



EUROPEAN
COMMISSION

Brussels, **XXX**
[...] (2026) **XXX** draft

SENSITIVE*

Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

on a Digital Networks Act (DNA)

(Text with EEA relevance)

* Distribution only on a 'Need to know' basis - Do not read or carry openly in public places. Must be stored securely and encrypted in storage and transmission. Destroy copies by shredding or secure deletion. Full handling instructions <https://europa.eu/!db43PX>

EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL

• Reasons for and objectives of the proposal

As laid out in the European Digital Decade Policy Programme¹, connectivity is foundational for digital transformation, aiming for universal gigabit broadband and 5G in populated areas by 2030. Robust, fast, and secure networks enable digital skills development, business innovation (AI, cloud), essential e-government/health services, and closing the digital divide, ensuring inclusive participation and competitiveness across the EU. Connectivity is not just access; it is about real-time data exchange, vital for achieving the EU's broader digital goals and fostering a truly connected, prosperous society.

A modern and simplified legal framework that incentivises the transition from legacy networks to fibre, 5G and cloud-based infrastructures as well as an increased scale through service provision and cross-border operation is key. This was also highlighted in the results of the exploratory consultation on the future of the electronic communications sector and its infrastructure (2023)² and later in the Commission's White Paper - 'How to master Europe's digital infrastructure needs?' (2024)³ as well as in the response to the Call for Evidence for Digital Networks Act (2025)⁴.

Subsequent strategic analyses, including the Letta⁵, Draghi⁶ and Niinistö⁷ reports, and the Commission's Communication "A Competitiveness Compass for the EU"⁸ further assert that a cutting-edge digital network infrastructure is critical for the future competitiveness of Europe's economy, security and social welfare. The availability of high-quality, reliable and secure connectivity for end-users as well as for key economic sectors is a must.

Driven by the increasing importance of performance and security requirements for such services, digital networks are undergoing a technological transformation where cloud and edge computing capabilities are becoming an integral part of connectivity infrastructure. The adoption of the Digital Networks Act (DNA), accompanied by the review and evaluation of the European Electronic Communications Code (EECC)⁹ and related legal acts, is an opportunity to simplify and further harmonise the legal framework. This will reinforce competitiveness and resilience and foster a more integrated single market.

Satellite connectivity is emerging as one of the core enablers of EU strategic autonomy. Satellite connectivity is crucial for affordable broadband internet access in remote areas and for the

¹ Decision (EU) 2022/2481 of the European Parliament and of the Council of 14 December 2022 establishing the Digital Decade Policy Programme 2030, OJ L 323, 19.12.2022, p. 4.

² <https://digital-strategy.ec.europa.eu/en/consultations/future-electronic-communications-sector-and-its-infrastructure>

³ <https://digital-strategy.ec.europa.eu/en/library/white-paper-how-master-europes-digital-infrastructure-needs>

⁴ https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14709-Digital-Networks-Act_en

⁵ <https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf>

⁶ https://commission.europa.eu/topics/competitiveness/draghi-report_en

⁷ https://commission.europa.eu/topics/defence/safer-together-path-towards-fully-prepared-union_en

⁸ Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, "A Competitiveness Compass for the EU", 29.1.2025, COM(2025) 30 final.

⁹ Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code, OJ L 321, 17.12.2018, pp. 36.

provision of services related to security, crisis management, defence, and other critical applications. In the rapidly evolving satellite technological landscape, Europe needs to strengthen its strategic autonomy in satellite communications, including networks and services, to secure and improve resilience while safeguarding the Single Market – this can be achieved with harmonised EU satellite authorisation conditions.

In parallel, satellite connectivity must build greater resilience against harmful interference, notably affecting Global Navigation Satellite Systems (GNSS) such as Galileo. In addition, the EU should be able to respond in a concrete, actionable and operational way to the security threats posed by drones.

To support the Union's policy objectives of consumer welfare, industrial competitiveness, security and resilience and sustainability, the DNA aims to incentivise all market players to innovate and invest in advanced connectivity and promote an ecosystem of connectivity and computing infrastructures enabling the AI continent.

- Consistency with existing policy provisions in the policy area**

The DNA replaces certain existing legislative instruments currently in place in the EU acquis regulating the connectivity ecosystem: Electronic Communications Code, BEREC Regulation¹⁰, Radio Spectrum Policy Program (RSPP)¹¹, and parts of the Open Internet Regulation (OIR)¹² and the ePrivacy Directive¹³. The aim of merging these instruments into the DNA in the form of a Regulation is simplification and better coordination between the rules, enabling providers to operate and innovate in the Single Market. Providers need simplified and consistent authorisation rules (EECC), access to fixed networks and spectrum resources (EECC, RSPP) and a simplified and harmonised set of rules for networks and services (EECC, OIR). Finally, the governance regime needs to support and enable the Single Market conditions (EECC, BEREC Regulation, RSPP). In addition, the proposal complements the Gigabit Infrastructure Act¹⁴, which sets out a framework to support faster and more cost-effective deployment of very-high-capacity networks (VHCN). The DNA is also consistent with the Roaming Regulation¹⁵, which regulates roaming charges within the EU.

In the area of consumer protection, the DNA continues to be complementary to the Union horizontal consumer protection framework. While maintaining a high level of consumer

¹⁰ Regulation (EU) 2018/1971 of the European Parliament and of the Council of 11 December 2018 establishing the Body of European Regulators for Electronic Communications (BEREC) and the Agency for Support for BEREC (BEREC Office), amending Regulation (EU) 2015/2120 and repealing Regulation (EC) No 1211/2009, OJ L 321, 17.12.2018, p. 1.

¹¹ Decision No 243/2012/EU of the European Parliament and of the Council of 14 March 2012 establishing a multiannual radio spectrum policy programme, OJ L 81, 21.3.2012, p. 7.

¹² Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union, OJ L 310, 26.11.2015, p. 1.

¹³ Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications), OJ L 201, 31.7.2002, p. 37.

¹⁴ Regulation (EU) 2024/1309 of the European Parliament and of the Council of 29 April 2024 on measures to reduce the cost of deploying gigabit electronic communications networks, amending Regulation (EU) 2015/2120 and repealing Directive 2014/61/EU (Gigabit Infrastructure Act), OJ L, 2024/1309, 8.5.2024, ELI: <http://data.europa.eu/eli/reg/2024/1309/oj>.

¹⁵ Regulation (EU) 2022/612 of the European Parliament and of the Council of 6 April 2022 on roaming on public mobile communications networks within the Union, OJ L 115, 13.4.2022, p. 1.

protection, the DNA proposal simplifies and further harmonises the sector-specific rules for end-user protection in the area of electronic communications. Finally, the DNA proposal is fully in line with the Digital Decade Policy Programme, which outlines a vision for Europe's digital transformation until 2030, by setting the regulatory framework to achieve secure and sustainable digital infrastructures.

- **Consistency with other Union policies**

The present initiative is designed to ensure full complementarity with existing and forthcoming Union initiatives in the fields of cloud, artificial intelligence, data, cybersecurity and preparedness, and space. Ensuring coherence across these interconnected policy areas is essential for the Union's ability to build the necessary technological capacities along the entire digital value chain. At the same time, and by strengthening the foundations for a more integrated digital single market and innovative and investment-friendly digital infrastructure ecosystem, the Digital Networks Act constitutes one of the key flagship initiatives under the horizontal strategy to reignite Europe's economy, the EU Competitiveness Compass.

While the DNA does not seek to regulate cloud services, the increasing convergence between electronic communications networks and cloud/edge computing necessitates alignment with the Cloud and AI Development Act (CADA)¹⁶, which aims to strengthen EU cloud and edge capabilities through improved investment conditions and streamlined permitting procedures. Related Union actions under the AI Continent Action Plan¹⁷ on access to AI data and infrastructure and support for sectoral AI applications, reflect the broader transition towards cloud-based and AI-enabled network infrastructures. The initiative is also coherent with the Data Union Strategy¹⁸, which enhances access to high-quality data and further develop data-related infrastructure. By improving secure and reliable connectivity, the DNA will support these broader objectives.

Despite efforts undertaken through the 5G Cybersecurity Toolbox¹⁹, resilience risks in the sector of electronic communications persist. Dependencies continue to affect 4G/5G and fixed networks, submarine cables, cloud services, and critical sectors. The revision of the Cybersecurity Act²⁰ provides an opportunity to address ICT supply chain risks more systematically. These actions are closely linked to, and mutually reinforcing with, the present initiative's focus on enhancing network security and resilience. Although cybersecurity and resilience obligations are largely covered by the NIS2 Directive²¹ and the Critical Entities Resilience (CER) Directive²², there remains scope for greater coordination at Union level. The

¹⁶

¹⁷ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, "AI Continent Action Plan", 9.4.2025, COM(2025) 165 final.

¹⁸

Communication from the Commission to the European Parliament and the Council, "Data Union Strategy Unlocking Data For AI", 19.11.2025, COM(2025) 835 final.

¹⁹

<https://digital-strategy.ec.europa.eu/en/library/eu-toolbox-5g-security>

²⁰

Regulation (EU) 2019/881 of the European Parliament and of the Council of 17 April 2019 on ENISA (the European Union Agency for Cybersecurity) and on information and communications technology cybersecurity certification and repealing Regulation (EU) No 526/2013 (Cybersecurity Act), OJ L 151, 7.6.2019, p. 15.

²¹

Directive (EU) 2022/2555 of the European Parliament and of the Council of 14 December 2022 on measures for a high common level of cybersecurity across the Union, amending Regulation (EU) No 910/2014 and Directive (EU) 2018/1972, and repealing Directive (EU) 2016/1148 (NIS 2 Directive), OJ L 333, 27.12.2022, p. 80.

²²

Directive (EU) 2022/2557 of the European Parliament and of the Council of 14 December 2022 on the resilience of critical entities and repealing Council Directive 2008/114/EC, OJ L 333, 27.12.2022, p. 164.

absence of a sector-specific operational body and of a centralised Union-wide overview of preparedness, early-warning crisis management mechanisms, and resilience mapping in electronic communications further highlights this need.

The proposal is aligned with the objectives of the EU Preparedness Union Strategy by strengthening the resilience, redundancy and capabilities of electronic communications networks and services, in order to ensure the reliable transmission of communications during natural or man-made disruptions, crises or force majeure. In particular, it will support enhanced network and service capabilities, including measures ensuring the continuity and uninterrupted availability of emergency communications and the effective functioning of public warning services.

The DNA is also complementary to measures proposed under the EU Space Act²³. The EU's Strategic Vision for the Space Economy recognises that space-related investments are closely linked to the removal of regulatory barriers. The DNA is therefore seen as a critical building block of the EU single market for space. By eliminating regulatory barriers, this Regulation will enhance pan-European access to satellite spectrum and strengthen the single market for satellite communication services, enabling greater scalability and innovation. Investments in satellite infrastructure and the wider value chain are addressed through other EU instruments, including financial support for the multi-orbit IRIS² constellation (the Union's secure connectivity satellite system) and EU programmes such as CASSINI and InvestEU, which provide funding mechanisms for space operations.

It is also complementary with the Union's support for the IRIS2 satellite constellation, which aim to strengthen EU sovereignty in satellite connectivity and to facilitate the integration of terrestrial and non-terrestrial networks.

Finally, the European Critical Communication System (EUCCS), to be operational by 2030, will provide broadband-based secure communication services for public authorities across the Union and the Schengen area. The present initiative complements these efforts by contributing to the Union's overall capacity to respond to security threats and crisis.

2. LEGAL BASIS, SUBSIDIARITY AND PROPORTIONALITY

- Legal basis**

The proposal is based on Article 114 of the Treaty on the Functioning of the European Union (TFEU), as it aims to foster the internal market in the area of electronic communications and to ensure its functioning as well as the functioning of the internal market in other Union policy areas involving the use of spectrum.

- Subsidiarity (for non-exclusive competence)**

The DNA will have significant added value compared to action taken at Member States level. Strengthening European competitiveness requires access to fast, secure, and resilient digital infrastructure across the EU. In a context where the digital connectivity landscape is changing rapidly with integration of telecom, satellite, cloud and edge technology, driven by virtualisation and AI, the EU will only be able to achieve those objectives through a more harmonised legal environment across the EU that avoids fragmentation caused by inconsistent

²³ https://defence-industry-space.ec.europa.eu/eu-space-act_en

national administrative practices or implementation conditions that limit the opportunities of the single market.

Spectrum, like other resources such as numbers and to some extent land, is a scarce resource whose management and assignment needs to consider national specificities and needs but also the interest of the Union. In this respect, there is a need for a more convergent and consistent EU regulation for market entry to eliminate the obstacles that appear due to undue divergent conditions for the assignment of individual rights of use for spectrum, numbers or land. Lastly, in order for the EU to lead the rest of the world on new and enhanced services, such as 5G, equipment manufacturers and providers of communications services need sufficient scale. This means not only technical harmonisation, but most importantly an internal market developing in a broadly aligned fashion, for services and devices to benefit from stable and harmonised rules.

As regards satellite connectivity, the inherently global nature of satellite services, which transcend national borders, makes satellite connectivity a policy area in which action at Union level is more effective than measures undertaken solely at national level. The timely availability and uptake of satellite connectivity, which relies exclusively on access to satellite spectrum across the EU, are critical inputs for European industrial autonomy and play a central role in enhancing the Union's competitiveness. There is therefore a strong rationale for the EU to pursue an ambitious, coordinated, EU-wide approach to satellite authorisation, underpinned by appropriate regulatory instruments and complementary measures designed to facilitate and accelerate the achievement of this objective.

The objective of ensuring a timely and orderly transition from legacy copper networks to fibre-based networks cannot be sufficiently achieved by Member States acting alone, as divergent national approaches would risk fragmentation of the internal market, legal uncertainty for operators active in several Member States, and uneven conditions for investment and end-user protection. Union action is therefore justified to establish a common framework, safeguards and minimum principles governing the transition. At the same time, in line with the principle of subsidiarity, the concrete design, sequencing and implementation of the transition are entrusted to the Member States and national regulatory authorities, which are best placed to take account of local market conditions, network topologies, consumer needs and geographic specificities. The Regulation thus combines a harmonised Union approach with nationally managed processes, ensuring effectiveness while fully respecting Member States' responsibilities.

Action is also needed at EU level to reduce fragmentation of consumer and end-user protection rules, which raises administrative costs for cross-border service providers and hinders development of innovative services, while resulting in an uneven and sub-optimal level of consumer protection across the Union.]

Overall, the scale of the problems in the digital ecosystem requires a legislative initiative at EU level because they have increasingly an EU dimension, and can be more efficiently resolved at Union level, leading to overall greater benefits, more accelerated and harmonised implementation, and lower costs than if Member States acted alone.

- **Proportionality**

Proportionality is ensured as proposed measures focus on tackling clear bottlenecks to the Single Market, in order to create the conditions for new cross-border electronic communications networks and services to develop at EU level, in particular via simplifying and harmonising the authorisation regime. In doing so it supports the Single Market objective of freedom of

provision of electronic communications services. At the same time, it avoids disrupting operations of those providers that would opt for keeping a national (or sub-national) footprint.

Building upon the successful elements of the existing regulatory framework, the proposal retains the well-functioning SMP (significant market power) regime and the three-criteria test, however, re-focusing intervention on market failures, enabling NRAs to use more easily symmetric measures, where appropriate, and putting emphasis on use of less intrusive regulatory tools where possible. The harmonization of access products coupled with well-targeted and proportionate regulation including access to in-building wiring and potentially beyond should support greater take-up of Gigabit broadband and higher broadband speeds. Proposed regulation allows for both smooth transition from copper to fibre networks and for proportionate regulation in full fibre environment.

In addition, as compared to the current framework, the proposal accelerates transition to fibre networks. Proportionality is ensured via appropriate safeguards for end-users as well as the process being reviewed and managed nationally. The competent authorities are responsible for ensuring that adequate broadband services are available, using appropriate safeguards (ensuring comparable quality and comparable prices of retail fibre-based services, coverage by alternative technologies, etc.) This process will be subject to the Commission's scrutiny.

The proposed measures will also involve proportionate changes to governance, creating a governance system both for market regulation and spectrum management that is suitable for the new EU level tasks with Single Market dimension and allowing for decision taking at the most efficient level. The RSPG would be transformed in an EU body, similar to the BEREC. Given the absence of legal personality, both relevant EU bodies (BEREC, RSPB) would not exercise binding decision-making powers. Such competences would remain with the Commission and national authorities. The EU bodies concerned would continue to provide advice, opinions, guidelines and other forms of support to the policymaking process.

To promote greater convergence in spectrum management, significant assignments would be subject to a mandatory EU-level Spectrum Single Market mechanism, enabling the Commission, BEREC and RSPB to comment on draft measures. The Commission could intervene where necessary to address conditions with potential Single Market implications. Given the cross-border nature of satellite services, the Commission, supported by the advisory structures, would manage the EU satellite authorisation, including by selecting satellite licensees, where spectrum resources are limited.

The end-user protection rules are simplified and reinforce full harmonisation with targeted exceptions (e.g. regarding maximum contract duration), but harmonisation is limited to the areas covered by the proposal. On Universal Service Obligations (USO), a more harmonised approach is introduced for the definition of adequate internet access service. The USO availability obligation is maintained, ensuring that consumers (with an extension to microenterprises, small enterprises and not-for profit organisations) have an adequate internet access and voice communications services available at a fixed location. The concept of affordability of an adequate internet access and voice communications services with possible measures for consumers with low income or special social needs is also maintained with a more harmonised approach for establishing affordability. The USO provisions complement the copper switch off process and transition to fibre and as such will be subject to the review.

The solutions will enable relevant stakeholders to exploit the synergies of a large single market and reduce inefficiencies in their operations and investments, in the most timely and effective

manner. At the same time, the proposal ensures to those operators who opt to provide services in a single Member States continuity of the current rules while benefitting from improved and clearer rules concerning consumer and end-users rights, and a more predictable environment for access to spectrum inputs and to electronic communications networks and services.

- **Choice of the instrument**

The Commission proposes a Regulation as it ensures the removal of single market barriers by harmonising the existing regulatory framework for electronic communications. This includes specific, directly applicable rights and obligations for providers, competent authorities and end users; it also includes coordinating mechanisms regarding certain inputs at European level to facilitate the provision of electronic communications services across borders and an adapted authorisation regime for undertakings operating across the Member States. A Regulation is also an important tool in the field of resilience. In a cross-border connectivity environment, vulnerabilities in one Member State can undermine security across the EU and threats to electronic communications networks and services, whether cyberattacks, physical disruptions or systemic failures, are inherently transnational. Furthermore, geopolitical instability requires rapid, coordinated and EU-wide response, which cannot be ensured if Member States implement measures at different speeds or with varying levels of ambition.

Finally, as set out in the SWD Annex 11 to the Impact Assessment: Evaluation – Review of the functioning of European Electronic Communications Code (EECC), BEREC Regulation, Open Internet Regulation, and certain aspects of the ePrivacy Directive, experience with the EECC shows that Member States have not been able to address the sectoral challenges timely, due to the long time needed for transposition of the Code into national law. This was particularly prominent for spectrum authorisations, as many of the 5G auctions have been conducted many years after the transposition date of the EECC on the basis of outdated legislation. In addition, the transposition has been often accompanied by additional layers of rules resulting in overregulation and gold-plating, making it difficult for companies to grow cross-border and scale. Fragmented national rules under the current Directive have failed to deliver a true single market. Divergent authorisation conditions, end-user rules, and additional national requirements create a patchwork that raises compliance costs and blocks the scale-up of innovative cross-border services, despite their substantial market potential. As connectivity converges with cloud, edge, and AI, new business models could flourish, but today's complexity discourages operators from centralising operations, leveraging cloud economies of scale, and deploying pan-European services.

3. RESULTS OF EX-POST EVALUATIONS, STAKEHOLDER CONSULTATIONS AND IMPACT ASSESSMENTS

- **Ex-post evaluations/fitness checks of existing legislation**

The analysis has shown that the EECC, through its objectives of promotion of connectivity and access to, and take-up of, very high-capacity networks, helped to achieve and maintain effective competition and protect end users. However, the EECC, being a Directive, resulted in national fragmentation and therefore has not achieved the completion of the single market. Furthermore, the evaluation revealed the need for some rebalancing of objectives, (investment, demand), and considering the addition of new objectives of enhanced competitiveness, security and resilience and sustainability.

Several pillars of EECC are still fit for purpose:

The Significant Market Power (SMP) regime remains the key instrument for ex ante regulation, ensuring that markets work well. However, NRAs have increasingly defined markets at regional or local level and the overall use of ex ante regulation has decreased.

Radio spectrum is of utmost strategic and geopolitical importance; it is essential to enable communication, drive economic growth and social prosperity, and support critical services across various sectors.

The universal service obligations (USO) in the EECC are a safety net to ensure all consumers in the Union have access to affordable adequate internet and voice communications services.

The provisions on end-user rights are mostly still fit for purpose but could be simplified in some aspects.

Access regulation is based on competition law principles and on transparent consultation mechanisms with the Commission as the guardian of the Treaties, ensuring that the proposed regulations would not create a barrier to the internal market and are compatible with Union law. Such a system promotes regulatory predictability by ensuring a consistent regulatory approach.

The current framework is, in principle, well adapted to addressing instances of significant market power including local monopolies, which is relevant in full fibre environment in a post-copper world. The number of cases regarding the oligopolistic markets, notified under Article 32 EECC was very limited. Possible issues in oligopolistic markets have been addressed either under the spectrum authorisation regime or under competition law.

Moreover, there is a room for simplification of some key provisions that have either not been applied by regulators (Article 76 regarding co-investments, Article 77 regarding the imposition of functional separation) or were applied by some regulators but should be further simplified to enable their broader application (Article 61(3) covering symmetric regulation, Article 79 covering regulatory commitments, Article 80 regulating wholesale-only networks).

As regards copper switch-off, Article 81 has had limited practical relevance primarily due to the lack of plans announced by incumbent operators and has not significantly contributed to accelerating the transition from copper to fibre networks. Instead, its primary purpose has been to provide national regulatory authorities with a framework to manage the switch-off process in a transparent and competitive manner, ensuring that migrations do not harm competition or end-user rights, and that alternative access products of comparable quality are available.

On **wireless connectivity**, although the EU spectrum policy framework has laid down the foundation for coordinated 5G deployment through early harmonisation and binding deadlines for the assignment of spectrum, and has ensured competitive prices for end users, the EU is lagging in high quality 5G deployment compared to leading world economies. This has negative implications not only for consumers but also for EU's industrial competitiveness and innovation. The reasons are diverse: spectrum assignment conditions remain excessively fragmented and have not ensured consistent outcomes in terms of investments. Excessively high reserve prices, revenue-oriented auction designs, insufficiently long duration of licenses, unjustified market shaping measures, lack of flexibility and incentives to share spectrum and use it more efficiently have increased the cost of spectrum which, combined with limited mobile revenues and lack of demand, have negatively affected deployment.

The procedural tools of the EECC to help establish the single market for spectrum, and in particular the voluntary peer review of spectrum assignment procedures or the voluntary joint authorisation procedure allowing several Member States to cooperate to grant spectrum usage rights through common conditions and procedures, have been either rarely used or ineffective to promote regulatory predictability and investment. As regards cross-border harmful interferences between Member States, the RSPG good offices' involvement has brought

significant added-value according to participants but has not been fully efficient to address cross-border coordination issues with third countries or in non-harmonised bands.

Overall, the lack of regulatory predictability and inefficient use of spectrum have affected the financial attractiveness of 5G investment projects.

For **satellite services** that have a clear cross-border nature, the failure to establish a single market is even more apparent. There are no minimum common authorisation conditions or requirements for satellite spectrum, and no common selection procedures (except for the 2 GHz MSS band), wide variations in timescales for issuing a license, different approaches to national coordination with existing services, different fees and different conditions attached to the licences. This fragmentation does not allow to leverage the strength of the internal market to ensure a level playing field in space and is not favourable to scaling up for the EU-wide provision of satellite services and allows for regulatory forum shopping. These barriers affect EU readiness for the direct-to-device challenge in a context where the EU risks being strategically dependent on foreign players for services crucial for its security and defence.

The evaluation findings on the **general authorisation provisions** pointed out to the need for further harmonisation, update and simplification of the general authorisation regime and paving the way for facilitating the deployment of more virtualised and centrally managed networks and software- and cloud-based electronic communications services in the EU.

The provisions on end-user rights are mostly still fit for purpose and there must be continued focus on their enforcement and implementation. At the same time, some updates and simplification could be beneficial for both end-users and service providers, for example, streamlining of contractual information (Article 102), as well as the harmonisation at EU level of some aspects, such as parameters on quality of services (Article 104)

As regards governance the assessment of BEREC and the BEREC Office and their contribution to the harmonised implementation of the EECC has been overall positive in particular as regards quality of BEREC guidelines and reports, and overall supporting NRAs in reaching common approaches. Yet BEREC guidelines and exchanges of best practices were not sufficient to bring about the single market. As markets, technology and broader digital ecosystem rapidly evolve, BEREC's mandate should also evolve to encompass new tasks in e.g. resilience, spectrum, satellites. In addition, BEREC Office should be strengthened to increase its capacity to support BEREC, including on substance, to ensure better alignment with EU-level policies.

Similarly, the assessment of the contribution of the RSPG in spectrum policy is positive. Its deliverables related to spectrum for future wireless connectivity, including 6G, spectrum sharing, future use of the UHF band, WRCs and their outcome, satellite connectivity, and climate change have provided valuable input for further EC considerations. However, as the RSPG adopts deliverables in general by consensus, at least on some sensitive issues, it needs to strike a balance between different national interests and the EU and national prerogatives, sometimes regrettably to the detriment of the broader EU benefit. RSPG opinions sometimes tend to be too technical and not as political/strategic as its role of a high-level advisory group to the Commission would require. Moreover, several limitations have significantly reduced its impact, such as the voluntary nature of the peer review, or the legal limitations to use its Good Offices mechanism to address interferences from third countries. Synergies between RSPG and BEREC work in technical, economic and overall policy dimensions have not been leveraged.

- **Stakeholder consultations**

The Commission launched a broad exploratory consultation on the future of the electronic communications sector and its infrastructure in 2023. In February 2024, the Commission

opened a consultation on its White Paper ‘How to master Europe’s digital infrastructure needs?’ (White Paper) The White Paper was published on ‘Have Your Say’ for feedback for 18 weeks and received 357 feedback contributions. A Call for Evidence was launched in June 2025 on the objectives and policy options for a proposal for a Digital Networks Act (DNA). Significant feedback has been received.

In addition to the Call for Evidence, the three studies commissioned by the Commission have conducted two rounds of targeted consultations to 134 selected stakeholders. The targeted industry stakeholders represented different ECN and ECS providers and other service providers. The majority were fixed network operators but also included a sizable number of CAPs (content and application providers) and broadcasters.

The White Paper analysed the challenges Europe currently faces in the rollout of future connectivity networks. It presented possible scenarios for public policy action going forward, including possible future DNA, divided in three pillars. Stakeholders agreed on the importance of modern, secure and resilient digital infrastructures for EU competitiveness.

Telco incumbents were positive towards the idea of the regulatory level playing field but raised questions about the regulatory solution. Cloud providers were concerned about being included in the scope of telco-specific regulation. Most stakeholders supported broadly the objective of reducing reporting obligations and removing unnecessary regulatory burdens. The feedback to the White Paper was crucial to conclude that a new regulatory framework is needed to overcome the barriers to and complete the digital single market.

In the Call for Evidence most stakeholders supported broadly the objective of reducing reporting obligations and removing unnecessary regulatory burdens.

Member States and NRAs did not see scope for a fully-fledged Country of Origin regime for electronic communication services because a significant set of national rules would remain. Regarding end-users’ protection, Member States, NRAs and consumer organisations emphasised that robust consumer protection must be maintained. Most telecom operators and service providers called for simplification and the removal of sector-specific rules.

Traditional telecom operators called for a recalibration of the regulatory framework that currently places them at a disadvantage compared to CAPs. Internet community and consumer groups opposed changes to the Open Internet rules that would, in their view, risk leading to a two-speed Internet

In access policy the traditional difference between incumbents and access seekers can be noted, with the former calling for deregulation and the latter keeping the current access regime untouched. Some ECNs (AltNets) advocated for setting a specific EU-wide target date to encourage fibre adoption and environmental benefits. Concerns were raised about potential digital exclusion and market distortions if the switch-off is premature.

On spectrum, Member States and BEREC consider the current spectrum governance model appropriate and are generally reluctant to introduce changes. They are also opposed to centralisation of spectrum authorisation. While they support harmonised spectrum use for its economic benefits, they stress the importance of maintaining flexibility to reflect national market differences. A harmonised, pan-European approach to satellite market access is considered essential to unlock the full potential of satellite connectivity across the EU.

The telco community supports a more investment-friendly spectrum policy that increases certainty and flexibility. It favours longer or indefinite licence durations, tacit renewals, lower spectrum costs, and flexible usage rules. The sector also supports reducing market fragmentation, strengthening peer review, and introducing common authorisation procedures, alongside a clear EU roadmap for spectrum availability. It stresses that market-shaping

measures that undermine investment and network differentiation should be avoided. The telco community also supports EU-driven collaboration on emerging technologies, such as satellite D2D services.

Alternative telecom stakeholders support greater coordination and harmonisation of spectrum assignment across EU Member States. An evolving EU roadmap for spectrum availability is also seen as beneficial. They support clear and early-defined conditions for licence renewal, as well as policies promoting spectrum trading and use-it-or-share-it-or-lose-it obligations to ensure more efficient spectrum use. However, they express serious doubts about imposing legal deadlines for spectrum awards.

- **Collection and use of expertise**

The proposal takes into account the following main inputs:

The contributions received to the **exploratory consultation** on the future of the electronic communications sector and its infrastructure, launched in February 2023.

The stakeholders' feedback to the **White Paper - 'How to master Europe's digital infrastructure needs?'** of February 2024.

The stakeholders' feedback received for the **Call for Evidence on DNA** published in 2025.

The three review studies that were conducted to support the preparation of this proposal are:

Study 2024-025 on "Completing the Digital Single Market (DSM): Regulatory enablers for cross border networks - FWC No FW-00141705;

Study 2024-026 on 'Review of Access Regulation under the European Electronic Communications Code and analysis of future Access policy in full fibre environment' - FwC No FW-00141705;

Study 2024-028 on 'Financial conditions, demand and investment needs and their regulatory and policy implications including on the universal service' - FwC No FW-00141705.

In parallel, between March and September 2025, the Commission organised strategic **workshops with BEREC and the Radio Spectrum Policy Group (RSPG)**, to gather the views of high-level representatives from the competent authorities of all Member States. Furthermore, a **dedicated workshop** was organised **with BEUC and the correspondent national consumer organisations** on 16 July 2025 to ascertain the concerns and challenges for consumers and end-users of electronic communications. These efforts have been complemented with a high number of meetings held with industrial stakeholders active across the whole digital value chain, and their business associations.

- **Impact assessment**

The impact assessment has identified the following options to best address the problems:

Copper-switch-off and access regulation

The preferred option to accelerate FTTH deployment and take-up will be based on national plans to be notified to the Commission. The plans will explain (i) in which areas copper will be switched off and by when and (ii) the measures to support the transition to fibre. Until 31 December 2035 copper switch off is triggered when the following two conditions are cumulatively met: (i) at least 95% of fibre coverage and (ii) availability of affordable retail connectivity services. After this date the conditions will not play a role anymore and Member States will be required to mandate the switch-off in all the remaining copper switch-off areas with some exceptions. Regarding access regulation, this option builds on the existing

regulatory framework, including both symmetric and asymmetric (SMP-based) measures. An important focus will be on regional and local markets.

With respect to the economic and environmental impacts, this would have positive impacts in terms of (i) accumulated GDP increase of EUR 406 billion above the baseline scenario, (ii) total CO₂ emission reduction below baseline scenario (516 thousand tonnes) and (iii) average download speeds (311 Mbps in 2030 and 725 Mbps in 2035). As for the social impacts, the impact of the options cannot be quantified. However, the option is very likely to result in highest positive social impact as it is performing well in terms of in terms of FTTH coverage and FTTH take-up rate. Regarding the impact on fundamental rights, the option ranks medium.

Spectrum

The preferred option entails mainly unlimited licence duration by default, with possibility for review clauses and revocation of rights of use, quasi automatic renewals, and the application of pro-investment auction designs. It provides for the possibility to harmonise spectrum authorisation conditions and includes a mandatory spectrum Single Market procedure at EU level of authorisation procedures. It ensures increased transparency and predictability of the timing of availability of spectrum through roadmaps. This option is the most efficient given that overall benefits significantly outweigh its costs. It would ensure timely deployment of high quality 5G and future 6G networks. It would have a positive impact on GDP, have spillover effects on vertical sectors and be coherent and complement the copper-switch off process. It would lead to a reduced ecological footprint of 5G mobile networks, thanks to the decrease in energy consumption per gigabyte linked to new mobile technologies.

General authorisation and authorisation for satellite services

The preferred option includes single “passport” for other networks and services than satellite and an EU authorisation for satellite spectrum, including selection of licensees in cases of scarcity and enforcement of authorisation conditions. This option would reduce the administrative and compliance costs as well as the reporting costs. Together with harmonised authorisation conditions and other relevant applicable rules (including end-user rules) as well as soft measures to facilitate ecosystem cooperation, the preferred option would allow providers active in several Member States to centralise network operations more easily and provide services cross border more consistently. Thereby it would allow to cooperate with actors in the extended connectivity ecosystem in a Level Playing Field. EU satellite authorisation would allow operators guaranteed access to spectrum in all Member States under the same authorisation conditions, providing them with the means to scale up and provide pan-European services, while addressing sovereignty aspects.

Governance

The preferred option builds on the existing set up of BEREC and BEREC Office and upgrades the RSPG from a Commission expert group to a body with a secretariat provided by the BEREC Office. The Office (whose name will be changed to “Office for Digital Networks”, ODN) with new coordination task will enhance the effectiveness of spectrum management. By providing administrative and support services to both BEREC and the Radio Spectrum Policy Body (RSPB), the ODN will strengthen the existing link between the two bodies, enabling better coordination and more coherent outcomes.

Administrative costs

The administrative costs for businesses relate to the obligations and benefits of the copper switch-off and access, plus the simplification areas. The additional administrative obligations related to the mandatory copper switch-off lead to an increase in direct recurring administrative costs by 7% (in FTEs per year) and EUR 112 million one-off cost, compared to the status quo. The harmonisation of the authorisation conditions and EU satellite authorisation will result in some one-off costs to adapt to the harmonised conditions but overall lower recurrent costs for authorisation, and implementation.

- **Regulatory fitness and simplification**

As regards access regulation, the preferred option would remove a number of provisions relating to SMP regulation such as those regarding co-investment (Article 76 EECC) and functional separation (Articles 77 and 78 EECC). At the same time, enabling the NRAs to impose access to in-house wiring and beyond the first concentration point from own initiative (and not at request as this is currently the case) would simplify the way how access regulation is implemented. This would have the effect of simplifying existing rules and remove the perceived shortcomings and unnecessary complexities and potential lack of coherence associated with those provisions that led to the limited usage of them. Furthermore, the impacts on fibre coverage, take-up and competition of their removal is likely to be limited. This is particularly true for Article 76 EECC, which has been superseded by wider analysis by NRAs of the implications of commercial arrangements including co-investment in the context of the market analysis procedure. The REFIT potential of these provisions had been also recognized by the stakeholders.

Furthermore, the proposed option will simplify, strengthen and increase oversight with the aim of securing more uniform implementation of remedies in the benefit of the Single market. Harmonisation of specifications for key wholesale products as well as attention to quality of service guarantees for businesses should simplify the use of access products and also contribute to the development of competition in services for multi-site and multinational enterprises.

As regards spectrum, the consolidation of relevant provisions of the RSPP in the EECC presents significant REFIT benefits, as it ensures consistency, by eliminating duplicative and outdated provisions that hinder EU competitiveness in the deployment of innovative services.

The EU authorisation for the provision of satellite networks and services and use of satellite spectrum presents significant improved efficiency potential as it would reduce the cost of satellite authorisation for satellite operators and national authorities. A satellite operator wishing to provide services across the EU would not need to follow 27 authorisation processes, respect 27 sets of authorisation conditions, which include diverse and costly reporting obligations and ineffective enforcement measures, and obtain spectrum rights in all Member States. On the contrary, the Commission, with the assistance of the Office, would receive the requests and issue the authorisations to provide satellite services as well as authorisations to use spectrum including individual rights of use of spectrum, either in some Member States where the provider wishes to provide services, or in the entire EU. The authorisation conditions, including reporting elements, would be common across the EU and developed with the assistance of the Office and the RSPG. The Commission would also ensure selection at EU level in case of spectrum scarcity. Further, there would be a binding EU-level compliance and enforcement framework for ensuring that satellite constellations' access to the EU market complies with the common conditions in line with international law. Enforcement at EU level (including withdrawal of the authorisation for the entire single market) would be effectively addressing interference issues and, at the same time, it would incentivise preventively the respect of the authorisation requirements.

A key improved efficiency potential will also be achieved in the area of authorisation for terrestrial networks and services. The key drivers of problems with the general authorisation (GA) regime in the EU electronic communications sector arise from the EECC's regulatory flexibility, which has led to fragmentation and inconsistent application of the GA conditions. The EECC harmonised the list of possible GA conditions, but it remained maximum and national discretion was kept on attaching the conditions. Consequently, Member States did not take a uniform approach to GA regime and introduced divergent secondary legislation and/or administrative (regulatory) decisions to further specify the conditions. This situation results in potentially up to 1,053 conditions specified at national levels, a cross-border operator (present or with a regulatory footprint in 27 Member States) could be required to comply with. The proposal radically reduces this fragmentation and limits reporting and compliance obligations by subjecting providers only to streamlined and harmonised conditions and obligations laid down directly in the Regulation. Furthermore, for entities wishing to provide networks and services across the single market, the proposal introduces a streamlined notification-based system enabling providers to operate in one or several Member States on the basis of a single authorisation. To this end, it sets out the general authorisation conditions, the Single Passport procedure, and mechanisms for coordination, mutual assistance and consistent enforcement among national authorities, supported by BEREC and the Office for Digital Networks.

As regards impact on SMEs, simplified procedures, including a unified notification template and a single notification mechanism, are expected to reduce administrative and compliance costs for providers, in particular SMEs, allowing them to redirect resources towards innovation and growth rather than regulatory processes. Greater legal certainty and regulatory predictability further strengthen SMEs' competitiveness and facilitate market entry. SMEs also benefit indirectly from harmonised and more flexible access regimes, including simplified access to spectrum and spectrum sharing, which lower entry barriers and support the development and scaling-up of innovative services, notably in sectors such as manufacturing, health, agriculture and transport. No disproportionate negative impacts on SMEs are anticipated; on the contrary, the measures are expected to generate net benefits, including cost savings and improved opportunities for innovation.

- **Fundamental rights**

The proposal's impact on fundamental rights such as the freedom of expression and information, non-discrimination, consumer protection and the protection of personal data, has been analysed. In particular, the Regulation will set a higher level of harmonisation for end-user rights, while keeping a high-level of protection for consumers.

The proposal takes full account of the fundamental rights and principles recognised by the Charter of Fundamental Rights of the European Union. In particular, the proposed measures aim at achieving higher levels of connectivity with a modernised set of consumer protection rules. This will in turn ensure non-discriminatory access to any contents and services, including public services, and help promote freedom of expression and of business, and enable Member States to comply with the Charter.

The introduction of a mandatory, but conditional, copper switch-off constitutes a limitation of the freedom to conduct a business under Article 16 of the Charter of Fundamental Rights of the EU. However, such a limitation may be justified where it pursues an objective of general interest and complies with the principles of necessity and proportionality. Market developments already show that operators are progressively retiring copper networks on the basis of commercial considerations, suggesting that a structured switch-off is not inherently at odds with their interests. Given the expected social, economic and environmental benefits, the measure appears

consistent with the requirement of necessity. Moreover, the proposed sustainability conditions, the option to maintain copper networks for a longer period where the conditions are not met and the possible exception to copper switch off when the deployment of fibre or other adequate connectivity solution is not possible ensure respect for proportionality.

4. BUDGETARY IMPLICATIONS

The budgetary implications of the proposal are described in details in the Legislative Financial and Digital Statement accompanying the proposal. Overall, 42 FTEs requested for the initiative are already in place within the DG CNECT and will be redeployed, consisting of 29 establishment plan posts and 13 external staff (CAs and SNEs). In addition to these existing resources, the initiative requires 5 FTEs of exceptional additional staff (3 officials and 2 external staff – CAs or SNEs), which are requested on top of the current staffing levels in order to ensure full and effective implementation of the initiative. The proposal requires additional human resources which will be paid from an administrative support line of the programme/initiative.

The current budget expenditure line of the BEREC Office will continue to finance the unchanged portion of the Office for Digital Networks, while additional expenditure for the Office for Digital Networks, described in the Proposal, will be financed from satellite spectrum authorisation fees, and, if available, EU numbering authorisation fees and voluntary and in-kind contributions from Member States.

5. OTHER ELEMENTS

- Implementation plans and monitoring, evaluation and reporting arrangements**

The Commission should monitor the application of this Regulation and evaluate its effectiveness over time. By [date] and every five years thereafter, the Commission should review the functioning of this Regulation and submit a report to the European Parliament and to the Council. By XX and every five years thereafter, the Commission shall review the functioning of this Regulation and report to the European Parliament and to the Council. Those reviews shall evaluate in particular, the market implications of Article 69 and Article 83 and whether the ex ante and other intervention powers pursuant to this Regulation are sufficient to enable national regulatory authorities to ensure that competition in electronic communications markets continues to thrive to the benefit of end-users.

To support consistent implementation and effective monitoring of the Regulation, Member States should ensure that the relevant information on the designation of undertakings and the obligations imposed on them is available to the Commission in a timely manner.

National regulatory authorities should also notify the Commission of the names of undertakings designated as having significant market power for the purposes of this Regulation and of the obligations imposed on such undertakings under the Regulation. Any changes affecting the obligations imposed on undertakings, or the undertakings concerned, should be notified to the Commission without delay.

By [two/three years after the date of application of this Regulation], the Commission should review the functioning of the ecosystem cooperation, taking utmost account of the report of BEREC referred to in Article 201.

In addition, by 30 June 2034, the Commission should review the scope of affordable universal service, and availability of universal service in light of social, economic and technological

developments, including the transition to fibre. The review should take into account, *inter alia*, the prevailing technologies used by the majority of consumers. The Commission should submit a report to the European Parliament and to the Council setting out the outcome of the review.

Within two years of the Regulation becoming applicable, the ODN, in coordination with ENISA where applicable, should prepare a report on the internal market for electronic communications networks and services. This report should provide an overview of market developments and examine how the measures introduced under the Regulation affect the functioning of the internal market, including aspects related to resilience and preparedness, as well as the market impact of mergers. The draft report should be shared with BEREC [and the RSPB] for approval, [and made available to the Commission for information]. Following this, updated reports should be published on a yearly basis to track progress and emerging trends.

- **Explanatory documents (for directives)**

Not applicable.

- **Detailed explanation of the specific provisions of the proposal**

Part I: Scope, objectives and definitions

Part I of the Regulation establishes the horizontal framework governing the organisation of the electronic communications sector within the Union. It defines the subject matter, scope and key concepts of the Regulation, laying down common definitions applicable throughout the legal framework in order to ensure legal certainty and consistent application across Member States. It also sets out the general objectives and regulatory principles that are to guide Member States, national regulatory and other competent authorities, BEREC, the Radio Spectrum Policy Body and the Office for Digital Networks, as well as the Commission, in the exercise of their respective tasks.

Part II (Preparedness and resilience) introduces a dedicated framework for network and service resilience and preparedness, recognising electronic communications networks and services as essential to the functioning of society and the economy. To this end, it establishes obligations and cooperation mechanisms aimed at ensuring the availability and capabilities of networks and services in situations of crisis, including the continuity of emergency communications and public warnings. It further provides for the adoption by BEREC of a report entitled “Union Preparedness Plan for Digital Infrastructures”, that includes an assessment, common operational recommendations and crisis management guidelines, and clarifies the respective roles of Union bodies and national authorities in monitoring, coordination and response, thereby strengthening a coherent and effective Union-wide approach to resilience and preparedness in the electronic communications sector.

Finally, Part III (“Single market authorisation and passporting”) establishes the single passporting framework for the provision of electronic communications networks and services under a general authorisation regime. It affirms the freedom to provide such networks and services throughout the Union, subject only to harmonised conditions and obligations laid down in the Regulation, and introduces a streamlined notification-based system enabling providers to operate in one or several Member States on the basis of a single authorisation. To this end, it sets out the general authorisation conditions, the Single Passport procedure, and mechanisms for coordination, mutual assistance and consistent enforcement among national authorities, supported by BEREC and the Office for Digital Networks. BEREC guidelines establish the

procedural details as regards the interactions between the actors and competent authorities as well as the applicable conditions and rules in the Member States.

Part IV: Resources (Spectrum and numbering)

Part IV of the proposal for Regulation establishes a comprehensive and forward-looking framework for the management, allocation and use of key electronic communications resources, namely radio spectrum and numbering resources, recognising their role as strategic public goods essential for connectivity, innovation, security and the functioning of the internal market. As regards radio spectrum, it sets out common principles and objectives for coordinated strategic planning and management at Union level, in line with international obligations, and reinforces mechanisms for cross-border coordination and the resolution of harmful interference. It introduces technology and service neutrality, promotes shared and efficient use of spectrum, and provides for a Union spectrum strategy and roadmaps to ensure predictability, timely availability and alignment with wider Union policy objectives.

The Regulation further harmonises authorisation regimes, conditions for assignment, duration, renewal, transfer and sharing of spectrum rights, strengthens pro-investment and competition-friendly award procedures, and establishes Union-level tools such as spectrum scrutiny, common authorisation conditions, one-stop-shop procedures and Union authorisations, including a dedicated framework for the provision of satellite networks and services in the Union. In particular, it establishes Union-level authorisations for satellite spectrum as well as its monitoring and enforcement. Further, it defines a procedure for granting such authorisations and sets out greater coordination mechanisms for ITU filings along with ensuring coexistence between satellite and terrestrial spectrum allocations in the Union.

In parallel, Part IV provides for a framework for pan-European numbering resources and sets the rules governing numbering resources, ensuring their efficient management, availability and extraterritorial use across the Union, supporting pan-European services, and safeguarding consumer protection and fair access. Together, these provisions aim to ensure the efficient, coordinated and future-proof use of scarce resources, while enhancing legal certainty, reducing fragmentation and enabling the development of innovative, cross-border electronic communications networks and services throughout the Union.

Part V: "Transition to fibre, markets functioning and competition"

Part V lays down the rules ensuring the proper functioning of electronic communications markets and the effectiveness of competition throughout the Union.

It introduces, first, a dedicated framework for the orderly transition from legacy copper networks to fibre-to-the-home networks, applicable where copper remains in service beyond a defined date. The transition to fibre process will be based on national plans to be notified to the Commission where each Member State will explain (i) in which areas copper will be switched off and by when and (ii) the measures to support the transition to fibre. In the first phase, copper switch off is triggered in a given area when the following two conditions are cumulatively met: (i) at least 95% of fibre coverage and (ii) availability of affordable retail connectivity services. At the later stage the conditions will not play a role anymore and Member States will be required to mandate the switch-off in all the remaining copper switch-off areas except in the areas where fibre deployment is not economically, viable and there is no adequate solution capable of replacing copper-based services. In the latter areas, Member States may decide not to

mandate the switch-off. Finally, safeguards apply throughout the entire process – to maintain continuity and protect consumers.

Part V covers also the framework for access to land and rights of way, interconnection and access, and the application of symmetric and SMP-based regulatory remedies. It clarifies the rights and obligations of undertakings in negotiating access and interconnection, empowers national regulatory authorities to impose proportionate measures to ensure end-to-end connectivity and interoperability where justified.

This part maintains the main pillars of the current system of symmetric and SMP access regulation. As for the SMP, the rules prioritise the ‘investment friendly’ access regulation of passive networks (ducts and poles where operators deploy own fibre networks) and promote the harmonisation of access products. As far as symmetric access is concerned, the rules aim at stimulating fibre take-up by maintaining access to in-building wiring when requested. In addition, NRAs can use symmetric measures to tackle local bottlenecks by imposing access to local networks fibre network. Moreover, the symmetric rules should allow the connection of end users whose premises are not connected via an obligation on fibre operators deploying a network nearby to connect those users.

Finally, Part V strengthens internal market procedures for draft national measures affecting trade between Member States, ensuring consistent application across the Union through coordinated notification, assessment and, where necessary, intervention mechanisms.

Part VI: Services

Part VI sets out service-related obligations aimed at ensuring that all end-users in the Union can benefit from essential connectivity and a high and common level of protection. It modernises universal service obligations by refreshing the right of all consumers to access an affordable adequate internet access service and voice communications services at a fixed location, and providing for harmonised procedures on how Member States define “adequate” connectivity in light of minimum bandwidth enjoyed by the majority of consumers, supported by BEREC guidance and for ensuring the bandwidth necessary for social and economic participation in society. It also provides a structured approach to affordability, including monitoring of retail price evolution, measures for consumers with low income or special social needs, and specific support to ensure equivalent access for end-users with disabilities, while enabling the Commission—after consulting BEREC—to specify, by implementing acts, adequate internet access service in light of national conditions and criteria and methodology to consider for affordability assessment. A new and more flexible approach to financing is proposed without sector specific designation or the related funding mechanism.

Part VI further safeguards end-user rights in the digital environment. It preserves open internet access by codifying end-users’ rights to access and distribute content and to use applications and terminal equipment of their choice, alongside strict net neutrality obligations subject only to narrowly defined and proportionate exceptions and robust supervision by national regulatory authorities, complemented by BEREC reporting and guidelines. It consolidates and updates consumer protection rules that are presented in three chapters. The chapter “Rights for Consumers” is scoped to consumers and extended to microenterprises and not-for-profit organisations (some provisions are extended also to small enterprises) and includes sector-specific rules on transparency and contract information (including a contract summary template), contract duration and termination, and bundled offers. The chapter “Rights for end-users” includes switching and number portability and ensures non-discrimination. The chapter

“Facilities and functionalities for end-users” includes measures against fraudulent activities and to ensure critical services such as missing children hotlines, emergency communications and public warning systems and, where applicable, the use of the digital wallet. The chapter also includes rules on calling line identification, equivalent access and choice for end-users with disabilities. Finally, the chapter provides targeted interoperability and “must carry” provisions, and empowers the Commission to update technical annexes by delegated acts to reflect technological and societal developments.

Part VII: Governance

Part VII establishes the governance framework necessary to ensure the coherent, independent and effective functioning of the single market for electronic communications. It defines the roles, powers and safeguards applicable to national regulatory and other competent authorities, entrusts them with clearly identified tasks, preserves their legal and functional independence from market actors, and provides them with adequate resources and budgetary autonomy. It also lays down common principles on appointment, dismissal, accountability and transparency, as well as obligations for cooperation and coordination at national and cross-border level, thereby reinforcing regulatory consistency and mutual trust across the Union.

Part VII further consolidates Union-level governance by integrating and strengthening the roles of BEREC, the Radio Spectrum Policy Body and the Office for Digital Networks. It clarifies BEREC’s objectives, tasks and internal organisation, enhancing its capacity to promote consistent implementation of the regulatory framework through opinions, guidelines, reports and best practices, supported by structured data collection and market monitoring. In particular, given the geopolitical context, it strengthens BEREC’s competences linked to resilience and preparedness, such as the adoption of the Union Preparedness Plan for Digital Infrastructures. In parallel, it establishes a reinforced framework for strategic radio spectrum governance through the RSPB, defining its advisory and coordination role in Union spectrum policy, cross-border coordination and international engagement, while ensuring close cooperation with BEREC where regulatory and spectrum matters intersect.

Finally, Part VII provides a comprehensive organisational, financial and accountability framework for the Office for Digital Networks as a Union body supporting both BEREC and the RSPB. It sets out the ODN’s tasks, governance structure, programming, budgetary and staffing rules, and ensures transparency, sound financial management and effective oversight, including anti-fraud, audit and evaluation mechanisms.

Part VIII: General and final provisions

Part VIII lays down the general, procedural and final provisions that ensure the effective, transparent and uniform application of the Regulation across the Union. It establishes a comprehensive framework for the provision, exchange and publication of information, empowering national regulatory and other competent authorities, BEREC and the RSPB to request proportionate, justified and timely information from undertakings, including on environmental sustainability, while safeguarding confidentiality, data protection and business secrets. It further provides for regular geographical surveys of network deployments and forecasts, enabling evidence-based regulatory action, informed public funding decisions and coordinated planning, including during the transition from legacy to fibre networks.

Part VIII also reinforces openness, participation and regulatory consistency through structured consultation and transparency mechanisms. It requires public consultation on draft measures

with significant market impact, accessible consultation procedures and the systematic involvement of end-users, including end-users with disabilities, consumers and other stakeholders. At Union level, it introduces harmonisation and standardisation procedures allowing the Commission, with the support of BEREC or the RSPB, to address divergences that risk fragmenting the internal market, while promoting interoperable, future-proof technical standards in a technology-neutral manner.

Finally, Part VIII provides clear rules on dispute resolution, compliance, enforcement and legal certainty. It establishes out-of-court and regulatory dispute resolution mechanisms at national and cross-border level, complemented by guidance and voluntary conciliation to foster cooperative, innovative and sustainable ecosystem practices. It sets out proportionate enforcement powers, penalties and safeguards, including rights of appeal, and defines the use of delegated and implementing powers, committee procedures, monitoring, review and transitional arrangements.

Proposal for a

**REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
on a Digital Networks Act (DNA)**

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 114 thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee²⁴, [where necessary]

Having regard to the opinion of the Committee of the Regions²⁵, [where necessary]

Acting in accordance with the ordinary legislative procedure,

Whereas:

- (1) The functioning of Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code ('EECC') has been reviewed in light of technological and market developments.
- (2) Technologies are rapidly evolving, data traffic has been significantly growing and demand for Gigabit connectivity is increasing. A modern and environmentally sustainable digital infrastructure for connectivity and computing are critical enablers for the competitiveness of EU industry and society taking advantage of the benefits of digitalisation. High-quality, secure and resilient connectivity for everybody and everywhere in the Union, including in rural and remote areas, such as islands and mountainous and sparsely populated regions, as well as the outermost regions, is needed.
- (3) Decision (EU) 2022/2481 of the European Parliament and of the Council²⁶ set updated targets for 2030 that reflect the expected connectivity needs of the future where all European households should be covered by a gigabit network, with all populated areas covered by next-generation wireless high-speed networks with performance at least equivalent to that of 5G. To achieve those targets, there is a need for policies to speed up, simplify and lower the costs of the deployment of Gigabit fixed and wireless networks across the Union, including reducing the administrative burden for both operators and national administrations.
- (4) The EECC, through its objectives of promotion of connectivity and access to, and take-up of, Gigabit networks, helped to achieve or maintain effective competition in the

²⁴ OJ C [...], [...], p. [...].

²⁵ OJ C [...], [...], p. [...].

²⁶ Decision (EU) 2022/2481 of the European Parliament and of the Council of 14 December 2022 establishing the Digital Decade Policy Programme 2030 (OJ L 323, 19.12.2022, p.4).

markets for electronic communications networks and services. Member States were required to adopt and publish, by 21 December 2020, the laws, regulations and administrative provisions necessary to implement the EECC into their national law. The full transposition in all 27 Member States was only completed in 2024. Such long delays from the proposal of legislative reforms to entry into application in the Union is no longer suitable for the rapid transformation of the technology in the current sociopolitical context, which require rules that can have a fast impact on the market. Moreover, certain national provisions which relate to EECC provisions but go beyond what would be strictly necessary for the completeness and conformity of the transposition has led to the continued fragmentation of the internal market in the area of electronic communications.

- (5) Therefore, the European regulatory framework for electronic networks and services should be framed in a directly applicable Regulation. To this end, the relevant legislative instruments (European Electronic Communications Code, BEREC Regulation²⁷, Radio Spectrum Policy Programme²⁸ and certain provisions of the Open Internet Regulation and the ePrivacy Directive) should be merged into one single Regulation, the Digital Networks Act.
- (6) This Regulation creates a legal framework to ensure the freedom to provide electronic communications networks and services, subject only to the conditions laid down in this Regulation and to any restrictions in accordance with Article 52(1) of the Treaty on the Functioning of the European Union (TFEU), in particular measures regarding public policy, public security and public health, and consistent with Article 52(1) of the Charter of Fundamental Rights of the European Union (the ‘Charter’)²⁹.
- (7) As described in the White Paper on Digital Infrastructure Needs (COM(2024) 81 final), the sector is undergoing significant technological changes, where digital infrastructures are becoming cloud- and AI-based and the connectivity ecosystem is broadening to provide new innovative services, e.g. based on quality and in partnership with other innovators. Therefore, this Regulation takes account of the evolution from electronic communications networks towards ‘Digital Networks’.
- (8) This Regulation does not cover the content delivered over electronic communications networks using electronic communications services, such as broadcasting content, financial services and certain information society services, and is without prejudice to measures taken at Union or national level in respect of such services, in accordance with Union law, in order to promote cultural and linguistic diversity and to ensure the defence of media pluralism. The content of television programmes is covered by Directive 2010/13/EU of the European Parliament and of the Council. The regulation of audiovisual policy and content aims at achieving general interest objectives, such as freedom of expression, media pluralism, impartiality, cultural and linguistic diversity, social inclusion, consumer protection and the protection of minors. The separation

²⁷ Regulation (EU) 2018/1971 of the European Parliament and of the Council of 11 December 2018 establishing the Body of European Regulators for Electronic Communications (BEREC) and the Agency for Support for BEREC (BEREC Office), amending Regulation (EU) 2015/2120 and repealing Regulation (EC) No 1211/2009 (OJ L 321, 17.12.2018, p. 1).

²⁸ Decision No 243/2012/EU of the European Parliament and of the Council of 14 March 2012 establishing a multiannual radio spectrum policy programme, (OJ L 081 21.3.2012, p. 7), as amended by Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 (OJ L 321, 17.12.2018, p. 36).

²⁹ Charter of Fundamental Rights of the European Union (OJ C 326, 26.10.2012, p. 391).

between the regulation of electronic communications and the regulation of content does not affect the taking into account of the links existing between them, in particular in order to guarantee media pluralism, cultural diversity and consumer protection. Within the limits of their competences, competent authorities should contribute to ensuring the implementation of policies aiming to promote those objectives.

- (9) This Regulation does not affect the application to radio equipment of Directive 2014/53/EU of the European Parliament and of the Council³⁰, but does cover car radio and consumer radio receivers, and consumer digital television equipment.
- (10) In order to allow national regulatory and other competent authorities to meet the objectives set out in this Regulation, its scope should cover certain aspects of radio equipment as defined in Directive 2014/53/EU and consumer equipment used for digital television, in order to facilitate access for end-users with disabilities. It is important for national regulatory and other competent authorities to encourage network operators and equipment manufacturers to cooperate in order to facilitate access by end-users with disabilities to electronic communications services. The non-exclusive use of radio spectrum for the self-use of radio terminal equipment, although not related to an economic activity, should also be the subject of this Regulation in order to ensure a coordinated approach with regard to their authorisation regime.
- (11) The requirements concerning the capabilities of electronic communications networks are constantly increasing. While in the past the focus was mainly on growing bandwidth available overall and to each individual user, other parameters such as downlink and uplink data rates, latency, availability and reliability are becoming increasingly important. The current response towards that demand is to bring optical fibre closer and closer to the end-user, and future ‘Gigabit networks’ require performance parameters which are equivalent to those that a network based on optical fibre elements at least up to the network termination point can deliver. In the case of wireless connection, this corresponds to network performance similar to that achievable based on an optical fibre installation up to the base station, considered to be the network termination point.
- (12) Certain electronic communications services under this Regulation could also fall within the scope of the definition of ‘information society service’ set out in Article 1 of Directive (EU) 2015/1535 of the European Parliament and of the Council³¹. The provisions of that Directive that govern information society services apply to those electronic communications services to the extent that this Regulation or other Union legal acts do not contain more specific provisions applicable to electronic communications services. However, electronic communications services such as voice telephony, messaging services and electronic mail services are covered by this Regulation. The same undertaking, for example an internet service provider, can offer both an electronic communications service, such as access to the internet, and services not covered by this Regulation such as the provision of web-based and not communications-related content.
- (13) The same undertaking, for example a cable operator, can offer both an electronic communications service, such as the conveyance of television signals, and services not

³⁰ Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC (OJ L 153, 22.5.2014, p. 62).

³¹ Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services (OJ L 241, 17.9.2015, p. 1).

covered under this Regulation, such as the commercialisation of an offer of sound or television broadcasting content services, and therefore additional obligations can be imposed on such an undertaking in relation to its activity as a content provider or distributor, in accordance with provisions other than those of this Regulation, without prejudice to the conditions laid in an annex to this Regulation.

- (14) In order to fall within the scope of the definition of electronic communications service, a service needs to be provided normally in exchange for remuneration. In the digital economy, market participants consider information about users has a monetary value. Electronic communications services are often supplied to the end-user not only for money, but increasingly and in particular for the provision of personal data or other data. The concept of remuneration encompasses situations where the provider of a service requests and the end-user knowingly provides personal data within the meaning of Regulation (EU) 2016/679³² or other data directly or indirectly to the provider. It also encompasses situations where the end-user allows access to information without actively supplying it, such as personal data, including the IP address, or other automatically generated information, such as information collected and transmitted by a cookie. In line with the case-law of the Court of Justice of the European Union (Court of Justice) on Article 57 TFEU³³ (1), remuneration also exists within the meaning of the TFEU if the service provider is paid by a third party and not by the service recipient. The concept of remuneration should therefore also encompass situations in which the end-user is exposed to advertisements as a condition for gaining access to the service, or situations in which the service provider monetises personal data it has collected in accordance with Regulation (EU) 2016/679.
- (15) Interpersonal communications services are services that enable interpersonal and interactive exchange of information, covering services like traditional voice calls between two individuals but also all types of emails, messaging services, or group chats. Interpersonal communications services only cover communications between a finite, that is to say not potentially unlimited, number of natural persons, which is determined by the sender of the communication. Communications involving legal persons should fall within the scope of the definition where natural persons act on behalf of those legal persons or are involved at least on one side of the communication. Interactive communication entails that the service allows the recipient of the information to respond. Services which do not meet those requirements, such as linear broadcasting, video on demand, websites, social networks, blogs, or exchange of information between machines, should not be considered to be interpersonal communications services. In exceptional circumstances a service should not be considered to be an interpersonal communications service if the interpersonal and interactive communication facility is a minor and purely ancillary feature to another service and for objective technical reasons cannot be used without that principal service, and its integration is not a means to circumvent the applicability of the rules governing electronic communications services. As elements of an exemption from the definition the terms ‘minor’ and ‘purely ancillary’ should be interpreted narrowly and from an objective end-user’s perspective. An interpersonal communications feature could be considered to be minor where its objective utility for an end-user is very limited and where it is in reality barely used by

³² Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (OJ L 119, 4.5.2016, p.1), corrigendum, OJ L 127, 23.5.2018.

³³ Judgment of the Court of Justice of 26 April 1988, Bond van Adverteerders and Others v The Netherlands State, C-352/85, ECLI: EU:C:1988:196.

end-users. An example of a feature that could be considered to fall outside the scope of the definition of interpersonal communications services might be, in principle, a communication channel in online games, depending on the features of the communication facility of the service.

- (16) Interpersonal communications services using numbers from national and international numbering plans connect with publicly assigned numbering resources. Those number-based interpersonal communications services comprise both services to which end-users' numbers are assigned for the purpose of ensuring end-to-end connectivity and services enabling end-users to reach persons to whom such numbers have been assigned. The mere use of a number as an identifier should not be considered to be equivalent to the use of a number to connect with publicly assigned numbers and should therefore, in itself, not be considered to be sufficient to qualify a service as a number-based interpersonal communications service. Number-independent interpersonal communications services should be subject to obligations only where public interests require that specific regulatory obligations apply to all types of interpersonal communications services, regardless of whether they use numbers for the provision of their service. It is justified to treat number-based interpersonal communications services differently, as they participate in, and hence also benefit from, a publicly assured interoperable ecosystem.
- (17) The network termination point represents a boundary for regulatory purposes between the regulatory framework for electronic communications networks and services and the regulation of telecommunications terminal equipment. Defining the location of the network termination point is the responsibility of the national regulatory authority.
- (18) The objectives of the new regulatory framework should also be updated to address the challenges of the sector and ensure it can adapt to future developments. With the technological transformation of electronic communication networks towards digital networks integrating cloud and AI based solutions, the connectivity ecosystem is expanding. Therefore, this Regulation should support the competitiveness of the sector and the ability to master this transformation. It should foster innovation and effective cooperation among the broad range of players in the extended connectivity ecosystem.
- (19) The internal market in the area of electronic communications is still divided into 27 national markets, which limits the possibilities for providers to scale up and innovate in the extended connectivity ecosystem on a level-playing field with Content and Application Providers (CAPs), who are benefiting to a large extent from a country-of-establishment regime and therefore operate in the Union in one Single Market. This uneven level playing field among various actors in the ecosystem has been recognized in the Commission White Paper on Digital Infrastructure Needs as well as the Letta Report. In this context, the European Council underlined in its conclusions from October 2025 that particular efforts are required to 'deepen the Single Market for electronic communications'. Therefore, with a view to increasing the competitiveness and resilience of the sector, this Regulation should facilitate the development of a Single Market for electronic communications introducing simplified and further harmonised measures, facilitating scale-up in the Union, supporting and incentivising innovation and investment in modern, resilient and sustainable networks and services. This should include facilitating cross border provision of electronic communications networks and services, including pan-European satellite communications services as well as the development of trans-European digital networks.

- (20) The new general objectives complement general objectives laid out by the EECC that are still relevant and needed for the sector, such as fostering investment in the widespread connectivity, ensuring access to and take-up of Gigabit networks, promote effective competition and maintain a high level of protection for end users.
- (21) Strengthening the resilience and preparedness of connectivity infrastructure and services of the Union is of vital importance in view of increasing risks of natural disasters and crisis, as well as intentional foreign interference in networks and radio signals. To this end, this Regulation should strengthen the Union's strategic autonomy ensuring resilient connectivity infrastructure and services and prepare to respond to address contingencies, such as physical, cyber and hybrid attacks and natural disasters, making mitigating measures available, improving resilience, in particular redundancy of critical network segments based on the coherent integration of terrestrial and non-terrestrial (satellite and subsea) networks, and foreseeing the needed network capabilities for the society to respond to crises.
- (22) As bottlenecks and barriers to entry remain at the infrastructure level, including as a consequence of the transition to fibre, this Regulation should ensure sustainable competition through the implementation of a simplified access regulation that addresses market failure, so that end users continue to benefit from a larger choice of advanced affordable and high quality services.
- (23) This Regulation aims to reduce *ex ante* sector-specific rules as competition in the markets develops and, ultimately, to ensure that electronic communications are governed only by competition law. This was the aim since the first regulatory framework for the electronic communications network and services was adopted (Directive 2009/140/EC). Considering that the markets for electronic communications have shown strong competitive dynamics in recent years, it is essential that *ex ante* regulatory obligations are imposed only where there is a market failure on the markets concerned.
- (24) To best address the possible anti-competitive effects in the markets following the copper switch off and the transition to fibre, this Regulation empowers national regulatory authorities to use both symmetric and asymmetric measures based on the national market circumstances and in line with the principle of proportionality. To increase predictability and legal certainty, strengthen the single market and facilitate the emergence of pan-European services, harmonised access products have been introduced in this Regulation
- (25) The objective of *ex ante* regulatory intervention is to produce benefits for end-users by making retail markets effectively competitive on a sustainable basis. Obligations at wholesale level should be imposed where in the absence of those obligations effective competition is not likely to emerge or persist in one or more retail markets. It is likely that national regulatory authorities are gradually, through the process of market analysis, able to find retail markets to be competitive even in the absence of wholesale regulation, especially considering expected improvements in innovation and competition. In such a case, the national regulatory authority should conclude that regulation is no longer needed at wholesale level, and assess the corresponding relevant wholesale market with a view to withdrawing *ex ante* regulation. [to be updated on the basis of the access option preferred]. In doing so, the national regulatory authority should take into account any leverage effects between wholesale and related retail markets which might require the removal of barriers to entry at the infrastructure level in order to ensure long-term competition at the retail level.

- (26) It is also necessary to give appropriate incentives for investment in Gigabit networks (including advanced 5G, 6G, fibre, submarine cables, data centres that support innovation in content-rich internet services and strengthen the overall competitiveness of the Union. It is therefore vital to promote efficient investment in the development of those networks, and solutions and support widespread availability and take up of Gigabit networks and of electronic communication services, including by the timely transition to a full fibre environment across the Union.
- (27) For the Member States, the national regulatory and other competent authorities and the stakeholders, that connectivity objective translates, on the one hand, into aiming for the highest capacity networks and services economically sustainable in a given area, and, on the other, into pursuing territorial cohesion, in the sense of convergence in capacity available in different areas.
- (28) It is important that the electronic communications framework is closely aligned with the Union objectives regarding its transition to a low-carbon economy. Therefore, this Regulation should promote sustainability of networks and services by supporting attractive investment conditions for energy-efficient and low-carbon networks and solutions. In particular, this objective should be aligned with fostering connectivity enabling energy efficiency and carbon neutrality in other industrial sectors as well as investment in energy-efficient connectivity infrastructure in line with updated taxonomy framework and related Code of Conduct for Sustainable Telecom Networks. This regulation shall also foster cooperation among the actors involved in end-to-end service delivery as regards efficient management of data traffic.
- (29) In view of the objectives of this Regulation, national regulatory and other competent authorities should, where necessary, coordinate their actions with the authorities of other Member States, as well as with BEREC, RSPB and ODN in carrying out their task under this Regulation.
- (30) Progress towards the achievement of the general objectives of this Regulation should be supported by a robust system of continuous assessment and benchmarking by the Commission of Member States with respect to the availability of Gigabit networks in all major socio-economic drivers such as schools, transport hubs and major providers of public services, and highly digitised businesses, the availability of uninterrupted high-quality 5G stand-alone network coverage, and the availability to all households in each Member State of electronic communications networks which are capable of providing at least 100 Mbps, and which are promptly upgradeable to gigabit speeds. To that end, the Commission should continue monitoring the performance of Member States, including, by way of an example, indexes that summarise relevant indicators on the Union's digital performance and track the evolution of Member States in digital competitiveness, and, where necessary, establish new methods and new objective, concrete and quantifiable criteria for benchmarking the effectiveness of Member States
- (31) As a follow-up to the Nevers Call of 9 March 2022 Member States conducted a risk assessment of Europe's communications infrastructures and networks. To mitigate the identified risks, this assessment put forward a number of strategic and technical recommendations for Member States, the Commission and the European Network and Information Security Agency (ENISA)³⁴, to be implemented with the support of the

³⁴ Regulation (EU) 2019/881 of the European Parliament and of the Council of 17 April 2019 on ENISA (the European Union Agency for Cybersecurity) and on information and communications technology cybersecurity certification and repealing Regulation (EU) No 526/2013 (Cybersecurity Act) (OJ L 151, p. 15).

BEREC. Among other strategic recommendations, there are calls to: assess resilience of international interconnections; assess criticality, resilience and redundancy of core Internet infrastructure, such as subsea communication cables and reinforce Union capabilities and coordinated action to strengthen the resilience of communications infrastructures. To achieve effective preparedness and enhance resilience, cooperation among national competent authorities and EU level bodies should be strengthened, including through common guidance and timely information-sharing.

- (32) Electronic communications networks and services form a critical backbone of Union society and the economy. While Directive (EU) 2022/2555 of the European Parliament and of the Council of 14 December 2022 on measures for a high common level of cybersecurity across the Union³⁵ addresses the security and resilience of individual entities, there is a need for a sector-specific Union framework to ensure the overall resilience, preparedness and continuity of electronic communications at Union level, including in situations involving cross-border disruptions or large-scale natural or man-made disruptions, crises or force majeure that may negatively affect the population. To that end, the Office for Digital Networks ('ODN') should act as the central coordination point for resilience in the electronic communications sector, drawing on its sector-specific expertise, market oversight and Union-wide perspective. As such, ODN should exchange and coordinate with national regulatory authorities, the Commission and other relevant Union bodies and agencies, including ENISA, as well as, where appropriate, international organisations such as NATO, on issues relating to Union-level assessment, monitoring, analysis and preparedness of electronic communications networks and services and their capability to contribute to the overall resilience of European society and economy, while fully respecting the roles of ENISA, the NIS Cooperation Group and EU-CyCLONe under Union cybersecurity and civil protection frameworks.
- (33) In this context, ODN should be tasked with ensuring a coherent, cross-border and sector-specific approach. ODN's role should complement, and be without prejudice to, the obligations of individual providers and the competences of authorities under Directive (EU) 2022/2555, focusing instead on a system-wide preparedness, interchangeable infrastructures, trans-European network and services continuity and coordinated crisis response.
- (34) In the Union, when natural or man-made disruptions, crises or force majeure arise that may negatively affect the population, the availability and specific capabilities of electronic communication networks and services are crucial as they enable the population to receive timely information, maintain social and economic interactions, and access public and emergency-related services. Without prejudice to Directive (EU) 2022/2555, under this Regulation all providers of public electronic communication network and other relevant digital infrastructure providers under Article 3 of Directive (EU) 2022/2555 that own or control electronic communications network infrastructure or may enable electronic communication services should adopt measures to ensure the availability of interpersonal communication services and internet access services when such events arise. Providers of electronic communication networks and services that are not publicly available could ensure redundancy in such critical situations. Other relevant digital infrastructure providers under Article 3 of Directive (EU) 2022/2555 that own or control electronic communications networks and services should enable, to the extent it

³⁵ Directive (EU) 2022/2555 of the European Parliament and of the Council of 14 December 2022 on measures for a high common level of cybersecurity across the Union, amending Regulation (EU) No 910/2014 and Directive (EU) 2018/1972, and repealing Directive (EU) 2016/1148 (NIS 2 Directive) (OJ L 333, 27.12.2022, p. 80).

is technically possible and as far as public interest is served, the availability of interpersonal communications services and internet access services if the publicly available electronic communications networks and services are critically disrupted by the aforementioned large scale event.

- (35) End-users should be able to ask for help or assistance from the competent authorities via emergency communications and receive information from the competent authorities via public warnings in case of large-scale events that have the potential to negatively affect the population, like catastrophic network breakdowns or in case of force majeure. Consequently, electronic communication networks and services providers should adopt specific measures to ensure uninterrupted electronic communications, including internet traffic, necessary to effectively convey emergency communications and public warnings from and to the affected end-users or population. National public safety answering point systems and public warning systems should be designed to be redundant and resilient in case of large-scale events that have the potential to negatively affect the population.
- (36) Before significant changes in the networks used to provide access to emergency services are implemented, providers of interpersonal communication services and public safety answering points (“PSAPs”) should take all necessary steps, including testing and validation of solutions in order to ensure the continued availability of emergency communications and caller location information for end users and to ensure the continued possibility to send public warnings to end-users. Electronic networks and service providers should present a roadmap indicating the process of migration to the competent authorities of the Member State, that contains sufficient information to assess the risk posed to the availability of emergency communication services and the potentially affected end-users. Such a roadmap should be provided in order to inform in a timely manner the users of electronic communication services relying on the current technology and to allow them to prepare or adapt to the new technologies and avoid the discontinuation of the electronic communication services on the devices they are using.
- (37) As part of long-term resilience enhancing measures, the development of the resilient integrated connectivity should, among others, address the preparedness for adoption of state-of-the-art technology and for instance, the emerging quantum communication technologies to ensure next generation of secure communications in particular in critical network segments. In this regard, the transition to post-quantum cryptography is necessary. In addition, quantum communication supported by fibre or Gigabit communications networks could play an important role. The EuroQCI, designed to become an integral part of the new EU space-based secure communication system (Infrastructure for Resilience, Interconnectivity and Security by Satellite/IRIS), could be a driver for the next generation of secure communications to the benefit of the businesses and governments across the Union. Thus, by ensuring timely transition to post-quantum cryptography, by progressively integrating quantum-based systems into existing communication infrastructure and by developing a resilient Europe’s quantum communication ecosystem and industry, the security of sensitive data and critical infrastructure should be reinforced.
- (38) The Union-level efforts should be complemented by BEREC in ensuring a high level of resilience by adoption of a report titled “Union Preparedness Plan for Digital Infrastructures”, prepared by the ODN. The Plan should consist of a comprehensive assessment, operational recommendations and crisis management practices on further measures to ensure a consistent approach to resilience across the Union as well as on funding mechanisms ensuring redundancy and enhancing EU-level preparedness for

crisis. To be ready to operate electronic communications and digital networks' infrastructure and provide electronic communications services, including during crises and via resilient national and international interconnections, the EU-level sector specific role in preparedness and crisis management needs to be enhanced.

- (39) The BEREC template for collection of data on resilience of electronic communications networks and services or other digital infrastructures identified as essential under Article 3 of Directive (EU) 2022/2555 to support the preparation of the Plan should include information about capacity, architecture, capabilities and usage of network segments, which are considered key to ensuring overall resilience and continuity of services at Union scale. This should notably include specific network segments such as international interconnections, aggregation networks, core and backbone networks (submarine networks, including their cable landing stations, internet exchange points/points of presence and satellite networks integrated with terrestrial networks which are capable of providing back-up service in the event of unavailability of the prior), content delivery networks or networks connecting large data centre facilities. Where information which is classified in accordance with Union or national law needs to be exchanged, reported or otherwise shared under this Regulation, the corresponding rules on the handling of classified information should be applied. Where appropriate, non-classified summaries enabling operational coordination may be shared in parallel.
- (40) Furthermore, the ODN should contribute, at Union level, to the monitoring, analysis and synthesis of information on architecture, capacity, technical capabilities and resilience of electronic communication networks, and support coordination efforts aimed at ensuring the availability and increased capabilities of electronic communication networks and services during natural or man-made disruptions, crises or force majeure, while fully respecting the national crisis response coordination frameworks. This could include, for instance, identification of areas where redundancy is needed, informing strategic policy and investments decisions to support redundancy, in particular for trans-European digital networks and related future funding programmes such as proposed as part of the digital window of the European Competitiveness Fund under the multi-annual financial framework. The assessment should also provide an overview of reserve network capacities, as well as an overview of existing and emerging mechanisms for traffic prioritisation, including network slicing and other network management and network optimisation solutions which protect and secure communications. Such mechanisms play an important role in ensuring the continuity of essential communications networks and services during situations of increased demand, network congestion, or other communication disruptions, which may occur during crises.
- (41) In particular, specialised services enabled by advanced network capabilities, such as network slicing, play an increasingly important role in supporting use cases with heightened requirements for security, reliability and low latency. This includes applications such as the operation of unmanned aircraft systems, including drones, which require assured levels of performance, resilience and isolation from other traffic to ensure safe and secure functioning. The availability of such specialised services can enable public authorities and private operators to deploy security-related and safety-critical applications more effectively, while fostering innovation and efficient use of network resources, in line with Union objectives for security, technological leadership and the development of advanced digital services.
- (42) The Union's resilience increasingly depends on future-proof connectivity and reduced strategic dependencies. This calls for a forward-looking approach that strengthens the

ability of terrestrial and non-terrestrial (satellite) networks to interconnect and operate seamlessly, including in crisis situations. Resilience can be enhanced through integrated, layered network architectures combining terrestrial networks with non-terrestrial networks ('NTNs'), supported by virtualisation, redundancy and automated network management. Such integration can maintain essential communications where terrestrial infrastructure is damaged or congested and strengthen overall continuity of service. In this context, the ODN should participate in market monitoring and technological developments, identify bottlenecks to interoperability and deployment (including between terrestrial and NTN systems and for emerging technologies), and provide recommendations to support a coherent Union-level approach to resilient connectivity.

- (43) The ODN should be able, where appropriate, and in cooperation with relevant bodies and competent authorities, to analyse the threat landscape which the Union electronic communications networks and services are increasingly exposed to. This includes, among others, incidents of harmful radio spectrum interference. Such incidents have increased in recent years in a context of heightened geopolitical tensions and may affect the availability and quality of services, often with cross-border implications. In this context, the ODN should analyse such trends and support competent authorities by issuing operational recommendations. This role should complement national responsibilities and contribute to a coordinated Union-level response.
- (44) In order to ensure a consistent and coordinated regulatory response at Union level to enhance the preparedness for crisis, BEREC should adopt crisis management practices setting out common procedures and coordination arrangements for national regulatory and other competent authorities, including in crisis management and civil protection in the event of natural or man-made disruptions, crises or force majeure. Those practices should be aligned with existing Union and national crisis management frameworks and support coherent action, including through information sharing with relevant Union-level crisis response and civil protection coordination system and cyber-response mechanisms where cybersecurity incidents are involved.
- (45) Under the EECC, Member States were able to subject the right of providers of public electronic communications networks and services only to a rather flexible general authorisation regime. The objective was to stimulate the development of new networks and services while allowing service providers and consumers to benefit from the economies of scale of the internal market.
- (46) The general authorisation system was based on a harmonised but maximum list of conditions that kept the flexibility of the Member States to decide which general authorisation conditions to attach to the general authorisation within their territories, how to further specify them at national level and the possibility to require providers to submit to the national regulatory or other competent authorities a notification indicating their intention to start providing the services. The notification was intended to have a declaratory nature and no explicit decision or administrative act by the national regulatory authority was required.
- (47) The evaluation of the EECC has revealed, however, that the lack of a single and coordinated general authorisation, largely developed and implemented at national level and the absence of a uniform and coherent approach to the conditions applicable as well as the notification procedures despite the BEREC harmonised, non-mandatory template, led to regulatory fragmentation and to increased barriers for operators to scale up and operate cross border.

- (48) To overcome the challenges posed by the EECC and enable providers to benefit fully from the internal market for electronic communications, this Regulation lays down a modern general authorisation regime applicable to all types of electronic communications networks involved in the delivery of publicly available digital services and to publicly available electronic communications services with some exceptions.
- (49) In relation to the providers of electronic communications networks, the general authorisation system should not apply to certain types of networks that do not have the main purpose to support the provision of publicly available digital services. Examples are networks mainly used for private, internal or closed, predetermined user group communications, including networks used only for internal links between communications infrastructure facilities not mainly intended for publicly available digital services. In relation to the provision of electronic communications services, number-independent interpersonal communications services should remain excluded from the scope of general authorisation. Contrary to the other categories of electronic communications networks and services as defined in this Regulation, number-independent interpersonal communications services do not benefit from the use of public numbering resources and do not participate in a publicly assured interoperable ecosystem. It is therefore appropriate to continue not subjecting those types of services to the general authorisation regime. However, number-independent interpersonal communications service providers may also be subject to certain obligations under this Regulation.
- (50) The general authorisation regime will be subject to compliance with a shorter updated list of fully harmonised conditions applicable in all Member States, as well as with some other conditions that do not stem from this Regulation but from other Union or national laws, but that are not yet fully harmonised, such as, access to data and data retention rules and ICT supply chain requirements in accordance with [enter reference to the proposal for a revised Cybersecurity Act] and Regulation (EU) 2024/2847³⁶ (Cybersecurity Resilience Act).
- (51) Furthermore, providers subject to a general authorisation should submit a notification to the national regulatory authority of the Member State in which they intend to start the provision of electronic communications networks or services or where such are already provided. They should also be able to submit only one notification to one Member State in case they intend to provide services in more than one Member State under the Single Passport procedure. Under this Regulation, satellite systems should not be subject to the general Single Passport procedure, but to a specific EU level procedure.
- (52) The notification should use a mandatory template made available by BEREC. It should consist of a declaration by a natural or legal person to the national regulatory or other competent authority of the intention to start the provision of electronic communications networks or services and the submission of limited information further specified by the related BEREC template including identity, contact and business details, information about the networks or services intended to be provided and their geographical area of availability as well as the estimated date for starting the activity.
- (53) National regulatory authorities should not impose additional or separate notification requirements. In this regard, national regulatory authorities should not require any

³⁶ Regulation (EU) 2024/2847 of the European Parliament and of the Council of 23 October 2024 on horizontal cybersecurity requirements for products with digital elements and amending Regulations (EU) No 168/2013 and (EU) 2019/1020 and Directive (EU) 2020/1828 (Cyber Resilience Act) (OJ L, 2024/2847, 20.11.2024).

additional documents as part of the general authorisation that are not contained in BEREC's notification template. Notification requirements (in particular, update of notification requirements) should be kept to the minimum.

- (54) To encourage the provision of cross-order networks and services, providers should be able to submit the notification not only in the official language of the Member State concerned but in any official language of the EU or at least in English language.
- (55) In addition, all national regulatory authorities should accept notifications online (for example, via a an entry point at the website of the relevant authority and, where mandated, through harmonised digital solutions such as Business Wallets), and should not require providers to use digital certificates limited to the national territory that are not mutually recognised in other Member States and that are not in accordance with the minimum requirements established by the Commission for the cross-border processing of documents signed electronically by competent authorities³⁷ or to have national representatives to interact with national authorities. In their exchange of information or documents by electronic means, public authorities should act in accordance with the requirements of Regulation (EU) 2024/903.
- (56) Competent authorities should not impede the provision of networks or services in any way, including on grounds of incompleteness of a notification. The notification to start their activities should not entail administrative costs for the providers of electronic communications networks or services.
- (57) In order to support effective cross-border coordination the ODN should continue to maintain a central database of all notifications. Competent authorities should transmit only complete notifications to the ODN.
- (58) Following the notification, competent authorities should confirm the start of the provision of networks or services describing the conditions, rights and obligations applicable in the Member State or Member States where the provider intends to provide networks or services. When the provider has notified its intention to provide networks or services only within the territory of one Member State, it should comply with the harmonised general authorisation conditions and, as regards any specificities, the conditions applicable in the jurisdiction of that Member State. However, this is without prejudice to other national rules applicable, apart from authorisation conditions, to providers in Member States where the service or networks are provided.
- (59) The confirmation that providers can start their activities should include information about the rights and obligations of undertakings under the general authorisation. Providers might need confirmation of their rights under the general authorisation, for example to apply for rights of use for radio spectrum or numbering resources, obtain access or interconnection and rights to install facilities, including rights of way, in particular to facilitate negotiations with other, regional or local, levels of government or with service providers in other Member States. If a provider so requests, the confirmation may also take the form of a declaration. Such declarations should not by themselves constitute entitlements to rights, nor should any rights under the general authorisation, rights of use or the exercise of such rights depend upon a declaration. A

³⁷

Commission Implementing Decision of 17 March 2014 amending Decision 2011/130/EU establishing minimum requirements for the cross-border processing of documents signed electronically by competent authorities under Directive 2006/123/EC of the European Parliament and of the Council on services in the internal market (OJ L 80, 19.3.2014, p. 7).

declaration should serve as a confirmation or proof to other national or regional authorities that the provider is authorised under this Regulation.

- (60) When granting rights of use for radio spectrum, for numbering resources or rights to install facilities, the national regulatory authorities should inform the undertakings to which they grant such rights of the relevant conditions. The national regulatory authorities should include such conditions for the use of radio spectrum in individual rights of use or in the confirmation for operations under a general authorisation.
- (61) Specific obligations imposed on undertakings providing electronic communications networks and electronic communications services in accordance with Union law by virtue of their designation as having significant market power as defined in this Regulation should be imposed separately from the general rights and obligations under the general authorisation.
- (62) In the case of electronic communications networks not provided to the public it is appropriate to impose fewer and lighter obligations, if any, than those that are justified for electronic communications networks and services provided to the public. However, they remain bound, among others, by obligations justified by public interest such as for networks resilience preparedness, cybersecurity, lawful interception/access to data and data retention in accordance with this Regulation or other applicable legislation.
- (63) The Single Passport procedure should facilitate the provision of electronic communications networks and services across Member States. Whenever a provider intends to provide electronic communications networks and services in various Member States, it should be able to submit only one notification to one national regulatory authority where it intends to start or already operates.
- (64) While under the previous general authorisation regime, the provider would have to submit notifications and very often obtain or present declaration to other national competent authorities to exercise their general authorisation rights and for instance, to install facilities. The Single Passport procedure should end by a confirmation to the provider to start provision of networks or services. Additional declarations, if any, may be issued only upon request by a provider and following the BEREC guidelines on general authorisation. For example, if needed, under the Single Passport confirmation the provider may ask through the ODN for a declaration describing under which circumstances the provider of electronic communications networks or services under general authorisation has the right to apply for rights to install facilities, negotiate interconnection, and obtain access to interconnection, in order to facilitate the exercise of those rights, for instance, at other levels of government or in relation to other undertakings. Such declarations could describe the criteria and procedure regarding the specific obligations on individual undertakings and should be provided through the ODN by the national regulatory authority of the Member State where networks or services will be provided and only upon request by the provider. The BEREC guidelines should specify the details about the possibility to request a declaration.
- (65) To ensure the effectiveness of the Single Passport, cooperation among national regulatory or other competent authorities of the Member States should be required to support BEREC and the ODN to issue and update guidelines and information resources on the harmonised application of general authorisation conditions in the Member States as well as mutual assistance in enforcing matters.
- (66) Therefore, upon entry into force of this Regulation, Member States should designate national single contact points. The designated national single contact points should

communicate to the ODN any specificities regarding the national implementation of the harmonised general authorisation conditions in their respective Member States, as well as any national procedures put in place to make effective the conditions listed in Article 9(2). Where there are different authorities responsible for the enforcement of the general authorisation and for the implementation of the measures, these national authorities should work closely with the designated single contact points. The designated national single points of contact should cooperate with the ODN on general authorisation conditions related to national legislation and procedures applicable to the provision of electronic communications networks and services, in particular related to cybersecurity, national security, access to data by law enforcement authorities and data retention.

- (67) Where appropriate, BEREC, supported by ODN, and the designated national contact points should closely cooperate with other bodies at Union level, such as NIS Co-operation Group, High-Level Group on Access to Data, European Data Protection Board, European Data Innovation Board, AI Board, to coordinate and facilitate a more harmonised implementation of other regulatory obligations affecting the provision of electronic communications networks and services and resulting from other Union acts, such as security, access to data, data retention, and personal and non-personal data protection.
- (68) The national regulatory authority of the Member State of notification should have the power to impose penalties for the breach of the general authorisation conditions. Penalties should be imposed according to national regulations and could include, in case of serious breach, and where necessary after consultation with the regulatory authorities of the affected Member States, the withdrawal of the right to provide networks and services in all the Member States covered by the single passport. A serious breach should be found exceptionally, for example, where non-compliance with one or more general authorisation conditions persists despite the remedial actions undertaken by the national regulatory or other competent authority. Only in exceptional cases, when a national regulatory authority of the Member State where the networks or services are provided concluded that the breach of the authorisation conditions may have a negative impact in its territory on the grounds of, among others, national security, public interest, harm to end-users rights, it shall have the right to impose penalties within its jurisdiction. Such exceptional enforcement measure should be taken in coordination with the relevant competent authorities of notification.
- (69) Enforcement of relevant national laws, in particular consumer protection rules or access to data and data retention for law enforcement purposes should be ensured by the national regulatory and other competent authorities of the Member States where networks and services are provided.
- (70) As an exception, in the case of machine-to-machine services with extraterritorial use of numbering resources, relevant rules of the Member State of notification shall apply.
- (71) In accordance with Directive (EU) 2022/2555 (Network and Information Security 2 Directive) and the revised [Cybersecurity Act], the competent authorities of the Member State where the networks and services are provided (or Member State of destination principle) should be competent to enforce cybersecurity rules for public electronic communications networks and services.
- (72) The requirements for the Single Passport should be without prejudice to Member States' powers to block, on a case-by-case basis, access to numbers or services where this is justified by reasons of fraud or misuse as specified in this Regulation.

- (73) It should be possible to impose administrative charges on undertakings providing electronic communications services in order to finance the activities of the national regulatory or other competent authority in managing the general authorisation system and the granting of rights of use. Such charges should be limited to cover the actual administrative costs for those activities and should not be imposed on small providers. To that end, transparency should be ensured in the income and expenditure of national regulatory and other competent authorities by means of annual reporting about the total sum of charges collected and the administrative costs incurred, in order to allow undertakings to verify that they are in balance.
- (74) Systems for administrative charges should not distort competition or create barriers to market entry. A general authorisation system renders it impossible to attribute administrative costs and hence charges to individual undertakings, except for the granting of rights of use for numbering resources, radio spectrum and for rights to install facilities. Any applicable administrative charges should be in line with the principles of a general authorisation system. An example of a fair, simple and transparent alternative for those charge attribution criteria could be a turnover related distribution key. Where administrative charges are very low, flat rate charges, or charges combining a flat rate basis with a turnover related element could also be appropriate. To the extent that the general authorisation system extends to undertakings with very small market shares, such as community-based network providers, or to service providers the business model of which generates very limited revenues even in the case of significant market penetration in terms of volumes, Member States should establish an appropriate de minimis threshold for the imposition of administrative charges.
- (75) Member States might need to amend rights, conditions, procedures, charges and fees relating to general authorisations and rights of use where this is objectively justified. Such proposed amendments should be duly notified to all interested parties in good time, giving them adequate opportunity to express their views. Unnecessary procedures should be avoided in the case of minor amendments to existing rights to install facilities or rights of use for radio spectrum or for numbering resources when such amendments do not have an impact on third parties' interests. Minor amendments to rights and obligations are amendments which are mainly administrative, do not change the substantial nature of the general authorisations and the individual rights of use and thus cannot generate any competitive advantage over other undertakings.
- (76) Considering the importance of ensuring legal certainty and in order to promote regulatory predictability to provide a safe environment for investments, in particular for new wireless broadband communications, any restriction or withdrawal of any existing rights of use for radio spectrum or for numbering resources or right to install facilities should be subject to predictable and transparent justifications and procedures. Hence, stricter requirements or a notification mechanism could be imposed in particular where rights of use have been assigned pursuant to competitive or comparative procedures and in the case of harmonised radio spectrum bands to be used for wireless broadband electronic communications services ('wireless broadband services'). Justifications referring to effective and efficient use of radio spectrum and technological evolution could rely on technical implementing measures adopted under Decision No 676/2002/EC of the European Parliament and of the Council (24). Furthermore, except where proposed amendments are minor, where general authorisations and individual rights of use for radio spectrum need to be restricted, withdrawn or amended without the consent of the holder of the right, this can take place after consulting interested parties. As restrictions or withdrawals of general authorisations or rights may have

significant consequences for their holders, the competent authorities should take particular care and assess in advance the potential harm that such measures may cause before adopting such measures.

- (77) The previous regulatory frameworks addressing spectrum were developed at a different geopolitical context and hence its strategic dimension had not been sufficiently addressed. Spectrum supports vital services like critical communications, emergency communications, air traffic control, maritime navigation, and public security and safety networks. As any of basic commodities, spectrum, and access to it, could also become a vulnerability, moreover it could be weaponised in the context of armed and economic conflicts, for instance for jamming and spoofing signals and disturbing key military and civil activities from transport to banking.
- (78) Radio spectrum is of outmost strategic and geopolitical importance for the EU and its Member States. It is essential to enable communication, drive economic growth and social prosperity, and support security and provision of mission critical services across various sectors. Spectrum has become a pre-requisite for EU's strategic autonomy and security, hence the need for its effective management and strategic and efficient utilisation as a common European resource, in accordance with the objectives of this Regulation, in particular the Union's sovereignty.
- (79) Due to the development of new wireless technologies and applications, demand for spectrum is growing, not just in the area of electronic communications, such as for providing citizens and businesses with ubiquitous very-high capacity broadband connectivity on move, but also in other sectors relying on radio spectrum, such as transport, manufacturing, space and energy. To meet growing demand, an appropriate cross-sectorial approach to spectrum management is essential to ensure the efficient use of radio spectrum.
- (80) Radio spectrum should be managed in a manner that ensures the avoidance of harmful interference. The basic concept of harmful interference should therefore be properly defined to ensure that regulatory intervention is limited to the extent necessary to prevent such interference. Advanced methods for protection against harmful interference and radio spectrum management methods should be applied in order to avoid, to the extent possible, the application of the non-interference and non-protection principle.
- (81) National borders are increasingly irrelevant in determining optimal radio spectrum use. Undue fragmentation amongst national policies results in increased costs and lost market opportunities for radio spectrum users and slows down innovation to the detriment of the proper functioning of the internal market and prejudice to consumers and the economy as a whole. Strategic planning, coordination and, where appropriate, harmonisation at Union level can help ensure that radio spectrum users derive the full benefits of the internal market and that Union interests can be effectively defended globally.
- (82) Radio spectrum policy activities in the Union should be without prejudice to measures taken, at Union or national level, in accordance with Union law, to pursue general interest objectives, in particular with regard to public governmental and defence networks, content regulation and audiovisual and media policies, and the right of Member States to organise and use their radio spectrum for public order, public security and defence.

- (83) The radio spectrum management provisions of this Regulation should be consistent with the work of international and regional organisations dealing with radio spectrum management, such as the International Telecommunications Union (ITU) and the European Conference of Postal and Telecommunications Administrations (CEPT), in order to ensure the effective management of and harmonisation of the use of radio spectrum across the Union and between the Member States and other members of the ITU.
- (84) The need to ensure that citizens are not exposed to electromagnetic fields at a level harmful to public health is imperative. Competent authorities should pursue consistency across the Union to address this issue, having particular regard to the precautionary approach taken in Recommendation 1999/519/EC, in order to work towards ensuring more consistent deployment conditions. Competent authorities should apply the procedure set out in Directive (EU) 2015/1535, where relevant, with a view also to providing transparency to stakeholders and to allowing other Member States and the Commission to react.
- (85) Radio spectrum is a scarce public resource with an important public and market value. It is an essential input for all kinds of wireless networks and services, including for radio-based electronic communications networks and services. It should therefore be efficiently allocated and assigned by national regulatory or other competent authorities in accordance with harmonised objectives and principles governing their action as well as objective, transparent and non-discriminatory criteria, taking into account the democratic, social, linguistic and cultural interests related to the use of radio spectrum. Decision No 676/2002/EC establishes a framework for harmonisation of radio spectrum.
- (86) Lack of coordination between Member States and their competent authorities when organising the use of radio spectrum in their territory can, if not solved through bilateral Member States negotiations, create large-scale interference issues severely impacting the development of the Digital Single Market. Member States and their competent authorities should take all necessary measures to avoid cross-border and harmful interference between them. The Radio Spectrum Policy Group (RSPG) established by Commission Decision³⁸ supported the necessary cross-border coordination and was the forum for resolving cross-border issues between Member States; however, the RSPG assistance fell short in cross-border coordination issues with third countries on general or, between Member States involving the non-EU harmonised spectrum (e.g. FM frequencies), as the RSPG simply did not have a legal basis and appropriate tools to act.
- (87) This process should continue under the DNA, but should be extended to non-harmonised radio spectrum, for instance FM frequencies used for radio broadcasting, as such spectrum might also have a high economic, cultural and social value for European citizens. Moreover, any holder of a spectrum usage right should also be given the opportunity to initiate such task of the Radio Spectrum Policy Body (RSPB) when it is directly impacted from harmful interference in the lawful use of its spectrum.
- (88) Difficult harmful interference cases between Member States that could not be solved by direct negotiations, notwithstanding the support of the RSPB, might require the imposition of binding solutions adopted by the Commission, building on the RSPB's proposed solution, to resolve the case definitively or to enforce under Union law a coordinated solution. Such mechanism should apply under specific deadlines ensuring that there is no unjustified delay, and propose appropriate solutions, including the

³⁸ Commission Decision of 11 June 2019 setting up the Radio Spectrum Policy Group and repealing Decision 2002/622/EC (,OJ C 196, 12.6.2019, p. 16).

withdrawal of any right that is at the source of the harmful interference situation and the right for damages.

- (89) Cross-border interference from third countries has become an increasingly alarming problem at the EU borders and a threat not only to the networks themselves, but also to EU security. For instance, interference to the Global Navigation Satellite System ("GNSS") close to armed conflict areas, such as at the Eastern borders of the EU, has serious consequences to transportation, critical infrastructures, electronic communications and finance sectors, because modern infrastructure depends heavily on this system for precise positioning, navigation, and timing ("PNT") data. In these cases, it is not sufficient to rely on efforts at the ITU. There is need, to provide in EU law a solidarity mechanism to more effectively support one or several affected Member States. Under the solidarity mechanism of this Regulation, all Member States would be requested to act together and in line with particular actions defined by the EU together with the RSPB, and intervene alongside the Commission in supporting affected Member States. In the case of persistent and serious harmful interference cases violating international law, the Commission should be empowered to refer the case to the Council of the EU and propose it to adopt restrictive measure under Article 29 TEU against the third country concerned.
- (90) Technological developments, in particular next-generation (e.g. 6G) radio technologies as well as artificial intelligence, improve the viability and reliability of spectrum sharing across a wide range of frequency bands, thus providing access to a scarce resource to multiple users, while preventing harmful interference and ensuring adequate protection of incumbent services. An efficient, effective and innovation-driven use of radio spectrum is essential to achieve the EU connectivity targets and to support EU competitiveness. Achieving these objectives requires a regulatory approach that systematically considers shared spectrum use as the norm for spectrum authorisation based on the principle 'use it or share it', while exclusive rights of spectrum use are applied only where necessary and justified. At the same time, such policy needs to ensure that spectrum sharing is fostering competition, rather than restricting it.
- (91) Competent authorities should consider that spectrum which is not used in a territory or for a period of time is presumed to be sharable, unless the holder of the right of use demonstrates that it is not technically feasible to share or that sharing would interfere with, degrade, or otherwise limit the original holder's use of the spectrum or that it has plans to use the spectrum in a way which does not allow sharing. In order to determine whether spectrum is considered as being used, competent authorities should take into account several elements, including the deployment plans of the holder of the right in a foreseeable future. The conditions for sharing under the principle of 'use it or share it', including the remuneration, the way to determine its duration and the technical conditions should be determined in advance when granting the right of use.
- (92) Competent authorities should promote the shared use of radio spectrum by determining the most appropriate authorisation regimes for each scenario and by establishing appropriate and transparent rules and conditions therefor. Shared use can be based on general authorisations or licence-exempt use allowing, under specific sharing conditions, several users to access and use the same radio spectrum in different geographic areas or at different moments in time. It can also be based on individual rights of use under arrangements such as licensed shared access where all users (with an existing user and new users) agree on the terms and conditions for shared access, under the supervision of the competent authorities, in such a way as to ensure a minimum guaranteed radio transmission quality. When allowing shared use under different

authorisation regimes, competent authorities should not set widely diverging durations for such use under different authorisation regimes.

- (93) Flexibility in radio spectrum management and access to radio spectrum has been established through technology and service-neutral authorisations to allow radio spectrum users to choose the best technologies to apply, and services to be provided in radio spectrum bands declared available for electronic communications services in the relevant National Frequency Allocation Plans in accordance with Union law ('the principle of technology neutrality and the principle of service neutrality'). Any administrative determination of technologies and services to be used in a given band should be based on proportionate and non-discriminatory criteria, and should be clearly justified, in the case of services by general interest objectives, and subject to regular review. As such determination would introduce an exception to the rule and reduce the freedom to choose the service provided or technology used, any proposal for such allocation should be transparent and subject to public consultation.
- (94) Restrictions to the principle of technology neutrality should be appropriate and justified by the need to avoid harmful interference, for example by imposing emission masks and power levels, to ensure the protection of public health by limiting public exposure to electromagnetic fields, to ensure the proper functioning of services through an adequate level of technical quality of service, while not necessarily precluding the possibility of using more than one service in the same radio spectrum band, to ensure proper sharing of radio spectrum, in particular where its use is subject only to general authorisations, to safeguard efficient use of radio spectrum, or to fulfil a general interest objective in accordance with Union law.
- (95) Competent authorities should be allowed to require the provision of a specific service in a particular spectrum band to meet clearly defined general interest objectives such as safety of life, the need to promote social, regional and territorial cohesion, or the avoidance of the inefficient use of radio spectrum to be permitted where necessary and proportionate. Those objectives should include the promotion of cultural and linguistic diversity and media pluralism, as defined by Member States in accordance with Union law. Except where necessary to protect safety of life or, by way of exception, to fulfil other general interest objectives as defined by Member States in accordance with Union law, exceptions should not result in certain services having exclusive use, but should rather grant them priority so that, insofar as possible, other services or technologies could coexist in the same radio spectrum band. It lies within the competence of the Member States to define the scope and nature of any exception regarding the promotion of cultural and linguistic diversity and media pluralism.
- (96) Where competent authorities decide, by way of exception, to limit the freedom to provide electronic communications networks and services based on grounds of public policy, public security or public health, competent authorities should explain the reasons for such a limitation.
- (97) Different Union policy areas rely on spectrum, such as electronic communications, research, technological development and space, transport, energy, common security and defence, audiovisual and cultural policies. It should be possible to set policy orientations and objectives for the availability and efficient use of radio spectrum necessary for completion of the internal market in those EU policy areas, in accordance with this Regulation. In particular, competent authorities and the Commission should take all steps necessary to ensure that sufficient spectrum is available for the provision of ubiquitous and high-quality connectivity to all European citizens and businesses,

including when travelling or when they are in rural, remote or offshore areas. They should ensure spectrum availability and protect spectrum for the implementation of European programmes related to space, in particular for Earth and space observation, satellite navigation and positioning, and secure and resilient satellite communications for governmental users, as well as for transport and transport management systems, and the Common Security and Defence Policy activities. They should also aim to ensure sufficient spectrum for the audiovisual and content production services, and the research and scientific activities.

- (98) While such policy orientations and objectives set by the multiannual Radio Spectrum Policy Programme, established by Decision No 243/2012/EU of the European Parliament and the Council³⁹, are still valid, its actions have been largely completed or become outdated. To avoid duplication and ensure consistency, the objectives from the Radio Spectrum Policy Programme should be reflected in this Regulation and Decision No 243/2012/EU should be repealed.
- (99) (EU Strategy) In view to the implementation of the specific current and future Union policies relying on spectrum, timely identification of their spectrum needs is essential. Considering that in order to increase regulatory predictability the precise needs and timing for availability of radio spectrum should be known when such policies are developing or adopted, the harmonised details of the specific bands involved and the coordinated rules for their availability and use should be specified for each case by the Commission in a strategic document adopted after opinion of the RSPB. This Spectrum Strategy should be adopted after each World Radio Communications Conference to provide *inter alia* transparency as to how the different WRC decisions will be incorporated in the EU level order. The Union spectrum strategy should increase the transparency of spectrum related activity at the EU level and enhance predictability for different competent authorities and market players.
- (100) (EU roadmap bis) Union spectrum strategy could include operational spectrum roadmaps defining specific milestones and deadlines for the availability and authorisation of spectrum which should be established through Commission implementing acts when the specific circumstances and needs for spectrum are known. When adopting the spectrum strategy and roadmaps, the Commission should take into consideration Union policy objectives, such as the need to safeguard the Union's strategic autonomy, to foster the completion of the single market and to meet specific technological or quality requirements for cross-border services. The Commission should also take into account that radio spectrum is a public good with an important social, cultural and economic value, that should be used effectively and efficiently. They should respect relevant international agreements applicable to radio spectrum, including avoidance of harmful interference, and should promote the principles of technology and service neutrality and of shared use of spectrum. For the Union spectrum strategy and roadmaps to make a difference, a process should be established within the RSPB which would allow competent authorities together with the Commission to monitor advancement in implementation in Member States and exchange of experience, good practices and information.
- (101) The first EU spectrum strategy and roadmap should likely focus on spectrum for the introduction of next-generation (6G) wireless broadband communications, including its non-terrestrial elements, but ultimately it should also include spectrum needs of other

³⁹ Decision No 243/2012/EU of the European Parliament and of the Council of 14 March 2012 establishing a multiannual radio spectrum policy programme (OJ L 91, 21.3.2012, p. 7)

Union policies, as they arise. It should cater for the use not only of licenses, but also of unlicensed use, such as for instance for WiFi.

- (102) To tap the full benefit of harmonisation under Decision No 676/2002/EC the use of harmonised radio spectrum bands should be allowed in a timely and synchronised manner throughout the Union. Allowing the use of a radio spectrum band entails assigning radio spectrum under a general authorisation regime or individual rights of use in order to permit the use of radio spectrum as soon as the assignment process is completed. In order to assign radio spectrum bands, it might be necessary to release a band occupied by other users and to compensate them. Implementation of a common deadline might however be affected in a particular Member State by issues relating to unresolved cross-border coordination issues, to the complex technical migration of existing users of a band, to a general interest objective, to the safeguarding of national security and defence or to force majeure. In any case, competent authorities should take all measures to reduce any delay to the minimum in terms of geographical coverage, timing and radio spectrum range, for example competent authorities should depending on relevant circumstances, request the Union to provide legal, political and technical support to resolve radio spectrum coordination issues with countries neighbouring the Union, including candidate and acceding countries. Any delay in implementation of the common deadline apart to allowed exceptions could be considered as that a competent authority has failed to act and could be filed to the national court.
- (103) (petition for rulemaking) With fast development of new wireless technologies and services, including using modern capabilities, such as artificial intelligence, the EU spectrum management should become more agile and pro-active. In this regard, it is important to give innovators and other prospective users opportunity to initiate the harmonisation process at the EU level, if the need is demonstrated for *inter alia* the introduction of new technologies or the elimination of old technologies that make the use of spectrum inefficient or harm consumers. An open, transparent and non-discriminatory process should therefore be created for a formal filing and review of requests by the Commission. The process should include a public consultation that would help the Commission decide whether to start a new process, and if so with which scope. As a consequence, the Commission should be able to decide whether to start updating or developing a spectrum related policy with support of the RSPB and/or initiate the development of harmonised technical and operational conditions for the use of a particular spectrum band together with the Radio Spectrum Committee pursuant to Decision No 676/2002/EC.
- (104) General authorisations for the use of radio spectrum may facilitate the most effective use of radio spectrum and foster innovation in some cases and are pro-competitive, whereas individual rights of use for radio spectrum in other cases may be the most appropriate authorisation regime in the presence of certain specific circumstances. Individual rights of use should be considered, for example, when favourable propagation characteristics of the radio spectrum or the envisaged power level of the transmission imply that general authorisations cannot address the interference concerns in light of the required quality of service. Technical measures such as solutions to improve receiver resilience might enable the use of general authorisations or radio spectrum sharing, and possibly avoid systematic recourse to the non-interference and non-protection principle.
- (105) In general, competent authorities decide on the most appropriate authorisation regime to be applied in that band or parts thereof. Where there is a risk of diverging solutions that could fragment the internal market, particularly where harmonised conditions for a radio spectrum band are established under Decision No 676/2002/EC, and thereby delay

the rollout of wireless systems, the Commission should be empowered to decide, taking utmost account of the opinion of the RSPB, on common solutions, acknowledging the technical harmonisation measures in force. This could provide a common toolbox for competent authorities which they should take into account when identifying appropriate consistent authorisation regimes to be applied to a band, or part of a band, depending on factors such as population density, propagation characteristics of the bands, divergence between urban and rural uses, the possible need to protect existing services and the resulting implications for economies of scale in manufacturing.

- (106) In order to facilitate the development of network-as-a-service, enable a more efficient use of the spectrum, and decrease the cost and environmental impact of wireless network deployment, prospective users of radio spectrum for public or non-public networks, should be able to request that, to the extent possible, the same authorisation conditions apply in the Member States where they use spectrum for their networks. The Commission and competent authorities should cooperate with each other, and with the RSPB, to develop common authorisation conditions. The Commission should also have the power to make the use of such conditions binding. The harmonisation of authorisation conditions would facilitate the cross-border provision of services and economies of scale.
- (107) To promote the provision of pan-European high-quality networks and services or to exploit economies of scale, this Regulation should empower the Commission and the RSPB to authorise a part of spectrum at Union level. Every new generation of mobile networks is more expensive to deploy than the previous one. It could hence not be economically feasible for all mobile network operators currently active in the Union market to upgrade their networks to 6G. If requested by the Commission, the RSPB could hence assess, in its opinion on common authorisation conditions the opportunity of an award of radio spectrum at the Union level and suggest an appropriate authorisation procedure and award conditions, such as, for instance, operation on a wholesale model. The same need could also arise to increase the amount of spectrum used for Mobile Satellite Services, by repurposing terrestrial spectrum. In order to ensure the provision of pan-European services, such repurposed spectrum should also be awarded and authorised at the Union level. Setting the same authorisation conditions at the Union level, and if requested, Union authorisation and harmonised award conditions at the Union level could facilitate the deployment and development of some high-quality networks and services, such as, satellite services provided using radio spectrum allocated for terrestrial services or 6G networks.
- (108) In order to reduce bureaucracy and accelerate access to spectrum for which the authorisation conditions have been harmonised by Commission Decision in more than one Member State, a procedure might be established to facilitate the granting of individual rights of use by more than one national regulatory authority, in a coordinated manner and at a single location; it could take the form of a 'one stop shop procedure'.
- (109) Where the harmonised assignment of radio spectrum to particular undertakings has been agreed at Union level, Member States should strictly implement such agreements in the granting of rights of use for radio spectrum from the National Frequency Allocation Plan.
- (110) Sufficiently long duration of rights of use of radio spectrum should increase investment predictability to contribute to faster network roll-out and better services, as well as stability to support radio spectrum trading and leasing. The minimum duration of rights of use for wireless broadband established by the EECC has not proven sufficient to

attract sufficient investments, to allow for business continuity and amortisation of mobile ventures compared to other communication technologies, and encourage more ambitious deployments of networks and advanced and cross border services.

- (111) Those objectives can hence be better achieved by the provision of rights with indefinite duration. At the same time, indefinite duration should facilitate development of a functioning secondary market for spectrum trading and leasing. The risk that indefinite duration of rights of use would prevent market entry and reduce competition, availability, quality of services, and investment incentives should however be addressed through regulatory safeguards that protect competition and prevent spectrum hoarding, such as obligations to provide wholesale access or enable spectrum sharing. By choosing appropriate authorisation conditions - such as “use-it-or-share-it or lose-it” conditions and rollout obligations - and by enforcing them, the competent authorities should ensure spectrum would not be left idle or blocked and would be made available to more efficient or innovative competitors. They should also combine long or indefinite durations with periodic checkpoints, conditional renewal regimes or revocation powers that allow rights to be reviewed, adjusted, or withdrawn, if needed for spectrum management or public interest objectives.
- (112) Considering the importance of technical innovation, competent authorities should be able to provide for rights to use radio spectrum for experimental purposes, subject to specific restrictions and conditions strictly justified by the experimental nature of such rights.
- (113) As long-term investment planning depends on guarantees for renewals, in the same way as on their duration of rights of use, the renewal should be in principle automatic, unless there are compelling reasons against it. Some other main comparable markets in the world have already applied indefinite or recurrent easy renewals. Competent authorities should however have the power to not renew the rights of use or to renew them for a shorter period or under changed conditions. This should be the case where the certain conditions for refusal or change are met based on criteria that should be restrictively interpreted to provide sufficient guarantees and predictability. Any decision not to renew should be subject to an open, non-discriminatory and transparent procedure. In order to ensure legal certainty and respect legitimate expectations of holders of the rights, the possibility of refusal to renew should be considered within an appropriate timespan prior to the expiry of the rights concerned.
- (114) Renewals should be accompanied by a review of the annual and one-off fees for the use of radio spectrum to ensure that those fees continue to promote optimal use, taking account, *inter alia*, of market developments and technological evolution. Such review should be based on the value of the rights of use as resulted from the latest competitive or comparative assignment procedure adjusted to reflect the cost of additional terms and conditions attached thereto, such as coverage or quality of service requirements. The revenues per connection, as well as the overall burden that holders of right have from all their spectrum holdings, should also be taken into account, to avoid that very high prices paid in past auctions continue to overburden holders of right and prevent them from investing in networks. For reasons of legal certainty, it is appropriate for any adjustments to the existing fees to be based on the same principles as those applicable to the award of new rights of use.
- (115) Transfer of rights of use for radio spectrum can be an effective means of increasing the efficient use of spectrum. For the sake of flexibility and efficiency, and to allow valuation of radio spectrum by the market, competent authorities should by default allow

radio spectrum users to transfer or lease their rights of use for radio spectrum to third parties following a simple procedure and subject to the conditions attached to such rights and to competition rules, under the supervision of the national regulatory authorities responsible. The conditions under which an individual right may be transferred or leased by the holder of the right should be specified at the moment of granting that right. In order to facilitate such transfers or leases, provided that technical implementing measures adopted under Decision No 676/2002/EC are respected, Member States should also consider requests to have radio spectrum rights partitioned or disaggregated and conditions for use reviewed. At the same time, it should be possible for the competent authority to reject the transfer or lease of spectrum for reasons of security or sovereignty, or in the absence of sufficient guarantees that the spectrum will be used in accordance with the authorisation conditions or for the intended use.

- (116) New concepts of spectrum sharing require accurate, real-time data on frequency occupancy to ensure efficient use of spectrum and avoidance of interference. A dynamic database focused on specific frequency bands should help identifying underutilised spectrum and support more efficient spectrum use and sharing practices. Such a dynamic inventory could also contribute to the development and implementation of any operational spectrum roadmap.
- (117) In line with the case-law of the Court of Justice, competent authorities should not levy any charges or fees in relation to the provision of networks and electronic communications services other than those provided for by this Regulation. Where the provision of electronic communications relies on public resources the use of which is subject to specific authorisation, competent authorities should be able to impose fees to ensure optimal use of those resources. Fees should reflect the value of the rights of use taking account *inter alia* of the economic and technical situation of the market concerned and be set in a manner that ensures efficient assignment and use of radio spectrum. This Regulation is without prejudice to the purpose for which fees for rights of use are employed. It should be possible, for example, to use such fees to finance activities of national regulatory and other competent authorities that cannot be covered by administrative charges. Where, in the case of competitive or comparative selection procedures, fees for rights of use for radio spectrum consist entirely or partly of a one-off amount, payment arrangements should ensure that such fees do not in practice lead to selection on the basis of criteria unrelated to the objective of ensuring optimal use of radio spectrum.
- (118) The methodology for calculating the level of spectrum fees in the Union differs considerably between Member States. This discrepancy could make difficult the provision of networks based on radio spectrum in multiple Member States. The Commission should hence be able to publish, on a regular basis, benchmark studies and, as appropriate, develop other guidance with regard to the methodology for calculating spectrum annual fees. Such methodology should be based on the principles set in this Regulation and allow competent authorities to calculate the exact fee to be applied, which could comprise a fixed annual part (per kHz per category of band) and a percentage of the yearly turnover generated through the use of frequencies. When the Commission determines the methodology, the experience of BEREC and the national regulatory authorities in building suitable cost models will be invaluable and should be taken into account. Competent authorities should make sure that the amount of these fees in any case covers the cost of the management of the spectrum.

- (119) Any burden imposed on undertakings for rights of use for radio spectrum can influence decisions about whether to seek and put into use radio spectrum resources. Competent authorities should therefore set reserve prices in a way that leads to the efficient assignment of those rights, irrespective of the type of selection procedure used. This Regulation should empower the Commission to adopt a recommendation on a common methodology for defining reserve prices, considering criteria such as the opportunity cost of spectrum, the characteristics of the band and the costs associated with the fulfilment of authorisation conditions imposed to further policy objectives. In doing so, regard should also be had to the competitive situation of the market concerned including the possible alternative uses of the resources. In principle, competent authorities should not set reserve prices where they impose coverage or quality of service obligations, unless there is a risk of collusion. Where, in the case of competitive or comparative selection procedures, fees for rights of use for radio spectrum consist entirely or partly of a one-off amount, payment arrangements should ensure that such fees do not in practice lead to selection on the basis of criteria unrelated to the objective of ensuring optimal use of radio spectrum.
- (120) Considering the high level of cost of spectrum that has originated due to the reliance of auction selection based on the comparative payment of fees, priority should be given on commitments over fees. Fees could therefore be substituted by commitments offered by applicants to implement measures that would directly benefit the deployment of networks and the quality of wireless communications. In practice, this could take the form of advanced payments that would be repaid or bank guarantees that would be lifted when those commitments are fulfilled.
- (121) The requirement to respect the principles of technology and service neutrality in granting rights of use, together with the possibility to transfer rights between undertakings, underpin the freedom and means to deliver electronic communications services to the public, thereby also facilitating the achievement of general interest objectives. This Regulation is without prejudice whether radio spectrum is assigned directly to providers of electronic communications networks or services or to entities that use those networks or services. Such entities may be radio or television broadcast content providers. The responsibility for compliance with the conditions attached to the right of use for radio spectrum and the relevant conditions attached to the general authorisation should in any case lie with the undertaking to which the right of use for radio spectrum has been granted. Certain obligations imposed on broadcasters for the delivery of audiovisual media services may require the use of specific criteria and procedures for the granting of radio spectrum usage rights to meet a specific general interest objective set out by competent authorities in accordance with Union law. However, the procedure for the granting of such right should in any event be objective, transparent, non-discriminatory and proportionate.
- (122) The case-law of the Court of Justice requires that any national restrictions to the rights guaranteed by Article 56 TFEU should be objectively justified and proportionate and should not exceed those necessary to achieve their objectives. Moreover, radio spectrum granted without an open procedure should not be used for purposes other than the general interest objective for which they were granted. In such a case, the interested parties should be given the opportunity to comment within a reasonable period.
- (123) As part of the application procedure for granting rights, competent authority should verify whether the applicant is able to comply with the conditions to be attached to such rights. Those conditions should be reflected in eligibility criteria set out in objective, transparent, proportionate and non-discriminatory terms prior to the launch of any

competitive selection procedure. For the purpose of applying such criteria, the applicant may be requested to submit the necessary information to prove its ability to comply with those conditions. Where such information is not provided, the application for the right of use for radio spectrum may be rejected.

- (124) Competent authorities should, prior to the granting of the right, impose only the verification of elements that can reasonably be demonstrated by an applicant exercising ordinary care, taking due account of the important public and market value of radio spectrum as a scarce public resource. This is without prejudice to the possibility for subsequent verification of the fulfilment of eligibility criteria, for example through milestones, where criteria could not reasonably be met initially. To preserve effective and efficient use of radio spectrum, competent authorities should not grant rights where their review indicates applicants' inability to comply with the conditions, without prejudice to the possibility of facilitating time-limited experimental use.
- (125) Where demand for a radio spectrum band exceeds the availability and, as a result, a competent authority concludes that the number of rights of use for radio spectrum is to be limited, appropriate and transparent procedures should apply for the granting of such rights to avoid any discrimination and optimise the use of the scarce resource. Such limitation should be justified, proportionate and based on a thorough assessment of market conditions, giving due weight to the overall benefits for users and to national and internal market objectives. The objectives governing any limitation procedure should be clearly established in advance, and where possibly, quantified, giving due weight to the need to fulfil national and internal market objectives. When considering the most appropriate selection procedure, and in accordance with coordination measures taken at Union level, competent authorities should, in a timely and transparent manner, consult all interested parties on the justification, objectives and conditions of the procedure, *inter alia* stating the outcome of any related assessment of the competitive, technical and economic situation of the market. Competent authorities should be able to use, *inter alia*, competitive or comparative selection procedures for the assignment of radio spectrum, taking into account, *inter alia*, the competitive, technical and economic situation of the market. In administering such schemes, competent authorities should take into account the objectives of this Regulation. If a Member State finds that further rights can be made available in a band, it should start the process therefor.
- (126) While meant to ensure non-discriminatory assignment and efficient use of spectrum, auctions - as a type of a selection procedure relying on competitive price bidding - could result in creation of an important financial burden on operators if they are not designed properly and/or the award conditions do not reflect the situation on the market. Therefore, priority should be given to investment-oriented auctions focusing on the achievement of certain quality and coverage commitments rather than on the payment of fees, as it has already been implemented in a few countries within and outside the EU.
- (127) The voluntary Peer Review Form established by the EECC as an instrument for peer learning did not succeed in making more convergent use and definition of elements of selection procedures and the conditions attached to the rights of use for radio spectrum, as only about one third national measures were reviewed by peers. As those elements and conditions have a significant impact on market conditions and the competitive situation, including conditions for entry and expansion, a new *ex ante* coordination mechanism – a spectrum Single Market procedure – would be established. That procedure would apply to every measure proposed by competent authorities in a view to undertake a selection procedure or to amend or renew rights of use in relation to

harmonised radio spectrum for wireless broadband networks and services. Such an ex ante mechanism would be more efficient than intervention ex post, as it could detect in advance measures which are ill justified or disproportionate. The notifying authority should especially explain how any proposed market shaping measure is necessary to maintain or achieve effective competition and outline its likely effects on existing and future investments by market participants, on the basis of a market analysis. If notifying authority intends to impose a definite duration of a right to use, it should argue whether the proposed duration is sufficient in light of the investments that are needed to achieve the objectives of the assignment procedure and this Regulation. The Commission can notify its reservations on a draft market shaping measures, i.e. measures that impact the structure or the level of competition in the market, such as spectrum caps, reservations or wholesale access obligations, and states the reasons thereof. The Commission could consider that the measure would create a barrier to the internal market, or seriously doubt about its compatibility with Union law. The Commission could also notify its reservation in the case of a limited duration, where it considers that such duration is insufficient in light of the investments that are needed to achieve the objectives of the assignment procedure and of this Regulation. To ensure its effectiveness, the process should provide the Commission with a possibility of a veto on the duration of rights of use and on market shaping measures. This new spectrum Single Market process should replace the Peer Review Forum.

- (128) Measures taken specifically to promote competition when granting or renewing rights of use for radio spectrum should be decided by national regulatory and other competent authorities, which have the necessary economic, technical and market knowledge. Radio spectrum assignment conditions can influence the competitive situation in electronic communications markets and conditions for entry. Limited access to radio spectrum, in particular when radio spectrum is scarce, can create a barrier to entry or hamper investment, network roll-out, the provision of new services or applications, innovation and competition. New rights of use, including those acquired through transfer or leasing, and the introduction of new flexible criteria for radio spectrum use can also influence existing competition. Where unduly applied, certain conditions used to promote competition, can have other effects; for example, radio spectrum caps and reservations can create artificial scarcity, wholesale access obligations can unduly constrain business models in the absence of market power, and limits on transfers can impede the development of secondary markets. Therefore, a consistent and objective competition test for the imposition of such conditions is necessary and should be applied in a coordinated manner. The use of such measures should therefore be based on a thorough and objective assessment, by national regulatory and other competent authorities, of the market and the competitive conditions thereof on the basis of a market analysis. National competent authorities should, however, always ensure the effective and efficient use of radio spectrum and avoid distortion of competition through anti-competitive hoarding.
- (129) Measures which intervene in the structure of the market, such as spectrum caps or reservations may be imposed only where less intrusive measures, such as wholesale access obligations are not sufficient to guarantee effective competition at retail level. When wholesale access obligations are imposed, competent authorities shall have assessed whether retail markets would be effectively competitive in the absence of wholesale intervention. The assessment shall be holistic and take into account not only listed prices for mass market consumer products, but also other elements such as targeted rebates, as well as investments and quality of service. When determining the rights of use subject to such obligations, the competent authority shall consider the capacity available to support wholesale offers.

- (130) Massive growth in radio spectrum demand, and in end-user demand for wireless broadband capacity, calls for solutions allowing alternative, complementary, spectrally efficient access solutions, including low-power wireless access systems with a small-area operating range, such as RLANs and networks of low-power small-size cellular access points. Such complementary wireless access systems, in particular publicly accessible RLAN access points, increase access to the internet for end-users and mobile traffic off-loading for mobile operators. RLANs use harmonised radio spectrum without requiring an individual authorisation or a right of use for radio spectrum. To date, most RLAN access points are used by private users as local wireless extension of their fixed broadband connection. End-users, within the limits of their own internet subscription, should not be prevented from sharing access to their RLAN with others, in order to increase the number of available access points, in particular, in densely populated areas, maximise wireless data capacity through radio spectrum re-use and create a cost-effective complementary wireless broadband infrastructure accessible to other end-users. Therefore, unnecessary restrictions to the deployment and interlinkage of RLAN access points should also be removed.
- (131) Public authorities or public service providers that use RLANs in their premises for their personnel, visitors or clients, for example to facilitate access to e-Government services or for information on public transport or road traffic management, could also provide access to such access points for general use by citizens as an ancillary service to services they offer to the public on such premises, to the extent allowed by competition and public procurement rules. Moreover, the provider of such local access to electronic communications networks within or around a private property or a limited public area on a non-commercial basis or as an ancillary service to another activity that is not dependent on such access, such as RLAN hotspots made available to customers of other commercial activities or to the general public in that area, can be subject to compliance with general authorisations for rights of use for radio spectrum but should not be subject to any conditions or requirements attached to general authorisations applicable to providers of public electronic communications networks or services or to obligations regarding end-users or interconnection. However, such a provider should remain subject to the liability rules set out in Directive 2000/31/EC of the European Parliament and of the Council (34). Further technologies, such as LiFi, are emerging and will complement current radio spectrum capabilities of RLANs and wireless access point to include optical visible light-based access points and lead to hybrid local area networks allowing optical wireless communication.
- (132) Since low power small-area wireless access points, such as femtocells, picocells, metrocells or microcells, can be very small and make use of unobtrusive equipment similar to that of domestic RLAN routers, which do not require any permits beyond those necessary for the use of radio spectrum, and considering the positive impact of such access points on the use of radio spectrum and on the development of wireless communications, any restriction to their deployment should be limited to the greatest extent possible. As a result, in order to facilitate the deployment of small-area wireless access points, and without prejudice to any applicable requirement related to radio spectrum management, competent authorities should not subject to any individual permits the deployment of such devices on buildings which are not officially protected as part of a designated environment or because of their special architectural or historical merit, except for reasons of public safety. To that end, their characteristics, such as maximum size, weight and emission characteristics, should be specified at Union level in a proportionate way for local deployment and to ensure a high level of protection of public health, as laid down in Recommendation 1999/519/EC. For the operation of

small-area wireless access points, Article 7 of Directive 2014/53/EU should apply. This is without prejudice to private property rights set out in Union or national law. The procedure for considering permit applications should be streamlined and without prejudice to any commercial agreements and any administrative charge involved should be limited to the administrative costs relating to the processing of the application. The process of assessing a request for a permit should take as little time as possible, and in principle no longer than four months.

- (133) Public buildings and other public infrastructure are visited and used daily by a significant number of end-users who need connectivity to consume eGovernment, eTransport and other services. Other public infrastructure, such as streetlamps, traffic lights, offer very valuable sites for deploying small cells, for instance, due to their density. Without prejudice to the possibility for competent authorities to subject the deployment of small-area wireless access points to individual prior permits, operators should have the right to access to those public sites for the purpose of adequately serving demand. Competent authorities should therefore ensure that such public buildings and other public infrastructure are made available on reasonable conditions for the deployment of small cells with a view to complementing Directive 2014/61/EU and without prejudice to the principles set out in this Directive. Directive 2014/61/EU follows a functional approach and imposes obligations of access to physical infrastructure only when it is part of a network and only if it is owned or used by a network operator, thereby leaving many buildings owned or used by public authorities outside its scope. On the contrary, a specific obligation is not necessary for physical infrastructure, such as ducts or poles, used for intelligent transport systems, which are owned by network operators (providers of transport services or providers of public electronic communications networks), and host parts of a network, thus falling within the scope of Directive 2014/61/EU.
- (134) This Regulation amends Article 4 of Decision 676/2002/EC (“Radio Spectrum Decision”) related to the function of the Radio Spectrum Committee. Indeed, in order to ensure the security and the technological sovereignty of the Union or of its Member States, a mechanism should be established that would permit the Commission and Member States to discuss issues and decide on the common position without involvement of non-EU countries and stakeholders. The Commission should be therefore empowered to require Member States to establish in the Radio Spectrum Committee common positions related the development of some technical implementing measures that might affect the security and/or the technological sovereignty of the Union or of its Member States, prior to the discussions at the CEPT.
- (135) Where justified on the basis of the actual assessment of the resilience needs, the measures taken by providers of number-independent interpersonal communications services should be lighter. The same approach should apply mutatis mutandis to interpersonal communications services which make use of numbers and which do not exercise actual control over signal transmission.
- (136) Whereas in accordance with Article 216(1) TFEU, the Union has external competence and may conclude agreements with international organisations where the Treaties so provide or where this is necessary to achieve the objectives of the Union’s policies. The management of radio spectrum and the use of radio frequencies, including for satellite communications, are areas largely regulated by Union legislation adopted on the basis of Article 114 TFEU, in particular the European Electronic Communications Code, the Radio Spectrum Policy Programme and the Radio Spectrum Decision. As the use of satellite spectrum is inherently international in nature, governed by global

coordination through the International Telecommunication Union (ITU), positions adopted in the context of the ITU and its Radio Regulations could affect Union common rules or alter their scope. At the same time, satellite spectrum constitutes a critical asset for global communications markets, influencing competitiveness, investment and the availability of innovative services across the Union. In view of these interconnected international and internal market dimensions, the exercise of the Union's external shared competence is justified in order to ensure efficient use of satellite spectrum, effective coordination and the proper functioning of the internal market. exercise of the Union's external shared competence. The use of spectrum by satellites is inherently international in nature, as it is governed by global coordination mechanisms in the ITU and enables cross-border service provision across multiple countries. At the same time, satellite spectrum constitutes a critical asset for global communication markets, influencing competitiveness, investment, and the availability to provide innovative services across the Union. In view of these dual international and market dimensions, a coherent and forward-looking Union approach is necessary to ensure efficient satellite spectrum use, effective coordination, and a the proper functioning of the internal single market.; In view of these interconnected international and internal market dimensions, the exercise of the Union's external shared competence is justified in order to ensure efficient use of satellite spectrum, effective coordination and the proper functioning of the internal market.

- (137) In its opinion of 16 June 2021 on the Radio Spectrum Policy Programme, the Radio Spectrum Policy Group (RSPG) emphasised that spectrum policy should support the development of innovative satellite systems ensuring EU-controlled connectivity and the provision of reliable, resilient and cost-effective governmental satellite services. The Union's capacity to grant satellite authorisations should reflect the emerging challenges and realities of the satellite sector such as the Union's strategic needs in the context of the Union Secure Connectivity Programme, IRIS² constellation. A strengthened Union framework is hence necessary to position the Union as a prominent actor in the global space industry, provide a robust basis for the development and operation of sovereign pan-European satellite infrastructure, and ensure the effective enforcement of security and competition safeguards. This framework should support scalable, secure and investment-friendly access to spectrum, and the deployment of European multi-orbit satellite systems. Further, this framework should be essential to implement the European Preparedness Union Strategy, adopted on 26 March 2025, that stresses inter alia the need to develop minimum preparedness criteria for essential services such as telecommunications to ensure the resilience of vital societal functions, and to promote dual use by design, in developing secure communications and connectivity for EU Critical Communications Systems (EUCCS).
- (138) Satellites play a vital role in ensuring the Union's security, resilience, and strategic autonomy. Recent technological advancements, evolving market dynamics, geopolitical challenges, and competition concerns related to satellite networks necessitate enhanced action at Union level. Satellite operators are increasingly seeking market access, and regulators are under growing pressure to establish appropriate regulatory frameworks that align with Union policies and objectives. There is a need to simplify and consolidate the rules on the provision of satellite networks, services and use of satellite spectrum, facilitate the creation of cross-border services and networks, and prevent regulatory gaps in access conditions for new satellite constellations. Such measures are necessary to ensure space competitiveness, strategic autonomy and secure connectivity.

- (139) More specifically, technological developments are leading to the progressive integration of terrestrial and non-terrestrial networks into a unified communication architecture, combining ground-based infrastructure with non-terrestrial components, in particular Low Earth Orbit satellite constellations, thereby ensuring ubiquitous, resilient and high-performance connectivity on a global scale. The global competition for standardisation and for access to satellite spectrum for next-generation mobile technologies demonstrates the strategic importance of spectrum as a critical resource. Specific legal provisions in this area are necessary to effectively address these developments, by strengthening the rules governing satellite spectrum management to enable the Union to ensure its strategic autonomy in the deployment of secure and resilient terrestrial and non-terrestrial 5G and 6G networks.
- (140) Although spectrum for satellite use is harmonised and managed primarily at the international level through the International Telecommunication Union (ITU), authorisation procedures for the provision of satellite services vary significantly across Member States. Applicable rules and conditions governing satellite networks and satellite communications services remain fragmented across Member States, hindering satellite operators in the Union from achieving the necessary scale to provide cross-border or pan-European connectivity services. Such services are increasingly essential for connecting underserved and remote areas, strengthening resilience, and supporting the deployment of new technologies.
- (141) A harmonised and centralised Union framework for the authorisation of satellite networks and satellite communication services should be established, with implementation supported by Member States. Such a framework, granting Union-level rights of use under common conditions, would enhance legal certainty, reduce fragmentation, and strengthen the Union's strategic autonomy, security and sovereignty in satellite communications, while complementing the objectives of the EU Space Act and the Vision for the EU Space Economy. Union-level satellite authorisation, through a procedure involving the Commission, and the Radio Spectrum Policy Body (RSPB) in all steps from allocation, licensing to enforcement, would reduce administrative burden, enhance transparency in market access, and ensure consistent management of spectrum scarcity and interference. It would safeguard the integrity of the internal market, promote secure and competitive services, and align spectrum policies with the Union's strategic objectives, thereby supporting secure, scalable and strategically autonomous satellite communications.
- (142) In view of the implementation of the specific current and future Union policies relying on numbering resources, timely identification of needs for both current and innovative services is essential. The development of the Union internal market results in increasing deployment of cross-border services that often rely on numbering resources. In order for these services to thrive and bring the expected societal benefits and economic growth, regulatory consistency and predictability should be ensured with regard to the planning, allocation and management of numbering resources in the Union. The Commission should deliver a forward-looking numbering strategy, relying on the input of all interested parties and with due consideration of the opinion of BEREC, that would constitute the basis of the Union numbering plan.
- (143) The availability of pan-European numbering resources would enable consistency and simplification of the use of numbering resources by providers of cross-border or pan-European services. The Commission, relying on Member States' support, should be able to take measures, including by means of adopting implementing acts, to adopt the Union numbering plan, to enable the application for numbering ranges to the ITU or to set the

conditions that may be attached to the right of use of numbering resources from the Union numbering plan, including the fees for rights of use for such resources and the possibility to transfer such fees to the ODN. While national regulatory authorities should assign the pan-European numbering resources and ensure the enforcement of the conditions attached to the individual rights of use, the ODN, in cooperation with national regulatory authorities, an under the supervision of BEREC, should keep an up-to-date database of the pan-European numbering resources.

- (144) In order to effectively support the free movement of goods, services and persons within the Union, it should be possible to use certain national numbering resources, in particular certain non-geographic numbers, in an extraterritorial manner, that is to say outside the territory of the assigning Member State. In light of the considerable risk of fraud with respect to interpersonal communications, such extraterritorial use should be allowed only for the provision of electronic communications services other than interpersonal communications services. Enforcement of relevant national laws, in particular consumer protection rules and other rules related to the use of numbering resources should be ensured by Member States independently of where the rights of use have been granted and where the numbering resources are used within the Union. Member States remain competent to apply their national law to providers using numbering resources granted in another Member State on their territory.
- (145) The national regulatory authorities of the Member States where numbering resources from another Member State are used, do not have control over those numbering resources. It is therefore essential that the national regulatory authority of the Member State which grants the rights of extraterritorial use should also ensure the effective protection of the end-users in the Member States where those numbers are used. In order to achieve effective protection, national regulatory authority granting rights of extraterritorial use should attach conditions in accordance with this Regulation regarding the respect by the provider of consumer protection rules and other rules related to the use of numbering resources in those Member States where those resources will be used.
- (146) The national regulatory authorities of those Member States where numbering resources are used should be able to request the support of the national regulatory authorities that granted the rights of use for the numbering resources to assist in enforcing its rules. Enforcement measures by the national regulatory authorities that granted the rights of use should include dissuasive penalties, in particular in the case of a serious breach the withdrawal of the right of extraterritorial use for the numbering resources assigned to the undertaking concerned. The requirements on extraterritorial use should be without prejudice to powers of national regulatory authority to block access to numbers or services where that is justified by reasons of fraud or misuse. The extraterritorial use of numbering resources should be without prejudice to Union rules related to the provision of roaming services, including those relative to preventing anomalous or abusive use of roaming services which are subject to retail price regulation and which benefit from regulated wholesale roaming rates. Member States should continue to be able to enter into specific agreements on extraterritorial use of numbering resources with third countries.
- (147) Access to numbering resources on the basis of transparent, objective and non-discriminatory criteria is essential for undertakings to compete in the electronic communications sector. National regulatory authorities should be able to grant rights of use for numbering resources to undertakings other than providers of electronic communications networks or services in light of the increasing relevance of numbers

for various Internet of Things services. All elements of national numbering plans should be managed by national regulatory authorities, including point codes used in network addressing.

- (148) The development of pan-European services, in particular machine to machine services, would be further enabled by the availability of harmonised numbers across the Union while the management of these numbering resources by national regulatory authorities in cooperation with the ODN would ensure a single set of conditions to comply with by these service providers. For this purpose, Member States shall support the Commission to apply for ranges of numbering resources to the ITU, including by applying for such specific numbering ranges on their behalf. Where there is a need for harmonisation of numbering resources in the Union to support the development of pan-European services or cross-border services, in particular new machine-to-machine-based services such as connected cars, and where the management of these resources in a centralised way by national regulatory authorities in cooperation with the ODN would enable simpler and more transparent allocation procedures for service providers, the Commission may adopt implementing measures with the assistance of BEREC.
- (149) It should be possible to fulfil the requirement to publish decisions on the granting of rights of use for numbering resources by making those decisions publicly accessible via a website.
- (150) An internal market implies that the originating party is able to access all numbers included in the national numbering plans of other Member States and to access services using non-geographic numbers, including freephone and premium-rate numbers and pan-European numbering resources within the Union, except where the receiving party has chosen, for commercial reasons, to limit access from certain geographical areas. The originating party should also be able to access numbers from the Universal International Freephone Numbers (UIFN).
- (151) Cross-border access to numbering resources and associated services should not be prevented, except in objectively justified cases, for example to combat fraud or abuse (for example, in connection with certain premium-rate services), when the number is defined as having a national scope only (for example, a national short code) or when it is economically unfeasible. National regulatory authorities must have the powers to block, including in a preventive manner, on the basis of the case-by-case analysis of the risks entailed by a certain pattern of use, access to numbers or services where that is justified by reasons of fraud or misuse. Tariffs charged to parties calling from outside the Member State concerned need not be the same as for those parties calling from inside that Member State. Users should be fully informed in advance and in a clear manner of any charges applicable to freephone numbers, such as international call charges for numbers accessible through standard international dialling codes. Where interconnection or other service revenues are withheld by providers of electronic communications services for reasons of fraud or misuse, Member States should ensure that retained service revenues are refunded to the end-users affected by the relevant fraud or misuse where possible.
- (152) High-speed and high-quality connectivity is essential for the cohesion of the Union's society and the competitiveness of the Union economy. Fibre-to-the-home (FTTH) networks constitute the most future-proof means of providing secure, reliable and energy-efficient connectivity capable of meeting the Union's digital transformation and climate objectives, while also reducing maintenance and operational costs for operators.

- (153) To accelerate the deployment of FTTH networks and increase the take-up of services provided over those networks, it is necessary to plan and implement the switch-off of legacy copper networks in an orderly and timely manner. To that effect, this Regulation establishes a structured framework for the progressive and proportionate transition from copper to fibre networks. It therefore regulates the use of copper networks in the general interest and does not affect the ownership of network assets, which remains governed by national law.
- (154) The copper switch-off should respect the principles of predictability, transparency and proportionality. This Regulation therefore lays down objective conditions, procedural steps and safeguards governing the copper switch-off, while providing for proportionate exceptions. Together with a sufficiently long transition period, these measures protect the interests of end-users, enhance legal certainty for businesses and avoid distortions of competition.
- (155) To support a coherent and efficient preparation of the copper switch-off, a coordinated action is needed at EU and national level. Member States, in particular those in which copper services are still in service on [], play a key role in achieving a rapid and orderly transition to fibre to the benefit of end users. Each Member State should draw up a national transition to fibre plan setting out its strategy for the transition to fibre networks. That plan should describe network coverage for the relevant technologies, identify deployment initiatives and specify measures to support a timely and orderly migration from copper to fibre networks.
- (156) To plan and manage the copper switch-off in a structured and transparent manner, national regulatory authorities should identify specific geographic copper switch-off areas (CSO areas), using harmonised criteria to be identified in guidance adopted by the Commission, and should keep those areas under review in light of network deployment and market developments.
- (157) The decision to mandate the copper switch-off in a CSO area should be based on objective sustainability conditions, namely that fibre networks pass in close proximity to a very high share of homes, and affordable retail connectivity services of comparable quality are available to end-users. The assessment of those conditions should be carried out by national regulatory authorities on the basis of up-to-date coverage, deployment and market data.
- (158) For the purposes of assessing whether fibre networks pass in close proximity to homes and can be connected with reasonable effort and at a reasonable cost, as well as whether affordable services of comparable quality are available, national regulatory authorities should apply objective and transparent criteria, taking into account national circumstances, local deployment conditions and relevant market data.
- (159) Member States should aim to start the copper switch-off in a significant proportion of CSO areas well in advance of 31 December 2035. To that effect, they should take appropriate measures, in line with their national transition to fibre plan, to maximise the number of CSO areas where the sustainability conditions are met at an early stage.
- (160) Where the sustainability conditions are met, Member States should mandate the copper switch-off within defined time limits, following the publication of the relevant assessments by national regulatory authorities. This progressive approach facilitates orderly migration, reduces uncertainty and allows sufficient time for operators and end-users to adapt.

- (161) Where the sustainability conditions are not met in a CSO area, copper networks may continue to be in service for additional time. However, by 31 December 2035, the copper switch-off should, as a rule, be mandated in all CSO areas. This long-term objective provides a clear investment signal while allowing sufficient flexibility to accommodate differences in deployment progress across Member States and regions.
- (162) In exceptional cases, where fibre deployment is not economically viable and no adequate connectivity solution capable of replacing copper-based services is available, Member States should be able to refrain from mandating the copper switch-off.
- (163) Such exceptions are necessary to avoid disproportionate impacts on end-users and ensure the continuity of essential services.
- (164) To ensure a smooth transition and protect end-users, Member States should provide for appropriate safeguards prior to the copper switch-off. Those safeguards should include clear and timely information, as well as measures to ensure the continuity or migration of critical services to functionally equivalent alternatives.
- (165) National regulatory authorities should supervise the implementation of the copper switch-off and ensure that operators comply with approved switch-off plans, timelines and communication obligations. Effective, proportionate and dissuasive penalties should be imposed in cases of non-compliance.
- (166) It is necessary to give appropriate incentives for investment in Gigabit networks that support innovation in content-rich internet services and strengthen the overall competitiveness of the Union. It is therefore vital to promote efficient investment in the development of those networks, while safeguarding competition, as bottlenecks and barriers to entry remain at the infrastructure level, and boosting consumer choice through regulatory predictability and consistency
- (167) Competition can best be fostered through an economically efficient level of investment in new and existing infrastructure, complemented by regulation, where necessary, to ensure consumers and business choices of services. An efficient level of infrastructure-based competition is the extent of infrastructure duplication at which investors can reasonably expect to make a fair return.
- (168) It should be ensured that procedures exist for the granting of rights to install facilities that are timely, non-discriminatory and transparent, in order to guarantee the conditions for fair and effective competition. This Regulation is without prejudice to national provisions governing the expropriation or use of property, the normal exercise of property rights, the normal use of the public domain, or to the principle of neutrality with regard to the rules in Member States governing the system of property ownership.
- (169) Permits issued to providers of electronic communications networks and services allowing them to gain access to public or private property are essential factors for the establishment of electronic communications networks or new network elements. Unnecessary complexity and delay in the procedures for granting rights of way may therefore represent important obstacles to the development of competition. Consequently, the acquisition of rights of way by authorised undertakings should be simplified. Competent authorities should coordinate the acquisition of rights of way, making relevant information accessible on their websites.
- (170) It is necessary to strengthen the powers of the Member States as regards holders of rights of way to ensure the entry or roll-out of a new network in a fair, efficient and environmentally responsible way and independently of any obligation on an undertaking designated as having significant market power to grant access to its electronic

communications network. Improving facility sharing can lower the environmental cost of deploying electronic communications infrastructure and serve public health, public security and meet town and country planning objectives. Competent authorities should be empowered to require that the undertakings which have benefitted from rights to install facilities on, over or under public or private property share such facilities or property, including physical co-location, after an appropriate period of public consultation, during which all interested parties should be given the opportunity to state their views, in the specific areas where such general interest reasons impose such sharing. That can be the case for instance where the subsoil is highly congested or where a natural barrier needs to be crossed. Competent authorities should in particular be able to impose the sharing of network elements and associated facilities, such as ducts, conduits, masts, manholes, cabinets, antennae, towers and other supporting constructions, buildings or entries into buildings, and a better coordination of civil works on environmental sustainability of electronic communications networks or other public policy grounds. On the contrary, it should be for national regulatory authorities to define rules for apportioning the costs of the facility or property sharing, to ensure that there is an appropriate reward of risk for the undertakings concerned. For example, in a symmetric context, any guidance issued by the Commission or BEREC, pursuant to Article 3, Article 5(6) and Article 11(6) of Regulation (EU) 2024/1309 should be taken into utmost account, as appropriate. In light of the obligations imposed by Directive 2014/61/EU, the competent authorities, in particular, local authorities, should also establish appropriate coordination procedures, in cooperation with national regulatory authorities, with respect to public works and other appropriate public facilities or property which should be able to include procedures that ensure that interested parties have information concerning appropriate public facilities or property and ongoing and planned public works, that they are notified in a timely manner of such works, and that sharing is facilitated to the maximum extent possible.

- (171) Where mobile operators are required to share towers or masts for environmental reasons, such mandated sharing could lead to a reduction in the maximum transmitted power levels allowed for each operator for reasons of public health, and this in turn could require operators to install more transmission sites to ensure national coverage. Competent authorities should seek to reconcile the environmental and public health considerations in question, taking due account of the precautionary approach set out in Council Recommendation 1999/519/EC (32).
- (172) The provisions of this Regulation as regards access and interconnection apply to public electronic communications networks. Providers of electronic communications networks other than to the public do not have access or interconnection obligations under this Regulation except where, in benefiting from access to public networks, they may be subject to conditions laid down by Member States.
- (173) In an open and competitive market, there should be no restrictions that prevent undertakings from negotiating access and interconnection arrangements between themselves, in particular on cross-border agreements, subject to the competition rules laid down in the TFEU. In the context of achieving a more efficient, truly pan-European market, with effective competition, more choice and competitive services to end-users, undertakings which receive requests for access or interconnection from other undertakings that are subject to general authorisation in order to provide electronic communications networks or services to the public should in principle conclude such agreements on a commercial basis, and negotiate in good faith.

- (174) In markets where there continue to be large differences in negotiating power between undertakings, and where some undertakings rely on infrastructure provided by others for delivery of their services, it is appropriate to establish a regulatory framework to ensure that the market functions effectively. National regulatory authorities should have the power to secure, where commercial negotiation fails, adequate access and interconnection and interoperability of services in the interest of end-users. In particular, they can ensure end-to-end connectivity by imposing proportionate obligations on undertakings that are subject to the general authorisation and that control access to end-users. Control of means of access may entail ownership or control of the physical link to the end-user (either fixed or mobile), or the ability to change or withdraw the national number or numbers needed to access an end-user's network termination point. This would be the case for example if network operators were to restrict unreasonably end-user choice for access to internet portals and services.
- (175) In light of the principle of non-discrimination, national regulatory authorities should ensure that all undertakings, irrespective of their size and business model, whether vertically integrated or separated, can interconnect on reasonable terms and conditions, with a view to providing end-to-end connectivity and access to the internet.
- (176) National legal or administrative measures that link the terms and conditions for access or interconnection to the activities of the party seeking interconnection, and specifically to the degree of its investment in network infrastructure, and not to the interconnection or access services provided, may cause market distortion and may therefore not be compatible with competition rules.
- (177) Network operators who control access to their own customers do so on the basis of unique numbers or addresses from a published numbering or addressing range. Other network operators need to be able to deliver traffic to those customers, and so need to be able to interconnect directly or indirectly to each other. It is therefore appropriate to lay down rights and obligations to negotiate interconnection.
- (178) Interoperability is of benefit to end-users and is an important aim of that regulatory framework. Encouraging interoperability is one of the objectives for national regulatory and other competent authorities as set out in that framework. That framework also provides for the Commission to publish a list of standards or specifications covering the provision of services, technical interfaces or network functions, as the basis for encouraging harmonisation in electronic communications. Member States should encourage the use of published standards or specifications to the extent strictly necessary to ensure interoperability of services and to improve freedom of choice for users.
- (179) Currently both end-to-end connectivity and access to emergency services depend on end-users using number-based interpersonal communications services. An increased exclusive use of number-independent interpersonal communications services by an increasing number of end-users could entail a lack of sufficient interoperability between communications services. As a consequence, significant barriers to market entry and obstacles to further onward innovation could emerge and appreciably threaten effective end-to-end connectivity between end-users.
- (180) Where such interoperability issues arise, the Commission should be able to request a BEREC report which should provide a factual assessment of the market situation at Union and Member State level. Taking utmost account of the BEREC report and other available evidence and taking into account the effects on the internal market, the Commission should decide whether there is a need for regulatory intervention, including by national regulatory or other competent authorities. If the Commission considers that

such regulatory intervention is necessary at Union level or should be considered by national regulatory or other competent authorities, it should be able to adopt implementing measures specifying the nature and scope of possible regulatory interventions, including by national regulatory or other competent authorities, including in particular obligations to publish and allow the use, modification and redistribution of relevant information by authorities and providers and measures to impose the mandatory use of standards or specifications on all or on specific providers.

- (181) National regulatory authorities should assess, in light of the specific national circumstances, whether any intervention is necessary and justified to ensure end-to-end-connectivity, and if so, impose proportionate obligations, in accordance with the Commission's implementing measures, on those providers of number-independent interpersonal communications services with a significant level of coverage and user-uptake. The term significant should be interpreted in the sense that the geographic coverage and the number of end-users of the provider concerned represent a critical mass with a view to achieving the goal of ensuring end-to-end connectivity between end-users. Providers with a limited number of end-users or limited geographic coverage which would contribute only marginally to achieving that goal, should normally not be subject to such interoperability obligations.
- (182) In situations where undertakings are deprived of access to viable alternatives to non-replicable wiring, cables and associated facilities inside buildings or up to the first concentration or distribution point and in order to promote competitive outcomes in the interest of end-users, national regulatory authorities should be empowered to impose access obligations on all undertakings, irrespective of a designation as having significant market power. In that regard, national regulatory authorities should take into consideration all technical and economic barriers to future replication of networks. However, as such obligations can in certain cases be intrusive, can undermine incentives for investments, and can have the effect of strengthening the position of dominant players, they should be imposed only where justified and proportionate to achieving sustainable competition in the relevant markets. The mere fact that more than one such infrastructure already exists should not necessarily be interpreted as showing that its assets are replicable. If necessary in combination with such access obligations, undertakings should also be able to rely on the obligations to provide access to physical infrastructure on the basis of Directive 2014/61/EU. Any obligations imposed by the national regulatory authority under this Directive and decisions taken by other competent authorities under Directive 2014/61/EU to ensure access to in-building physical infrastructure or to physical infrastructure up to the access point should be consistent.
- (183) National regulatory authorities should be able, to the extent necessary, to impose obligations on undertakings to provide access to the facilities referred to in an annex to this Regulation, namely application programming interfaces (APIs) and electronic programme guides (EPGs), to ensure not only accessibility for end-users to digital radio and television broadcast services but also to related complementary services. Such complementary services should be able to include programme related services which are specifically designed to improve accessibility for end-users with disabilities, and programme related connected television services.
- (184) In situations where undertakings are deprived of access to viable alternatives to non-replicable wiring, cables and associated facilities inside buildings or up to the first concentration or distribution point and in order to promote competitive outcomes in the interest of end-users, national regulatory authorities should be empowered to impose access obligations on all undertakings, irrespective of a designation as having significant

market power. In that regard, national regulatory authorities should take into consideration all technical and economic barriers to future replication of networks. However, as such obligations can in certain cases be intrusive, can undermine incentives for investments, and can have the effect of strengthening the position of dominant players, they should be imposed only where justified and proportionate to achieving sustainable competition in the relevant markets. The mere fact that more than one such infrastructure already exists should not necessarily be interpreted as showing that its assets are replicable. If necessary in combination with such access obligations, undertakings should also be able to rely on the obligations to provide access to physical infrastructure on the basis of Directive 2014/61/EU. Any obligations imposed by the national regulatory authority under this Directive and decisions taken by other competent authorities under Directive 2014/61/EU to ensure access to in-building physical infrastructure or to physical infrastructure up to the access point should be consistent.

- (184) It is important that when national regulatory authorities assess the concentration or distribution point up to which they intend to impose access, they choose a point in accordance with BEREC guidelines. Selecting, where possible, a point nearer to end-users will be more beneficial to infrastructure competition and the roll-out of Gigabit networks. It could also be justified to impose access obligations to wiring and cables beyond the first concentration or distribution point, where it is demonstrated that replication faces high and non-transitory physical or economic barriers, leading to competition problems or market failures at the retail level to the detriment of end-users. The assessment of the replicability of network elements requires a market analysis, but the national regulatory authority does not need to establish significant market power in order to impose these obligations. On the other hand, such market analysis requires a sufficient economic assessment of market conditions, to establish whether the criteria necessary to impose obligations beyond the first concentration or distribution point are met. Such access obligations are more likely to be necessary in geographical areas where the business case for alternative infrastructure rollout is not viable or riskier, for example because of low population density. Conversely, normally a high concentration of households might indicate that the imposition of such obligations is unnecessary.
- (185) National regulatory authorities should consider whether such obligations have the potential to strengthen the position of undertakings designated as having significant market power. National regulatory authorities should be able to impose access to active or virtual network elements used for service provision on such infrastructure if access to passive elements would be economically inefficient or physically impracticable, and if the national regulatory authority considers that, absent such an intervention, the purpose of the access obligation would be circumvented. In order to enhance consistent regulatory practice across the Union, the Commission should be able to require the national regulatory authority to withdraw its draft measures extending access obligations beyond the first concentration or distribution point.
- (186) In such cases, in order to comply with the principle of proportionality, it can be appropriate for national regulatory authorities to exempt certain categories of undertakings, from obligations going beyond the first concentration or distribution point, which should be determined by national regulatory authorities, on the grounds that an access obligation not based on an undertaking's designation as having significant market power would risk compromising their business case for recently deployed network elements, in particular by small local projects. Wholesale-only undertakings should not be subject to such access obligations if they offer an effective alternative

access on a commercial basis to a Gigabit network, on fair, non-discriminatory and reasonable terms and conditions, including as regards price. It should be possible to extend that exemption to other providers on the same terms. The exemption is not appropriate for providers that are in receipt of public funding.

- (187) Sharing of passive infrastructure used in the provision of wireless electronic communications services in compliance with competition law principles can be particularly useful to maximise Gigabit connectivity throughout the Union, especially in less densely populated areas where replication is impracticable and end-users risk being deprived of such connectivity. National regulatory authorities should, by way of exception, be able to impose such sharing or localised roaming access, in accordance with Union law, if that possibility has been clearly established in the original conditions for the granting of the right of use and they demonstrate the benefits of such sharing in terms of overcoming insurmountable economic or physical obstacles and access to networks or services is therefore severely deficient or absent, and taking into account several factors, including in particular the need for coverage along major transport paths, choice and a higher quality of service for end-users as well as the need to maintain infrastructure roll-out incentives. In circumstances where there is no access by end-users, and sharing of passive infrastructure alone does not suffice to address the situation, the national regulatory authorities should be able to impose obligations on the sharing of active infrastructure. In so doing, national regulatory or other competent authorities retain the flexibility to choose the most appropriate sharing or access obligation which should be proportionate and justified based on the nature of the problem identified.
- (188) While it is appropriate in some circumstances for a national regulatory or other competent authority to impose obligations on undertakings irrespective of a designation of significant market power in order to achieve goals such as end-to-end connectivity or interoperability of services, it is necessary to ensure that such obligations are imposed in accordance with the regulatory framework and, in particular, its notification procedures. Such obligations should be imposed only where justified in order to secure the objectives of this Regulation, and where they are objectively justified, transparent, proportionate and non-discriminatory in accordance with the relevant notification procedures.
- (189) In the context of transition to fibre, it is crucial to ensure that end-users are connected to the available fibre networks that pass their premises within a reasonable time frame.
- (190) In order to ensure the connection of end-users, national regulatory authorities shall oblige any provider of electronic communications networks to deploy, with reasonable additional build-out, a connecting link between the requesting end-user's home and the nearest distribution/connection point intended to serve their premises.
- (191) In order to ensure adequate recovery of the cost of deploying the connecting link, the requested operator may be entitled to ask the requesting end-user to bear the costs. However, national regulatory authorities should ensure that the costs paid by the end users are fair and reasonable and may intervene to set maximum prices if needed. National regulatory authorities may use existing contracts and commercial terms and conditions agreed between retail services providers and end-users as a benchmark to determine whether prices, and terms and conditions are fair and reasonable. An additional markup may be envisaged, having regard to the geographic conditions and any other relevant conditions.

- (192) The transition to fibre, the need to ensure that end-users are connected to fibre in their homes and the reported difficulties that operators encounter in deploying fibre in multi-dwelling buildings to address end users' demand justify an exception to Article 11(4) of Regulation (EU) 2024/1309⁴⁰. In such circumstances, where connecting the requesting end-user requires deploying in-building wiring and associated facilities within a multi-dwelling unit, the owners or the administrators of the unit may not refuse such deployment. However, to avoid excessive intrusions in private properties and unnecessary duplication of infrastructure within their building, they should be entitled to refuse the deployment of a second in-building wiring and associated facilities. National regulatory authorities should then ensure that access to this network is provided on a symmetric basis.
- (193) In order to overcome insurmountable economic or physical obstacles for providing end-users with services or networks which rely on the use of radio spectrum and where mobile coverage gaps persist, their closing may require the access and sharing of passive infrastructure, or, where this is not sufficient, the sharing of active infrastructure, or localised roaming access agreements. Without prejudice to sharing obligations attached to the rights of use on the basis of other provisions of this Directive, and in particular measures to promote competition, where national regulatory or other competent authorities intend to take measures to impose the sharing of passive infrastructure, or when passive access and sharing are not sufficient, active infrastructure sharing or localised roaming access agreements, they may, however, also be called to consider the possible risk for market participants in underserved areas.
- (194) Competition rules alone may not always be sufficient to ensure cultural diversity and media pluralism in the area of digital television. Technological and market developments make it necessary to review obligations to provide conditional access on fair, reasonable and non-discriminatory terms on a regular basis, by a Member State for its national market, in particular to determine whether it is justified to extend obligations to EPGs and APIs, to the extent necessary to ensure accessibility for end-users to specified digital broadcasting services. Member States should be able to specify the digital broadcasting services to which access by end-users is to be ensured by any legislative, regulatory or administrative means that they consider to be necessary.
- (195) Member States should also be able to permit their national regulatory authority to review obligations in relation to conditional access to digital broadcasting services in order to assess through a market analysis whether to withdraw or amend conditions for undertakings that do not have significant market power on the relevant market. Such a withdrawal or amendment should not adversely affect access for end-users to such services or the prospects for effective competition.
- (196) There is a need for ex ante obligations in certain circumstances in order to ensure the development of a competitive market, the conditions of which favour the deployment and take-up of Gigabit networks and services, and the maximisation of end-user benefits. The definition of significant market power used in this Regulation is equivalent to the concept of dominance as defined in the case-law of the Court of Justice.
- (197) In assessing the need for ex ante regulatory intervention, national regulatory authorities should take into account whether wholesale access is available to any interested undertaking on the basis of either already existing regulation (in particular based on the

⁴⁰ Regulation (EU) 2024/1309 of the European Parliament and of the Council of 29 April 2024 on measures to reduce the cost of deploying gigabit electronic communications networks, amending Regulation (EU) 2015/2120 and repealing Directive 2014/61/EU (Gigabit Infrastructure Act), OJ L [tr], 2024/1309.

Gigabit Infrastructure Act) or commercial conditions permitting sustainable competitive outcomes for end-users on the retail market.

- (198) It is essential that ex ante regulatory obligations should be imposed on a wholesale market only where there are one or more undertakings with significant market power, with a view to ensuring sustainable competition and where Union and national competition law are not sufficient to address the problem.
- (199) The Commission has drawn up guidelines at Union level in accordance with the principles of competition law for national regulatory authorities to follow in assessing whether competition is effective in a given market and in assessing significant market power. National regulatory authorities should analyse whether a given product or service market is effectively competitive in a given geographical area, which could be the whole or a part of the territory of the Member State concerned or neighbouring parts of territories of Member States considered together. An analysis of effective competition should include an analysis as to whether the market is prospectively competitive, and thus whether any lack of effective competition is durable. Those guidelines should also address the issue of newly emerging markets, where de facto the market leader is likely to have a substantial market share but should not be subjected to inappropriate obligations. The Commission should review the guidelines regularly, in particular on the occasion of a review of the existing law, taking into account the case-law of the Court of Justice, economic literature and actual market experience and with a view to ensuring that they remain appropriate in a rapidly developing market. National regulatory authorities will need to cooperate with each other where the relevant market is found to be transnational.
- (200) National regulatory authorities should define relevant geographic markets within their territory taking into utmost account the Commission Recommendation on relevant product and service markets (the ‘Recommendation’) when adopted pursuant to this Regulation and taking into account national and local circumstances. Therefore, national regulatory authorities should at least analyse the markets that are contained in the Recommendation, including those markets that are listed but no longer regulated in the specific national or local context. National regulatory authorities should also analyse markets that are not contained in that Recommendation, but that are regulated within the territory of their jurisdiction on the basis of previous market analyses, or other markets, if they have sufficient grounds to consider that the three criteria provided in this Regulation are met.
- (201) In some circumstances geographic markets are defined as national or sub-national, for example due to the national or local nature of network roll-out which determines the boundaries of undertakings’ potential market power in respect of wholesale supply, but there is still a significant transnational demand from one or more categories of end-users. That can in particular be the case for demand from business end-users with multisite facility operations in different Member States. If that transnational demand is not sufficiently met by suppliers, for example if they are fragmented along national borders or locally, a potential internal market barrier arises. Therefore, BEREC should be empowered to provide guidelines to national regulatory authorities on common regulatory approaches to ensure that transnational demand can be met in a satisfactory way, providing a basis for the interoperability of wholesale access products across the Union and permitting efficiencies and economies of scale despite the fragmented supply side. BEREC’s guidelines should shape the choices of national regulatory authorities in pursuing the internal market objective when imposing regulatory obligations on undertakings designated as having significant market power at national level while

providing guidance for the harmonisation of technical specifications of wholesale access products capable of meeting such identified transnational demand, in the interest of the internal market.

- (202) In determining whether an undertaking has significant market power in a specific market, national regulatory authorities should act in accordance with Union law and take utmost account of the Commission guidelines on market analysis and the assessment of significant market power.
- (203) Two or more undertakings can be found to enjoy a joint dominant position not only where there exist structural or other links between them but also where the structure of the relevant market is conducive to coordinated effects, that is, it encourages parallel or aligned anti-competitive behaviour on the market.
- (204) The objective of any ex ante regulatory intervention is ultimately to produce benefits for end-users in terms of price, quality and choice by making retail markets effectively competitive on a sustainable basis. It is likely that national regulatory authorities will gradually be able to find many retail markets to be competitive even in the absence of wholesale regulation, especially taking into account expected improvements in innovation and competition.
- (205) For national regulatory authorities, the starting point for the identification of wholesale markets susceptible to ex ante regulation is the analysis of corresponding retail markets. The analysis of effective competition at the retail and at the wholesale level is conducted from a forward-looking perspective over a given time horizon, and is guided by competition law, including, as appropriate, the relevant case law of the Court of Justice. If it is concluded that a retail market would be effectively competitive in the absence of ex ante wholesale regulation on the corresponding relevant markets, this should lead the national regulatory authority to conclude that regulation is no longer needed at the relevant wholesale level.
- (206) National regulatory authorities should ensure markets are analysed in a consistent manner and, where possible, at the same time. Moreover, the notification under Article 85 should be comprehensive, including the market definition, SMP designation and correlated remedies to ensure that the remedies imposed are proportionate and reflect the actual market situation and to ensure transparency for the market participants to the greatest extent.
- (207) When assessing wholesale regulation to solve problems at the retail level, national regulatory authorities shall take into account the fact that several wholesale markets can provide wholesale upstream inputs for a particular retail market, and, conversely, that a single wholesale market can provide wholesale upstream inputs for a variety of retail markets. Furthermore, competitive dynamics in a particular market can be influenced by markets that are contiguous but not in a vertical relationship, such as can be the case between certain fixed and mobile markets. National regulatory authorities should conduct that assessment for each individual wholesale market considered for regulation, starting with remedies for access to civil infrastructure, as such remedies are usually conducive to more sustainable competition including infrastructure competition, and thereafter analysing any wholesale markets considered susceptible to ex ante regulation in order of their likely suitability to address identified competition problems at retail level. When deciding on the specific remedy to be imposed, national regulatory authorities should assess its technical feasibility and carry out a cost-benefit analysis, having regard to its degree of suitability to address the identified competition problems at retail level, and enabling competition based on differentiation and technology

neutrality. National regulatory authorities should consider the consequences of imposing any specific remedy which, if feasible only on certain network topologies, could constitute a disincentive for the deployment of Gigabit networks in the interest of end-users.

- (208) Without prejudice to the principle of technology neutrality, the national regulatory authorities should provide incentives through the remedies imposed, and, where possible, before the roll-out of infrastructure, for the development of flexible and open network architecture, which would reduce eventually the burden and complexity of remedies imposed at a later stage. At each stage of the assessment, before the national regulatory authority determines whether any additional, more burdensome, remedy should be imposed it should seek to determine whether the retail market concerned would be effectively competitive, also taking into account any relevant commercial arrangements or other wholesale market circumstances, including other types of regulation already in force, such as for example general access obligations to non-replicable assets or obligations imposed pursuant to Regulation (EU) 2024/1309, and of any regulation already considered to be appropriate by the national regulatory authority for an undertaking designated as having significant market power. Such an assessment, aiming to ensure that only the most appropriate remedies necessary to effectively address any problems identified in the market analysis are imposed, does not preclude a national regulatory authority from finding that a mix of such remedies together, even if of differing intensity, in line with the proportionality principle, offers the least intrusive way of addressing the problem. Even if such differences do not result in the definition of distinct geographic markets, they should be able to justify differentiation in the appropriate remedies imposed in light of the differing intensity of competitive constraints.
- (209) Ex ante regulation imposed at the wholesale level, which is in principle less intrusive than retail regulation, is considered to be sufficient to tackle potential competition problems on the related downstream retail market or markets. The substantial improved competitive conditions since the regulatory framework for electronic communications has been in place led to the progressive deregulation of retail markets across the Union.
- (210) When a national regulatory authority withdraws wholesale regulation, it should define an appropriate notice period to ensure a sustainable transition to a de-regulated market. In defining such a notice period, the national regulatory authority should take into account the existing agreements between access providers and access seekers that have been entered into on the basis of the imposed regulatory obligations. In particular, such agreements can provide a contractual legal protection to access seekers for a determined period. The national regulatory authority shall also take into account the effective possibility for market participants to take up any commercial wholesale access or co-investment offers which can be present in the market and the need to avoid an extended period of possible regulatory arbitrage. Transition arrangements established by the national regulatory authority should consider the extent and timing of regulatory oversight of pre-existing agreements, once the notice period starts.
- (211) In order to provide market players with certainty as to regulatory conditions, a time limit for market reviews is necessary. It is important to conduct a market analysis on a regular basis and within a reasonable and appropriate timeframe. There is a risk that failure by a national regulatory authority to analyse a market within the time-limit jeopardises the internal market, also given that normal infringement proceedings do not produce their desired effect on time.

- (212) Due to the high level of technological innovation and highly dynamic markets in the electronic communications sector, there is a need to adapt regulation rapidly in a coordinated and harmonised way at Union level, as experience has shown that divergence among the national regulatory authorities in the implementation of the regulatory framework may create a barrier to the internal market.
- (213) In the interest of greater stability and predictability of regulatory measures, the maximum period allowed between market analyses should remain five years, provided market changes in the intervening period do not require a new analysis and without prejudice to the possibility of imposing interim measures. In determining whether a national regulatory authority has complied with its obligation to analyse markets and notified the corresponding draft measure at a minimum every five years, only a notification including a new assessment of the market definition and of significant market power will be considered to be starting a new five-year market cycle. A mere notification of new or amended regulatory remedies, imposed on the basis of a previous and unrevised market analysis will not be considered to have satisfied that obligation. Non-compliance by a national regulatory authority with the obligation to conduct market analysis at regular intervals laid down in this Regulation shall not be considered, in itself, to be a ground for the invalidity or inapplicability of existing obligations imposed by that national regulatory authority in the market in question.
- (214) The imposition of a specific obligation on an undertaking designated as having significant market power does not require an additional market analysis but rather a justification that the obligation in question is appropriate and proportionate in relation to the nature of the problem identified on the market in question, and on the related retail market.
- (215) When assessing the proportionality of the obligations and conditions to be imposed, national regulatory authorities should take into account the different competitive conditions existing in the different areas within their Member States having regard in particular to the results of the geographical survey conducted in accordance with this Regulation.
- (216) Reviews of obligations imposed on undertakings designated as having significant market power during the timeframe of a market analysis should allow national regulatory authorities to take into account the impact on competitive conditions of new developments, for instance of newly concluded voluntary agreements between undertakings, or the constitution by an undertaking with significant market power of a separate entity for either infrastructure deployments or services provision, thus providing the flexibility which is particularly necessary in the context of longer regulatory cycles. A similar logic should apply in the case of an unforeseeable breach or termination of a commercial agreement, or if such an agreement has effects diverging from the market analysis. If the termination of an existing agreement occurs in a deregulated market, it is possible that a new market analysis is required. In the absence of a single important change in the market but in the case of dynamic markets, it may be necessary to conduct a market analysis more often than every five years. Markets should be considered to be dynamic if the technological evolution and end-user demand patterns are likely to evolve in such a way that the conclusions of the analysis would be superseded within the medium term for a significant group of geographic areas or of end-users within the geographic and product market defined by the national regulatory authority.

- (217) When assessing the remedies to be imposed, the national regulatory authorities should start by assessing, in line with the principle of proportionality, whether the least intrusive remedies are sufficient to address the identified competition problems. In this respect, remedies such as obligations of non-discrimination and transparency shall be assessed as a first step. Where these remedies are not sufficient, the national regulatory authorities shall assess whether access to passive infrastructure could be sufficient and appropriate to address the competition issues identified. If that is not the case, the national regulatory authorities shall assess whether the harmonised access products are appropriate and sufficient to address these problems. Harmonised access products may include FTTH unbundling, virtual unbundled local access as the products typically imposed in the wholesale markets serving mass customers. In addition, such harmonised products could include ethernet leased lines and quality of service parameters in the markets serving business customers when needed. Where the national regulatory authorities justifies that the harmonised access products are not appropriate in light of the market circumstances, it may impose other remedies.
- (218) Civil engineering assets that can host an electronic communications network are crucial for the successful roll-out of new networks because of the high cost of duplicating them, and the significant savings that can be made when they can be reused. Therefore, in addition to the rules on physical infrastructure laid down in Regulation (EU) 2024/1309, a specific remedy is necessary in those circumstances where civil engineering assets are owned by an undertaking designated as having significant market power. Where civil engineering assets exist and are reusable, the positive effect of achieving effective access to them on the roll-out of competing infrastructure is very high, and it is therefore necessary to ensure that access to such assets can be used as a self-standing remedy for the improvement of competitive and deployment dynamics in any downstream market, to be considered before assessing the need to impose any other potential remedies, and not just as an ancillary remedy to other wholesale products or services or as a remedy limited to undertakings availing themselves of such other wholesale products or services. National regulatory authorities should value reusable legacy civil engineering assets on the basis of the regulatory accounting value net of the accumulated depreciation at the time of calculation, indexed by an appropriate price index, such as the retail price index, and excluding those assets which are fully depreciated, over a period of not less than 40 years, but still in use. When also based on the information gathered on deployment of Gigabit infrastructures, it results that access to physical infrastructure it is a crucial precondition for the deployed networks and thus for the downstream market, the identification of a separate physical infrastructure market may be considered also to provide long term regulatory predictability.
- (219) In order to foster the achievement of an internal market in the area of digital networks and services, it is essential to further harmonise, wherever possible, access products. Therefore, this regulation should provide the requirements according to which a wholesale access product could be considered as a European harmonised wholesale access product, which could be imposed by national regulatory authorities of all Member States.
- (220) National regulatory authorities should accordingly assess whether the replacement of obligations previously imposed to undertakings with significant market power to provide wholesale access to Gigabit networks with an obligation to supply a European access product would be appropriate and proportionate.

- (221) In consideration of the constantly evolving market and technological developments, the Commission should be empowered to adopt implementing acts to define the technical requirements of European access products as needs be.
- (222) Where a national regulatory authority has concluded that a European access product would be appropriate and proportionate, it should impose it on the undertaking with significant power concerned. The imposition of the European access products should take precedence over the imposition of any other remedies. National regulatory authorities shall impose obligations of access to, and use of, specific networks elements and associated facilities only where a European access product would not be sufficient to address the competitive problems on a specific market.
- (223) Transparency, non-discrimination, accounting separation and price and cost accounting could be envisaged as complements to the imposition of the European access products. Where obligations are imposed on undertakings that require them to meet reasonable requests for access to and use of networks elements and associated facilities, such requests should be refused only on the basis of objective criteria such as technical feasibility or the need to maintain network integrity. Where access is refused, the aggrieved party should be able to submit the case to the dispute resolutions procedures under this Regulation. An undertaking with mandated access obligations cannot be required to provide types of access which it is not within its power to provide. The imposition by national regulatory authorities of mandated access that increases competition in the short term should not reduce incentives for competitors to invest in alternative facilities that will secure more sustainable competition or higher performance and end-user benefits in the long term. When choosing the least intrusive regulatory intervention, and in line with the principle of proportionality, national regulatory authorities could, for example, decide to review the obligations imposed on undertakings designated as having significant market power and amend any previous decision, including by withdrawing obligations, imposing or not imposing new access obligations if this is in the interests of users and sustainable service competition. National regulatory authorities should be able to impose technical and operational conditions on the provider or beneficiaries of mandated access in accordance with Union law. In particular the imposition of technical standards should comply with Directive (EU) 2015/1535.
- (224) National regulatory authorities should, when imposing obligations for access to new and enhanced infrastructures, ensure that access conditions reflect the circumstances underlying the investment decision, taking into account, *inter alia*, the roll-out costs, the expected rate of take up of the new products and services and the expected retail price levels. Moreover, in order to provide planning certainty to investors, national regulatory authorities should be able to set, if applicable, terms and conditions for access which are consistent over appropriate review periods. In the event that price controls are considered to be appropriate, such terms and conditions can include pricing arrangements which depend on volumes or length of contract in accordance with Union law and provided they have no discriminatory effect. Any access conditions imposed should respect the need to preserve effective competition in services to consumers and businesses.
- (225) Mandating access to network infrastructure can be justified as a means of increasing competition, but national regulatory authorities need to balance the rights of an infrastructure owner to exploit its infrastructure for its own benefit, and the rights of other service providers to access facilities that are essential for the provision of competing services.

- (226) In markets where an increased number of access networks can be expected on a forward-looking basis, end-users are more likely to benefit from improvements in network quality, by virtue of infrastructure-based competition, compared to markets where only one network persists. The adequacy of competition on other parameters, such as price and choice, is likely to depend on the national and local competitive circumstances. In assessing the adequacy of competition on such parameters and the need for regulatory intervention, national regulatory authorities should also take into account whether wholesale access is available to any interested undertaking on reasonable commercial terms permitting sustainable competitive outcomes for end-users on the retail market. The application of general competition rules in markets characterised by sustainable and effective infrastructure-based competition should be sufficient.
- (227) When considering whether to impose remedies to control prices, and if so in what form, national regulatory authorities should seek to allow a fair return for the investor on a particular new investment project. In particular, there are risks associated with investment projects specific to new access networks which support products for which demand is uncertain at the time the investment is made.
- (228) Price control may be necessary when market analysis in a particular market reveals inefficient competition. In particular, undertakings designated as having significant market power should avoid a price squeeze whereby the difference between their retail prices and the interconnection or access prices charged to competitors who provide similar retail services is not adequate to ensure sustainable competition. When a national regulatory authority calculates costs incurred in establishing a service mandated under this Regulation, it is appropriate to allow a reasonable return on the capital employed including appropriate labour and building costs, with the value of capital adjusted where necessary to reflect the current valuation of assets and efficiency of operations. The method of cost recovery should be appropriate to the circumstances taking account of the need to promote efficiency, sustainable competition and deployment of Gigabit networks and thereby maximise end-user benefits, and should take in account the need to have predictable and stable wholesale prices for the benefit of all operators seeking to deploy new and enhanced networks, in accordance with Commission Recommendation on the regulatory promotion of gigabit connectivity .
- (229) Due to uncertainty regarding the rate of materialisation of demand for the provision of Gigabit networks-based services, it is important in order to promote efficient investment and innovation to allow those operators investing in new or upgraded networks a certain degree of pricing flexibility. National regulatory authorities should be able to decide to maintain or not to impose regulated wholesale access prices on next-generation networks if sufficient competition safeguards are present. More specifically, to prevent excessive prices in markets where there are undertakings designated as having significant market power, pricing flexibility should be accompanied by additional safeguards to protect competition and end-user interests, such as strict non-discrimination obligations, measures to ensure technical and economic replicability of downstream products, and a demonstrable retail price constraint resulting from infrastructure competition or a price anchor stemming from other regulated access products, or both. Those competitive safeguards do not prejudice the identification by national regulatory authorities of other circumstances under which it would be appropriate not to impose regulated access prices for certain wholesale inputs, such as where high price elasticity of end-user demand makes it unprofitable for the undertaking designated as having significant market power to charge prices appreciably above the competitive level or where lower population density reduces the incentives for the

development of Gigabit networks and the national regulatory authority establishes that effective and non-discriminatory access is ensured through obligations imposed in accordance with this Directive.

- (230) The pricing of access to newly built civil-engineering infrastructure of the SMP operator for the deployment of gigabit networks by alternative operators could have an impact on the SMP operator's incentives to build new civil-engineering infrastructure with sufficient capacity to host alternative networks. The price for access to the newly built civil-engineering infrastructure should reflect current market conditions and should be based on the full actual costs incurred by the SMP operator, as long as strict non-discrimination is ensured in the terms and conditions of access to such infrastructure. Such an approach would provide the right incentives for investing in new civil-engineering infrastructure. Moreover, depending on market circumstances, building significant new civil-engineering infrastructure may represent for the SMP operator a risk-investment profile higher than the risk profile associated with the reuse of legacy civil-engineering infrastructure. That risk profile would involve risks in terms of incurred costs and in terms of expected revenues. NRAs should carefully assess the relevant market circumstances and, when applicable, reward the higher and quantifiable risk-investment profile by way of a (higher) risk premium.
- (231) However, where equivalence of access (Equivalence of Input or Output) is implemented, national regulatory authorities should in principle refrain from imposing regulated prices. National regulatory authorities should also refrain from imposing regulated prices where there is a proven retail market price constraint. Such obligations should consist, for instance, of technical and economic replicability tests, combined with monitoring mechanisms. The retail market price constraint could arise from infrastructural competition, clear commitments made by alternative providers to deploy Gigabit networks in underserved areas as resulting from geographical surveys, and regulated anchor products subject to cost orientation.
- (232) Where a national regulatory authority imposes obligations to implement a cost-accounting system in order to support price controls, it should be able to undertake an annual audit to ensure compliance with that cost-accounting system, provided that it has the necessary qualified staff, or to require such an audit to be carried out by another qualified body, independent of the undertaking concerned.
- (233) The charging system in the Union for wholesale voice call termination is based on Calling Party Network Pays. An analysis of demand and supply substitutability shows that currently or in the foreseeable future, there are no substitutes at wholesale level which might constrain the setting of charges for termination in a given network. Taking into account the two-way access nature of termination markets, further potential competition problems include cross-subsidisation between operators. Those potential competition problems are common to both fixed and mobile voice call termination markets. Therefore, in light of the ability and incentives of terminating operators to raise prices substantially above cost, cost orientation is considered to be the most appropriate intervention to address this concern over the medium term. Future market developments may alter the dynamics of those markets to the extent that regulation would no longer be necessary.
- (234) In order to reduce the regulatory burden in addressing the competition problems relating to wholesale voice call termination consistently across the Union, the Commission shall continue to establish, by means of a delegated act, a single maximum voice termination

rate for mobile services and a single maximum voice termination rate for fixed services that apply Union-wide.

- (235) This Regulation shall lay down the detailed criteria and parameters on the basis of which the values of voice call termination rates are set. Termination rates across the Union have decreased consistently and are expected to continue to do so.
- (236) In order to take account of market, social and technological developments, including evolution of technical standards, to manage the risks posed to security of networks and services and to ensure effective access to emergency services through emergency communications, the power to adopt acts in accordance with Article 290 TFEU should be delegated to the Commission in respect of setting a single maximum Union-wide voice termination rate in fixed and mobile markets; adopting measures related to emergency communications in the Union; and adapting the annexes to this Regulation in order to take account of technological and social development or changes in market demand. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making⁴¹. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.
- (237) It is already possible today in some markets that as part of the market analysis the undertakings designated as having significant market power are able to offer commitments which aim to address competition problems identified by the national regulatory authority and which the national regulatory authority then takes into account in deciding on the appropriate regulatory obligations. Such remedies may also consist in transferring local access network assets or a substantial part thereof to a separate legal entity under different ownership or in the establishment of a separate business entity. Any new market developments should be taken into account in deciding on the most appropriate remedies capable of ensuring long-term effectiveness. However, and without prejudice to the provisions on the regulatory treatment of wholesale-only undertakings, the nature of the commitments offered as such does not limit the discretion accorded to the national regulatory authority to impose remedies on undertakings designated as having significant market power. In order to enhance transparency and to provide legal certainty across the Union, the procedure for undertakings to offer commitments and for the national regulatory authorities to assess them, taking into account the views of market participants by means of a market test, and if appropriate to make them binding on the committing undertaking and enforceable by the national regulatory authority, should be laid down in this Regulation. Unless the national regulatory authority has made commitments binding and decided not to impose obligations, that procedure is without prejudice to the application of the market analysis procedure and the obligation to impose appropriate and proportionate remedies to address the identified market failure.
- (238) National regulatory authorities shall be able to make the commitments binding, wholly or in part, for a specific period which shall not exceed the period for which they are offered, after having conducted a market test by means of a public consultation of interested parties. Where the commitments have been made binding, the national

⁴¹

regulatory authority shall consider the consequences of this decision in its market analysis and take them into account when choosing the most appropriate regulatory measures. National regulatory authorities should assess the commitments made in a forward-looking perspective of sustainability, in particular when choosing the period for which they are made binding, and shall have regard to the need to ensure stable and predictable market conditions. Binding commitments related to voluntary separation by a vertically integrated undertaking which has been designated as having significant market power in one or more relevant markets can add predictability and transparency by setting out the process of implementation of the planned separation. Such commitments may, for example, provide a roadmap for implementation with clear milestones and predictable consequences if certain milestones are not met.

- (239) The commitments may include the appointment of a monitoring trustee, whose identity and mandate should be approved by the national regulatory authority, and the obligation on the undertaking offering them to provide periodic implementation reports.
- (240) Network owners whose business model is limited to the provision of wholesale services to others, can be beneficial to the creation of a thriving wholesale market, with positive effects on retail competition downstream. Furthermore, their business model can be attractive to potential financial investors in less volatile infrastructure assets and with longer term perspectives on deployment of Gigabit networks. Nevertheless, the presence of a wholesale-only undertaking does not necessarily lead to effectively competitive retail markets, and wholesale-only undertakings can be designated as having significant market power in particular product and geographic markets. Certain competition risks arising from the behaviour of undertakings following wholesale-only business models might be lower than for vertically integrated undertakings, provided the wholesale-only model is genuine and no incentives to discriminate between downstream providers exist. The regulatory response should therefore be commensurately less intrusive, but should preserve in particular the possibility to introduce obligations in relation to fair and reasonable pricing. On the other hand, national regulatory authorities should be able to intervene if competition problems have arisen to the detriment of end-users. This would be particularly important in those areas where, after completion of the copper switch-off process, a wholesale-only undertaking may remain as the sole provider of a Gigabit network. An undertaking active on a wholesale market that supplies retail services solely to business users larger than small and medium-sized enterprises should be regarded as a wholesale-only undertaking.
- (241) The Union mechanism allowing the Commission to require national regulatory authorities to withdraw planned measures concerning market definition and the designation of undertakings as having significant market power has contributed significantly to a consistent approach in identifying the circumstances in which ex ante regulation may be applied and those in which the undertakings are subject to such regulation. The experience of the procedures, under Article 32 and 33 of Directive 2018/1972/EU has shown that inconsistencies in the national regulatory authorities' application of remedies under similar market conditions undermine the internal market in electronic communications. Therefore, it is still necessary to empower the Commission and BEREC, within their respective responsibilities, to ensure a higher level of consistency in the application of remedies concerning draft measures proposed by national regulatory authorities. With regard to draft measures relating to the extension of obligations beyond the first concentration or distribution point, where needed to address high and non-transitory economic or physical barriers to replication, on undertakings irrespective of a designation as having significant market power, or to

the regulatory treatment of new Gigabit network elements, it is still necessary that the Commission should be able to require a national regulatory authority to withdraw a draft measure. In order to benefit from the expertise of national regulatory authorities on the market analysis, the Commission should consult BEREC prior to adoption of its decisions or recommendations.

- (242) In assessing draft measures, the Commission should continue to be bound by a clear deadline, to ensure a thorough yet swift assessment. However, it is no longer justified to foresee different deadlines for the assessment of market reviews, on the one hand, and of remedies, on the other hand. A single deadline for both assessments would improve consistency and contribute to the creation of a simplified and more efficient regulatory framework.
- (243) Transparency in the application of the Union mechanism for consolidating the internal market for electronic communications should be increased in the interest of citizens and stakeholders and to enable parties concerned to make their views known, including by way of requiring national regulatory authorities to publish any draft measure at the same time as it is communicated to the Commission, to BEREC, and to the national regulatory authorities in other Member States. Any such draft measure should be reasoned and should contain a detailed analysis.
- (244) The national consultation of interested parties should be conducted prior to the consultation at Union level for the purposes of consolidating the internal market for electronic communications and within the procedure for the consistent application of remedies, in order to allow the views of interested parties to be reflected in the consultation at Union level. This would also avoid the need for a second consultation at Union level in the event of changes to a planned measure as a result of the national consultation.
- (245) National regulatory authorities should be required to cooperate with each other, with BEREC and with the Commission, in a transparent manner, to ensure the consistent application, in all Member States, of this Regulation.
- (246) The discretion of national regulatory authorities needs to be reconciled with the development of consistent regulatory practices and the consistent application of the regulatory framework in order to contribute effectively to the development and completion of the internal market. National regulatory authorities should therefore support the internal market activities of the Commission and of BEREC.
- (247) The Commission should still be able, after taking utmost account of the opinion of BEREC, to require a national regulatory authority to withdraw a draft measure where it concerns the definition of relevant markets or the designation of undertakings as having significant market power, and where such decisions would create a barrier to the internal market or would be incompatible with Union law and in particular the policy objectives that national regulatory authorities should follow. This procedure is without prejudice to the notification procedure provided for in Directive (EU) 2015/1535 and the Commission's prerogatives under TFEU in respect of infringements of Union law.
- (248) Measures that could affect trade between Member States are measures that could have an influence, direct or indirect, actual or potential, on the pattern of trade between Member States in a manner which might create a barrier to the internal market. They comprise measures that have a significant impact on undertakings or users in other Member States, which include: measures which affect prices for users in other Member States; measures which affect the ability of an undertaking established in another

Member State to provide an electronic communications service, and in particular measures which affect the ability to offer services on a transnational basis; and measures which affect market structure or access, leading to repercussions for undertakings in other Member States. Tackling such measures is of utmost importance as this regulation strives to progressively achieve an internal market for electronic communications and digital networks.

- (249) When the Commission has taken a decision requiring a national regulatory authority to withdraw a planned measure, national regulatory authorities should withdraw its draft measure or submit a revised measure to the Commission. A deadline should be laid down for the notification of the revised measure to the Commission in order to inform market players of the duration of the market review and in order to increase legal certainty.
- (250) While it is essential that national regulatory authorities are given adequate time to conduct thorough market analyses/reviews, they should also be enabled to promptly address situations requiring urgent measures.
- (251) Therefore, an exception to the general timeline foreseen for market reviews should be established to allow national regulatory authorities to adopt provisional measures. Such provisional measures should apply for a limited period of time and should not be used more than once to address the same problem.
- (252) Having regard to the short time-limits in the consultation mechanism at Union level, powers should be conferred on the Commission to adopt recommendations or guidelines to simplify the procedures for exchanging information between the Commission and national regulatory authorities, for example in cases concerning stable markets, or involving only minor changes to previously notified measures. Powers should also be conferred on the Commission in order to allow for the introduction of a notification exemption in order to streamline procedures in certain cases.
- (253) Finally, the Commission should be able to adopt, as necessary, having taken utmost account of the opinion of BEREC, recommendations in relation to the identification of the relevant product and service markets, the notifications under the procedure for consolidating the internal market and the harmonised application of the provisions of the regulatory framework.
- (254) The increased competition and choice for communications services have gradually led to reduction of the universal service scope. Elements such as directories or provision of public pay phones have been phased out of the universal service scope. Therefore, the concept of universal service should continue to evolve to reflect advances in technology, market developments and changes in user demand.
- (255) Under Article 169 TFEU, the Union is to contribute to the protection of consumers.
- (256) Universal service remains a safety net to ensure that a set of at least the minimum services is available to all and at an affordable price to consumers, where a risk of social exclusion arising from the lack of such access prevents citizens from full social and economic participation in society.
- (257) A fundamental requirement of universal service is to ensure that all consumers have access at an affordable price to an adequate internet access and voice communications services at a fixed location. Member States could ensure affordability of adequate internet access and voice communications services other than at a fixed location to citizens on the move, where they consider that this is necessary to ensure consumers' full social and economic participation in society. Particular attention should be paid in

that context to ensuring that consumers with disabilities have equivalent access. There should be no constraints on the technical means by which the adequate internet access and voice communications services at a fixed location are provided, allowing for wired or wireless technologies, nor any constraints on which undertakings provide part or all of universal service obligations.

- (258) Basic internet access is virtually universally available across the Union and very widely used for a broad range of activities. However, the overall take-up rate is lower than availability as there are still those who are disconnected due to reasons related to awareness, cost, skills and due to choice. Affordable adequate internet access has become of crucial importance to society and the wider economy. It provides the basis for participation in the digital economy and society through essential online internet services.
- (259) The speed of internet access experienced by a given user depends on a number of factors, including the providers of internet connectivity as well as the given application for which a connection is being used. It is for the Member States, taking into account BEREC guidelines, to define adequate internet access in light of the minimum bandwidth enjoyed by the majority of consumers within a Member State's territory in order to allow an adequate level of social inclusion and participation in the digital economy and society in their territory. The affordable adequate internet access service should have sufficient bandwidth to support access to and use of at least basic services that reflect the services used by the majority of consumers. To that end, the BEREC guidelines should take into account the development in the use of the internet to identify those online services used by a majority of consumers across the Union and necessary for social and economic participation in society. The Commission should be empowered to adopt implementing acts to determine the adequate internet access service and the bandwidth necessary for social and economic participation in society. The end-user rights applicable to electronic communications services should also apply to any adequate internet access and voice communications services.
- (260) National regulatory authorities in coordination with other competent authorities should be able to monitor the evolution and details of retail tariffs for services that fall within the scope of universal service obligations to assess the need for affordability measures. Such monitoring should be carried out not more than annually to ensure that it would not represent an excessive administrative burden for either national regulatory and other competent authorities or providers of such services. The monitoring could include the details of offers of tariff options or packages for consumers with low income or special social needs.
- (261) The need for affordability measures varies between Member States and a harmonised approach for the criteria and methodology to be used for assessing the affordability of adequate internet access and voice communications services could ensure the consistency of approaches, while taking into account the distinct situations across Member States. For harmonising the criteria and methodology to consider for assessing affordability, the Commission should be empowered to adopt implementing acts after consulting BEREC. BEREC should provide input based on the data collected annually by the national regulatory authorities on the evolution and level of retail prices of adequate internet access services and voice communications services at a quality specified in the respective national territories. The criteria could take into account, amongst other criteria, the most affordable price available in the market and its percentage of average income with consideration of consumers with low income or special social needs.

- (262) An affordable price means a price defined by Member States at national level considering the common criteria and methodology set in an implementing act. Where Member States establish that retail prices for adequate broadband internet access and voice communications services are not affordable to consumers with low income or special social needs, including older people, consumers with disabilities and consumers living in rural or geographically isolated areas, they should take appropriate measures. To that end, Member States could provide those consumers with direct support for communication purposes, which could be part of social allowances, vouchers, or direct payments to those consumers. Alternatively, or in addition, Member States could require all providers of such services to offer basic tariff options or packages, including reduced monthly subscription fees.
- (263) Such special tariff options or packages to deal with the needs of consumers with low income or users with special social needs should be provided with basic features, in order to reduce impact on the functioning of the market.
- (264) Where a Member State requires providers to offer to consumers with a low income or special social needs tariff options or packages different from those provided under normal commercial conditions, those tariff options or packages should be provided by all providers of internet access and voice communication services. In accordance with the principle of proportionality, requiring all providers of internet access and voice communication services to offer tariff options or packages should not result in excessive administrative or financial burden for those providers or Member States.
- (265) In light of the reduced scope of universal service obligations, there is a limited need to use sector-specific designations. In addition, given the existence of a framework for public funding of services of general economic interest (SGEI)⁴², the sector specific rules on the designation of undertakings for the provision of universal service for electronic communications should be repealed. In this regard, as recalled in the Commission Communication (EC 2012/C 8/02) states that when a provider is entrusted with the provision of a SGEI, it may need public financial support for compensation to cover all or part of the net costs incurred, including a reasonable profit. The simplification could increase Member States' flexibility when choosing the method of financing of universal service obligations, possibly reducing the administrative burden for providers while ensuring compatibility with the internal market.
- (266) Affordability should not be a barrier to consumers' access to the minimum set of connectivity services. A right to contract with a provider should mean that consumers who might face refusal, in particular those with a low income or special social needs, should have the possibility to enter into a contract for the provision of affordable adequate internet access and voice communications services at least at a fixed location with any provider of such services in that location. In order to minimise the financial risks such as non-payment of bills, providers should be free to provide the contract under pre-payment terms, on the basis of affordable individual pre-paid units.

⁴² Communication from the Commission on the application of the European Union State aid rules to compensation granted for the provision of services of general economic interest Official Journal C8, 11.01.2012, p. 4-14; Commission Decision of 20 December on the application of Article 106(2) of the Treaty on the Functioning of the European Union to State aid in the form of public service compensation granted to certain undertakings entrusted with the operation of services of general economic interest Official Journal L7, 11.01.2012, p. 3-10; Communication from the Commission, European Union framework for State aid in the form of public service compensation (2011) Official Journal C8, 11.01.2012, p. 15-22; and Commission Regulation (EU) 2023/2832 (OJ L, 2023/2832, 15.12.2023) of 13 December 2023 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to de minimis aid granted to undertakings providing services of general economic interest.

- (267) Affordability for individual consumers should be founded upon their right to contract with a provider. Other rights, for example, itemised billing, the availability of a number for an adequate period and ability to monitor and control expenditure are end-user rights in this Regulation for all consumers and should apply also to consumers benefiting from affordability measures.
- (268) Consumers should not be obliged to access services they do not want and it should therefore be possible for eligible consumers to restrict, on request, the affordable universal service to voice communications services.
- (269) Member States should introduce measures to promote the creation of a market for affordable products and services incorporating facilities for consumers with disabilities, including equipment with assistive technologies. This can be achieved, *inter alia*, by referring to European standards, or by supporting the implementation of requirements under Directive (EU) 2019/882. Member States should introduce appropriate measures and take specific measures for instance if the market is not delivering affordable products and services incorporating facilities for consumers with disabilities under normal economic conditions. Those measures could include direct financial support to consumers. The cost to consumers with disabilities of relay services should be equivalent to the average cost of voice communications services.
- (270) Relay services refer to services which enable two-way communication between remote end-users of different modes of communication (for example text, sign, speech) by providing conversion between those modes of communication, normally by a human operator. Real time text is defined in accordance with Directive (EU) 2019/882.
- (271) Where a Member State decides to compensate the undertakings providing basic tariff options or packages, for example when the provision results in unfair financial burden, it should ensure the compatibility of such a measure with the internal market, including competition rules.
- (272) For data communications at data rates that are sufficient to permit an adequate internet access, fixed-line connections are nearly universally available and used by a majority of citizens of the Union and services based on wireless technologies have even greater reach. However, there are differences between Member States as regards availability and affordability of adequate internet access services at a fixed location across urban and rural areas.
- (273) The market has a leading role to play in ensuring availability of internet access with constantly growing capacity. In areas where the market would not deliver, other public policy tools to support availability of adequate internet access connections appear, in principle, more cost-effective and less market-distortive than universal service obligations, for example recourse to financial instruments such as those available under the Invest EU programme and the Connecting Europe Broadband Fund supported by the Connecting Europe Facility, the use of EU public funding or national resources managed by Member States at and attaching coverage obligations to rights of use for radio spectrum to support the deployment of broadband networks in less densely populated areas. One of the objectives of public policy measures may also be to enable end-users to purchase adequate internet access services they would otherwise not buy, for instance, where appropriate, through direct support or connectivity vouchers for financing of monthly fees, standard set-up connection costs, necessary terminal equipment or limited in-house wiring e.g., when necessary and ancillary to the provision of the service. When a Member State decides to grant financial support for this purpose,

it should ensure the compatibility of such a measure with the internal market, including competition rules.

- (274) If, after carrying out a due assessment, taking into account the results of the geographical survey of networks deployment conducted by the competent authority, it is shown that neither the market nor public intervention mechanisms are likely to provide consumers, microenterprises, small enterprises or not-for-profit organisations in certain areas with a connection capable of delivering adequate internet access service as defined by Member States and voice communications services at a fixed location, the Member State should be able to exceptionally entrust different providers or sets of providers of those services in the different relevant parts of the national territory. In addition to the geographical survey, Member States should be able to use, where necessary, any additional evidence to establish to what extent adequate internet access and voice communications services are available at a fixed location. That additional evidence could include data available to the national regulatory authorities through the market analysis procedure and data collected from users. Member States should be able to restrict universal service obligations in support of availability of adequate internet access services to the end-user's primary location or residence.
- (275) Where, in order to ensure the availability of an adequate internet access and voice communications services when such a service cannot be ensured under normal commercial circumstances or other public policy tools, and a Member State decides to entrust one or more undertakings to guarantee such availability throughout the national territory or parts of it and to grant financial support for this purpose, it should ensure the compatibility of such a measure with the internal market, including competition rules.
- (276) A priori, requirements to ensure nation-wide territorial coverage imposed in an entrustment procedure are likely to exclude or dissuade certain undertakings from applying for being universal service providers. Entrusting providers with universal service obligations for an excessive or indefinite period might also lead to an a priori exclusion of certain providers. Where in exceptional circumstances a Member State decides to entrust one or more providers for affordability purposes, it should be possible for those providers to be different from those entrusted for the availability element of universal service.
- (277) Future social, economic and technological developments, including transition to fibre, might change the need for the availability or affordability of universal service. BEREC should therefore monitor the availability and affordability regarding adequate internet access and voice communications in Member States and publish an opinion including an assessment of the impact of such developments on the application in practice of the provisions of this Regulation. The opinion could take into account the possible safeguards adopted by Member States for consumers with low income or special social needs in the context of the copper switch-off as set in this Regulation. The Commission, taking outmost account of BEREC's opinion, should submit a report in particular with a view to proposing that the scope of the rules on the availability or affordability of universal service should be changed or redefined.
- (278) Following the gradual reduction of the scope of the universal service, provision of public payphones and directories and directory enquiry services under the universal service regime has continued to phase out. This renders the provisions of Directive (EU) 2018/1972 on the status of the existing universal services beyond the scope of Directive (EU) 2018/1972 obsolete.

- (279) National regulatory authorities in coordination with other competent authorities should monitor the affordability of adequate internet access and voice communications services used by consumers. The affordability of adequate internet access and voice communications services is related to the information which users receive regarding usage expenses as well as the relative cost of usage compared to other services, and is also related to their ability to control expenditure. Affordability therefore means giving power to consumers through obligations imposed on providers. Those obligations benefit all consumers and include, *inter alia*, a specified level of itemised billing, the possibility for consumers selectively to block certain calls, such as high-priced calls to premium services, to control expenditure via pre-payment means, and to offset up-front connection fees.
- (280) Except in cases of persistent late payment or non-payment of bills, consumers entitled to affordable tariffs should, pending resolution of the dispute, be protected from immediate disconnection from the network on the grounds of an unpaid bill and, in particular, in the case of disputes over high bills for premium-rate services, continue to have access to essential voice communications services and a minimum service level of internet access.
- (281) In order to provide stability and support a gradual transition from sector-specific rules for organising and financing the universal service to the legal framework applicable to SGEI, existing designations of undertakings for the provision of universal service in Member States on the basis of Directive (EU) 2018/1972 should not be affected, provided they were in force on the date of entry into force of this Regulation. They should maintain their status until the expiry of such designations, provided the services or comparable services are not available under normal commercial circumstances.
- (282) Regulation (EU) 2015/2120 established common rules to safeguard equal and non-discriminatory treatment of traffic in the provision of internet access services and related end-users' rights and aimed to protect end-users and simultaneously to guarantee the continued functioning of the internet ecosystem as an engine of innovation.
- (283) The present reframing of the European regulatory framework for electronic networks and services in this Regulation offers an occasion to merge the provisions for measures concerning the open internet contained in Regulation (EU) 2015/2120 into this Regulation, without touching upon the fundamental principles of equal and non-discriminatory treatment of traffic in the provision of internet access services, as well as the right of end-users to access and distribute information and content, use and provide applications and services, and use terminal equipment of their choice.
- (284) The second Report from the Commission to the European Parliament and the Council on the implementation of Regulation (EU) 2015/2120 confirmed that the principles governing open internet access continue to be fit for purpose and to strike an appropriate balance between protecting end-users and enabling technological progress. However, in light of the significant evolution of networking technologies since 2015, the Report identified the need to clarify the interpretation of certain provisions of that Regulation, in particular those concerning the conditions under which specialised services may be offered. While BEREC is empowered to issue guidelines to support consistent implementation by national regulatory authorities, additional guidance at Union level may be necessary to ensure a harmonised approach to emerging services and technologies, including network slicing, experimental services and differentiated industrial use-cases. Empowering the Commission to adopt implementing act on the implementation of specialised services should therefore contribute to legal certainty and

regulatory coherence across the Union, by providing clear criteria for compliance, including, *inter alia*, quality-of-service parameters or minimum levels to be ensured for general internet access services. Such implementing act should complement BEREC guidelines, support uniform application of the framework, and encourage investment and innovation in advanced connectivity services and in the business-to-business segment in particular, thereby strengthening the competitiveness of the Union's digital economy.

- (285) Regulation (EU) 2015/2120 also established measures regulating the retail prices for intra-EU communications. The measures aimed to ensure that consumers are not charged excessive prices for making number-based interpersonal communications originating in the Member State of their domestic provider and terminating at any fixed or mobile number in another Member State. After merging the provisions on open internet access to this Regulation, it is appropriate to merge the remaining provisions of Regulation (EU) 2015/2120 into Regulation (EU) 2022/612. The Roaming Regulation is the suitable legislative act to contain both provisions on roaming as well as on intra-EU communications. Regulation (EU) 2015/2120 should therefore be repealed.
- (286) Divergent implementation of the rules on end-user protection has created significant internal market barriers affecting both providers of electronic communications services and end-users. Those barriers should be reduced by the applicability of the same rules ensuring a high common level of protection across the Union. A calibrated full harmonisation of the end-user rights covered by this Regulation should considerably increase legal certainty for both end-users and providers of electronic communications services, and should significantly lower entry barriers and unnecessary compliance burden stemming from the fragmentation of the rules. Full harmonisation helps to overcome barriers to the functioning of the internal market resulting from such national provisions concerning end-user rights which at the same time protect national providers against competition from other Member States. Full harmonisation of their rights increases the trust of end-users in the internal market as they benefit from an equally high level of protection when using electronic communications services, not only in their Member State but also while living, working or travelling in other Member States.
- (287) Contracts are an important tool for end-users to ensure transparency of information and legal certainty. Most service providers in a competitive environment will conclude contracts with their customers for reasons of commercial desirability. The obligations on information requirements for contracts cover internet access services and interpersonal communications services. Services consisting wholly or mainly in the conveyance of signals, such as transmission services used for machine-to-machine services, are not covered by the additional information requirements for contracts of this Regulation. In addition to this Regulation, the requirements of existing Union consumer protection law relating to contracts, in particular Council Directive 93/13/EEC⁴³, and Directive 2011/83/EU of the European Parliament and of the Council⁴⁴, apply to consumer transactions relating to electronic communications networks and services. Regulation 2016/679⁴⁵ on data protection applies to processing of personal data.

⁴³ Council Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts (OJ L 95, 21.4.1993, p. 29).

⁴⁴ Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council (OJ L 304, 22.11.2011, p. 64).

⁴⁵ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (OJ L 119, 4.5.2016, p. 1).

- (288) Some of those end-user protection provisions which a priori apply only to consumers, namely those on contract information, maximum contract duration and bundles, should benefit not only consumers, but also microenterprises and not-for-profit organisations as defined in national law. The bargaining position of those categories of enterprises and organisations is comparable to that of consumers, and they should therefore benefit from the same level of protection unless they explicitly waive those rights. Obligations on contract information in this Regulation, including those of Directive 2011/83/EU that are referred to in this Regulation, should apply irrespective of whether any payment is made and of the amount of the payment to be made by the customer. The obligations on contract information, including those contained in Directive 2011/83/EU, should apply automatically to microenterprises, and not-for-profit organisations unless they prefer negotiating individualised contract terms with providers of electronic communications services. As opposed to microenterprises and not-for-profit organisations, larger enterprises usually have stronger bargaining power and do, therefore, not depend on the same contractual information requirements as consumers. The provisions on provider switching and number portability, which are important also for larger enterprises should continue to apply to all end-users. Not-for-profit organisations are legal entities that do not earn a profit for their owners or members. Typically, not-for-profit organisations are charities or other types of public interest organisations. Hence, considering the comparable situation, it is legitimate to treat such organisations in the same way as microenterprises under this Regulation, insofar as end-user rights are concerned. Furthermore, consumers entitled to affordable tariffs based on universal service are entitled to the same level of protection as all other consumers.
- (289) The specificities of the electronic communications sector require, beyond horizontal contract rules, a limited number of additional end-user protection provisions. End-users should be informed, *inter alia*, of any quality of service levels offered, conditions for promotions and termination of contracts, applicable tariff plans and tariffs for services subject to particular pricing conditions. That information is relevant for providers of internet access services and publicly available interpersonal communications services. Without prejudice to the applicable rules on the protection of personal data, a provider of publicly available electronic communications services should not be subject to the obligations on information requirements for contracts where that provider, and affiliated companies or persons, do not receive any remuneration directly or indirectly linked to the provision of electronic communications services, such as where a university gives visitors free access to its Wi-Fi network on campus without receiving any remuneration, whether through payment from the users or through advertising revenues.
- (290) It is essential that the required relevant information is provided prior to the conclusion of the contract and in clear and understandable language and on a durable medium or, where not feasible and without prejudice to the definition of durable medium set out in Directive 2011/83/EU, in a document, made available by the provider and notified to the user, that is easy to download, open and consult on devices commonly used by consumers. Providers should also present a summary of the essential contract terms. The pre-contractually provided information as well as the summary should constitute an integral part of the final contract. The contract summary should be concise and easily readable, ideally no longer than the equivalent of one single-sided A4 page or, where a number of different services are bundled into a single contract, the equivalent of up to three single-sided A4 pages. In order to respond to technological, social and market developments and to reduce compliance cost, the Commission may, after consulting BEREC, adopt implementing acts for such contract summaries to be used by the

providers in line with the main elements of information requirements set out in this Regulation.

- (291) Without prejudice to the substantive obligation on the provider related to security by virtue of this Regulation, the contract should specify the type of action the provider might take in the case of security incidents, threats or vulnerabilities. In addition, the contract should also specify any compensation and refund arrangements available if a provider responds inadequately to a security incident, including if a security incident, notified to the provider, takes place due to known software or hardware vulnerabilities, for which patches have been issued by the manufacturer or developer and the service provider has not applied those patches or taken any other appropriate countermeasure.
- (292) The provisions on safeguarding of open internet access should be complemented by effective end-user provisions which address issues particularly linked to internet access services and enable consumers to make informed choices. Providers of internet access services should inform consumers in a clear manner how traffic management practices deployed might have an impact on the quality of internet access services, consumers' privacy and the protection of personal data as well as about the possible impact of services other than internet access services to which they subscribe, on the quality and availability of their respective internet access services. In order to empower consumers in such situations, providers of internet access services should therefore inform consumers in the contract of the speed which they are able realistically to deliver. The normally available speed is understood to be the speed that an end-user could expect to receive most of the time when accessing the service. Providers of internet access services should also inform consumers of available remedies in accordance with national law in the event of non-compliance of performance. Any significant and continuous or regularly recurring difference, where established by a monitoring mechanism certified by the national regulatory authority, between the actual performance of the service and the performance indicated in the contract should be deemed to constitute non-conformity of performance for the purposes of determining the remedies available to the consumer in accordance with national law. The methodology should be established in the guidelines of the Body of European Regulators for Electronic Communications (BEREC).
- (293) End-users are often not aware of the cost of their consumption behaviour or have difficulties in estimating their time or data consumption when using electronic communications services. In order to increase transparency and to allow for better control of their communications budget, it is important to provide end-users with facilities that enable them to track their consumption in a timely manner. In addition, in order to protect against 'bill-shocks', providers should provide free-of-charge alerts in case of atypical or excessive consumption patterns including in relation to premium rate services and other services subject to particular pricing conditions. Itemised bills on the usage of internet access should indicate only the time, duration and amount of consumption during a usage session but not indicate the websites or internet end-points connected to during such a usage session. Under Directive (EU) 2018/1972 Member States were able to ensure that competent authorities in coordination, where relevant, with national regulatory authorities are able to require providers of internet access service or publicly available number-based interpersonal communications services to make available all or part of additional facilities included in Directive (EU) 2018/1972. Member States were also able to go beyond the facilities in order to ensure a higher level of consumer protection. This Regulation obliges the provision of these facilities to be provided for universal service consumers benefiting from affordability measures. In

addition, itemised billing and certain cost control measures are obligatory facilities to be provided to all consumers free of charge. Member States should not introduce in their national law other requirements for additional facilities diverging from the provisions of this Regulation. However, Member States should be able to maintain provisions on these facilities that were enacted based on Directive (EU) 2018/1972.

- (294) The availability of transparent, up-to-date and comparable information on offers and services is a key element for consumers in competitive markets where several providers offer services. Consumers should be able to compare the prices of various services offered on the market easily on the basis of information published in an easily accessible form. In order to allow them to make price and service comparisons easily, providers of internet access services or publicly available interpersonal communication services should publish for greater transparency information, including tariffs, quality of service, conditions on terminal equipment supplied, and other relevant information. Enterprises typically rely on negotiated contract terms and do not depend on the same requirements of publication of offers as consumers.
- (295) Following the increased possibilities of end-users to search and compare a broad range of offers using advanced digital search tools, private or public, the obligatory provision of comparison tools by the relevant competent authorities has become less relevant. Comparison tools, such as websites, are an effective means for end-users to assess the merits of different providers of internet access services and interpersonal communications services, where provided against recurring or consumption-based direct monetary payments, and to obtain impartial information, in particular by comparing prices, tariffs, and quality parameters in one place. Competent authorities could certify such tools, in order to ensure they are operationally independent from service providers and no service provider is given favourable treatment in search results.
- (296) In the absence of relevant rules of Union law, content, applications and services are considered to be lawful or harmful in accordance with national substantive and procedural law. Providers of electronic communications networks or services should act in accordance with requirements under Regulation (EU) 2022/2065 whether content, applications or services are lawful or harmful. This Directive and Directive 2002/58/EC are without prejudice to Regulation (EU) 2022/2065, which, *inter alia*, contains a ‘mere conduit’ rule for intermediary service providers, as defined therein.
- (297) In order to facilitate comparability across the Union and to reduce compliance cost, BEREC should adopt guidelines on relevant quality of service parameters for internet access services which national regulatory authorities in coordination with other competent authorities should take into utmost account when enforcing the quality of service obligations relevant to the end-user rights of this Regulation. In its guidelines for internet access services, BEREC should specify the quality of service parameters to be measured for the purposes of information requirements for contracts and for information to be published for transparency as provided for in this Regulation, considering standards and technical specifications issued by European and international standardisation bodies. The parameters should include at least parameters for the monitoring mechanism for internet access services, relevant parameters for end-users with disabilities, download and upload speeds pursuant to required information on speeds for information for contracts with internet access services and for information to be published, latency, jitter and packet loss. The relevant parameters for end-users with disabilities should include also parameters for interpersonal communications services.

- (298) In order to take full advantage of the competitive environment, consumers should be able to make informed choices and to change providers when it is in their best interest to do so. It is essential to ensure that they are able to do so without being hindered by legal, technical or practical obstacles, including contractual conditions, procedures and charges. That does not preclude providers from setting reasonable minimum contractual periods of up to 24 months in consumer contracts. However, Member States should have the possibility to maintain provisions for a shorter maximum duration and to permit consumers to change tariff plans or terminate the contract within the contract period without incurring additional costs in light of national conditions, such as levels of competition and stability of network investments. Independently from the electronic communications service contract, consumers might prefer and benefit from a longer reimbursement period for physical connections. Such consumer commitments can be an important factor in facilitating deployment of Gigabit networks up to or very close to end-user premises, including through demand aggregation schemes which enable network investors to reduce initial take-up risks. However, the rights of consumers to switch between providers of electronic communications services, as established in this Regulation, should not be restricted by such reimbursement periods in contracts on physical connections and such contracts should not cover terminal or internet access equipment, such as handsets, routers or modems. The equal treatment of entities, including operators, financing the deployment of a Gigabit physical connection to the premises of an end-user, including where such financing is by way of an instalment contract should be ensured. The obligations on contract duration and termination should apply to microenterprises, small enterprises and not-for-profit organisations unless they prefer negotiating individualised contract terms with providers of electronic communications services. As opposed to microenterprises and small enterprises, larger enterprises usually have stronger bargaining power and do, therefore, not depend on the same requirements for contract duration and termination as consumers.
- (299) Automatic prolongation of contracts for electronic communications services is possible. In those cases, consumers should be able to terminate their contract without incurring any costs after the expiry of the contract term.
- (300) Any changes to the contractual conditions proposed by providers of publicly available electronic communications services other than number-independent interpersonal communications services, which are not to the benefit of the consumer, for example in relation to charges, tariffs, data volume limitations, data speeds, coverage, or the processing of personal data, should give rise to the right of the consumer to terminate the contract without incurring any costs, even if they are combined with some beneficial changes. Any change to the contractual conditions by the provider should therefore entitle the consumer to terminate the contract unless each change is in itself beneficial to the consumer, or the changes are of a purely administrative nature, such as a change in the provider's address, and have no negative effect on the consumer, or the changes are strictly imposed by legislative or regulatory changes, such as new contract information requirements imposed by Union or national law. Whether a change is exclusively to the benefit of the consumer should be assessed on the basis of objective criteria. The consumer's right to terminate the contract should be excluded only if the provider is able to demonstrate that all contract changes are exclusively to the benefit of the consumer or are of a purely administrative nature without any negative effect on the consumer.
- (301) Where a lawful price-indexation clause, specified according to the information requirements for contracts that require to describe the method by which price may

lawfully vary, is an integral part of the contract, its implementation would not constitute a change in contractual conditions but the application of an existing contract provision, where the clause is in accordance with Union and national law.

- (302) Consumers should be notified of any changes to the contractual conditions by means of a durable medium. The provisions on contract termination should be without prejudice to other provisions of Union or national law concerning the grounds on which contracts can be terminated or on which contractual terms and conditions can be changed by the service provider or by the consumer.
- (303) With respect to terminal equipment, the customer contract should specify any conditions imposed by the provider on the use of the equipment, such as by way of 'SIM-locking' mobile devices, if such conditions are not prohibited under national law, and any charges due on termination of the contract, whether before or on the agreed expiry date, including any cost imposed in order to retain the equipment. Where the consumer chooses to retain terminal equipment bundled at the moment of the contract conclusion, any compensation due should not exceed its pro rata temporis value calculated on the basis of the value at the moment of the contract conclusion, or on the remaining part of the service fee until the end of the contract, whichever amount is smaller. Any restriction to the usage of terminal equipment on other networks should be lifted, free of charge, by the provider at the latest upon payment of such compensation.
- (304) Bundles comprising at least either an internet access service or a publicly available number-based interpersonal communications service, as well as other services, such as publicly available number-independent interpersonal communications services, linear broadcasting and machine-to-machine services, or terminal equipment, have become increasingly widespread and are an important element of competition. For the purposes of this Regulation, a bundle should be considered to exist in situations where the elements of the bundle are provided or sold by the same provider under the same or a closely related or linked contract. While bundles often bring about benefits for consumers, they can make switching more difficult or costly and raise risks of contractual 'lock-in'. Where different services and terminal equipment within a bundle are subject to divergent rules on contract termination and switching or on contractual commitments regarding the acquisition of terminal equipment, consumers are effectively hampered in their rights under this Regulation to switch to competitive offers for the entire bundle or parts of it. Certain essential provisions of this Regulation regarding contract summary information, transparency, contract duration and termination and switching should, therefore, apply to all elements of a bundle, including terminal equipment, other services such as digital content or digital services, and electronic communications services which are not directly covered by the scope of those provisions. All end-user obligations applicable under this Regulation to a given electronic communications service when provided or sold as a stand-alone service should also be applicable when it is part of a bundle with at least an internet access service or a publicly available number-based interpersonal communications service. Other contractual issues, such as the remedies applicable in the event of non-conformity with the contract, should be governed by the rules applicable to the respective element of the bundle, for instance by the rules of contracts for the sales of goods or for the supply of digital content. However, a right to terminate any element of a bundle comprising at least an internet access service or a publicly available number-based interpersonal communications service before the end of the agreed contract term because of a lack of conformity or a failure to supply should give a consumer the right to terminate all elements of the bundle. Also, in order to maintain their capacity to switch

easily providers, consumers should not be locked in with a provider by means of a contractual de facto extension of the initial contract period.

- (305) The possibility of switching between providers is key for effective competition in a competitive environment. The availability of transparent, accurate and timely information on switching should increase the end-users' confidence in switching and make them more willing to engage actively in the competitive process. Service providers should ensure continuity of service so that end-users are able to switch providers without being hindered by the risk of a loss of service and, where technically possible, allow for switching on the date requested by end-users. In exceptional circumstances, switching might not be possible for objective technical reasons such as in situations where the secure functioning of terminal equipment or its integrity would otherwise be endangered. This could possibly be the case for SIM cards or eSIMs that are embedded in terminal equipment and that are used for both transmission of machine-to-machine services as well as for internet access. An example for this could be a car where the same eSIM is used for updating the car's automotive software as well as for internet access for the infotainment system.
- (306) Number portability is a key facilitator of consumer choice and effective competition in competitive electronic communications markets. End-users who so request should be able to retain their numbers independently of the provider of service and for a limited time between the switching of providers of service. The provision of this facility between connections to the public telephone network at fixed and non-fixed locations is not covered by this Regulation.
- (307) The impact of number portability is considerably strengthened when there is transparent tariff information, both for end-users who port their numbers and for end-users who call those who have ported their numbers. National regulatory authorities should, where feasible, facilitate appropriate tariff transparency as part of the implementation of number portability.
- (308) When ensuring that pricing for interconnection related to the provision of number portability is cost-oriented, national regulatory authorities should also be able to take account of prices available in comparable markets.
- (309) Number portability should be implemented with the minimum delay, so that the number is functionally activated within one working day and the end-user does not experience a loss of service lasting longer than one working day from the agreed date. The right to port the number should be attributed to the end-user who has the relevant (pre- or post-paid) contract with the provider. In order to facilitate a one-stop-shop enabling a seamless switching experience for end-users, the switching process should be led by the receiving provider of electronic communications to the public. BEREC should issue guidelines on the global process of the switching and of the porting of numbers, taking into account technological developments. This should include, where available, a requirement for the porting to be completed through over-the-air provisioning, unless an end-user requests otherwise as well as details on the compensation process in case of delays in, or abuse of, porting and switching processes, missed service and installation appointments or failure by the provider to comply with the obligations related to switching and number portability.
- (310) In line with the provisions on penalties of this Regulation, Member States should define rules on penalties in the case of the failure of a provider to comply with the obligations on switching and porting laid down in this Regulation, including delays in, or abuses of, porting by, or on behalf of, a provider. Experience in certain Member States has shown

that there is a risk of end-users being switched to another provider without having given their consent. While that is a matter that should primarily be addressed by law enforcement authorities, Member States should be able to impose appropriate penalties, as are necessary to minimise such risks, and to ensure that end-users are protected throughout the switching process without making the process less attractive for them. The right to port numbers should not be restricted by contractual conditions.

- (311) In order to ensure that switching and porting take place within the time-limits provided for in this Regulation, Member States should be able to provide for the compensation of end-users by providers in an easy and timely manner where an agreement between a provider and an end-user is not respected. Such measures should be proportionate to the length of the delay in complying with the agreement. These could include compensation for delays exceeding one working day in activation of service, porting of a number, or loss of service, and where providers miss agreed service or installation appointments. Additional compensation could also be in the form of an automatic reduction of the remuneration where the transferring provider is to continue providing its services until the services of the receiving provider are activated.
- (312) In accordance with the principle of proportionality, a number of provisions on end-user rights in this Regulation should not apply to microenterprises which provide only number-independent interpersonal communications services. According to the case law of the Court of Justice, the definition of small and medium-sized enterprises, which includes microenterprises, is to be interpreted strictly. In order to include only enterprises that are genuinely independent microenterprises, it is necessary to examine the structure of microenterprises which form an economic group, the power of which exceeds the power of a microenterprise, and to ensure that the definition of microenterprise is not circumvented by purely formal means.
- (313) The completion of the internal market for electronic communications requires the removal of barriers for end-users to have cross-border access to electronic communications services across the Union. Providers of electronic communications to the public should not deny or restrict access or discriminate against end-users. Differentiation should, however, be possible based on and within the boundaries set by the Union law, for example the measures provided for in Regulation (EU) 2022/612 to prevent abusive or anomalous use of regulated retail roaming services.
- (314) End-users are increasingly vulnerable to fraudulent activities carried out through interpersonal communications services. Several Member States have introduced national measures to combat evolving fraud schemes, such as CLI spoofing, phishing, smishing, and vishing. However, these measures remain uncoordinated and reflect primarily national perspectives, enabling fraudsters to shift their activities to jurisdictions where such practices are not effectively addressed. The ODN should enable the gathering of relevant information and best practices to enable BEREC to issue technical and legal guidelines on the measures that could effectively protect end-users against fraudulent activities in the Union. These guidelines should enable Member States adopt coordinated measures to be implemented by interpersonal communication services, with full respect of Union legislation on personal data protection. The Commission should be empowered to adopt delegated acts to ensure the effectiveness of measures that interpersonal communication services put in place to protect end-users against fraudulent activities.
- (315) Considering the particular aspects related to the reporting of missing children, Member States should maintain their commitment to ensure that a well-functioning service for

reporting missing children is actually available in their territories under the number '116000'. Member States should take appropriate measures to ensure that a sufficient level of service quality in operating the '116000' number is achieved.

- (316) In parallel with the missing children hotline number '116000', many Member States also ensure that children have access to a child-friendly service operating a helpline that helps children in need of care and protection through the use of the '116111' number. Such Member States and the Commission should ensure that awareness is raised among citizens, and in particular among children and among national child protection systems, about the existence of the '116111' helpline.
- (317) In order to address public interest issues with respect to the use of internet access services and publicly available number-based interpersonal communications services and to encourage protection of the rights and freedoms of others, Member States should be able to produce and disseminate or have disseminated, with the aid of providers of such services, public-interest information related to the use of such services. It should be possible for such information to include public-interest information regarding the most common infringements and their legal consequences, for instance regarding copyright infringement, other unlawful uses and the dissemination of harmful content, and advice and means of protection against risks to personal security, for example those arising from disclosure of personal information in certain circumstances, as well as risks to privacy and personal data, and the availability of easy-to-use and configurable software or software options allowing protection for children or vulnerable persons. In addition, end users should be made aware of the risks to personal security, privacy and personal data when using internet access services and publicly available interpersonal communications services, including protection against fraudulent activities perpetrated via those services and should be informed be informed on the ways they can protect themselves against those risks. The information could be coordinated by way of the cooperation procedure established in this Regulation. Such public-interest information should be updated where necessary and should be presented in easily comprehensible formats, as determined by each Member State, and on national public authority websites. Member States should be able to oblige providers of internet access services and publicly available number-based interpersonal communications services to disseminate this standardised information to all of their customers in a manner considered to be appropriate by the national public authorities. Dissemination of such information should, however, not impose an excessive burden on providers. If it does so, Member States should require such dissemination by the means used by providers in communications with end-users made in the ordinary course of business.
- (318) Providers of interpersonal communications services that have an obligation to provide access to emergency services through emergency communications, in exceptional circumstances, namely due to a lack of technical feasibility, might not be able to provide access to emergency services or caller location, or to both. In such cases, they should inform their customers adequately in the contract. Such providers should provide their customers with clear and transparent information in the initial contract and update it in the event of any change in the provision of access to emergency services, for example in invoices. That information should include any limitations on territorial coverage, on the basis of the planned technical operating parameters of the communications service and the available infrastructure. Where the service is not provided over a connection which is managed to give a specified quality of service, the information should also include the level of reliability of the access and of caller location information compared to a service that is provided over such a connection, taking into account current

technology and quality standards, as well as any quality of service parameters specified under this Regulation.

- (319) End-users should be able to access emergency services through emergency communications free of charge and without having to use any means of payment, from any device which enables number-based interpersonal communications services, including when travelling within the Union. Emergency communications are a means of communication that includes voice communications services, messaging, video or other types of communications, for example real time text, total conversation and relay services. Member States, taking into account the capabilities and technical equipment of the PSAPs, should be able to determine which number-based interpersonal communications services are appropriate for emergency services, including the possibility to limit those options to voice communications services and their equivalent for end-users with disabilities, or to add additional options as agreed with national PSAPs. Emergency communication can be triggered on behalf of a person by an in-vehicle emergency call or an eCall as defined in Regulation (EU) 2015/758. The digital wallet issued under Regulation (EU) 910/2014 (eIDAS) enables end-users to access a digital hub for essential services. Therefore, Member States have to ensure that end-users will be also able to originate an emergency communication by using their digital wallet.
- (320) Emergency communications and caller location information have to be routed to the most appropriate PSAP without delay to enable the appropriate answering and handling of the emergency communications. Effective routing of emergency communications should be ensured also in the context of the technological migration from circuit-switched to packet-switched technologies. The most appropriate PSAP is normally determined by the Member State on the basis of a territorial competence to handle emergency communications or the competence to handle a certain type of communication, for example a PSAP equipped to handle real time text or sign-language communication. The interpersonal communication services provided through packet-switched technologies providing voice, text – including real time text –, and video may be routed in the public network domain or PSAP domain. Depending on the national organisation of PSAPs, while the emergency communication reaches PSAP system through the public networks, further routing may be necessary within the PSAP IP network to reach the most appropriate PSAP. In order to guarantee the availability of effective emergency communications to the benefit of all end-users, Member States should ensure the timeliness of routing to the most appropriate PSAP of all types of emergency communications and of caller location information mandated on their territory. Member States may mandate access to emergency services through emergency communications from number independent interpersonal communication services as long as the national PSAP system allows for receiving these communications by routing to the most appropriate PSAP and for the receipt of caller location information. This may, for example, include the designation by a Member State of a single IP gateway for receiving emergency communications. Nonetheless, such providers should inform end-users when access to the single European emergency number ‘112’ or to caller location information is not supported.
- (321) Member States should consider the PSAP’s ability to handle emergency communications in more than one language.
- (322) Member States should take specific measures to ensure that emergency services, including the single European emergency number ‘112’, are equally accessible to end-users with disabilities, in particular deaf, hearing-impaired, speech-impaired and deaf-

blind end-users and in accordance with Union law harmonising accessibility requirements for products and services. The principle of equivalence implies that end-users with disabilities should be able to access emergency services through emergency communications in a functionally equivalent manner to that in which other end-users access emergency services, in particular by calling the '112' number via voice-based services. Since there is no common understanding of the functional equivalence requirements, the requirements that replicate the functionalities of emergency communications enjoyed by other end-users, mainly voice-based services, should be established.

- (323) Caller location information, which applies to all emergency communications, improves the level of protection and the security of end-users and assists the emergency services in the discharge of their duties, provided that the transfer of emergency communication and associated data to the emergency services concerned is guaranteed by the national system of PSAPs. The reception and use of caller location information, which includes both network-based location information where the network that ensures the connectivity provides that information to the service provider or the PSAP and enhanced handset caller location information, where the radio equipment device makes it available for transmission, should comply with relevant Union law on the processing of personal data and security measures. Undertakings that provide network-based location should make caller location information available to emergency services as soon as the call reaches that service, independently of the technology used. However, handset-based location technologies have proven to be significantly more accurate and cost effective due to the availability of data provided by the European Geostationary Navigation Overlay Service and Galileo Satellite system and other Global Navigation Satellite Systems and Wi-Fi data. Therefore, handset-derived caller location information should complement network-based location information even if the handset-derived location becomes available only after the emergency communication is set up. Member States should ensure that, where available, the handset-derived caller location information is made available to the most appropriate PSAP. This might not be always possible, for example when the location is not available on the handset or through the interpersonal communications service used, or when it is not technically feasible to obtain that information. Furthermore, Member States should ensure that the PSAPs are able to retrieve and manage the caller location information available, where feasible. The establishment and transmission of caller location information should be free of charge for both the end-user and the authority handling the emergency communication irrespective of the means of establishment, for example through the handset or the network, or the means of transmission, for example through voice channel, SMS or IP-based.
- (324) It is important to increase awareness of the single European emergency number '112' in order to improve the level of protection and security of citizens travelling in the Union. To that end, citizens should be made fully aware, when travelling in any Member State, in particular through information provided in international bus terminals, train stations, ports or airports and in telephone directories, end-user and billing material, that the single European emergency number '112' can be used as a single emergency number throughout the Union. This is primarily the responsibility of the Member States, but the Commission should continue both to support and to supplement initiatives of the Member States to heighten awareness of the single European emergency number '112' and periodically to evaluate the public's awareness of it.

- (325) In order to respond to technological developments concerning access to emergency services by using the digital wallet, accurate caller location information, equivalent access for end-users with disabilities and call routing to the most appropriate PSAP, the Commission should be empowered to adopt by means of a delegated act measures necessary to ensure effective emergency communications in the Union. Such measures should be without prejudice to the organisation of emergency services of Member States.
- (326) A citizen in one Member State who needs to contact the emergency services in another Member State cannot do so because the home country PSAP may not have any contact information of the PSAP system in other Member States. A Union-wide, secure database of numbers to reach the PSAP systems in each Member State should therefore be maintained. To that end, ODN should maintain a secure database of E.164 numbers to contact Member State's PSAP systems, in order to ensure that the PSAPs in one Member State can be contacted by the PSAP in another.
- (327) Mobile number based interpersonal communication service providers have an important role in the national preparedness strategies, therefore public warnings should be transmitted by those providers to all end-users concerned. The end-users concerned should be considered to be those who are located in the geographic areas potentially being affected by imminent or developing major emergencies and disasters during the warning period, as determined by the competent authorities.
- (328) Where the effective reach of all end-users concerned, independently of their place or Member State of residence, is ensured and fulfils the highest level of data security, Member States should be able to provide for the transmission of public warnings by using the digital wallet issued under Regulation (EU) 910/2014 (eIDAS), while ensuring that the citizens of the Union are effectively protected when travelling in another Member State.
- (329) Originating identification means identification information of the communication originator or endpoint of an electronic communication service such as Voice over Internet Protocol (VoIP) in packet-switched networks that may be transmitted to the terminal of the receiving party or end-user when the communication is being set up. In circuit-switched networks, the presentation of the calling party's number to the called party prior to the call being established is known as calling line identification.
- (330) The originating identification may use identifiers as signalling protocols other than E.164 numbers or national numbering plans to transmit identification of the originator or the endpoint to the terminal equipment of the called or receiving party when the call or the communication is being set up. The interconnecting providers, including providers of transit services, should ensure the transfer of the authentic originating identification or calling line identification information in the national and international interconnection agreements according to the national or international regulations or rules of the countries involved.
- (331) It is necessary to protect the right of the calling party to withhold the presentation of the identification of the line/originating identification from which the call is being made (CLIR) and the right of the called party to reject calls from unidentified lines. Certain end-users, in particular help lines, and similar organisations, have an interest in guaranteeing the anonymity of their callers.

- (332) A public safety answering point that displays a generic line identification when responding to an emergency communication should not be considered as an unidentified line.
- (333) As regards connected line identification, it is necessary to protect the right and the legitimate interest of the called party to withhold the presentation of the identification of the line to which the calling party is actually connected (COLR).
- (334) Using a specific code or prefix should not relieve the legal or natural persons sending direct marketing call from the obligation to present their calling line or originating identification.
- (335) There is justification for overriding the elimination of calling line or originating identification presentation in specific cases. End-users' rights to privacy with regard to calling line/originating identification should be restricted where this is necessary to trace malicious and nuisance calls and with regard to calling line or originating identification and location data where this is necessary to allow emergency services and public safety answering points to answer and handle emergency communications, including eCalls. This should be without prejudice to the possibility to override the elimination of the presentation of the calling line identification based on other legal grounds.
- (336) Technology exists that enables providers of electronic communications services to limit the reception of malicious, nuisance or other fraudulent and nuisance calls by end-users in different ways, including blocking of silent calls. Such calls could include calls originating from invalid numbers, i.e. numbers that do not exist in the numbering plan, or valid numbers that are not allocated to a provider of a number-based interpersonal communications service or that are not assigned to an end-user. Providers of publicly available interpersonal communications services should protect end-users by offering them, free of charge, the possibility to request the blocking of such calls, where technically feasible, or the stopping of automatic call forwarding by a third party to the end-user's terminal equipment. To this end, providers should deploy state of the art technology such as authentication solutions. Providers should make end-users aware of the existence of such functionalities, for instance, by publication on their webpage, where appropriate. The possibility to block unwanted calls should be deemed to be technically feasible unless the provider demonstrates objective technical obstacles, which may exist, for instance, in PSTN networks.
- (337) [to be decided during ISC]
- (338) Publicly available directories consist of any directory or service containing information of end-users, such as phone numbers (including mobile phone numbers), email address, contact details and includes inquiry services. The main function of directory services is to enable to identify such persons. The increasing availability and use of digital alternatives like online search engines, social media and online directories that offer an up-to-date way to find contact information do not justify maintaining the obligation on number-based interpersonal communications services providers. In addition, many directory enquiry services are now available as apps or online, allowing users to search for information digitally. Furthermore, the right to privacy and to protection of the personal data of a natural person requires that end-users that are natural persons are asked for consent before their personal data are included in a directory. Different from natural persons, legitimate interests of legal entities related to their data being included in a directory should be also protected. However, the enforcement of the Directive 2002/58/EC showed divergent practices across Member States as regards the consent of end-users that are natural persons for inclusion of their personal data in a directory.

Sometimes, Member States provide that end-users have the right to object the inclusion of their personal data in their national laws or the withdrawal of consent of a natural person is not shared with third parties processing personal data from the directories, which may not only lower the level of protection ensured by Regulation (EU) 2016/679, but also expose end-users to fraudulent practices by malicious actors. Moreover, all ways of requesting an 'informed consent' and of sharing contact details in an electronic or paper form irrespective of the provider should be in accordance with the general data protection rules and that renders the directory enquiry services and directories of subscribers' provisions obsolete.

- (339) In line with the objectives of the Charter and the obligations enshrined in the United Nations Convention on the Rights of Persons with Disabilities, the regulatory framework should ensure that all end-users, including end-users with disabilities, older people, and users with special social needs, have easy and equivalent access to affordable high quality services regardless of their place of residence within the Union. Declaration 22 annexed to the final Act of Amsterdam provides that the institutions of the Union are to take account of the needs of persons with disabilities in drawing up measures under Article 114 TFEU.
- (340) In order to ensure that end-users with disabilities benefit from competition and the choice of service providers enjoyed by the majority of end-users, competent authorities should specify, where appropriate and in light of national conditions, and after consulting end-users with disabilities, consumer protection requirements for end-users with disabilities to be met by providers of publicly available electronic communications services. Such requirements can include, in particular, that providers ensure that end-users with disabilities take advantage of their services on equivalent terms and conditions, including prices, tariffs and quality, as those offered to their other end-users, irrespective of any additional costs incurred by those providers. In taking the measures on equivalent access and choice, competent authorities should encourage compliance with the relevant standards and specifications laid down in accordance with the provisions of this Regulation on standardisation. The consumer protection requirements for end-users with disabilities may be applied also to wholesale arrangements between providers. In order to avoid creating an excessive burden on service providers competent authorities should verify, whether the objectives of equivalent access and choice can be achieved without such measures.
- (341) End-users should be able to enjoy a guarantee of interoperability in respect of all equipment sold in the Union for the reception of radio in new vehicles of category M and of digital television. Member States should be able to require minimum harmonised standards in respect of such equipment. Such standards could be adapted from time to time in light of technological and market developments.
- (342) Where Member States decide to adopt measures in accordance with Directive (EU) 2015/1535 for the interoperability of consumer radio receivers, the impact on the market for low-value radio broadcast receivers should be limited and receivers should be capable of receiving and reproducing radio services provided via digital terrestrial radio broadcasting or via IP networks, in order to ensure that interoperability is maintained. This may also improve public safety, by enabling users to rely on a wider set of technologies for accessing and receiving emergency information in the Member States.
- (343) It is desirable to enable consumers to achieve the fullest connectivity possible to digital television sets. Interoperability is an evolving concept in dynamic markets.

Standardisation bodies should do their utmost to ensure that appropriate standards evolve along with the technologies concerned. It is likewise important to ensure that connectors are available on digital television sets that are capable of passing all the necessary elements of a digital signal, including the audio and video streams, conditional access information, service information, API information and copy protection information. This Regulation should therefore ensure that the functionality associated to or implemented in connectors is not limited by network operators, service providers or equipment manufacturers and continues to evolve in line with technological developments. For display and presentation of connected television services, the realisation of a common standard through a market-driven mechanism is recognised as a consumer benefit. Member States and the Commission should be able to take policy initiatives, consistent with the Treaties, to encourage this development.

- (344) The provisions on interoperability of consumer radio and television equipment do not prevent car radio receivers in new vehicles of category M from being capable of receiving and reproducing radio services provided via analogue terrestrial radio broadcasting and those provisions do not prevent Member States from imposing obligations to ensure that digital radio receivers are capable of receiving and reproducing analogue terrestrial radio broadcasts.
- (345) Without prejudice to Union law, this Regulation does not prevent Member States from adopting technical regulations related to digital terrestrial television equipment, to prepare the migration of consumers to new terrestrial broadcasting standards, and avoid the supply of equipment that would not be compliant with the standards to be rolled out.
- (346) Member States should be able to lay down proportionate ‘must carry’ obligations on undertakings under their jurisdiction, in the interest of legitimate public policy considerations, but such obligations should only be imposed where they are necessary to meet general interest objectives clearly defined by Member States in accordance with Union law and should be proportionate and transparent. It should be possible to apply ‘must carry’ obligations to specified radio and television broadcast channels and complementary services supplied by a specified media service provider. Obligations imposed by Member States should be reasonable, that is they should be proportionate and transparent in light of clearly defined general interest objectives. Member States should provide an objective justification for the ‘must carry’ obligations that they impose in their national law in order to ensure that such obligations are transparent, proportionate and clearly defined. The obligations should be designed in a way which provides sufficient incentives for efficient investment in infrastructure.
- (347) Electronic communications networks and services used for the distribution of radio or television broadcasts to the public include cable, IPTV, satellite and terrestrial broadcasting networks. They might also include other networks to the extent that a significant number of end-users use such networks as their principal means to receive radio and television broadcasts. ‘Must carry’ obligations related to analogue television broadcast transmissions should be considered only where the lack of such an obligation would cause significant disruption for a significant number of end-users or where there are no other means of transmission for specified television broadcast channels. ‘Must carry’ obligations can include the transmission of services specifically designed to enable equivalent access by end-users with disabilities. Accordingly complementary services include services designed to improve accessibility for end-users with disabilities, such as videotext, subtitling for end-users who are deaf or hard of hearing, audio description, spoken subtitles and sign language interpretation, and could include access to the related raw-data where necessary. In light of the growing provision and

reception of connected television services and the continued importance of EPGs for end-user choice the transmission of programme-related data necessary to support connected television and EPG functionalities can be included in ‘must carry’ obligations. It should be possible for such programme-related data to include information about the programme content and how to access it, but not the programme content itself.

- (348) ‘Must carry’ obligations should be subject to review taking into account technological and market evolution and in order to ensure that they continue to be proportionate to the objectives to be achieved. Such obligations could, where appropriate, entail a provision for proportionate remuneration which should be set out in national law. Where that is the case, national law should also determine the applicable methodology for calculating appropriate remuneration. That methodology should avoid inconsistency with access remedies that may be imposed by national regulatory authorities on providers of transmission services used for broadcasting which have been designated as having significant market power. However, where a fixed-term contract provides for a different methodology, it should be possible to continue to apply that methodology for the duration of the contract. In the absence of a national provision on remuneration, providers of radio or television broadcast channels and providers of electronic communications networks used for the transmission of those radio or television broadcast channels should be able to agree contractually on a proportionate remuneration.
- (349) Certain tasks pursuant to this Regulation are tasks which should be undertaken only by national regulatory authorities, namely, bodies which are independent both from the sector and from any external intervention or political pressure. Unless otherwise provided, Member States should be able to assign other regulatory tasks provided for in this Regulation either to the national regulatory authorities or to other competent authorities. Member States should promote the stability of competences of the national regulatory authorities with regard to the assignment of tasks which resulted from the transposition of the Union electronic communications regulatory framework as amended in 2018, in particular those related to market competition or market entry. Where tasks are assigned to other competent authorities, those other competent authorities should seek to consult the national regulatory authorities before taking a decision. Pursuant to the principle of good cooperation, national regulatory and other competent authorities should exchange information for the exercise of their tasks.
- (350) Member States should notify the Commission of the identity of the national regulatory and other competent authorities. For authorities competent for granting rights of way, it should be possible to fulfil the notification requirement by a reference to the single information point established pursuant to Regulation (EU) 2024/1309.
- (351) In accordance with the principle of the separation of regulatory and operational functions, Member States should guarantee the independence of the national regulatory and other competent authorities with a view to ensuring the impartiality of their decisions. This requirement of independence is without prejudice to the institutional autonomy and constitutional obligations of the Member States or to the principle of neutrality with regard to the rules in Member States governing the system of property ownership laid down in Article 345 TFEU.
- (352) In order to ensure an effective application of the regulatory framework and to increase their authority and the predictability of its decisions, a national regulatory authority should be protected against external intervention or political pressure liable to jeopardise

its independent assessment of matters coming before it. Such outside influence makes a national legislative body unsuited to act as a national regulatory authority under the regulatory framework. For that purpose, rules had to be laid down at the outset regarding the grounds for the dismissal of the head of the national regulatory authority in order to remove any reasonable doubt as to the neutrality of that body and its imperviousness to external factors. In order to avoid arbitrary dismissals, dismissed members should have the right to request that the competent courts verify the existence of a valid reason to dismiss, among those provided for in this Regulation. Such dismissals should relate only to the personal or professional qualifications of the head or member. It is important that national regulatory authorities have their own budget allowing them, in particular, to recruit a sufficient number of qualified staff. In order to ensure transparency, that budget should be published annually. Within the limits of their budget, they should have autonomy in managing their resources, human and financial. In order to ensure impartiality, Member States that retain ownership of, or control, undertakings contributing to the budget of the national regulatory or other competent authorities through administrative charges should ensure that there is effective structural separation of activities associated with the exercise of ownership or control from the exercise of control over the budget.

- (353) There is a need to further reinforce the independence of the national regulatory authorities to ensure the imperviousness of its head and members to external pressure, by providing minimum appointment qualifications, and a minimum duration for their mandate. Furthermore, to address the risk of regulatory capture, ensure continuity and enhance independence, Member States should consider limiting the possibility of renewing the mandates of the head or members of the board and set up an appropriate rotation scheme for the board and the top management. This could be arranged, for instance, by appointing the first members of the collegiate body for different periods in order for their mandates, as well as that of their successors, not to lapse at the same moment.
- (354) National regulatory authorities should have adequate financial and human resources to carry out the tasks assigned to them. To strengthen BEREC, make it more representative and safeguard its expertise, experience and knowledge of the specific situation in the full range of national markets, each Member State should ensure that its national regulatory authority has adequate financial and human resources required to participate fully in the work of BEREC.
- (355) National regulatory authorities should be accountable for, and should be required to report on, the way in which they are exercising their tasks. That obligation should normally take the form of an annual reporting obligation rather than ad hoc reporting requests, which, if disproportionate, could limit their independence or hinder them in the exercise of their tasks.
- (356) The Body of European Regulators (BEREC) was first established by the Commission in 2002⁴⁶ as a Commission expert working group, the European Regulators Group for Electronic Communications Networks and Services (ERG), to advise and assist the Commission in consolidating the internal market for electronic communications networks and services by ensuring the development of consistent regulatory practice and the consistent application of the Union's regulatory framework for electronic communications. Regulation (EC) No 1211/2009 of the European Parliament and of the

⁴⁶ Commission Decision 2002/627/EC of 29 July 2002 establishing the European Regulators Group for Electronic Communications Networks and Services (OJ L 200, 30.7.2002, p. 38).

Council⁴⁷ established BEREC as a Union body, composed of national regulatory authorities, replacing the ERG, and supported by the Office, a Community body with legal personality established to carry out the tasks referred to in Regulation (EC) No 1211/2009, in particular the provision of professional and administrative support services to BEREC. In order to support BEREC efficiently, the Office was given legal, administrative and financial autonomy. Regulation (EU) 2018/1971⁴⁸ established the BEREC Office as a Union agency for the support of BEREC.

- (357) BEREC acts as a forum for cooperation among national regulatory authorities and between national regulatory authorities and the Commission in the exercise of the full range of their responsibilities under the Union regulatory framework. BEREC also serves as a body for reflection, debate and advice for the European Parliament, the Council and the Commission in the field of electronic communications.
- (358) The regulatory framework and its governance structures, including the Commission, national regulatory and other competent authorities, BEREC and the BEREC Office, have delivered good results in terms of harmonisation of the internal market. However, national markets are still fragmented and an internal market for electronic networks and services has not been achieved. This affects companies engaged in cross-border business or active in a significant number of Member States, including where BEREC guidelines exist. The evaluation⁴⁹ identified in particular three problematic issues, first, the strong national influence on BEREC that may affect the impact of its output on the internal market, second, the asymmetric extension of national regulatory authorities' competences creating inconsistencies in national regulatory authorities' contributions to BEREC work, third, resource constraints and structural weaknesses which affect its ability to carry out both existing and newly assigned tasks. Therefore, the governance framework needs to evolve to support the completion of the internal market for electronic communications throughout the Union, by ensuring consistent approaches in the application of rules and more coordination among national regulatory and other competent authorities at national level, among Union bodies and offices at Union level and between the national and the Union level.
- (359) The Radio Spectrum Policy Group (RSPG) was first established by Commission Decision 2002/622/EC⁵⁰ to contribute to the development of the internal market and to support the development of a Union-level radio spectrum policy. Decision 2002/622/EC was later replaced by Decision 2019/4147⁵¹. The RSPG assists and advises the Commission on radio spectrum policy issues. Those include radio spectrum availability, harmonisation and allocation of radio spectrum, provision of information concerning allocation, availability and use of radio spectrum, methods for granting rights to use spectrum, refarming, relocation, valuation and efficient use of radio spectrum and the protection of human health. The RSPG provides advice to the European Parliament and

⁴⁷ Regulation (EC) No 1211/2009 of the European Parliament and of the Council of 25 November 2009 establishing the Body of European Regulators for Electronic Communications (BEREC) and the Office, [OJ L 337, 18.12.2009, p. 1](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32009R1211&from=EN).

⁴⁸ Regulation (EU) 2018/1971 of the European Parliament and of the Council of 11 December 2018 establishing the Body of European Regulators for Electronic Communications (BEREC) and the Agency for Support for BEREC (BEREC Office), amending Regulation (EU) 2015/2120 and repealing Regulation (EC) No 1211/2009, OJ L 321, 17.12.2018, pp. 1–35.

⁴⁹

⁵⁰ Commission Decision 2002/622/EC of 26 July 2002 establishing a Radio Spectrum Policy Group, OJ L 198, 27.7.2002, p. 49.

⁵¹

Commission Decision of 11 June 2019 setting up the Radio Spectrum Policy Group and repealing Decision 2002/622/EC, C/2019/4147, OJ C 196, 12.6.2019, pp. 16–21.

to the Council upon their request on matters of radio spectrum. The RSPG has become the forum for the coordination of implementation by Member States of their obligations related to radio spectrum under Directive (EU) 2018/1972 and plays a central role in fields essential for the internal market, such as cross-border radio spectrum coordination and standardisation.

- (360) Although valuable, the RSPG in its opinions did not fully exploit its mandate to advise Union institutions on broader aspects of radio spectrum policy in general (e.g., economic, political, cultural, strategic, security, health and social issues), partly due to a lack of a proper support structure. The close cooperation between BEREC and RSPG where spectrum issues have regulatory implications envisaged by Directive (EU) 2018/1972, was in practice limited to few joint opinions or reports. Both BEREC and RSPG relied on the resources of their members for the work on substance, which means that any constraints that the national authorities have, be it of budgetary nature, staffing or workload, are reflected in their ability to effectively contribute to the work of BEREC and RSPG.
- (361) Therefore, the RSPG needs to evolve to become a Union body, similar to BEREC, with adequate administrative and professional support. This Regulation thus establishes the Radio Spectrum Policy Body (RSPB) which replaces the RSPG. The RSPB should continue to have advisory role in the development of a radio spectrum policy in the Union. The Commission or the European Parliament may at any time request RSPB to adopt an opinion or a report on any radio spectrum policy issue. In its opinions, the RSPG should take into account *inter alia* technical, economic, political, cultural, strategic, health and social aspects, as well as the various potentially conflicting needs of radio spectrum users with a view to ensure that a fair, non-discriminatory and proportionate balance is achieved. Furthermore, the RSPB should assume new tasks under this Regulation.
- (362) This Regulation establishes a significant number of new tasks for BEREC and the RSPB. The role of the BEREC Office, currently providing mainly administrative support to BEREC, should be enhanced to provide BEREC and RSPB with support on administrative matters and with expertise on the merits of the tasks assigned to them. To this aim, the BEREC Office's structure should be adapted and its budgetary resources increased. The new official name of the BEREC Office should be 'Office for Digital Networks'. The designation 'ODN' should be used as the Agency's short name.
- (363) In light of the increasing complexity and strategic importance of electronic communications networks and digital network infrastructures, and of their growing interdependence with radio spectrum policy, it is necessary to establish a reinforced Union-level support structure. The ODN should play a central role in providing expertise, analytical capacity and coordination supporting BEREC and the RSPB, while fully respecting their respective mandates and independence. Strengthened and structured support at Union level is essential to ensure the consistent application of Union law, enhance regulatory and policy coherence, avoid fragmentation of the internal market and support the effective implementation of Union digital objectives.
- (364) BEREC should provide expertise and establish confidence by virtue of its independence, the quality of its advice and information, the transparency of its procedures and methods of operation, and its diligence in carrying out its tasks with the support of the ODN. BEREC's independence should not prevent its Board of Regulators from deliberating on the basis of drafts prepared by working groups under its guidance.

- (365) In order to carry out its tasks, BEREC should pool expertise from national regulatory authorities and staff from the ODN. BEREC should aim to ensure the participation of all national regulatory authorities in the fulfilment of its regulatory tasks and its functioning.
- (366) The Union institutions and the national regulatory authorities should benefit from BEREC's assistance and advice, including on the relevant regulatory impact of any issue concerning the overall dynamics of digital markets or with regard to their relationship, discussions and exchanges with, and the dissemination of regulatory best practices to, third parties. In addition to its contribution to the Commission's public consultation, BEREC should, when requested, advise the Commission in the preparation of legislative proposals. BEREC should also be able to provide advice to the European Parliament and to the Council, on their request or on its own initiative.
- (367) BEREC, as a technical body with expertise on electronic communications and composed of representatives from national regulatory authorities and the Commission, is best placed to be entrusted with tasks such as contributing to efficient internal market procedures for draft national measures as regards market regulation, providing the necessary guidelines to national regulatory and other competent authorities in order to ensure common criteria and a consistent regulatory approach,. The ODN should be equipped to support BEREC in all its regulatory tasks. This is without prejudice to the tasks established for national regulatory authorities, which are closest to the electronic communications markets and their local conditions.
- (368) To contribute to the objectives of this Regulation, in addition to its current tasks, BEREC should promote effective cooperation among providers of electronic communications networks and undertakings active in closely related sectors, by issuing guidelines on facilitating ecosystem cooperation on technical and commercial matters related to the provision of electronic communications services or information society services and of innovative products and services. BEREC should also be entrusted with new tasks on resilience and preparedness, including the adoption of a Union Preparedness Plan for Digital Infrastructures prepared by the ODN. BEREC should also adopt guidelines on technical and legal measures that could effectively protect end-users against fraudulent activities in the Union.
- (369) In light of the increasing convergence between the sectors providing electronic communications services, and the horizontal dimension of regulatory issues related to their development, BEREC and the ODN should cooperate with, and without prejudice to the role of, national regulatory authorities, other Union bodies, offices, agencies and advisory groups, in particular the RSPB, the European Data Protection Supervisor established by Regulation (EU) 2018/1725 of the European Parliament and of the Council⁵², the European Data Protection Board established by Regulation (EU) 2016/679 of the European Parliament and of the Council⁵³, the European Regulators Group for Audiovisual Media Services established by the Directive

⁵² Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC, OJ L 295, 21.11.2018, pp. 39–98.

⁵³ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC

2010/13/EU of the European Parliament and the Council⁵⁴, the European Union Agency for Network and Information Security established by Regulation (EU) N° 526/2013 of the European Parliament and of the Council⁵⁵, the European GNSS Agency established by Regulation (EU) N° 912/2010 of the European Parliament and of the Council⁵⁶, the Consumer Protection Cooperation Network established pursuant to Regulation (EC) N° 2006/2004 of the European Parliament and the Council⁵⁷, the European Competition Network and European standardisation organisations, as well as with existing committees (such as the Communications Committee and the Radio Spectrum Committee). Where appropriate, BEREC and the ODN should also cooperate with relevant competent authorities of Member States responsible for competition, consumer protection, cybersecurity and data protection, and with the competent authorities of third countries, in particular, regulatory authorities competent in the field of electronic communications or groups of those authorities, as well as with international organisations when necessary for the carrying out of their tasks. BEREC should also be able to consult interested parties by means of public consultation.

- (370) The members of the BEREC Board of Regulators should be appointed by national regulatory authorities normally from among the heads of the national regulatory authority or members of its collegiate body. The rotation of the role of Chair of the BEREC Board of Regulators is intended to ensure continuity of BEREC's work. A rotation of the roles of Vice-Chairs is also promoted.
- (371) BEREC should be able to act in the interests of the Union, independently from any external intervention, including political pressure or commercial interference. It is therefore important to ensure that the persons appointed to the Board of Regulators enjoy the highest guarantees of personal and functional independence. The head of a national regulatory authority, a member of its collegiate body, or the replacement of either of them, enjoy such a level of personal and functional independence. More specifically, they should act independently and objectively, should not seek or take instructions in the exercise of their functions, and should be protected against arbitrary dismissal. The function of the alternate on the Board of Regulators could also be performed by the head of the national regulatory authority, a member of its collegiate body, the replacement of either of them, or by another member of staff of the national regulatory authority, who acts on behalf of, and in accordance with the scope of the mandate of, the member of the Board of Regulators replaced.
- (372) The RSPB Board should include high-level governmental experts from the Member States with responsibility for strategic radio spectrum policy. At RSPG meetings, national delegations should present a consolidated and coordinated national view, no matter if responsibility for radio spectrum are shared between different national bodies,

⁵⁴ Directive 2010/13/EU of the European Parliament and of the Council of 10 March 2010 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive)

⁵⁵ Regulation (EU) No 526/2013 of the European Parliament and of the Council of 21 May 2013 concerning the European Union Agency for Network and Information Security (ENISA) and repealing Regulation (EC) No 460/2004

⁵⁶ Regulation (EU) No 912/2010 of the European Parliament and of the Council of 22 September 2010 setting up the European GNSS Agency, repealing Council Regulation (EC) No 1321/2004 on the establishment of structures for the management of the European satellite radio navigation programmes and amending Regulation (EC) No 683/2008 of the European Parliament and of the Council

⁵⁷ Regulation (EC) No 2006/2004 of the European Parliament and of the Council of 27 October 2004 on cooperation between national authorities responsible for the enforcement of consumer protection laws (the Regulation on consumer protection cooperation)

not only in relation to the internal market but also to public order, public security, civil protection and defence policies as such policies may influence the organisation of radio spectrum as a whole.

- (373) The European Conference of Postal and Telecommunications administrations (CEPT) should be invited as an observer of the RSPB's work considering that the activities of the RSPB have a significant impact on radio spectrum at pan-European level and that CEPT and its affiliate bodies have extensive technical expertise in radio spectrum management. Drawing on CEPT's expertise is also appropriate based on mandates granted thereto pursuant to the Decision 676/2002/EC in order to develop technical implementing measures in the areas of radio spectrum allocation and information availability. In view of the importance of European standardisation for the development of equipment using radio spectrum, it is likewise important to associate as observer the European Telecommunications Standardisation Institute (ETSI).
- (374) In addition, if necessary, and on a case-by-case basis, the BEREC Board of Regulators, RSPB Board and the Management Board should be able to invite any person whose opinion may be of relevance, for example in light of their role and expertise, to participate in their meetings as an observer. Such observer status should not be permanent and consequently, an invite to participate in the meetings of the Board of Regulators, RSPB Board or the Management Board should be issued for a specific meeting.
- (375) The BEREC Board of Regulators, the RSPB Board and the Management Board of the ODN should hold at least two ordinary meetings a year. Given past experience and the enhanced role of BEREC and RSPB, the BEREC Board of Regulators, RSPB Board and the Management Board may need to hold additional meetings. To further enhance cooperation between BEREC and the RSPB, joint meetings of the Board of Regulator and RSPB Board may be convened to discuss matters of relevance for both BEREC and the RSPB.
- (376) Experience has shown that most of BEREC's and RSPB's tasks are better carried out through working groups. BEREC working groups should always ensure equal consideration of all national regulatory authorities' views and contributions, while RSPB working groups should ensure equal consideration of all RSPB members' views and contributions. National regulatory and, where relevant, competent authorities and responsible for spectrum should promptly respond to nomination requests in order to ensure the quick establishment of working groups, in particular those related to procedures with time-limits. The working groups should be open to the participation of experts from the Commission. To further enhance the impact of BEREC's and RSPB's output on the internal market, professional staff from the ODN should also systematically support and contribute to the working groups' activities. The BEREC Board of Regulators and the RSPB Board should therefore set up working groups, through the ODN, and appoint their Chairs, representing where possible different national regulatory and, where relevant, competent authorities responsible for spectrum, and the ODN.
- (377) Where appropriate and depending on the allocation of tasks to authorities in each Member State, other competent authorities should be invited to participate and their views should be taken into consideration in the relevant BEREC working group where their expertise is needed. If experts from other competent authorities are unable to attend such meetings, national regulatory authorities shall demonstrate that their views have

been taken into account. In any event, the independence of BEREC should be maintained.

- (378) In order to further extend the consistent implementation of the regulatory framework for electronic communications, the BEREC Board of Regulators, the RSPB Board, the working groups and the Management Board should be open to the participation of authorities of third countries competent in the field of electronic communications or spectrum policy where those third countries have entered into agreements with the Union to that effect, such as EEA EFTA States and candidate countries.
- (379) In order to ensure a coherent and consistent application of the Union regulatory framework for electronic communications and radio spectrum policy, it is necessary to strengthen the cooperation between BEREC and the RSPB. Given the increasing interdependence between electronic communications regulation and spectrum management, structured, regular and systematic cooperation, including through joint meetings and joint working groups, is essential to avoid regulatory fragmentation, enhance policy coherence and support the effective functioning of the internal market.
- (380) To enhance the cooperation between BEREC and the RSPB, the Chair of the BEREC Board of Regulators and the Chair of the RSPB Board should meet at least twice a year. To address issues identified as needing close cooperation between BEREC and RSPB, the Chairs should make proposals to their respective boards for joint activities, including to set up joint task forces. The issues identified to be subject to close cooperation should also be described in the work programmes of BEREC and the RSPB. The areas where more cooperation is advisable could include regulatory issues of mutual interest, in particular market regulation and competition related to radio spectrum, as well as satellites communications, verticals, 5G and 6G networks and future mobile communications.
- (381) The ODN should be a body of the Union with legal personality and enjoy legal, administrative and financial autonomy. As a Union decentralised agency, the ODN should operate within its mandate and the existing institutional framework. It should not be seen as representing a Union position to an outside audience or as committing the Union to legal obligations. Its seat should remain in Riga, as decided by the Representatives of the Governments of the Member States⁵⁸. The Seat Agreement between the Government of the Republic of Latvia and the Office entered into force on 5 August 2011.
- (382) The ODN should provide all necessary professional and administrative support for the work of BEREC and the RSPB, including financial, organisational and logistical support, and should contribute to BEREC and RSPB's regulatory work.
- (383) To ensure that BEREC receives sufficient support on its regulatory tasks and to strengthen the impact on the internal market of its output, this Regulation should assign the ODN clear and defined role and tasks, such as to actively participate and contribute to all the activities of BEREC working groups, prepare a Union Preparedness Plan for Digital Infrastructures to strengthen the resilience and preparedness of electronic communications networks, services and other digital infrastructures at Union level in the event of natural or man-made disruptions, crises or force majeure which may have a significant adverse impact on the population or the functioning of the internal market,

⁵⁸ Decision taken by common accord between the Representatives of the Governments of the Member States of 31 May 2010 on the location of the seat of the Office of the Body of European Regulators for Electronic Communications (BEREC) (2010/349/EU), OJ L 156, 23.6.2010, p. 12.

and to support the coordination among national regulatory authorities and other competent authorities to facilitate the issuance of single authorisations to operate within the Union.

- (384) The ODN should also be entrusted with tasks in support of the RSPB and the Commission, for example to provide analytical, administrative and logistical support to the RSPB Board, its working groups and the Commission in carrying out the tasks assigned to them by this Regulation. The ODN should also assist the Commission and the RSPB in the process of granting the Union authorisation for the provision of satellite networks and services and the use of spectrum for satellite, and upon Commission request, it should assist it in conducting a selection procedure at Union level. The ODN should also act as a where a one stop shop procedure is created by the Commission to facilitate the granting of spectrum under common authorisation conditions.
- (385) The ODN should be composed of a Management Board and a Director.
- (386) The Management Board of the ODN and the BEREC Board of Regulators should operate in parallel, with the former deciding on administrative matters, such as the budget, staff and audits, and the latter on regulatory matters relating to BEREC's tasks. In principle and in addition to one representative of the Commission and one representative of the RSPB, the representatives of the national regulatory authorities on the Management Board should be the same persons as those appointed to the BEREC Board of Regulators, but national regulatory authorities should be able to appoint other representatives fulfilling the same requirements.
- (387) This Regulation provides for the Management Board to delegate relevant appointing authority powers to the Director, who is authorised to sub-delegate those powers. This is intended to contribute to the efficient management of the staff single point of contact for submission of applications and notifications of the ODN.
- (388) The Director should remain the representative of the ODN with regard to legal and administrative matters. The Management Board should appoint the Director, subject to the positive opinion of the representative of the RSPB, and following an open and transparent selection procedure in order to guarantee a rigorous evaluation of the candidates and a high level of independence.
- (389) In order to guarantee the ODN's autonomy and independence, and in order to provide support to the work of BEREC and RSPB, the ODN should have its own budget. The budget should be adequate and should reflect the additional tasks assigned and the enhanced role of BEREC, RSPB and the ODN. The ODN should be mainly financed from the general budget of the Union. However, to ensure that it has adequate budget to carry out its tasks, the ODN should be able to levy fees from undertakings for obtaining and maintaining Union satellite authorisations and pan-European numbering resources. The level of those fees and the modalities for payments should be set by the Commission in implementing acts. The financing of the ODN should be subject to an agreement by the budgetary authority as set out in point 31 of the Inter-institutional Agreement of 2 December 2013 between the European Parliament, the Council and the Commission on budgetary discipline, on cooperation in budgetary matters and on sound financial management⁵⁹.
- (390) The ODN should be adequately staffed for the purpose of carrying out its duties. All tasks assigned to the ODN, including professional and administrative services supporting BEREC and RSPB in carrying out their regulatory tasks, together with

⁵⁹ OJ C 373, 20.12.2013, p. 1.

compliance with the financial, staff and other applicable regulations, and the increased weight of operational tasks required of the ODN vis-à-vis administrative ones should be duly assessed and reflected in the resource programming.

- (391) Commission Delegated Regulation (EU) N° 2019/715⁶⁰ should apply to the ODN.
- (392) BEREC and the RSPB should be entitled to establish working arrangements with competent Union bodies, offices, agencies and advisory groups, with competent authorities of third countries and with international organisations, which should not create legal obligations. The goal of such working arrangements could be, for instance, to develop cooperative relationships and exchange views on regulatory issues. The Commission should ensure that the necessary working arrangements are consistent with Union policy and priorities, and that BEREC and RSPB operate within their mandate and the existing institutional framework and are not seen as representing the Union position to an outside audience or as committing the Union to international obligations. Participation in the work of BEREC, the RSPB and the ODN without the right to vote of the authorities of third countries with primary responsibility in the field of electronic communications or spectrum, should only be possible when relevant working arrangements are in place.
- (393) BEREC and the RSPB, supported by the ODN, should be able to engage in communication activities within their field of competence, which are not detrimental to BEREC's and RSPB's core tasks, respectively. The content and implementation of the BEREC's and RSPB's communication strategy should be consistent, objective, relevant and coordinated with the strategies and activities of the Commission and the other institutions in order to take into consideration the broader image of the Union. The ODN's communication activities should be carried out in accordance with relevant communication and dissemination plans adopted by the Management Board.
- (394) In order to ensure a high level of confidentiality and to avoid conflicts of interests, the rules on those matters applying to members of the organisational bodies of BEREC, RSPB and the ODN should apply to their alternates.
- (395) In order to carry out their tasks effectively, BEREC, RSPB and the ODN should have the right to request all necessary information from the Commission, the national regulatory authorities and competent authorities responsible for spectrum, and, as a last resort, other authorities and undertakings. Requests for information should provide reasons, should be proportionate and should not impose an undue burden on the addressees. NRAs should cooperate with BEREC and the ODN and should provide them with timely and accurate information to ensure that BEREC and ODN are able to fulfil their tasks. BEREC and the ODN should also, pursuant to the principle of sincere cooperation, share with the Commission, the NRAs and other competent authorities all necessary information. Where relevant, the confidentiality of information should be ensured. When assessing if a request is duly justified, BEREC should take into consideration if the information requested is related to the carrying out of tasks exclusively attributed to the relevant authorities. The same would apply to RSPB and competent authorities responsible for spectrum mutatis mutandis.

⁶⁰

Commission Delegated Regulation (EU) 2019/715 of 18 December 2018 on the framework financial regulation for the bodies set up under the TFEU and Euratom Treaty and referred to in Article 70 of Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council

- (396) The ODN should establish a common information and communication system to avoid duplication of information requests and facilitate communications between all authorities involved.
- (397) Since this Regulation confers new tasks on BEREC, the RSPB and the ODN and other Union legal acts may confer additional tasks, the Commission should carry out a regular evaluation of the operation of BEREC, the RSPB and the ODN and the effectiveness of their institutional structure in a changing digital environment. If, as the outcome of that evaluation, the Commission finds that the institutional structure is not suited to the carrying out BEREC's, RSPB's and the ODN's tasks, and, in particular, to ensure the consistent implementation of the regulatory framework for electronic communications, it should explore all possible options for improving that structure.
- (398) The BEREC Office which was established as a decentralised agency with legal personality by Regulation (EC) No 2018/1971, is succeeded by the ODN established by this Regulation as regards all ownership, agreements, including the Seat Agreement, legal obligations, employment contracts, financial commitments and liabilities. The ODN should take over the staff of the BEREC Office whose rights and obligations should not be affected. In order to ensure continuity in the work of BEREC and the ODN, their representatives should continue in office until the end of their term of office.
- (399) National regulatory authorities, other competent authorities and BEREC need to gather information from market players in order to carry out their tasks effectively, including assessing the compliance of general terms and conditions with this Regulation without suspending the applicability of those terms and conditions during the assessment. It may, by way of exception, also be necessary to gather information from other undertakings active in sectors that are closely related to the electronic communications services sector, such as content providers, that hold information which could be necessary for them to exercise their tasks under Union law. It might also be necessary to gather such information on behalf of the Commission, to allow it to fulfil its respective obligations under Union law. Requests for information should be proportionate and not impose an undue burden on undertakings. Information gathered by national regulatory and other competent authorities should be publicly available, except in so far as it is confidential in accordance with national rules on public access to information and subject to Union and national rules on commercial confidentiality.
- (400) In order to ensure that national regulatory authorities carry out their regulatory tasks in an effective manner, the data which they gather should include accounting data on the retail markets that are associated with wholesale markets where an undertaking is designated as having significant market power and as such are regulated by the national regulatory authority. The data should also include data which enable the national regulatory authority to assess compliance with conditions attached to rights of use, the possible impact of planned upgrades or changes to network topology on the development of competition or on wholesale products made available to other parties. Information regarding compliance with coverage obligations attached to rights of use for radio spectrum is key to ensure completeness of the geographical surveys of network deployments. In that respect, the competent authority should be able to require that information is provided at disaggregated local level with a granularity adequate to conduct a geographical survey of networks. Common templates and approaches should be developed for the reporting of financial, statistical data, networks and service categories and other market information by services providers. Changes to reporting requirements, once established, should be minimised wherever possible

- (401) In order to support EU sustainability objectives, it is vital that the EU attracts investments into environmentally sustainable activities in the field of electronic communications networks and services. Such regulations as, but not limited to, Regulation (EU) 2020/852 [EU Taxonomy Regulation] of the European Parliament and of the Council and under Directive (EU) 2022/2464 [CSRD] of the European Parliament and of the Council allow financial and non-financial undertakings to share a common definition of economic activities that can be considered environmentally sustainable. Electronic communications networks are covered notably by the EU Code of Conduct on sustainable telecommunications networks [to be adopted], as planned under the Commission's Communication of 18 October 2022 entitled 'Digitalising the energy system - EU action plan'. In line with the once-only principle, it is necessary that national regulatory and other competent authorities assess if the information on environmental sustainability already provided by undertakings pursuant to Union law is sufficient for them and BEREC to carry out their regulatory tasks under Union law. In this regard, BEREC should, as part of its horizontal guidelines on reporting, map the sustainability related reporting obligations. BEREC should cooperate with other competent authorities to ensure efficient data gathering and processing from other sustainability related reports required by EU or national law in the application of EU law, with the view to minimize the administrative burden and reuse the existing relevant data.
- (402) It should be possible to exchange information that is considered to be confidential by a competent authority, in accordance with Union and national rules on commercial confidentiality and on the protection of personal data, with the Commission, BEREC and any other authorities where such exchange is necessary. The information exchanged should be limited to that which is relevant and proportionate to the purpose of such an exchange.
- (403) Member States' obligations to provide information for the defence of Union interests under international agreements as well as reporting obligations under law that is not specific to the electronic communications sector such as competition law should not be affected.
- (404) To alleviate the burden of reporting and information obligations for network and service providers and the competent authority concerned, BEREC should adopt guidelines on scope, templates, formats, timing and frequency of reporting which should not exceed two times per year. The reporting obligations for electronic communication networks providers other than public but delivering digital services to the public and operating only under general authorisation should be more general, fewer and lighter. Any reporting and information obligations should be proportionate, objectively justified and limited to what is strictly necessary. In particular, duplication of requests for information by the competent authority and by BEREC, and the systematic and regular proof of compliance with all conditions under a general authorisation or a right of use, should be avoided. Undertakings should be aware of the intended use of the information sought. Provision of information should not be a condition for market access. For statistical purposes and to maintain accurate information in the notifications database, a notification may be required from providers of electronic communications networks or services when they cease activities.
- (405) Regulatory intervention must rely on detailed information regarding network roll-out in order to be effective and to target the areas where it is needed. That information is essential for the purpose of promoting investment, increasing connectivity across the Union and providing information to all relevant authorities and citizens. It should

include surveys regarding both deployment of Gigabit networks as well as significant upgrades or extensions of networks which might not match the performance characteristics of Gigabit networks in all respects, such as roll-out of fibre to the cabinet coupled with active technologies like vectoring. The gathering of information should also support the process of copper switch-off with all the relevant information. The relevant forecasts should concern periods of up to three years. The level of detail and territorial granularity of the information that competent authorities should gather should be guided by the specific regulatory objective, and should be adequate for the regulatory purposes that it serves. Therefore, the size of the territorial unit will also vary between Member States, depending on the regulatory needs in the specific national circumstances, and on the availability of local data. National regulatory and other competent authorities should be guided by BEREC guidelines on best practice to approach such a task, and such guidelines will be able to rely on the existing experience of national regulatory and/or other competent authorities in conducting geographical surveys of networks roll-out. Without prejudice to commercial confidentiality requirements, competent authorities should, where the information is not already available on the market, make data directly accessible in an open format in accordance with Directive (EU) 2019/1024 of the European Parliament and of the Council⁶¹ and without restrictions on reuse the information gathered in such surveys and should make available tools to end-users as regards quality of service to contribute towards the improvement of their awareness of the available connectivity services. In gathering any of that information, all authorities concerned should respect the principle of confidentiality, and should avoid causing a competitive disadvantage to any undertaking.

- (406) Where geographical surveys show competition issues, national regulatory authorities should conduct a market review even before the regular deadline foreseen by the current regulation.
- (407) Reliable information on the deployment of broadband networks is essential for the precise targeting of State aid, the verification of universal service obligations, and the effective promotion of competition. Current periodic surveys often fail to capture the dynamic nature of fibre rollouts. Therefore, the mapping of network deployments should evolve from a static survey to a continuous, Application Programming Interfaces (APIs)-based data ingestion model, creating a 'real-time digital twin' of Union connectivity that includes both terrestrial and non-terrestrial (satellite) capacity.
- (408) Accurate calculation of connectivity coverage, take-up rates and market shares require a precise denominator. To ensure the robustness of these calculations, national regulatory authorities should have access to the authoritative count of households and physical premises per address point, as held by National Statistical Institutes or Cadastral Authorities. Access to this reliable data is essential to calculate accurate connectivity coverage and penetration rates for the monitoring of Digital Decade targets and to ensure robust and consistent market analysis across the Union.
- (409) Access to gigabit networks is a prerequisite for social inclusion and economic development, yet demand-side factors significantly influence market contestability and investment viability. To effectively perform market analyses, define relevant markets, and target public interventions, national regulatory authorities should be able to distinguish between 'infrastructure gaps' (where networks are absent) and 'adoption

⁶¹ Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information (recast), OJ L 172, pp. 56–83.

gaps' (where networks exist but remain unused). Therefore, it is recommended to establish a framework for the interoperability of geospatial network data and socio-economic micro-data to assess the real constraints on coverage, demand, and digital inclusion.

- (410) Specifically, data concerning household composition, age structure, and disposable income could be necessary not only for social policy but for assessing demand elasticity and potential barriers to entry for new competitors. Furthermore, precise income and poverty indicators are indispensable for the automatic verification of eligibility for social vouchers and for ensuring that State aid is strictly limited to areas of market failure where commercial deployment is not viable due to low purchasing power. The processing of these metrics allows Member States to target subsidies with precision, ensuring public funds support the most vulnerable citizens without distorting competition.
- (411) Experience has shown that technical barriers often persist within the final connection to the user, distinct from the near network deployment. Therefore, statistical data regarding physical building characteristics, including construction year, dwelling type (multi-dwelling units vs. single dwelling units), and tenancy status, is vital. Access to this data could enable regulators to identify 'vertical bottlenecks', such as internal wiring costs which may act as barriers to entry of the investments, and to adjust cost models for wholesale access pricing accordingly.
- (412) To effectively perform regulatory tasks, including the definition of sub-national geographic markets and the targeting of State aid, national regulatory authorities require the processing of geospatial network data in combination with granular socio-economic and physical micro-data at the level of individual address points. This processing constitutes a task carried out in the substantial public interest pursuant to Article 9(2)(g) of Regulation (EU) 2016/679. To ensure full compliance with the principles of statistical confidentiality laid down in Regulation (EC) No 223/2009⁶², this Regulation recommends the use of a Secure Processing Environment (SPE) or equivalent secure technical interfaces. This environment ensures that while analysis is performed on micro-data for accuracy, no confidential data is disclosed to the regulatory authority, and any public reporting derived from this analysis must be aggregated to a level that prevents the re-identification of specific statistical units, typically ensuring a minimum threshold of at least three units.
- (413) To ensure consistency across the internal market, BEREC could update its guidelines to specify the technical standards for the Secure Processing Environment and the data definitions for the socio-economic indicators, ensuring that the burden on National Statistical Institutes is minimized through standardized Application Programming Interfaces (APIs).
- (414) While market participants can change their deployment plans for unforeseen, objective and justifiable reasons, competent authorities should intervene, including if public funding is affected, and, where appropriate, impose penalties if they have been provided, knowingly or due to gross negligence, by an undertaking or public authority with

⁶² Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics and repealing Regulation (EC, Euratom) No 1101/2008 of the European Parliament and of the Council on the transmission of data subject to statistical confidentiality to the Statistical Office of the European Communities, Council Regulation (EC) No 322/97 on Community Statistics, and Council Decision 89/382/EEC, Euratom establishing a Committee on the Statistical Programmes of the European Communities, OJ L 87, 31.3.2009, pp. 164–173.

misleading erroneous or incomplete information. For the purpose of the relevant provisions on penalties, gross negligence should refer to a situation where an undertaking or a public authority provides misleading, erroneous or incomplete information due to its behaviour or internal organisation which falls significantly below due diligence regarding the information provided. Gross negligence should not require that the undertaking or public authority knows that the information provided is misleading, erroneous or incomplete, but, rather, that it would have known, had it acted or been organised with due diligence. It is important that the penalties are sufficiently dissuasive in light of the negative impact on competition and on publicly funded projects. The provisions on penalties should be without prejudice to any rights to claim compensation for damages in accordance with national law.

- (415) Bridging the digital divide in the Union is essential to enable all citizens of the Union to have access to the internet and digital services. To that end, in the case of specific and well-defined areas, the relevant authorities should have the possibility to invite undertakings and public authorities to declare their intention to deploy Gigabit networks in these areas, allowing them sufficient time to provide a thoroughly considered response. The information included in the forecasts should reflect the economic prospects of the electronic communications networks sector and investment intentions of undertakings at the time when the data are gathered, in order to allow the identification of available connectivity in different areas. Where an undertaking or public authority declares an intention to deploy in an area, the national regulatory or other competent authority should be able to require other undertakings and public authorities to declare whether or not they intend to deploy Gigabit networks, or significantly upgrade or extend their network to a performance of at least 100 Mbps download speeds in this area. That procedure will create transparency for undertakings and public authorities that have expressed their interest in deploying in this area, so that, when designing their business plans, they can assess the likely competition that they will face from other networks. The positive effect of such transparency relies on market participants responding truthfully and in good faith.
- (416) In the interests of predictable investment conditions, competent authorities should be able to share information with undertakings and public authorities expressing interest in deploying Gigabit networks on whether other types of network upgrades, are present or foreseen in the area in question.
- (417) It is important that national regulatory and other competent authorities consult all interested parties on proposed decisions, give them sufficient time to the complexity of the matter to provide their comments, and take account of their comments before adopting a final decision. In order to ensure that decisions at national level do not have an adverse effect on the functioning of the internal market or other TFEU objectives, national regulatory authorities should also notify certain draft decisions to the Commission and other national regulatory authorities to give them the opportunity to comment. It is appropriate for competent authorities to consult interested parties in the cases defined in this Regulation on all draft measures which have an effect on trade between Member States.
- (418) In the context of a competitive environment, the views of interested parties, including users and consumers, should be taken into account. In order to appropriately address the interests of citizens, Member States should put in place an appropriate consultation mechanism. Such a mechanism could take the form of a body which would, independently of the national regulatory authority and service providers, carry out research into consumer-related issues, such as consumer behaviour and mechanisms for

changing suppliers, and which would operate in a transparent manner and contribute to the existing mechanisms for stakeholder consultation. Furthermore, a mechanism could be established for the purpose of enabling appropriate cooperation on issues relating to the promotion of lawful content. Any cooperation procedures agreed pursuant to such a mechanism should, however, not allow for the systematic surveillance of internet use.

- (419) Standardisation should remain primarily a market-driven process. However, there may still be situations where it is appropriate to require compliance with specified standards at Union level in order to improve interoperability, freedom of choice for users and encourage interconnectivity in the internal market. At national level, Member States are subject to Directive (EU) 2015/1535. Standardisation procedures under this Regulation are without prejudice to Directives 2014/30/EU (29) and 2014/35/EU (30) of the European Parliament and of the Council, and Directive 2014/53/EU.
- (420) Radio spectrum harmonisation and coordination, and equipment regulation supported by standardisation, are complementary and need to be coordinated closely to meet their joint objectives effectively, with the support of the RSPB. Coordination between the content and timing of mandates to CEPT under Decision No 676/2002/EC and standardisation requests to standardisation bodies, such as the European Telecommunications Standards Institute, including with regard to radio receivers parameters, should facilitate the introduction of future systems, support radio spectrum sharing opportunities and ensure efficient radio spectrum management.
- (421) The Union and the Member States have entered into commitments in relation to standards and the regulatory framework of telecommunications networks and services in the World Trade Organization.
- (422) Out-of-court dispute resolution procedures may constitute a fast and cost-efficient way for end-users to enforce their rights, in particular for consumers and microenterprises and small enterprises as defined in the Annex to Commission Recommendation 2003/361/EC (26). Member States should enable the national regulatory authority or another competent authority responsible for, or at least one independent body with proven expertise in dealing with, end-user rights to act as an alternative dispute resolution entity. With respect to such dispute resolutions, those authorities should not be subject to any instructions. As many Member States have established dispute resolution procedures also for end-users other than consumers, to whom Directive 2013/11/EU of the European Parliament and of the Council⁶³ does not apply, it is reasonable to maintain the sector-specific dispute resolution procedure for both consumers and, where Member States extend it, also for other end-users, in particular microenterprises and small enterprises. In relation to out-of-court dispute resolution, Member States should be able to maintain or introduce rules that go beyond those laid down by Directive 2013/11/EU in order to ensure a higher level of consumer protection.
- (423) In the event of a dispute between undertakings in the same Member State in an area covered by this Regulation, for example relating to obligations for access and interconnection or to the means of transferring end-user lists, an aggrieved party that has negotiated in good faith but failed to reach agreement should be able to call on the national regulatory authority to resolve the dispute. National regulatory authorities should be able to impose a solution on the parties. The intervention of a national regulatory authority in the resolution of a dispute between providers of electronic

⁶³ Directive 2013/11/EU of the European Parliament and of the Council of 21 May 2013 on alternative dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC (Directive on consumer ADR), OJ L 165, 18.6.2013, pp. 63–79.

communications networks to the public or services or associated facilities in a Member State should seek to ensure compliance with the obligations arising under this Regulation.

- (424) In addition to the rights of recourse granted under Union or national law, there is a need for a simple procedure to be initiated at the request of either party in a dispute, to resolve cross-border disputes between undertakings providing, or authorised to provide, electronic communications networks or services in different Member States.
- (425) One important task assigned to BEREC is to adopt, where appropriate, opinions in relation to cross-border disputes. National regulatory authorities should therefore fully reflect any opinion submitted by BEREC in their measures imposing any obligation on an undertaking or otherwise resolving the dispute in such cases.
- (426) Technology and market developments in electronic communications networks and services and cloud and artificial intelligence (AI) based networks and services are leading to increased interaction, cooperation and commercial agreements among a broad range of undertakings, including electronic communication service providers, Content and Application providers, software and AI developers as well as network equipment and device manufacturers. In light of these developments BEREC should assist undertakings through guidelines, covering, *inter alia*, best practices for facilitating cooperation among market players in the broader connectivity ecosystem. The guidelines should be forward looking and enable future break-through innovation and development of use-cases contributing to the Union's objectives under the Competitiveness Compass. BEREC, with the support of ODN, may work closely with industry representatives and other relevant stakeholders. To that end, BEREC may establish a dedicated stakeholder cooperation group to facilitate structured dialogue, exchange of best practices and technical expertise, and to support the consistent and effective implementation of the guidelines.
- (427) Cooperation aspects under the guidelines should include service-level agreements between network providers, aspects related to fair, reasonable and proportionate use of the resources of the other party or, in cases such as the handover of IP traffic via interconnection, peering and transit for the purpose of providing information society services or electronic communications services in an efficient, optimised, and reliable way. In this context, the notion of interconnection should be understood as referring primarily to the technical interconnection between networks, irrespective of whether such networks are public electronic communications networks or networks owned or operated by content and application providers, including content-delivery infrastructures and other forms of private networks. Technological and commercial developments have led to an increased deployment of caches, content delivery nodes, and other techniques that enhance traffic exchange and optimise end-to-end performance, thereby resulting in closer technical cooperation and more frequent interconnection between public and private networks. However, regulatory rules on interconnection should continue to apply only to providers of public electronic communications networks, as interconnection and traffic exchange arrangements between private networks and public networks generally function effectively based on commercial negotiations. Accordingly, the guidelines should clarify this distinction to ensure legal certainty, while fostering beneficial technical collaboration across the broader connectivity and digital services ecosystem.
- (428) The guidelines should also encompass the exchange of information on expected traffic patterns, including peaks, and in general traffic forecasting, in order to support

optimised network planning and congestion management. Furthermore, the guidelines should address additional aspects of energy-efficient, environmentally sustainable traffic delivery from an end-to-end perspective, including the promotion of a more harmonised use of data compression techniques, such as codecs, in order to reduce energy consumption and improve network usage efficiency.

- (429) At the same time, and with the objective of incentivising provision of innovative services, the guidelines may also provide guidance on co-innovation frameworks between electronic communications networks and other undertakings active in the electronic communications or closely related sectors. In addition, the guidelines may provide good practices for neutral host and multi-cloud deployment in electronic communications networks, lowering barriers for AI developers and content providers to innovate, in accordance with Regulation 2023/2854 of the European Parliament and of the Council of 13 December 2023 on harmonised rules on fair access to and use of data [Data Act]⁶⁴, promote interoperability standards and other relevant measures to incentivise deployment of innovative products and services requiring cooperation between electronic communications networks providers or between such providers and other undertakings active in the electronic communications or closely related sectors. Such innovative products and services may include, *inter alia*, joint deployment of edge computing services to bring cloud resources needed for delivery of low-latency services closer to mobile subscribers, provision of enterprise/industrial IoT platforms requiring collaboration between cloud and electronic communication providers, or electronic communication network providers and content and application providers co-deploying caches inside networks to optimise streaming.
- (430) In order to promote effective cooperation between providers of electronic communications networks and other undertakings active in the electronic communications or closely related sectors, it is appropriate to establish a voluntary conciliation procedure to facilitate dialogue on technical and commercial arrangements. Such a procedure provides a structured and neutral forum, supported by national regulatory authorities in cooperation with BEREC to encourage amicable solutions and reduce the likelihood of protracted disputes and enhance regulatory consistency. By encouraging cooperation and mutual understanding, this procedure can contribute to the more efficient and optimised delivery of IP traffic, support interoperability and quality of services, and facilitate the deployment of innovative services based on collaboration, while preserving contractual freedom.
- (431) Competent authorities should monitor and secure compliance with the terms and conditions of the general authorisation and rights of use, and in particular to ensure effective and efficient use of radio spectrum and compliance with coverage and quality of service obligations, through administrative penalties including financial penalties and injunctions and withdrawals of rights of use in the event of breaches of those terms and conditions. Undertakings should provide the most accurate and complete information possible to competent authorities to allow them to fulfil their surveillance tasks.
- (432) Considering the advantages of spectrum sharing to ensure efficient and effective use of spectrum, in case of breach of spectrum usage right obligations, sharing can be a solution to organise the sanction so that the right holder could propose to share the spectrum with a third party according to terms defined in advance in the right, or the competent

⁶⁴ Regulation (EU) 2023/2854 of the European Parliament and of the Council of 13 December 2023 on harmonised rules on fair access to and use of data and amending Regulation (EU) 2017/2394 and Directive (EU) 2020/1828 (Data Act) (OJ L 2023/2854, 22.12.2023).

authority may choose an additional user in which case, the procedure to share the band could be assimilated to the granting of a new right, which is governed by Article 48 as well as by Article 55 in the case of limited spectrum that would require a selection process.

- (433) Any party subject to a decision of a competent authority should have the right to appeal to a body that is independent of the parties involved and of any external intervention or political pressure which could jeopardise its independent assessment of matters coming before it. That body can be a court. Furthermore, any undertaking which considers that its applications for the granting of rights to install facilities have not been dealt with in accordance with the principles set out in this Regulation should be entitled to appeal against such decisions. That appeal procedure should be without prejudice to the division of competences within national judicial systems and to the rights of legal entities or natural persons under national law. In any case, Member States should grant effective judicial review against such decisions.
- (434) In order to ensure legal certainty for market players, appeal bodies should carry out their functions effectively. In particular, appeal proceedings should not be unduly lengthy. Interim measures suspending the effect of the decision of a competent authority should be granted only in urgent cases in order to prevent serious and irreparable damage to the party applying for those measures and if the balance of interests so requires.
- (435) In order to ensure uniform conditions for the implementation of this Regulation, implementing powers should be conferred on the Commission to adopt decisions to resolve cross-border harmful interference between Member States; to identify a harmonised or coordinated approach for the purpose of addressing inconsistent implementation of general regulatory approaches by national regulatory authorities on the regulation of electronic communications markets, as well as numbering, including number ranges, portability of numbers and identifiers, number and address translation systems, and access to emergency services through the single European emergency number '112'; to make the implementation of standards or specifications compulsory, or remove standards or specifications from the compulsory part of the list of standards; to adopt the technical and organisational measures to appropriately manage the risks posed to security of networks and services, as well as the circumstances, format and procedures applicable to notification of security incidents; to specify relevant details relating to tradable individual rights publicly available in a standardised electronic format when the rights of use for radio spectrum are created to specify the physical and technical characteristics of small-area wireless access points; to authorise or prevent a national regulatory authority from imposing on undertakings designated as having significant market power certain obligations for access or interconnection; to harmonise specific numbers or numbering ranges to address unmet cross-border or pan-European demand for numbering resources; and to specify the contract summary template to be provided to consumers. Those powers should be exercised in accordance with Regulation (EU) N°182/2011 of the European Parliament and of the Council.
- (436) The publication of information by Member States will ensure that market players and potential market entrants understand their rights and obligations, and know where to find the relevant detailed information. Publication in the national gazette helps interested parties in other Member States to find the relevant information.
- (437) In order to determine the correct application of Union law, the Commission needs to know which undertakings have been designated as having significant market power and which obligations have been placed upon market players by national regulatory

authorities. In addition to publication of that information at national level, it is therefore necessary for Member States to submit that information to the Commission. Where Member States are required to send information to the Commission, they should be able to do so by electronic means, subject to agreement on appropriate authentication procedures.

- (438) The Commission should review the functioning of this Regulation periodically, in particular with a view to determining the need for amendments in light of changing technological or market conditions.
- (439) In carrying out its review of the functioning of this Regulation, the Commission should assess whether, in light of developments in the market and with regard to both competition and consumer protection, there is a continued need for the provisions on sector-specific *ex ante* regulation or whether those provisions should be amended or repealed.

HAVE ADOPTED THIS REGULATION:

1. PART I - SCOPE, OBJECTIVES AND DEFINITIONS

Article 1

[ex Art. 1]

Subject matter

- 1. This Regulation establishes rules for the provision of electronic communications networks, electronic communications services, associated facilities and associated services, and certain aspects of terminal equipment.
- 2. This Regulation also establishes a governance framework for the electronic communications sector composed of the national regulatory and other competent authorities, the Body of European Regulators for Electronic Communications ('BEREC'), the Radio Spectrum Policy Body ('RSPB'), and the Office for Digital Networks ('ODN'), laying down the tasks of BEREC, RSPB and the ODN as well as those of national regulatory authorities and, where applicable, of other competent authorities, and establishes a set of procedures for the application of the legal framework throughout the Union.

Article 2

[ex Art. 2]

Definitions

For the purposes of this Regulation, the definitions in Article 2 of Decision No 626/2008/EC apply.

The following definitions also apply:

- (1) 'electronic communications network' means transmission systems, whether or not based on a permanent infrastructure or centralised administration capacity, and, where applicable, switching or routing equipment and other resources, including network elements which are not active, which permit the conveyance of signals by wire, radio, optical or other electromagnetic means, including satellite networks, fixed and mobile networks, electricity cable systems, to the extent that they are used for the purpose of

- transmitting signals, networks used for radio and television broadcasting, and cable television networks, irrespective of the type of information conveyed;
- (2) ‘very high capacity network’ means either an electronic communications network which consists wholly of optical fibre elements at least up to the distribution point at the serving location, or an electronic communications network which is capable of delivering, under usual peak-time conditions, similar network performance in terms of available downlink and uplink bandwidth, resilience, error-related parameters, and latency and its variation; network performance can be considered similar regardless of whether the end-user experience varies due to the inherently different characteristics of the medium by which the network ultimately connects with the network termination point;
- (3) ‘Gigabit network’ means either an electronic communications network which consists wholly of optical fibre elements up to the network termination point, or an electronic communications network which is capable of delivering, under usual peak-time conditions, similar network performance in terms of available downlink and uplink bandwidth, resilience, error-related parameters, and latency and its variation;
- (4) ‘transnational markets’ means markets identified in accordance with Article 74, which cover the Union or a substantial part thereof located in more than one Member State;
- (5) ‘electronic communications service’ means a service normally provided for remuneration via electronic communications networks, which encompasses, with the exception of services providing, or exercising editorial control over, content transmitted using electronic communications networks and services, the following types of services:
- (a) internet access service;
 - (b) interpersonal communications service;
 - (c) services consisting wholly or mainly in the conveyance of signals such as transmission services used for the provision of machine-to-machine services and for broadcasting;
- (6) ‘home passed’ (or premises passed) means end users’ premises for which an operator has deployed its access network up to a serving point (i.e. the nearest distribution/connection point intended to serve that premises), such that, from receipt of the request, the operator can make the access service available within four (4) weeks with reasonable additional built out (i.e. by carrying out only the standard premises-specific final drop connection and activation, without extending the access network beyond the serving point). ;
- (7) “home connected” (or premises connected) means an end user’s premises where the access network infrastructure has been physically extended from the serving point and terminated inside the user’s premises.
- (8) “home activated” (or premises activated) means a "Home Connected" premises for which an end user has entered into a commercial contract with a service provider and the electronic communications service is live and functional.
- (9) ‘critical copper-based service’ means an electronic communications service delivered over legacy copper access infrastructure to the extent that it supports mission critical or essential functions, such as emergency communications, telecare systems, alarms, and monitoring control systems used by the water, energy, and transport industries.

- (10) ‘internet access service’ means a publicly available service that provides access to the internet, and thereby connectivity to virtually all end points of the internet, irrespective of the network technology and terminal equipment used;
- (11) ‘interpersonal communications service’ means a service normally provided for remuneration that enables direct interpersonal and interactive exchange of information via electronic communications networks between a finite number of persons, whereby the persons initiating or participating in the communication determine its recipient(s) and does not include services which enable interpersonal and interactive communication merely as a minor ancillary feature that is intrinsically linked to another service;
- (12) ‘number-based interpersonal communications service’ means an interpersonal communications service which connects with publicly assigned numbering resources, namely, a number or numbers in national or international numbering plans, or which enables communication with a number or numbers in national or international numbering plans;
- (13) ‘number-independent interpersonal communications service’ means an interpersonal communications service which does not connect with publicly assigned numbering resources, namely, a number or numbers in national or international numbering plans, or which does not enable communication with a number or numbers in national or international numbering plans;
- (14) ‘public electronic communications network’ means an electronic communications network used wholly or mainly for the provision of publicly available electronic communications services which support the transfer of information between network termination points;
- (15) ‘network termination point’ means the physical point at which an end-user is provided with access to a public electronic communications network, and which, in the case of networks involving switching or routing, is identified by means of a specific network address, which may be linked to an end-user’s number or name;
- (16) ‘associated facilities’ means associated services, physical infrastructures and other facilities or elements associated with an electronic communications network or an electronic communications service which enable or support the provision of services via that network or service, or have the potential to do so, and include buildings or entries to buildings, building wiring, antennae, towers and other supporting constructions, ducts, conduits, masts, manholes, and cabinets;
- (17) ‘associated service’ means a service associated with an electronic communications network or an electronic communications service which enables or supports the provision, self-provision or automated-provision of services via that network or service, or has the potential to do so, and includes number translation or systems offering equivalent functionality, conditional access systems and electronic programme guides (EPGs), as well as other services such as identity, location and presence service;
- (18) ‘conditional access system’ means any technical measure, authentication system and/or arrangement whereby access to a protected radio or television broadcasting service in intelligible form is made conditional upon subscription or another form of prior individual authorisation;
- (19) ‘user’ means a natural or legal person using or requesting a publicly available electronic communications service;

- (20) ‘end-user’ means a user not providing public electronic communications networks or publicly available electronic communications services;
- (21) ‘consumer’ means any natural person who uses or requests a publicly available electronic communications service for purposes which are outside his or her trade, business, craft or profession;
- (22) ‘provision of an electronic communications network’ means the establishment, operation, control or making available of such a network;
- (23) ‘application programming interface’ or ‘API’ means the software interface between applications, made available by broadcasters or service providers, and the resources in the set-top boxes intended for connection to television sets or in integrated digital television or digital radio sets;
- (24) ‘radio spectrum’ means radio waves in frequencies between 9 kHz and 3000 GHz; radio waves are electromagnetic waves propagated in space without artificial guide;
- (25) ‘radio spectrum allocation’ means the designation of a given radio spectrum band for use by one or more types of radio communications services, where appropriate, under specified conditions;
- (26) ‘harmful interference’ means interference which endangers the functioning of a radio navigation service or of other safety services or which otherwise seriously degrades, obstructs or repeatedly interrupts a radio communications service operating in accordance with the applicable international, Union or national regulations;
- (27) ‘general authorisation’ means a legal framework ensuring rights and laying down obligations for the provision of electronic communications networks or services in the internal market, in accordance with this Regulation;
- (28) ‘small-area wireless access point’ means low-power wireless network access equipment of a small size operating within a small range, using licenced radio spectrum or licence-exempt radio spectrum or a combination thereof, which may be used as part of a public electronic communications network, which may be equipped with one or more low visual impact antennae, and which allows wireless access by users to electronic communications networks regardless of the underlying network topology, be it mobile or fixed;
- (29) ‘radio local area network’ or ‘RLAN’ means low-power wireless access system, operating within a small range, with a low risk of interference with other such systems deployed in close proximity by other users, using, on a non-exclusive basis, harmonised radio spectrum;
- (30) ‘harmonised radio spectrum’ means radio spectrum for which harmonised conditions relating to its availability and efficient use have been established by way of technical implementing measures in accordance with Article 4 of Decision No 676/2002/EC of the European Parliament and of the Council⁶⁵;
- (31) ‘shared use of radio spectrum’ means access, on an equal or hierarchical order of protection, by two or more technologies or users, to the same radio spectrum bands or channels, in order to ensure the efficient use thereof; which can be based on a defined sharing arrangement between users, authorised on the basis of a general authorisation,

⁶⁵ Decision No 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision) (OJ L 108, 24.4.2002, p. 1).

individual rights of use for radio spectrum or a combination thereof; it includes regulatory approaches such as licensed shared access that guarantee to all users predictable and reliable sharing conditions;

- (32) ‘access’ means the making available of facilities or services to another undertaking, under defined conditions, either on an exclusive or a non-exclusive basis, for the purpose of providing electronic communications services, information society services or broadcast content services; it covers, *inter alia*: access to electronic communications networks and network elements and associated facilities, which may involve the connection of equipment, by fixed or non-fixed means (in particular this includes access to the local loop and to facilities and services necessary to provide services over the local loop); access to physical infrastructure including buildings, ducts and masts; access to relevant software systems including operational support systems; access to information systems or databases for pre-ordering, provisioning, ordering, maintaining and repair requests, and billing; access to number translation or systems offering equivalent functionality; access to fixed and mobile networks, in particular for roaming; access to conditional access systems for digital television services and access to virtual network services;
- (33) ‘interconnection’ means a specific type of access implemented between providers of electronic communications networks by means of the physical and logical linking of electronic communications networks used by the same or a different undertaking in order to allow the users of one undertaking to communicate with users of the same or another undertaking, or to access services provided by another undertaking where such services are provided by the parties involved or other parties who have access to the network;
- (34) ‘operator’ means an undertaking providing or authorised to provide a public electronic communications network or an associated facility;
- (35) ‘local loop’ means the physical path used by electronic communications signals connecting the network termination point to a distribution frame or equivalent facility in the fixed public electronic communications network;
- (36) ‘call’ means a connection established by means of a publicly available interpersonal communications service allowing two-way voice communication;
- (37) ‘voice communications service’ means a publicly available electronic communications service for originating and receiving, directly or indirectly, national or national and international calls through a number or numbers in a national or international numbering plan; (inconsistency with definition of call);
- (38) ‘geographic number’ means a number from the national numbering plan where part of its digit structure contains geographic significance used for routing calls to the physical location of the network termination point;
- (39) ‘non-geographic number’ means a number from the national numbering plan that is not a geographic number, such as mobile, freephone and premium-rate numbers;
- (40) ‘total conversation service’ means a multimedia real time conversation service that provides bidirectional symmetric real time transfer of motion video, real time text and voice between users in two or more locations;
- (41) ‘public safety answering point’ or ‘PSAP’ means a physical location where an emergency communication is received under the responsibility of a public authority or a private organisation recognised by the Member State;

- (42) ‘most appropriate PSAP’ means a PSAP established by responsible authorities to which emergency communications are routed and that is competent to convey contextual information to the emergency services from the relevant area of intervention;
- (43) ‘emergency communication’ means communication by means of interpersonal communications services between an end-user and the PSAP with the goal to request and receive emergency relief from emergency services;
- (44) ‘effective emergency communication’ means emergency communication that ensures timely communication between the end-user and the most appropriate PSAP, and makes available in a timely manner contextual information, including caller location information;
- (45) ‘contextual information’ means the information conveyed through an emergency communication by the end-user or derived and transmitted automatically from the terminal equipment of the end-user or the relevant network in order to enable the timely identification of the intervention resources of the emergency services and the fast arrival of the emergency services at the intervention scene;
- (46) ‘emergency service’ means a service, recognised as such by the Member State, that provides immediate and rapid assistance in situations where there is, in particular, a direct risk to life or limb, to individual or public health or safety, to private or public property, or to the environment, in accordance with national law;
- (47) ‘caller location information’ means, in a public mobile network, the data processed, derived from network infrastructure or handsets, indicating the geographic position of an end-user’s mobile terminal equipment, and, in a public fixed network, the data about the physical address of the network termination point;
- (48) ‘terminal equipment’ means terminal equipment as defined in Article 1, point (1), of Commission Directive 2008/63/EC (1);
- (49) ‘satellite communications services’ means services whose provision makes use, wholly or partly, through the establishment, by satellite ground stations or its complementary ground and airborne components, of radiocommunications to space segment (“uplinks”), and/or the establishment of radiocommunications between a space segment and ground stations or its complementary ground and airborne components (“downlinks”);
- (50) ‘provision of satellite networks’ means the establishment and operation of satellite systems, ground stations and, where applicable, its complementary ground and airborne components;
- (51) ‘satellite ground station’ means equipment on Earth which is capable of being used either for transmission-only, or for transmission and reception (“transmit-receive”), or for reception only (“receive-only”), of radiocommunication signals by means of satellites or other space-based systems. This includes, but is not limited to, ground stations, terminals and terrestrial-based equipment needed to communicate with satellites or other space stations;
- (52) ‘complementary ground and airborne components’ means ground-based or airborne stations of satellite networks used at fixed or changing locations, in order to improve the availability of satellite network services in geographical areas within the footprint of the system’s satellite(s), where communications with one or more space stations cannot be ensured with the required quality.

- (53) ‘secure governmental communications services’ means mobile satellite services, provided to government-authorised users, by providers which fulfil appropriate security and resilience requirements, and which include one or several of the following applications: surveillance, crisis management, connection and protection of key infrastructures, public safety, emergency response, security and defence;
- (54) ‘sovereign satellite system’ means a satellite system, owned or controlled either by the EU, by one of its Member States or by nationals of Member States, which is capable of providing secure governmental communications services;
- (55) ‘traffic data’ means any data processed for the purpose of the conveyance of a communication on an electronic communications network or for the billing thereof;
- (56) ‘location data’ means any data processed in an electronic communications network, indicating the geographic position of the terminal equipment of a user or subscriber of a publicly available electronic communications service’.

Article 3

[Ex Art. 3]

General Objectives and Principles

- 1. In the context of this Regulation, Member States, national regulatory and other competent authorities, as well as BEREC, the RSPB, the ODN and the Commission, shall pursue the following general objectives which are not listed in order of priority:
 - (a) reinforce the competitiveness of the connectivity sector and industry at-large facilitating investments in advanced digital infrastructures, including cloud and AI based solutions, enabling innovative services, including quality-assured and reliable services, and facilitating cooperation among players in the broader digital ecosystem;
 - (b) develop a single market for electronic communications facilitating network operation and service provision across borders within the Union, the development of trans-European digital networks and the provision of innovative networks and services including pan-European satellite communications services;
 - (c) reinforce the resilience and preparedness of electronic communications networks and services at Union level, by fostering cooperation among public authorities and providers of electronic communications networks and services in building the necessary resilience capacities;
 - (d) promote investment in connectivity and widespread availability, access to and take-up of gigabit networks, including fixed, mobile and wireless networks, to the benefit of all citizens and businesses of the Union, in terms of price, quality and choice;
 - (e) ensure the provision of high quality, affordable, and publicly available electronic communications services to all end-users through effective competition in electronic communications networks and associated facilities, including efficient infrastructure-based competition, and in electronic communications services and associated services throughout the Union;
 - (f) promote the interests of the citizens of the Union and safeguard the protection of end-users’ rights, including the equal and non-discriminatory treatment of traffic in the provision of internet access services, so that they continue to benefit from a large choice of advanced affordable and high quality services; and guarantee a high and common level of protection in particular for specific social groups, including

- affordable pricing for end users with disabilities, older end users and end users with special needs, and choice and equivalent access for end-users with disabilities;
- (g) promote sustainability by facilitating investments in energy-efficient and low-carbon digital networks and solutions and incentivise end-to-end traffic efficiency.
2. When exercising their competences or carrying out their tasks in the pursuit of the general objectives, national regulatory and other competent authorities, BEREC, the RSPB, the ODN and the Commission shall act impartially, objectively, transparently and in a non-discriminatory and proportionate manner. In particular, they shall apply the following principles:
- (a) promote regulatory predictability to guarantee consistent regulatory approaches, through mutual cooperation;
 - (b) ensure that, in similar circumstances, measures are applied consistently and that there is no discrimination in the treatment of providers of electronic communications networks and services;
 - (c) take due account of the potential regulatory and administrative burden imposed by regulatory decisions and strive to limit them as much as possible;
 - (d) apply Union law in a technologically neutral fashion, to the extent that this is consistent with the achievement of the general objectives set out in this Article;
 - (e) take due account of the variety of conditions relating to infrastructure, competition, the circumstances of end-users and, in particular, consumers in the various geographic areas within a Member State.

2. PART II - PREPAREDNESS AND RESILIENCE

Article 4

[New Article]

Role of electronic communications networks and services in ensuring resilience and preparedness

Electronic communications networks and services shall be recognised as essential for the overall resilience of Union society and economy.

Providers of electronic communications networks and services and other digital infrastructure providers mentioned in Article 5(1), BEREC, the ODN, national regulatory and other competent authorities under Article 1(2), point (a) of Directive (EU) 2022/2555 and national crisis management and civil protection authorities shall, within their respective competences, anticipate, prevent and respond to natural or man-made disruptions, crises or force majeure that may negatively affect the population, through the coherent implementation of preparedness-related obligations under this Regulation and under the relevant Union and national civil protection, crisis management and response mechanisms.

Article 5

[Ex Art. 108]

Availability and capabilities of networks and services

1. Providers of electronic communications networks and publicly available electronic communications services, other digital infrastructure providers in the scope of Article

3 of Directive (EU) 2022/2555 where they own or control electronic communications networks and services, national regulatory authorities, national competent authorities under Article 1(2), point (a) of Directive (EU) 2022/2555 and national competent authorities including, where relevant, national crisis management and civil protection authorities shall cooperate to ensure the continuous availability of electronic communications networks and services as well as their necessary capabilities to anticipate, prevent, prepare for and respond to natural or man-made disruptions, crisis or force majeure that may negatively affect the population.

2. In doing so, authorities and providers referred to in sub-paragraph 1 shall take into consideration the BEREC Union Preparedness Plan for Digital Infrastructures pursuant to Article 6 of this Regulation.
3. Without prejudice to Directive (EU) 2022/2555, providers referred to in paragraph 1 of this Article and PSAPs shall take all necessary measures, with utmost consideration of the BEREC Union Preparedness Plan for Digital Infrastructures pursuant to Article 6, to ensure uninterrupted availability of emergency communications, unhampered access to emergency services and uninterrupted transmission of public warnings in the case of natural or man-made disruptions, crisis or force majeure that may negatively affect the population.
4. When implementing new technologies in their networks or services, providers of public electronic communications networks and publicly available electronic communications services and PSAPs shall take all the necessary preparatory measures, including testing and validation of solutions, to ensure the availability of emergency communication and public warning services within the Union.
5. Where the migration to other network technologies may result in the discontinuation of services on currently used end-user devices, providers of public electronic communications networks and of publicly available electronic communications services shall inform national competent authorities and end-users at least 2 years in advance, by providing a roadmap reflecting the migration process.

Article 6

[New Article]

Union Preparedness Plan for Digital Infrastructures

1. By 12 months after entry into force, BEREC shall adopt a report, entitled ‘Union Preparedness Plan for Digital Infrastructures’ (‘the Plan’), with a view to strengthening the resilience and preparedness of electronic communications networks, services and other digital infrastructures at Union level in the event of natural or man-made disruptions, crises or force majeure which may have a significant adverse impact on the population or the functioning of the internal market.
2. The Plan shall include:
 - (a) a comprehensive assessment of the architecture, capacities, capabilities and use of electronic communication networks and other digital infrastructures under the scope of Article 3 of Directive (EU) 2022/2555, prepared on the basis of information collected pursuant to Article 7(2) and transmitted to the ODN in accordance with Article 7(3) of this Regulation. The assessment shall, among other, provide an overview of network topology at Union level, identify route diversification, potential bottlenecks or points of failure and areas where resilience-related measures,

such as strategic investments to support redundancy, in particular for trans-European digital networks, are needed. The assessment shall be handled in accordance with applicable Union and national rules on the protection of classified information. The information contained therein shall be presented in aggregated form, to prevent exact geolocation of sensitive assets.

- (b) a set of operational recommendations on network resilience measures based on, among other, the assessment under point (a). This could include, but is not limited to, recommendations ensuring the technical capability of electronic communications network and service providers to integrate with different types of terrestrial and non-terrestrial networks such as satellite networks, capabilities to ensure the continuity of essential communication networks and services during situations of increased demand, network congestion, or natural or man-made disruptions, or other measures considered instrumental in ensuring service availability and necessary network capabilities, including, but not limited to system outage threats, such as intentional harmful radio spectrum interference.
- (c) crisis management practices. The practices shall be addressed to national regulatory and other competent authorities and aim at harmonised procedures, coordination arrangements and operational protocols to be applied in the event of natural or man-made disruptions, crises or force majeure. The crisis management practices shall be consistent with and complementary to relevant Union and national civil protection, crisis management and response mechanisms.

Article 7

[New Article]

Cooperation and data gathering supporting the preparation of the Plan

1. To support BERIC, the ODN shall prepare the draft Plan in close cooperation with the Commission and, where it concerns the preparedness and resilience of electronic communications networks and services, with the Cooperation Group established pursuant to Article 14 of Directive (EU) 2022/2555, the European Union Agency for Cybersecurity (ENISA) and in consultation with the relevant European crisis response and civil protection coordination authorities, as appropriate. It shall be reviewed and updated regularly based on, among other, information gathered under paragraph 2 of this Article.
2. To support the preparation of the Plan, the national regulatory authorities shall, on a biennial basis, collect information on the architecture, capacity, capabilities and use of electronic communications networks and, where relevant, other digital infrastructures falling within the scope of Article 3 of Directive (EU) 2022/2555, insofar as such information has not already been made available to them or to other national competent authorities pursuant to Union or national law.
3. Requests for information under paragraph 2 shall be reasoned, proportionate and limited to what is strictly necessary for the performance of tasks related to resilience and preparedness. The information shall be transmitted to the ODN on a biennial basis.
4. By *[3 months after the entry into force]*, BERIC shall, in close cooperation with the Commission and ENISA, publish a common template to be used by national regulatory authorities for the collection of the information referred to in paragraph 2.

Article 8

[New Article]

Cooperation with the Commission, other EU bodies or expert groups

1. Where a natural or man-made disruption, crisis or force majeure involves or coincides with a large-scale cybersecurity incident within the meaning of Directive (EU) 2022/2555, and in accordance with the Council Recommendation on a blueprint for crisis management, BEREC shall provide European Cyber Crisis Liaison Organisation Network (EU-CyCLONe) and the Commission with relevant information to ensure shared situational awareness and coherence in crisis response.
2. Upon request, the ODN shall share with the Commission details of the analysis used to prepare the Plan under Article 6. The Commission shall take such information into utmost account in the development and implementation of funding instruments, including strategic investments in trans-European digital networks or when adopting policies or measures to enhance the resilience and preparedness of electronic communications networks, as appropriate.
3. The tasks and actions under Part II of this Regulation shall be without prejudice to the tasks of ENISA, the Computer Security Incident Response Team (CSIRTs) network, EU-CyCLONe, the Network and Information Security Cooperation Group under Directive (EU) 2022/2555 or other expert groups or coordination systems under the Union civil protection law.

3. PART III - SINGLE MARKET AUTHORISATION AND PASSPORTING

Article 9

[ex Art. 12 + Annex I, Parts A, B and C]

General authorisation

1. The freedom to provide electronic communications networks and services shall be subject to the conditions and obligations set out in this Regulation. Member States may limit the freedom to provide electronic communications networks and electronic communications services only for the reasons set out in Article 52(1) TFEU on grounds of public policy, public security or public health. Any such limitation shall be duly reasoned and shall be notified to the Commission.
2. The general authorisation regime shall apply to providers of public electronic communications services and providers of electronic communications networks used, wholly or mainly, for the purpose of providing electronic communications services or information society services available to the public.
3. The general authorisation regime shall not apply to number-independent interpersonal communications services.
4. Under the general authorisation regime, the right to provide electronic communications networks and services shall be subject only to the following conditions:
 - (a) compliance, as applicable to the provider, with requirements for resilience and preparedness of networks during natural or man-made disruptions, crisis or force majeure under this Regulation and terms of use for communications from public

- authorities to the general public for warning the public of imminent threats and for mitigating the consequences of major catastrophes;
- (b) compliance, as applicable to the provider, with terms of use for critical communication services during major disasters or national emergencies to ensure communications between emergency services and authorities;
 - (c) compliance, as applicable to the provider, with measures designed to ensure compliance with the standards or specifications referred to in Article 189 of this Regulation;
 - (d) compliance, as applicable to the provider, with ICT supply chain requirements in accordance with the proposal for a revised Regulation (EU) 2019/881 [Cybersecurity Act] and Regulation (EU) 2024/2847;
 - (e) enabling of access to data and data retention in accordance with Union or national law, as applicable to the provider;
 - (f) maintenance of the integrity of public electronic communications networks, including by conditions to prevent electromagnetic interference between electronic communications networks or services in accordance with Directive 2014/30/EU, as applicable to the provider;
 - (g) compliance, as applicable to the provider, with requirements or measures on interconnection in accordance with Article 66 of this Regulation;
 - (h) for electronic communications networks and services, compliance, as applicable to the provider, with relevant international agreements relating to the use of scarce resources which are not subject to granting of individual rights of use;
 - (i) interoperability of services in accordance with this Regulation, as applicable to the provider;
 - (j) where appropriate, subject to administrative charges in accordance with Article 12.

Additional conditions for the use of radio spectrum in accordance with Article 30 of this Regulation, as applicable to the provider.

Additional conditions for the use of numbering resources which are assigned from the national numbering plans and, when applicable from the Union numbering plan, in accordance with Articles 46 and 50 of this Regulation, as applicable to the provider.

Article 10

[new Art., previously included in Art 12(3) and (4)]

Single Passport procedure

1. Under the general authorisation regime, where a provider intends to provide networks or services in one or several Member States, it shall submit a notification to the national regulatory authority of one of those Member States under the single passport procedure.
2. Providers shall not be required to obtain a decision or any other administrative act by any regulatory or other competent authority of the Member State of notification, or by any other authority of the Member States in which the provider intends to operate, before exercising the rights derived from the general authorisation.

3. The notification shall be made in accordance with a notification template adopted under Article 184 and made available by BEREC. BEREC shall update the notification template where necessary.
4. The notified competent authorities shall transmit the notification received to the ODN without undue delay. Where the notification concerns several Member States, the ODN shall transmit it for information to the competent authorities of the other Member States where the provider intends to operate without undue delay.
5. Where the notification concerns the intent of a provider already operating in one or several Member States to extend its operations to additional Member States, the ODN shall transmit such notification for information to the competent authorities of all the Member States concerned, including those Member States where the provider already provides electronic communications networks or services.
6. Under the Single Passport procedure, the notified authority shall confirm the authorisation to provide electronic communications networks or services to the provider within one week of the submission of the notification under paragraph 1. The confirmation shall include information concerning all the general authorisation conditions applicable in the Member State or Member States in which networks or services are intended to be provided, as well as related obligations and rights derived from the authorisation. Where the notification concerns the intent of a provider already operating in one or several Member States to extend its operations to additional Member States, the confirmation shall include information concerning the general authorisation conditions applicable in the additional Member States.
7. Once the notification is confirmed, the provider may exercise the rights derived from the general authorisation and start the activity, where necessary subject to the provisions on the rights of use under this Regulation.
8. The ODN shall maintain a publicly available Union database of the notifications submitted to the national regulatory authorities. The notified authorities shall update the information about all received notifications in the database at least every two months.
9. For electronic communications networks and electronic communications services notified before the entry into force of this Regulation, no new notification shall be required. Providers may replace existing general authorisations in the Member States, where they provide services, with a new general authorisation using the Single Passport procedure. When deploying new networks or services, after the entry into force of this Regulation, providers shall be subject to the Single Passport procedure concerning these new networks or services.

Article 11

(Ex Art. 14)

Guidelines and Mutual Assistance

1. By *[12 months after entry into force]*, BEREC shall, in cooperation with the Commission and other competent authorities, including designated contact points under paragraph 2 of this Article, publish guidelines to ensure that all the conditions listed in Article 9(2) are applied in a coherent, non-discriminatory and proportionate manner and are accessible to providers via the ODN webpage.

2. Each Member State shall designate a national single contact point tasked with communicating with the ODN and with maintaining up-to-date information about the national legislation and procedures applicable to the provision of electronic communications networks and services, in particular those related to general authorisation conditions, including the conditions regarding cybersecurity, access to data and data protection and the obligations under this Regulation.
3. The format, procedures and timeline for the coordination and mutual assistance for enforcement and the arrangements for the exchange of information between national competent authorities and the ODN in accordance with Regulation (EU) 2024/903 may be further specified by the Commission by means of implementing acts.
4. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 202.
5. Without prejudice to the enforcement powers of Member States concerning applicable law in their jurisdiction, under the Single Passport regime, the national regulatory authority of the Member State of notification shall have the power to impose penalties for breach of the authorisation conditions. In case of a serious breach, possible measures, and where necessary, after consultation with the regulatory authorities of the affected Member States, shall include the withdrawal of the right to operate in the Member State or Member States covered under the Single Passport.
6. Where the national regulatory authority of the Member State where the networks or services are provided concludes that the breach of the authorisation conditions may have a serious negative impact in its territory on the grounds of, among others, national security, public interest or harm to end-users' rights, it shall have the right to impose penalties within its jurisdiction, after consultation with the relevant authorities of the Member State of notification.

Article 12

[Ex Art. 16]

Administrative charges

1. Where Member States impose administrative charges on undertakings providing electronic communications networks or services under the general authorisation or to which a right of use has been granted, those charges shall:
 - (a) cover, in total, only the administrative costs incurred in the management, control and enforcement of the general authorisation system and of the rights of use and of specific obligations as referred to in Articles 67, 68 (1), 69 and 77, which may include costs for international cooperation, harmonisation and standardisation, market analysis, monitoring compliance and other market control, as well as, where appropriate, work involving preparation and enforcement of administrative decisions, such as decisions on access and interconnection;
 - (b) be imposed upon the individual undertakings in an objective, transparent and proportionate manner.
2. Undertakings the turnover of which is below a certain threshold or the activities of which do not reach a minimum market share or have a very limited territorial scope shall not be subject to administrative charges.

3. Where administrative charges are imposed, national regulatory or other competent authorities shall publish an annual overview of their administrative costs and of the total sum of the charges collected. Where there is a difference between the total sum of the charges and the administrative costs, appropriate adjustments shall be made.

4. PART IV - RESOURCES (SPECTRUM AND NUMBERING)

4.1. TITLE I: SPECTRUM

4.1.1. CHAPTER I: Principles and objectives

SECTION 1: INTERNATIONAL RULES FOR SPECTRUM USE AND MANAGEMENT

Article 13

[ex Art. 4 and ex. Art. 45]

Strategic planning and management of radio spectrum

1. Member States and the Commission shall manage radio spectrum in the internal market in a coordinated way as a common European resource under shared competence with a view of fostering economic growth, protecting Union values and security, in pursuit of the objectives provided in Article 3 of this Regulation, in particular security, internal market and sovereignty aspects.
2. The Commission, assisted by the RSPB, and competent authorities shall cooperate in the strategic planning of spectrum and coordination of radio spectrum policy approaches.
3. Competent authorities shall manage radio spectrum effectively and efficiently in accordance with this Regulation and with the ITU Radio Regulations and other agreements adopted in the framework of the ITU applicable to radio spectrum. They shall make every effort to eliminate any potential or actual source of cross-border or national harmful interference and shall take spectrum related measures to minimise the security risks in providing electronic communications networks and services.
4. Where this Regulation empowers the Commission to manage radio spectrum, it shall exercise the same competences and respect the same obligations as competent authorities, unless this Regulation or other Union law provide otherwise.
5. Competent authorities may allow an alternative use of all or part of radio spectrum band harmonised pursuant to Decision No 676/2002/EC, where:
 - (a) a public consultation held in accordance with Article 186 and forward-looking assessment of market demand, in accordance with Article 32, demonstrate a lack of marked demand for harmonised use of the spectrum band in the foreseeable future;
 - (b) such alternative use does not prevent or hinder the availability or the use of such a band in other Member States.

The competent authority shall inform the Commission and the other competent authorities, through the Office, of its decision, together with the reasons therefor, and regularly review it.

Article 14

(Ex Art. 28)

Harmful interference

1. Holders of rights of use of radio spectrum shall have the right to use their frequencies free from harmful interference, subject to the National Frequency Allocation Plans and international agreements.
2. Competent authorities shall cooperate with each other, and, where appropriate, through the RSPB, in the cross-border coordination of the use of radio spectrum. They shall resolve any problem or dispute in relation to cross-border coordination or cross-border harmful interference, which prevents the use of the radio spectrum in the territory of the Union.
3. In case of unresolved cross-border coordination or cross-border harmful interference between Member States, any competent authority or any holder of spectrum usage right may request the RSPB to use its good offices to resolve the issue. The RSPB may issue an opinion proposing a coordinated solution. Where requested by a competent authority, the RSPB shall issue such an opinion.
4. Where the cross-border issue between Member States is not resolved within [12] months from the request referred to in paragraph 3, the Commission shall, at the request of a competent authority from any affected Member State or holder of a spectrum usage right, or on its own initiative, take a decision by means of implementing acts to resolve cross-border issue, taking utmost account of the opinion of the RSPB pursuant to paragraph 3 if any.
5. Where a cross-border issue involves a third country, including a candidate and acceding country, the Commission and competent authorities within the RSPG shall, upon the request of any competent authority from an affected Member State, cooperate to provide legal, political and technical support to resolve such issue, so that the Member States concerned can observe their obligations and exercise their rights to use radio spectrum under Union law.
6. In the case the cross-border issue involving third country is not resolved within 12 months from the request in paragraph 5, the Commission shall, at the request of a competent authority from the affected Member State and taking utmost account of the RSPB opinion, if any, adopt implementing decisions to define the assistance or contribution that Member States should provide with a support of the Commission to resolve such issues, irrespective of whether they are affected by the interference or not.
7. Where the cross-border issue with a third country cannot be solved by applying support on the basis of paragraph 6, within a period of 12 months, the Commission may, in case of violation of international law and taking into account the RSPB opinion, if any, propose to the Council to adopt restrictive measures under Article 29 TEU against the third country concerned.
8. The implementing acts referred to in paragraphs 4 and 6 of this Article shall be adopted in accordance with the procedure referred to in Article 202(4).

SECTION 2: PRINCIPLES

Article 15

[New]

Principle of shared use of spectrum

1. Without prejudice to the exception provided in the second sub-paragraph, radio spectrum under general authorisation and individual rights of use shall be shared by

providers of the same service (intra-service sharing) or different services (interservice sharing).

Competent authorities may restrict or not propose shared use of spectrum on grounds related to:

- (a) safeguarding competition and non-discriminatory market access;
 - (b) technical or economical feasibility;
 - (c) where exclusive rights of spectrum use are necessary to safeguard public safety, national security, defence, or the protection of critical services;
 - (d) avoidance of harmful interference;
 - (e) cross-border coordination.
2. The competent authority shall ensure that the assigned spectrum is used efficiently. In this regard, it shall have the right to require the holder of the spectrum rights, including those for defence and security, to share any portion of spectrum that is unused within a given geographic area or time period, provided that such shared use does not interfere with, degrade, or otherwise limit the original holder's use of the spectrum.

Article 16

[Ex Art. 45(4) and (5)]

Principles of technology and service neutrality

1. Any type of technology may be used to provide electronic communications networks or services within the spectrum bands allocated for such use in the National Frequency Allocation Plan, in accordance with Union law.

Competent authorities may only restrict that right based on proportionate and non-discriminatory grounds of:

- (a) avoidance of harmful interference;
 - (b) protection of public health against electromagnetic fields at risk, taking utmost account of Recommendation 1999/519/EC;
 - (c) ensuring technical quality of service;
 - (d) ensuring maximisation of radio spectrum sharing;
 - (e) safeguarding efficient use of radio spectrum;
 - (f) ensuring the fulfilment of a general interest objective in accordance with paragraph 2.
2. Any type of electronic communications service may be provided in the radio spectrum designated for such services in the National Frequency Allocation Plan, in accordance with Union law.

Competent authorities may only restrict that right in order to fulfil a requirement under the ITU Radio Regulations based on proportionate and non-discriminatory criteria. A competent authority shall have the right to request that a particular service is provided in a specific band only where justified by the need to:

- (a) protect safety of life;
- (b) promote social, regional or territorial cohesion;
- (c) avoid inefficient use of radio spectrum;

- (d) promote cultural and linguistic diversity and media pluralism, for example the provision of radio and television broadcasting services.

Competent authorities may only prohibit the provision of any other service in a specific band, where justified by the need to protect the safety of life.

4.1.2. *CHAPTER II: Allocation*

SECTION 1: SPECTRUM STRATEGY AND ROADMAPS FOR ALLOCATION

Article 17

[new]

Union Spectrum Strategy and Roadmaps

1. After having consulted the stakeholders and taking into account the opinion of the RSPB, the Commission shall set up a forward-looking Union spectrum strategy and may update it after each World Radiocommunication Conference.
2. The Union spectrum strategy shall guide long-term spectrum planning, innovation and efficient use of spectrum across the Union. It shall identify spectrum needs and ensure availability and, if relevant, protect spectrum necessary for fulfilling objectives of different Union policy areas involving the use of spectrum, including defence and security.
3. On the basis of the Union spectrum strategy, the Commission may, where relevant, by means of implementing acts, adopt Union spectrum roadmaps, taking into account the opinion of the RSPB and after giving opportunity to all interested parties to express their views.
4. Each Union spectrum roadmap shall identify spectrum needs related to a specific spectrum technology or service and set timelines for technical harmonisation of the spectrum use pursuant to Decision No 676/2002/EC and, where relevant, deadlines for authorisation of the use of that spectrum pursuant to this Regulation, which may derogate from the deadline set by Article 18(1). This is without prejudice to the possibility to derogate from the deadline of Article 18(1) pursuant to Article 18(2) and (3).
5. Those implementing acts shall be adopted in accordance with the procedure referred to in Article 202(4) with the assistance of the Committee provided in paragraph 2 of that Article. The RSPB shall monitor technical, economic and societal developments related to spectrum use, and shall, whenever necessary, recommend updating any Union roadmap. Within 9 months from the establishment of the Union spectrum roadmaps, competent authorities shall submit to the Commission and RSPB their national spectrum roadmaps, indicating, where relevant, national measures necessary to implement a Union spectrum roadmap and their timelines. Competent authorities shall publish the national spectrum roadmaps and regularly update them.
6. Competent authorities shall regularly report to the Commission and the RSPB on the implementation of their national spectrum roadmaps. The Commission and competent authorities within the RSPB shall cooperate to identify and address any deficiencies in areas where progress towards one or several objectives of the Union spectrum roadmap is regarded to be insufficient by the Commission or the RSPB.

Article 18

[Ex Art. 53]

Coordinated timing of assignments

1. Where the use of radio spectrum has been harmonised by technical implementing measures in accordance with Decision No 676/2002/EC for wireless broadband networks and services, the competent authorities shall authorise it within 24 months from the adoption of that measure, or as soon as possible after the lifting of any decision to allow alternative use on an exceptional basis pursuant to Article 13(5) of this Regulation.
2. The deadline provided for in paragraph 1 of this Article may be extended for a specific band to the extent justified by one of the following circumstances:
 - (a) a restriction to the use of that band based on the general interest objective provided in Article 16(2), points (a) or (d);
 - (b) unresolved cross-border coordination issues resulting in harmful interference with third countries, provided that the affected Member State has, where appropriate, requested Union assistance pursuant to Article 14(5);
 - (c) the need to safeguard national security and defence;
 - (d) force majeure.

The competent authority concerned shall review such an extension at least every two years and upon request from a prospective spectrum user or the Commission.

3. The deadline provided for in paragraph 1 may be extended for a specific band to the extent necessary and up to 24 months in the case of:
 - (a) unresolved cross-border coordination issues resulting in harmful interference between Member States, provided that the affected Member State takes all necessary measures in a timely manner pursuant to Article 14(3) and (4);
 - (b) the need to ensure, and the complexity of ensuring, the technical migration of existing users of that band.
4. In the event of an extension under paragraph 2 or 3, the competent authority concerned shall inform the other competent authorities and the Commission in a timely manner, stating the reasons.
5. In the case a competent authority does not comply with the deadline set in paragraph 1, and without prejudice to paragraphs 2 and 3, and if it does not accept a request for alternative use pursuant to Article 13(5), any affected party may bring the competent authority before the national court on the grounds its failure to act.
6. The Commission may by means of an implement act determine common dates for the authorisation of the use of specific harmonised radio spectrum in accordance with paragraph 1 and in derogation to paragraphs 1, 2 and 3.

This implementing act shall be adopted in accordance with the examination procedure of Article 202.

SECTION 2: PETITION FOR ALLOCATION/HARMONISATION

Article 19

[new]

Request for harmonisation of radio spectrum

1. Any interested party may submit a reasoned request to the Commission to consider the harmonisation of conditions for the availability and/or efficient use of a specific frequency band pursuant to Article 4 of Decision No 676/2002/EC.
2. Upon such request, the Commission shall organise a public consultation and submit that request either to the RSPB for a report or opinion, or to the Radio Spectrum Committee, or to both. Where addressed, the Radio Spectrum Committee may adopt an opinion pursuant to Article 3(2) of Decision No 676/2002/EC.
3. A reasoned response to such request shall be transmitted within a reasonable deadline, preferably within six months from the receipt thereof by the Commission.
4. The request and the response shall be published by the Commission.
5. After public consultation and taking utmost account of the opinion of RSPB, the Commission may adopt guidelines that lay down the form, content and level of detail to be given in the requests, details of the process of handling of the requests and, where relevant, any deadlines

4.1.3. CHAPTER III : Assignment

SECTION 1: PRINCIPLES

Article 20

[Ex Art. 46 and Ann.I.D(1-3)]

General authorisation of the use of radio spectrum

1. Radio spectrum shall be used under general authorisation subject to compliance with conditions in paragraph 2, unless an individual right of use is required in accordance with Article 21.
2. Undertakings authorised to use radio spectrum based on general authorisation shall only be subject to the following conditions:
 - (a) to provide a service or to use a type of technology within the limits of Article 16 including, where appropriate, coverage and quality of service requirements;
 - (b) to use radio spectrum effectively and efficiently in accordance with this Regulation;
 - (c) to apply technical and operational conditions necessary for the avoidance of harmful interference and for the protection of public health against electromagnetic fields, taking utmost account of Recommendation 1999/519/EC [where such conditions are different from those accompanying the use of spectrum under the general authorisation];
 - (d) to comply with ICT supply chain requirements in accordance with Regulation (EU) 2019/881 (Cybersecurity Act) and Regulation (EU) 2024/2847.

Article 21

[Ex Art. 46, 47 and Ann.I.D(4-10)]

Individual rights of the use of radio spectrum

1. Competent authorities may subject radio spectrum use to individual rights only where necessary to maximise the efficient use of spectrum in light of demand and taking into account the following criteria:
 - (a) the specific characteristics of the radio spectrum concerned;
 - (b) the need to avoid harmful interference;
 - (c) the development of reliable conditions for radio spectrum sharing, where appropriate;
 - (d) the need to ensure technical quality of communications or service;
 - (e) objectives of general interest as laid down by Member States in accordance with Union law;
 - (f) the need to safeguard efficient use of radio spectrum.
2. Undertakings holding an individual right of use of radio spectrum may be, in addition to the conditions in Article 20(2), subject only to conditions, established by the competent authority prior to assignment or renewal of such right, related to:
 - (a) time frame and maximum duration in accordance with Article 24, subject to any changes in the National Frequency Allocation Plan;
 - (b) transfer or leasing of rights in accordance with Article 26;
 - (c) payment of fees for rights of use in accordance with Article 29;
 - (a) fulfilment of any commitment made in the framework of an authorisation or authorisation renewal process prior to the authorisation being granted or, where applicable, to the invitation for application for rights of use;
 - (b) pooling or allowing access to radio spectrum for other users in specific regions or at national level or sharing radio spectrum;
 - (c) using radio spectrum bands in compliance with relevant international agreements;
 - (d) conditions specific to an experimental use of radio spectrum bands;
 - (e) sharing passive or active infrastructure which relies on radio spectrum;
 - (f) commercial roaming access agreements;
 - (g) joint roll-out of infrastructures for the provision of networks or services which rely on the use of radio spectrum.

Competent authorities shall not attach conditions under points (e), (h), (i) or (j) unless justified pursuant to the procedure referred to in Article 32. Spectrum users and right holders shall implement those conditions in compliance with competition law.

3. Competent authorities shall consult and inform interested parties, in a timely and transparent manner, about the conditions to be attached to individual rights of use before they are imposed. They shall set the criteria for assessing compliance with those conditions in advance and transmit them to the interested parties in a transparent manner.

4. The competent authority may combine individual rights with general authorisation for the use of radio spectrum, considering any likely effects on competition, innovation and market entry.
5. The RSPB shall collect good practices on the choice between general authorisations and individual rights.
6. Taking utmost account of any RSPB opinion, the Commission may take a decision, by means of an implementing act, designating the most appropriate authorisation regime for the use of radio spectrum in a particular radio spectrum band, or parts thereof, harmonised under Decision No 676/2002/EC with a view to promoting a consistent approach in the Union.

That implementing act shall be adopted in accordance with the procedure referred to in Article 202(4).

SECTION 2 : HARMONISATION

Article 22

[new]

Common authorisation conditions of use for radio spectrum

1. Prospective users of radio spectrum in two or several Member States, for public and non-public networks, may request competent authorities from the Member States concerned to jointly establish within the RSPB common authorisation conditions to reduce the cost of deployment or environmental impact. Competent authorities shall inform the Commission of such requests.
2. Where the Commission or at least two competent authorities concerned submit a reasoned request, irrespective of whether these are provided by providers of public electronic communications networks or not, the RSPB shall, after consulting stakeholders, develop common authorisation conditions, including as regards the best way to share spectrum between public and private networks. The Commission may adopt implementing acts making such authorisation conditions binding in all Member States and imposing a common format.
3. With the view to ensuring the existence throughout the Union of high quality wireless broadband services, including satellite Direct-to-Device services, and at the request of two or more competent authorities, or of the Commission, the RSPB shall address the opportunity and modalities of authorising a part of spectrum at Union level and to suggest the appropriate authorisation procedure and the award conditions. Taking utmost account of the RSPB opinion, the Commission may define, by means of an implementing act, the processes and award conditions for the authorisation of spectrum use in a particular radio spectrum band, or parts thereof, harmonised under Decision No 676/2002/EC, at Union level.
4. When carrying out the authorisation process, the Commission may seek assistance of RSPB, ODN, the Communication Committee or external experts.
5. Where the common authorisation conditions have been established pursuant to paragraph 2, the Commission may lay down, by means of implementing acts, a one-stop-shop procedure that allows an undertaking to file at the ODN requests for rights of use of spectrum in more than one Member States, and specify the procedural arrangements, including administrative deadlines.

6. The competent authorities shall grant the rights and authorisations within the deadlines set by Article 40.
7. The implementing acts referred to in paragraphs 2, 3 and 5 of this Article shall be adopted in accordance with the procedure referred to in Article 202(4).

Article 23

[Ex Art. 36)]

Harmonised assignment of radio spectrum

Competent authorities shall not impose any further conditions, additional criteria or procedures in case holders of right to use spectrum harmonised in accordance with Decision No 626/2002/EC have been selected under a common selection procedure at the Union level or where Union harmonised authorisation conditions apply.

SECTION 3: HARMONISED RULES APPLICABLE TO AUTHORISATION CONDITIONS

Article 24

[Ex Art. 49]

Duration of rights

1. Spectrum usage rights shall be in principle granted for an unlimited duration. Competent authorities may provide, at the time of the granting of the right of use, the possibility to periodically review the conditions accompanying the rights of use, including coverage and quality of service obligations.
2. Individual rights of use which are granted for an unlimited period of time may be revoked at any time with a 5-year notice, as well as for any of the reasons stipulated in Article 25(2). By exception, where individual rights of use for wireless broadband services which have been granted for an unlimited duration are revoked within the first 25 years from their issuing, Article 197 shall apply.
3. By exception to paragraph 1, individual rights of use may be granted for a limited period that is appropriate in light of the objectives pursued in accordance with Article 30(4), where there is a need to ensure competition, as well as, in particular, effective and efficient use of radio spectrum, and to promote innovation.
4. Where the individual rights of use are granted for a limited period, the competent authority shall set the maximum duration in advance, without prejudice to any subsequent changes in the National Frequency Allocation Plan, and specify it in the decisions on the granting of individual rights.
5. Where competent authorities subject individual rights of use for radio spectrum for which harmonised conditions have been set by technical implementing measures in accordance with Decision No 676/2002/EC in order to enable its use for wireless broadband electronic communications services ('wireless broadband services') to a limited duration, holders of the rights of use shall have the right to use spectrum for a period of at least 25 years.
6. Where granted for limited period, individual rights of use shall be subject to renewal according to Article 25 of this Regulation.
7. Where duly justified, the competent authorities may derogate from paragraph 3 of this Article in any of the following cases:

- (a) in limited geographical areas, where access to high-speed networks is severely deficient or absent;
 - (b) for specific short-term projects;
 - (c) for experimental use by imposing specific obligations;
 - (d) for uses of radio spectrum which, in accordance with Article 16, can coexist with wireless broadband services;
 - (e) for alternative use of radio spectrum in accordance with Article 13(5).
8. Competent authorities may adjust the duration of rights of use laid down in this Article to ensure the simultaneous expiry of the duration of rights in one or several bands, or with the view to assessing the need for a renewal in accordance with Article 25 of this Regulation, in the latter case only for a period of 2 years, renewable once.

Article 25

[ex Art. 50]

Renewal of individual rights of use for harmonised radio spectrum

1. Any right of use of harmonised radio spectrum subject to limited duration shall be automatically renewed for a similar duration and with similar conditions upon request by its holder.
2. In derogation to paragraph 1, after giving all interested parties the opportunity to express their views through a public consultation in accordance with Article 186, the competent authority may decide, at least five years in advance of the expiry of the right, not to automatically renew the right of use and either let the right expire and organise an open, transparent and non-discriminatory authorisation procedure in order to grant new rights, or to renew the existing rights subject to a different duration or to different conditions for one or several of the following reasons:
 - (a) the fulfilment of the objectives set out in Article 3, and Article 30(4), as well as public policy objectives under Union or national law, taking also into account the importance of existing investments;
 - (b) the implementation of a new technical implementing measure adopted in accordance with Article 4 of Decision No 676/2002/EC;
 - (c) the serious non-implementation of the conditions attached to the right concerned by its holder;
 - (d) the need to promote, or avoid any distortion of competition in accordance with Article 32;
 - (e) the need to render the use of radio spectrum more efficient in light of technological or market evolution;
 - (f) if spectrum was granted free of charge.

Where considering not to renew the right of use for the reasons under the first subparagraph, point (d), the competent authority shall proceed with a new selection procedure only where there is evidence of credible market demand from undertakings other than those holding rights of use for radio spectrum in the band concerned, and where it has established that the number of infrastructures that can be economically sustained in the market is higher than the number of incumbent operators.

3. Unless the decision referred to in paragraph 2 is taken at the latest 5 years before the expiry of the rights concerned, the existing rights shall be automatically renewed pursuant to paragraph 1.
4. The decision of renewal shall be accompanied by a review of the annual and one-off fees related to the use of radio spectrum, which shall be carried out on the basis of Article 29. When defining the level of the fees, competent authorities shall take into account *inter alia* historical prices, international benchmarks, the evolution of the average revenue per MHz per connection taking into account all spectrum used for the respective service, and the opportunity cost of spectrum.
5. This Article shall also apply to rights that were granted before the publication of this Regulation and that expire within a period of time of at least 7 years after that publication.

Article 26

[Ex Art. 51]

Transfer or lease of individual rights of use for radio spectrum

1. Holders of rights of use of radio spectrum shall have the right to transfer or lease their rights of use in conformity with this Article.

Competent authorities may determine that this paragraph does not apply, or take a decision to prohibit the transfer or lease, where the individual right of use for radio spectrum was initially granted free of charge or assigned for broadcasting with a general interest or cultural objective attached.

2. The holder of the rights of use shall notify its intention to transfer or lease rights of use for radio spectrum, as well as the effective date of transfer thereof to the competent authority which shall make this information public.

From the date of the transfer or lease, the transferee or lessee shall be bound by the original conditions attached to the rights of use, unless otherwise decided by the competent authority in accordance with the following paragraph. In the case of lease, the original assignee shall be bound by the original conditions together with the lessor. In the case of harmonised radio spectrum, any such transfer shall comply with such harmonised use.

3. The transfer and lease of the radio spectrum shall be submitted to the least onerous procedure possible. The transfer and lease shall not be refused unless there is a clear risk of distortion of competition from the accumulation of rights of use in particular in accordance with Article 32 or there are serious doubts that the new user is able to meet the original conditions for the right of use.

Exceptionally, and taking into account the context and circumstances of the transfer of the right of use, in particular whether the transferee is controlled directly or indirectly, for example through significant funding, including subsidies, by the government of a third country or is pursuing State-led outward projects or programmes, competent authorities shall have the power to block the transfer of spectrum which is essential for resilience, security, including continuity of supply of electronic communication services, defence or the maintenance of public order, the disruption or abuse of which could have a significant impact in a Member State or in the Union.

Any administrative charge imposed on undertakings in connection with processing an application for the transfer, sharing or lease of rights of use for radio spectrum shall comply with Article 12.

4. This Article is without prejudice to the Member States' competence to enforce compliance with the conditions attached to the rights of use at any time, both with regard to the original holder of the right and the new user, in accordance with their national law.
5. Competent authorities shall facilitate the transfer or lease of rights of use for radio spectrum by giving consideration to any request to adapt the conditions attached to the rights in a timely manner and by ensuring that those rights or the relevant radio spectrum may to the best extent be partitioned or disaggregated.

Article 27

[new]

Shared use of spectrum

1. In light of Article 15, and without prejudice to coverage or other obligations imposed on holders of individual rights of use of radio frequency, and to obligations undertaken in the context of a competitive or comparative procedure, holders of rights of use shall take steps to organise, allow and offer the sharing of their rights of use, where such sharing is technically feasible.
2. Any third party interested in using a part of the spectrum in a specific territory or period of time shall have the right to express its interest to the competent authority.

Holders of the right of use shall have the right to refuse shared use of the spectrum where they demonstrate that they are using the spectrum or that they have developed plans to use it in the foreseeable future, in a way which makes sharing not technically feasible. Holders of the right shall commit to their plans, facing otherwise sanctions in accordance with Article 199 of this Regulation.

Where assessing the feasibility of shared use of spectrum, competent authorities shall take into account the deployment plans of holders of rights of use for the entire duration of their right. Competent authorities shall apply the procedure of Article 190 mutatis mutandis. They may allow the shared use of spectrum for a limited duration of time or provide for periodic review. Competent authorities shall have the power to block the shared use of spectrum on the same grounds than those provided for in Article 26 of this Regulation.

3. The conditions for the shared use of radio spectrum shall be set in the right to use spectrum in accordance with Article 21.

Such conditions shall in particular determine:

- the usage priority, the coexistence rules and the type of protection against harmful interference between the primary and secondary holder;
- the type of usage allowed to the new user in comparison with the original usage authorised;
- whether shared use of spectrum can be imposed in case of breach of an obligation attached to the right of use, such as of a coverage obligation.

4. Any obligation accompanying the right of use may be fulfilled either by the original or the new user or both. Both users shall be bound by the obligations set in the right of use that regulate the sharing of the spectrum.

Article 28

[New]

Database

1. The ODN shall establish a dynamic database for geolocation and monitoring of spectrum usage opportunities to promote and allow the shared use of specific spectrum bands so as to improve the efficiency of spectrum use, in order to support Union policies.

The database shall include up-to-date information collected and provided by Member States on the geolocalisation of existing uses of spectrum to allow prospective spectrum users to access such spectrum.

This database shall be directly accessible to any prospective user of radio spectrum.

2. For the purposes of ensuring the uniform implementation of paragraph 1 of this Article, the Commission, taking utmost account of the views of the RSPB, may, by means of implementing acts, define the spectrum bands covered by the database and develop practical arrangements and uniform formats for the collection and provision of data by the competent authorities to the Commission.

Those implementing acts shall be adopted in accordance with the procedure referred to in 202(4).

3. The establishment and usage of the database shall ensure the protection of privacy as well as business confidentiality rules, in particular under Article 8 of Decision No 676/2002/EC and the right of Member States to withhold information which is relevant for national security. It shall to the best extent minimise the administrative burden and existing obligations on the Member States under other Union law, in particular obligations to provide specific information.
4. The ODN shall administer the database.

Article 29

[Ex Art. 42]

Contributions for rights of use for radio spectrum

1. Competent authorities may impose payment for rights of use of radio spectrum in the form of one-off or annual fee or combination thereof determined in accordance with this Article.
2. Annual fees and one-off fees not related to comparative or competitive selection procedure shall be objectively justified, transparent, non-discriminatory and proportionate in relation to their intended purpose, ensure optimal use of spectrum and take into account the general objectives of this Regulation. They shall be set at a level to cover, in total, administrative costs incurred by competent authorities in the management, control and enforcement of spectrum rules in accordance with Article 12(1), point (a).

By [1 year after the entry into force of this Regulation], the Commission, taking into account the opinions of BEREC and of RSPB, adopts a recommendation on a common methodology for defining annual fees as referred to in the first subparagraph, that may take into account different characteristics of the spectrum, such as the capacity of a spectrum band and its scarcity, and the service intended to be provided.

3. One-off fees in a comparative selection procedure, if any, or reserve prices in a competitive selection procedure shall be set at a level which ensures efficient assignment, use of radio spectrum and investments and deployment of networks and services.

Any reserve price shall be set as a minimum payment for obtaining the right of use of radio spectrum.

Before imposing a reserve price, or defining its level, the competent authority shall take into account costs entailed by conditions attached to those rights.

By [*one year after the application of this Regulation*], the Commission shall take into account opinions of BEREC and RSPB, adopt a recommendation on a common methodology for defining a reserve price, taking into account *inter alia* the opportunity cost of spectrum and the characteristics of the band.

4. Competent authorities shall take utmost account of the recommendations referred to in paragraph 2 and 3 of this Article. In case either of the recommendation is not followed and deviations persist which could not be objectively justifiable, the Commission may adopt a decision by means of an implementing act to ensure the harmonised application.

That implementing act shall be adopted in accordance with the examination procedure referred to in Article 202.

5. Any payment of any fees shall be applied only where spectrum is actually available for use and the possibility shall be given to be paid in yearly instalments.
6. Annual or one-off fees shall, upon request, be reimbursed against the fulfilment of pre-determined commitments by the holder of right to use spectrum. The possibility and the rate for such reimbursement shall be transparent, fair and non-discriminatory and announced in advance of any selection procedure or assignment, or renewal or review process.

SECTION 4: GRANTING AND SELECTION PROCEDURES

Article 30

[Ex Art. 48 and 55]

Granting of individual rights of use for radio spectrum and selection procedure

1. Competent authorities shall grant individual rights of use for radio spectrum under Article 21 upon request and following open, transparent, non-discriminatory and proportionate procedures, set in advance, to any undertaking provided that it is able to comply with the conditions attached to such right. Applicants shall provide all necessary information to demonstrate their ability to comply with conditions attached to the right of use.
2. Competent authorities shall assess applications for individual rights of use for radio spectrum pursuant to objective, transparent, proportionate and non-discriminatory

eligibility criteria that are set out in advance and reflect the conditions to be attached to such rights. They shall not discriminate operators of associated facilities and wholesale network operators when applying for individual rights to use spectrum for the provision of electronic communications networks or services, and specify how such operators may fulfil coverage, quality or other obligations.

3. Notwithstanding paragraph 1 and 2, specific criteria and procedures, including an exception to the requirement of open procedures, may apply where the granting of individual rights of use for radio spectrum to the providers of radio or television broadcast content services is necessary to achieve a general interest objective as laid down under national law in accordance with Union law.
4. Where justified, competent authority may limit the number of individual rights of use. In such a case, it shall define and give reasons for the selection procedure chosen and objectives pursued thereby, stating the outcome of any related assessment of the competitive, technical and economic situation of the market.
5. Competent authorities shall give all interested parties, including users and consumers, the opportunity to express their views on any aspect of the procedure described in paragraph 4, especially on any limitations, selection procedure and selection criteria, within a reasonable period not shorter than 30 days and shall take into account views of the interested parties.
6. Where the competent authority intends to limit the individual rights of use in relation to harmonised radio spectrum for wireless broadband networks and services, it shall notify a draft final measure to the spectrum single market procedure under Article 31 and shall not proceed with the selection before finalising the spectrum single market procedure.
7. Competent authorities shall publish any decision on the selection procedure and the related rules, including the selection criteria and the conditions to be attached to the rights of use, clearly stating the reasons therefor and invite applications for rights of use.
8. The competent authorities shall take, communicate and make public the decisions on the granting of individual rights of use for radio spectrum as soon as possible after the receipt of the complete application and within six weeks in the case of radio spectrum declared available for electronic communications services in National Frequency Allocation Plans, extendable to up to eight months in the case of a selection procedure, subject to any specific timetable established pursuant to Article 17.

That time limit shall be without prejudice to any applicable international agreements relating to the use of radio spectrum or of orbital positions.

9. The competent authority shall review, as appropriate, any limitation at regular intervals or at the reasonable request of affected undertakings. Where a competent authority concludes that additional rights of use for radio spectrum or a combination of general authorisation and individual rights of use can be granted, it shall publish that conclusion and initiate the process of granting such rights.
10. The RSPB shall collect good practices on authorisation processes and related award conditions, such as on pro-investment auction design, methodology for calculating reserve prices, annual fees, coverage obligations. Taking into account the opinion of RSPB, the Commission may recommend most appropriate pro-investment

authorisation processes aspects and selection conditions for authorising the use of spectrum in one or several bands harmonised based on Decision No 676/2002/EC.

11. Competent authorities shall take utmost account of the recommendations referred to in paragraph 10 and shall justify to the Commission any deviation thereof. In case such deviation results in inconsistent implementation of pro-investment authorisation processes or selection conditions which persists for at least 2 years after adoption of a recommendation, the Commission may adopt a decision by means of an implementing act to ensure their harmonised application.
12. That implementing act shall be adopted in accordance with the procedure referred to in Article 202(4).
13. This Article is without prejudice to the transfer of rights of use for radio spectrum in accordance with Article 26.

Article 31

[Ex Art. 35]

Spectrum Single market procedure

1. Where the competent authority intends to undertake a selection procedure in accordance with Article 30(4), or to amend or renew rights of use in relation to harmonised radio spectrum for wireless broadband networks and services, it shall publish its draft final measure and communicate it to the Commission, the RSPB, the BEREC and to the competent authorities of other Member States, at the same time, stating the reasons for the measure and explaining how the measure:
 - (a) promotes the development of the internal market, the cross-border provision of services, as well as competition, and maximises the benefits for the consumer, and overall achieves the objectives set in Articles 3 and 13 of this Regulation, as well as in Decision No 676/2002/EC;
 - (b) ensures effective and efficient use of radio spectrum;
 - (c) ensures stable and predictable investment conditions for existing and prospective radio spectrum users when deploying networks for the provision of electronic communications services which rely on radio spectrum.

Where applicable, the competent authority shall also explain the reasons for proposing:

- (d) any market shaping measure under Article 32(2), and include the outcome of the analysis carried out;
- (e) a limited duration of right of use in accordance with Article 24(2).
2. Competent authorities, the RSPB, the BEREC and the Commission may comment the draft measure, within a period of 30 working days, which shall not be extended.
3. The draft final measure referred to in paragraph 1 shall not be adopted for a further 60 working days where the Commission has notified to the relevant national authority that it has reservations on the opportunity or proportionality of the draft market shaping measures and/or the extent of the duration. That 60 working days period shall not be extended. The Commission shall inform BEREC and national regulatory authorities of its reservations in such a case and simultaneously make them public.
4. Within 30 working days from the notification of Commission's reservations, the RSPB and the BEREC shall issue their opinions on the Commission's notification indicating

whether they consider that the draft measure should be maintained, amended or withdrawn and, where appropriate, provide specific proposals to that end. That opinion shall provide reasons and be made public.

5. If in its opinion the RSPG or the BEREC shares partially or fully the reservation or serious doubts of the Commission, they shall cooperate closely with the national regulatory authority concerned and the Commission to identify the most appropriate and effective measure.
6. Within 60 working days from the notification of its reservations, the Commission may take a decision:
 - (a) requiring the notifying competent authority to amend or withdraw the draft measure; or
 - (b) lifting its reservations or serious doubts referred to in this paragraph.

The Commission shall take utmost account of the opinions of the RSPB and the BEREC before taking a decision under this paragraph.

The Commission decision referred to in point (a) shall be accompanied by a detailed and objective analysis of the reasons why the draft market shaping measure and/or the limited duration should not be adopted or explaining how they should be amended.

7. Where the Commission has adopted a decision requiring the notifying authority to withdraw the draft measure, the authority concerned shall not adopt such a measure. After having undertaken a public consultation, in accordance with Article 186, the competent authority shall notify within six months of the date of the Commission's decision a new draft measure to the RSPB, the BEREC and the Commission.
8. Except in the cases covered by paragraph 3 and the Commission's decision requesting withdrawal, the competent authority concerned shall take the utmost account of comments of other competent authorities, of the RSPB, the BEREC and of the Commission and may adopt the resulting measure and shall, where it does so, communicate it to the Commission. The competent authority shall communicate to the Commission and to RSPB and BEREC all adopted final measures which fall under paragraph 3.
9. The ODN shall keep record of the Union Spectrum Single Market proceedings under this Article.

Article 32

[Ex Art. 52]

Competition

1. Rights of use for radio spectrum for electronic communications networks and services shall be granted, amended or renewed in such a way as to promote effective competition and avoid distortions of competition in the internal market in accordance with this Regulation.
2. Where competent authorities responsible for spectrum management grant, amend or renew rights of use for radio spectrum in relation to harmonised radio spectrum for wireless broadband networks and services, they shall refer to the national regulatory authority the decision on any measure that could affect competition, such as:

- (a) limiting the amount of radio spectrum bands for which rights of use are granted to any undertaking, or, in justified circumstances, attaching conditions to such rights of use, such as the provision of wholesale access, national or regional roaming, in certain bands or in certain groups of bands with similar characteristics;
- (b) reserving, where appropriate and justified with regard to a specific situation in the national market, a certain part of a radio spectrum band or group of bands for assignment to new entrants;
- (c) refusing to grant new rights of use for radio spectrum or to allow new radio spectrum uses in certain bands, or attaching conditions to the grant of new rights of use for radio spectrum or to the authorisation of new uses of radio spectrum, in order to avoid the distortion of competition by any assignment, transfer or accumulation of rights of use;
- (d) including conditions prohibiting, or imposing conditions on, transfers of rights of use for radio spectrum, not subject to Union or national merger control, where such transfers are likely to result in significant harm to competition;
- (e) amending the existing rights in accordance with this Regulation where this is necessary to remedy *ex post* a distortion of competition by any transfer or accumulation of rights of use for radio spectrum.

National regulatory authorities shall only propose such measures on the basis of a market analysis carried out in accordance with Article 73(2), and in particular a forward-looking assessment of the market competitive conditions and an assessment of the likely effects of such measures on competition as well as on existing and future investments.

3. In selecting the appropriate measures under paragraph 2, national regulatory authorities shall respect proportionality and impose the least intrusive measure capable of ensuring competition at retail level:
 - (a) Before imposing measures affecting the structure of the market, national regulatory authorities should assess the number of infrastructures that can be economically sustained in the market with reference to the characteristics of the spectrum awarded and associated investment requirements needed to achieve the quality of service targeted.
 - (b) Before imposing any wholesale access obligation, national regulatory authorities shall review the relevant markets, on a forward-looking basis, taking into account not only listed prices for mass market consumer products, but also other elements such as targeted rebates, as well as investments and quality of service, whether retail markets would be effectively competitive in the absence of wholesale intervention.

By [1 year from entry into force], the Commission shall, taking into account BEREC opinion to develop guidelines for the consistent application of this paragraph.

4. The proposed measures under paragraph 2 shall constitute a part of a draft measure submitted by a competent authority to procedure under Article 31.
5. When applying paragraph 2 of this Article, national regulatory and other competent authorities shall comply with the procedures set out in Articles 186, 197, and 198.

SECTION 7: ACCESS TO NETWORKS

Article 33

[Ex Art. 56]

Access to radio local area networks

1. Every user shall have the right to provide access through RLANs to a public electronic communications network and allow use of the harmonised radio spectrum for that provision, subject only to applicable general authorisation conditions relating to radio spectrum use as referred to in Article 20(2).
2. Where that provision is not part of an economic activity or is ancillary to an economic activity or a public service which is not dependent on the conveyance of signals on those networks, any undertaking, public authority or end-user providing such access shall not be subject to any general authorisation for the provision of electronic communications networks or services pursuant to Article 10, to obligations regarding end-users rights pursuant to Title III of Part VI, or to obligations to interconnect their networks pursuant to Article 65(1).
3. Article 12 of Directive 2000/31/EC shall apply.
4. Providers of public electronic communications networks or publicly available electronic communications services have the right to allow access to their networks to other providers of such networks and services or to the public, through RLANs, subject to compliance with the applicable general authorisation conditions and the prior informed agreement of the end-user, where the RLAN is located at the end-user's premises.
5. In accordance with Article 95 of this Regulation, providers of public electronic communications networks or publicly available electronic communications services shall not unilaterally restrict or prevent end-users from:
 - (a) accessing RLANs of their choice provided by third parties;
 - (b) allowing reciprocally or, more generally, accessing the networks of such providers by other end-users through RLANs, including on the basis of third-party initiatives which aggregate and make publicly accessible the RLANs of different end-users.
6. End-users may allow access, reciprocally or otherwise, to their RLANs by other end-users, including on the basis of third-party initiatives which aggregate and make the RLANs of different end-users publicly accessible.
7. No undue restriction shall be applied to the provision of access to RLANs to the public:
 - (c) by public sector bodies or in public spaces close to premises occupied by such public sector bodies, where that provision is ancillary to the public services provided on those premises;
 - (d) by initiatives of non-governmental organisations or public sector bodies to aggregate and make reciprocally or more generally accessible the RLANs of different end-users, including, where applicable, the RLANs to which public access is provided in accordance with point (a).

Article 34

[Ex Art. 57]

Deployment and operation of small-area wireless access points

1. The deployment of small-area wireless access points shall not be unduly restricted and be subject to nationally consistent rules. Such rules shall be published in advance of their application.

2. In particular, the deployment of small-area wireless access points complying with the characteristics laid down pursuant to paragraph 2 shall be exempted from any individual town planning permit or other individual prior permits.
3. By way of derogation from the second subparagraph of this paragraph, the deployment of small-area wireless access points on buildings or sites of architectural, historical or natural value protected in accordance with national law or where necessary for public safety reasons may be subject to a permit. Article 7 and following of Regulation 2024/1309 shall apply to the granting of those permits.
4. The Commission shall, by means of implementing acts, specify the physical and technical characteristics, such as maximum size, weight, and where appropriate emission power of small-area wireless access points.
5. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 202(4).
6. Those implementing acts shall be kept under review to adapt to technological progress as well as to the needs of network deployments.
7. This Article is without prejudice to the essential requirements laid down in Directive 2014/53/EU and to the authorisation regime applicable for the use of the relevant radio spectrum.
8. Subject, where relevant, to Regulation 2024/1309, operators shall have the right to access any physical infrastructure controlled by national, regional or local public authorities which is technically suitable to host small-area wireless access points or which is necessary to connect such access points to a backbone network, including street furniture, such as light poles, street signs, traffic lights, billboards, bus and tramway stops and metro stations. All reasonable requests for access shall be granted on fair, reasonable, transparent and non-discriminatory terms and conditions, which shall be made public at a single information point.
9. Without prejudice to any commercial agreements, the deployment of small-area wireless access points shall not be subject to any fees or charges going beyond the administrative charges in accordance with Article 12.

Art. 35

[Ex Art. 58]

Technical regulations on electromagnetic fields

The procedures laid down in Directive (EU) 2015/1535 shall apply with respect to any draft measure by competent authorities that would impose on the deployment of small-area wireless access points different requirements with respect to electromagnetic fields than those referred to in Recommendation 1999/519/EC or successive recommendations replacing it.

4.2. TITLE II: USE OF SPECTRUM BY SATELLITE

Article 36

[new]

International context and single market

1. The Commission shall manage the use of spectrum for satellite in line with the Union's international obligations and commitments, including the decisions adopted by the Council pursuant to Article 218 TFEU, in a manner that fully reflects its international dimension and strategic importance for the Union and the Member States, and in support of the objectives to develop a single market for electronic communications.
2. Holders of rights of use of radio spectrum for the provision of satellite networks and satellite communications services shall use their rights in a way that does not contradict the achievement of Union's policies, such as, global, secure and resilient connectivity, access to emergency communications services and development of scientific research.

Article 37

[new]

Filing and coordination of satellite systems with ITU

1. At the request of a prospective user of radio spectrum, a competent spectrum authority shall inform the Commission and other competent authorities within the RSPB about any request to file, coordinate or register with the International Telecommunication Union (ITU) a satellite system that is intended to cover more than one Member State or ground station and, where applicable, its complementary ground and airborne components. The competent authority concerned shall indicate whether it requires support from other competent authorities and the Union to carry out the ITU coordination in order to defend and promote the interest and policies of the Member States and of the Union. Member States and the Commission may comment on the request. While avoiding unnecessary delays in the filing process, the Member State concerned shall ensure that such comments are duly considered.
2. Upon receiving a request to coordinate under ITU rules frequencies or an orbital position for a satellite system or a ground station and, where applicable, its complementary ground and airborne components, under ITU rules, the competent authority concerned shall immediately inform the Commission and the other competent authorities through the RSPB, in order to coordinate their response to such requests.
3. Where two or more competent authorities receive requests concerning the same frequency band or the same orbital position, the RSPB shall coordinate a Union position for a timely and consistent Union response to the ITU.

Article 38

[new]

Union level general authorisation for the provision of satellite networks and satellite communications services

1. The Union authorisation pursuant to Article 39 shall include a general authorisation for provision of satellite networks and/or satellite communication services as established under this Article.
2. By exception to Article 9, the provision of satellite networks, including satellite ground stations and, where applicable, complementary ground and airborne components and of satellite communications services in the Union or in several Member States shall only be subject to the conditions defined in accordance with paragraph 3, if at all.

3. Providers shall submit a notification to the Commission and shall not need to obtain any explicit decision or authorisation or any other administrative act from other competent authorities.
4. The Commission, taking into account the RSPB opinion, may, by means of implementing acts, specify the conditions attached to the general authorisation for the provision of satellite networks and/or satellite communication services, also taking into account the conditions specified in Article 9(2).
5. These conditions shall include but not be limited to:
 - (a) payment of administrative charges in accordance with Article 12;
 - (b) maintenance of integrity, security and resilience of the satellite networks and satellite communications services;
 - (c) maintenance of permanent control over the transmission of all radio stations, including ground stations, and, where applicable, their complementary ground and airborne components, using the spectrum authorised under the Union authorisation, even in the case they are owned, installed or operated by third parties or not located inside the Union.

Those implementing acts shall be adopted in accordance with the procedure referred to in Article 202(4).

6. The Union general authorisation shall confer to the undertakings the minimum rights derived from the general authorisation provided for in Article 9 in all Member States.
7. Article 12, 197 and 198 shall apply mutatis mutandis.

Article 39

[new]

Union authorisation for the use of satellite spectrum

1. The use of radio spectrum for the provision of satellite services in the Union or in more than one Member State shall be subject to a Union authorisation, granted by the Commission.
2. The Commission, after opinion of the RSPB, shall adopt an implementing act establishing the European Table of Allocation of Satellite Frequencies. It shall, on the basis of Article 17, harmonise radio spectrum available for satellite services pursuant to Decision No 676/2002/EC and authorise the use of radio spectrum harmonised for satellite services. The Commission may decide that access to certain satellite spectrum bands shall be possible under general authorisation. In such a case, it shall establish the authorisation conditions for the use of radio spectrum in those bands, including any applicable fees.
3. Where the Commission considers on its own initiative or upon request from a competent authority or an applicant to limit the number of Union authorisations in a given radio spectrum band due to the scarcity of the spectrum, or the provision of secure governmental communications services, or other reasons of general interest, it shall give interested parties the opportunity to express their views in a public consultation in accordance with Article 186.
4. Any undertaking requesting a Union authorisation shall be subject to the following conditions:

- (a) be established in the Union;
- (b) be compliant with the ITU Radio Regulations by ensuring:
 - i. application of the relevant Radio Regulations coordination and notification procedures including the ITU Master International Frequency Register (MIFR) entry respecting the ITU status and dates of protection and carried out in good faith;
 - ii. compliance with relevant international coordination agreements;
 - iii. that no harmful interference is created to other satellite networks or systems nor to any stations operated in accordance with the ITU Radio Regulations;
 - iv. operation on a non-interference non-protection basis where the filing has not yet been notified and recorded in the MIFR or is operated under Radio Regulation No.4.4;
- (c) to coordinate with any satellite system whenever this was submitted for authorisation in the Union in the future;
- (d) to use radio spectrum for the provision of satellite services in accordance with ITU Radio Regulations, including avoidance of harmful interference, and, where applicable, in accordance with any technical harmonisation act adopted pursuant to Decision No 626/2002/EC;
- (e) in the case of ITU filing done by third country, to demonstrate that the jurisdiction of that country provides for effective resolution of interferences and implements tools for immediate accountability in case of unlawful use;
- (f) conditions specific to an experimental use of radio spectrum satellite bands;
- (g) payment of spectrum fees;
- (h) any additional conditions necessary for the protection of EU policies.

Additional conditions referred to the first subparagraph, point (h), will be objective, transparent, proportionate and non-discriminatory. Before applying them, the Commission shall take into account the opinion of the RSPB and views expressed in the public consultation in accordance with Article 186.

- 5. Within one year from the entry into force of this Regulation, the Commission shall, based on existing national authorisation requirements and taking into account the RSPB opinion, adopt an implementing act setting the modalities for the calculation of annual spectrum fees, their collection and distribution, as well as on any additional authorisation conditions to those in paragraph
- 6. Within a period of three years from the entry into force of this Regulation, the current national authorisations for the use of spectrum will be replaced by EU authorisations.
- 7. The implementing acts referred to in paragraphs 2, 4 and 5 of this Article shall be adopted in accordance with the procedure referred to in Article 202(4).

Article 40

[new]

Procedure for granting a Union authorisation

1. Any undertaking shall submit an application for a Union authorisation to use radio spectrum for the provision of satellite communications services and of satellite networks to the Commission. The Commission shall publish such applications upon receipt.
2. In applying this Article, the Commission shall be assisted by a permanent RSPB working group on satellite authorisation. This group shall be composed of representatives of Member States with expertise in satellite communications.
3. The application shall specify spectrum needs and contain information necessary for identification of the undertaking, a short description of the satellite service and information necessary to verifying compliance of conditions from Article 39.
4. Subject to paragraph 4, the Commission shall examine the request with the assistance of the RSPB working group on satellite authorisation and ODN. Taking account of the RSPB opinion, the Commission shall adopt an implementing act and grant the Union authorisation where the applicant complies with conditions set out in Article 39.
5. The RSPB shall submit an opinion to the Commission within 10 working days from the receipt of the request.
6. Where necessary, the RSPB may postpone the submission of the opinion referred to in the second subparagraph of this paragraph and ask the Commission to take appropriate measures in order to harmonise the technical conditions for the use of the spectrum pursuant to Decision No 626/2002/EC or other conditions of the Union authorisations.
7. That implementing acts shall be adopted in accordance with the procedure referred to in Article 202(4).
8. Where the Commission decides to select rights holders in a selection procedure, it shall carry out such a procedure in accordance with Annex XII.
9. Unless a specific procedure is provided in Union law, the Commission shall determine the most appropriate type of selection procedure, taking into account the opinion of the RSPB.
10. The Commission shall, by means of implementing acts, lay down details and timelines applicable to the procedure under this Article. Those implementing acts shall be adopted in accordance with the procedure referred to in Article 202(3).

Article 41

[new]

Effect of the Union authorisation

1. By derogation to Article 10, the Union authorisation shall confer to its holder the right to provide satellite networks and/or satellite communications services and the right to use radio spectrum throughout the Union or to the specific Member States defined in the authorisation. No national authorisation shall be required for the provision of satellite networks or satellite services or for the use of radio spectrum for the provision thereof in any Member State.
2. The Union authorisation shall confer the same rights and obligations in each Member State in a similar way as an authorisation granted by that Member State for the provision of satellite communications services and/or satellite networks and for the use of terrestrial spectrum.

3. The Union authorisation shall not relieve its holder from coordination obligations, including spectrum sharing obligations, with respect to existing or future satellite networks or satellite communications services.
4. The holder of the Union authorisation shall:
 - where applicable, honour any commitments they gave in their application or during the selection procedure, irrespective of whether the combined demand for radio spectrum exceeds the amount available;
 - respect Union's policies such as global, secure and resilient connectivity, access to emergency communications services as well as scientific research;
 - provide to the Commission an annual report detailing the status of development of their satellite network and/or satellite communications service.

Article 42

[new]

Duration and renewal of the Union authorisation

1. The duration of the Union authorisation shall be determined by the Commission. Article 24 shall apply mutatis mutandis.
2. Without prejudice to Article 24(3), where justified, the Commission may shorten the duration in the following cases:
 - (a) for specific short-term projects;
 - (b) for experimental use in orbit by imposing specific obligations;
 - (c) in order to comply with international law obligations applicable to the Member States.
3. The Union authorisation can be renewed by the Commission, taking into account any opinion of the RSPB. Article 25 shall apply mutatis mutandis.

Article 43

[new]

Supervision and Remedies

1. The Commission and competent authorities collaborating within COCOM and the RSPB, shall monitor the compliance of the satellite networks and satellite communications services operating under a Union authorisation with the conditions of Articles 38 and 39, as well as Union law and applicable ITU Radio Regulations and shall take appropriate measures to address any non-compliance.
2. Taking into account the opinion of the RSPB, the Commission shall, by means of implementing acts, adopt the detailed arrangements for the coordinated monitoring and enforcement of Union authorisations, including conditions for the coordinated suspension or withdrawal of authorisations. Those implementing acts shall be adopted in accordance with the procedure referred to in Article 202(3).
3. The Commission shall examine any alleged specific breach of a condition attached to an Union authorisation or of any provision of this Chapter. The RSPB shall assist the Commission in the examination thereof.

4. Where a competent authority is of the opinion that a Union authorisation holder fails to comply with any authorisation condition or with any provision of this Chapter, it shall bring the matter to the attention of the Commission and of the RSPB
5. Where the Commission finds that a holder of a Union authorisation does not comply with any condition under Article 38 or 39 it shall inform that operator of its findings.
6. In case of breach of any authorisation condition or provision of this Chapter, the Commission shall, by means of implementing acts, and taking account of the RSPB opinion, adopt appropriate and proportionate corrective measures, including:
 - (a) the suspension or the withdrawal of the Union authorisation;
 - (b) measures allowed by the ITU Radio Regulations including Article 22 thereof;
 - (c) the prohibition of the use of the spectrum for ground stations and, where applicable, its complementary ground and airborne components in the Union, without prejudice to civil and criminal sanctions under national law.
7. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 202(4).
8. The Commission may also impose fines or periodic penalties on the holder of an Union authorisation, which shall not exceed 5 % of its total worldwide turnover in the preceding financial year.
9. The Commission shall inform the Member States of its enforcement actions under this Article.
10. Notwithstanding with paragraphs 1 and 2, in the cases of non-payment of spectrum sees, procedure in accordance with Article 199 shall apply mutatis mutandis.

Article 44

[new]

Resolution of satellite interferences

1. Any measure decided by the Commission shall be enforced by the competent authorities to its full extent and within the deadline set by the Commission, where necessary with appropriate sanctions allowed by national law. Exceptionally, a competent authority may decide to defer the application of such coordinated measure on its national territory for a renewable period of up to 6 months where that measure is likely to seriously disrupt connectivity on its territory. It shall inform the Commission in advance and shall limit the duration of such exception as much as possible, where applicable by incentivising end-users to switch to alternative satellite networks or services.
2. Any measure justified by the need to avoid or mitigate harmful interference shall stand pending the outcome of any judicial or other appeal against the Commission decision or against a national enforcement measure unless interim measures are granted that are appropriate to sufficiently mitigate or eliminate such interference pursuant to the following paragraph.
3. Where urgent action is necessary to avoid harmful interference on its territory, a competent authority may, on its own initiative, or at the Commission's request, take appropriate interim measures including the suspension of the application of the Union authorisation on its territory. When it does so on its initiative, the Member State shall

inform the Commission and the RSPB of the reasons of its action within 5 working days. The Commission shall inform RSPB and the other competent authorities. The Commission shall immediately start the procedure provided for in paragraph 2.

Article 45

[new]

Coordination between satellite and terrestrial use of spectrum

1. Shared use of spectrum between terrestrial and satellite systems shall only be possible with the agreement and under the responsibility of the primary holder of the terrestrial right of use, and should ensure efficient use of spectrum, prevent harmful interference to terrestrial wireless systems providing electronic communications services, and adequately protect these and other relevant incumbent wireless services and applications, by safeguarding the unconstrained continuity of the current operation and the future evolution and development of all relevant radio services and applications currently using these bands and adjacent bands.
2. When confronted with a request for coordination of the use of spectrum between terrestrial and space applications under the ITU rules in relation to radio spectrum that has been harmonised pursuant to Decision No 676/2002/EC, the competent authority concerned shall communicate such request to the Commission for immediate transmission to the members of the Radio Spectrum Committee.
3. The Committee, acting upon a Commission's request pursuant to Article 202(4) shall adopt an opinion, suggesting the response to be given to the ITU coordination request, taking into account any specificities of the use of that spectrum in each Member State. The Commission may adopt an implementing decision on coordinated coexistence conditions in the Union on the basis of that opinion in accordance with the procedure referred to in Article 202(4).
4. Where necessary to ensure the coordinated protection of rights granted by Member States for the terrestrial use of radio spectrum that has been harmonised pursuant to Decision No 676/2002/EC or the coordinated granting of rights to use such spectrum to satellite operators on a shared basis with terrestrial operators, the Commission may, taking the utmost account of the opinion of the RSPB, adopt recommendations for the harmonised application of this Regulation and the coordinated sharing of the spectrum between terrestrial and satellite usages.

4.3. TITLE III: NUMBERING RESOURCES

Article 46

[NEW article]

Strategic planning and management of numbering resources

1. Member States and the Commission shall manage numbering resources in the internal market in a coordinated way as a common Union resource under shared competence with a view of fostering economic growth by enabling innovation and the consistent provision of number-based electronic communications services in the Union, protecting Union values and security, in pursuit of the objectives provided in Article 3 of this Regulation.

2. The Commission, assisted by the ODN, and national regulatory authorities shall cooperate in the strategic planning of numbering resources in the Union and the identification of the potential use of numbering resources for cross border or pan-European services.
3. The Commission shall, taking into account the opinion of BERIC and after giving opportunity to all interested parties to express their views, lay down a forward-looking Union numbering strategy concerning the consistent management of numbering resources in the Members States and at Union level.
4. On the basis of the Union numbering strategy referred to in paragraph 3 of this Article, the Commission, assisted by the ODN, shall establish the Union numbering plan providing for the numbering resources to be used in the Union by the corresponding cross border or pan-European services.

The Union Numbering Plan, modalities concerning the application for ITU numbering ranges for the Union numbering plan and the conditions that may be attached to the right of use of numbering resources from the Union numbering plan, including the fees for rights of use for such resources, may be adopted by the Commission by way of implementing acts.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 202(4).

Article 47

[NEW, + Ex Art. 94 para 6]

Pan-European numbering resources

1. In order to ensure the availability of numbering resources for cross-border or pan-European services, in accordance with the Union numbering plan, the Commission may take measures to harmonise specific numbers or numbering ranges or apply for numbering ranges to the ITU, if appropriate by way of implementing acts pursuant to Article 46(4).
2. Member States shall support the harmonisation of specific numbers or numbering ranges within the Union and the application for pan-European numbering resources to the ITU where it promotes a single market for electronic communications or the development of pan-European services.
3. National regulatory authorities shall manage, in cooperation with the ODN, the allocation of numbers or number ranges from the pan-European numbering resources and shall enforce the conditions attached to the individual rights of use from the pan-European numbering resources.
4. The ODN shall establish and keep up to date a database of the pan-European numbering resources on the basis of the information provided in a timely manner by national regulatory authorities on the allocation of numbers and beneficiaries of the numbers.

Six months after the adoption of the Union numbering plan, the ODN shall set up the procedure and system for provision of information under this paragraph and under Article 48(4), fourth subparagraph.

Article 48

[Ex Art. 93]

National numbering resources

1. National regulatory authorities shall control the granting of rights of use for all national numbering resources and the management of the national numbering plans and shall provide adequate numbering resources for the provision of publicly available electronic communications services. National regulatory authorities shall establish objective, transparent and non-discriminatory procedures for granting rights of use for national numbering resources.
2. Upon request, national regulatory authorities shall also grant rights of use for numbering resources from the national numbering plans for the provision of specific services to undertakings other than providers of electronic communications networks or services, provided that adequate numbering resources are made available to satisfy current and foreseeable future demand. Those undertakings shall demonstrate their ability to manage the numbering resources and to comply with any relevant requirements set out pursuant to Article 49. National regulatory or other competent authorities may suspend the further granting of rights of use for numbering resources to such undertakings if it is demonstrated that there is a risk of exhaustion of numbering resources.

In order to contribute to the consistent application of this paragraph, BEREC shall maintain the guidelines on common criteria for the assessment of the ability to manage numbering resources and of the risk of exhaustion of numbering resources and update them as necessary, after consulting stakeholders and in close cooperation with the Commission.

3. National regulatory authorities shall apply the national numbering plans and procedures in a manner that gives equal treatment to all providers of publicly available electronic communications services and the undertakings eligible in accordance with paragraph 2. Undertakings to which the right of use for numbering resources has been granted shall not discriminate against other providers of electronic communications services as regards the numbering resources used to give access to their services.
4. National regulatory authorities shall make available a range of non-geographic numbers which may be used for the provision of electronic communications services other than interpersonal communications services, throughout the territory of the Union, without prejudice to Regulation (EU) 2022/612 and Article 52(2) of this Regulation. Where rights of use for numbering resources have been granted in accordance with paragraph 2 of this Article to undertakings other than providers of electronic communications networks or services, this paragraph shall apply to the specific services for the provision of which the rights of use have been granted.

National regulatory authorities shall ensure that the conditions listed in Article 50 that may be attached to the rights of use for numbering resources used for the provision of services outside the Member State of the country code, and their enforcement, are as stringent as the conditions and enforcement applicable to services provided within the Member State of the country code, in accordance with this Regulation. National regulatory or other competent authorities shall also ensure in accordance with Article 49(6) that providers using numbering resources of their country code in other Member States comply with consumer protection and other national rules related to the use of numbering resources applicable in those Member States where the numbering resources are used. This obligation is without prejudice to the enforcement powers of the competent authorities of those Member States.

The ODN, under the supervision of BEREC, shall assist national regulatory authorities, at their request, in coordinating their activities to ensure the efficient management of numbering resources with a right of extraterritorial use within the Union.

In order to facilitate the monitoring by the national regulatory authorities of compliance with the requirements of this paragraph, under the supervision of BEREC, the ODN shall maintain a database on the numbering resources with a right of extraterritorial use within the Union. For this purpose, national regulatory or other competent authorities shall transmit periodically the relevant information to the ODN.

5. National regulatory authorities shall publish the national numbering plans, as well as all subsequent additions or amendments thereto, subject only to limitations imposed on the grounds of national security.
6. Every two years BEREC shall present a report on the national practices regarding the granting of rights of use for national and pan-European numbering resources focusing on diverging practices within the Union. The first such report shall be presented by [dd/mm/yyyy].

Article 49

[Ex Art. 94]

Procedure for granting of rights of use for numbering resources

1. Where it is necessary to grant individual rights of use for numbering resources, national regulatory authorities shall grant such rights, upon request, to any undertaking for the provision of electronic communications networks or services covered by a general authorisation referred to in Article 9 and in Article 183(3) point (c), and to any other rules ensuring the efficient use of those numbering resources in accordance with this Regulation.
2. The rights of use for numbering resources shall be granted through open, objective, transparent, non-discriminatory and proportionate procedures.

When granting rights of use for numbering resources, national regulatory authorities shall specify whether those rights can be transferred by the holder of the rights, and under which conditions.

Where national regulatory authorities grant rights of use for numbering resources for a limited period, the duration of that period shall be appropriate for the service concerned with a view to the objective pursued, taking due account of the need to allow for an appropriate period for investment amortisation.

3. National regulatory authorities shall take decisions on the granting of rights of use for numbering resources as soon as possible after receipt of the complete application and within three weeks in the case of numbering resources that have been allocated for specific purposes within the national numbering plan. Such decisions shall be made public.
4. Where national regulatory authorities have determined, after consulting interested parties in accordance with Article 186, that rights of use for numbering resources of exceptional economic value are to be granted through competitive or comparative selection procedures, national regulatory authorities may extend the three-week period referred to in paragraph 3 of this Article by up to three weeks.

5. National regulatory authorities shall not limit the number of individual rights of use to be granted, except where this is necessary to ensure the efficient use of numbering resources.
6. Where the rights of use for numbering resources include their extraterritorial use within the Union in accordance with Article 48(4), national regulatory authorities shall attach to those rights of use specific conditions in order to ensure compliance with all the relevant national consumer protection rules and national law related to the use of numbering resources applicable in the Member States where the numbering resources are used.

Upon request from a national regulatory authority of a Member State where the numbering resources are used, demonstrating a breach of relevant consumer protection rules or national laws related to the use of numbering resources of that Member State, the national regulatory authorities of the Member State where the rights of use for the numbering resources have been granted shall enforce the conditions attached under the first subparagraph of this paragraph in accordance with Article 199, including, in serious cases, by withdrawing the rights of extraterritorial use for the numbering resources granted to the undertaking concerned.

The ODN, under the supervision of BEREC, shall facilitate and coordinate the exchange of information between the national regulatory authorities of the different Member States involved and ensure the appropriate coordination of work among them.

7. This Article shall also apply where national regulatory authorities grant rights of use for numbering resources to undertakings other than providers of electronic communications networks or services in accordance with Article 48(2).

Article 50

(Ex Annex 1 Part E)

Conditions which may be attached to rights of use for numbering resources

Where national regulatory authorities attach conditions to the right of use of numbering resources, such conditions shall be limited to the following:

1. designation of service for which the number shall be used, including any requirements linked to the provision of that service and, for the avoidance of doubt, tariff principles and maximum prices that can apply in the specific number range for the purposes of ensuring consumer protection in accordance with Article 3(1), point (f);
2. effective and efficient use of numbering resources in accordance with this Regulation;
3. number portability requirements in accordance with this Regulation;
4. maximum duration in accordance with Article 49, subject to any changes in the national numbering plan;
5. transfer of rights at the initiative of the holder of the rights and conditions for such transfer in accordance with this Regulation, including any condition that the right of use for a number be binding on all the undertakings to which the rights are transferred;
6. fees for rights of use in accordance with Article 51;
7. any commitments which the undertaking obtaining the rights of use has made in the course of a competitive or comparative selection procedure;
8. obligations under relevant international agreements relating to the use of numbers;

9. obligations concerning the extraterritorial use of numbers within the Union to ensure compliance with consumer protection and other number-related rules in Member States other than that of the country code;
10. enabling access by end-users of numbers from the national numbering plan, Universal International Freephone Numbers, numbering plans of other Member States and numbers from the pan-European numbering resources.

Article 51

[Ex Art. 95]

Fees for rights of use for numbering resources

National regulatory authorities may impose fees for the rights of use for numbering resources which reflect the need to ensure the optimal use of those resources. Such fees shall be objectively justified, transparent, non-discriminatory and proportionate in relation to their intended purpose and shall take into account the general objectives set out in Article 3 of this Regulation.

Article 52

[Ex Art. 97]

Access to numbers and services

1. Where economically feasible, except where a receiving party has chosen for commercial reasons to limit access by originating parties located in specific geographical areas, providers of number based electronic communications services shall take all necessary steps to ensure that the originating parties are able to access all of the following:
 - (a) non-geographic numbers and services using such numbers within the Union;
 - (b) all numbers provided in the Union, regardless of the technology and devices used by the operator, including those in the national numbering plans of Member States and Universal International Freephone Numbers (UIFN);
 - (c) the numbers from the pan-European numbering resources.
 2. National regulatory authorities shall have the power to require providers of public electronic communications networks or publicly available electronic communications services to adopt preventive measures by blocking access to numbers or services where this is justified by reasons of fraud or misuse and to require that in such cases providers of electronic communications services withhold relevant interconnection or other service revenues.
- 5. PART V – TRANSITION TO FIBRE, MARKETS FUNCTIONING AND COMPETITION**
- 5.1. TITLE I: TRANSITION TO FIBRE NETWORKS**

Article 53

[New]

Scope of application

This Title shall apply in Member States where copper networks remain in service beyond [30 June 2029].

Article 54

[New]

Copper switch-off areas

1. The copper switch-off shall be organised in copper switch-off areas (CSO areas) covering all geographic areas where copper networks are in service.
2. National regulatory authorities shall delimit CSO areas, taking utmost account of the criteria set out in Commission guidance to be adopted by [29 February 2028].
3. By [31 May 2028], national regulatory authorities shall publish the list of CSO areas.
4. National regulatory authorities shall review and, where appropriate, update the list of CSO areas to support a timely and orderly copper switch-off. Any updated list shall be published without undue delay.

Article 55

[New]

National transition to fibre plan

1. By [31 October 2029], each Member State shall prepare a transition to fibre plan and notify it to the Commission.
2. The transition to fibre plan shall set out the Member State's strategy for the nationwide transition to fibre networks, in particular for the migration from copper to FTTH networks. It shall contain:
 - (a) information on the coverage of copper and fibre networks;
 - (b) measures in place or planned to foster fibre deployment and the transition to FTTH networks;
 - (c) a list of CSO areas indicating, for each area, whether the sustainability conditions set out in Article 56(1) are met, together with the corresponding migration milestones and, where relevant, enabling measures
3. By [30 June 2034], Member States shall update their transition to fibre plan and notify the updated plan to the Commission.
4. The updated transition to fibre plan shall report progress on the implementation of the initial plan. In particular, it shall contain:
 - (a) information on the status of the copper switch-off in each CSO area;
 - (b) a list of CSO areas where fibre deployment is economically viable but will only be completed after [31 December 2035], together with information on the availability of adequate connectivity solutions capable of replacing copper-based services;
 - (c) a list of CSO areas where fibre deployment is not economically viable.
5. The Commission may comment on the initial and the updated transition to fibre plan within [one month]. Member States shall take the utmost account of those comments.

Article 56

[New]

Sustainability conditions

1. For the purposes of this Chapter, the sustainability conditions shall consist of the following requirements:
 - (a) fibre networks pass in close proximity to at least 95 % of homes in the CSO area, and those homes can be connected with reasonable effort and at a reasonable cost;
 - (b) affordable retail connectivity services of comparable quality are available to end-users relying on copper-based services.
2. National regulatory authorities shall specify, in accordance with national circumstances, objective and transparent parameters and criteria for assessing close proximity, reasonable effort and reasonable cost, and affordability.

Article 57

[New]

Assessment of sustainability conditions

1. National regulatory authorities shall assess, for each CSO area, whether the sustainability conditions set out in Article 56(1) are met.
2. For the assessment referred to in paragraph 1, national regulatory authorities shall, in particular, take into account data collected pursuant to Article 182.
3. By [30 June 2029], national regulatory authorities shall publish a list of CSO areas where the sustainability conditions are met. Thereafter, for a period of [five years], national regulatory authorities shall publish, at least every [12 months], a list of CSO areas that subsequently meet those conditions.

Article 58

[New]

Mandating the copper switch-off

1. Until [31 December 2035], Member States shall mandate the copper switch-off in CSO areas where the sustainability conditions set out in Article 56(1) are met.
2. By [31 December 2035], Member States shall mandate the copper switch-off in all CSO areas.
3. By way of exception to paragraph 2, in CSO areas where fibre deployment is not economically viable and no adequate connectivity solution capable of replacing copper-based services is available, Member States may decide not to mandate the copper switch-off.
4. For the purposes of paragraphs 1 and 2, Member States shall mandate the copper switch-off by adopting a binding legal act. Each such legal act shall set a start date no later than [one year] after its adoption and shall require that the copper switch-off be completed within [three years] from that start date. For mandates pursuant to paragraph 1, the legal act shall be adopted within [six months] of the publication of a list referred to in Article 57(3).

Article 59

[New]

Safeguards

1. Member States shall ensure that end-users affected by the copper switch-off are informed clearly, in a timely and accessible manner, in particular of:
 - (a) the expected timing of the copper switch-off;
 - (b) any necessary changes to their connectivity service or terminal equipment;
 - (c) the alternative connectivity services available to them.
2. Member States shall ensure the continuity of electronic communications services supporting critical copper-based services. Operators shall take the necessary technical and commercial measures to ensure the continued operation of such services or their migration to functionally equivalent alternatives.
3. In light of national conditions, Member States shall adopt safeguards for consumers referred to in Article 89.
4. National regulatory authorities shall assess the need for safeguards to protect end-users relying on copper-based services, including measures related to switching processes and affordability of alternative connectivity services, and shall advise Member States accordingly.
5. Prior to the adoption of a binding legal act mandating the copper switch-off pursuant to Article 58, and no later than [31 December 2035], Member States shall adopt appropriate safeguards.

Article 60

[New]

Copper switch-off plans by operators

1. Operators shall draw up a copper switch-off plan for the CSO areas where the copper switch-off is mandated. The plan shall include timelines, technical measures, communication activities and arrangements for the migration of access seekers and end-users.
2. Operators shall submit their copper switch-off plan or plans to the national regulatory authority within [six months] of the adoption of the binding legal act pursuant to Article 58.
3. The national regulatory authority shall assess the plan(s) within [two months] and shall either approve them or request amendments.
4. Operators shall implement the copper switch-off plan(s) as approved by the national regulatory authority, including any amendments requested. Operators shall report progress to the national regulatory authority at intervals determined by it.

Article 61

[New]

Supervision and enforcement

1. National regulatory authorities shall supervise the implementation of the copper switch-off in accordance with the approved copper switch-off plans.
2. In the event of failure to comply with the approved copper switch-off plan, national regulatory authorities shall impose penalties that are effective, proportionate and dissuasive. Penalties may include fines of up to [X%] of the operator's total worldwide annual turnover in the preceding financial year.

5.2. TITLE II: ACCESS TO LAND

Article 62

[part of ex Art. 42]

Fees for rights to install facilities

Competent authorities may impose fees for the rights to install facilities on, over or under public or private property that are used for the provision of electronic communications networks or services and associated facilities, provided that such fees are objectively justified, transparent, non-discriminatory and proportionate in relation to their intended purpose and take into account the general objectives of this Regulation.

Article 63

[Ex Art. 43]

Rights of way

1. Where a competent authority considers an application for the granting of any of the following rights, it shall apply paragraph 2:
 - (a) the right to install facilities on, over or under public or private property to an undertaking authorised to provide public electronic communications networks;
 - (b) the right to install facilities on, over or under public property to an undertaking authorised to provide electronic communications networks other than to the public.
2. For the purposes of paragraph 1, the competent authority shall:
 - (a) act on the basis of simple, efficient, transparent and publicly available procedures, applied without discrimination and without delay, and in any event make its decision within six months of the application, except in the case of expropriation;
 - (b) follow the principles of transparency and non-discrimination in attaching conditions to any such rights.

The procedures referred to in the first subparagraph, point (a), may differ depending on whether the applicant is providing public electronic communications networks or not.

3. Where public or local authorities retain ownership or control of undertakings providing public electronic communications networks or publicly available electronic communications services, there shall be an effective structural separation of the function responsible for granting the rights referred to in paragraph 1 from the activities associated with ownership or control.

Article 64

[Ex Art. 44]

Co-location and sharing of network elements and associated facilities for providers of electronic communications networks

1. Where an operator has exercised the right under national law to install facilities on, over or under public or private property, or has taken advantage of a procedure for the expropriation or use of property, competent authorities may impose co-location and sharing of the network elements and associated facilities installed on that basis, in order to foster environmental sustainability of electronic communications networks, to protect public health and public security or to meet town- and country-planning objectives.

Co-location or sharing of network elements and facilities installed and sharing of property may be imposed only after an appropriate period of public consultation, during which all interested parties shall be given an opportunity to express their views and only in the specific areas where such sharing is considered to be necessary with a view to pursuing the objectives provided in the first subparagraph. Competent authorities may impose the sharing of such facilities or property, including land, buildings, entries to buildings, building wiring, masts, antennae, towers and other supporting constructions, ducts, conduits, manholes, cabinets or measures facilitating the coordination of public works. Where necessary, a Member State may designate a national regulatory or other competent authority for one or more of the following tasks:

- (a) coordinating the process provided for in this Article;
 - (b) acting as a single information point;
 - (c) setting down rules for apportioning the costs of facility or property sharing and of civil works coordination, taking into account, among others, the relevant guidance issued by BEREC or the Commission in accordance with Regulation (EU) 2024/1309.
2. Measures taken by a competent authority in accordance with this Article shall be objective, transparent, non-discriminatory and proportionate. Where relevant, these measures shall be carried out in coordination with the national regulatory authorities.

5.3. TITLE III: INTERCONNECTION

5.3.1. CHAPTER I: General provisions and principles

Article 65

[Ex Art. 59]

General framework for access and interconnection

1. Undertakings in the same Member State or in different Member States shall have the right to negotiate between themselves agreements on technical and commercial arrangements for access or interconnection, in accordance with Union law. The undertaking requesting access or interconnection shall not need to be authorised to operate in the Member State where access or interconnection is requested, if it is not providing services and does not operate a network in that Member State.
2. Without prejudice to Article 115, undertakings, when granting access or interconnection, shall not be required to offer different terms and conditions to different undertakings for equivalent services or measures imposing obligations that are not related to the actual access and interconnection services provided without prejudice to the conditions set out in Article 9.

Article 66

[Ex Art. 60]

Rights and obligations of undertakings

1. Operators of public electronic communications networks shall have a right and, when requested by other undertakings so authorised in accordance with Article 9, an obligation to negotiate with each other interconnection for the purpose of providing publicly available electronic communications services, in order to ensure provision and interoperability of services throughout the Union. Operators shall offer access and interconnection to other undertakings on terms and conditions consistent with obligations imposed by the national regulatory authority pursuant to Articles 68, 67 and 77.
2. Without prejudice to Article 183, undertakings which acquire information from another undertaking before, during or after the process of negotiating access or interconnection arrangements shall use that information solely for the purpose for which it was supplied and respect at all times the confidentiality of information transmitted or stored. Such undertakings shall not pass on the received information to any other party, in particular other departments, subsidiaries or partners, for whom such information could provide a competitive advantage.
3. Negotiations shall be conducted through neutral intermediaries when conditions of competition so require.

Article 67

[Ex Art. 62]

Conditional access systems and other facilities

1. Member States shall ensure that the conditions laid down in Part I of Annex I apply in relation to conditional access to digital television and radio services broadcast to viewers and listeners in the Union, irrespective of the means of transmission. Upon a market analysis set out in paragraph 3 of this Article, Member States may apply conditions to other facilities referred to in Part II of Annex I.
2. Conditions applied in accordance with this Article shall be without prejudice to the ability of Member States to impose obligations in relation to the presentational aspect of EPGs and similar listing and navigation facilities.
3. Notwithstanding paragraph 1 of this Article, national regulatory authorities may review the conditions applied in accordance with this Article, by undertaking a market analysis in accordance with Article 76(1) to determine whether to maintain, amend or withdraw the conditions applied.

5.3.2. CHAPTER II: Symmetric rules for access

Article 68

[Ex Art. 61]

Powers and responsibilities of the national regulatory and other competent authorities with regard to access and interconnection

1. National regulatory authorities or, in the case of paragraph 2, first subparagraph, points (b) and (c), of this Article, national regulatory authorities or other competent

authorities shall, acting in pursuit of the objectives set out in Article 3, encourage and, where appropriate, ensure, in accordance with this Regulation, adequate access and interconnection, and as well as the interoperability of services, exercising their responsibility in a way that promotes efficiency, sustainable competition, the deployment of Gigabit networks, innovative services enablers, efficient investment and innovation, environmentally and economically sustainable delivery of electronic communications services, information society services and content and gives the maximum benefit to end-users.

They shall provide guidance and make publicly available the procedures applicable to gain access and interconnection to ensure that undertakings, including small and medium-sized enterprises and providers of electronic communications networks with a limited geographical reach can benefit from the obligations imposed.

2. In particular, without prejudice to measures that may be taken regarding undertakings designated as having significant market power in accordance with Article 77, national regulatory authorities or, in the case of points (b) and (c) of this subparagraph, national regulatory authorities or other competent authorities shall be able to impose:
 - (a) to the extent necessary to ensure end-to-end connectivity, obligations on undertakings subject to general authorisation that control access to end-users, including, in justified cases, the obligation to interconnect their networks where this is not already the case;
 - (b) in justified cases and to the extent necessary, obligations on undertakings subject to general authorisation that control access to end-users to make their services interoperable;
 - (c) in justified cases, where end-to-end connectivity between end-users is endangered due to a lack of interoperability between interpersonal communications services, and to the extent necessary to ensure end-to-end connectivity between end-users, obligations on relevant providers of number-independent interpersonal communications services which reach a significant level of coverage and user uptake, to make their services interoperable;
 - (d) to the extent necessary to ensure accessibility for end-users to digital radio and television broadcasting services and related complementary services specified by the Member State, obligations on operators to provide access to the other facilities referred to in Part II of Annex I on fair, reasonable and non-discriminatory terms.

The obligations referred to in the first subparagraph, point (c), shall be imposed only:

- (e) to the extent necessary to ensure interoperability of interpersonal communications services and may include proportionate obligations on providers of those services to publish and allow the use, modification and redistribution of relevant information by the authorities and other providers, or to use and implement standards or specifications listed in Article 189(1) or of any other relevant European or international standards;
- (f) where the Commission, after consulting BERIC and taking utmost account of its opinion, has found an appreciable threat to end-to-end connectivity between end-users throughout the Union or in at least three Member States and has adopted implementing measures specifying the nature and scope of any obligations that may be imposed.

The implementing measures referred to in the second subparagraph, point (b), shall be adopted in accordance with the examination procedure referred to in Article 204(4).

Article 69

[Ex Art. 61(3)-(7)]

Symmetric measures

1. Without prejudice to Article 68(1) and (2), national regulatory authorities may, upon reasonable request, impose obligations to grant access to wiring and cables and associated facilities inside buildings or up to the first concentration or distribution point as determined by the national regulatory authority, where that point is located outside the building. Where it is justified on the grounds that replication of such network elements would be economically inefficient or physically impracticable, such obligations may be imposed on providers of electronic communications networks or on the owners of such wiring and cables and associated facilities, where those owners are not providers of electronic communications networks. The access conditions imposed may include specific rules on access to such network elements and to associated facilities and associated services, on transparency and non-discrimination and on fair and reasonable terms and conditions.
2. Where a national regulatory authority concludes that the obligations imposed in accordance with the first subparagraph may not sufficiently address high and non-transitory economic or physical barriers to replication which underlie an existing or emerging market situation significantly limiting competitive outcomes for end-users, it may impose the access obligations, beyond the first concentration or distribution point, on fair and reasonable terms and conditions, unless specific and justified circumstances require a cost orientation. In determining the extent of the obligation beyond the first concentration or distribution point, the national regulatory authority shall take utmost account of relevant BEREC guidelines.
3. National regulatory authorities shall not impose obligations in accordance with the second subparagraph on providers of electronic communications networks where they determine that:
 - (a) the provider has the characteristics listed in Article 84(1) and makes available a viable and similar alternative means of reaching end-users by providing access to a Gigabit network to any undertaking, on fair, non-discriminatory and reasonable terms and conditions; national regulatory authorities may extend that exemption to other providers offering, on fair, non-discriminatory and reasonable terms and conditions, access to a Gigabit network;
 - (b) the imposition of obligations would compromise the economic or financial viability of a new network deployment, in particular by small local projects.
4. Obligations and conditions imposed in accordance with this Article shall be objective, transparent, proportionate and non-discriminatory. They shall be implemented in accordance with the procedures referred to in Articles 186 and 85. The national regulatory and other competent authorities which have imposed such obligations and conditions shall assess the results thereof by five years after the adoption of the previous measure adopted in relation to the same undertakings and assess whether it would be appropriate to withdraw or amend them in light of evolving conditions. Those authorities shall notify the outcome of their assessment in accordance with the procedures referred to in Articles 186 and 85.
5. For the purpose of paragraphs 1 and 2 of this Article, the national regulatory authority shall be empowered to intervene on its own initiative where justified in order to secure

the policy objectives of Article 3, in accordance with this Regulation and, in particular, with the procedures referred to in Articles 186 and 85.

6. By [date/month/year], BEREC shall assess the effectiveness of the guidelines on common approaches to the identification of the network termination point in different network topologies in contributing to a consistent definition of the location of network termination points by national regulatory authorities.

Article 70

[Ex Article 61(4)]

Localised roaming

1. Without prejudice to Article 68 paragraphs 1 and 2, national regulatory authorities shall have the power to impose on undertakings providing or authorised to provide electronic communications networks obligations in relation to the sharing of passive infrastructure or obligations to conclude localised roaming access agreements, in both cases if directly necessary for the local provision of services which rely on the use of radio spectrum, in accordance with Union law and provided that no viable and similar alternative means of access to end-users is made available to any undertaking on fair and reasonable terms and conditions. National regulatory authorities may impose such obligations only where this possibility is clearly provided for when granting the rights of use for radio spectrum and where justified on the grounds that, in the area subject to such obligations, the market-driven deployment of infrastructure for the provision of networks or services which rely on the use of radio spectrum is subject to insurmountable economic or physical obstacles and therefore access to networks or services by end-users is severely deficient or absent. In those circumstances where access and sharing of passive infrastructure alone does not suffice to address the situation, national regulatory authorities may impose obligations on sharing of active infrastructure.

National regulatory authorities shall have regard to:

- (a) the need to maximise connectivity throughout the Union, along major transport paths and in particular territorial areas, and to the possibility to significantly increase choice and higher quality of service for end-users;
- (b) the efficient use of radio spectrum;
- (c) the technical feasibility of sharing and associated conditions;
- (d) the state of infrastructure-based as well as service-based competition;
- (e) technological innovation;
- (f) the overriding need to support the incentive of the host to roll out the infrastructure in the first place.

In the event of dispute resolution, national regulatory authorities may, *inter alia*, impose on the beneficiary of the sharing or access obligation the obligation to pool or share radio spectrum with the infrastructure host in the relevant area or allow access to radio spectrum for other users in specific regions or at national level.

Article 71

[New]

Symmetric measures for transition to fibre

To facilitate the transition to fibre, the national regulatory authority shall impose on a provider deploying a fibre-to-the-home (FTTH) network in the area where the copper switch-off has been mandated the obligation to connect, upon user's request, households within its deployment area. Where more than one provider is present in the area, the national regulatory authority may impose such obligations on only one of the providers, based on transparent, proportionate and non-discriminatory criteria.

In the market analysis carried out by the national regulatory authority in the context of the copper switch-off, the national regulatory authority shall define the conditions for the access obligations in paragraph 1, including the cost recovery calculation, as needed.

The NRAs shall ensure that the costs exceeding the normal connection fee, when they are borne by end users, should be fair and reasonable. The NRAs may decide to set maximum level of connection fees to be paid by end users.

In the areas where the copper switch-off has been mandated, where the connection of households requires providers of electronic communications networks to deploy new fibre wiring and cables and associated facilities inside a multi-dwelling unit [building], the owner or the administrator of such multi-dwelling unit [building] shall allow such deployment at the request of any resident of the multi-dwelling unit [building].

The obligation to allow the deployment of fibre wiring and cables and associated facilities inside a multi-dwelling unit [building] shall be considered to be fulfilled once a single provider of electronic communications networks has deployed the network. National regulatory authority shall impose measures under Article 68 paragraph 1 where needed to ensure effective access by other provider of electronic communications networks to the new fibre wiring and cables, and associated facilities.

The national regulatory authority may request any other provider of electronic communications networks to proceed with such deployment where the provider of electronic communications networks which has passed the multi-dwelling unit [building] provides substantiated justification proving the impossibility to comply with this obligation.

5.4. TITLE IV: MARKETS AND COMPETITION

5.4.1. *CHAPTER I Market analysis and significant market power*

Article 72

[Ex Art. 63]

Market definition

1. Where national regulatory authorities intend to define relevant markets appropriate to national circumstances, they shall do so in accordance with the principles of competition law. When defining relevant geographic markets within their territory, national regulatory authorities shall take into account, in particular, the degree of infrastructure competition.
2. The Commission shall, every five years, after a public consultation, analyse the overall trends in the Union, and assess whether the adoption of a recommendation on relevant product and service markets ('the Recommendation') is required. The Commission may adopt the Recommendation, after public consultation, including with national regulatory authorities, and taking utmost account of the opinion of BEREC. The Recommendation shall identify those product and service markets within the electronic

communications sector the characteristics of which may be such as to justify the imposition of regulatory obligations set out in this Regulation, without prejudice to markets that may be defined in specific cases under competition law. These products and services markets shall be defined in accordance with the principles of competition law.

Where the Commission decides to adopt the Recommendation, it shall review it regularly.

Where a market is included in the Recommendation, national regulatory authority shall review it. The markets where *ex ante* regulation is imposed shall be reviewed every five years to determine whether the three criteria referred to in Article 72(1) are met.

Article 73

[Ex Art. 67]

Market analysis procedure

1. National regulatory authorities shall determine whether a relevant market defined in accordance with Article 72 is such as to justify the imposition of the regulatory obligations set out in this Regulation. National regulatory authorities shall carry out an analysis, where appropriate in collaboration with national competition authorities.

Prior to the copper switch-off the national regulatory authorities shall conduct a relevant markets reviews covering at least the areas affected by this process.

National regulatory authorities shall follow the procedures set out in Articles 186 and 85 when conducting market analyses and shall proceed in a timely manner, concluding the process within a period of one year.

A market may be considered to justify the imposition of regulatory obligations set out in this Regulation if all the following criteria are met:

- (a) high and non-transitory structural, legal or regulatory barriers to entry are present;
 - (b) there is a market structure which does not tend towards effective competition within the relevant time horizon, having regard to the state of infrastructure-based competition and other sources of competition behind the barriers to entry;
 - (c) competition law alone is insufficient to adequately address the identified market failure(s).
2. Where a national regulatory authority conducts the analysis required by paragraph 1, it shall consider, in a forward-looking perspective, how the markets would develop in the absence of regulation imposed on the basis of this Article. The national regulatory authority, shall take into account all of the following in its analysis:
 - (a) market developments affecting the likelihood of the relevant market tending towards effective competition;
 - (b) all relevant competitive constraints, at the wholesale and retail levels, irrespective of whether the sources of such constraints are considered to be electronic communications networks, electronic communications services, or other types of services or applications which are comparable from the perspective of the end-user, and irrespective of whether such constraints are part of the relevant market;
 - (c) other types of regulation or measures imposed and affecting the relevant market or related retail market or markets throughout the relevant period, including, without limitation, obligations imposed in accordance with Articles 64, 68 and 69;

- (d) regulation imposed on other relevant markets on the basis of this Article.
- 3. Where a national regulatory authority concludes that a relevant market does not justify the imposition of regulatory obligations in accordance with the procedure in paragraphs 1 and 2 of this Article, or where the conditions set out in paragraph 4 of this Article are not met, it shall not impose any specific regulatory obligations in accordance with Article 77 and shall withdraw previous obligations imposed in accordance with Article 77.
- 4. National regulatory authorities shall consider mandating an appropriate notice period for the remedies to be lifted, taking into account the need to ensure a sustainable transition for the beneficiaries of those obligations and end-users, end-user choice, and that regulation does not continue for longer than necessary. When setting such a notice period, national regulatory authorities may determine specific conditions and notice periods in relation to existing access agreements.
- 5. Where a national regulatory authority determines that in a relevant market the imposition of regulatory obligations in accordance with paragraphs 1 and 2 of this Article is justified, it shall identify any undertakings which individually or jointly have a significant market power on that relevant market in accordance with Article 72. The national regulatory authority shall impose on such undertakings appropriate specific regulatory obligations in accordance with Article 77 or maintain or amend such obligations where they already exist if it considers that the outcome for end-users would not be effectively competitive in the absence of those obligations.
- 6. Measures taken in accordance with paragraphs 3 and 4 of this Article shall be subject to the procedures referred to in Articles 186 and 85. National regulatory authorities shall carry out an analysis of the relevant market and notify the corresponding draft measure in accordance with Article 85 within five years from the adoption of a previous measure where the national regulatory authority has defined the relevant market and determined which undertakings have significant market power.

Article 74

[Ex Art. 65]

Procedure for the identification of transnational markets

- 1. Where the Commission or at least two national regulatory authorities concerned submit a reasoned request, including supporting evidence, BEREC shall conduct an analysis of a potential transnational market. After consulting stakeholders and taking utmost account of the analysis carried out by BEREC, the Commission may adopt decisions identifying transnational markets in accordance with the principles of competition law.
- 2. In the case of transnational markets identified in accordance with paragraph 1 of this Article, the national regulatory authorities concerned shall jointly conduct the market analysis taking the utmost account of the SMP guidelines and, in a concerted fashion, shall decide on any imposition, maintenance, amendment or withdrawal of regulatory obligations referred to in Article 73(4). The national regulatory authorities concerned shall jointly notify to the Commission their draft measures regarding the market analysis and any regulatory obligations pursuant to Article 85.
- 3. Two or more national regulatory authorities may also jointly notify their draft measures regarding the market analysis and any regulatory obligations in the absence

of transnational markets, where they consider that market conditions in their respective jurisdictions are sufficiently homogeneous.

Article 75

[Ex Art. 66]

Procedure for the identification of transnational demand

BEREC shall conduct an analysis of transnational end-user demand for products and services that are provided within the Union, if where it receives a reasoned request providing supporting evidence from the Commission or from at least two of the national regulatory authorities concerned indicating that there is a serious demand problem to be addressed. BEREC may also conduct such analysis where it receives a reasoned request from market participants providing sufficient supporting evidence and considers that there is a serious demand problem to be addressed. BEREC's analysis is without prejudice to any findings of transnational markets in accordance with Article 74(1) and to any findings of national or sub-national geographical markets by national regulatory authorities in accordance with Article 72.

Article 76

[Ex Art. 63]

Undertakings with significant market power

1. Where a national regulatory authority identifies an undertaking to have significant market power in accordance with the procedure referred to in Article 73, paragraph 2 of this Article shall apply.
2. An undertaking shall be deemed to have significant market power where, either individually or jointly with others, it enjoys a position equivalent to dominance, namely a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers.
3. In particular, national regulatory authorities shall, when assessing whether two or more undertakings are in a joint dominant position in a market, act in accordance with Union law and take into utmost account the guidelines on market analysis and the assessment of significant market power published by the Commission pursuant to Article 72 .
4. Where an undertaking has significant market power on a specific market, it may also be designated as having significant market power on a closely related market, where the links between the two markets allow the market power held on the specific market to be leveraged into the closely related market, thereby strengthening the market power of the undertaking. Consequently, remedies aiming to prevent such leverage may be applied in the closely related market pursuant to Articles 77 – 84.
5. After consulting BEREC, the Commission shall publish guidelines for market analysis and the assessment of significant market power ('the SMP guidelines') which shall be in accordance with the relevant principles of competition law. The SMP guidelines shall include guidance to national regulatory authorities on the application of the concept of significant market power to the specific context of ex ante regulation of electronic communications markets, taking account of the three criteria referred to in Article 73(1).

5.4.2. *CHAPTER II: Access remedies imposed on undertakings with significant market power*

Article 77

[Ex Art. 68]

Imposition, amendment or withdrawal of obligations

1. When assessing the competitive conditions of a specific market and the need for regulatory intervention, National regulatory authorities shall consider in first instance the influence on competitive dynamics of existing regulations, commercial agreements.
2. In accordance with the principle of proportionality, where an undertaking is designated as having significant market power on a specific market as a result of a market analysis carried out in accordance with Article 73, a national regulatory authority shall choose the least intrusive way of addressing the possible problems identified in the market analysis. In this assessment the national regulatory authorities should take into consideration the commitments offered by the operators designated as having significant market power under Article 83 or in the context of proceedings under national or Union competition law.

National regulatory authorities may, where appropriate, impose obligations such as obligation of transparency and of non-discrimination at first stage.

Where a national regulatory authority considers the above obligations to be not sufficient or not appropriate, in accordance with Article 77, it shall examine whether the imposition of obligations in accordance with Article 80 alone would be a proportionate and sufficient means by which to promote competition and the end-user's interest.

Without prejudice to Article 80, where they consider that additional access obligations are needed, national regulatory authorities shall impose the obligations granting harmonised access set out in Article 81.

Only where national regulatory authorities provide substantiated justification demonstrating that such obligations imposed in accordance with Articles 80 and 81 do not address the competition problems identified on the concerned market, they may impose other obligations for access to specific active or virtual network elements and service and use of, specific network elements and associated facilities pursuant to Article 78.

In addition to these obligations, where obligations laid down in Articles 77 to 84 are not appropriate, national regulatory authorities may impose the obligation of accounting separation, the obligation of price control and cost accounting obligations.

3. Obligations imposed in accordance with this Article shall be:
 - (a) based on the nature of the problem identified by a national regulatory authority in its market analysis, where appropriate taking into account the identification of transnational demand pursuant to Article 75;
 - (b) proportionate, having regard, to the costs and benefits;
 - (c) justified considering the objectives laid down in Article 3;
 - (d) imposed following consultation in accordance with Articles 186 and 85.

The obligations imposed shall not have a retroactive effect. Where duly justified exceptional circumstances arise, the obligations may be imposed with a commencement date that differs from the one ordinarily provided.

4. National regulatory authorities shall notify decisions to impose, amend or withdraw obligations on undertakings to the Commission, in accordance with the procedure referred to in Article 85.
5. In the case of developments in the market, including commercial agreements, or commitments, which do not require changing the market definition or the significant market power assessment and do not justify a new market analysis in accordance with Article 73, the national regulatory authority shall assess without delay whether it is necessary to review the obligations imposed on undertakings designated as having significant market power and amend any previous decision, including by withdrawing obligations or imposing new obligations, in order to ensure that such obligations continue to meet the conditions set out in paragraph 4 of this Article. Such amendments shall be imposed only after consultations in accordance with Articles 186 and 85.
6. National regulatory authorities shall impose the obligations—s without prejudice to either of the following:
 - (a) Articles 68 and 67;
 - (b) Articles 64, Article 50(7) of this Regulation, Articles 52 and 101 of this Regulation and the relevant provisions of Directive 2002/58/EC containing obligations on undertakings other than those designated as having significant market power;
 - (c) The need to comply with international commitments.
7. In order to contribute to the consistent application of remedies, the Commission may, in close cooperation with BERE, issue guidance to assist national regulatory authorities on the consistent implementation of their obligations under this Article.

Article 78

[Ex Art. 73]

Obligations of access to, and use of, specific network elements and associated facilities

1. National regulatory authorities may, in accordance with Article 77, impose obligations on undertakings to meet reasonable requests for access to, and use of, specific network elements and associated facilities, other than those identified in Articles 80 and 81, in situations where the national regulatory authorities consider that denial of access or unreasonable terms and conditions having a similar effect would hinder the emergence of a sustainable competitive market at the retail level, and would not be in the end-user's interest. National regulatory authorities may require undertakings *inter alia*:
 - (a) to give third parties access to, and use of, specific physical network elements and associated facilities, as appropriate, including unbundled access to the local loop and sub-loop;
 - (b) to give third parties access to specific active or virtual network elements and services;
 - (c) to negotiate in good faith with undertakings requesting access;
 - (d) not to withdraw access to facilities already granted;
 - (e) to provide specific services on a wholesale basis for resale by third parties;

- (f) to grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of services or virtual network services;
- (g) to provide co-location or other forms of associated facilities sharing;
- (h) to provide specific services needed to ensure interoperability of end-to-end services to users, or roaming on mobile networks;
- (i) to provide access to operational support systems or similar software systems necessary to ensure fair competition in the provision of services;
- (j) to interconnect networks or network facilities;
- (k) to provide access to associated services such as identity, location and presence service.

National regulatory authorities shall have the power subject those obligations to conditions covering fairness, reasonableness and timeliness.

2. Where national regulatory authorities consider the appropriateness of imposing any of the possible specific obligations referred to in paragraph 1 of this Article, and in particular where they assess, in accordance with the principle of proportionality, whether and how such obligations are to be imposed, they shall analyse whether other forms of access to wholesale inputs, either on the same or on a related wholesale market, would be sufficient to address the identified problem in the end-user's interest. That assessment shall include commercial access offers, regulated access pursuant to Articles 68 and 69, or existing or planned regulated access to other wholesale inputs pursuant to this Article. National regulatory authorities shall take account in particular of the following factors:

- (a) the technical and economic viability of using or installing competing facilities, in light of the rate of market development, taking into account the nature and type of interconnection or access involved, including the viability of other upstream access products, such as access to ducts;
- (b) the expected technological evolution affecting network design and management;
- (c) the need to ensure technology neutrality enabling the parties to design and manage their own networks;
- (d) the feasibility of providing the access offered, in relation to the capacity available;
- (e) the initial investment by the facility owner, taking account of any public investment made and the risks involved in making the investment, with particular regard to investments in, and risk levels associated with, gigabit networks;
- (f) the need to safeguard competition in the long term, with particular attention to economically efficient infrastructure-based competition and innovative business models that support sustainable competition, such as those based on co-investment in networks;
- (g) where appropriate, any relevant intellectual property rights;
- (h) the provision of pan-European services.

3. When imposing obligations on an undertaking to provide access in accordance with this Article, national regulatory authorities shall be empowered to lay down technical or operational conditions to be met by the provider or the beneficiaries of such access, where necessary to ensure normal operation of the network. Obligations to follow specific technical standards or specifications shall comply with the standards and specifications laid down in accordance with Article 189.

Price control and cost accounting obligations

1. A national regulatory authority may, in accordance with Article 77, impose obligations relating to cost recovery and price control, including obligations for cost orientation of prices and obligations concerning cost-accounting systems, for the provision of specific types of interconnection or access, in situations where a market analysis indicates that a lack of effective competition means that the undertaking concerned may sustain prices at an excessively high level, or may apply a price squeeze, to the detriment of end-users.

In determining whether price control obligations would be appropriate, national regulatory authorities shall take into account the need to promote competition and long-term end-user interests related to the deployment and take-up of gigabit networks. In particular, to encourage investments by the undertaking, including in gigabit networks, national regulatory authorities shall take into account the investment made by the undertaking, in particular where new investments have been made. Where the national regulatory authorities consider price control obligations to be appropriate, they shall allow the undertaking a reasonable rate of return on adequate capital employed, taking into account any risks specific to a particular new investment network project.

National regulatory authorities shall consider not imposing or maintaining obligations pursuant to this Article, where they establish that a demonstrable retail price constraint is present and that any obligations imposed in accordance with Article 77, including, in particular, any economic replicability test, ensures effective and non-discriminatory access.

Where national regulatory authorities consider it appropriate to impose price control obligations on access to existing network elements, they shall also take account of the benefits of predictable and stable wholesale prices in ensuring efficient market entry and sufficient incentives for all undertakings to deploy new and enhanced networks.

2. National regulatory authorities shall ensure that any cost recovery mechanism or pricing methodology that is mandated serves to promote the deployment of new and enhanced networks, efficiency and sustainable competition and maximises sustainable end-user benefits. In this regard, national regulatory authorities may also take account of prices available in comparable competitive markets.
3. Where an undertaking has an obligation regarding the cost orientation of its prices, the burden of proof that charges are derived from costs, including a reasonable rate of return on investment, shall lie with the undertaking concerned. For the purpose of calculating the cost of efficient provision of services, national regulatory authorities may use cost accounting methods independent of those used by the undertaking. National regulatory authorities may require an undertaking to provide full justification for its prices, and may, where appropriate, require prices to be adjusted.
4. National regulatory authorities shall ensure that, where implementation of a cost-accounting system is mandated in order to support price control, a description of the cost-accounting system is made publicly available, showing at least the main categories under which costs are grouped and the rules used for the allocation of costs. A qualified independent body shall verify compliance with the cost-accounting system and shall publish annually a statement concerning compliance.

Article 80

[Ex Art. 72]

Access to passive networks

1. A national regulatory authority may, in accordance with Article 77, impose obligations on undertakings to meet reasonable requests for access to, and use of, dark fibre and civil engineering including, but not limited to, buildings or entries to buildings, building cables, including wiring, antennae, towers and other supporting constructions, poles, masts, ducts, conduits, inspection chambers, manholes and cabinets, in situations where, having considered the market analysis, the national regulatory authority concludes that denial of access or access given under unreasonable terms and conditions having a similar effect would hinder the emergence of a sustainable competitive market and would not be in the end-user's interest.
2. National regulatory authorities may impose obligations on an undertaking to provide access in accordance with this Article, irrespective of whether the assets that are affected by the obligation are part of the relevant market in accordance with the market analysis, provided that the obligation is necessary and proportionate to meet the objectives of Article 3.

Article 81

[New]

Harmonised access products

1. Without prejudice to Article 80, a national regulatory authority shall assess whether it is justified and proportionate to impose on a operator designated as having significant market power on a specific market as a result of a market analysis carried out in accordance with Article 73, an obligation to offer Union harmonised access products prior to imposing other access products.
2. When the national regulatory authority decides to impose other access products, it shall explain why they are more appropriate than the harmonised access product to address the problems identified.
3. The Union harmonised products may include local access products..
4. The Commission may adopt within *[6 months from the adoption of this Regulation]* implementing acts setting out the technical specifications, standard cost elements, cost methodologies for harmonised products and the reference offer related to the harmonised access product(s), based on a BEREC opinion. The Commission may review those implementing acts in light of market and technological developments based on a BEREC opinion.
5. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 202.
6. The harmonised access product shall meet the following substantive requirements:
 - (a) ability to be offered as an access product to any provider of electronic communications networks and services [which is active] in the Union;
 - (b) maximum degree of network and service interoperability and non-discriminatory network management between operators consistently with network topology;
 - (c) capacity to serve end-users on competitive terms;

- (d) cost-effectiveness, taking into account the capacity to be implemented on existing and newly built VHCN networks and to co-exist with other access products that may be provided on the same network infrastructure;
 - (e) operational effectiveness, in particular in respect of limiting to the extent possible implementation obstacles and deployment costs for access providers and access seekers;
 - (f) respect of the rules on protection of privacy, personal data, security and integrity of networks and transparency in conformity with Union law.
7. When a national regulatory authority has established that the obligation to offer such harmonised access products shall replace the wholesale access obligations previously imposed, it shall establish an appropriate transitional period of a duration of at least 6 months before repealing the latter measures.

Article 82

[Ex Art. 75]

Termination rates

1. Taking utmost account of the opinion of BERIC, the Commission shall review the delegated act supplementing this Regulation by setting a single maximum Union-wide mobile voice termination rate and a single maximum Union-wide fixed voice termination rate (together referred to as 'the Union-wide voice termination rates'), which are imposed on any provider of mobile voice termination or fixed voice termination services, respectively, in any Member State. The review shall take place every five years and shall consider on each such occasion, by applying the criteria referred to in Article 73(1), whether setting Union-wide voice termination rates continue to be necessary. Where the Commission decides, following its review in accordance with this paragraph, not to impose a maximum mobile voice termination rate or a maximum fixed voice termination rate, or neither, national regulatory authorities may conduct market analyses of voice termination markets in accordance with Article 73, to assess whether the imposition of regulatory obligations is necessary. Where a national regulatory authority imposes, as a result of such analysis, cost-oriented termination rates in a relevant market, it shall follow the principles, criteria and parameters set out in Annex III and its draft measure shall be subject to the procedures referred to in Articles 186 and 85.
2. National regulatory authorities shall closely monitor, and ensure compliance with, the application of the Union-wide voice termination rates by providers of voice termination services. National regulatory authorities may, at any time, require a provider of voice termination services to amend the rate it charges to other undertakings if it does not comply with the delegated act referred to in paragraph 1.

Article 83

[Ex Art. 79]

Commitments procedure

1. National regulatory authorities shall inform operators of the possibility to offer commitments to address the competition problems identified.

2. Undertakings designated as having significant market power may offer to the national regulatory authority commitments regarding conditions for access, co-investment, or both, applicable to their networks in relation, *inter alia*, to:
 - (a) cooperative arrangements relevant to the assessment of appropriate and proportionate obligations pursuant to Article 77;
 - (b) co-investment in gigabit networks;
 - (c) effective and non-discriminatory access by third parties during an implementation period of voluntary separation, including the transfer of their local access network assets or a substantial part thereof to a separate legal entity under different ownership, or establishment of a separate business entity, by a vertically integrated undertaking, and after the proposed form of separation is implemented.

The offer for commitments shall be sufficiently detailed regarding the scope, the duration and the timing and modality of their implementation, to allow the national regulatory authority to undertake its assessment pursuant to paragraph 2 of this Article. Such commitments may extend beyond the periods for carrying out market analysis provided for in Article 73(5).

3. National regulatory authorities shall consider whether the commitments alone would be a proportionate and sufficient means to address the competition problems identified. In order to assess any commitments offered by an undertaking pursuant to paragraph 1 of this Article, the national regulatory authority shall, except where such commitments clearly do not fulfil one or more relevant conditions or criteria, perform a market test, in particular on the offered terms, by conducting a public consultation of interested parties, in particular third parties which are directly affected. Potential co-investors or access seekers may provide views on the compliance of the commitments offered with the conditions provided, as applicable, in Article 77 and may propose changes.
4. As regards the commitments offered under this Article, the national regulatory authority shall, when assessing obligations pursuant to Article 77(2), have particular regard to:
 - (a) evidence regarding the fair and reasonable character of the commitments offered;
 - (b) the openness of the commitments to all market participants;
 - (c) the timely availability of access under fair, reasonable and non-discriminatory conditions, before the launch of related retail services;
 - (d) the overall adequacy of the commitments offered to enable sustainable competition on downstream markets and to facilitate cooperative deployment and take-up of gigabit networks in the interest of end-users.

Taking into account all the views expressed in the consultation, and the extent to which such views are representative of different stakeholders, the national regulatory authority shall communicate to the undertaking designated as having significant market power its preliminary conclusions as to whether the commitments offered comply with the objectives, criteria and procedures set out in this Article and, as applicable, in Articles 68-~~76~~ or 78, and under which conditions it may consider making the commitments binding. The undertaking may revise its initial offer to take account of the preliminary conclusions of the national regulatory authority and with a view to satisfying the criteria set out in this Article and, as applicable, in Articles 68 or 78.

5. The national regulatory authority may issue a decision to make the commitments binding, wholly or in part.

6. By way of derogation from Article 73(5), the national regulatory authority may make some or all commitments binding for a specific period, which may be the entire period for which they are offered, and, in the case of co-investment commitments made binding, it shall make them binding for a period of minimum seven years. Where the national regulatory authority makes commitments binding pursuant to this Article, it shall assess under Article 77 the consequences of that decision for market development and the appropriateness of any obligation that it has imposed or would, absent those commitments, have considered imposing pursuant to that Article or Articles 77 to 81. When notifying the relevant draft measure under Article 68 in accordance with Article 32, the national regulatory authority shall accompany the notified draft measure with the commitments decision.
7. The national regulatory authority shall monitor, supervise and ensure compliance with the commitments that it has made binding in accordance with paragraph 3 of this Article in the same way in which it monitors, supervises and ensures compliance with obligations imposed under Article 77 and shall consider the extension of the period for which they have been made binding when the initial period expires. Where the national regulatory authority concludes that an undertaking has not complied with the commitments that have been made binding in accordance with paragraph 3 of this Article, it may impose penalties on such undertaking in accordance with Article 199. Without prejudice to the procedure for ensuring compliance of specific obligations under Article 30, the national regulatory authority may reassess the obligations imposed in accordance with Article 68(6).
8. Paragraphs 1-3 of this Article shall apply to undertakings that may offer commitments to avoid the regulatory measures under Article 69.

Article 84

[Ex Art. 80]

Wholesale-only undertakings

1. A national regulatory authority that designates an undertaking which is absent from any retail markets for electronic communications services in the identified geographic market [or in any other geographic market that could influence the undertaking's behaviour on the identified geographic market] as having significant market power in one or several wholesale markets in accordance with Article 73 shall consider whether that undertaking has the following characteristics:
 - (a) all companies and business units within the undertaking, all companies that are controlled but not necessarily wholly owned by the same ultimate owner and any shareholder capable of exercising control over the undertaking only have activities, current and planned for the future, in wholesale markets for electronic communications services and therefore do not have activities in any retail market for electronic communications services provided to end-users in the identified geographic market or in any other geographic market that could influence the undertaking's behaviour on the identified geographic market;
 - (b) the undertaking is not bound to deal with a single and separate undertaking operating downstream that is active in the retail market for electronic communications services provided to end-users in the identified geographic market [or in any geographic market that could influence the undertaking's behaviour on the identified geographic market],

because of an exclusive agreement or an agreement which de facto amounts to an exclusive agreement.

2. Where the national regulatory authority concludes that the conditions laid down in paragraph 1 of this Article are fulfilled, it may impose on that undertaking only obligations pursuant to Article 73 and non-discrimination or to fair and reasonable pricing, where justified on the basis of a market analysis including a prospective assessment of the likely behaviour of the undertaking designated as having significant market power.
3. The national regulatory authority shall review obligations imposed on the undertaking in accordance with this Article at any time if it concludes that the conditions laid down in paragraph 1 of this Article are no longer met and it shall, as appropriate, apply Articles 73 to 83. The undertakings shall, without undue delay, inform the national regulatory authority of any change of circumstance relevant to paragraph 1, points (a) and (b), of this Article.
4. The national regulatory authority shall also review obligations imposed on the undertaking in accordance with this Article if on the basis of evidence of terms and conditions offered by the undertaking to its downstream customers, the authority concludes that competition problems have arisen or are likely to arise to the detriment of end-users which require the imposition of one or more obligations laid down in Articles 77 - 81, or the amendment of the obligations imposed in accordance with paragraph 2 of this Article. The imposition of obligations and their review in accordance with this Article shall be implemented in accordance with the procedures referred to in Articles 186 and 85.

5.4.3. CHAPTER III: Internal market procedures for market regulation

Article 85

[Ex Art. 32 and 33]

Consolidating the internal market in the area of electronic communications

1. In carrying out their tasks under this Regulation, national regulatory authorities shall take the utmost account of the objectives set out in Article 3.
2. Except where otherwise provided in recommendations or guidelines adopted pursuant to Article 87 upon completion of the public consultation, where a national regulatory authority intends to take a measure which:

- (a) falls within the scope of Article 69, Article 72, Articles 73 to 84,
 - (b) would affect trade between Member States,

it shall publish the draft measure and communicate it to the Commission, to BEREC, and to the national regulatory authorities in other Member States, at the same time, stating the reasons for the measure, in accordance with Article 20(3). National regulatory authorities, BEREC and the Commission may comment on that draft measure within 30 working days. The 30 working days period shall not be extended.

3. The draft measure referred to in paragraph 3 of this Article shall not be adopted for a further 90 working days, where that measure aims to:
 - (a) define a relevant market and assess its susceptibility for ex ante regulation pursuant to Article 71;

- (b) decide whether or not to designate an undertaking as having, either individually or jointly with others, significant market power, under Article 73;
- (c) impose, amend or withdraw an obligation on an undertaking in application of Article 69(2) or Article 77 except from obligations imposed in accordance with Articles 80 and 81

and the Commission has indicated to the national regulatory authority that it considers that the draft measure would create a barrier to the internal market or if it has serious doubts as to its compatibility with Union law and in particular the objectives referred to in Article 3. That 90 working days period shall not be extended. The Commission shall inform BEREC and national regulatory authorities of its reservations in such a case and simultaneously make them public.

4. Within 30 working days from the beginning of the 90 working days period referred to in paragraph 1, BEREC shall issue an opinion on the Commission reservations referred to in paragraph 3, indicating whether it considers that the draft measure should be maintained, amended or withdrawn and, where appropriate, provide specific proposals to that end. That opinion shall provide reasons and be made public.
5. If in its opinion, BEREC shares partially or fully the serious doubts of the Commission, it shall cooperate closely with the national regulatory authority concerned and the Commission to identify the most appropriate and effective measure.
6. Within the 90 working days period referred to in paragraph 4, the Commission may:
 - (a) take a decision requiring the national regulatory authority concerned not to adopt the draft measure where the Commission's reservations were based on Article 85(3), points (a), (b) or (c);
 - (b) take a decision to lift its reservations referred to in paragraph 3;
 - (c) for draft measures falling under Article 69(2), take a decision requiring the national regulatory authority concerned to withdraw the draft measure.

The Commission shall take utmost account of the opinion of BEREC before taking a decision.

Decisions referred to in the first subparagraph, points (a) and (c), shall be accompanied by a detailed and objective analysis of why the Commission considers that the draft measure is not to be adopted, together with specific proposals for amending it.

7. Where the Commission has adopted a decision in accordance with of paragraph 6, first subparagraph, of this Article requiring the national regulatory authority to withdraw a draft measure, the national regulatory authority shall not adopt such a measure. After having undertaken a public consultation in accordance with Article 186, the national regulatory authority shall notify within eighteen months of the date of the Commission's decision a new draft measure.
8. Except in the cases covered by paragraph 3 and paragraph 6, points (a) and (c), the national regulatory authority concerned shall take the utmost account of comments of other national regulatory authorities, of BEREC and of the Commission and may, adopt the resulting draft measure and shall, where it does so, communicate it to the Commission. The national regulatory authority shall communicate to the Commission and to BEREC all adopted final measures which fall under paragraph 2, points (a) and (b).

Article 86

[New]

Provisional measures

1. Where a national regulatory authority considers that there is an urgent need to act, in order to safeguard competition or protect the interests of users, by way of derogation from the procedure set out in Article 85, it may immediately adopt proportionate and provisional measures, valid for a period not longer than 12 months. It shall, without delay, communicate those measures, with full reasons, to the Commission, to the other national regulatory authorities and to BEREC.
2. After the expiry of the 12-month period, the interim measure shall be either withdrawn or replaced by a permanent measure subject to prior national and Union-level consultation in accordance with Articles 186 and 85.
3. The national regulatory authority shall not adopt an interim measure to address the same competition problem for which a provisional measure was already adopted.

Article 87

[Ex Art. 34]

Implementing provisions

After public consultation and after consulting the national regulatory authorities and taking utmost account of the opinion of BEREC, the Commission may adopt recommendations or guidelines in relation to Article 32 that lay down the form, content and level of detail to be given in the notifications required in accordance with Article 32(3), the circumstances in which notifications would not be required, and the calculation of the time-limits.

6. PART VI - SERVICES

6.1. TITLE I: UNIVERSAL SERVICE OBLIGATIONS

Article 88

[Ex Art. 84]

Affordable universal service

1. All consumers in the Union shall be entitled to have access to an affordable adequate internet access service and to voice communications services at the quality specified in their territories, at a fixed location.
2. Each Member State shall, in light of the minimum bandwidth enjoyed by the majority of consumers in their territory, and taking into account the BEREC guidelines as provided for in the second subparagraph, define the adequate internet access service pursuant to the first subparagraph with a view to ensuring bandwidth necessary for social and economic participation in society.

By *[12 MONTHS AFTER ENTRY INTO FORCE]*, BEREC shall, in order to contribute towards a consistent application of this Article, after consulting stakeholders and in close cooperation with the Commission, taking into account available Commission (Eurostat) data, issue guidelines to support the definition of adequate internet access service pursuant to the first subparagraph and the specification of the bandwidth necessary for social and economic participation in society. The guidelines shall be updated regularly to reflect technological advances and changes in consumer usage patterns.

Article 89

[ex Art. 85]

Provision of affordable universal service

1. National regulatory authorities in coordination with other competent authorities shall monitor the evolution and level of retail prices of the services referred to in Article 88(1) available on the market annually, in particular in relation to national prices and national consumer income.
2. Where Member States establish that, in light of national conditions, retail prices for the services referred to in Article 88(1) are not affordable, because consumers with low income or special social needs are prevented from accessing such services, they shall take measures to ensure affordability for such consumers of adequate internet access service and voice communications services at least at a fixed location.
3. Where Member States decide to require tariff options or packages, these shall be offered by all providers. These offers shall be easily accessible to consumers with low income or special social needs. National regulatory authorities in coordination with other competent authorities shall ensure, where applicable, that the conditions under which undertakings provide tariff options or packages are fully transparent and are published and applied in accordance with the principles of non-discrimination and efficiency.
4. Consumers entitled to the tariff options or packages referred to in the first subparagraph shall have a right to conclude a contract with a provider of adequate internet access service and voice communications services.
5. When a consumer so requests, the contract shall be limited to voice communications services.
6. Member States shall provide support, as appropriate, to consumers with disabilities, and take other specific measures where appropriate, with a view to ensuring that related terminal equipment, and specific equipment and specific services that enhance equivalent access, including where necessary total conversation services and relay services, are available and affordable.
7. Member States shall use the most efficient and appropriate approach for the measures referred to in this Article, whilst respecting the principles of objectivity, transparency, non-discrimination and proportionality, and ensuring compatibility with the internal market, including competition rules.

Article 90

[NEW]

Determining adequate internet access service, necessary bandwidth, criteria and methodology for affordability

The Commission may, after consulting BEREC and taking into account technological advances and changes in consumer usage patterns, adopt implementing acts to determine the adequate internet access service, including the bandwidth necessary for social and economic participation in society pursuant to Article 88 in light of national conditions. The implementing acts shall also include criteria and methodology to be considered by the national regulatory authorities in coordination with other competent authorities for establishing whether the retail prices of the

services referred to in Article 88(1) are affordable for consumers with low income or special social needs pursuant to Article 89.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 202(4).

Article 91

[Ex Art. 86]

Availability of universal service

1. Where a Member State has established, taking into account the results of the geographical survey conducted in accordance with Article 185, and any additional evidence where necessary, that the availability at a fixed location of an adequate internet access service as defined in accordance with Article 88(2) and of voice communications services cannot be ensured under normal commercial circumstances in the national territory or different parts thereof, Member States shall use public policy tools and, where other public policy tools did not provide the desired effect, they may impose universal service obligations to ensure that all reasonable requests by consumers, microenterprises, small enterprises and not-for-profit organisations for accessing those services in the relevant parts of their territory are met.
2. Where other measures or public policy tools did not provide the desired effect and Member States decide to impose universal service obligations to ensure for consumers, microenterprises, small enterprises and not-for-profit organisations the availability at a fixed location of an adequate internet access service as defined in accordance with Article 88(2) and of voice communications services, they may entrust one or more undertakings to guarantee such availability throughout the national territory, or to cover specific parts of the national territory.

Member States shall use the most efficient and appropriate approach for the measures referred to in this paragraph, whilst respecting the principles of objectivity, transparency, non-discrimination and proportionality, ensuring compatibility with the internal market, including competition rules.

Article 92

[Ex Art. 88]

Control of expenditure and additional facilities and services

1. In providing facilities and services additional to those referred to in Article 88, providers of an adequate internet access service and of voice communications services in accordance with Articles 88, 89 and 91 shall establish terms and conditions in such a way that the eligible end-user is not obliged to pay for facilities or services which are not necessary or not required for the service requested.
2. Providers of an adequate internet access service and of voice communications services referred to in Article 88 that provide services pursuant to Article 89 shall offer the following specific facilities and services, as applicable, in order that consumers can monitor and control expenditure:
 - (a) selective barring for outgoing calls or premium SMS or MMS, or, where technically feasible, other kinds of similar applications;
 - (b) pre-payment systems;

- (c) phased payment of connection fees;
- (d) proportionate, non-discriminatory and published measures, ensuring due warning of any consequent service interruption or disconnection, to cover non-payment of bills issued by providers and measures to avoid unwarranted disconnection of services, including an appropriate mechanism to check continued interest in using the service;
- (e) tariff advice;
- (f) cost control, including free-of-charge alerts to consumers in the case of atypical or excessive consumption patterns;
- (g) facility to deactivate third party billing.

Article 93

[New]

Transitional provisions regarding designations of undertakings under Directive (EU) 2018/1972 and review of universal service

1. Undertakings that on *[ENTRY INTO FORCE]* were designated for the provision of specific tariff options or packages or for ensuring the availability at a fixed location of an adequate broadband internet access service and of voice communications services under Directive (EU) 2018/1972 shall maintain their status until the expiry of such designations.
2. BEREC shall monitor the availability and affordability regarding adequate internet access and voice communications in light of market and technological developments and shall, by 30 June 2033 publish an opinion on such developments and on their impact on the application of the availability and affordability.

By 30 June 2034 the Commission, taking utmost account of the BEREC opinion, shall review the scope of the affordable universal service of Article 89 and availability of universal service of Article 91, in particular with a view to proposing to the European Parliament and to the Council that the scope be changed or redefined.

The review shall be undertaken in light of social, economic and technological developments, including transition to fibre and taking into account, *inter alia*, prevailing technologies used by the majority of consumers. The Commission shall submit a report to the European Parliament and to the Council regarding the outcome of the review.

6.2. TITLE II: OPEN INTERNET ACCESS

Article 94

[Ex Art 3 OIR]

Safeguarding of open internet access

1. End-users shall have the right to access and distribute information and content, use and provide applications and services, and use terminal equipment of their choice, irrespective of the end-user's or provider's location or the *location*, origin or destination of the information, content, application or service, via their internet access service. This paragraph is without prejudice to Union law, or national law that complies with Union law, related to the lawfulness of the content, applications or services.

2. Agreements between providers of internet access services and end-users on commercial and technical conditions and the characteristics of internet access services such as price, data volumes or speed, and any commercial practices conducted by providers of internet access services, shall not limit the exercise of the rights of end-users laid down in paragraph 1.
3. Providers of internet access services shall treat all traffic equally, when providing internet access services, without discrimination, restriction or interference, and irrespective of the sender and receiver, the content accessed or distributed, the applications or services used or provided, or the terminal equipment used.

The first subparagraph shall not prevent providers of internet access services from implementing reasonable traffic management measures. In order to be deemed to be reasonable, such measures shall be transparent, non-discriminatory and proportionate, and shall not be based on commercial considerations but on objectively different technical quality of service requirements of specific categories of traffic. Such measures shall not monitor the specific content and shall not be maintained for longer than necessary.

Providers of internet access services shall not engage in traffic management measures going beyond those set out in the second subparagraph, and in particular shall not block, slow down, alter, restrict, interfere with, degrade or discriminate between specific content, applications or services, or specific categories thereof, except as necessary, and only for as long as necessary, in order to:

- (a) comply with Union legislative acts, or national legislation that complies with Union law, to which the provider of internet access services is subject, or with measures that comply with Union law giving effect to such Union legislative acts or national legislation, including with orders by courts or public authorities vested with relevant powers;
 - (b) preserve the integrity and security of the network, of services provided via that network, and of the terminal equipment of end-users;
 - (c) prevent impending network congestion and mitigate the effects of exceptional or temporary network congestion, provided that equivalent categories of traffic are treated equally.
4. Any traffic management measure may entail processing of personal data only if such processing is necessary and proportionate to achieve the objectives set out in paragraph 3. Such processing shall be carried out in accordance with Regulation (EU) 2016/679 of the European Parliament and of the Council. Traffic management measures shall also comply with Directive 2002/58/EC of the European Parliament and of the Council.
 5. Providers of electronic communications to the public, including providers of internet access services, and providers of content, applications and services shall be free to offer services other than internet access services which are optimised for specific content, applications or services, or a combination thereof, where the optimisation is necessary in order to meet requirements of the content, applications or services for a specific level of quality. Providers of electronic communications to the public, including providers of internet access services, may offer or facilitate such services only where the network capacity is sufficient to provide them in addition to any internet access services provided. Such services shall not be usable or offered as a replacement for internet access services, and shall not be to the detriment of the availability or general quality of internet access services for end-users.

6. The Commission may, taking utmost account of BEREC's opinion after consulting BEREC, adopt implementing acts detailing the conditions referred to in this Article for the offering of services other than internet access services which are optimised for specific content, applications or services, or a combination thereof.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 202.

Article 95

[Ex Art. 5 OIR]

Supervision and enforcement of open internet access

1. National regulatory authorities shall closely monitor and ensure compliance with Article 94, and shall promote the continued availability of non-discriminatory internet access services at levels of quality that reflect advances in technology. For those purposes, national regulatory authorities may impose requirements concerning technical characteristics, minimum quality of service requirements and other appropriate and necessary measures on one or more providers of electronic communications to the public, including providers of internet access services.
2. Providers of electronic communications to the public, including providers of internet access services, shall provide, every two years, to national regulatory authorities, information relevant to the obligations set out in Article 94, Annex III (point 5), Article 98(4) and Article 190(3), in particular information concerning the management of their network capacity and traffic, as well as justifications for any traffic management measures applied.
3. National regulatory authorities shall share the information with BEREC. Based on the information from the national regulatory authorities, BEREC shall publish every two years a report regarding the main practices and findings of national regulatory authorities.
4. By [adoption date + 1 year] BEREC shall, in close cooperation with the Commission, publish a common template to be used to collect the required information under paragraph 2.
5. In order to contribute to the consistent application of Article 94, BEREC shall, after consulting stakeholders and in close cooperation with the Commission, issue guidelines on the implementation of the obligations of national regulatory authorities under this Article. The guidelines shall also detail the relevant quality of service parameters for internet access services, including parameters for the monitoring mechanism referred to in Article 98(4), second subparagraph, parameters relevant for end-users with disabilities, the applicable measurement methods, the content and format of the information, as provided in Annex III and of publication as provided in Annex IV, and quality certification mechanisms. The relevant parameters for end-users with disabilities shall also include parameters for publicly available interpersonal communications services.

National regulatory authorities shall take utmost account of BEREC's guidelines when enforcing the quality of service obligations.

6.3. TITLE III: END-USER RIGHTS

6.3.1. CHAPTER I Rights for Consumers

Article 96

[Ex Art. 102]

Information requirements for contracts

1. Before a consumer is bound by a contract or any corresponding offer, and in addition to requirements pursuant to Directive 2011/83/EU, providers of internet access services or of publicly available interpersonal communications services shall provide the information listed in Annex III of this Regulation to the extent that that information relates to a service they provide.
2. The information shall be provided in a clear and comprehensible manner on a durable medium as defined in Article 2, point (10), of Directive 2011/83/EU or, where provision on a durable medium is not feasible, in an easily downloadable document made available by the provider. The provider shall expressly draw the consumer's attention to the availability of that document and the importance of downloading it for the purposes of documentation, future reference and unchanged reproduction.
3. The information shall, upon request, be provided in an accessible format for end-users with disabilities in accordance with the accessibility requirements of Annex 1 of Directive (EU) 2019/882.
4. Providers of internet access services or of publicly available interpersonal communications services shall provide consumers with a concise and easily readable contract summary. That summary shall identify the main elements of the information requirements in accordance with paragraph 1. Those main elements shall include:
 - (a) the name, address and contact information of the provider and, if different, the contact information for any complaint;
 - (b) the main characteristics of each service provided;
 - (c) the respective prices for activating the electronic communications service and for any recurring or consumption-related charges, where the service is provided for direct monetary payment;
 - (d) the duration of the contract and the conditions for its renewal and termination;
 - (e) the extent to which the products and services are designed for end-users with disabilities;
 - (f) with respect to internet access services, a summary of the information required pursuant to points (d) and (e) of section 5 of Annex III of this Regulation.

The Commission may, after consulting BEREC, adopt implementing acts specifying a contract summary template to be used by the providers to fulfil their obligations under this paragraph.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 202.

Providers subject to the obligations under paragraph 1 shall duly complete that contract summary template with the required information and provide the contract summary free of charge to consumers, prior to the conclusion of the contract, including distance contracts. Where, for objective technical reasons, it is impossible to provide the contract summary at that

moment, it shall be provided without undue delay thereafter and before the consumer is bound by a contract or any corresponding offer.

5. The information referred to in paragraphs 1 and 2 shall become an integral part of the contract and shall not be altered unless the contracting parties expressly agree otherwise.
6. Where internet access services or publicly available interpersonal communications services are billed on the basis of either time or volume consumption, their providers shall offer consumers the facility to monitor and control the usage and cost of each of those services. This facility shall include access to timely information on the level of consumption of services included in a tariff plan. In particular, providers shall notify consumers before any consumption limit, included in their tariff plan, is reached and when a service included in their tariff plan is fully consumed.
7. Subject to the requirements of relevant law on the protection of personal data and privacy, providers shall offer the basic level of itemised bills to consumers free of charge in order that they can:
 - (a) allow verification and control of the charges incurred in using internet access services or number-based interpersonal communications services;
 - (b) adequately monitor their usage and expenditure and thereby exercise a reasonable degree of control over their bills.

Such itemised bills shall include an explicit mention of the identity of the supplier and of the duration of the services charged by any premium numbers unless the consumer has requested that information not to be mentioned.

Calls which are free of charge to the calling end-users, including calls to helplines, shall not be required to be identified in the calling consumer's itemised bill.

Consumers shall have the right to receive non-itemised bills. The rights of consumers receiving itemised bills shall be reconciled with the right to privacy of calling consumers and called consumers, for example by ensuring that sufficient alternative privacy enhancing methods of communications or payments are available to such consumers.

8. Member States shall not maintain or introduce in their national law end-user protection provisions diverging from this Article, including more, or less, stringent provisions to ensure a different level of protection. This is without prejudice to the right of Member States to maintain provisions on additional facilities under Directive (EU) 2018/1972.

Article 97

[Ex Art. 103]

Transparency

1. Where providers of internet access services or publicly available interpersonal communications services make the provision of those services to consumers subject to terms and conditions, they shall publish the information referred to in Annex IV in a clear, comprehensive, machine-readable manner and in an accessible format for end-users with disabilities in accordance with the accessibility requirements set in Annex 1 of Directive (EU) 2019/882. Such information shall be updated regularly.
2. Member States shall not maintain or introduce in their national law end-user protection provisions diverging from this Article, including more, or less, stringent provisions to ensure a different level of protection.

Contract duration and termination

1. Conditions and procedures for contract termination shall not act as a disincentive to changing service provider and contracts concluded between consumers and providers of publicly available electronic communications services other than number-independent interpersonal communications services and other than transmission services used for the provision of machine-to-machine services shall not mandate a commitment period longer than 24 months. This is without prejudice to the right of Member States to maintain provisions which mandate shorter maximum contractual commitment periods.

This paragraph shall not apply to the duration of an instalment contract where the consumer has agreed in a separate contract to instalment payments exclusively for deployment of a physical connection, in particular to gigabit networks. An instalment contract for the deployment of a physical connection shall not include terminal equipment, such as a router or modem, and shall not preclude consumers from exercising their rights under this Article.

2. Where a contract or national law provides for automatic prolongation of a fixed duration contract for electronic communications services other than number-independent interpersonal communications services and other than transmission services used for the provision of machine-to-machine services, consumers are entitled, after such prolongation, to terminate the contract at any time with a maximum one-month notice period and without incurring any costs except the charges for receiving the service during the notice period. Before the contract is automatically prolonged, providers shall inform the consumers in a prominent and timely manner and on a durable medium, of the end of the contractual commitment and of the means by which to terminate the contract. In addition, and at the same time, providers shall give consumers best tariff advice relating to their services.
3. Consumers shall have the right to terminate their contract without incurring any further costs upon notice of changes in the contractual conditions proposed by the provider of publicly available electronic communications services other than number-independent interpersonal communications services, unless the proposed changes are exclusively to the benefit of the consumer, are of a purely administrative nature and have no negative effect on the consumer, or are directly imposed by Union or national law.

Providers shall notify consumers at least one month in advance of any change in the contractual conditions and shall simultaneously inform them of their right to terminate the contract without incurring any further costs if they do not accept the new conditions. The right to terminate the contract shall be exercisable within one month after notification. The notification shall be made in a clear and comprehensible manner on a durable medium.

4. Any significant continued or frequently recurring discrepancy between the actual performance of an electronic communications service, other than an internet access service or a number-independent interpersonal communications service, and the performance indicated in the contract shall be considered to be a basis for triggering the remedies available to the consumer in accordance with national law, including the right to terminate the contract free of cost.

For internet access service, any significant discrepancy, continuous or regularly recurring, between the actual performance of the internet access service regarding speed or other quality of service parameters and the performance indicated by the provider of internet access services

in accordance with points (a) to (d) of Annex III section 5 shall, where the relevant facts are established by the monitoring mechanism specified in the BEREC guidelines referred to in Article 95(3) and certified by the national regulatory authority, be deemed to constitute non-conformity of performance for the purposes of triggering the remedies available to the consumer in accordance with national law.

5. Where a consumer has the right to terminate a contract for a publicly available electronic communications service, other than a number-independent interpersonal communications service, before the end of the agreed contract period pursuant to this Regulation or to other provisions of Union or national law, no compensation shall be due by the consumer other than for retained subsidised terminal equipment.

Where the consumer chooses to retain terminal equipment bundled at the moment of the contract conclusion, any compensation due shall not exceed its pro rata temporis value as agreed at the moment of the conclusion of the contract or the remaining part of the service fee until the end of the contract, whichever is the smaller.

The provider shall lift any condition on the use of that terminal equipment on other networks free of charge at the latest upon payment of the compensation.

6. Member States shall not maintain or introduce in their national law end-user protection provisions diverging from this Article, including more, or less, stringent provisions to ensure a different level of protection. This is without prejudice to the right of Member States to maintain provisions referred to in paragraph 1 of this Article.

Article 99

[Ex Art. 107]

Bundled offers

1. Where a bundle of services or a bundle of services and terminal equipment offered to a consumer comprises at least an internet access service or a publicly available number-based interpersonal communications service, Article 96(2), Article 97(1), Article 98 and Article 101(1) shall apply to all elements of the bundle including, mutatis mutandis, those not otherwise covered by those provisions.
2. Where the consumer has, under Union law, or national law in accordance with Union law, a right to terminate any element of the bundle as referred to in paragraph 1 before the end of the agreed contract term because of a lack of conformity with the contract or a failure to supply, the consumer has the right to terminate the contract with respect to all elements of the bundle.
3. Any subscription to additional services or terminal equipment provided or distributed by the same provider of internet access services or of publicly available number-based interpersonal communications services shall not extend the original duration of the contract to which such services or terminal equipment are added, unless the consumer expressly agrees otherwise when subscribing to the additional services or terminal equipment.
4. Member States shall not maintain or introduce in their national law end-user protection provisions diverging from this Article, including more, or less, stringent provisions to ensure a different level of protection.

Article 100

[NEW]

Rights for microenterprises, small and medium-sized enterprises or not-for-profit organisations

Article 96, Article 99(1) and Article 99(3) shall also apply to end-users that are microenterprises or not-for-profit organisations, unless they have explicitly agreed to waive all or parts of rights laid down in those provisions. Article 98(1), Article 98(2), Article 98(3) and Article 98(5) shall also apply to end-users that are microenterprises, small and medium-sized enterprises or not-for-profit organisations, unless they have explicitly agreed to waive all or parts of the rights laid down in those provisions.

6.3.2. CHAPTER II: Rights for end-users

Article 101

[Ex Art. 106]

Provider switching and number portability

1. In the case of switching between providers of internet access services, the providers concerned shall provide the end-user with adequate information before and during the switching process and ensure continuity of the internet access service, unless technically not feasible. The receiving provider shall ensure that the activation of the internet access service occurs within the shortest possible time on the date and within the timeframe expressly agreed with the end-user. The transferring provider shall continue to provide its internet access service on the same terms until the receiving provider activates its internet access service. Loss of service during the switching process shall not exceed one working day.
2. National regulatory authorities shall ensure that the switching process is efficient and simple for the end-user.
3. End-users with numbers from the national numbering plan shall have the right to retain their numbers, upon request, independently of the undertaking providing the service. This requirement shall apply:
 - (a) in the case of geographic numbers, at a specific location;
 - (b) in the case of non-geographic numbers, at any location.

This does not apply to the porting of numbers between networks providing services at a fixed location and mobile networks.

4. Where an end-user terminates a contract the end-user shall have the right to port a number from the national numbering plan to the same or another provider for a minimum of one month after the date of termination, unless that right is renounced by the end-user.
5. National regulatory authorities shall ensure that pricing among providers related to the provision of number portability is cost-oriented, and that no direct charges are applied to end-users.
6. The porting of numbers and their subsequent activation shall be carried out within the shortest possible time on the date explicitly agreed with the end-user. In any case end-users who have concluded an agreement to port a number to a new provider shall have that number activated within one working day from the date agreed with the end-user.

In the case of failure of the porting process, the transferring provider shall reactivate the number and related services of the end-user until the porting is successful. The transferring provider shall continue to provide its services on the same terms and conditions until the services of the receiving provider are activated. In any event the loss of service during the process of provider switching and the porting of numbers shall not exceed one working day. Operators whose access networks or facilities are used by either the transferring or the receiving provider, or both, shall ensure that there is no loss of service that would delay the switching and porting process.

7. The receiving provider shall lead the switching and porting processes set out in paragraphs 1 and 5 and both the receiving and transferring providers shall cooperate in good faith. They shall not delay or abuse the switching and porting processes, nor shall they port numbers or switch end-users without the end-users' explicit consent. The end-users' contracts with the transferring provider shall be terminated automatically upon conclusion of the switching process.

By [12 months after entry into force], in order to contribute to a consistent application of this Article, BERIC shall, after consulting stakeholders and in close cooperation with the Commission, adopt guidelines specifying the details of the switching and porting processes, taking into account technical feasibility and the need to maintain continuity of service to the end-users. The guidelines shall also detail the compensation process of end-users by their providers in case of delays in, or abuse of, porting and switching processes, missed service and installation appointments or failure by the provider to comply with the obligations set out in this Article. National regulatory authorities shall establish the details of the switching and porting processes taking utmost account of the BERIC guidelines. This shall include, where technically feasible, a requirement for the porting to be completed through over-the-air provisioning, unless an end-user requests otherwise.

National regulatory authorities shall also take appropriate measures ensuring that end-users are adequately informed and protected throughout the switching and porting processes and are not switched to another provider without their consent.

Transferring providers shall refund, upon request, any remaining credit to the consumers using pre-paid services. Refund may be subject to a fee only if provided for in the contract. Any such fee shall be proportionate and commensurate with the actual costs incurred by the transferring provider in offering the refund.

8. Member States shall not maintain or introduce in their national law end-user protection provisions diverging from this Article, including more, or less, stringent provisions to ensure a different level of protection. This is without prejudice to the right of Member States to adopt or maintain rules on the compensation of end-users by their providers in the case of the failure of a provider to comply with the obligations laid down in this Article, as well as in the case of delays in, or abuses of, porting and switching processes, and missed service and installation appointments.

Article 102

[Ex Art. 98]

Exemption of certain microenterprises

With the exception of Article 103, the Title III shall not apply to microenterprises providing number-independent interpersonal communications services unless they also provide other electronic communications services.

Before concluding a contract, a microenterprise benefitting from such an exemption shall inform end-users of the exemption under the first paragraph.

Article 103

[Ex Art. 99]

Non-discrimination

Providers of electronic communications networks or services shall not apply any different requirements or general conditions of access to, or use of, networks or services to end-users, unless justified within the limits of Union law.

6.3.3. CHAPTER III: Facilities and functionalities for end-users

Article 104

[New]

Protecting end-users against fraudulent activities

1. Providers of internet access services and of publicly available interpersonal communications services shall cooperate with national competent authorities to identify effective measures to prevent fraudulent activities perpetrated by making use of those services, that affect end-users, while ensuring full compliance with Union legislation on personal data protection.
2. The ODN shall collect information from national regulatory or other competent authorities, relevant European and global organisations and stakeholders, including EUROPOL, on the fraudulent activities perpetrated by making use of the services referred to in paragraph 1, in particular on those that are of cross-border nature.
3. BEREC, after consulting ENISA, shall issue guidelines on technical and legal measures that could effectively protect end-users against fraudulent activities in the Union, in particular measures relying on the empowerment of national regulatory authorities or competent authorities to block numbers and services pursuant to Article 52 paragraph 2. The first such BEREC guidelines shall be adopted *[1 year after the entry into force]* and update it when necessary but at least every two years thereafter.
4. National competent authorities shall adopt measures preventing fraudulent activities perpetrated by making use of the services referred to in paragraph 1, by taking utmost account the guidelines issued under paragraph 3.
5. The Commission is empowered to adopt, after consulting BEREC, delegated acts in accordance with Article 201 supplementing paragraph 3 of this Article concerning the measures necessary to ensure the effectiveness of fraud preventing measures within the Union.

Article 105

[Ex Art. 96]

Missing children and child helpline hotlines

1. Providers of number based interpersonal communication services shall ensure free of charge access for end-users, including end-users with disabilities, to the service operating a hotline to report cases of missing children. When travelling within the

Union, end-users shall have free of charge access to the visited country's service. The hotline shall be available on the number '116000'.

2. Member States shall take appropriate measures to ensure that the authority or undertaking to which the number '116000' has been assigned allocates the necessary resources to operate the hotline.
3. Member States and the Commission shall ensure that end-users are adequately informed of the existence and use of services provided under the numbers '116000' and, where appropriate, '116111'.

Article 106

[Ex Art. 103(4)]

Distribution of public interest information

Providers of internet access services or publicly available interpersonal communications services, shall distribute public interest information free of charge to existing and new end-users, where appropriate, by the means that they ordinarily use in their communications with end-users. Public interest information shall be provided by the relevant public authorities in a standardised format and shall, *inter alia*, cover the following topics:

- (a) uses of internet access services and publicly available interpersonal communications services to engage in unlawful activities or to disseminate harmful content, in particular where it may prejudice respect for the rights and freedoms of others, including infringements of data protection rights, copyright and related rights, and their legal consequences;
- (b) the means of protection against risks to personal security, privacy and personal data when using internet access services and publicly available interpersonal communications services, including protection against fraudulent activities perpetrated via those services.

Article 107

[Ex Art. 109]

Emergency communications and the single European emergency number

1. Providers of publicly available number-based interpersonal communications services shall provide end-users access to emergency services through emergency communications mandated by the Member State where they provide the service, free of charge, without having to be a subscriber and without having to use any means of payment, including by using the single European emergency number '112' and any national emergency number specified by Member States.
2. Providers of emergency communications shall ensure that PSAPs can call back, end-users originating the emergency communication, or originate an interpersonal communication by using the same interpersonal communication service as the one on which were contacted, free of charge, and if it is not economically feasible, at a retail price that does not exceed domestic retail price of the provider serving the PSAP .
3. Member States may mandate access to emergency services through emergency communications from other providers of interpersonal communication services as long as the national PSAP system allows for routing to the most appropriate PSAP and receipt of caller location information.

4. Providers of electronic communications services which are not publicly available but which enable calls to public networks shall ensure access to emergency services by using the single European emergency number ‘112’ when alternative and easy access to emergency services is not available.
5. No later than two years after the adoption of the delegated act referred to in paragraph 8, Member States shall ensure that end-users can originate emergency communications by means of a mobile application coupled with the digital wallet issued under Regulation (EU) 910/2014 (eIDAS).
6. Providers of interpersonal electronic communications services referred to in paragraph 1 shall implement the technical and organisational measures to ensure effective emergency communications for their end-users whilst traveling within the Union.
7. Interpersonal communication service providers and national PSAP systems shall ensure that emergency communications and caller location information are routed without delay to the most appropriate PSAP. National PSAP organisations shall ensure that all emergency communications, including when the single European emergency number ‘112’ is used, are appropriately answered and handled.
8. Providers referred to in paragraph 1 shall ensure that access for end-users with disabilities to emergency services is available through emergency communications and is equivalent to that enjoyed by other end-users, including by complying with Directive (EU) 2019/882 (EEA)⁶⁶
9. When mandating means of access to emergency services through emergency communications for end-users with disabilities, Member States shall ensure that, subject to technical feasibility, the following functional equivalence requirements are met:
 - (a) the emergency communication enables two-way interactive communication between the end-user with disabilities and the PSAP;
 - (b) the emergency communication is available in a seamless way, without pre-registration, to end-users with disabilities travelling within the Union;
 - (c) the emergency communication is provided to end-users with disabilities free of charge;
 - (d) the emergency communication is routed without delay to the most appropriate PSAP that is qualified and equipped to appropriately answer and process the emergency communication from end-users with disabilities;
 - (e) equivalent levels of accuracy and reliability of caller location information are ensured for the emergency communication for end-users with disabilities as for emergency calls by other end-users;
 - (f) the end-users with disabilities are enabled to reach at least the same level of awareness about the means of access to emergency services through emergency communications as other end-users about emergency calls to ‘112’, either by the design of the means of access or through awareness raising measures.
10. Providers of emergency communications shall ensure that caller location information is made available to the most appropriate PSAP without delay after the emergency communication is set up. This shall include network-based location information and, where the radio equipment device makes it available for transmission, handset-derived

⁶⁶ Directive (EU) 2019/882 of the European Parliament and of the Council of 17 April 2019 on the accessibility requirements for products and services

caller location information. Providers of emergency communications shall ensure that the establishment and the transmission of the caller location information are free of charge for the end-user and the PSAP with regard to all emergency communications to the single European emergency number ‘112’. PSAP organisations shall ensure that the technical and organisational measures are in place to receive and process the caller location information. Member States may extend these obligations to cover emergency communications to national emergency numbers.

11. Member States shall ensure that end-users, including roaming end-users, and end-users with disabilities are adequately informed about the means of access to emergency services through emergency communications, including by using of the single European emergency number ‘112’. That information shall be provided in accessible formats, addressing different types of disabilities. The Commission shall support and complement Member States’ action.
12. The Commission is empowered to adopt, after consulting BEREC, delegated acts in accordance with Article 201 supplementing paragraphs 1, 2, 3, 5 and 6 of this Article by laying down the measures necessary to ensure effective emergency communications in the Union with regard to technical specifications to allow the origination of emergency communications by using the digital wallet, caller location information solutions, harmonised European caller location criteria, equivalent access for end-users with disabilities and routing to the most appropriate PSAP. The Commission is empowered to adopt the first such delegated act on harmonised European caller location criteria by *[adoption date + 2 years]*.
13. Member states shall report to the ODN, with the purpose of maintaining a database by ODN under the supervision of BEREC, the E.164 numbers to contact Member State’s PSAP systems to ensure that they are able to contact each other from one Member State to another.

Article 108

[Ex Art. 110]

Transmission of public warnings

1. Providers of mobile number-based interpersonal communications services shall transmit public warnings to the end-users concerned, via the technology mandated by the Member States where they provide the service, in the geographic areas potentially being affected by imminent or developing major emergencies and disasters during the warning period, as determined by the competent authorities.
2. The Commission may adopt implementing acts laying down technical provisions concerning the transmission of public warnings by using the digital wallet issued under of Regulation (EU) 910/2014 to all end-users concerned, including roaming end-users.
3. Member States shall ensure that one year after the first implementing act adopted under paragraph 3 of this Article, public warnings are transmitted to all end-users concerned by means of a mobile application coupled with the digital wallet issued pursuant to Regulation (EU) 910/2014 (eIDAS).

Article 109

[New]

[merged Annex VI, Part B, letter a) EECC integrating Art. 8 ePD. It includes also some wording of the “tentatively agreed” e-privacy proposal articles at technical level in 2022]

Presentation and restriction of calling, connected line identification and originating identification

1. Providers of public electronic communications networks, internet access or publicly available interpersonal communications services shall provide calling line or originating identification.
2. They shall ensure that the originating party is able, by using a simple means and free of charge, to prevent the presentation of calling line or originating identification at the point where their interpersonal voice communication terminates on a per-communication basis.
3. The network or service provider shall ensure that the receiving party is able, by using a simple and free of charge means for reasonable use of this function, to prevent the presentation of the calling line identification or originating identification of incoming calls.
4. Prior to the voice communication being established and presenting the calling line or originating identification, the service provider shall ensure that the receiving party is able, by using a simple and free of charge means, to reject incoming voice communications where the originating party has used its rights provided for in paragraph 1.
5. Where presentation of connected line identification is offered, the service provider shall ensure that the receiving party is able, by using a simple and free of charge means, to prevent the presentation of the connected line identification to which the calling end-user is connected.
6. Paragraph 1 shall also apply with regard to voice communications to third countries originating in the Union. Paragraphs 2, 3 and 4 shall also apply to incoming voice communications originating in third countries.
7. Where presentation of calling or connected line identification or originating identification is displayed, the providers of internet access services or publicly available interpersonal communications services shall inform the public thereof and of the rights set out in paragraphs 1 to 4 and the exceptions under Article 109.

Article 110

[Integrating Art. 10 ePD. It includes also some wording of the “tentatively agreed” e-privacy proposal articles at technical level in 2022]

Exceptions [for tracing malicious or nuisance communications and for emergency services]

1. The caller’s or originating party’s right to not display the calling line identification or originating identification may be overridden by the providers of public electronic communications networks or publicly available electronic communications services, on a temporary basis, to assist competent authorities or an end-user in tracing of malicious or nuisance communications in accordance with Article 6(1), point (f), of Regulation (EU) 2016/679.
2. Where the receiving party denied or did not give its consent for the processing of location data, that choice may be overridden by the providers of public electronic

communications networks or publicly available electronic communications services on a temporary basis, in accordance with Article 6(1), point (d), of Regulation (EU) 2016/679, in the case of originating emergency communications.

3. The principles for processing of personal data under Article 5 of Regulation (EU) 2016/679 shall apply.
4. [The Commission shall be empowered to adopt implementing acts in accordance with Article 202(4)] with regard to the establishment of procedures and the circumstances where providers of publicly available internet access and publicly available interpersonal communication services shall override the elimination of the presentation of the calling line identification or the originating identification on a temporary basis, where end-users request the tracing of malicious or nuisance communications.

Article 111

[NEW, Art 11 ePD]

Automatic call forwarding and automated calling systems

1. Providers of publicly available number-based interpersonal communications services shall deploy state of the art measures to limit, upon the called end-user's request, the reception of, malicious or nuisance calls by providing the following possibilities, free of charge:
 - (a) to block, where technically feasible, incoming calls from specific numbers or from anonymous sources;
 - (b) to stop automatic call forwarding by a third party to the end-user's terminal equipment.
2. Providers of interpersonal electronic communications services offering or [any person] using automated calling systems shall not prevent the right of the presentation of the calling line or originating identity on the called line or the receiving party and shall present the identity or the number on which they can be contacted.

Article 112

[New]

[To be decided during ISC]

Art. 113

[Ex Art. 111]

Equivalent access and choice for end-users with disabilities

1. Providers of publicly available electronic communications services shall ensure that end-users with disabilities:
 - (a) have access to electronic communications services, including the related contractual information provided pursuant to Article 96, equivalent to that enjoyed by the majority of end-users;
 - (b) benefit from the choice of undertakings and services available to the majority of end-users.

The competent authorities shall specify requirements to this effect to be met by providers.

2. In taking the measures referred to in paragraph 1 of this Article, competent authorities shall encourage compliance with the relevant standards or specifications laid down in accordance with Article 189.

Article 114

[Ex Art. 113]

Interoperability of car radio and consumer radio receivers and consumer digital television equipment

1. Car radio receivers and consumer digital television equipment shall be interoperable in accordance with Annex IV.
2. Where Member States decide to adopt measures to ensure the interoperability of other consumer radio receivers such measures shall not be applied to products where a radio receiver is purely ancillary, such as smartphones, and to equipment used by radio amateurs.
3. Providers of digital television services shall ensure, where appropriate, that the digital television equipment that they provide to their end-users is interoperable so that, where technically feasible, the digital television equipment is reusable with other providers of digital television services.

Without prejudice to Article 5(2) of Directive (EU) 2024/884/EU of the European Parliament and of the Council (⁴), upon termination of their contract, end-users shall have the possibility to return the digital television equipment through a free and easy process, unless the provider demonstrates that it is fully interoperable with the digital television services of other providers, including those to which the end-user has switched.

Digital television equipment which complies with harmonised standards the references of which have been published in the Official Journal of the European Union, or with parts thereof, shall be considered to comply with the requirement of interoperability set out in the second subparagraph covered by those standards or parts thereof.

4. Member States shall not maintain or introduce in their national law end-user protection provisions diverging from this Article, including more, or less, stringent provisions to ensure a different level of protection.

Article 115

[Ex Art. 114]

‘Must carry’ obligations

1. Member States may impose reasonable ‘must carry’ obligations for the transmission of specified radio and television broadcast channels and related complementary services, in particular accessibility services to enable appropriate access for end-users with disabilities and data supporting connected television services and EPGs, on undertakings under their jurisdiction providing electronic communications networks and services used for the distribution of radio or television broadcast channels to the public, where a significant number of end-users of such networks and services use them as their principal means to receive radio and television broadcast channels. Such obligations shall be imposed only where they are necessary to meet general interest

objectives as clearly defined by each Member State and shall be proportionate and transparent.

2. Member States shall review the obligations referred to in paragraph 1 where there is a relevant change in national market conditions or where the general interest objectives referred to in paragraph 1.
3. Neither paragraph 1 of this Article nor Article 65(2) shall prejudice the ability of Member States to determine appropriate remuneration, if any, in respect of measures taken in accordance with this Article while ensuring that, in similar circumstances, there is no discrimination in the treatment of providers of electronic communications networks and services. Where remuneration is provided for, Member States shall clearly set out the obligation to remunerate in national law, including, where relevant, the criteria for calculating such remuneration. Member States shall ensure that it is applied in a proportionate and transparent manner.

Article 116

[Ex Art. 116]

Adaptation of annexes

The Commission is empowered to adopt delegated acts in accordance with Article 201 amending Annexes IV and V.

7. PART VII: GOVERNANCE

7.1. TITLE I: NATIONAL REGULATORY AND OTHER COMPETENT AUTHORITIES

Article 117

[Ex Art. 5]

National regulatory and other competent authorities

1. Within the scope of this Regulation, the national regulatory authorities shall be responsible for at least the following tasks:
 - (a) handling the notification and single passport procedure under the general authorisation system referred to in Articles 9 and 10, confirming the right to provide networks or services;
 - (b) implementing market regulation, including the imposition of access and interconnection obligations;
 - (c) data gathering, including on resilience and sustainability, that national regulatory authorities may need to carry out their tasks;
 - (d) implementing the measures for the transition to fibre, including defining the copper switch-off areas, assessing and supervising copper switch-off plans submitted by network operators;
 - (e) ensuring the resolution of disputes between undertakings, including the voluntary conciliation on ecosystem cooperation referred to in Article 194;
 - (f) carrying out radio spectrum management and authorisation, or, where those tasks are assigned to other competent authorities, taking decisions regarding the market-shaping

- and competition elements of national processes related to the rights of use for radio spectrum for electronic communications networks and services;
- (g) contributing to the protection of end-user rights in the electronic communications sector, in coordination, where relevant, with other competent authorities;
 - (h) supervising and enforcing open internet access described in Article 94 in line with Article 95;
 - (i) monitor the evolution and level of retail prices of the services referred to in Article 88(1) pursuant to Article 89;
 - (j) ensuring number portability;
 - (k) granting numbering resources and managing numbering plans;
 - (l) providing support on preparedness and resilience, in accordance with Articles 4 to 7 of this Regulation;
 - (m) performing any other task that this Regulation or other Union legislation reserves to national regulatory authorities.
2. National regulatory authorities shall actively support the goals of BEREC of promoting greater regulatory coordination and consistency.
 3. Member States shall publish the names of national regulatory and other competent authorities and their respective tasks under this Regulation in an easily accessible form.

Member States shall notify to the Commission all national regulatory and other competent authorities that are assigned tasks under this Regulation, and their respective responsibilities, as well as any change thereof.

Article 118

[Ex Art. 6]

Independence of national regulatory and other competent authorities

1. National regulatory and other competent authorities shall be legally distinct from, and functionally independent of, any natural or legal person providing electronic communications networks, equipment or services. The regulatory function shall be structurally separated from activities associated with ownership or control of undertakings providing electronic communications networks or services.
2. National regulatory and other competent authorities shall exercise their powers impartially, transparently and in a timely manner. National regulatory and other competent authorities shall have adequate technical, financial and human resources to carry out the tasks assigned to them.

Article 119

[Ex Art. 7]

Appointment and dismissal of members of national regulatory authorities

1. The head of a national regulatory authority, or, where applicable, the members of the collegiate body fulfilling that function within a national regulatory authority or their alternates, shall be appointed for a term of office of at least three years from among persons of recognised standing and professional experience, on the basis of merit,

skills, knowledge and experience and following an open and transparent selection procedure.

2. The head of a national regulatory authority, or where applicable, members of the collegiate body fulfilling that function within a national regulatory authority or their alternates may be dismissed during their term only if they no longer fulfil the conditions required for the performance of their duties which are laid down in national law before their appointment.
3. The decision to dismiss the head of the national regulatory authority concerned, or where applicable members of the collegiate body fulfilling that function, shall be made public at the time of dismissal. The dismissed head of the national regulatory authority or, where applicable, members of the collegiate body fulfilling that function shall receive a statement of reasons. In the event that the statement of reasons is not published, it shall be published upon that person's request. Any natural or legal person shall have the right to challenge this decision before a court, on points of fact as well as on points of law.

Article 120

[Ex Art. 8]

Political independence and accountability of the national regulatory authorities

1. Without prejudice to Article 124(9) of this Regulation, national regulatory authorities shall act independently and objectively, including in the development of internal procedures and the organisation of staff, shall operate in a transparent and accountable manner in accordance with Union law, and shall not seek or take instructions from any other body in relation to the exercise of the tasks assigned to them under national law implementing Union law. This shall not prevent supervision in accordance with national constitutional law. Only appeal bodies set up in accordance with Article 200 shall have the power to suspend or overturn decisions of the national regulatory authorities.
2. National regulatory authorities shall report annually, *inter alia*, on the state of the electronic communications market, on the decisions they issue, on their human and financial resources and how those resources are attributed, as well as on future plans. Their reports shall be made public.

Article 121

[Ex Art. 9]

Regulatory capacity of national regulatory authorities

1. National regulatory authorities shall have separate annual budgets and have autonomy in the implementation of the allocated budget. Those budgets shall be made public.
2. National regulatory authorities shall have adequate financial and human resources to carry out the tasks assigned to them and to actively participate in and contribute to BEREC. Financial autonomy shall not prevent supervision or control in accordance with national constitutional law. Any control on the budget of the national regulatory authorities shall be exercised in a transparent manner and made public.

Article 122

[Ex Art. 11]

Cooperation with national authorities and BEREC

1. In Member States where there is more than one national authority or competent authority responsible, national regulatory and other competent authorities shall cooperate and coordinate among each other, as necessary.

Such authorities shall provide each other with the information necessary for the application of this Regulation.

In respect of the information exchanged, the receiving authority shall ensure the same level of confidentiality as that of the originating authority.

2. National regulatory and other competent authorities of the same Member State or of different Member States shall, where necessary, enter into cooperative arrangements with each other to foster regulatory cooperation.
3. Where competences under this Regulation or other Union law are assigned by Member States to other competent authorities, national regulatory authorities shall act as national coordinators, ensuring that the views of the competent authorities are fully taken into account in all of BEREC's discussions and outputs.

In particular, national regulatory authorities shall provide ODN with relevant contacts within national competent authorities to allow it to implement its tasks under Articles 148 and 149.

7.2. TITLE II: BEREC TASKS AND ORGANISATION

Article 123

[Ex Art 3 BEREC Regulation]

Objectives of BEREC

1. BEREC shall act within the scope of this Regulation and Regulation (EU) 2022/612 and (EU) 2015/2120.
2. BEREC shall pursue the objectives set out in Article 3 of this Regulation. In particular, BEREC shall aim to ensure the consistent implementation of the Union's regulatory framework for electronic communications within the scope referred to in paragraph 1 of this Article.
3. BEREC shall carry out its tasks independently, impartially, transparently and in a timely manner.
4. BEREC shall draw upon the expertise available in the national regulatory authorities and in the ODN.

Article 124

[Ex Art 4 BEREC Regulation]

General regulatory tasks of BEREC

1. BEREC shall:
 - (a) assist and advise the national regulatory and other competent authorities, the European Parliament, the Council and the Commission, and cooperate with the national

- regulatory authorities and the Commission, upon request or on its own initiative, on any technical matter regarding electronic communications within its competence;
- (b) assist and advise the Commission, upon request, in relation to the preparation of legislative proposals in the field of electronic communications, including on any proposed amendment of this Regulation;
 - (c) issue opinions, guidelines and reports, as referred to in Articles 126, 127 and 128, as well as recommendations and common positions, and disseminate regulatory best practices addressed to the national regulatory authorities to encourage the consistent and correct implementation of the regulatory framework for electronic communications.
2. BEREC shall evaluate the need for regulatory innovation and coordinate actions between national regulatory and other competent authorities to enable the development of new innovative electronic communications.
 3. On matters relating to radio-spectrum, BEREC shall participate in the Union Spectrum Single Market procedure.
 4. BEREC shall be consulted by the Commission when reviewing mergers within Union dimension in the electronic communications sector.
 5. BEREC shall promote effective cooperation among providers of electronic communications networks and undertakings active in the electronic communications or closely related sectors, in accordance with Article 193(2) of this Regulation. In that context, BEREC shall also facilitate the coherent application of those guidelines, encourage the development of joint technical and commercial practices, and monitor their effects on the provision of electronic communications services and information society services in an efficient, optimised and reliable way.
 6. BEREC shall carry out other tasks assigned to it by this Regulation or other legal acts of the Union, in particular by Regulations (EU) 2022/612 and (EU) 2015/2120.
 7. BEREC shall make public its regulatory tasks and shall update that information when new tasks are assigned to it. BEREC shall not carry out tasks that are not expressly assigned to it by this Regulation or other Union law.
 8. BEREC shall make public all of its final opinions, guidelines, reports, recommendations, common positions and best practices, and any commissioned studies, as well as the relevant draft documents for the purpose of the public consultations referred to in paragraph 10 of this Article.
 9. Without prejudice to compliance with relevant Union law and other acts adopted by the Commission, national regulatory authorities and the Commission shall take the utmost account of any guidelines, opinion, recommendation, common position and best practices adopted by BEREC in accordance with this Regulation, with the aim of ensuring the consistent implementation of the regulatory framework for electronic communications within the scope referred to in Article 123 of this Regulation.

Where a national regulatory authority deviates from the guidelines referred to in Article 127, it shall provide the reasons thereof.

10. BEREC shall, where appropriate, consult interested parties and give them the opportunity to comment within a reasonable period having regard to the complexity of the matter. Save in exceptional circumstances, that period shall not be shorter than 30 days. BEREC shall, without prejudice to Article 171, make the results of such public

consultations publicly available. Such consultations shall take place as early as possible in the decision-making process.

11. BEREC shall, where appropriate, consult and cooperate with relevant national authorities, such as those competent in the fields of competition, consumer protection, cybersecurity and data protection.
12. BEREC shall, where appropriate, cooperate with competent Union bodies, offices, agencies and advisory groups, as well as with the competent authorities of third countries and with international organisations, in accordance with Article 168(1) of this Regulation.

Article 125

[ex Art 4 BEREC Regulation]

Analysis, monitoring and collection of information

1. BEREC shall conduct analyses of potential transnational markets and of transnational end-user demand in accordance with Articles 74 and 75 of this Regulation, respectively.
2. BEREC shall supervise the ODN in monitoring and collecting information and, where relevant, making up-to-date information publicly available on the application of Regulation (EU) 2022/612, in accordance with Article 16 thereof.
3. BEREC shall supervise the ODN in facilitating and coordinating the exchange of information between the national regulatory authorities and ensure the appropriate coordination of work among them, in accordance with Article 49(6), third subparagraph of this Regulation.
4. BEREC shall promote the modernisation, coordination and standardisation of the collection of data by national regulatory and other competent authorities, such data being made available to the public in an open, reusable and machine-readable format on the BEREC website, the EU Digital Gateway.
5. BEREC shall supervise the ODN in the establishment and maintenance of databases of:
 - (a) the notifications transmitted to the competent authorities by providers of electronic communications networks and services subject to general authorisation, in accordance with Article 10 of this Regulation;
 - (b) on pan-European numbering resources, in accordance with Article 47(4), and on the numbering resources with a right of extraterritorial use within the Union, in accordance with Article 48(4), fourth subparagraph, of this Regulation;
 - (c) where relevant, E.164 numbers of Member State PSAPs, in accordance with Article 107(9) of this Regulation;
 - (d) a single, Union-wide database of numbering ranges for value-added services in each Member State, to be made accessible to operators, national regulatory authorities and, where applicable, to other competent authorities, in accordance with Regulation (EU) 2022/612;
 - (e) a single, Union-wide database of means of access to emergency services that are mandated in each Member State and that are technically feasible to be used by roaming customers, to be made accessible to operators and national regulatory authorities and,

where applicable, to other competent authorities in accordance with Regulation (EU) 2022/612.

Article 126

[Ex Art 4 BEREC Regulation]

BEREC opinions

1. BEREC shall issue opinions as referred to this Regulation and in Regulation (EU) 2022/612, and in particular on:
 - (a) the resolution of cross-border disputes, in accordance with Article 192 of this Regulation;
 - (b) draft national measures related to the internal market procedures for market regulation, in accordance with Article 85 of this Regulation;
 - (c) draft decisions and recommendations on harmonisation, in accordance with Article 188 of this Regulation;
 - (d) end-to-end connectivity between end-users, in accordance with Article 68(2) second sub-paragraph, point (b) of this Regulation;
 - (e) markets susceptible to ex ante regulation, in accordance with Article 72(2) of this Regulation;
 - (f) the determination of a single maximum Union-wide mobile voice termination rate and a single maximum Union-wide fixed voice termination rate, in accordance with Article 82 of this Regulation;
 - (g) the technical specifications, standard cost elements, cost methodologies and the reference offer related to the Union access product(s) in accordance with Article 81 of this Regulation;
 - (h) on the forward-looking Union numbering strategy concerning the consistent management of numbering resources in the Members States and at Union level, in accordance with Article 46(3) of this Regulation;
 - (i) on the determination of the adequate internet access service and the bandwidth necessary for social and economic participation in society, in accordance with Article 90 of this Regulation;
 - (j) on market and technological developments and on their impact on the application of the availability and affordability of adequate internet access and voice communications, in accordance with Article 93(2) of this Regulation;
 - (k) on conditions for the offering of services other than internet access services which are optimised for specific content, applications or services, or a combination thereof, in accordance with Article 94(6) of this Regulation;
 - (l) the contract summary template, in accordance with Article 96(2) second sub-paragraph of this Regulation;
 - (m) on technical and legal measures that could effectively protect end-users against fraudulent activities, in accordance with Article 104(5);
 - (n) on measures necessary to ensure effective emergency communications, in accordance with Article 107(8) of this Regulation;

- (o) on the elements of the case submitted for a voluntary conciliation procedure, in accordance with Article 194(2) of this Regulation.
2. On matters relating to radio-spectrum, BEREC shall issue the following opinions:
- (a) on common methodologies for defining annual spectrum fees and reserve prices in accordance with Article 29 of this Regulation;
 - (b) where relevant, in accordance with the Union Spectrum Single Market procedure referred to in Article 31 of this Regulation;
 - (c) on consistent application of market shaping measures in accordance with Article 32(3) of this Regulation.

Article 127

[Ex Art 4 BEREC Regulation]

BEREC guidelines

BEREC shall issue guidelines on the implementation of the Union regulatory framework for electronic communications, in particular, as referred to in this Regulation, as well as in Regulation (EU) 2022/612 and Regulation (EU) 2015/2120, on:

- (a) a common template to collect information on architecture, capacity, capabilities and use of electronic communications networks, in accordance with Article 7 of this Regulation;
- (b) the notification template, in accordance with Article 10(3) of this Regulation;
- (c) the general authorisation conditions under the single passport procedure, to ensure all the conditions listed in Article 9(2) of this Regulation are applied in a coherent, non-discriminatory and proportionate manner, in accordance with Article 11(1) of this Regulation;
- (d) common criteria for the assessment of the ability to manage numbering resources and of the risk of exhaustion of numbering resources, in accordance with Article 48 of this Regulation;
- (e) to support the definition of adequate internet access service and the specification of the bandwidth necessary for social and economic participation in society, in accordance with Article 88 of this Regulation;
- (f) relevant criteria to foster the consistent application of Article 69(2) of this Regulation;
- (g) common approaches to the identification of the network termination point in different network topologies, in accordance with Article 69(6) of this Regulation;
- (h) guidelines on the implementation of the obligations of national regulatory authorities in safeguarding of open internet access, in accordance with Article 95(4) of this Regulation, which shall also detail the relevant quality of service parameters for internet access services, including parameters for the monitoring mechanism referred to in Article 98(4), second subparagraph, parameters relevant for end-users with disabilities, the applicable measurement methods, the content and format of the information, as provided in Annex III and of publication as provided in Annex IV, and quality certification mechanisms;
- (i) on a common template to be used to collect information required under Article 95(3) of this Regulation;

- (j) specifying the details of the switching and porting processes, in accordance with Article 101(6) of this Regulation;
- (k) on technical and legal measures that could effectively protect end-users against fraudulent activities, in accordance with Article 104(3) of this Regulation;
- (l) wholesale roaming access, in accordance with Article 3(8) of Regulation (EU) 2022/612;
- (m) the implementation of quality of service measures and the consistent application of Article 8 of Regulation (EU) 2022/612, in accordance with Article 4(3) and Article 8(6) of Regulation (EU) 2022/612 (retail guidelines);
- (n) the parameters to be taken into account by national regulatory authorities in their assessment of the sustainability of the domestic charging model, in accordance with Article 5a(6) of Regulation (EU) 2015/2120;
- (o) the scope, timing, frequency and format, including of information collection procedures and general reporting obligations for providers falling under the general authorisation regime, in accordance with Article 184(1) of this Regulation;
- (p) the consistent implementation of obligations as regards geographical surveys and forecasts, in accordance with Article 185 of this Regulation;
- (q) on facilitating ecosystem cooperation on technical and commercial matters related to the provision of electronic communications services or information society services and of innovative products and services, in accordance with Article 193(1) of this Regulation.
- (r) the issuing of other guidelines ensuring the consistent implementation of the regulatory framework for electronic communications and consistent regulatory decisions by the national regulatory authorities, upon the request of the European Parliament, the Council or the Commission, in particular for regulatory issues affecting a significant number of Member States or with a cross border element.

Article 128

[Ex Art 4 BEREC Regulation]

BEREC reports

BEREC shall issue reports on technical matters within its competence, in particular on:

- (a) a Union Preparedness Plan for Digital Infrastructures, including a comprehensive assessment of the architecture, capacities, capabilities and use of digital infrastructures, a set of operational recommendations and crisis management practices, in accordance with Article 6 of this Regulation;
- (b) the evolution of pricing and consumption patterns both for domestic and roaming services, the evolution of actual wholesale roaming rates for unbalanced traffic, the relationship between retail prices, wholesale charges and wholesale costs for roaming services as well as on transparency and comparability of tariffs, in accordance with Article 21 of Regulation (EU) 2022/612;
- (c) the outcomes of the annual reports that national regulatory authorities shall provide in accordance with Article 5 of Regulation (EU) 2015/2120, through the publication of an annual synthesis report;

- (d) the market developments in the electronic communications sector, on an annual basis, in accordance with Article 120(2) of this Regulation;
- (e) the national implementation and functioning of the general authorisation, and their impact on the functioning of the internal market, in accordance with Article 207(5) of this Regulation;
- (f) on the national practices regarding the granting of rights of use for national and pan-European numbers focusing on diverging practices within the Union, in accordance with Article 48(6) of this Regulation;
- (g) on main practices and findings of national regulatory authorities relating to the application of open internet rules, in accordance with Article 95(2) of this Regulation;
- (h) the effects of the application of the guidelines on effective ecosystem cooperation, and on the functioning of the facility for voluntary conciliation, in accordance with Article 195 of this Regulation.

Article 129

[Ex Art. 7 BEREC Regulation]

Composition of the BEREC Board of Regulators

1. The Board of Regulators shall be composed of one member from each Member State. Each member shall have the right to vote.

Each member shall be appointed by the national regulatory authority that has primary responsibility for overseeing the day-to-day operation of the markets for electronic communications networks and services under this Regulation. The member shall be appointed from among the head of the national regulatory authority, a member of its collegiate body, or the replacement of either of them.

2. Each member of the Board of Regulators shall have an alternate, appointed by the national regulatory authority. The alternate shall represent the member in his or her absence. The alternate shall be appointed from among the head of the national regulatory authority, a member of its collegiate body, the replacement of either of them, or the staff of the national regulatory authority.
3. Members of the Board of Regulators and their alternates shall be appointed in light of their knowledge in the field of electronic communications, taking into account relevant managerial, administrative and budgetary skills. In order to ensure continuity of the work of the Board of Regulators, all appointing national regulatory authorities shall make efforts to limit the turnover of their members and, where possible, also of their alternates, and shall aim to achieve a balanced representation between men and women.
4. The Commission shall participate in all deliberations of the Board of Regulators without the right to vote and shall be represented at an appropriately high level.
5. An up-to-date list of members of the Board of Regulators and their alternates, together with their declarations of interest, shall be made public.

Article 130

[Ex Art. 8 BEREC Regulation]

Independence of the BEREC Board of Regulators

1. The Board of Regulators shall act independently and objectively in the interests of the Union, regardless of any particular national or personal interests.
2. Without prejudice to coordination as referred to in Article 122(1) of this Regulation, the members of the Board of Regulators and their alternates shall neither seek nor take instructions from any government, institution, person or body.

Article 131

[Ex Art. 9 BEREC Regulation]

Functions of the BEREC Board of Regulators

1. The Board of Regulators shall have the following functions:
 - (a) to fulfil the regulatory tasks of BEREC set out in Articles 124 to 128, namely to adopt the opinions, guidelines, reports, recommendations and common positions and disseminate best practices referred to in these Articles, relying, in doing so, on the preparatory work carried out by the working groups;
 - (b) to take administrative decisions relating to the organisation of BEREC's work;
 - (c) to adopt BEREC's biennial work programme as referred to in Article 143;
 - (d) to adopt BEREC's biennial report on its activities as referred to in Article 144;
 - (e) to adopt rules for the prevention and management of conflicts of interests as referred to in Article 175(5), as well as in respect of members of the working groups;
 - (f) to adopt detailed rules on the right of access to documents held by BEREC in accordance with Article 169;
 - (g) to adopt and regularly update the communication and dissemination plans as referred to in Article 170(2), based on an analysis of needs;
 - (h) to adopt, acting by a two-thirds majority of its members, and make public, its rules of procedure;
 - (i) to authorise, together with the ODN Director, the conclusion of working arrangements with competent Union bodies, offices, agencies and advisory groups and with competent authorities of third countries and with international organisations in accordance with Article 168(1);
 - (j) to set up working groups, in coordination with the ODN, and appoint their Chairs in accordance with Article 142;
 - (k) to provide the Director of the ODN with guidance with regard to the carrying out of the tasks of the ODN in relation to the BEREC tasks.
2. In particular, the BEREC Board of Regulators shall review its rules of procedure within 6 months from the entry into force of this Regulation.

Article 132

[Ex Art. 10 BEREC Regulation]

Chair and Vice-Chairs of the BEREC Board of Regulators

1. The BEREC Board of Regulators shall appoint, acting by a two-thirds majority of their members, a Chair and at least one Vice-Chair from among its members.

2. The Vice-Chair shall automatically assume the duties of the Chair where the latter is not in a position to perform those duties.
3. The term of office of the Chairs shall be one year for BEREC, renewable once. In order to ensure continuity of BEREC's work, the incoming Chair shall serve, where possible, one year as Vice-Chair before their term of office as Chair. The rules of procedure shall provide for a shorter term where it is not possible for the incoming Chair to serve as Vice-Chair one year before their term of office as Chair.
4. The Chair of the BEREC Board of Regulators shall neither seek nor take instruction from any government, institution, person or body.
5. The Chair shall report to the European Parliament and to the Council on the performance of BEREC's tasks when invited to do so.
6. The incoming Chairs shall participate to the meetings of the BEREC Board of Regulators.

7.3. TITLE III: RSPB TASKS AND ORGANISATION

Article 133

[NEW]

Establishment and objectives of the RSPB

1. The Radio Spectrum Policy Body (RSPB) is hereby established with the responsibilities laid down in this Regulation.
2. The RSPB shall replace and take over tasks the Radio Spectrum Policy Group (RSPG), which was established by Commission Decision of 11 June 2019 setting up the Radio Spectrum Policy Group and repealing Decision 2002/622/EC.
3. RSPB shall pursue the objectives set out in Article 3 of this Regulation. In particular, RSPB shall aim to ensure the consistent implementation of regulatory framework on spectrum and support the development of a Union-level radio spectrum policy.
4. RSPB shall carry out its tasks impartially, transparently and in a timely manner.
5. RSPB shall draw upon the expertise available in the competent authorities and in the ODN in accordance with Article 149.

Article 134

[RSPG Decision Art. 2]

RSPB tasks in support of Commission and other Union's institutions

1. The RSPB shall assist and advise the Commission:
 - (a) on strategic radio spectrum policy issues in the Union;
 - (b) on the coordination of radio spectrum policy approaches in the Union;
 - (c) by issuing opinions concerning legislative proposals including for the purpose of releasing harmonised spectrum for shared use or for use not subject to individual rights;
 - (d) by issuing opinions in relation to Commission recommendations regarding the harmonised application of the provisions of the regulatory framework for electronic

communications in the field of radio spectrum, without prejudice to the role of BERE;

- (e) on coordination and cooperation between the Commission, Member States and relevant competent authorities in relation to the implementation of existing radio spectrum Union legislation, programmes and policies;
 - (f) where appropriate, on harmonised conditions with regard to the availability and efficient use of radio spectrum, necessary for the establishment and functioning of the internal market.
2. In particular in relation to this Regulation, the RSPB shall assist the Commission in:
- (a) in developing the Union spectrum strategy pursuant to Article 17 and in monitoring technical, economic and societal developments to suggest roadmap's updates.
 - (b) in cases of a request for a (new) spectrum allocation by an interested party, where the matter affects spectrum policy, in accordance with Article 19;
 - (c) designating the most appropriate authorisation regime for a particular harmonised spectrum band in accordance with Article 21(5);
 - (d) jointly establishing relevant common authorisation conditions and, where relevant, suggest the appropriate authorisation procedure and the award conditions, in accordance with Article 22;
 - (e) recommending common methodologies for defining annual fees and reserve prices under Article 29;
 - (f) developing common pro-investment authorisation processes aspects and selection conditions for authorisation the use of harmonised spectrum in accordance with Article 30(10);
 - (g) where relevant, specifying the conditions attached to the general authorisation in accordance with Article 38(3);
 - (h) establishing the European Table of Allocation of Satellite Frequencies in accordance with Article 39(2);
 - (i) defining additional conditions necessary for the protection of EU policies in accordance with Article 39(4);
 - (j) setting the modalities for the calculation of annual spectrum fees, their collection and distribution in accordance with Article 39(5);
 - (k) assessing application granting Union authorisations in accordance with Article 40;
 - (l) recommending the coordinated sharing of the spectrum between terrestrial and satellite usages in accordance with Article 45(4).
3. The RSPB shall also assist the Commission in its preparatory work on proposals to the Council for the adoption of decisions in accordance with Article 218(9) of the Treaty on the Functioning of the European Union establishing the positions to be adopted on the Union's behalf in international organisations competent in radio spectrum matters.
4. The RSPB shall assist and advise the Council and the European Parliament upon their request on the strategic planning and coordination of radio spectrum policy approaches in the Union.

The RSPB task in support of competent authorities

1. The RSPB shall assist competent authorities in cooperating with each other and with the Commission in support of the strategic planning and coordination of radio spectrum policy approaches in the Union, by:
 - (a) developing best practices on radio spectrum related matters, with a view to implementing Union law, and in relation to this Regulation, the RSPB shall collect good practices on:
 - (a) the most appropriate authorisation regime in accordance with Article 21(4) and
 - (b) spectrum authorisation processes and selection conditions in accordance with Article 30(10);
 - (b) facilitating coordination between Member States with a view to implementing Union law and to contributing to the development of a single market for electronic communications, by *inter alia* enhancing the information sharing, cooperation and peer learning between Member States;
 - (c) coordinating Member States' approaches with regard to the exercise of radio spectrum usage rights and publishing reports and opinions on radio spectrum related matters;
 - (d) where relevant, organising meetings to allow national regulatory or other competent authorities, upon their request, to discuss and exchange views and experiences relating to the authorisation processes and conditions of the use of radio spectrum;
 - (e) organising regular discussions with the Commission on different strategic issues related to spectrum;
 - (f) organising workshops and hearings with representatives of stakeholder and academia on technical, economic and societal developments related to spectrum.
2. In particular in relation to this Regulation, the RSPB shall assist competent authorities and the Commission in:
 - (a) providing its good offices to resolve any cross-border coordination or cross-border harmful interference issue or dispute between Member States or with third countries, and issue relevant opinions, in accordance with Article 14;
 - (b) monitoring implementation of national spectrum roadmaps in accordance with Article 17(6);
 - (c) identifying spectrum bands to be covered by, and practical arrangement of databases in accordance with Article 28;
 - (d) relation to filings and coordination of satellite systems with ITU in accordance with Article 37;
 - (e) monitoring the compliance of the satellite systems operating under a Union authorisation, and in examining and appropriately responding to breaches thereof in accordance with Article 43, including by issuing relevant opinions;
 - (f) exchanging information about urgent actions in accordance with Article 44(3).
3. The RSPB shall actively participate in the Union Spectrum Single Market procedure under Article 31 and shall deliver opinions, where provided in this Regulation.

Article 136

[Ex Art. 3 RSPG Decision]

Composition of the RSPB Board

1. The RSPB Board shall be composed of one member from each Member State. Each member shall have the right to vote.
2. The RSPB Board shall be composed of authorities responsible for spectrum policy from Member States.
3. The member of the Board appointed by each Member State shall be a high-level representative with overall responsibility for strategic radio spectrum policy.
4. The Commission shall participate in all meetings of the RSPB Board without voting rights and shall be represented at the appropriate level.
5. Each member of the RSPB Board as well as the Commission may appoint an alternate representative who, in the event of absence or incapacity of the nominated representative, shall be empowered to exercise the responsibilities of the representative appointed in accordance with paragraph 3 of this Article.
6. A list with the names and affiliation of the representatives of the members of the RSPB Board as well as of their alternates shall be made public on the website of the RSPB.

Article 137

[NEW]

Functions of the RSPB Board

1. The RSPB Board shall have the following functions:
 - (a) to fulfil the RSPB tasks set out in Articles 134 and 135, namely to adopt the opinions and reports, and disseminate best practices, relying, in doing so, on the preparatory work carried out by the working groups;
 - (b) to take administrative decisions relating to the organisation of RSPB's work;
 - (c) to adopt RSPB's biennial work programme as referred to in Article 143;
 - (d) to adopt RSPB's biennial report on its activities as referred to in Article 144;
 - (e) to adopt rules on prevention and management of conflicts of interest as referred to in Article 175(5), as well as in respect of members of the working groups;
 - (f) to adopt detailed rules on the right of access to documents held by RSPB in accordance with Article 169;
 - (g) to adopt and regularly update the communication and dissemination plans as referred to in Article 170(2) based on an analysis of needs;
 - (h) to adopt and make public its rules of procedure by two-thirds majority of their members;
 - (i) to authorise, together with the ODN Director, the conclusion of working arrangements with competent Union bodies, offices, agencies and advisory groups and with competent authorities of third countries and with international organisations in accordance with Article 168(1);

- (j) to set up working groups, in coordination with the ODN, and appoint their Chairs in accordance with Article 142;
 - (k) to provide the Director of the ODN with guidance with regard to the carrying out of the tasks of the ODN in relation to the RSPB tasks.
2. In particular, the RSPB Board shall review its rules of procedure within 6 months from the entry into force of this Regulation.

Article 138

[Ex RSPG RoP]

Chair and Vice-Chairs of the RSPB Board

- 1. The RSPB Board shall appoint, acting by a two-thirds majority of its members, a Chair and a Vice-Chair from among its members.
- 2. The Vice-Chair shall automatically assume the duties of the Chair where the latter is not in a position to perform those duties.
- 3. The term of office of the Chair shall be two years for RSPB, renewable once. In order to ensure continuity of RSPB's work, the incoming Chair shall serve, where possible, at least one year as Vice-Chairs before their term of office as Chair. The rules of procedure shall provide for a shorter term where it is not possible for the incoming Chair to serve as Vice-Chairs one year before their term of office as Chair.
- 4. The Chair shall report to the European Parliament and to the Council on the performance of RSPB's tasks when invited to do so.
- 5. The incoming Chair shall participate to the meeting of the RSPB Board.

7.4. TITLE IV: COMMON PROVISIONS AND COOPERATION BETWEEN BEREC AND RSPB

Article 139

[Ex Art. 6 BEREC Regulation]

Organisational structure of BEREC and the RSPB

BEREC and the RSPB shall each comprise:

- (a) a Board;
- (b) working groups.

Article 140

[Ex Art. 11 BEREC Regulation Art. 2 RSPG RoP]

Meetings of the BEREC Board of Regulators and of the RSPB Board

- 1. The Chairs of the Board of Regulators Regulators and of the RSPB Board shall convene the meetings of the Board of Regulators and of the RSPB Board, respectively, and shall set the agendas for those meetings, which shall be made public.
- 2. The Board of Regulators and the RSPB Board shall hold at least two ordinary meetings a year, respectively.

Extraordinary meetings shall be convened at the initiative of the Chair, upon the request of at least three of its members or upon the request of the Commission.

3. The Director of the ODN shall take part in all deliberations without the right to vote.
4. The BEREC Board of Regulators and the RSPB Board may invite any person whose opinion may be of interest to it, to participate in its meetings as an observer.
5. The members and the alternates of the BEREC Board of Regulators and the RSPB Board may, subject to their rules of procedure, be assisted at the meetings by their advisers or other experts.
6. Where the BEREC Board of Regulators and the RSPB Board consider it appropriate, they may invite relevant representatives from the industry to their respective meetings to present positions.
7. The Commission may request that the participation to discussions relating to sensitive and confidential matters with a strong Union dimension is restricted. The Chair, in agreement with the Director of the ODN, may request that the participation to discussions relating to resilience or security that may be needed to carry out tasks under this Regulation is restricted.
8. The ODN shall provide the secretariat for the BEREC Board of Regulators and the RSPB Board.

Article 141

[Ex Art. 12 BEREC Regulation, Art. 7 RSPG RoP, and Art. 4(1)RSPG decision]

Voting rules

1. The BEREC Board of Regulators and the RSPB Board shall take decisions by a simple majority of their members unless otherwise provided for in this Regulation or in another legal act of the Union.

The decisions of the BEREC Board of Regulators and of the RSPB Board shall be made public and shall indicate any reservations of any member upon their request.

2. Each member of the BEREC Board of Regulators and of the RSPB Board shall have one vote. In the absence of a member, the alternate shall be entitled to exercise that member's right to vote.

In the absence of a member and the alternate, the right to vote may be delegated to another member.

The Chair may delegate the right to vote in any event. The Chair shall take part in the voting unless they have delegated the right to vote.

3. The respective rules of procedure of the BEREC Board of Regulators and of the RSPB Board shall set out in detail the arrangements governing voting, including the conditions under which one member may act on behalf of another member, the quorum, and the notification deadlines for meetings. Furthermore, the rules of procedure shall ensure that the members of the BEREC Board of Regulators and of the RSPB Board are provided with full agendas and draft proposals in advance of each meeting so that they have the opportunity to propose amendments prior to the vote. The rules of procedure may, *inter alia*, set out a procedure for voting on urgent matters, a written procedure, and other practical arrangements for the operation of the BEREC Board of Regulators and of the RSPB Board.

Article 142

[Ex Art. 13 BEREC Regulation Art. 12 RSPG RoP, Art. 13 BEREC Regulation]

Working groups

1. Where justified, the BEREC Board of Regulators and the RSPB Board may set up working groups, through the ODN, to implement their work programmes.
2. The BEREC Board of Regulators and the RSPB Board shall appoint the Chairs of their respective working groups, representing, where possible, different national regulatory authorities, members of the RSPB and the ODN.
3. The BEREC working groups shall be open to the participation of experts from all the national regulatory authorities. The RSPB working groups shall be open to the participation of all the members of the RSPB. Experts from the ODN and the Commission shall be entitled to participate to all working groups. The staff of the ODN shall also contribute to the regulatory work of, and provide administrative support to, the working groups.
4. By derogation to paragraph 3:
 - (a) the experts from the Commission and the national regulatory authority concerned shall not participate to BEREC working groups set up to carry out the tasks referred to in Article 126(1), point (b).
 - (b) the experts from the Commission and the national competent authority concerned shall not participate to RSPB working groups set up to carry out the tasks referred to in Article 135(3);
 - (c) only experts from Member States' authorities, the Commission and the ODN shall participate in the RSPB working group set up to carry out the tasks referred in Article 134(3).
5. In BEREC working groups which are set up to carry out tasks related to competences attributed at national level to other competent authorities, the experts from other competent authorities notified pursuant to Article 117(3) of this Regulation shall be invited to participate and their views shall be taken into consideration. If experts from other competent authorities are unable to attend such meetings, national regulatory authorities shall ensure that the views of those other competent authorities have been taken into account.

The BEREC Board of Regulators and the RSPB Board or the Chairs of the working groups may invite individual experts recognised as competent in the relevant field to participate in the working group meetings, where necessary on a case-by-case basis.

6. The working groups shall be normally dissolved as soon as their mandate is fulfilled, except working groups related to the RSPB tasks in Article 134(3) and 135(2)(a) and (3) which shall be permanent.
7. The BEREC Board of Regulators and the RSPB Board shall adopt rules of procedure laying down the practical arrangements for the operation of the working groups.

Article 143

[Ex Art. 21 BEREC Regulation]

Work Programme

1. After consulting the European Parliament, the Council and the Commission, as well as other interested parties in accordance with Article 4(5), the BEREC Board of Regulators and the RSPB Board shall adopt biennial work programmes by 31 December of the year preceding the biennial cycle.
2. The BEREC Board of Regulators and the RSPB Board shall transmit their work programmes to the European Parliament, the Council and the Commission as soon as they are adopted.

Article 144

[Ex Art. 22 BEREC Regulation]

Biennial Activity Report

The BEREC Board of Regulators and the RSPB Board shall adopt the biennial reports on the activities of BEREC and the RSPB, respectively.

The BEREC Board of Regulators shall transmit their biennial activity report to the European Parliament, the Council, the Commission and the European Economic and Social Committee by 15 June every other year.

Article 145

[New]

Cooperation between BEREC and RSPB

1. BEREC and the RSPB shall cooperate on a continuous and systematic basis on matters of mutual relevance, in particular where electronic communications regulation and radio spectrum policy intersect. To that end, BEREC and the RSPB shall establish joint working groups where appropriate, ensure regular exchanges of information and expertise, and coordinate their respective work programmes in order to promote regulatory consistency and effective policy implementation.
2. The Chair of the BEREC Board of Regulators and the Chair of the RSPB Board shall meet at least twice per year in order to identify issues of common interest requiring close and systematic cooperation between BEREC and the RSPB. The Chairs shall submit proposals to their respective boards for the adoption of joint activities, including, where relevant structured cooperation mechanisms. Such issues shall be taken into account in the preparation of the biennial work programmes of BEREC and the RSPB.
3. Where necessary, joint meetings of the BEREC Board of Regulators and the RSPB Board shall be convened to address matters of relevance to both bodies and to ensure consistent and coherent regulatory and policy approaches.

7.5. TITLE V: OFFICE FOR DIGITAL NETWORKS (ODN)

7.5.1. CHAPTER I: ODN tasks and organisation

Article 146

[ex Art. 1 BEREC Regulation]

Establishment

The ODN shall replace and succeed the Agency for Support for BEREC ('BEREC Office'), which was established by Regulation (EU) 2018/1971.

Article 147

[new]

General mandate of the ODN

The ODN shall act within the scope of this Regulation to support the development of the single market for electronic communications.

In fulfilling its mandate, the ODN shall support and assist BEREC in the performance of its tasks under this Regulation, including through the provision of technical expertise, analytical capacity, coordination support and operational assistance, without prejudice to the independence of BEREC and its decision-making powers. The ODN shall also actively support and assist the RSPB in the performance of its tasks, in particular by ensuring close coordination between the policy and regulation of electronic communications and radio spectrum, and by facilitating structured cooperation where issues of common relevance arise.

ODN shall carry out any other tasks conferred upon it by this Regulation or by other Union acts, provided that such tasks are compatible with its mandate and contribute to the objectives referred to in Article 3 of this Regulation.

Article 148

[Ex Art. 5 BEREC Regulation]

Tasks of the ODN to support BEREC

1. The ODN shall have the following tasks in support of BEREC:
 - (a) to provide expert support services to BEREC in fulfilling its regulatory tasks, including by participating and contributing to all the activities of the working groups, in accordance with Article 142 of this Regulation;
 - (b) to collect data and information from national regulatory and other competent authorities, and to exchange and transmit information in relation to the regulatory tasks assigned to the BEREC pursuant to Articles 124 to 128 and 104(2) of this Regulation;
 - (c) to produce, on the basis of the information referred to in point (b), regular draft reports on specific aspects of developments in the Union electronic communications market, such as roaming and benchmarking reports to be submitted to BEREC;
 - (d) to disseminate regulatory best practices among national regulatory and other competent authorities, in accordance with Article 124(1) point (c) of this Regulation;
 - (e) under the supervision of BEREC, to establish and manage registries and databases in accordance with Article 125(5) of this Regulation;
 - (f) under the supervision of BEREC, to establish and manage an information and communications system, in accordance with Article 174 of this Regulation;
 - (g) to assist BEREC in conducting public consultations, in accordance with Article 124(10) of this Regulation;
 - (h) to assist in the preparation of the work and provide other administrative and content-related support to ensure the smooth functioning of the BEREC Board of Regulators;

- (i) to assist in setting up working groups, upon the request of the BEREC Board of Regulators, contribute to the regulatory work and provide administrative support to ensure the smooth functioning of those groups;
- (j) to prepare the Union Preparedness Plan for Digital Infrastructures, in accordance with Articles 6 and 7 of this Regulation;
- (k) to transmit notifications referred to in Article 10(1) to national regulatory and other competent authorities to facilitate the single passport procedure in accordance with Article 10(4) of this Regulation;
- (l) to maintain a publicly available Union database of the notifications submitted to the national regulatory authorities, in accordance with Article 10(7) of this Regulation;
- (m) to assist the Commission in the strategic planning of numbering resources in the Union and the identification of the potential use of numbering resources for cross border or pan-European services, and in the establishment of a Union numbering plan in accordance with Article 46(2) and (4) of this Regulation;
- (n) to cooperate with national regulatory authorities on the allocation of numbers and management of the pan-European numbering resources, in accordance with Article 47(3) of this Regulation;
- (o) to set up the procedure and system for the provision of information, in accordance with Article 47(4) of this Regulation;
- (p) under BEREC supervision, to assist national regulatory authorities in coordinating activities on numbering resources with a right of extraterritorial use, in accordance with Article 48(4) of this Regulation;
- (q) to assist BEREC in preparing the harmonised templates, in accordance with Article 184 of this Regulation;
- (r) to carry out other tasks assigned to it by this Regulation or by other legal acts of the Union.

By [two years after entry into application], the ODN, in coordination with ENISA, shall publish a report on the progress towards the single market for electronic communications, describing in particular the state of the market, the market structure, and the impact of the measures implemented under this Regulation on the internal market, including the ex post effects of mergers on the market. Before publication, a draft report shall be submitted to BEREC and the RSPB for approval. The report shall be published annually.

Article 149

[NEW]

Tasks of the ODN in support of the RSPB and the Commission

1. The ODN shall provide analytical, administrative and logistical support to the RSPB Board, its working groups and the Commission in carrying out the tasks assigned to them by this Regulation.
2. The ODN shall assist the Commission and the RSPB in the process of granting the Union authorisation in accordance with Articles 40 and where requested by the Commission, it shall assist the Commission in conducting a selection procedure in accordance with Annex VI of this Regulation.

3. Where requested by the Commission, the ODN shall assist the Commission in carrying out the authorisation process at Union level in accordance with Article 22(3) of this Regulation.
4. Where the one stop shop procedure is created by the Commission pursuant to Article 22(4) of this Regulation, the ODN shall act as a single point of contact for submission of applications and notifications.
5. The ODN shall establish and administer dynamic databases for geolocation and monitoring of spectrum usage opportunities in accordance with Article 28 of this Regulation.

Article 150

[Ex Art. 2 BEREC Regulation]

Legal personality of the ODN

1. The ODN shall be a body of the Union. It shall have legal personality.
2. In each Member State, the ODN shall enjoy the most extensive legal capacity accorded to legal persons under national law. It shall, in particular, be capable of acquiring and disposing of movable and immovable property and being party to legal proceedings.
3. The ODN shall be represented by its Director.
4. The ODN shall have sole responsibility for the tasks assigned to and the powers conferred on it.
5. The ODN shall have its seat in Riga.

Article 151

[Ex Art. 14 BEREC Regulation]

Organisational structure of the ODN

The ODN shall comprise:

- (a) a Management Board;
- (b) a Director.

Article 152

[Ex Art. 15 BEREC Regulation]

Composition of the Management Board

1. The Management Board shall be composed of the persons appointed as members of the BEREC Board of Regulators, the Chair of the RSPB Board and of one high level representative of the Commission. Each member of the Management Board shall have the right to vote.

Each appointing national regulatory authority, as referred to in Article 129(1), second subparagraph, may appoint a person other than the member of the BEREC Board of Regulators as member of the Management Board. That person shall be the head of the national regulatory authority, a member of its collegiate body, or the replacement of either of them.

2. Each member of the Management Board shall have an alternate. The alternates shall represent the member in their absence.

The alternates of each member shall be the persons appointed as alternates of the members of the BEREC Board of Regulators. The representative of the Commission shall also have an alternate.

Each appointing national regulatory authority, as referred to in Article 129(1), second subparagraph, may appoint a person other than the alternate of the member of the BEREC Board of Regulators as the alternate of the member of the Management Board. That person shall be the head of the national regulatory authority, a member of its collegiate body, the replacement of either of them, or the staff of the national regulatory authority.

3. The members of the Management Board and their alternates shall neither seek nor take instructions from any government, institution, person or body.
4. An up-to-date list of members of the Management Board and their alternates, together with their declarations of interests, shall be made public.

Article 153

[Ex Art. 16 BEREC Regulation]

Administrative Functions of the Management Board

1. The Management Board shall have the following administrative functions:
 - (a) to ensure that the ODN performs all tasks assigned to it in accordance with this Regulation, by taking utmost consideration of the need to ensure proper support to the RSPB and to carry out its tasks in accordance with Articles 148 and 149;
 - (b) to provide general orientations for the ODN's activities and adopt, on an annual basis, ODN's single programming document by a majority of two thirds of its members, taking into account the opinion of the RSPB and of the Commission and in accordance with Article 159 of this Regulation;
 - (c) to adopt, by a majority of two thirds of its members with voting rights, the annual budget of the ODN and exercise other functions in respect of ODN's budget pursuant to Part VII, Title V, Chapter II of this Regulation;
 - (d) to adopt, make public and proceed with an assessment of the consolidated annual activity report on the ODN's activities referred to in Article 163 and submit both the report and its assessment, by 1 July each year to the European Parliament, the Council, the Commission and the Court of Auditors.
 - (e) to adopt the financial rules applicable to the ODN in accordance with Article 165 of this Regulation;
 - (f) to adopt an anti-fraud strategy proportionate to fraud risks, taking into account the costs and benefits of the measures to be implemented;
 - (g) to ensure adequate follow-up to findings and recommendations stemming from the internal or external audit reports and evaluations, as well as from investigations of the European Anti-Fraud Office (OLAF);
 - (h) to adopt rules for the prevention and management of conflicts of interests as referred to in Article 175(5) of this Regulation;

- (i) to adopt and regularly update the communication and dissemination plans referred to in Article 170(3), based on an analysis of needs;
- (j) to adopt practical measures regarding the right of access to the ODN's documents, in accordance with Article 169 of this Regulation;
- (k) to adopt its rules of procedure;
- (l) to authorise the conclusion of working arrangements in accordance with Article 168(2) of this Regulation;
- (m) to adopt implementing rules for giving effect to the Staff Regulations of Officials of the European Union and the Conditions of Employment of Other Servants of the European Union⁶⁷, in accordance with Article 110 of the Staff Regulations;
- (n) without prejudice to the decision referred to in paragraph 2, first subparagraph, to exercise, with respect to the staff of the ODN, the powers conferred by the Staff Regulations on the Appointing Authority and by the Conditions of Employment of Other Servants on the Authority Empowered to Conclude a Contract of Employment (the 'appointing authority powers');
- (o) to appoint the Director and, where relevant, extend their term of office or remove them from office in accordance with Article 158 of this Regulation;
- (p) to appoint an Accounting Officer, subject to the Staff Regulations and the Conditions of Employment of Other Servants, who shall be wholly independent in the performance of their duties;
- (q) to take all decisions on the establishment of the ODN's internal structures and, where necessary, their modification, taking into consideration the ODN's activity needs as well as having regard to sound budgetary management.

With regard to the first subparagraph, point (m), the ODN may appoint the same Accounting Officer as another Union body or institution. In particular, the ODN and the Commission may agree that the Commission's accounting officer shall also act as Accounting Officer of the ODN.

2. The Management Board shall adopt, in accordance with Article 110 of the Staff Regulations, a decision based on Article 2(1) of the Staff Regulations and on Article 6 of the Conditions of Employment of Other Servants, delegating relevant appointing authority powers to the Director and specifying the conditions under which this delegation of powers can be suspended. The Director shall be authorised to sub-delegate those powers.

Where exceptional circumstances so require, the Management Board may, by way of a decision, temporarily suspend the delegation of the appointing authority powers to the Director and those sub-delegated by the latter and exercise them itself or delegate them to one of its members or to a member of staff other than the Director.

3. The Management Board shall review its rules of procedure within 6 months from the entry into force of this Regulation.

⁶⁷ Regulation (EEC, Euratom, ECSC) No 259/68 of the Council of 29 February 1968 laying down the Staff Regulations of Officials and the Conditions of Employment of Other Servants of the European Communities and instituting special measures temporarily applicable to officials of the Commission, OJ L 56, p. 1, ELI: [http://data.europa.eu/eli/reg/1968/259\(1\)/oj](http://data.europa.eu/eli/reg/1968/259(1)/oj)

Article 154

[Ex Art. 17 BEREC Regulation]

Chairperson and Deputy Chairpersons of the Management Board

1. The Chairperson and the Deputy Chairpersons of the Management Board shall be the persons appointed as the Chair and Vice-Chairs of the BEREC Board of Regulators. The same term of office shall apply.

By derogation from the first subparagraph, the Management Board may, by a majority of two thirds of its members, elect other members of the Management Board as Chairperson or Deputy Chairperson(s) from among its members, representing Member States. Their term of office shall be the same as that of the Chair and Vice-Chairs of the BEREC Board of Regulators.

2. One of the Deputy Chairpersons shall automatically assume the duties of the Chairperson where the latter is not in a position to perform those duties.
3. The Chairperson of the Management Board shall report to the European Parliament and to the Council on the carrying out of the tasks of the ODN when invited to do so.

Article 155

[Ex Art. 18 BEREC Regulation]

Meetings of the Management Board

1. The Chairperson shall convene the meetings of the Management Board.
2. The Director of the ODN shall take part in the deliberations, except those related to Article 158, without the right to vote.
3. The Management Board shall hold at least two ordinary meetings a year. In addition, the Chairperson shall convene extraordinary meetings on his or her own initiative, upon the request of the Commission, or of at least three of its members.
4. The Management Board may invite any person whose opinion may be of interest to attend its meetings as an observer.
5. The members of the Management Board and their alternates may, subject to its rules of procedure, be assisted at the meetings by advisers or experts.
6. The ODN shall provide the secretariat for the Management Board.

Article 156

[Ex Art. 19 BEREC Regulation]

Voting rules of the Management Board

1. The Management Board shall take decisions by an absolute majority of its members, unless otherwise provided for in this Regulation.
2. Where the Management Board votes on matters related to the Financial Framework Regulation for decentralised regulatory agencies and the Staff Regulations of Officials and the Conditions of Employment of Other Servants of the European Union, the decision must be subject to a positive vote of the Commission.
3. Each member shall have one vote. In the absence of a member with the right to vote, the alternate shall be entitled to exercise their right to vote.

4. The Chairperson may delegate the right to vote in any event. They shall take part in the voting unless they have delegated the right to vote.
5. The Management Board's rules of procedure shall establish more detailed voting arrangements, in particular the circumstances in which a member may act on behalf of another member.

Article 157

[Ex Art. 20 BEREC Regulation]

Tasks and responsibilities of the Director

1. The Director shall be the legal representative of the ODN and shall be in charge of the administrative management of the ODN. The Director shall be accountable to the Management Board.
2. The Director shall prepare the meetings of the Management Board and assist the Chair of the BEREC Board of Regulators and the Chair of the RSPB Board, in preparing the meetings of their respective bodies.
3. The Director shall be independent in the performance of his or her duties and shall neither seek nor take instructions from any government, institution, person or body.
4. The Director shall report to the European Parliament and to the Council on the performance of their duties when invited to do so.
5. The Director shall be responsible for the implementation of the ODN's tasks and following the guidance provided by the BEREC Board of Regulators, the RSPB Board and the Management Board. In particular, the Director shall be responsible for:
 - (a) the day-to-day administration of the ODN;
 - (b) preparing the work of the Management Board and participating, without having the right to vote, in the work of the Management Board;
 - (c) implementing administrative decisions adopted by the BEREC Board of Regulators, the RSPB Board and the Management Board;
 - (d) preparing, and submitting to the Management Board, the single programming document referred to in Article 159;
 - (e) assisting the BEREC Board of Regulators and the RSPB Board in the preparation of their activity reports as referred to in Article 144;
 - (f) assisting the BEREC Board of Regulators and the RSPB Board in the preparation of their work programmes, respectively, as referred to in Article 143;
 - (g) implementing the single programming document, and reporting to the Management Board on its implementation;
 - (h) preparing the draft annual report on the ODN's activities as referred to in Article 163 and presenting it to the Management Board for assessment and adoption;
 - (i) preparing an action plan following-up conclusions of internal or external audit reports and evaluations, as well as investigations by the OLAF and reporting on progress at least once a year to the Management Board;
 - (j) protecting the financial interests of the Union by applying preventive measures against fraud, corruption and any other illegal activities, by carrying out effective checks and,

- if irregularities are detected, by recovering amounts wrongly paid and, where appropriate, by imposing effective, proportionate and dissuasive administrative measures, including financial penalties;
- (k) preparing an anti-fraud strategy for the ODN and presenting it to the Management Board for approval;
 - (l) preparing draft financial rules applicable to the ODN;
 - (m) preparing the ODN's draft statement of estimates of revenue and expenditure and implementing its budget, in accordance with Article 160;
 - (n) authorising, together with the BEREC Board of Regulators, or the RSPB Board where relevant, the conclusion of working arrangements with competent Union bodies, offices, agencies and advisory groups and with competent authorities of third countries and with international organisations in accordance with Article 168;
 - (o) taking all decisions on the establishment of the ODN's internal structures and, where necessary, their modification, taking into consideration ODN's activity needs, in particular to support both BEREC and RSPB, as well as having regard to sound budgetary management.
6. The Director shall, under the supervision of the Management Board, take the necessary measures, in particular with regard to adopting internal administrative instructions and publishing notices, in order to ensure the functioning of the ODN in accordance with this Regulation.
7. The Director shall, subject to the prior consent of the Commission, the Management Board and the Member States concerned, decide whether it is necessary for the purpose of carrying out the ODN's tasks in an efficient and effective manner to locate one or more members of staff in one or more Member States. The decision shall specify the scope of the activities to be carried out in a manner that avoids unnecessary costs and duplication of administrative functions of the ODN. Before such a decision is taken, its impact in terms of staff allocation and budget shall be set out in the multi-annual programming document referred to in Article 159.

Article 158

[Ex Article 32 BEREC Regulation]

Appointment of the Director

- 1. The Director shall be engaged as a temporary agent of ODN in accordance with Article 2, point (a), of the Conditions of Employment of Other Servants.
- 2. The Director shall be appointed by the Management Board, following an open and transparent selection procedure, on the basis of merit, management, administrative and budgetary skills and the skills and experience relevant to electronic communications networks and services. The appointment shall be subject to the positive opinion of the RSPB representative in the Management Board.

The list of candidates shall not be proposed by the Chairperson or by a Deputy Chairperson alone. The rules of procedure of the Management Board shall set out in detail the arrangements governing a procedure to shortlist the number of eligible candidates and a voting procedure.

- 3. For the purpose of concluding the contract with the Director, the ODN shall be represented by the Chairperson of the Management Board.

4. Before appointment, the candidate selected by the Management Board shall be invited to make a statement before the competent committee of the European Parliament and to answer questions put by its members.
5. The term of office of the Director shall be five years. By the end of that period, the Management Board shall carry out an assessment that takes into account an evaluation of the Director's performance and the ODN's tasks and challenges. That assessment shall be submitted to the European Parliament and to the Council.
6. The Management Board, taking into account the assessment referred to in paragraph 5, subject to a positive opinion of the RSPB Board, may extend the Director's term of office once, for no more than five years.
7. The Management Board shall inform the European Parliament if it intends to extend the Director's term of office. Within one month before any such extension, the Director may be invited to make a statement before the competent committee of the European Parliament and to answer questions put by its members.
8. A Director whose term of office has been extended shall not participate in another selection procedure for the same post after the end of the cumulative period.
9. Where the term of office is not extended, the Director shall, upon a decision of the Management Board, remain in office beyond the expiry of the initial term of office until the appointment of a successor.
10. The Director may be removed from office only upon a decision of the Management Board acting on a proposal from a member and subject to the positive opinion of the RSPB Board.
11. The Management Board shall reach decisions on appointment, extension of the term of office or removal from office of the Director on the basis of a vote of a two-thirds majority of its members.

7.5.2. *CHAPTER II: Budget and programming of the ODN*

Article 159

[Ex Art. 23 BEREC Regulation]

Annual and multi-annual programming

1. Each year, the Director shall draw up a draft programming document containing annual and multiannual programming ('single programming document') in accordance with Article 32 of Commission Delegated Regulation (EU) 2019/715, taking into account guidelines set by the Commission.

By 31 January each year, the Management Board shall adopt the draft single programming document and forward it to the Commission to provide their opinion. The draft single programming document shall also be submitted to the European Parliament and to the Council.

The Management Board shall subsequently adopt the single programming document, taking into account the opinion of the Commission. It shall submit the single programming document, as well as any subsequent updates, to the European Parliament, the Council and the Commission.

The single programming document shall become definitive after adoption of the general budget of the Union and, where necessary, shall be adjusted accordingly.

2. The annual programming document shall comprise detailed objectives and expected results, including performance indicators. It shall also contain a description of the actions to be financed and an indication of the financial and human resources allocated to each action, in accordance with the principles of activity-based budgeting and management, as referred to in Article 166. The annual programming document shall be consistent with the BEREC and RSPB's outline of their work programme as referred to in Article 143 and with the multiannual programming document of the ODN referred to in paragraph 4 of this Article. It shall clearly indicate tasks that have been added, changed or deleted in comparison with the previous financial year.
3. The Management Board shall, where necessary, amend the annual programming document after adoption of BEREC and RSPB's work programmes referred to in Article and where a new task is assigned to BEREC, RSPB or to the ODN.

Any substantial amendment to the annual programming document shall be adopted by the same procedure as that used to adopt the initial annual programming document. The Management Board may delegate the power to make non-substantial amendments to the annual programming document to the Director.

4. The multiannual programming document shall set out overall strategic programming including objectives, expected results and performance indicators. It shall also set out resource programming including multi-annual budget and staff.

The resource programming shall be updated annually. The strategic programming shall be updated where appropriate, and in particular to address the outcome of the evaluation referred to in Article 181.

5. The single programming document of the ODN shall include the implementation of BEREC and RSPB strategies for relations with competent Union bodies, offices, agencies and advisory groups, with competent authorities of third countries and with international organisations as referred to in Article 168(3), the actions linked to that strategy and the specification of associated resources.

Article 160

[Ex Art. 24 BEREC Regulation]

Establishment of the budget

1. Each year, the Director shall draw up a provisional draft estimate of the ODN's revenue and expenditure (the 'draft estimate') for the following financial year, including the establishment plan, and submit it to the Management Board.

The information contained in the draft estimate shall be consistent with the draft single programming document referred to in Article 159(1).

2. The Management Board shall, on the basis of the provisional draft estimate, adopt a draft estimate of the Agency's revenue for the following financial year, and shall send it to the Commission by 31 January each year.
3. The Commission shall submit the draft estimate to the European Parliament and the Council (hereinafter referred to as the budgetary authority") together with the draft general budget of the Union.
4. On the basis of the draft estimate, the Commission shall enter in the draft general budget of the Union the estimates it considers necessary for the establishment plan and

- the amount of the contribution to be charged to the general budget, which it shall place before the budgetary authority in accordance with Articles 313 and 314 of the TFEU.
5. The budgetary authority shall authorise the appropriations for the contribution to the ODN.
 6. The budgetary authority shall adopt ODN's establishment plan.
 7. The Management Board shall adopt ODN's budget. The budget shall become final following final adoption of the general budget of the Union. Where necessary, it shall be adjusted accordingly.
 8. For any building project likely to have significant implications for the budget of ODN, Commission Delegated Regulation (EU) 2019/715 shall apply.

Article 161

[Ex Art. 25 BEREC Regulation]

Structure of the budget

1. Estimates of all revenue and expenditure for the ODN shall be prepared each financial year, corresponding to the calendar year, and shall be shown in the ODN's budget.
2. The ODN's budget shall be balanced in terms of revenue and of expenditure.
3. Without prejudice to other resources, the ODN's revenue shall consist of any combination of the following:
 - (a) a contribution from the Union;
 - (b) any fee paid by undertakings for obtaining and maintaining Union satellite authorisations to be set out in Commission implementing act referred to in Article 39(5), fees for rights of use for pan-European numbering resources to be set out in Commission implementing act referred to in Article 46(4), charges for publications and any other service provided by the ODN;
 - (c) any in-kind or voluntary financial contribution from the Member States and from third countries or the regulatory authorities competent in the field of electronic communications of third countries participating in the work of ODN, as provided for in Article 168.
4. The revenue received by the ODN shall not compromise its neutrality, independence or objectivity.
5. The fees referred to in paragraph 1, point (b), and the way in which they are to be paid, shall be set by the Commission by implementing acts after carrying out a public consultation and after consulting the Management Board and the RSPB Board. Fees shall be set at such a level as to be sufficient to cover costs of the relevant services as provided in a cost-effective way and they shall avoid placing an undue financial or administrative burden on market participants or entities acting on their behalf. The Commission shall regularly examine the level of those fees on the basis of an evaluation and, where necessary, shall adapt the level of those fees and the way in which they are to be paid.

The implementing act referred to in the first sub-paragraph shall be adopted in accordance with the examination procedure referred to in Article 202.

6. The budgetary authority shall re-examine, when necessary, the level of the Union contribution on the basis of an evaluation of needs and taking account of the level of fees.
7. The expenditure of ODN shall include staff remuneration, administrative and infrastructure expenses and operational expenditure.

Article 162

[Ex Art. 26 BEREC Regulation]

Implementation of the budget

1. The Director shall implement the ODN's budget.
2. Each year the Director shall submit to the European Parliament and the Council all information relevant to the findings of evaluation procedures.

Article 163

[Ex Art. 27 BEREC Regulation]

Consolidated Annual Activity Report

The Management Board shall adopt consolidated annual activity reports in accordance with Article 48 of Commission Delegated Regulation (EU) 2019/715, taking into account guidelines set by the Commission.

Article 164

[Ex Art. 28 BEREC Regulation]

Presentation of accounts and discharge

1. The ODN's accounting officer shall submit the provisional accounts for the financial year to the Commission's Accounting Officer and to the Court of Auditors by 1 March of the following financial year.
2. The ODN shall submit the report on the budgetary and financial management to the European Parliament, the Council and the Court of Auditors by 31 March of the following financial year.
3. On receipt of the Court of Auditors' observations on the ODN's provisional accounts, the ODN's accounting officer shall draw up the ODN's final accounts under their own responsibility. The Director shall submit the final accounts to the Management Board for an opinion.
4. The Management Board shall deliver an opinion on the ODN's final accounts.
5. The Director shall submit the final accounts to the European Parliament, the Council, the Commission and the Court of Auditors, together with the Management Board's opinion by 1 July following each financial year.
6. The ODN shall publish the final accounts in the Official Journal of the European Union by 15 November of the following year.
7. The Director shall submit to the Court of Auditors a reply to its observations by 30 September of the following financial year. The Director shall also submit that reply to the Management Board.

8. The Director shall submit to the European Parliament, upon the latter's request, any information required for the smooth application of the discharge procedure for the financial year in question, in accordance with Article 267(3) of Regulation (EU, Euratom) 2024/2509 of the European Parliament and of the Council⁶⁸.
9. On a recommendation from the Council acting by a qualified majority, the European Parliament shall, before 15 May of year N + 2, give a discharge to the Director in respect of the implementation of the budget for year N.

Article 165

[Ex Art. 29 BEREC Regulation]

Financial rules

The financial rules applicable to the ODN shall be adopted by the Management Board after consulting the Commission. They shall not diverge from Commission Delegated Regulation (EU) 2019/715 unless such a divergence is required for ODN's operation and the Commission has given its prior consent.

Article 166

[Ex Art. 30, 31 and 33 BEREC Regulation]

Staff of the ODN

1. The Staff Regulations and the Conditions of Employment of Other Servants and the rules adopted by agreement between the institutions of the Union for giving effect to those Staff Regulations and the Conditions of Employment of Other Servants shall apply to the staff of the ODN.
2. In accordance with the principle of activity-based management of human resources, the ODN shall have the staff required to carry out its duties.
3. The number of staff and corresponding financial resources shall be proposed in accordance with Article 159(2) and (4) and Article 160(1), taking account of Articles 148 and 149, and all other tasks assigned to the ODN by this Regulation or by other Union legal acts, as well as the need for compliance with the regulations applicable to all Union decentralised agencies.
4. The ODN may make use of seconded national experts or other staff not employed by it. The Staff Regulations and the Conditions of Employment of Other Servants shall not apply to such staff.
5. The Management Board shall adopt a decision laying down rules on the secondment of national experts to the ODN.

7.5.3. CHAPTER III: General provisions

Article 167

[Ex Article 34 BEREC Regulation]

Privileges and immunities

⁶⁸ Regulation (EU, Euratom) 2024/2509 of the European Parliament and of the Council of 23 September 2024 on the financial rules applicable to the general budget of the Union, OJ L, 2024/2509, ELI: <http://data.europa.eu/eli/reg/2024/2509/oj>

The Protocol on the Privileges and Immunities of the European Union shall apply to the ODN and its staff.

Article 168

[Ex Art. 35 BEREC Regulation]

Cooperation with Union bodies, third countries and international organisations

1. In so far as necessary in order to achieve the objectives set out in this Regulation and carry out its tasks, and without prejudice to the competences of the Member States and the institutions of the Union, BEREC, RSPB and the ODN may cooperate with competent Union bodies, offices, agencies and advisory groups, with competent authorities of third countries and with international organisations.

To that end, BEREC, RSPB and the ODN may, subject to prior approval by the Commission, establish working arrangements. Those arrangements shall not create legal obligations.

2. The BEREC Board of Regulators, the RSPB Board, the working groups and the Management Board shall be open to the participation of authorities of third countries with primary responsibility in the field of electronic communications or spectrum policy as relevant, where those third countries have entered into agreements with the Union to that effect.

Under the relevant provisions of those agreements, working arrangements shall be developed specifying, in particular, the nature, extent and manner in which the authorities of the third countries concerned will participate without the right to vote in the work of BEREC, RSPB and of the ODN, including provisions relating to participation in the initiatives carried out by BEREC and RSPB, financial contributions and staff to the ODN. As regards staff matters, those arrangements shall, in any event, comply with the Staff Regulations.

3. As part of the biennial work programme referred to in Article 143, the BEREC Board of Regulators and the RSPB Board shall adopt, respectively, BEREC's and RSPB's strategy for relations with competent Union bodies, offices, agencies and advisory groups, with competent authorities of third countries and with international organisations concerning matters for which BEREC and RSPB, respectively, are competent. The Commission, BEREC, RSPB and the ODN shall conclude an appropriate working arrangement for the purpose of ensuring that BEREC, RSPB and the ODN operate within their mandate and the existing institutional framework.

Article 169

[Ex Art 36 BEREC Regulation]

Access to documents and data protection

1. Regulation (EC) No 1049/2001 of the European Parliament and of the Council⁶⁹ shall apply to documents held by BEREC, the RSPB and the ODN.
2. The BEREC Board of Regulators, the RSPB Board and the Management Board shall update, where necessary, the detailed rules adopted for applying Regulation (EC) No 1049/2001.

⁶⁹ Regulation (EC) No 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents, OJ L 145, 31.5.2001, p. 43, ELI: <http://data.europa.eu/eli/reg/2001/1049/oi>

3. The processing of personal data by BEREC, the RSPB and the ODN shall be subject to Regulation (EU) 2018/1725.
4. The BEREC Board of Regulators, the RSPB Board and the Management Board shall update where necessary the measures adopted for the application of Regulation (EU) 2018/1725 by BEREC, the RSPB and the ODN, including those concerning the appointment of a Data Protection Officer of the ODN. Those measures shall be established after consulting the European Data Protection Supervisor.

Article 170

[Ex Art. 37 BEREC Regulation]

Transparency and communication

1. BEREC, the RSPB and the ODN shall carry out their activities with a high level of transparency. BEREC, the RSPB and the ODN shall ensure that the public and any interested parties are given appropriate, objective, reliable and easily accessible information, in particular in relation to their tasks and the results of their work.
2. BEREC and the RSPB, supported by the ODN, may engage in communication activities on their own initiative within their field of competence in accordance with relevant communication and dissemination plans adopted by the BEREC Board of Regulators and the RSPB Board. The allocation of resources for such support for communication activities within the ODN's budget shall not be detrimental to the effective exercise of BEREC and the RSPB's tasks as referred to in Article 124 to 128 and Articles 134 and 145, respectively or the ODN's tasks as referred to in Articles 148 and 149.
3. Communication activities of the ODN shall be carried out in accordance with relevant communication and dissemination plans adopted by the Management Board.

Article 171

[Ex Art. 38 BEREC Regulation]

Confidentiality

1. Without prejudice to Article 169(1) and Article 173(2), BEREC, the RSPB and the ODN shall not disclose to third parties information that they process or receive in relation to which a reasoned request for confidential treatment has been made in whole or in part.
2. Members and other participants at the meetings of the BEREC Board of Regulators, the RSPB Board, the Management Board and the working groups, the Director, seconded national experts and other staff not employed by the ODN shall comply with the confidentiality requirements under Article 339 TFEU, even after their duties have ceased.
3. The BEREC Board of Regulators, the RSPB Board, and the Management Board shall lay down the practical arrangements for implementing the confidentiality rules referred to in paragraphs 1 and 2.

Article 172

[Ex Art. 39 BEREC Regulation]

Security rules on the protection of classified and sensitive non-classified information

BEREC, the RSPB and the ODN shall adopt their own security rules equivalent to the Commission's security rules for protecting European Union Classified Information and sensitive non-classified information, *inter alia*, provisions for the exchange, processing and storage of such information as set out in Commission Decisions (EU, Euratom) 2015/443⁷⁰ and (EU, Euratom) 2015/444⁷¹. Alternatively, BEREC, the RSPB or the ODN may adopt a decision applying the Commission's rules *mutatis mutandis*.

Article 173

[Ex Art. 40 BEREC Regulation]

Exchange of information

1. Upon the reasoned request of BEREC, RSPB or the ODN, the Commission and the national regulatory and other competent authorities shall provide BEREC, RSPB or the ODN with all the necessary information, in a timely and accurate manner, to carry out their tasks, provided that they have legal access to the relevant information and that the request for information is necessary in relation to the nature of the task in question.
2. BEREC, RSPB or the ODN may also request such information to be provided at regular intervals and in specified formats. Such requests shall, where possible, be made using common reporting formats.
3. Upon the reasoned request of the Commission, a Member State or an national regulatory or other competent authority, the RSPB, BEREC or the ODN shall provide, in a timely and accurate manner, any information that is necessary to enable the Commission, the Member State, the national regulatory or other competent authority, to carry out their tasks, pursuant to the principle of sincere cooperation. Where the RSPB, BEREC or the ODN consider information to be confidential, the Commission, the Member State, the national regulatory or other competent authority shall ensure such confidentiality in accordance with Union and national law, including Regulation (EC) No 1049/2001. Business confidentiality shall not prevent the timely sharing of information.
4. Before requesting information in accordance with this Article and in order to avoid the duplication of reporting obligations, BEREC, the RSPB, or the ODN shall take account of any relevant existing information publicly available.
5. Where information is not made available by national regulatory or other competent authorities or the Member State, in a timely manner, BEREC, the RSPB, or the ODN may address a reasoned request either to other national regulatory and other competent authorities of the Member State concerned, or directly to the relevant undertakings providing electronic communications networks, services and associated facilities. The BEREC, RSPB, or the ODN shall notify the national regulatory or other competent authorities that have failed to provide the information of requests in accordance with the first subparagraph.

⁷⁰ Commission Decision (EU, Euratom) 2015/443 of 13 March 2015 on Security in the Commission, OJ L 72, 17.3.2015, pp. 41–52.

⁷¹ Commission Decision (EU, Euratom) 2015/444 of 13 March 2015 on the security rules for protecting EU classified information, OJ L 72, 17.3.2015, pp. 53–88.

Upon the request of BEREC, RSPB or the ODN, the national regulatory and other competent authorities shall assist BEREC or RSPB in collecting the information.

6. National regulatory and other competent authorities shall have the power to require other responsible national authorities or undertakings providing electronic communications networks and services, associated facilities, or associated services to submit all information necessary to carry out their tasks referred to in this Article.

Other responsible national authorities or undertakings as referred to in the first subparagraph shall provide such information promptly upon request and in accordance with the timescales and level of detail required.

Member States shall ensure that national regulatory and other competent authorities are empowered to enforce such information requests by imposing penalties that are appropriate, effective, proportionate and dissuasive.

Article 174

[Ex Art. 41 BEREC Regulation]

Information and communication system

1. The ODN shall establish and manage an information and communication system with at least the following functions:
 - (a) a common platform for the exchange of information, providing BEREC, RSPB, the Commission and national regulatory authorities and competent authorities responsible for spectrum with the necessary information for the consistent implementation of the Union regulatory framework for electronic communications;
 - (b) a dedicated interface for requests for information and notification of those requests as referred to in Article 173, for access by BEREC, RSPB, the ODN, the Commission and national regulatory authorities and competent authorities responsible for spectrum;
 - (c) a platform for early identification of the need for coordination between national regulatory authorities and competent authorities responsible for spectrum.
2. The Management Board shall adopt the technical and functional specifications for the purpose of establishing the information and communication system referred to in paragraph 1. That system shall be subject to intellectual property rights and the required confidentiality level.

Article 175

[Ex Art. 42 BEREC Regulation]

Declarations of interests

1. Members of the BEREC Board of Regulators, the RSPB Board, the Management Board, the Director, seconded national experts and other staff not employed by the ODN shall each make a written declaration indicating their commitments and the absence or presence of any direct or indirect interests that might be considered to prejudice their independence.
2. Such declarations shall be made at the time of taking up responsibilities, shall be accurate and complete, and shall be updated where there is a risk of there being any direct or indirect interest that might be considered to prejudice the independence of the person making the declaration.

3. The declarations made by the members of the BEREC Board of Regulators, RSPB Board, the members of the Management Board and the Director shall be made public.
4. Members of the BEREC Board of Regulators, RSPB Board, the Management Board and the working groups, and other participants in their meetings, the Director, seconded national experts and other staff not employed by the ODN shall each accurately and completely declare, at the latest at the start of each meeting, any interest which might be considered to be prejudicial to their independence in relation to the items on the agenda, and shall abstain from participating in the discussion and the voting on, such points.
5. The BEREC Board of Regulators, the RSPB Board and the Management Board shall lay down the rules for the prevention and management of conflicts of interests and, in particular, for the practical arrangements for the application of paragraphs 1 and 2.

Article 176

[Ex Art. 43 BEREC Regulation]

Combating fraud

1. In order to facilitate combating fraud, corruption and other unlawful activities under Regulation (EU, Euratom) No 883/2013 of the European Parliament and of the Council⁷², by [6 months after entry into force], the ODN shall accede to the Interinstitutional Agreement of 25 May 1999 between the European Parliament, the Council of the European Union and the Commission of the European Communities concerning internal investigations by OLAF and adopt appropriate provisions applicable to all staff of the ODN using the template set out in the Annex to that Agreement.
2. The Court of Auditors shall have the power of audit, on the basis of documents and on-the-spot inspections, over all grant beneficiaries, contractors and subcontractors who have received Union funds from the ODN.
3. OLAF may carry out investigations, including on-the-spot checks and inspections, in accordance with the provisions and procedures laid down in Regulation (EU, Euratom) No 883/2013 and Council Regulation (Euratom, EC) No 2185/96⁷³ with a view to establishing whether there has been fraud, corruption or any other illegal activity affecting the financial interests of the Union in connection with a grant agreement or grant decision or a contract funded by the ODN.
4. Without prejudice to paragraphs 1, 2 and 3, cooperation agreements with third countries and international organisations, contracts, grant agreements and grant decisions shall contain provisions expressly empowering the Court of Auditors and OLAF to conduct such audits and investigations, in accordance with their respective competences.

⁷² Regulation (EU, Euratom) No 883/2013 of the European Parliament and of the Council of 11 September 2013 concerning investigations conducted by the European Anti-Fraud Office (OLAF) and repealing Regulation (EC) No 1073/1999 of the European Parliament and of the Council and Council Regulation (Euratom) No 1074/1999, OJ L 248, 18.9.2013, pp. 1–22.

⁷³ Council Regulation (Euratom, EC) No 2185/96 of 11 November 1996 concerning on-the-spot checks and inspections carried out by the Commission in order to protect the European Communities' financial interests against fraud and other irregularities, OJ L 292, 15.11.1996, pp. 2–5.

Article 177

[Ex Art. 44 BEREC Regulation]

Liability

1. The ODN's contractual liability shall be governed by the law applicable to the contract in question.
2. The Court of Justice of the European Union (Court of Justice) shall have jurisdiction to give judgment pursuant to any arbitration clause contained in a contract concluded by the ODN.
3. In the case of non-contractual liability, the ODN shall, in accordance with the general principles common to the laws of the Member States, make good any damage caused by its departments or by its staff in the performance of their duties.
4. The Court of Justice shall have jurisdiction in disputes overcompensation for damages referred to in paragraph 3.
5. The personal liability of its staff towards the ODN shall be governed by the provisions laid down in the Staff Regulations or the Conditions of Employment of Other Servants applicable to them.

Article 178

[Ex Art. 45 BEREC Regulation]

Administrative inquiries

The activities of BEREC, RSPB and of the ODN shall be subject to the inquiries of the European Ombudsman in accordance with Article 228 TFEU.

Article 179

[Ex Art. 46 BEREC Regulation]

Language arrangements

1. Regulation N°1⁷⁴ shall apply to the ODN.
2. Translation and all other linguistic services required by the ODN, other than interpretation, shall be provided by the Translation Centre for the Bodies of the European Union, as established by Council Regulation (EC) No 2965/94⁷⁵.

Article 180

[Ex Art. 47 BEREC Regulation]

Headquarters Agreement and operating conditions

1. The arrangements concerning the accommodation to be provided for the ODN in the host Member State and the facilities to be made available by that Member State as well as the specific rules applicable in the host Member State to the Director, members of the Management Board, the ODN staff and members of their families shall be laid

⁷⁴ Regulation No 1 determining the languages to be used by the European Economic Community (OJ 17, 6.10.1958, p. 385).

⁷⁵ Council Regulation (EC) No 2965/94 of 28 November 1994 setting up a Translation Centre for bodies of the European Union, OJ L 314, 7.12.1994, p. 1, ELI: <http://data.europa.eu/eli/reg/1994/2965/oj>

down in a Headquarters Agreement between the ODN and the host Member State, may be reviewed after obtaining the approval of the Management Board.

2. The host Member State shall provide the necessary conditions to ensure the smooth and efficient functioning of the ODN, including multilingual, European-oriented schooling and appropriate transport connections.

Article 181

[Ex Art. 48 BEREC Regulation]

Evaluation

1. By [5 years after entry into force], and every five years thereafter, the Commission shall carry out an evaluation in compliance with the Commission guidelines to assess BEREC's, RSPB's and the ODN's performance in relation to their objectives, mandate, tasks and location. The evaluation shall, in particular, address the possible need to modify the structure or mandate of BEREC, RSPB and the ODN, and the financial implications of any such modification.
2. Where the Commission considers that the continuation of BEREC, RSPB or the ODN is no longer justified with regard to its assigned objectives, mandate and tasks, it may propose that this Regulation be amended or repealed accordingly.
3. The Commission shall report to the European Parliament, the Council and the Management Board on the findings of its evaluation and shall make those findings public.

Article 182

[Ex Art. 49 BEREC Regulation]

Transitional Provisions regarding the BEREC, RSPB's succession of the RSPG, ODN's succession of the BEREC Office

1. The ODN shall succeed the BEREC Office that was established by Regulation (EU) 2018/1971 as regards all ownership, agreements, legal obligations, employment contracts, financial commitments and liabilities.
2. In particular, this Regulation shall not affect the rights and obligations of the staff of BEREC Office. Their contracts may be renewed under this Regulation in accordance with the Staff Regulations and the Conditions of Employment of Other Servants and in accordance with the budgetary constraints of the ODN.
3. With effect from [*entry into force*], the Director appointed on the basis of Regulation (EU) No 2018/1971 shall act as Director with the functions provided for in this Regulation. The other conditions of the Director's contract shall remain unchanged.
4. The Management Board may decide to renew the term of office of the Director referred to in paragraph 2 of this Article for a further term. Article 158(5) and (6) shall apply mutatis mutandis. The cumulative term of office of the Director shall not exceed 10 years.
5. The BEREC Board of Regulators and the Management Board referred to in Articles 129 and 152 of this Regulation shall be composed of the members of the BEREC Board of Regulators and the Management Board referred to in Articles 7 and 15 of Regulation (EU) 2018/1971, until new representatives are appointed, with the

exception of the Chair of the RSPB Board who shall become a member of the Management Board upon the entry into force of this Regulation.

6. The Chairs and the Vice-Chairs of the BEREC Board of Regulators and of the Management Board who have been appointed on the basis of Regulation (EU) 2018/1971, shall remain in office as Chair and Vice-Chairs of the Board of Regulators as referred to in Article 132 of this Regulation, and as Chairperson and Deputy Chairpersons of the Management Board as referred to in Article 154 of this Regulation for the remaining period of their one-year term.
7. The RSPB Board referred to in Article 136 of this Regulation shall be composed of the members of the RSPG referred to in Article 4(3) of Commission Decision of 11 June 2019⁷⁶, until new representatives are appointed.
8. The Chair and the Deputy Chairs of the RSPG, who are in office at the entry into force of this Regulation, shall remain in office as Chair and Vice-Chair of the RSPB Board until the end of their term of office.
9. Working arrangements developed under Article 35(2) of Regulation (EU) 2018/1971 shall remain valid for the BEREC and the ODN. RSPG members without voting rights shall become participants to the RSPB without voting rights provided that working arrangements are developed in accordance with Article 168(2) second sub-paragraph of this Regulation.

8. PART VIII: GENERAL AND FINAL PROVISIONS

8.1. TITLE I: PROVISION OF INFORMATION, SURVEYS AND CONSULTATION MECHANISM

Article 183

[Ex Art. 20 (1)] and [Ex Art. 21]

Provision of information

1. Undertakings providing electronic communications networks and services, associated facilities, or associated services, shall provide all the information, including financial and information, necessary for national regulatory authorities, other competent authorities, BEREC and RSPB to carry out their tasks and ensure conformity with the provisions of, or decisions or opinions adopted in accordance with this Regulation. Where the information provided is insufficient to carry out their regulatory tasks under Union law, national regulatory authorities, other competent authorities and BEREC and RSPB shall have the right to request such information from other relevant undertakings active in the electronic communications or closely related sectors, as well as from the single information points established pursuant to Regulation (EU) 2024/1309.
2. Any request for information shall be proportionate to the performance of the tasks set out by this Regulation and shall be reasoned. Where national regulatory authorities require undertakings to provide information as referred to in paragraph 1, they shall inform them of the specific purpose for which this information is to be used.

⁷⁶

Undertakings shall provide the information requested promptly and in any event within the set deadlines.

3. National regulatory authorities may require undertakings to provide information with regard to the general authorisation, the rights of use or the specific obligations, which is proportionate and objectively justified in particular for the purposes of:
 - (a) verifying, on a systematic or case-by-case basis, compliance with conditions or obligations laid down in Articles 9(2), 21, 31, 49, 50, 51, 67, 68(1), 69 and 77.
 - (b) verifying, on a case-by-case basis, compliance with conditions of the general authorisation and/or obligations and conditions for rights of use for radio spectrum or numbering resources where a complaint has been received or where the competent authority has other reasons to believe that a condition is not complied with or in the case of an investigation by the competent authority on its own initiative;
 - (c) carrying out procedures for and the assessment of requests for granting rights of use;
 - (d) publishing comparative overviews of quality and price of services for the benefit of consumers;
 - (e) collating clearly defined statistics, reports or studies;
 - (f) carrying out market analyses for the purposes of this Regulation, including data on the downstream or retail markets associated with or related to the markets which are the subject of the market analysis and accounting data on the retail markets from the undertakings designated as having significant market power;
 - (g) safeguarding the efficient use and ensuring the effective management of radio spectrum and of numbering resources;
 - (h) evaluating future network or service developments that could have an impact on wholesale services made available to competitors, as well as information on electronic communications networks and associated facilities, which is disaggregated at local level and sufficiently detailed in terms of territorial coverage, on connectivity available to end-users or for conducting geographical surveys pursuant to Article 185;
 - (i) responding to reasoned requests for information by BEREC or RSPB.
- (j) The information referred to in the first subparagraph, points (a) and (b) and points (d) to (i), shall not be required prior to, or as a condition for, market access.
4. As regards the rights of use for radio spectrum, the information referred to in paragraph 3 of this Article shall refer in particular to the effective and efficient use of radio spectrum as well as to compliance with any coverage and quality of service obligations attached to the rights of use for radio spectrum and their verification.
5. National regulatory or other competent authorities shall not duplicate requests of information already made by BEREC or RSPB pursuant to the first and the third paragraph of this Article where BEREC or RSPB has made the information received available to those authorities.

Article 184

[new and Ex Art. 20 (2) – (5)]

Harmonised information requests and reporting

1. For the purpose of harmonised information requests to undertakings under Article 182(1), and in line with the principle of limiting the reporting pursuant to Article 182(3) to what is strictly necessary, by [12 months after the entry into force of this Regulation], BEREC shall issue guidelines concerning the scope, notifications, timing, frequency and format, including of information collection procedures and general reporting obligations for providers of public and non-public electronic communication networks and publicly available electronic communication services falling under the general authorisation regime pursuant to Article 9 of this Regulation. The guidelines shall also include templates for requests for information, including reporting to facilitate the analysis and presentation of the information gathered.
2. Where applicable, RSPB shall also develop templates for requests for information to facilitate the analysis and presentation of the information gathered. Information shall be requested and submitted only in accordance with the templates developed.
3. The Commission may, including by means of an implementing act, harmonise the methodologies for collection of information by national regulatory authorities.

The implementing act referred to in the first sub-paragraph shall be adopted in accordance with the examination procedure referred to in Article 202(4).

4. Where information on sustainability is collected pursuant to Article 3(1)(g), national regulatory and other competent authorities shall first access the information provided by undertakings pursuant to other relevant Union law. If national regulatory and other competent authorities conclude that this information is insufficient for the completion of the tasks set out by this Regulation, BEREC may include suitable approaches in the guidelines referred to in paragraph 1 of this Article aiming at streamlining the collection of the additional data needed.
5. National regulatory and other competent authorities shall provide the Commission, after a reasoned request, with the information necessary for it to carry out its tasks under the TFEU. The information requested by the Commission shall be proportionate to the performance of those tasks. Where the information provided refers to information previously provided by undertakings at the request of the authority, such undertakings shall be informed thereof. To the extent necessary, and unless the authority that provides the information has made an explicit and reasoned request to the contrary, the Commission shall make the information provided available to another such authority in another Member State.
6. Subject to the requirements of paragraph 6, the information submitted to one authority shall be made available to another such authority in the same or different Member State, to BEREC and RSPB, after a substantiated request, where necessary to allow either authority, or BEREC or RSPB, to fulfil its responsibilities under Union law.
7. Where information gathered pursuant to Article 182(1) and (3), including information gathered in the context of a geographical survey under Article 185, is considered to be confidential by a national regulatory or other competent authority in accordance with Union and national rules on confidentiality of information, the Commission, BEREC and any other competent authorities concerned shall protect such confidentiality but they shall not be prevented from sharing information amongst them in a timely manner for the purposes of reviewing, monitoring and supervising the application of this Regulation.

8. Acting in accordance with national rules on public access to information and subject to Union and national rules on commercial confidentiality and protection of personal data, national regulatory authorities shall publish information that contributes to an open and competitive market.
9. National regulatory and other competent authorities shall publish the terms of public access to information as referred to in paragraph 7, including the procedures for obtaining such access.

Article 185

[Ex Art. 22]

Geographical surveys of network deployments

1. National regulatory other competent authorities shall conduct a geographical survey of the reach, of electronic communications networks capable of delivering broadband services ('broadband networks') within one year from the entry into force of this Regulation and shall update it at least every three years thereafter.
2. The geographical survey shall include a survey of the current geographical reach of availability (premises passed), readiness (premises connected) and take-up (premises activated) of electronic communication networks, if relevant, distinguishing between residential, business and public segments, within their territory, as required for the tasks of national regulatory and/or other competent authorities under this Regulation. The geographical also contribute the application of State aid rules, if the relevant requirements are fulfilled.
3. The geographical survey shall also include a forecast for a period determined by the relevant authority of the reach of broadband networks, including at least gigabit networks, within their territory. The geographical survey may also contribute to the mapping required for the application of State aid rules, if the relevant requirements are fulfilled.
4. Such forecast shall include all relevant information, including information on planned deployments by any undertaking or public authority, of at least gigabit networks. For this purpose, national regulatory or other competent authorities shall request undertakings and public authorities to provide such information to the extent that it is available and can be provided with reasonable effort.
5. The national regulatory authority shall decide, with respect to tasks specifically attributed to it under this Regulation, the extent to which it is appropriate to rely on all or part of the information gathered in the context of such forecast.
6. Where a geographical survey is not conducted by the national regulatory authority, it shall be done in cooperation with that authority to the extent it may be relevant for its tasks. The information collected in the geographical survey shall be at an appropriate level of local detail and shall include sufficient information on the quality of service and parameters thereof and shall be treated in accordance with Article 184(6).
7. National regulatory or other competent authorities may designate an area with clear territorial boundaries where, on the basis of the information gathered and any forecast prepared pursuant to paragraph 1 of this Article, it is determined that, for the duration of the relevant forecast period, no undertaking or public authority has deployed or is planning to deploy a gigabit network or significantly upgrade their existing electronic

communication network to be capable of providing gigabit speed. National regulatory or other competent authorities shall publish the designated areas.

8. Within a designated area, the relevant authorities may invite undertakings and public authorities to declare their intention to deploy gigabit networks over the duration of the relevant forecast period. Where this invitation results in a declaration by an undertaking or public authority of its intention to do so, the relevant authority may require other undertakings and public authorities to declare any intention to deploy gigabit networks. The relevant authority shall specify the information to be included in such submissions, in order to ensure at least a similar level of detail as that taken into consideration in any forecast pursuant to paragraph 1.
9. National regulatory and other competent authorities shall gather data in accordance with an efficient, objective, transparent and non-discriminatory procedure, whereby no undertaking is excluded a priori.
10. National regulatory and other competent authorities, and local, regional and national authorities with responsibility for the allocation of public funds for the deployment of electronic communications networks, for the design of national broadband plans, for defining coverage obligations attached to rights of use for radio spectrum and for verifying availability of services falling within the universal service obligations in their territory shall take into account the results of the geographical survey and of any designated areas pursuant to paragraphs 1, 2 and 3 of this Article. For the purposes of allocating the public funds for the deployment of electronic communications networks, the results of the geographical surveys and any of the designated areas pursuant to paragraphs 1, 2 and 3 shall be taken into the account, insofar as they are relevant and appropriate for fulfilling obligations stemming from the application of State aid rules. The authorities conducting the geographical survey shall supply those results subject to the receiving authority ensuring the same level of confidentiality and protection of business secrets as the originating authority and inform the parties which provided the information. Those results shall also be made available to BEREC and the Commission upon their request and under the same conditions.
11. If the relevant information is not available on the market, competent authorities shall make data from the geographical surveys which are not subject to commercial confidentiality directly accessible in accordance with Directive (EU) 2019/1024 to allow for its reuse. They shall also, where such tools are not available on the market, make available information tools enabling end-users to determine the availability of connectivity in different areas, with a level of detail which is useful to support their choice of operator or service provider.
12. The national regulatory authority shall analyse the results of information gathered in the context of a geographical survey under this Article and decide whether there is a need to conduct a market review within the meaning of Articles 72 and 73. The results of such analysis shall be made publicly available in form of a report.
13. In the period of the transition to fibre, the report referred to in paragraph 12 of this Article shall include the analysis of the information concerning geographic surveys as well as the analysis of information, gathered according to Article 183 or other available sources, regarding prices and quality of services available over copper and fibre prices. The report shall be used to assess the sustainability conditions set in Article 56. The first report shall be published within one year from the entry into force of this Regulation.

Article 186

[Ex Art. 23]

Consultation and transparency mechanism

1. Except in cases falling within Articles 190, 191 or Article 86, where national regulatory or other competent authorities intend to take measures in accordance with this Regulation, or where they intend to provide for restrictions in accordance with Articles 16(1) and (2), which have a significant impact on the relevant market, they shall give interested parties the opportunity to comment on the draft measure within a reasonable period, having regard to the complexity of the matter and in any event not shorter than 30 days.
2. For the purposes of Article 31, the competent authorities shall inform the Commission, RSPB, BEREC and the competent authorities of other Member States at the moment of publication about any draft measure which falls within the scope of the comparative or competitive selection procedure pursuant to Article 30(4) and relates to the use of radio spectrum for which harmonised conditions have been set by technical implementing measures in accordance with Decision No 676/2002/EC in order to enable its use for wireless broadband electronic communications networks and services ('wireless broadband networks and services').
3. National regulatory and other competent authorities shall publish their national consultation procedures via a single information point through which all current consultations can be accessed.
4. The results of the consultation procedure shall be made publicly available, except in the case of confidential information in accordance with Union and national rules on commercial confidentiality.

Article 187

[Ex Art. 24]

Consultation of interested parties

1. Competent authorities in coordination, where relevant, with national regulatory authorities shall take account of the views of end-users, in particular consumers, and end-users with disabilities, manufacturers and undertakings that provide electronic communications networks or services on issues related to all end-user and consumer rights, including equivalent access and choice for end-users with disabilities, concerning publicly available electronic communications services, in particular where they have a significant impact on the market.
2. Competent authorities in coordination, where relevant, with national regulatory authorities shall establish a consultation mechanism, accessible for end-users with disabilities, ensuring that in their decisions on issues related to end-user and consumer rights concerning publicly available electronic communications services, due consideration is given to consumer interests in electronic communications.
3. Interested parties may develop, with the guidance of competent authorities in coordination, where relevant, with national regulatory authorities, mechanisms, involving consumers, user groups and service providers, to improve the general quality of service provision by, *inter alia*, developing and monitoring codes of conduct and operating standards.

4. Without prejudice to national rules in accordance with Union law promoting cultural and media policy objectives, such as cultural and linguistic diversity and media pluralism, competent authorities in coordination, where relevant, with national regulatory authorities may promote cooperation between undertakings providing electronic communications networks or services and sectors interested in the promotion of lawful content in electronic communications networks and services. That cooperation may also include coordination of the public-interest information to be provided pursuant to Article 106.

8.2. TITLE II: HARMONISATION PROCEDURES

Article 188

[Ex Art. 38]

Harmonisation procedures

1. Where the Commission finds that divergences in the implementation by the national regulatory or other competent authorities of the regulatory tasks specified in this Regulation could create a barrier to the internal market, the Commission may, taking the utmost account of the opinion of BEREC or, where relevant, the RSPB, adopt recommendations or, subject to paragraph 3 of this Article, decisions by means of implementing acts to ensure the harmonised application of this Regulation and in order to further the achievement of the general objectives set out in Article 3.
2. National regulatory and other competent authorities shall take utmost account of the recommendations referred to in paragraph 1 in carrying out their tasks. Where a national regulatory or other competent authority chooses not to follow a recommendation, it shall inform the Commission, giving the reasons for its position.
3. The decisions adopted pursuant to paragraph 1 shall include only the identification of a harmonised or coordinated approach for the purpose of addressing the following matters:
 - (a) the inconsistent implementation of general regulatory approaches by national regulatory authorities on the regulation of electronic communications markets in the application of Articles 72 and 73, where it creates a barrier to the internal market; such decisions shall not refer to specific notifications issued by the national regulatory authorities pursuant to Article 85; in such a case, the Commission shall propose a draft decision only:
 - i. after at least two years following the adoption of a Commission recommendation dealing with the same matter;
 - ii. taking utmost account of an opinion from BEREC on the case for adoption of such a decision, which shall be provided by BEREC within three months of the Commission's request;
 - (b) numbering, including number ranges, portability of numbers and identifiers, number and address translation systems, and access to emergency services through emergency communications.
4. The implementing acts referred to in paragraph 1 of this Article shall be adopted in accordance with the examination procedure referred to in Article 202(4).

5. BEREC may, on its own initiative, advise the Commission on whether a measure should be adopted pursuant to paragraph 1.
6. Where the Commission has not adopted a recommendation or a decision within one year from the date of adoption of an opinion by BEREC indicating the existence of divergences in the implementation by the national regulatory or other competent authorities of the regulatory tasks specified in this Regulation that could create a barrier to the internal market, it shall inform the European Parliament and the Council of its reasons for not doing so, and make those reasons public.

Where the Commission has adopted a recommendation in accordance with paragraph 1, but the inconsistent implementation creating barriers to the internal market persists for two years thereafter, the Commission shall, subject to paragraph 3, adopt a decision to address the matters referred to in paragraph 3 of this Article by means of implementing acts in accordance with paragraph 4.

Where the Commission has not adopted a decision within a further year from any recommendation adopted pursuant to the second subparagraph, it shall inform the European Parliament and the Council of its reasons for not doing so, and make those reasons public.

Article 189

[Ex Art. 39]

Standardisation

1. The Commission shall draw up and publish in the Official Journal of the European Union a list of non-compulsory standards or technical specifications to serve as a basis for encouraging the harmonised provision of electronic communications networks, electronic communications services and associated facilities and associated services. Where necessary, the Commission may, following consultation of the Committee established by Directive (EU) 2015/1535, pursuant to Article 10 of Regulation (EU) No 1025/2012⁷⁷ request one or more European standardisation organisations to draft standards.
2. Member States shall encourage the use of the standards or technical specifications referred to in paragraph 1 for the provision of services, technical interfaces or network functions, to the extent strictly necessary to ensure interoperability of services, end-to-end connectivity, facilitation of provider switching and portability of numbers and identifiers, and to improve freedom of choice for users.
3. In the absence of publication of standards or technical specifications in accordance with paragraph 1, Member States shall encourage the implementation of standards or technical specifications adopted by the European standardisation organisations. In the absence of such standards or specifications, Member States shall encourage the implementation of international standards or recommendations adopted by ITU, the European Conference of Postal and Telecommunications Administrations (CEPT), the

⁷⁷ Regulation (EU) No 1025/2012 of the European Parliament and of the Council of 25 October 2012 on European standardisation, amending Council Directives 89/686/EEC and 93/15/EEC and Directives 94/9/EC, 94/25/EC, 95/16/EC, 97/23/EC, 98/34/EC, 2004/22/EC, 2007/23/EC, 2009/23/EC and 2009/105/EC of the European Parliament and of the Council and repealing Council Decision 87/95/EEC and Decision No 1673/2006/EC of the European Parliament and of the Council, OJ L 316, 14.11.2012, pp. 12–33.

International Organisation for Standardisation (ISO) and the International Electrotechnical Commission (IEC).

4. Where international standards exist, Member States shall encourage the European standardisation organisations to use them, or the relevant parts of them, as a basis for the standards they develop, except where such international standards or relevant parts would be ineffective. Any standards or technical specifications referred to in paragraph 1 or in this paragraph shall not prevent access as may be required under this Regulation, where feasible.
5. Where the standards or specifications referred to in paragraph 1 have not been adequately implemented so that interoperability of services in one or more Member States cannot be ensured, the implementation of such standards or specifications may be made compulsory under the procedure laid down in paragraph 6, to the extent strictly necessary to ensure such interoperability and to improve freedom of choice for users.
6. Where the Commission intends to make the implementation of certain standards or technical specifications compulsory, it shall publish a notice in the Official Journal of the European Union and invite public comment by all parties concerned. The Commission shall, by means of implementing acts, make implementation of the relevant standards or technical specifications compulsory by making reference to them as compulsory standards or compulsory technical specifications in the list of standards or technical specifications published in the Official Journal of the European Union.
7. Where the Commission considers that the standards or technical specifications referred to in paragraph 1 no longer contribute to the provision of harmonised electronic communications services, no longer meet consumers' needs or hamper technological development, it shall remove them from the list of standards or technical specifications referred to in paragraph 1.
8. Where the Commission considers that the standards or specifications referred to in paragraph 4 no longer contribute to the provision of harmonised electronic communications services, no longer meet consumers' needs, or hamper technological development, it shall, by means of implementing acts, remove those standards or specifications from the list of standards or specifications referred to in paragraph 1.
9. The implementing acts referred to in paragraphs 4 and 6 of this Article shall be adopted in accordance with the examination procedure referred to in Article 202(4).
10. This Article does not apply in respect of any of the essential requirements, interface specifications or harmonised standards to which Directive 2014/53/EU applies.

8.3. TITLE III: DISPUTE RESOLUTION

Article 190

[Ex Art. 25]

Out-of-court dispute resolution

1. The national regulatory authority or another competent authority responsible for, or at least one independent body with proven expertise in, the application of Articles 95(4), 96, 97, 98, 99 and 101 of this Regulation shall be listed as an alternative dispute resolution entity in accordance with Article 20(2) of Directive 2013/11/EU with a view to resolving disputes between providers and consumers, as well as, where applicable,

microenterprises and small enterprises, arising under this Regulation and relating to the performance of contracts.

2. Without prejudice to Directive 2013/11/EU, where such disputes involve parties in different Member States, the competent bodies referred to in paragraph 1 shall coordinate their efforts with a view to bringing about a resolution of the dispute.
3. Providers of internet access services shall put in place transparent, simple and efficient procedures to address complaints of end-users relating to the rights and obligations laid down in Article 94 and complaints of consumers, microenterprises and not-for-profit organisations relating to the rights laid down in point 5 of Annex III.

Article 191

[Ex Art. 26]

Dispute resolution between undertakings

1. In the event of a dispute arising in connection with existing obligations under this Regulation between providers of public electronic communications networks or services in a Member State, or between such undertakings and other undertakings in the Member State benefiting from obligations of access or interconnection or between providers of electronic communications networks or services in a Member State and providers of associated facilities, the national regulatory authority concerned shall, at the request of either party, issue a binding decision to resolve the dispute in the shortest possible time-frame on the basis of clear and efficient procedures, and in any case within four months except in exceptional circumstances. All parties shall cooperate fully with the national regulatory authority.
2. In resolving a dispute, the national regulatory authority shall take decisions aimed at achieving the general objectives set out in Article 3. Any obligations imposed on an undertaking by the national regulatory authority in resolving a dispute shall comply with this Regulation.
3. The decision of the national regulatory authority shall be made available to the public, having regard to the requirements of commercial confidentiality. The national regulatory authority shall provide the parties concerned with a full statement of the reasons on which the decision is based.
4. The procedure referred to in paragraphs 1, 3 and 4 shall not preclude either party from bringing an action before the courts.

Article 192

[Ex Art. 27]

Resolution of cross-border disputes

1. In the event of a dispute arising under this Regulation between undertakings in different Member States, paragraphs 2, 3 and 4 of this Article shall apply. Those provisions shall not apply to disputes relating to radio spectrum coordination covered by Article 14.
2. Any party may refer the dispute to the national regulatory authority or authorities concerned. Where the dispute affects trade between Member States, the competent national regulatory authority or authorities shall notify the dispute to BEREC in order

to bring about a consistent resolution of the dispute, in accordance with the objectives set out in Article 3.

3. Where such a notification has been made, BEREC shall issue an opinion inviting the national regulatory authority or authorities concerned to take specific action in order to resolve the dispute or to refrain from action, in the shortest possible time-frame, and in any case within four months except in exceptional circumstances.
4. The national regulatory authority or authorities concerned shall await BEREC's opinion before taking any action to resolve the dispute. In exceptional circumstances, where there is an urgent need to act, in order to safeguard competition or protect the interests of end-users, any of the competent national regulatory authorities may, either at the request of the parties or on its own initiative, adopt interim measures.
5. Any obligations imposed on an undertaking by the national regulatory authority as part of the resolution of the dispute shall comply with this Regulation, take the utmost account of the opinion adopted by BEREC, and be adopted within one month of such opinion.
6. The procedure referred to in paragraph 2 shall not preclude either party from bringing an action before the courts.

8.4. **TITLE IV: ECOSYSTEM COOPERATION**

Article 193

[New]

Guidance to facilitate ecosystem cooperation

1. By *[day/month/year – 12 months after entry into force]*, BEREC shall, after consulting stakeholders and in close cooperation with the Commission, publish guidelines to assist providers of electronic communications networks and other undertakings active in the electronic communications or closely related sectors, in the application of industry practices and in facilitating cooperation on technical and commercial matters related to the provision of electronic communications services or information society services in an efficient, optimised and reliable way, as well as related to the provision of innovative products and services. Such cooperation shall cover matters outside of the scope of obligations under this Regulation, but with an effect on the provision of electronic communications services or information society services.
2. With the support of the ODN, BEREC shall promote effective cooperation among providers of electronic communications networks and undertakings active in the electronic communications or closely related sectors, ensuring that such cooperation is consistent with the guidelines referred to in paragraph 1. BEREC shall facilitate the coherent application of those guidelines, encourage the development of joint technical and commercial practices, and monitor their effects on the provision of electronic communications services and information society services in an efficient, optimised and reliable way.

Article 194

[New]

Facility for voluntary conciliation

1. On request of providers of electronic communications networks or other undertakings active in the electronic communications or closely related sectors, national regulatory authorities shall offer a conciliatory meeting between two providers of electronic communications networks or between such a provider and another undertaking active in the electronic communications or closely related sectors on technical and commercial arrangements, subject to the guidelines referred to in Article 193(2). The conciliatory meeting shall be convened by the national regulatory authority of the party lodging the request for conciliation unless agreed otherwise by the parties.
2. The national regulatory authority specified in paragraph 1 shall, in cooperation with BEREC, convene the meeting no later than three months after the submission of the request for voluntary conciliation. Within 1 week following the request, the national regulatory authority shall inform BEREC of the elements of the case. Within two months following the request, BEREC shall issue an opinion on the elements of the case and options for effective cooperation based on the guidelines referred to in Article 193. No later than one month after the meeting, taking utmost account of the BEREC opinion, the national regulatory authority shall provide a written account of the meeting, including the views of the parties involved and possible next steps as well as, unless in case of absence of one of the parties, elements of agreement or, in case of disagreement, options proposed by the national regulatory authority for effective cooperation.

Article 195

[New]

Reporting

By *[2 years after the date of application of this Regulation]*, BEREC shall publish a report on the effects of the application of the guidelines referred to in Article 193(1) on effective ecosystem cooperation as well as on the functioning of the facility for voluntary conciliation referred to in Article 194.

Article 196

[New]

Review clause

By *[3 years after the date of application of this Regulation]*, taking utmost account of BEREC report referred to in Article 195, the Commission shall review the functioning of the ecosystem cooperation.

8.5. TITLE V: COMPLIANCE AND RIGHT OF APPEAL

Article 197

[Ex-Art. 18]

Amendment of rights and obligations under general authorisation and individual authorisations for scarce resources

1. The rights, conditions and procedures concerning general authorisation and rights of use for radio spectrum or for numbering resources or rights to install facilities may be amended only in objectively justified cases and in a proportionate manner, taking into

consideration, where appropriate, the specific conditions applicable to transferable rights of use for radio spectrum or for numbering resources.

2. Except where proposed amendments are minor and have been agreed with the holder of the rights or the general authorisation, the intention to make such amendments shall be notified sufficiently in advance. Holders of the rights or the general authorisation and other interested parties, including users and consumers, shall be given sufficient time to express their views on the proposed amendments. That period shall be no less than four weeks except in exceptional circumstances. Amendments shall be published, together with the reasons therefor.

Article 198

[Ex Art. 19]

Restriction or withdrawal of rights

1. Without prejudice to Article 199(10) and (12), competent authorities shall not restrict or withdraw rights of use for radio spectrum or for numbering resources before the expiry of the period for which they were granted, except where justified pursuant to paragraph 2 of this Article, and, where applicable, in accordance with Article 20, 21 or 50, and to relevant national provisions regarding compensation for the withdrawal of rights.
2. Competent authorities may restrict or withdraw rights of use for radio spectrum, including the rights referred to in Article 24 of this Regulation, where needed to ensure efficient and effective use of radio spectrum, or the implementation of the technical harmonisation measures adopted under Article 4 of Decision No 676/2002/EC. Any such decision shall be based on pre-established and clearly defined procedures under national law, in accordance with the principles of proportionality and non-discrimination. Where rights of use have been assigned for a specific duration, unless provided otherwise at the time of the granting of the right, the holders of the rights shall have the right to be compensated appropriately for the direct cost of migration or reallocation of spectrum in accordance with national law.
3. A modification in the use of radio spectrum as a result of the application of Article 16(1) or (2) shall not alone constitute grounds to justify the withdrawal of a right of use for radio spectrum.
4. Any intention to restrict or withdraw rights under the general authorisation or individual rights of use for radio spectrum or for numbering resources without the consent of the holder of the rights shall be subject to consultation of the interested parties in accordance with Article 187.

Article 199

[Ex Art. 30]

Compliance with the conditions of the general authorisation or Single Passport and obligations and conditions for rights of use for radio spectrum, for numbering resources, specific obligations and measures for non-compliance

1. National regulatory and other competent authorities shall monitor and supervise compliance with the conditions of the general authorisation or obligations and conditions for rights of use for radio spectrum referred to in Articles 20, 21, 22, 24,

25, 26, 27, 29, 33 and 34, for numbering resources referred to in Articles 46 and 50, and with the specific obligations referred to in Articles 67, 68 (1) and 77.

2. National regulatory and other competent authorities shall have the power to require undertakings subject to the general authorisation, the Single Passport or benefitting from rights of use for radio spectrum or for numbering resources to provide all information necessary to verify compliance with the conditions of the general authorisation or obligations and conditions for of rights of use for radio spectrum and for numbering resources or with the specific obligations referred to in Articles 67, 68 (1) and 77 or Article 21, in accordance with Article 183.
3. Where a competent authority finds that an undertaking does not comply with one or more of the conditions of the general authorisation, Single Passport or obligations and conditions for rights of use for radio spectrum and for numbering resources referred to in Articles 20, 21, 22, 24, 25, 26, 27, 29, 33, 34, 46 and 50, or with the specific obligations referred to in Articles 67, 68 (1) and 77, it shall notify the undertaking of those findings and give the undertaking the opportunity to state its views, within a reasonable time limit.
4. The competent authority shall have the power to require the cessation of the breach referred to in paragraph 2 either immediately or within a reasonable time limit and shall take appropriate and proportionate measures aimed at ensuring compliance.
5. Member States shall lay down rules on penalties, including, where necessary, fines and non-criminal predetermined or periodic penalties, applicable to infringements of provisions pursuant to this Regulation or of any binding decision adopted by the Commission, the national regulatory or other competent authority pursuant to this Regulation, and shall take all measures necessary to ensure that they are implemented. The penalties provided for shall be appropriate, effective, proportionate and dissuasive.
6. In this regard, the competent authorities shall have the power to impose:
 - (a) where appropriate, dissuasive financial penalties which may include periodic penalties with retroactive effect;
 - (b) orders to cease or delay provision of a service or bundle of services which, if continued, would result in significant harm to competition, pending compliance with access obligations imposed following a market analysis carried out in accordance with Article 73.

The competent authorities shall communicate the measures and the reasons on which they are based to the undertaking concerned without delay and shall stipulate a reasonable period for the undertaking to comply with the measures.

7. Notwithstanding paragraphs 2 and 3 of this Article, Member States shall empower the competent authority to impose, where appropriate, financial penalties on undertakings for failure to provide information, in accordance with the obligations imposed under Article 183(3), first subparagraph, points (a) or (b), and obligations of transparency, within a reasonable period set by the competent authority.
8. Member States shall provide for penalties in the context of the procedure referred to in Article 185(8) only where an undertaking or public authority knowingly or grossly negligently provided misleading, erroneous or incomplete information.
9. When determining the amount of fines or periodic penalties imposed on an undertaking or public authority for knowingly or grossly negligently providing misleading,

erroneous or incomplete information in the context of the procedure referred to in Articles 184 and 185(8), regard shall be had, *inter alia*, to whether the behaviour of the undertaking or public authority has had a negative impact on competition and, in particular, whether, contrary to the information originally provided or any update thereof, the undertaking or public authority either has deployed, extended or upgraded a network, or has not deployed a network and has failed to provide an objective justification for that change of plan.

10. In the case of a serious breach or repeated breaches of the conditions of the general authorisation or of the obligations and conditions for the rights of use for radio spectrum and for numbering resources, or of the specific obligations referred to in new Articles 67, 68 (1) and 77 or Article 21(1) or (2), where measures aimed at ensuring compliance as referred to in paragraph 3 of this Article have failed, Member States shall empower competent authorities to prevent an undertaking from continuing to provide electronic communications networks or services or suspend or withdraw those rights of use. Such penalties may be applied to cover the period of any breach, even if the breach has subsequently been rectified.
11. Where conditions have been set pursuant to Article 20 in the right of use, to allow radio spectrum sharing in case of breach of an obligation attached to that right of use, competent authorities shall enforce such spectrum sharing. When imposed, a sharing solution shall either be proposed by the right holder in accordance with the provisions of its right or shall be organised by the competent authority pursuant to Article 30.
12. Notwithstanding paragraphs 2, 3 and 5 of this Article, and without prejudice to Article 39 on a Union authorisation for the use of satellite spectrum, the competent authority may take urgent interim measures to remedy the situation in advance of reaching a final decision, where it has evidence of a breach of the conditions of the general authorisation, of the obligations and conditions for the rights of use for radio spectrum and for numbering resources, or of the specific obligations referred to in Articles 67, 68 (1) and 77 or Article 21(1) or (2) which represents an immediate and serious threat to public safety, public security or public health or risks creating serious economic or operational problems for other providers or users of electronic communications networks or services or other users of the radio spectrum. The competent authority shall give the undertaking concerned the opportunity to state its views and propose any remedies. Where appropriate, the competent authority may confirm the interim measures, which shall be valid for a maximum of three months, but which may, in circumstances where enforcement procedures have not been completed, be extended for a further period of up to three months.

Article 200

[Ex Art. 31]

Right of appeal

1. Any user or undertaking providing electronic communications networks or services or associated facilities who is affected by a decision of a competent authority shall have the right of appeal against that decision to an appeal body that is independent of the parties involved and of any external intervention or political pressure liable to jeopardise its independent assessment of matters coming before it. This body, which may be a court, shall have the appropriate expertise to enable it to carry out its functions effectively.

2. Pending the outcome of the appeal, the decision of the competent authority shall stand, unless interim measures are granted in accordance with national law.
3. Where the appeal body referred to in paragraph 1 of this Article is not judicial in character, it shall always give written reasons for its decision. Furthermore, in such a case, its decision shall be subject to review by a court or a tribunal within the meaning of Article 267 TFEU.
4. Member States shall ensure that the appeal mechanism is effective.

8.6. **TITLE VI: FINAL PROVISIONS**

Article 201

[Ex Art. 117]

Exercise of the delegation

1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.
2. The power to adopt delegated acts referred to in Article 80(1), Article 109(5), Article 111(8) and Article 118 shall be conferred on the Commission for a period of five years from XX. The Commission shall draw up a report in respect of the delegation of power not later than nine months before the end of the five-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension not later than three months before the end of each period.
3. The delegation of power referred to in Article 80(1), Article 109(5), Article 111(8) and Article 118 may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the Official Journal of the European Union or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.
4. Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making.
5. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.
6. A delegated act adopted pursuant to Article 80(1), Article 109(5), Article 111(8) and Article 118 shall enter into force only if no objection has been expressed either by the European Parliament or by the Council within a period of two months of notification of that act to the European Parliament and to the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

Article 202

[Ex Art. 118]

Committee procedure

1. The Commission shall be assisted by the Communications Committee established by Directive (EU) 2018/1972. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011.
2. For the implementing acts referred to in Article 17(2), second sub-paragraph, the Commission shall be assisted by the Radio Spectrum Committee established pursuant to Article 3(1) of Decision No 676/2002/EC. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011.
3. Where reference is made to this paragraph, Article 4 of Regulation (EU) No 182/2011 shall apply.
4. Where the opinion of the committee is to be obtained by written procedure, that procedure shall be terminated without result when, within the time-limit for delivery of the opinion, the chair of the committee so decides or a committee member so requests.
5. Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply.
6. Where the opinion of the committee is to be obtained by written procedure, that procedure shall be terminated without result when, within the time-limit for delivery of the opinion, the chair of the committee so decides or a committee member so requests.

Article 203

[Ex Art. 119]

Exchange of information

1. The Commission shall provide all relevant information to the Communications Committee on the outcome of regular consultations with the representatives of network operators, service providers, users, consumers, manufacturers and trade unions, as well as third countries and international organisations.
2. The Communications Committee shall, taking account of the Union's electronic communications policy, foster the exchange of information between the Member States and between the Member States and the Commission on the situation and the development of regulatory activities regarding electronic communications networks and services.

Article 204

[Ex Art. 120]

Publication of information

1. Member States shall ensure that up-to-date information regarding the implementation of this Regulation is made publicly available in a manner that guarantees all interested parties easy access to that information. They shall publish a notice in their national official gazette describing how and where the information is published. The first such notice shall be published before [2 years after adoption] and thereafter a notice shall be published where there is any change in the information contained therein.

2. Member States shall submit to the Commission a copy of all such notices at the time of publication. The Commission shall distribute the information to the Communications Committee as appropriate.
3. Member States shall ensure that all relevant information on rights, conditions, procedures, charges, fees and decisions concerning general authorisations, rights of use and rights to install facilities is published and kept up to date in an appropriate manner in order to provide easy access to that information for all interested parties.
4. Where information referred to in paragraph 3 is held at different levels of government, in particular information regarding procedures and conditions on rights to install facilities, the competent authority shall make all reasonable efforts, having regard to the costs involved, to create a user-friendly overview of all such information, including information on the relevant levels of government and the responsible authorities, in order to facilitate applications for rights to install facilities.
5. Member States shall ensure that the specific obligations imposed on undertakings under this Regulation are published and that the specific product and service, and geographical markets are identified. Subject to the need to protect commercial confidentiality, they shall ensure that up-to-date information is made publicly available in a manner that guarantees all interested parties easy access to that information.
6. Member States shall provide the Commission with information that they make publicly available pursuant to paragraph 5. The Commission shall make that information available in a readily accessible form, and shall distribute the information to the Communications Committee as appropriate.

Article 205

[New Article]

Use of European business wallets

In the application of this Regulation, Member States, national regulatory and other competent authorities, as well as BEREC, RSPB, ODN and the Commission, shall enable and use the European Business Wallets as established by Regulation [XXX]⁷⁸.

Article 206

[Ex Art. 121]

Notification and monitoring

National regulatory authorities shall notify to the Commission the names of undertakings designated as having significant market power for the purposes of this Regulation, and the obligations imposed upon them under this Regulation. Any changes affecting the obligations imposed upon undertakings or of the undertakings affected under this Regulation shall be notified to the Commission without delay.

Article 207

[Ex Art. 122]

⁷⁸

[Insert reference to the Regulation on the establishment of European Business Wallets, once COM proposal is adopted]

Review procedures

1. By [5 years after entry into force] and every five years thereafter, the Commission shall review the functioning of this Regulation and report to the European Parliament and to the Council.
2. Those reviews shall evaluate in particular the market implications of Article 69 and Articles 83 and whether the *ex ante* and other intervention powers pursuant to this Regulation are sufficient to enable national regulatory authorities to ensure that competition in electronic communications markets continues to thrive to the benefit of end-users.
3. To that end, the Commission may request information from the Member States, which shall be supplied without undue delay.
4. BEREC shall, by [3 years after entry into force] and every three years thereafter, publish report on the national implementation and functioning of the general authorisation, and on their impact on the functioning of the internal market.
5. The Commission may, taking utmost account of the BEREC report submit a legislative proposal to amend those provisions where it considers this to be necessary for the purpose of addressing obstacles to the proper functioning of the internal market.

Article 208

[NEW]

Transitional provisions regarding contract summary template

Commission Implementing Regulation (EU) 2019/2243⁷⁹ shall continue to apply, *mutatis mutandis*, for the purposes of specifying a contract summary template to be used by the providers of internet access service or publicly available interpersonal communications services to fulfil their obligations under Article 96(2) of this Regulation, until the day of application of the implementing act referred to in Article 96(2) of this Regulation.

Article 209

[New]

Amendment to Decision No 676/2002/EC

In Article 4 of Decision No 676/2002/EC, the following paragraph is inserted:

“2a. For the development of technical implementing measures covered by this article that may affect the security or technological sovereignty of the Union or of its Member States, the Commission may require Member States to establish common positions to be adopted in the Radio Spectrum Committee in view to their participation in the activities of the CEPT.”

Article 210

Amendments to Directive 2002/58/EC

Articles 7, 8, 10, 11 and 12 of Directive 2002/58/EC are deleted.

⁷⁹ Commission Implementing Regulation (EU) 2019/2243 of 17 December 2019 establishing a template for the contract summary to be used by the providers of publicly available electronic communications services pursuant to Directive (EU) 2018/1972 of the European Parliament and of the Council, OJ L 336, 30.12.2019, p. 274–280.

References to Article 8 of Directive 2002/58/EC shall be read as references to Article 109 of this Regulation.

Article 211

Amendments to Regulation (EU) 2015/2120

Regulation (EU) 2015/2120 is amended as follows:

1. The title is replaced by the following:
‘Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning retail charges for regulated intra-EU communications’
2. Article 1 paragraphs 1 and 2, Article 2 points 1, 2, 4 and 5, Article 3, Article 4, Article 5; Article 6 subparagraph 1 are deleted.

Article 212

[Ex Art. 125]

Repeal

Directive (EU) 2018/1972, Regulation (EU) 2018/1971 and Decision No 243/2012/EU are repealed with effect from [entry into force].

References to Regulations (EU) 2015/2120 and (EU) 2018/1971, Directive (EU) 2018/1972 and Decision No 243/2012/EU shall be read as references to this Regulation.

Article 213

[Ex Art. 126]

Entry into force and application

1. This Regulation shall enter into force on the [twentieth day] following that of its publication in the *Official Journal of the European Union*. It shall apply from [6 months after entry into force].
2. Article 116(1)(a) shall apply as of [24 months after entry into force]. Competent authorities other than national regulatory authorities with assigned general authorisation competences under Directive (EU) 2018/1972 shall continue to exercise their functions no later than [two years] after the date of entry into force of this Regulation.
3. This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

For the European Parliament
The President

For the Council
The President

LEGISLATIVE FINANCIAL AND DIGITAL STATEMENT

1.	FRAMEWORK OF THE PROPOSAL/INITIATIVE.....	3
1.1.	Title of the proposal/initiative	3
1.2.	Policy area(s) concerned	3
1.3.	Objective(s)	3
1.3.1.	General objective(s)	3
1.3.2.	Specific objective(s).....	3
1.3.3.	Expected result(s) and impact	3
1.3.4.	Indicators of performance	3
1.4.	The proposal/initiative relates to:.....	4
1.5.	Grounds for the proposal/initiative	4
1.5.1.	Requirement(s) to be met in the short or long term including a detailed timeline for roll-out of the implementation of the initiative	4
1.5.2.	Added value of EU involvement (it may result from different factors, e.g. coordination gains, legal certainty, greater effectiveness or complementarities). For the purposes of this section 'added value of EU involvement' is the value resulting from EU action, that is additional to the value that would have been otherwise created by Member States alone.	4
1.5.3.	Lessons learned from similar experiences in the past.....	4
1.5.4.	Compatibility with the multiannual financial framework and possible synergies with other appropriate instruments.....	5
1.5.5.	Assessment of the different available financing options, including scope for redeployment.....	5
1.6.	Duration of the proposal/initiative and of its financial impact	6
1.7.	Method(s) of budget implementation planned	6
2.	MANAGEMENT MEASURES.....	8
2.1.	Monitoring and reporting rules	8
2.2.	Management and control system(s)	8
2.2.1.	Justification of the budget implementation method(s), the funding implementation mechanism(s), the payment modalities and the control strategy proposed.....	8
2.2.2.	Information concerning the risks identified and the internal control system(s) set up to mitigate them.....	8
2.2.3.	Estimation and justification of the cost-effectiveness of the controls (ratio between the control costs and the value of the related funds managed), and assessment of the expected levels of risk of error (at payment & at closure).....	8
2.3.	Measures to prevent fraud and irregularities.....	9
3.	ESTIMATED FINANCIAL IMPACT OF THE PROPOSAL/INITIATIVE.....	10
3.1.	Heading(s) of the multiannual financial framework and expenditure budget line(s) affected.....	10

3.2.	Estimated financial impact of the proposal on appropriations.....	12
3.2.1.	Summary of estimated impact on operational appropriations.....	12
3.2.1.1.	Appropriations from voted budget.....	12
3.2.1.2.	Appropriations from external assigned revenues	17
3.2.2.	Estimated output funded from operational appropriations.....	22
3.2.3.	Summary of estimated impact on administrative appropriations.....	24
3.2.3.1.	Appropriations from voted budget	24
3.2.3.2.	Appropriations from external assigned revenues	24
3.2.3.3.	Total appropriations	24
3.2.4.	Estimated requirements of human resources.....	25
3.2.4.1.	Financed from voted budget.....	25
3.2.4.2.	Financed from external assigned revenues	26
3.2.4.3.	Total requirements of human resources	26
3.2.5.	Overview of estimated impact on digital technology-related investments	28
3.2.6.	Compatibility with the current multiannual financial framework.....	28
3.2.7.	Third-party contributions	28
3.3.	Estimated impact on revenue	29
4.	DIGITAL DIMENSIONS.....	29
4.1.	Requirements of digital relevance.....	30
4.2.	Data	30
4.3.	Digital solutions	31
4.4.	Interoperability assessment.....	31
4.5.	Measures to support digital implementation	32

1. FRAMEWORK OF THE PROPOSAL/INITIATIVE

1.1. Title of the proposal/initiative

Proposal for a Regulation of the European Parliament and of the Council on Digital Networks Act (DNA)

1.2. Policy area(s) concerned

The proposal concerns policy areas linked to the development of electronic communications networks and services, with a focus on ensuring a smooth and timely transition toward high-quality, resilient and future-oriented digital networks. It aims to set the regulatory conditions for a Single Market in connectivity incentivising investment in fixed, mobile and satellite networks (including fibre, advanced 5G, future 6G and advanced mobile satellite communication systems), and supporting the connectivity requirements arising from emerging technologies such as AI, Internet of Things (IoT), quantum communication and advanced cloud services. By modernising the current framework, the initiative aims to facilitate efficient investment, promote sustainable competition and reduce technological dependencies, thereby supporting the European Union's long-term competitiveness and resilience.

The proposal seeks to remove persisting barriers to the cross-border provision of electronic communications services and to improve regulatory coherence and predictability across Member States. To this end, it envisages adjustments to regulatory competences and governance structures, including enhanced harmonisation of spectrum authorisation conditions and more consistent application of EU rules. These measures are intended to strengthen the functioning of the Single Market, facilitate economies of scale for providers, and ensure that consumers and businesses across the Union can benefit from high-quality connectivity services.

Furthermore, the initiative contributes to Union policies concerning security, resilience and preparedness. Electronic communications networks, including satellite-based systems, constitute critical infrastructure essential for the functioning of the economy, public services and society at large. The proposal therefore includes measures to support the development and integration of advanced non-terrestrial networks, address interference challenges and enhance the reliability and security of connectivity across all regions. By strengthening Europe's digital resilience, ensuring robust communication capabilities and supporting strategic autonomy in key technological domains, the initiative responds to the priorities outlined in recent high-level reports and contributes to the Union's broader preparedness and security objectives.

1.3. Objective(s)

1.3.1. General objective(s)

The initiative's general objective is to prepare the EU for the **transition to high-quality, reliable and resilient future digital networks**, in line with the competitiveness, Single Market and preparedness priorities identified in the Draghi, Letta and Niinistö reports. Ensuring advanced connectivity for all regions, including rural and remote areas, is essential for maintaining Europe's economic strength, social standards and technological leadership.

To achieve this, the proposal aims to put in place rules that make it easier to invest in and develop modern digital networks. This means supporting the move from old copper lines to fibre, speeding up the roll-out of high-quality 5G and future 6G

networks, and enabling the growth of other wireless and cloud-based infrastructure. These advanced networks are essential for technologies that depend on fast, real-time data and AI, such as connected devices, autonomous cars, smart energy systems and automated industry. Strengthening these foundations will help EU stay competitive in the global economy.

The objective also involves deepening the Single Market for connectivity by improving regulatory coherence, predictability and cross-border service provision. Finally, echoing the Niinistö report, the proposal emphasises the role of electronic communications, including satellite-based systems, in enhancing the EU's security, resilience and preparedness.

1.3.2. *Specific objective(s)*

Specific objective No 1

Swift Roll-Out and Take-Up of Fibre

This objective focuses on accelerating the deployment of fibre networks and promoting the adoption of fibre-based services across the EU. It aims to provide high-speed, high-quality connectivity for society and the economy while supporting sustainable competition and efficient investment. The initiative also seeks to facilitate cross-border service provision and streamline the regulatory framework to make the market more efficient for all stakeholders.

Specific objective No 2

Close the Gap in Mobile Network Quality

This objective targets the improvement of mobile network performance to match global leaders. It emphasizes investment in high-quality 5G networks, network densification, and future 6G deployment to enhance download and upload speeds, reduce latency, and deliver better overall connectivity for consumers and businesses. Achieving this will unlock the full innovation potential of mobile networks across multiple sectors throughout the Single Market.

Specific objective No 3

Expand Pan-European Network Operation and Service Provision

This objective aims to ease network operation and service provision across the Single Market and the deployment of advanced infrastructures, including LEO satellite constellations, alongside terrestrial networks. It seeks to remove regulatory barriers, promote integration of satellite and terrestrial technologies, and support transformative technologies such as cloud-based networks using and enabling AI, while reinforcing Europe's industrial capacity and strategic autonomy in the space and digital sectors.

This is closely related to objective 4 of deepening the Single Market for connectivity through, among others, an enhanced governance system.

1.3.3. *Expected result(s) and impact*

Specify the effects which the proposal/initiative should have on the beneficiaries/groups targeted.

1. Transition to Fibre

Proposed measures on fibre deployment focus on accelerating the roll-out and adoption of FTTH networks while refining access regulation. It maintains effective elements of the existing framework but emphasizes market-based, less intrusive

regulatory measures where appropriate. The expected effects of proposed measures include increased fibre coverage (up to 98% by 2035) and take-up rates (up to 78%), higher internet speeds, positive GDP impacts, and reduced CO₂ emissions. Beneficiaries include consumers and businesses who gain access to faster, more reliable connectivity, while network operators benefit from clearer rules and predictable investment conditions.

2. Spectrum Management

For spectrum, the proposed measures balance necessary harmonisation with flexibility for Member States, ensuring soft harmonisation initially and stronger measures only if disparities persist. This approach provides legal certainty, reduces investment risks, and supports large-scale and cross-border spectrum deployment for 5G and future 6G networks. Targeted groups include mobile operators, investors, and end-users who will benefit from faster network roll-out, enhanced coverage, and innovative services, while also enabling cost-effective connectivity in areas where fibre is not viable, including through Fixed Wireless Access or satellite solutions.

3. Authorisation

The Proposal introduces a single authorisation for terrestrial networks and EU-level authorisation for satellite spectrum, reducing administrative and compliance burdens. This ensures regulatory consistency, transparency, and predictability, particularly benefiting SMEs and new market entrants by lowering barriers to entry and enabling faster deployment of services. Satellite operators benefit from harmonised procedures, reduced regulatory fragmentation, and strategic spectrum use, supporting pan-European or global connectivity projects and enhancing resilience, security, and continuity of service for end-users.

4. Governance

The proposed governance system ensures continuity while strengthening EU-level coordination. It builds on the existing setup of BEREC and the BEREC Office, upgrading the RSPG from a Commission expert group to a body, similar to BEREC, supported by a secretariat provided by the Office for Digital Networks (ODN) which will replace BEREC Office. This enhances the effectiveness of spectrum management and improves coherence between BEREC and the RSPG. Decision-making powers remain with the Commission, maintaining a strong Single Market dimension, while the Office for Digital Networks (built on the enhanced BEREC Office) provides administrative and support services to both bodies. This approach ensures the desired benefits, including improved coordination, monitoring, and advisory support, at moderate costs, and complements the other measures for fibre, spectrum, and authorisation.

1.3.4. *Indicators of performance*

Specify the indicators for monitoring progress and achievements.

1. Swift roll-out and take-up of fibre

Progress on the deployment and adoption of fibre networks will be monitored using indicators that measure both coverage and usage. Key metrics include the number of FTTH homes passed and the percentage of households reached, the number of FTTH homes connected, and the take-up rate of FTTH services. These indicators will allow assessment of how quickly fibre networks are being rolled out and adopted across the

EU, and whether the initiative is successfully enabling high-speed, high-quality digital connectivity for consumers and businesses.

2. Close the gap in mobile network quality

To track improvements in mobile network quality, the initiative will use a combination of coverage, spectrum, and service-quality indicators. These include 5G Standalone coverage and availability, mid-band 5G population coverage, and spectrum readiness measured in MHz per population in 5G and future 6G pioneer bands. Additional indicators cover quality of service and user experience, the time to obtain spectrum authorisation, the number of licences with sharing conditions, and the amount of spectrum used by multiple users or categories. Together, these metrics will show whether the EU is catching up with global leaders in mobile connectivity and enabling innovative applications.

3. Increase pan-European network operation and service provision

The effectiveness of efforts to expand pan-European networks and services will be evaluated through indicators related to provider authorisations and satellite operations. These include the number of providers using the cross-border general authorisation regime, the number of new EU satellite authorisation licensees, and the number of operators selected through centralised procedures for harmonised satellite bands. Additional metrics include the time required to complete satellite authorisation processes and the number of interference issues that are timely and effectively addressed, reflecting the reliability and integration of pan-European digital infrastructure.

4. Deepen the Single Market for connectivity

The achievement of Single Market objectives will be monitored using indicators that track regulatory outputs and harmonisation efforts. This includes the number of high-quality outputs directly linked to Single Market goals, measured by the percentage of planned outputs delivered on schedule, as well as their quality (impact, uptake, regulatory relevance) and quantity (volume of outputs such as BEREC guidelines or opinions). Progress will be tracked by the Office for Digital Networks, providing continuous evaluation of how effectively governance structures and regulatory competences support a fully integrated EU digital communications market.

1.4. The proposal/initiative relates to:

- a new action
- a new action following a pilot project / preparatory action⁸⁰
- the extension of an existing action
- a merger or redirection of one or more actions towards another/a new action

1.5. Grounds for the proposal/initiative

1.5.1. Requirement(s) to be met in the short or long term including a detailed timeline for roll-out of the implementation of the initiative

The entry into force of the DNA regulation is expected within 3 days from the publication in the Official Journal. The entry into application should be within six months with notable exceptions for rules that require additional transitional period of

⁸⁰

As referred to in Article 58(2), point (a) or (b) of the Financial Regulation.

six months. These concerns in particular BERECA guidelines and Commission implementing/delegated acts envisaged in the DNA, allowing BERECA, RSPB, and the Commission, supported by the Office for Digital Networks sufficient time for their preparation and adoption.

- 1.5.2. *Added value of EU involvement (it may result from different factors, e.g. coordination gains, legal certainty, greater effectiveness or complementarities). For the purposes of this section 'added value of EU involvement' is the value resulting from EU action, that is additional to the value that would have been otherwise created by Member States alone.*

Reasons for action at EU level (ex-ante)

Strengthening European competitiveness requires fast, secure, and resilient digital infrastructure. The digital connectivity landscape is rapidly evolving, driven by the integration of telecom, satellite, cloud, and edge technologies, as well as virtualization and AI. In this context, fragmented national approaches risk creating inconsistent regulatory frameworks and burdensome administrative practices, which could hinder investment, innovation, and the proper functioning of the single market. Experience with the EECC resulted in slow implementation and overregulation due to divergent transposition of EU directives by Member States. Given the cross-border nature of the challenges, EU-level action is necessary to ensure a harmonised legal environment, facilitate coordinated planning, and address sectoral challenges efficiently and effectively.

Expected generated EU added value (ex-post)

EU involvement is expected to deliver clear added value beyond what Member States could achieve individually. By acting at EU level, the initiative can:

Ensure legal certainty and harmonisation across the Union, avoiding fragmented national rules that could limit opportunities within the single market.

Accelerate deployment of digital infrastructure through coordinated implementation and the reduction of administrative barriers.

Achieve greater overall effectiveness and efficiency by addressing challenges at the scale of the EU rather than piecemeal at national level.

Create complementarities between national initiatives, reducing costs and maximizing the benefits of investment across Member States.

Overall, EU-level action is expected to produce faster, more coherent, and more cost-efficient outcomes, generating benefits that would not be attainable if Member States acted independently.

- 1.5.3. *Lessons learned from similar experiences in the past*

The proposal of the respective regulation is informed by the practical experience in the implementation of the rules for the electronic communications sector, as detailed in the accompanying Staff Working Document (Annex 11 - Evaluation of European Electronic Communications Code (EECC), BERECA Regulation, Radio Spectrum Policy Program (RSPP), Open Internet Regulation (OIR), and certain aspects of the ePrivacy Directive). The evaluation report of the current legal framework identifies a series of specific shortcomings in the areas of existence of legacy cooper networks and access regulation, spectrum policy, general authorisation regime, end-users provisions, universal service obligations and governance. The proposal builds also on extensive

stakeholder consultation according to the stakeholder consultation strategy as summarised in Annex 2 to the Staff Working Document.

1.5.4. *Compatibility with the multiannual financial framework and possible synergies with other appropriate instruments*

The proposal is compatible with the multiannual financial framework since the updated rules ensure the continuation of the regulatory framework for the electronic communications market.

Small additional expenditure is foreseen to ensure implementation of the new elements of the regulation by the Commission and additional revenues from the external sources are foreseen to support the proper functioning of modernized decentralized agency (the ODN).

At the same time, this Regulation builds on certain foundational elements of the European Electronic Communications Code Directive (EECC) such as regulatory and governance model adjusted for the needs of the dynamically changing connectivity domain, taking into account a gradual approach to regulation in this area.

The proposal would build upon, and ensure coordination with, the structures and mechanisms developed in the context of other legislations on resilience and cybersecurity, such as, Directive 2022/2555 (NIS2 Directive) and Directive 2022/2557 (CER Directive).

The proposal is also compatible with currently negotiated proposal for a regulation on the safety, resilience and sustainability of space activities in the Union (SEC(2025) 335 final (Space Act) and Digital Omnibus proposal (proposal amending Regulations (EU) 2016/679, (EU) 2018/1724, (EU) 2018/1725, (EU) 2023/2854 and Directives 2002/58/EC, (EU) 2022/2555 and (EU) 2022/2557 as regards the simplification of the digital legislative framework, and repealing Regulations (EU) 2018/1807, (EU) 2019/1150, (EU) 2022/868, and Directive (EU) 2019/1024.

1.5.5. *Assessment of the different available financing options, including scope for redeployment*

The management of the action areas assigned to the ODN fits its existing mandate and general tasks of BEREC Office. However, the new areas of work—such as those linked to spectrum issues and RSPB, authorisation processes, internal market aspects, and resilience—will require specialised profiles or new assignments that cannot be absorbed by the current staffing levels or addressed solely through internal reallocation.

Similarly, the management of the action areas assigned to the Commission remains aligned with its mandate, but the growing scope of spectrum-related measures will require additional expertise. The increasing technical and operational complexity of satellite-related selection and authorisation procedures, including oversight and coordinated enforcement of ITU principles, demands specialists with advanced knowledge of spectrum management, monitoring technologies, satellites and international coordination mechanisms. New responsibilities in scrutinising national measures, analysing petition requests, assessing compliance frameworks, and contributing to future regulatory instruments also require reinforced economic, technical and regulatory capacities. Moreover, emerging technological developments and dynamic spectrum-use scenarios call for experts skilled in designing and supervising innovative data-driven tools and methodologies. In addition, expertise in

authorisation schemes and related procedures and rules including in national security will be required. As regards resilience and preparedness, skills will be needed as regards network mapping, assessment of network capabilities and crisis management. Overall, the scale, sensitivity, and cross-border nature of these new tasks necessitate the recruitment of dedicated experts to ensure effective implementation and coherence across the Union.

For certain horizontal tasks—such as administrative support, legal advice, and contract management—the Agency can draw on existing resources, generating efficiencies. Synergies will also be developed with internal technical structures, such as those supporting information exchange with the security monitoring centres of the Member States.

1.6. Duration of the proposal/initiative and of its financial impact

limited duration

in effect from [DD/MM]YYYY to [DD/MM]YYYY

financial impact from YYYY to YYYY for commitment appropriations and from YYYY to YYYY for payment appropriations.

unlimited duration

Implementation with a start-up period from 2028 to 2030 ,
followed by full-scale operation.

1.7. Method(s) of budget implementation planned⁸¹

Direct management by the Commission

by its departments, including by its staff in the Union delegations;

by the executive agencies

Shared management with the Member States

Indirect management by entrusting budget implementation tasks to:

third countries or the bodies they have designated

international organisations and their agencies (to be specified)

the European Investment Bank and the European Investment Fund

bodies referred to in Articles 70 and 71 of the Financial Regulation

public law bodies

bodies governed by private law with a public service mission to the extent that they are provided with adequate financial guarantees

bodies governed by the private law of a Member State that are entrusted with the implementation of a public-private partnership and that are provided with adequate financial guarantees

bodies or persons entrusted with the implementation of specific actions in the common foreign and security policy pursuant to Title V of the Treaty on European Union, and identified in the relevant basic act

bodies established in a Member State, governed by the private law of a Member State or Union law and eligible to be entrusted, in accordance with sector-specific rules, with the implementation of Union funds or budgetary guarantees, to the extent that such bodies are controlled by public law bodies or by bodies governed by private law with a public service mission, and are provided with adequate financial guarantees in the form of joint and several liability by the controlling bodies or equivalent financial guarantees and which may be, for each action, limited to the maximum amount of the Union support.

Comments

⁸¹

Details of budget implementation methods and references to the Financial Regulation may be found on the BUDGpedia site: <https://myintracomm.ec.europa.eu/corp/budget/financial-rules/budget-implementation/Pages/implementation-methods.aspx>.

For the Commission direct management is foreseen and in case of new ODN the budget implementation method is indirect management according to the Articles 70 and 71 of the Financial Regulation.

2. MANAGEMENT MEASURES

2.1. Monitoring and reporting rules

The Regulation will be reviewed and evaluated five years from its entry into force. The Commission will report on the findings of the evaluation to the European Parliament and the Council.

Furthermore, BEREC should support the monitoring of national implementation and contribute to the consistency of the internal market. BEREC shall publish every three years a report on the national implementation and functioning of the general authorisation, and on their impact on the functioning of the internal market.

To support consistent implementation and effective monitoring of the Regulation, Member States should ensure that the relevant information on the designation of undertakings and the obligations imposed on them is available to the Commission in a timely manner.

2.2. Management and control system(s)

2.2.1. *Justification of the budget implementation method(s), the funding implementation mechanism(s), the payment modalities and the control strategy proposed*

The Regulation establishes a new policy framework for harmonised rules governing the provision of electronic communications networks and services in the internal market, while supporting the Union's policy objectives of consumer welfare, industrial competitiveness, security and resilience, and environmental sustainability. The DNA Regulation aims to simplify and improve coordination of the regulatory framework, enabling providers to operate and innovate more effectively in the Single Market. These objectives necessitate reinforced EU-level coordination and operational capacity, which in turn require targeted and proportionate budgetary resources.

The Regulation introduces proportionate changes to the governance model, establishing a governance system for both market regulation (BEREC) and spectrum management (RSPB) that is adapted to new EU-level tasks with a clear Single Market dimension, while ensuring that decision-making remains at the most efficient level. The chosen governance model builds on existing structures and mandates, thereby limiting the need for new entities and allowing the budget to be implemented through established administrative and financial arrangements, ensuring cost-effectiveness and predictability of expenditure.

The new rules require a strengthened consistency mechanism for the cross-border application of obligations under this Regulation. This necessitates an enhanced BEREC Office providing administrative, technical and analytical support to national regulatory authorities and EU institutions, with the objective of ensuring uniform application of Union law and alignment with EU-level policy objectives. The BEREC Office is best placed to perform these tasks due to its existing expertise, governance structure and operational capacity. Consequently, the budget will be implemented under direct management for the Commission and indirect management for the decentralised agency (Office for Digital Networks) as referred to in Articles 70 and 71 of the Financial Regulation, primarily through staff expenditure and operating appropriations for the BEREC Office and the Commission. Funding will cover personnel costs, coordination activities, analytical support, IT tools and meetings, using annual appropriations in line with the multiannual programming.

In order to carry out these new tasks, additional human resources are required. The implementation and enforcement of the Regulation is estimated to require 25 additional full-time equivalents (FTEs) for the ODN and 5 additional FTEs for the Commission, notably for cross-border tasks related to spectrum management, the general authorisation scheme, satellite authorisation and numbering. The proposed staffing levels are directly linked to the volume and complexity of the new responsibilities and reflect the most cost-efficient option, avoiding duplication at national level and reducing administrative burden for market participants.

Payments will follow standard EU budgetary procedures, including commitments and payments made on an annual basis, in accordance with the Financial Regulation and within the ceilings of the applicable Multiannual Financial Framework supported by the annual contributions from the fees. Expenditure will be subject to the Commission's internal control framework, including ex-ante checks, ex-post audits, performance monitoring and reporting. This control strategy ensures sound financial management, legality and regularity of expenditure, and effective use of Union funds, while enabling timely implementation of the Regulation.

2.2.2. *Information concerning the risks identified and the internal control system(s) set up to mitigate them*

In order to ensure that the members of BEREC and the RSPB have the possibility to make informed analyses on the basis of factual evidence, it is foreseen that they should be supported by the Office for Digital Networks (ODN), replacing the BEREC Office, and that additional expertise should be provided by ODN staff where required.

The DNA provisions on the governance provide a comprehensive organisational, financial and accountability framework for the ODN as a Union body supporting both BEREC and the RSPB. The DNA sets out the ODN's tasks, governance structure, programming, budgetary and staffing rules, and ensures transparency, sound financial management and effective oversight, including anti-fraud, audit and evaluation mechanisms.

2.2.3. *Estimation and justification of the cost-effectiveness of the controls (ratio between the control costs and the value of the related funds managed), and assessment of the expected levels of risk of error (at payment & at closure)*

For the meeting expenditure regarding two Committees: the Communications Committee (COCOM) and the Radio Spectrum Committee (RSC), given the low value per transaction (e.g., refunding travel costs for a delegate for a meeting, catering costs), standard control procedures seem sufficient.

The costs of RSPB which will substitute current RSPG (and its sub-groups) will be taken over by the ODN, which will provide administrative support to the RSPB. Regarding the operative and operational costs of the ODN an internal control system is in place according to organisational, financial and accountability framework of DNA (Part VII Institutional set-up and Single Market governance.).

2.3. **Measures to prevent fraud and irregularities**

The existing fraud prevention measures applicable to the Commission will cover the additional appropriations necessary for this Regulation.

3. ESTIMATED FINANCIAL IMPACT OF THE PROPOSAL/INITIATIVE

3.1. Heading(s) of the multiannual financial framework and expenditure budget line(s) affected

Existing budget lines

In order of multiannual financial framework headings and budget lines.

Heading of multiannual financial framework	Budget line	Type of expenditure	Contribution			
			from EFTA countries ⁸³	from candidate countries and potential candidates ⁸⁴	From other third countries	other assigned revenue
	Number	Diff./Non-diff. ⁸²				
	[XX.YY.YY.YY]	Diff./Non-diff.	YES	NO	NO	NO
	[XX.YY.YY.YY]	Diff./Non-diff.	YES	NO	NO	NO
	[XX.YY.YY.YY]	Diff./Non-diff.	YES	NO	NO	NO

New budget lines requested

In order of multiannual financial framework headings and budget lines.

Heading of multiannual financial framework	Budget line	Type of expenditure	Contribution			
			from EFTA countries	from candidate countries and potential candidates	from other third countries	other assigned revenue
	Number	Diff./Non-diff.				
	[XX.YY.YY.YY]	Diff./Non-diff.	NO	NO	NO	NO
	[XX.YY.YY.YY]	Diff./Non-diff.	NO	NO	NO	NO
	[XX.YY.YY.YY]	Diff./Non-diff.	NO	NO	NO	NO

⁸² Diff. = Differentiated appropriations / Non-diff. = Non-differentiated appropriations.

⁸³ EFTA: European Free Trade Association.

⁸⁴ Candidate countries and, where applicable, potential candidates from the Western Balkans.

3.2. Estimated financial impact of the proposal on appropriations

3.2.1. Summary of estimated impact on operational appropriations

The proposal/initiative does not require the use of operational appropriations

The proposal/initiative requires the use of operational appropriations, as explained below

3.2.1.1. Appropriations from voted budget

EUR million (to three decimal places)

Heading of multiannual financial framework		Year	Year	Year	Year	Year	Year	Year	TOTAL MFF 2028-2034
DG: CNECT		2028	2029	2030	2031	2032	2033	2034	
Operational appropriations ⁸⁵ <eCOMM>									
Budget line	Commitments	(1a)	0.600	0.600	0.600	0.600	0.600	0.600	4.200
	Payments	(2a)		0.600	0.600	0.600	0.600	0.600	3.600
Budget line	Commitments	(1b)							0
	Payments	(2b)							0
Appropriations of an administrative nature financed from the envelope of specific programmes ⁸⁶									
Budget line		(3)							
TOTAL appropriations for DG CNECT	Commitments	=1a+1b+3	0.600	0.600	0.600	0.600	0.600	0.600	4.200
	Payments	=2a+2b+3		0.600	0.600	0.600	0.600	0.600	3.600

⁸⁵ eComm

⁸⁶ Technical and/or administrative assistance and expenditure in support of the implementation of EU programmes and/or actions (former 'BA' lines), indirect research, direct research.

EUR million (to three decimal places)

[Agency]: <Office for Digital Networks>	Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	TOTAL MFF 2028- 2034
Budget line: <.....> / EU Budget contribution to the agency	2.337	3.515	4.675	5.257	5.257	5.257	5.257	31.555

The appropriations / EU budget contribution to the agency will be compensated by a reduction of the envelope of the following programme <.....> / budget line: <.....> / in the year(s) : <.....> .

Mandatory table

TOTAL operational appropriations (including contribution to decentralised agency)			Year	Year	Year	Year	Year	Year	TOTAL MFF 2028- 2034	
			2028	2029	2030	2031	2032	2033		
			Commitments	(4)	2.937	4.115	5.275	5.857	5.857	
	Payments	(5)		0	0.600	0.600	0.600	0.600	0.600	3.600
TOTAL appropriations of an administrative nature financed from the envelope for specific programmes		(6)		0	0	0	0	0	0	0
TOTAL appropriations under HEADING <7> of the multiannual financial framework	Commitments	=4+6	2.937	4.115	5.275	5.857	5.857	5.857	5.857	35.755
	Payments	=5+6	0	0.600	0.600	0.600	0.600	0.600	0.600	3.600

EN

EN

Heading of multiannual financial framework	4	‘Administrative expenditure’ ⁸⁷
---	---	--

DG: <CNECT >		Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	TOTAL MFF 2028-2034
• Human resources		7.293	7.592	7.786	7.786	7.786	7.786	7.786	53.815
• Other administrative expenditure		0.429	0.429	0.429	0.429	0.429	0.429	0.429	3.003
TOTAL DG <CNECT>	Appropriations	7.722	8.021	8.215	8.215	8.215	8.215	8.215	56.818

TOTAL appropriations under HEADING 4 of the multiannual financial framework	(Total commitments = Total payments)	7.722	8.021	8.215	8.215	8.215	8.215	8.215	56.818
--	--	--------------	--------------	--------------	--------------	--------------	--------------	--------------	---------------

EUR million (to three decimal places)

		Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	TOTAL MFF 2028- 2034
TOTAL appropriations under HEADINGS 1 to 4	Commitments	10.659	12.136	13.490	14.072	14.072	14.072	14.072	92.573
of the multiannual financial framework	Payments	0.000	0.600	0.600	0.600	0.600	0.600	0.600	3.600

⁸⁷

The necessary appropriations should be determined using the annual average cost figures available on the appropriate BUDGpedia webpage.

3.2.3. Summary of estimated impact on administrative appropriations

- The proposal/initiative does not require the use of appropriations of an administrative nature
- The proposal/initiative requires the use of appropriations of an administrative nature, as explained below

3.2.3.1. Appropriations from voted budget

VOTED APPROPRIATIONS	Year	TOTAL 2028 - 2034						
	2028	2029	2030	2031	2032	2033	2034	
HEADING 4								
Human resources	7.293	7.592	7.786	7.786	7.786	7.786	7.786	53,815
Other administrative expenditure	0.429	0.429	0.429	0.429	0.429	0.429	0.429	3.003
Subtotal HEADING 4	7.722	8.021	8.215	8.215	8.215	8.215	8.215	56.818
Outside HEADING 4								
Human resources	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Other expenditure of an administrative nature	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Subtotal outside HEADING 4	0.000							
TOTAL	7.722	8.021	8.215	8.215	8.215	8.215	8.215	56.818

The appropriations required for human resources and other expenditure of an administrative nature will be met by appropriations from the DG that are already assigned to management of the action and/or have been redeployed within the DG, together, if necessary, with any additional allocation which may be granted to the managing DG under the annual allocation procedure and in the light of budgetary constraints.

3.2.4. Estimated requirements of human resources

- The proposal/initiative does not require the use of human resources
- The proposal/initiative requires the use of human resources, as explained below

3.2.4.1. Financed from voted budget

Estimate to be expressed in full-time equivalent units (FTEs)⁸⁸

VOTED APPROPRIATIONS	Year	Year	Year	Year	Year	Year	Year
	2028	2029	2030	2031	2032	2033	2034
• Establishment plan posts (officials and temporary staff)							
20 01 02 01 (Headquarters and Commission's Representation Offices)	30 (net)	31 (net)	32	32	32	32	32
20 01 02 03 (EU Delegations)	0	0	0	0	0	0	0
(Indirect research)	0	0	0	0	0	0	0
(Direct research)	0	0	0	0	0	0	0
Other budget lines (specify)	0	0	0	0	0	0	0
• External staff (inFTEs)							

⁸⁸ Please specify below the table how many FTEs within the number indicated are already assigned to the management of the action and/or can be redeployed within your DG and what are your net needs.

20 02 01 (AC, END from the 'global envelope')	14 (net)	15 (net)	15	15	15	15	15
20 02 03 (AC, AL, END and JPD in the EU Delegations)	0	0	0	0	0	0	0
Admin. Support line [XX.01.YY.YY]	- at Headquarters	0	0	0	0	0	0
	- in EU Delegations	0	0	0	0	0	0
(AC, END - Indirect research)	0	0	0	0	0	0	0
(AC, END - Direct research)	0	0	0	0	0	0	0
Other budget lines (specify) - Heading 4	0	0	0	0	0	0	0
Other budget lines (specify) - Outside Heading 4	0	0	0	0	0	0	0
TOTAL	44	46	47	47	47	47	47

The staff required to implement the proposal (in FTEs):

	To be covered by current staff available in the Commission services	Exceptional additional staff*		
		To be financed under Heading 4 or Research	To be financed from BA line	To be financed from fees
Establishment plan posts	29	3	N/A	
External staff (CA, SNEs, INT)	13	2		

Overall, 42 FTEs requested for the initiative are already in place within the DG CNECT and will be redeployed, consisting of 29 establishment plan posts and 13 external staff (CAs and SNEs). In addition to these existing resources, the initiative requires 5 FTEs of exceptional additional staff (3 officials and 2 external staff – CAs or SNEs), which are requested on top of the current staffing levels in order to ensure full and effective implementation of the initiative.

The new tasks introduced by the proposal—particularly those linked to spectrum governance, satellite authorisation, ex ante scrutiny of spectrum awards and closer coordination with BEREC and RSPG, next to supporting harmonisation of general authorisation conditions and single passporting procedure —cannot be absorbed by the DG CNECT existing human resources.

The leading unit for spectrum and satellite matters in charge of these areas is very small and already manages a broad portfolio of technically complex and time-sensitive files related to all aspects of EU spectrum policy. In addition to its existing duties, this same team currently hosts the entire RSPG secretariat function, which is handled by a 1.5 FTE, despite the steadily increasing workload and the growing number of spectrum issues requiring EU-level coordination. Internal assessments show that the unit has no capacity to take on additional responsibilities without compromising core ongoing work or diminishing the quality and timeliness of EU-level spectrum and satellite policy coordination.

Redeployment within the DG CNECT is not a feasible option. Other units do not have surplus staff, nor do they possess the specialised technical expertise necessary to work effectively on satellite communications, advanced spectrum engineering, interference management, or the emerging satellite-to-device ecosystem. These are highly innovative and technically demanding areas where generalist profiles or staff redeployed from unrelated policy fields cannot substitute for dedicated experts. The tasks foreseen in the proposal require deep, domain-specific knowledge and continuous engagement with national authorities, industry and international bodies. Given the combination of a very small existing team, the high workload already borne—including the one-person RSPG secretariat—and the specialised nature of satellite and spectrum work, additional dedicated posts are indispensable for the Commission to fulfil the new responsibilities assigned under the proposal.

The proposal requires additional human resources which will be paid from an administrative support line of the programme/initiative.

The type of staff is specified in the table above.

Description of tasks to be carried out by:

The Commission

Officials and temporary staff	<p>New tasks:</p> <ol style="list-style-type: none"> 1. EU Satellite authorisation, <u>including</u> and possible future selection procedures, <u>and supervision and enforcement of compliance with conditions applicable to satellite spectrum</u> satellite authorisation and 2. EU satellite coordinated enforcement related to harmful interferences and ITU filings coordination 3. Ex ante scrutiny of auctions – issuing comments letters/decisions (similar to fixed markets and remedies procedure) 4. Petition for rule making 5. Work on planned delegated/implementing acts (e.g. harmonised conditions, cost methodology, satellite) 6. Work on greater harmonisation of general authorisation scheme and related single passporting procedure, including rules in national security.
External staff	<p>New tasks:</p> <ol style="list-style-type: none"> 7. EU Satellite authorisation, <u>including</u> and possible future selection procedures, <u>and supervision and enforcement of compliance with conditions applicable to satellite spectrum</u> satellite authorisation and 8. EU satellite coordinated enforcement related to harmful interferences and ITU filings coordination 9. Ex ante scrutiny of auctions – issuing comments letters/decisions (similar to fixed markets and remedies procedure) 10. Petition for rule making 11. [Possible launch of the project on dynamic databases for geolocation and monitoring of spectrum usage opportunities] 12. Work on planned delegated/implementing acts (e.g. harmonised conditions, cost methodology, satellite), 13. Work on greater harmonisation of general authorisation scheme and related single passporting procedure, including rules in national security.

Office for Digital Networks

[Officials and] temporary staff	<ol style="list-style-type: none"> 1. With the participation of the ODN to the BEREC working groups the employees of the agency will be involved in the substance-related activities of all BEREC regulatory workstreams. This means that staff from the BEREC
---------------------------------	---

	<p>Office will be involved also on tasks already entrusted to BEREC under the EECC on which currently it is only providing administrative and logistical support.</p> <ol style="list-style-type: none"> 2. The ODN will be tasked to publish a comprehensive report on the internal market for electronic communications networks and services, describing the state, of trends, covering the effects of mergers on the market, and challenges on the electronic communication sector, including the security and resilience aspects (in coordination with ENISA). It should in particular report on the impact of the measures implemented under the DNA on the internal market. The first report could be published two years after entry into application, to allow for sufficient time for gathering data on the effects of the DNA measures and should thereafter be published annually. 3. Under the DNA, the RSPG will evolve from a Commission expert group to a self-standing body similar to BEREC (Radio Spectrum Policy Body or RSPB). The ODN will take over the RSPG Secretariat that is currently provided by the Commission; however, besides the administrative and organisational assistance, the ODN will support the RSPB also on merits. <p><u>In particular:</u></p> <ol style="list-style-type: none"> 4. To provide analytical, administrative and logistical support to the RSPB and its working groups. 5. To collect best practices on the choice between general authorisations and individual rights, on authorisation processes and related award conditions, such as on pro-investment auction design, methodology for calculating reserve prices, annual fees, coverage obligations. 6. To act as a single point of contact for submission of applications and notifications to facilitate the granting of spectrum usage rights and authorisations when the one stop shop procedure is created by the Commission. 7. To set up and administer dynamic databases for geolocation and monitoring of spectrum usage opportunities. 8. To assist RSPB in organising and chairing the Spectrum Scrutiny Forums and keeping record of the EU Spectrum Scrutiny proceedings. 9. To act as a point of contact for information on requests to coordinate under ITU rules frequencies or an orbital position for a satellite system or a ground station. 10. If requested by the Commission, to assist the Commission in the process of issuing /granting the EU authorisation for satellites. Likewise, if asked by the Commission, to assist the Commission in conducting selection procedures in the cases of scarcity of satellite spectrum. 11. To assist the Commission and RSPB in supervising and enforcing the EU satellite authorisations. Acting as a point for notifying that an EU authorisation holder is not complying with applicable conditions under the EU authorisation. 12. To manage the invoicing of the fees from EU level satellite auctions and authorisation procedures.
External staff	<p>In addition, the external staff in the BEREC Office shall have the following tasks to support BEREC work:</p> <ol style="list-style-type: none"> 1. to provide expert support to BEREC in fulfilling its regulatory tasks, including by contributing with the expertise of the experts from the new BEREC Office to all the activities of the working groups; 2. to support the coordination among national regulatory authorities and other competent authorities in the context of the new single passporting mechanism, and to facilitate the issuance of passporting declarations; 3. to support BEREC in monitoring the availability of services, capacity and use of electronic communication networks to help enhance network resilience and preparedness; analyse information on availability of services, capacity and use of electronic communications networks [and other relevant digital infrastructures; and support BEREC in preparing guidelines on resilience; 4. to collect data and information from NRAs and competent authorities, and to exchange and transmit information in relation to the new regulatory tasks assigned to

	the BEREC like network resilience and preparedness and, new single passporting mechanism;
	5. to produce regular draft reports on specific aspects of developments in the European electronic communications market, such benchmarking reports on new topics mentioned above to be submitted to BEREC;
	6. under the supervision of BEREC, to assist BEREC in establishment and development of registries and databases (of notifications of undertakings subject to general authorisation and necessary for new passporting procedure under DNA, numbering resources and E.164 numbers of Member State emergency services);
	7. to assist BEREC in conducting public consultations in the new areas under DNA.

3.2.5. *Overview of estimated impact on digital technology-related investments*

TOTAL Digital and IT appropriations	Year	TOTAL MFF 2028 - 2034						
	2028	2029	2030	2031	2032	2033	2034	
HEADING 4								
IT expenditure (corporate)	0	0	0	0	0	0	0	0
Subtotal HEADING 4	0							
Outside HEADING 4								
Policy IT expenditure on operational programmes	0	0	0	0	0	0	0	0
Subtotal outside HEADING 4	0							
TOTAL	0							

3.2.6. *Compatibility with the current multiannual financial framework*

The proposal/initiative:

- can be fully financed through redeployment within the relevant heading of the multiannual financial framework (MFF)
- requires use of the unallocated margin under the relevant heading of the MFF and/or use of the special instruments as defined in the MFF Regulation

In addition to the existing resources in the Commission/DG CNECT, the initiative requires 5 FTEs of exceptional additional staff (3 officials and 2 external staff – CAs or SNEs), which are requested in order to ensure full and effective implementation of the initiative.

- requires a revision of the MFF

3.2.7. *Third-party contributions*

The proposal/initiative:

does not provide for co-financing by third parties

provides for the co-financing by third parties estimated below:

Appropriations in EUR million (to three decimal places)

	Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	Total
Specify the co-financing body								
TOTAL appropriations co-financed								

3.2.8. Estimated human resources and the use of appropriations required in a decentralised agency

Staff requirements (full-time equivalent units)

Agency: Office for Digital Networks	Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034
Temporary agents (AD Grades)	1	4	8	10	10	10	10
Temporary agents (AST grades)							
Temporary agents (AD+AST) subtotal	1	4	8	10	10	10	10
Contract agents	1	3	5	5	5	5	5
Seconded national experts	2	6	8	10	10	10	10
Contract agents and seconded national experts subtotal	3	9	13	15	15	15	15
TOTAL staff	4	13	21	25	25	25	25

Agency: Office for Digital Networks >	Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	TOTAL 2028 - 2034
Title 1: Staff expenditure								0.000
Title 2: Infrastructure and operating expenditure								0.000
Title 3: Operational expenditure								0.000

TOTAL of appropriations covered by the EU budget	0.000							
---	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------

Appropriations covered by fees, if applicable, in EUR million (to three decimal places)

Agency: <Office for Digital Networks>.	Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	TOTAL 2028 - 2034
Title 1: Staff expenditure	0.495	1.673 (increa se 1.178)	2.833 (increa se 1.160)	3.415 (increa se 0.582)	3.415	3.415	3.415	15. 246
Title 2: Infrastructure and operating expenditure	0.972	0.972	0.972	0.972	0.972	0.972	0.972	1.880
Title 3: Operational expenditure	0.870	0.870	0.870	0.870	0.870	0.870	0.870	6.09
TOTAL of appropriations covered by fees	2.337	3.515	4.675	5.257	5.257	5.257	5.257	31.555

* Also, the fee should cover the contribution for pensions, not included in the LFDS tables as the FTEs costs are calculated according to the LFDS guidelines and provided calculator.

Below calculations for the pension securing adjustment can be found:

The annual rate for pension securing for 2027 is at the level of 26.2 %. The percentage is adapted annually and officially communicated in the draft budget circular. For the LFDS calculations 27 % is used. This percentage will be adapted on a yearly basis. 27% annual adjustment for pension-securing is applied only to AD posts (10 foreseen in new Office - ODN).

Additional cost linked to pension-securing (10 AD posts in total – starting with 1 in 2028, additional 3 – 2029, additional 4 – 2030, additional 2 – 2031): around EUR 5.1 million in total between 2028-2031 and EUR 0,5 million every year between 2032-2034 (EUR 1,5 million) = 6.6 million in total.

Overview/summary of human resources and appropriations (in EUR million) required by the proposal/initiative in a decentralised agency

Agency: <.....>	Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	TOTAL 2028 - 2034
Temporary agents (AD+AST)	1	4	8	10	10	10	10	-10
Contract agents	1	3	5	5	5	5	5	-5
Seconded national experts	2	6	8	10	10	10	10	10
Total staff	4	13	21	25	25	25	25	-25

Appropriations covered by the EU budget	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Appropriations covered by fees (if applicable)	0.495	1.673	2.833	3.415	3.415	3.415	3.415	15.246
Appropriations co-financed (if applicable)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL appropriations	0.495	1.673	2.833	3.415	3.415	3.415	3.415	15.246

Also, the fee should cover the contribution for pensions, not included in the LFDS tables as the FTEs costs are calculated according to the LFDS guidelines and provided calculator. Please see explanation and additional calculations under the table above.

3.3. *Estimated impact on revenue*

- The proposal/initiative has no financial impact on revenue.
- The proposal/initiative has the following financial impact:
 - on own resources
 - on other revenue
 - please indicate, if the revenue is assigned to expenditure lines

EUR million (to three decimal places)

Budget revenue line:	Appropriations available for the current financial year	Impact of the proposal/initiative ⁸⁹						
		Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034
Article		2.337	3.515	4.675	5.257	5.257	5.257	5.257

For assigned revenue, specify the budget expenditure line(s) affected.

The current budget expenditure line of the BEREC Office will continue to finance the unchanged portion of the Office for Digital Networks, while additional expenditure for the Office for Digital Networks described above will be financed from satellite spectrum authorisation fees, and, if available, fees for the rights of use of pan-European numbering resources and voluntary and in-kind contributions from Member States.

The satellite fees are linked to two main sources: the procedure for upcoming EU-level spectrum assignment/extension/renewals established in the DNA (first procedure for 2 GHz MSS band expected to take place in 2027). Such fees can be spread over periods longer than 10 years and therefore provide for a constant and stable revenue. As complement, if needed and operationally feasible, administrative charges/spectrum fees could be collected from undertakings subject to EU satellite authorisation after the entry into force of the DNA. The details for the calculation of the amount of the fees and the collection will be set out in an implementing act.

⁸⁹

As regards traditional own resources (customs duties, sugar levies), the amounts indicated must be net amounts, i.e. gross amounts after deduction of 20% for collection costs.

In case pan-European numbering resources would become available, fees collected for the rights of use of such resources will contribute to the ODN budget.

Furthermore, voluntary contributions from Member States and in-kind contributions could be received as revenue. Contributions from the EEA EFTA countries and from third countries whose national regulatory authorities currently participate in the work of BEREC and the BEREC Office on the basis of working arrangement and which will continue to participate in the work of BEREC and ODN, as well as contributions from any competent authorities responsible for spectrum that will participate in the work of RSPB and ODN, could also contribute to the ODN budget.

Depending on the final agreement with the co-legislators as regards timeframe, level and availability of fees, revenue levels exceeding or falling short of the budget necessary to cover the cost of the ODN could occur. In case of lower revenues the difference would need to be covered by alternative funding.

Other remarks (e.g. method/formula used for calculating the impact on revenue or any other information).

The additional expenditure will be covered by two main sources:

- Part of the spectrum fees from selection procedures carried out at EU level for satellite authorisation (of which the first will be carried out in 2027 for the 2 GHz MSS band). In the event that the selection procedure is not carried out in 2027, the current rights of use which expire in May 2027 will have to be extended. In such a case, the fees will be imposed on the incumbent operators in exchange for the extension, thus ensuring full cost recovery
- the administrative charges/spectrum fees for the EU level authorisation.

The method for calculating these will be defined case by case for each selection procedure and will at minimum cover the additional expenditure requested. For the first years until the end of the transition period, the necessary revenues will be levied from the outcome of the first already foreseen selection procedure. The amount of fees (which will largely cover the cost) will be indicated in advance of the procedure and given the scarcity of this spectrum, there is low risk that this amount is not levied.

With this amount spread over a long period of more than 10 years we will be able to finance the additional expenditures from 2028. The part of the revenues from the fees that is above the expenditure to be covered, will be transferred, e.g. to the overall EU budget.

Any complementary revenues from other EU satellite authorisation fees, EU numbering authorisation as well as voluntary and in-kind contributions by Member States, EEA EFTA countries and third countries participating in the works of BEREC and ODN, as well as RSPB and ODN, will be used to either cover the additional expenditures from 2028 alongside the revenue from the planned selection or transferred, e.g. to the overall EU budget.

4. DIGITAL DIMENSIONS

4.1. Requirements of digital relevance

Reference to the requirement	Requirement description	Actors affected or concerned by the requirement	High-level Processes	Categories
Art. 5(5)	Collect information on network architecture, capacity, capabilities and use biennially	National regulatory authorities	Collect and publish data	Data
Art. 9(7)	Maintain a publicly available Union database of notifications, centralized database for the single passport system implementation.	ODN, National regulatory authorities	Publish data	Data, Digital solutions, Public services
Art. 38(1)	Establish dynamic database for spectrum geolocation and monitoring	ODN	Publish data	Digital solutions
Art. 46.4	Establish European numbering plan for cross-border and pan-European services	Commission, ODN	Publish template	Public services
Art. 60.2	Electronic Copper Switch-off Plans	Undertakings providing electronic communications networks	Reporting	Data
Art. 148.5	Establish and administer dynamic databases accessible to prospective spectrum users	ODN, prospective user of radio spectrum	Publish data	Public services
Art. 173(1)	Establish and manage information and communication system with common platform for information exchange	ODN	Manage processes	Digital Solutions
Art. 182(1)	Provide all necessary information including financial	Undertakings providing electronic communications networks and	Reporting	Data

Reference to the requirement	Requirement description	Actors affected or concerned by the requirement	High-level Processes	Categories
	environmental sustainability information	services, national regulatory authorities		

4.2. Data

High-level description of the data in scope

Type of data	Reference(s) to the requirement(s)	Standard and/or specification (if applicable)
Network architecture, capacity, capabilities and use	Art. 5(5)	Specification
Notifications	Art. 9(7)	Specification
Electronic Copper Switch-off Plans	Art. 60.2	Specification
Financial and environmental sustainability information	Art. 182(1)	Standard

Alignment with the European Data Strategy

This legislative initiative is in line with the use of privately-held data by government authorities (business-to-government – B2G) in order to ensure evidence-driven policy-making and policy decisions.

Alignment with the once-only principle

The ‘once-only principle’ is respected in this case so as to minimise administrative burden on companies operating in the Single Market. Member States and the Commission shall ensure the protection of business confidential information.

Data flows:

Type of data	Reference(s) to the requirement(s)	Actors who provide the data	Actors who receive the data	Trigger for the data exchange	Frequency (if applicable)
Network architecture, capacity, capabilities and use	Art. 5(5)	Providers	National regulatory authorities	N/A	Biennially

Notifications	Art. 9(7)	National regulatory authorities	ODN	Single passport request	N/A
Electronic Copper Switch-off Plans	Art. 60.2	Providers	National regulatory authorities	Within six months of adoption	Once
Financial and environmental sustainability information	Art. 182(1)	Providers	National regulatory authorities	N/A	Yearly

4.3. Digital solutions

High-level description of digital solutions

Digital solution	Reference to the requirement	Main mandated functionalities	Responsible body	How is accessibility catered for?	How is reusability considered?	Use of AI techn.
Union Database of Notifications	Art. 9(7)	Maintain a specific database system for policy implementation	ODN	Not specified	Not specified	Not specified
Dynamic Spectrum Database	Art. 38(1)	Dynamic database to promote and allow the shared use of specific spectrum bands	ODN	Not specified	Not specified	Not specified
Information and Communication System	Art. 173(1)	Common platform for the exchange of information	ODN	Not specified	Not specified	Not specified

4.4. Interoperability assessment

High-level description of the digital public service(s) affected by the requirements

Digital public service or category of digital public services	Description	Reference(s) to the requirement(s)	Other interoperability solution(s)
General public services	Maintain a publicly available Union database of the notifications submitted to the national regulatory authorities	Art. 9(7)	N/A
General public services	Establishment of a digital numbering service system at EU level	Art. 46.4	N/A
General public services	Creation of publicly accessible digital services for spectrum management	Art. 148.5	N/A

4.5. Measures to support digital implementation

High-level description of measures supporting digital implementation

Description of the measure	Reference(s) to the requirement(s)	Commission role (if applicable)	Actors to be involved (if applicable)	Expected timeline (if applicable)
Implementing act establishing the European Table of Allocation of Satellite Frequencies	Art. 38(1)	Adopting the Implementing Act	N/A	After the adoption of the DNA
Develop templates for information requests	Art. 182(1)	Consult, Contribute to the template	BEREC, RSPG	N/A