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► **B** DIRECTIVE (EU) 2018/1972 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 11 December 2018

establishing the European Electronic Communications Code

(Recast)

(Text with EEA relevance)

(OJ L 321, 17.12.2018, p. 36)

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PART I

**FRAMEWORK (GENERAL RULES FOR THE ORGANISATION
OF THE SECTOR)**

TITLE I

SCOPE, AIM AND OBJECTIVES, DEFINITIONS

CHAPTER I

Subject matter, aim and definitions

Article 1

Subject matter, scope and aims

1. This Directive establishes a harmonised framework for the regulation of electronic communications networks, electronic communications services, associated facilities and associated services, and certain aspects of terminal equipment. It lays down tasks of national regulatory authorities and, where applicable, of other competent authorities, and establishes a set of procedures to ensure the harmonised application of the regulatory framework throughout the Union.

2. The aims of this Directive are to:

- (a) implement an internal market in electronic communications networks and services that results in the deployment and take-up of very high capacity networks, sustainable competition, interoperability of electronic communications services, accessibility, security of networks and services and end-user benefits; and
- (b) ensure the provision throughout the Union of good quality, affordable, publicly available services through effective competition and choice, to deal with circumstances in which the needs of end-users, including those with disabilities in order to access the services on an equal basis with others, are not satisfactorily met by the market and to lay down the necessary end-user rights.

3. This Directive is without prejudice to:

- (a) obligations imposed by national law in accordance with Union law or by Union law in respect of services provided using electronic communications networks and services;

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- (b) measures taken at Union or national level, in accordance with Union law, to pursue general interest objectives, in particular relating to the protection of personal data and privacy, content regulation and audiovisual policy;
- (c) actions taken by Member States for public order and public security purposes and for defence;
- (d) Regulations (EU) No 531/2012 and (EU) 2015/2120 and Directive 2014/53/EU.

4. The Commission, the Body of European Regulators for Electronic Communications ('BEREC') and the authorities concerned shall ensure compliance of their processing of personal data with Union data protection rules.

*Article 2***Definitions**

For the purposes of this Directive, the following definitions 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 (circuit- and packet-switched, including internet) 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) 'transnational markets' means markets identified in accordance with Article 65, which cover the Union or a substantial part thereof located in more than one Member State;

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- (4) ‘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’ as defined in point (2) of the second paragraph of Article 2 of Regulation (EU) 2015/2120;
 - (b) interpersonal communications service; and
 - (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;
- (5) ‘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;
- (6) ‘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;
- (7) ‘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;
- (8) ‘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;
- (9) ‘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;

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- (10) ‘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;
- (11) ‘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;
- (12) ‘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;
- (13) ‘user’ means a natural or legal person using or requesting a publicly available electronic communications service;
- (14) ‘end-user’ means a user not providing public electronic communications networks or publicly available electronic communications services;
- (15) ‘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;
- (16) ‘provision of an electronic communications network’ means the establishment, operation, control or making available of such a network;
- (17) ‘enhanced digital television equipment’ means set-top boxes intended for connection to television sets or integrated digital television sets, able to receive digital interactive television services;
- (18) ‘application programming interface’ or ‘API’ means the software interface between applications, made available by broadcasters or service providers, and the resources in the enhanced digital television equipment for digital television and radio services;
- (19) ‘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;

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- (20) ‘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;
- (21) ‘security of networks and services’ means the ability of electronic communications networks and services to resist, at a given level of confidence, any action that compromises the availability, authenticity, integrity or confidentiality of those networks and services, of stored or transmitted or processed data, or of the related services offered by, or accessible via, those electronic communications networks or services;
- (22) ‘general authorisation’ means a legal framework established by a Member State ensuring rights for the provision of electronic communications networks or services and laying down sector-specific obligations that may apply to all or to specific types of electronic communications networks and services, in accordance with this Directive;
- (23) ‘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;
- (24) ‘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;
- (25) ‘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;
- (26) ‘shared use of radio spectrum’ means access by two or more users to use the same radio spectrum bands under a defined sharing arrangement, authorised on the basis of a general authorisation, individual rights of use for radio spectrum or a combination thereof, including regulatory approaches such as licensed shared access aiming to facilitate the shared use of a radio spectrum band, subject to a binding agreement of all parties involved, in accordance with sharing rules as included in their rights of use for radio spectrum in order to guarantee to all users predictable and reliable sharing arrangements, and without prejudice to the application of competition law;

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- (27) ‘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, including when they are used for the delivery of information society services or broadcast content services; it covers, inter alia: access to 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;
- (28) ‘interconnection’ means a specific type of access implemented between public network operators by means of the physical and logical linking of public 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;
- (29) ‘operator’ means an undertaking providing or authorised to provide a public electronic communications network or an associated facility;
- (30) ‘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;
- (31) ‘call’ means a connection established by means of a publicly available interpersonal communications service allowing two-way voice communication;
- (32) ‘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;
- (33) ‘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;
- (34) ‘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;

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- (35) ‘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;
- (36) ‘public safety answering point’ or ‘PSAP’ means a physical location where an emergency communication is first received under the responsibility of a public authority or a private organisation recognised by the Member State;
- (37) ‘most appropriate PSAP’ means a PSAP established by responsible authorities to cover emergency communications from a certain area or for emergency communications of a certain type;
- (38) ‘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;
- (39) ‘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;
- (40) ‘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;
- (41) ‘terminal equipment’ means terminal equipment as defined in point (1) of Article 1 of Commission Directive 2008/63/EC ⁽¹⁾;
- (42) ‘security incident’ means an event having an actual adverse effect on the security of electronic communications networks or services.

*CHAPTER II**Objectives**Article 3***General objectives**

1. Member States shall ensure that in carrying out the regulatory tasks specified in this Directive, the national regulatory and other competent authorities take all reasonable measures which are necessary and proportionate for achieving the objectives set out in paragraph 2. Member States, the Commission, the Radio Spectrum Policy Group (‘RSPG’), and BEREC shall also contribute to the achievement of those objectives.

⁽¹⁾ Commission Directive 2008/63/EC of 20 June 2008 on competition in the markets in telecommunications terminal equipment (OJ L 162, 21.6.2008, p. 20).

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National regulatory and other competent authorities shall contribute within their competence to ensuring the implementation of policies aimed at the promotion of freedom of expression and information, cultural and linguistic diversity, as well as media pluralism.

2. In the context of this Directive, the national regulatory and other competent authorities as well as BEREC, the Commission and the Member States shall pursue each of the following general objectives, which are not listed in order of priority:

- (a) promote connectivity and access to, and take-up of, very high capacity networks, including fixed, mobile and wireless networks, by all citizens and businesses of the Union;
- (b) promote competition in the provision of electronic communications networks and associated facilities, including efficient infrastructure-based competition, and in the provision of electronic communications services and associated services;
- (c) contribute to the development of the internal market by removing remaining obstacles to, and facilitating convergent conditions for, investment in, and the provision of, electronic communications networks, electronic communications services, associated facilities and associated services, throughout the Union, by developing common rules and predictable regulatory approaches, by favouring the effective, efficient and coordinated use of radio spectrum, open innovation, the establishment and development of trans-European networks, the provision, availability and interoperability of pan-European services, and end-to-end connectivity;
- (d) promote the interests of the citizens of the Union, by ensuring connectivity and the widespread availability and take-up of very high capacity networks, including fixed, mobile and wireless networks, and of electronic communications services, by enabling maximum benefits in terms of choice, price and quality on the basis of effective competition, by maintaining the security of networks and services, by ensuring a high and common level of protection for end-users through the necessary sector-specific rules and by addressing the needs, such as affordable prices, of specific social groups, in particular end-users with disabilities, elderly end-users and end-users with special social needs, and choice and equivalent access for end-users with disabilities.

3. Where the Commission establishes benchmarks and reports on the effectiveness of Member States' measures towards achieving the objectives referred to in paragraph 2, the Commission shall, where necessary, be assisted by Member States, national regulatory authorities, BEREC and the RSPG.

4. The national regulatory and other competent authorities shall, in pursuit of the policy objectives referred to in paragraph 2 and specified in this paragraph, inter alia:

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- (a) promote regulatory predictability by ensuring a consistent regulatory approach over appropriate review periods and through cooperation with each other, with BEREC, with the RSPG and with the Commission;
- (b) ensure that, in similar circumstances, there is no discrimination in the treatment of providers of electronic communications networks and services;
- (c) apply Union law in a technologically neutral fashion, to the extent that this is consistent with the achievement of the objectives set out in paragraph 2;
- (d) promote efficient investment and innovation in new and enhanced infrastructures, including by ensuring that any access obligation takes appropriate account of the risk incurred by the investing undertakings and by permitting various cooperative arrangements between investors and parties seeking access to diversify the risk of investment, while ensuring that competition in the market and the principle of non-discrimination are preserved;
- (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, including local infrastructure managed by natural persons on a not-for-profit basis;
- (f) impose ex ante regulatory obligations only to the extent necessary to secure effective and sustainable competition in the interest of end-users and relax or lift such obligations as soon as that condition is fulfilled.

Member States shall ensure that the national regulatory and other competent authorities act impartially, objectively, transparently and in a non-discriminatory and proportionate manner.

*Article 4***Strategic planning and coordination of radio spectrum policy**

1. Member States shall cooperate with each other and with the Commission in the strategic planning, coordination and harmonisation of the use of radio spectrum in the Union in accordance with Union policies for the establishment and functioning of the internal market in electronic communications. To that end, they shall take into consideration, inter alia, the economic, safety, health, public interest, freedom of expression, cultural, scientific, social and technical aspects of Union policies, as well as the various interests of radio spectrum user communities, with the aim of optimising the use of radio spectrum and avoiding harmful interference.

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2. By cooperating with each other and with the Commission, Member States shall promote the coordination of radio spectrum policy approaches in the Union and, where appropriate, harmonised conditions with regard to the availability and efficient use of radio spectrum necessary for the establishment and functioning of the internal market in electronic communications.

3. Member States shall, through the RSPG, cooperate with each other and with the Commission in accordance with paragraph 1, and upon their request with the European Parliament and with the Council, 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 this Directive;
- (b) facilitating the coordination between Member States with a view to implementing this Directive and other Union law and to contributing to the development of the internal market;
- (c) coordinating their approaches to the assignment and authorisation of use of radio spectrum and publishing reports or opinions on radio spectrum related matters.

BEREC shall participate on issues concerning its competence relating to market regulation and competition related to radio spectrum.

4. The Commission, taking utmost account of the opinion of the RSPG, may submit legislative proposals to the European Parliament and to the Council for the purpose of establishing multiannual radio spectrum policy programmes, setting out the policy orientations and objectives for the strategic planning and harmonisation of the use of radio spectrum in accordance with this Directive, as well as for the purpose of releasing harmonised radio spectrum for shared use or for use not subject to individual rights.

TITLE II

INSTITUTIONAL SET-UP AND GOVERNANCE

CHAPTER I

*National regulatory and other competent authorities**Article 5***National regulatory and other competent authorities**

1. Member States shall ensure that each of the tasks laid down in this Directive is undertaken by a competent authority.

Within the scope of this Directive, the national regulatory authorities shall be responsible at least for the following tasks:

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- (a) implementing ex ante market regulation, including the imposition of access and interconnection obligations;
- (b) ensuring the resolution of disputes between undertakings;
- (c) carrying out radio spectrum management and decisions or, where those tasks are assigned to other competent authorities, providing advice 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;
- (d) contributing to the protection of end-user rights in the electronic communications sector, in coordination, where relevant, with other competent authorities;
- (e) assessing and monitoring closely market-shaping and competition issues regarding open internet access;
- (f) assessing the unfair burden and calculating the net cost of the provision of universal service;
- (g) ensuring number portability between providers;
- (h) performing any other task that this Directive reserves to national regulatory authorities.

Member States may assign other tasks provided for in this Directive and other Union law to national regulatory authorities, in particular, those related to market competition or market entry, such as general authorisation, and those related to any role conferred on BEREC. Where those tasks related to market competition or market entry are assigned to other competent authorities, they shall seek to consult the national regulatory authority before taking a decision. For the purposes of contributing to BEREC's tasks, national regulatory authorities shall be entitled to collect necessary data and other information from market participants.

Member States may also assign to national regulatory authorities other tasks on the basis of national law, including national law implementing Union law.

Member States shall, in particular, promote stability of competences of the national regulatory authorities when transposing this Directive with regard to the attribution of tasks resulting from the Union electronic communications regulatory framework as amended in 2009.

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.

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3. Member States shall publish the tasks to be undertaken by national regulatory and other competent authorities in an easily accessible form, in particular where those tasks are assigned to more than one body. Member States shall ensure, where appropriate, consultation and cooperation between those authorities, and between those authorities and national authorities entrusted with the implementation of competition law or consumer law, on matters of common interest. Where more than one authority has competence to address such matters, Member States shall ensure that the respective tasks of each authority are published in an easily accessible form.

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

*Article 6***Independence of national regulatory and other competent authorities**

1. Member States shall guarantee the independence of national regulatory authorities and of other competent authorities by ensuring that they are legally distinct from, and functionally independent of, any natural or legal person providing electronic communications networks, equipment or services. Member States that retain ownership or control of undertakings providing electronic communications networks or services shall ensure effective structural separation of the regulatory function from activities associated with ownership or control.

2. Member States shall ensure that national regulatory and other competent authorities exercise their powers impartially, transparently and in a timely manner. Member States shall ensure that they have adequate technical, financial and human resources to carry out the tasks assigned to them.

*Article 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. Member States shall ensure continuity of decision-making.

2. Member States shall ensure that 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.

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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. Member States shall ensure that this decision is subject to review by a court, on points of fact as well as on points of law.

*Article 8***Political independence and accountability of the national regulatory authorities**

1. Without prejudice to Article 10, 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 31 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 9***Regulatory capacity of national regulatory authorities**

1. Member States shall ensure that national regulatory authorities have separate annual budgets and have autonomy in the implementation of the allocated budget. Those budgets shall be made public.

2. Without prejudice to the obligation to ensure that national regulatory authorities have adequate financial and human resources to carry out the task assigned to them, 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.

3. Member States shall also ensure that national regulatory authorities have adequate financial and human resources to enable them to actively participate in and contribute to BEREC.



Article 10

Participation of national regulatory authorities in BEREC

1. Member States shall ensure that the goals of BEREC of promoting greater regulatory coordination and consistency are actively supported by their respective national regulatory authorities.
2. Member States shall ensure that national regulatory authorities take utmost account of guidelines, opinions, recommendations, common positions, best practices and methodologies adopted by BEREC when adopting their own decisions for their national markets.

Article 11

Cooperation with national authorities

National regulatory authorities, other competent authorities under this Directive, and national competition authorities shall provide each other with the information necessary for the application of this Directive. In respect of the information exchanged, Union data protection rules shall apply, and the receiving authority shall ensure the same level of confidentiality as that of the originating authority.

CHAPTER II

General authorisation

Section 1

General part

Article 12

General authorisation of electronic communications networks and services

1. Member States shall ensure the freedom to provide electronic communications networks and services, subject to the conditions set out in this Directive. To this end, Member States shall not prevent an undertaking from providing electronic communications networks or services, except where this is necessary for the reasons set out in Article 52(1) TFEU. Any such limitation to the freedom to provide electronic communications networks and services shall be duly reasoned and shall be notified to the Commission.
2. The provision of electronic communications networks or services, other than number-independent interpersonal communications services, may, without prejudice to the specific obligations referred to in Article 13(2) or rights of use referred to in Articles 46 and 94, be subject only to a general authorisation.
3. Where a Member State considers that a notification requirement is justified for undertakings subject to a general authorisation, that Member State may require such undertakings only to submit a notification to the national regulatory or other competent authority. The Member State shall not require such undertakings to obtain an explicit decision or any other administrative act by such authority or by any other authority before exercising the rights derived from the general authorisation.

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Upon notification, when required, an undertaking may start the activity, where necessary subject to the provisions on the rights of use under this Directive.

4. The notification referred to in paragraph 3 shall not entail more than 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 the minimal information which is required to allow BEREC and that authority to keep a register or list of providers of electronic communications networks and services. That information shall be limited to:

- (a) the name of the provider;
- (b) the provider's legal status, form and registration number, where the provider is registered in a trade or other similar public register in the Union;
- (c) the geographical address of the provider's main establishment in the Union, if any, and, where applicable, any secondary branch in a Member State;
- (d) the provider's website address, where applicable, associated with the provision of electronic communications networks or services;
- (e) a contact person and contact details;
- (f) a short description of the networks or services intended to be provided;
- (g) the Member States concerned; and
- (h) an estimated date for starting the activity.

Member States shall not impose any additional or separate notification requirements.

In order to approximate notification requirements, BEREC shall publish guidelines for the notification template and maintain a Union database of the notifications transmitted to the competent authorities. To that end, the competent authorities shall, by electronic means, forward each notification received to BEREC without undue delay. Notifications made to the competent authorities before 21 December 2020 shall be forwarded to BEREC by 21 December 2021.

*Article 13***Conditions attached to the general authorisation and to the rights of use for radio spectrum and for numbering resources, and specific obligations**

1. The general authorisation for the provision of electronic communications networks or services and the rights of use for radio spectrum and rights of use for numbering resources may be subject only to the conditions listed in Annex I. Such conditions shall be non-discriminatory, proportionate and transparent. In the case of rights of use for radio spectrum, such conditions shall ensure the effective and efficient use thereof and be in accordance with Articles 45 and 51, and, in the case of rights of use for numbering resources, shall be in accordance with Article 94.

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2. Specific obligations which may be imposed on undertakings providing electronic communications networks and services under Article 61(1) and (5) and Articles 62, 68 and 83 or on those designated to provide universal service under this Directive shall be legally separate from the rights and obligations under the general authorisation. In order to achieve transparency, the criteria and procedures for imposing such specific obligations on individual undertakings shall be referred to in the general authorisation.

3. The general authorisation shall contain only conditions which are specific for that sector and are set out in Parts A, B and C of Annex I and shall not duplicate conditions which are applicable to undertakings by virtue of other national law.

4. Member States shall not duplicate the conditions of the general authorisation where they grant the right of use for radio spectrum or for numbering resources.

*Article 14***Declarations to facilitate the exercise of rights to install facilities and rights of interconnection**

Competent authorities shall, within one week of the request of an undertaking, issue standardised declarations confirming, where applicable, that the undertaking has submitted a notification under Article 12(3). Those declarations shall detail the circumstances under which any undertaking providing electronic communications networks or services under the general authorisation has the right to apply for rights to install facilities, negotiate interconnection, and obtain access or interconnection, in order to facilitate the exercise of those rights, for instance at other levels of government or in relation to other undertakings. Where appropriate, such declarations may also be issued as an automatic reply following the notification referred to in Article 12(3).

*Section 2***General authorisation rights and obligations***Article 15***Minimum list of rights derived from the general authorisation**

1. Undertakings subject to the general authorisation pursuant to Article 12, shall have the right to:

- (a) provide electronic communications networks and services;
- (b) have their application for the necessary rights to install facilities considered in accordance with Article 43;
- (c) use, subject to Articles 13, 46 and 55, radio spectrum in relation to electronic communications networks and services;
- (d) have their application for the necessary rights of use for numbering resources considered in accordance with Article 94.

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2. Where such undertakings provide electronic communications networks or services to the public, the general authorisation shall give them the right to:

- (a) negotiate interconnection with and, where applicable, obtain access to, or interconnection from, other providers of public electronic communications networks or publicly available electronic communications services covered by a general authorisation in the Union in accordance with this Directive;
- (b) be given an opportunity to be designated to provide different elements of the universal service or to cover different parts of the national territory in accordance with Article 86 or 87.

*Article 16***Administrative charges**

1. Any administrative charges imposed on undertakings providing electronic communications networks or services under the general authorisation or to which a right of use has been granted 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 Article 13(2), which may include costs for international cooperation, harmonisation and standardisation, market analysis, monitoring compliance and other market control, as well as regulatory work involving preparation and enforcement of secondary legislation and administrative decisions, such as decisions on access and interconnection; and
- (b) be imposed upon the individual undertakings in an objective, transparent and proportionate manner which minimises additional administrative costs and associated charges.

Member States may choose not to apply administrative charges to 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.

2. Where national regulatory or other competent authorities impose administrative charges, they 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.

*Article 17***Accounting separation and financial reports**

1. Member States shall require undertakings providing public electronic communications networks or publicly available electronic communications services which have special or exclusive rights for the provision of services in other sectors in the same or another Member State to:

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- (a) keep separate accounts for the activities associated with the provision of electronic communications networks or services, to the extent that would be required if those activities were carried out by legally independent entities, in order to identify all elements of cost and revenue, with the basis of their calculation and the detailed attribution methods used, related to such activities, including an itemised breakdown of fixed assets and structural costs; or
- (b) have structural separation for the activities associated with the provision of electronic communications networks or services.

Member States may choose not to apply the requirements referred to in the first subparagraph to undertakings which have an annual turnover of less than EUR 50 million in activities associated with electronic communications networks or services in the Union.

2. Where undertakings providing public electronic communications networks or publicly available electronic communications services are not subject to the requirements of company law and do not satisfy the small and medium-sized enterprise criteria of Union law accounting rules, their financial reports shall be drawn up and submitted to independent audit and published. The audit shall be carried out in accordance with the relevant Union and national rules.

The first subparagraph of this paragraph shall also apply to the separate accounts required under point (a) of the first subparagraph of paragraph 1.

Section 3

Amendment and withdrawal

Article 18

Amendment of rights and obligations

1. Member States shall ensure that the rights, conditions and procedures concerning general authorisations 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 of the general authorisation, notice shall be given in an appropriate manner of the intention to make such amendments. Interested parties, including users and consumers, shall be allowed a sufficient period of 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 19

Restriction or withdrawal of rights

1. Without prejudice to Article 30(5) and (6), Member States shall not restrict or withdraw rights to install facilities or 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 Annex I, and to relevant national provisions regarding compensation for the withdrawal of rights.

2. In line with the need to ensure the effective and efficient use of radio spectrum, or the implementation of the technical implementing measures adopted under Article 4 of Decision No 676/2002/EC, Member States may allow the restriction or withdrawal of rights of use for radio spectrum, including the rights referred to in Article 49 of this Directive, based on pre-established and clearly defined procedures, in accordance with the principles of proportionality and non-discrimination. In such cases, the holders of the rights may, where appropriate and in accordance with Union law and relevant national provisions, be compensated appropriately.

3. A modification in the use of radio spectrum as a result of the application of Article 45(4) or (5) 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 23.

CHAPTER III

Provision of information, surveys and consultation mechanism

Article 20

Information request to undertakings

1. Member States shall ensure that undertakings providing electronic communications networks and services, associated facilities, or associated services, provide all the information, including financial information, necessary for national regulatory authorities, other competent authorities and BEREC to ensure conformity with the provisions of, or decisions or opinions adopted in accordance with, this Directive and Regulation (EU) 2018/1971 of the European Parliament and of the Council ⁽¹⁾. In particular, national regulatory authorities and, where necessary for performing their tasks, other competent

⁽¹⁾ 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 (see page 1 of this Official Journal).

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authorities shall have the power to require those undertakings to submit information concerning future network or service developments that could have an impact on the wholesale services that they make available to competitors, as well as information on electronic communications networks and associated facilities, which is disaggregated at local level and sufficiently detailed to enable the geographical survey and designation of areas in accordance with Article 22.

Where the information collected in accordance with the first subparagraph is insufficient for national regulatory authorities, other competent authorities and BEREC to carry out their regulatory tasks under Union law, such information may be inquired from other relevant undertakings active in the electronic communications or closely related sectors.

Undertakings designated as having significant market power on wholesale markets may also be required to submit accounting data on the retail markets that are associated with those wholesale markets.

National regulatory and other competent authorities may request information from the single information points established pursuant to Directive 2014/61/EU.

Any request for information shall be proportionate to the performance of the task and shall be reasoned.

Undertakings shall provide the information requested promptly and in accordance with the timescales and level of detail required.

2. Member States shall ensure that national regulatory and other competent authorities 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.

Subject to the requirements of paragraph 3, Member States shall ensure that the information submitted to one authority can be made available to another such authority in the same or different Member State and to BEREC, after a substantiated request, where necessary to allow either authority, or BEREC, to fulfil its responsibilities under Union law.

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3. Where information gathered pursuant to paragraph 1, including information gathered in the context of a geographical survey, is considered to be confidential by a national regulatory or other competent authority in accordance with Union and national rules on commercial confidentiality, the Commission, BEREC and any other competent authorities concerned shall ensure such confidentiality. Such confidentiality shall not prevent the sharing of information between the competent authority, the Commission, BEREC and any other competent authorities concerned in a timely manner for the purposes of reviewing, monitoring and supervising the application of this Directive.

4. Member States shall ensure that, 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 and other competent authorities publish information that contributes to an open and competitive market.

5. National regulatory and other competent authorities shall publish the terms of public access to information as referred to in paragraph 4, including the procedures for obtaining such access.

*Article 21***Information required with regard to the general authorisation, rights of use and specific obligations**

1. Without prejudice to any information requested pursuant to Article 20 and information and reporting obligations under national law other than the general authorisation, national regulatory and other competent authorities may require undertakings to provide information with regard to the general authorisation, the rights of use or the specific obligations referred to in Article 13(2), which is proportionate and objectively justified in particular for the purposes of:

- (a) verifying, on a systematic or case-by-case basis, compliance with condition 1 of Part A, conditions 2 and 6 of Part D, and conditions 2 and 7 of Part E, of Annex I and of compliance with obligations as referred to in Article 13(2);
- (b) verifying, on a case-by-case basis, compliance with conditions as set out in Annex I 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;

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- (f) carrying out market analyses for the purposes of this Directive, including data on the downstream or retail markets associated with or related to the markets which are the subject of the market analysis;
- (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, on territorial coverage, on connectivity available to end-users or on the designation of areas pursuant to Article 22;
- (i) conducting geographical surveys;
- (j) responding to reasoned requests for information by BEREC.

The information referred to in points (a) and (b), and (d) to (j) of the first subparagraph shall not be required prior to, or as a condition for, market access.

BEREC may develop templates for information requests, where necessary, to facilitate consolidated presentation and analysis of the information obtained.

2. As regards the rights of use for radio spectrum, the information referred to in paragraph 1 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.

3. Where national regulatory or other competent 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.

4. National regulatory or other competent authorities shall not duplicate requests of information already made by BEREC pursuant to Article 40 of Regulation (EU) 2018/1971 where BEREC has made the information received available to those authorities.

Article 22

Geographical surveys of network deployments

1. National regulatory and/or other competent authorities shall conduct a geographical survey of the reach of electronic communications networks capable of delivering broadband ('broadband networks') by 21 December 2023 and shall update it at least every three years thereafter.

The geographical survey shall include a survey of the current geographic reach of broadband networks within their territory, as required for the tasks of national regulatory and/or other competent authorities under this Directive and for the surveys required for the application of State aid rules.

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The geographical survey may also include a forecast for a period determined by the relevant authority of the reach of broadband networks, including very high capacity networks, within their territory.

Such forecast shall include all relevant information, including information on planned deployments by any undertaking or public authority, of very high capacity networks and significant upgrades or extensions of networks to at least 100 Mbps download speeds. For this purpose, national regulatory and/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.

The national regulatory authority shall decide, with respect to tasks specifically attributed to it under this Directive, the extent to which it is appropriate to rely on all or part of the information gathered in the context of such forecast.

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 20(3).

2. National regulatory and/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, 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 very high capacity network or significantly upgrade or extend its network to a performance of at least 100 Mbps download speeds. National regulatory and/or other competent authorities shall publish the designated areas.

3. Within a designated area, the relevant authorities may invite undertakings and public authorities to declare their intention to deploy very high capacity 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 very high capacity networks, or significantly upgrade or extend its network to a performance of at least 100 Mbps download speeds in this area. 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. It shall also inform any undertaking or public authority expressing its interest whether the designated area is covered or likely to be covered by a next-generation access network offering download speeds below 100 Mbps on the basis of the information gathered pursuant to paragraph 1.

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4. Measures pursuant to paragraph 3 shall be taken in accordance with an efficient, objective, transparent and non-discriminatory procedure, whereby no undertaking is excluded a priori.

5. Member States shall ensure that 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 take into account the results of the geographical survey and of any designated areas pursuant to paragraphs 1, 2 and 3.

Member States shall ensure that 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.

6. 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 2003/98/EC 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.

7. By 21 June 2020, in order to contribute to the consistent application of geographical surveys and forecasts, BEREC shall, after consulting stakeholders and in close cooperation with the Commission and relevant national authorities, issue guidelines to assist national regulatory and/or other competent authorities on the consistent implementation of their obligations under this Article.

*Article 23***Consultation and transparency mechanism**

1. Except in cases falling within Article 26 or 27 or Article 32(10), Member States shall ensure that, where national regulatory or other competent authorities intend to take measures in accordance with this Directive, or where they intend to provide for restrictions in accordance with Article 45(4) and (5), which have a significant impact on the relevant market, they give interested parties the opportunity to comment on the draft measure within a reasonable period, having regard to the complexity of the matter and, except in exceptional circumstances, in any event not shorter than 30 days.

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2. For the purposes of Article 35, the competent authorities shall inform the RSPG at the moment of publication about any draft measure which falls within the scope of the comparative or competitive selection procedure pursuant to Article 55(2) 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.

Member States shall ensure the establishment of 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 24***Consultation of interested parties**

1. Member States shall ensure, as appropriate, that competent authorities in coordination, where relevant, with national regulatory authorities 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.

Member States shall ensure that competent authorities in coordination, where relevant, with national regulatory authorities 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.

2. 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.

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3. 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 103(4).

*Article 25***Out-of-court dispute resolution**

1. Member States shall ensure that the national regulatory authority or another competent authority responsible for, or at least one independent body with proven expertise in, the application of Articles 102 to 107 and Article 115 of this Directive is 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 arising under this Directive and relating to the performance of contracts. Member States may extend access to alternative dispute resolution procedures provided by that authority or body to end-users other than consumers, in particular microenterprises and small enterprises.

2. Without prejudice to Directive 2013/11/EU, where such disputes involve parties in different Member States, Member States shall coordinate their efforts with a view to bringing about a resolution of the dispute.

*Article 26***Dispute resolution between undertakings**

1. In the event of a dispute arising in connection with existing obligations under this Directive between providers of 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, and without prejudice to paragraph 2, 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. The Member State concerned shall require that all parties cooperate fully with the national regulatory authority.

2. Member States may make provision for national regulatory authorities to decline to resolve a dispute where other mechanisms, including mediation, exist that would better contribute to resolution of the dispute in a timely manner in accordance with the objectives set out in Article 3. The national regulatory authority shall inform the parties thereof without delay. If, after four months, the dispute is not resolved, and if the dispute has not been brought before the courts by the party seeking redress, the national regulatory authority shall issue, at the request of either party, a binding decision to resolve the dispute in the shortest possible time-frame and in any case within four months.

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3. In resolving a dispute, the national regulatory authority shall take decisions aimed at achieving the 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 Directive.

4. 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.

5. The procedure referred to in paragraphs 1, 3 and 4 shall not preclude either party from bringing an action before the courts.

*Article 27***Resolution of cross-border disputes**

1. In the event of a dispute arising under this Directive 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 28.

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 Directive, 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.

*Article 28***Radio Spectrum Coordination among Member States**

1. Member States and their competent authorities shall ensure that the use of radio spectrum is organised on their territory in a way that no other Member State is prevented from allowing on its territory the use of harmonised radio spectrum in accordance with Union law, especially due to cross-border harmful interference between Member States.

Member States shall take all necessary measures to this effect without prejudice to their obligations under international law and relevant international agreements such as the ITU Radio Regulations and the ITU Radio Regional Agreements.

2. Member States shall cooperate with each other, and, where appropriate, through the RSPG, in the cross-border coordination of the use of radio spectrum in order to:

(a) ensure compliance with paragraph 1;

(b) resolve any problem or dispute in relation to cross-border coordination or cross-border harmful interference between Member States, as well as with third countries, which prevent Member States from using the harmonised radio spectrum in their territory.

3. In order to ensure compliance with paragraph 1, any affected Member State may request the RSPG to use its good offices to address any problem or dispute in relation to cross-border coordination or cross-border harmful interference. Where appropriate, the RSPG may issue an opinion proposing a coordinated solution regarding such a problem or dispute.

4. Where the actions referred to in paragraph 2 or 3 have not resolved the problem or dispute, and at the request of any affected Member State, the Commission may, taking utmost account of any opinion of the RSPG recommending a coordinated solution pursuant to paragraph 3, adopt decisions addressed to the Member States concerned by the unresolved harmful interference issue by means of implementing acts to resolve cross-border harmful interference between two or more Member States which prevent them from using the harmonised radio spectrum in their territory.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 118(4).

5. The Union shall, upon the request of any affected Member State, provide legal, political and technical support to resolve radio spectrum coordination issues with countries neighbouring the Union, including candidate and acceding countries, in such a way that the Member States concerned can observe their obligations under Union law. In the provision of such assistance, the Union shall promote the implementation of Union policies.



TITLE III
IMPLEMENTATION

Article 29

Penalties

1. Member States shall lay down rules on penalties, including, where necessary, fines and non-criminal predetermined or periodic penalties, applicable to infringements of national provisions adopted pursuant to this Directive or of any binding decision adopted by the Commission, the national regulatory or other competent authority pursuant to this Directive, and shall take all measures necessary to ensure that they are implemented. Within the limits of national law, national regulatory and other competent authorities shall have the power to impose such penalties. The penalties provided for shall be appropriate, effective, proportionate and dissuasive.

2. Member States shall provide for penalties in the context of the procedure referred to in Article 22(3) only where an undertaking or public authority knowingly or grossly negligently provides misleading, erroneous or incomplete information.

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 Article 22(3), 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.

Article 30

Compliance with the conditions of the general authorisation or of rights of use for radio spectrum and for numbering resources and compliance with specific obligations

1. Member States shall ensure that their relevant competent authorities monitor and supervise compliance with the conditions of the general authorisation or of rights of use for radio spectrum and for numbering resources, with the specific obligations referred to in Article 13(2) and with the obligation to use radio spectrum effectively and efficiently in accordance with Article 4, Article 45(1) and Article 47.

Competent authorities shall have the power to require undertakings subject to the general authorisation 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 of rights of use for radio spectrum and for numbering resources or with the specific obligations referred to in Article 13(2) or Article 47, in accordance with Article 21.

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2. Where a competent authority finds that an undertaking does not comply with one or more of the conditions of the general authorisation or of rights of use for radio spectrum and for numbering resources, or with the specific obligations referred to in Article 13(2), it shall notify the undertaking of those findings and give the undertaking the opportunity to state its views, within a reasonable time limit.

3. 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.

In this regard, Member States shall empower the competent authorities to impose:

- (a) where appropriate, dissuasive financial penalties which may include periodic penalties with retroactive effect; and
- (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 67.

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.

4. 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 point (a) or (b) of the first subparagraph of Article 21(1) and Article 69, within a reasonable period set by the competent authority.

5. In the case of a serious breach or repeated breaches of the conditions of the general authorisation or of the rights of use for radio spectrum and for numbering resources, or of the specific obligations referred to in Article 13(2) or Article 47(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. Member States shall empower the competent authority to impose penalties which are effective, proportionate and dissuasive. Such penalties may be applied to cover the period of any breach, even if the breach has subsequently been rectified.

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6. Notwithstanding paragraphs 2, 3 and 5 of this Article, 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 rights of use for radio spectrum and for numbering resources, or of the specific obligations referred to in Article 13(2) or Article 47(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 a reasonable 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.

7. Undertakings shall have the right to appeal against measures taken under this Article in accordance with the procedure referred to in Article 31.

*Article 31***Right of appeal**

1. Member States shall ensure that effective mechanisms exist at national level under which any user or undertaking providing electronic communications networks or services or associated facilities who is affected by a decision of a competent authority has 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. Member States shall ensure that the merits of the case are duly taken into account.

Pending the outcome of the appeal, the decision of the competent authority shall stand, unless interim measures are granted in accordance with national law.

2. 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.

Member States shall ensure that the appeal mechanism is effective.

3. Member States shall collect information on the general subject matter of appeals, the number of requests for appeal, the duration of the appeal proceedings and the number of decisions to grant interim measures. Member States shall provide such information, as well as the decisions or judgments, to the Commission and to BEREC upon their reasoned request.

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TITLE IV
INTERNAL MARKET PROCEDURES

CHAPTER I

Article 32

Consolidating the internal market for electronic communications

1. In carrying out their tasks under this Directive, national regulatory authorities shall take the utmost account of the objectives set out in Article 3.

2. National regulatory authorities shall contribute to the development of the internal market by working with each other and with the Commission and BEREC, in a transparent manner, in order to ensure the consistent application, in all Member States, of this Directive. To this end, they shall, in particular, work with the Commission and BEREC to identify the types of instruments and remedies best suited to address particular types of situations in the market.

3. Except where otherwise provided in recommendations or guidelines adopted pursuant to Article 34 upon completion of the public consultation, if required under Article 23, where a national regulatory authority intends to take a measure which:

(a) falls within the scope of Article 61, 64, 67, 68 or 83; and

(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 one month. The one-month period shall not be extended.

4. The draft measure referred to in paragraph 3 of this Article shall not be adopted for a further two months, where that measure aims to:

(a) define a relevant market which is different from those defined in the recommendation referred to in Article 64(1); or

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(b) decide whether or not to designate an undertaking as having, either individually or jointly with others, significant market power, under Article 67(3) or (4);

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and it would affect trade between Member States, 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 two-month 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.

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5. BEREC shall publish an opinion on the Commission's reservations referred to in paragraph 4, indicating whether it considers that the draft measure should be maintained, amended or withdrawn and shall, where appropriate, provide specific proposals to that end.

6. Within the two-month period referred to in paragraph 4, the Commission may either:

(a) take a decision requiring the national regulatory authority concerned to withdraw the draft measure; or

(b) take a decision to lift its reservations referred to in paragraph 4.

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

Decisions referred to in point (a) of the first subparagraph 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 point (a) of the first subparagraph of paragraph 6 of this Article requiring the national regulatory authority to withdraw a draft measure, the national regulatory authority shall amend or withdraw the draft measure within six months of the date of the Commission's decision. Where the draft measure is amended, the national regulatory authority shall undertake a public consultation in accordance with Article 23, and shall notify the amended draft measure to the Commission in accordance with paragraph 3 of this Article.

8. 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, except in the cases covered by paragraph 4 and point (a) of paragraph 6, adopt the resulting draft measure and shall, where it does so, communicate it to the Commission.

9. The national regulatory authority shall communicate to the Commission and to BEREC all adopted final measures which fall under points (a) and (b) of paragraph 3.

10. In exceptional circumstances, where a national regulatory authority considers that there is an urgent need to act, in order to safeguard competition and protect the interests of users, by way of derogation from the procedure set out in paragraphs 3 and 4, it may immediately adopt proportionate and provisional measures. It shall, without delay, communicate those measures, with full reasons, to the Commission, to the other national regulatory authorities, and to BEREC. A decision of the national regulatory authority to render such measures permanent or extend the period for which they are applicable shall be subject to paragraphs 3 and 4.

11. A national regulatory authority may withdraw a draft measure at any time.

*Article 33***Procedure for the consistent application of remedies**

1. Where an intended measure covered by Article 32(3) aims to impose, amend or withdraw an obligation on an undertaking in application of Article 61 or 67 in conjunction with Articles 69 to 76 and Article 83, the Commission may, within the one-month period referred to in Article 32(3), notify the national regulatory authority concerned and BEREC of its reasons for considering that the draft measure would create a barrier to the internal market or of its serious doubts as to its compatibility with Union law. In such a case, the draft measure shall not be adopted for a further three months following the Commission's notification.

In the absence of such notification, the national regulatory authority concerned may adopt the draft measure, taking utmost account of any comments made by the Commission, BEREC or any other national regulatory authority.

2. Within the three-month period referred to in paragraph 1 of this Article, the Commission, BEREC and the national regulatory authority concerned shall cooperate closely to identify the most appropriate and effective measure in light of the objectives laid down in Article 3, whilst taking due account of the views of market participants and the need to ensure the development of consistent regulatory practice.

3. Within six weeks from the beginning of the three-month period referred to in paragraph 1, BEREC shall issue an opinion on the Commission's notification referred to in paragraph 1, indicating whether it considers that the draft measure should be amended or withdrawn and, where appropriate, provide specific proposals to that end. That opinion shall provide reasons and be made public.

4. If in its opinion, BEREC shares the serious doubts of the Commission, it shall cooperate closely with the national regulatory authority concerned to identify the most appropriate and effective measure. Before the end of the three-month period referred to in paragraph 1, the national regulatory authority may either:

(a) amend or withdraw its draft measure taking utmost account of the Commission's notification referred to in paragraph 1 and of BEREC's opinion; or

(b) maintain its draft measure.

5. The Commission may, within one month following the end of the three-month period referred to in paragraph 1 and taking utmost account of the opinion of BEREC, if any:

(a) issue a recommendation requiring the national regulatory authority concerned to amend or withdraw the draft measure, including specific proposals to that end and providing reasons for its recommendation, in particular where BEREC does not share the Commission's serious doubts;

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- (b) take a decision to lift its reservations indicated in accordance with paragraph 1; or
- (c) for draft measures falling under the second subparagraph of Article 61(3) or under Article 76(2), take a decision requiring the national regulatory authority concerned to withdraw the draft measure, where BEREC shares the serious doubts of the Commission, accompanied by a detailed and objective analysis of why the Commission considers that the draft measure should not be adopted, together with specific proposals for amending the draft measure, subject to the procedure referred to in Article 32(7), which shall apply *mutatis mutandis*.

6. Within one month of the Commission issuing the recommendation in accordance with point (a) of paragraph 5 or lifting its reservations in accordance with point (b) of paragraph 5, the national regulatory authority concerned shall communicate to the Commission and to BEREC the adopted final measure.

That period may be extended to allow the national regulatory authority to undertake a public consultation in accordance with Article 23.

7. Where the national regulatory authority decides not to amend or withdraw the draft measure on the basis of the recommendation issued under point (a) of paragraph 5, it shall provide reasons.

8. The national regulatory authority may withdraw the proposed draft measure at any stage of the procedure.

*Article 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.

*CHAPTER II****Consistent radio spectrum assignment****Article 35***Peer review process**

1. Where the national regulatory or other competent authority intends to undertake a selection procedure in accordance with Article 55(2) in relation to 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 networks and services, it shall, pursuant to Article 23, inform the RSPG about any draft measure which falls within the scope of the comparative or competitive selection procedure pursuant to Article 55(2) and indicate whether and when it is to request the RSPG to convene a Peer Review Forum.

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When requested to do so, the RSPG shall organise a Peer Review Forum in order to discuss and exchange views on the draft measures transmitted and shall facilitate the exchange of experiences and best practices on those draft measures.

The Peer Review Forum shall be composed of the members of the RSPG and organised and chaired by a representative of the RSPG.

2. At the latest during the public consultation conducted pursuant to Article 23, the RSPG may exceptionally take the initiative to convene a Peer Review Forum in accordance with the rules of procedure for organising it in order to exchange experiences and best practices on a draft measure relating to a selection procedure where it considers that the draft measure would significantly prejudice the ability of the national regulatory or other competent authority to achieve the objectives set in Articles 3, 45, 46 and 47.

3. The RSPG shall define in advance and make public the objective criteria for the exceptional convening of the Peer Review Forum.

4. During the Peer Review Forum, the national regulatory authority or other competent authority shall provide an explanation on how the draft 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, 45, 46 and 47 of this Directive, as well as in Decisions No 676/2002/EC and No 243/2012/EU;

(b) ensures effective and efficient use of radio spectrum; and

(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.

5. The Peer Review Forum shall be open to voluntary participation by experts from other competent authorities and from BEREC.

6. The Peer Review Forum shall be convened only once during the overall national preparation and consultation process of a single selection procedure concerning one or several radio spectrum bands, unless the national regulatory or other competent authority requests that it is reconvened.

7. At the request of the national regulatory or other competent authority that requested the meeting, the RSPG may adopt a report on how the draft measure achieves the objectives provided in paragraph 4, reflecting the views exchanged in the Peer Review Forum.

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8. The RSPG shall publish in February each year a report concerning the draft measures discussed pursuant to paragraphs 1 and 2. The report shall indicate experiences and best practices noted.

9. Following the Peer Review Forum, at the request of the national regulatory or other competent authority that requested the meeting, the RSPG may adopt an opinion on the draft measure.

*Article 36***Harmonised assignment of radio spectrum**

Where the use of radio spectrum has been harmonised, access conditions and procedures have been agreed, and undertakings to which the radio spectrum shall be assigned have been selected in accordance with international agreements and Union rules, Member States shall grant the right of use for such radio spectrum in accordance therewith. Provided that all national conditions attached to the right to use the radio spectrum concerned have been satisfied in the case of a common selection procedure, Member States shall not impose any further conditions, additional criteria or procedures which would restrict, alter or delay the correct implementation of the common assignment of such radio spectrum.

*Article 37***Joint authorisation process to grant individual rights of use for radio spectrum**

Two or several Member States may cooperate with each other and with the RSPG, taking into account any interest expressed by market participants, by jointly establishing the common aspects of an authorisation process and, where appropriate, also jointly conducting the selection process to grant individual rights of use for radio spectrum.

When designing the joint authorisation process, Member States may take into consideration the following criteria:

- (a) the individual national authorisation processes shall be initiated and implemented by the competent authorities in accordance with a jointly agreed schedule;
- (b) it shall provide, where appropriate, for common conditions and procedures for the selection and granting of individual rights of use for radio spectrum among the Member States concerned;
- (c) it shall provide, where appropriate, for common or comparable conditions to be attached to the individual rights of use for radio spectrum among the Member States concerned, inter alia allowing users to be assigned similar radio spectrum blocks;
- (d) it shall be open at any time to other Member States until the joint authorisation process has been conducted.

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Where, in spite of the interest expressed by market participants, Member States do not act jointly, they shall inform those market participants of the reasons explaining their decision.

*CHAPTER III****Harmonisation procedures****Article 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 Directive could create a barrier to the internal market, the Commission may, taking the utmost account of the opinion of BEREC or, where relevant, the RSPG, adopt recommendations or, subject to paragraph 3 of this Article, decisions by means of implementing acts to ensure the harmonised application of this Directive and in order to further the achievement of the objectives set out in Article 3.

2. Member States shall ensure that national regulatory and other competent authorities take the 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 64 and 67, 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 32; 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; and

(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 the single European emergency number '112'.

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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 118(4).

5. BEREC may, on its own initiative, advise the Commission on whether a measure should be adopted pursuant to paragraph 1.

6. If 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 Directive 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 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 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 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, request that standards be drawn up by the European standardisation organisations (European Committee for Standardisation (CEN), European Committee for Electrotechnical Standardisation (Cenelec), and European Telecommunications Standards Institute (ETSI)).

2. Member States shall encourage the use of the standards or 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.

In the absence of publication of standards or specifications in accordance with paragraph 1, Member States shall encourage the implementation of standards or 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 the International Telecommunication Union (ITU), the European Conference of Postal and Telecommunications Administrations (CEPT), the International Organisation for Standardisation (ISO) and the International Electrotechnical Commission (IEC).

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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 specifications referred to in paragraph 1 or in this paragraph shall not prevent access as may be required under this Directive, where feasible.

3. If 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 4, to the extent strictly necessary to ensure such interoperability and to improve freedom of choice for users.

4. Where the Commission intends to make the implementation of certain standards or 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 compulsory by making reference to them as compulsory standards in the list of standards or specifications published in the Official Journal of the European Union.

5. Where the Commission considers that the standards or 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 specifications referred to in paragraph 1.

6. 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.

7. 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 118(4).

8. 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.



TITLE V
SECURITY

Article 40

Security of networks and services

1. Member States shall ensure that providers of public electronic communications networks or of publicly available electronic communications services take appropriate and proportionate technical and organisational measures to appropriately manage the risks posed to the security of networks and services. Having regard to the state of the art, those measures shall ensure a level of security appropriate to the risk presented. In particular, measures, including encryption where appropriate, shall be taken to prevent and minimise the impact of security incidents on users and on other networks and services.

The European Union Agency for Network and Information Security ('ENISA') shall facilitate, in accordance with Regulation (EU) No 526/2013 of the European Parliament and of the Council⁽¹⁾, the coordination of Member States to avoid diverging national requirements that may create security risks and barriers to the internal market.

2. Member States shall ensure that providers of public electronic communications networks or of publicly available electronic communications services notify without undue delay the competent authority of a security incident that has had a significant impact on the operation of networks or services.

In order to determine the significance of the impact of a security incident, where available the following parameters shall, in particular, be taken into account:

- (a) the number of users affected by the security incident;
- (b) the duration of the security incident;
- (c) the geographical spread of the area affected by the security incident;
- (d) the extent to which the functioning of the network or service is affected;
- (e) the extent of impact on economic and societal activities.

⁽¹⁾ 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 (OJ L 165, 18.6.2013, p. 41).

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Where appropriate, the competent authority concerned shall inform the competent authorities in other Member States and ENISA. The competent authority concerned may inform the public or require the providers to do so, where it determines that disclosure of the security incident is in the public interest.

Once a year, the competent authority concerned shall submit a summary report to the Commission and to ENISA on the notifications received and the action taken in accordance with this paragraph.

3. Member States shall ensure that in the case of a particular and significant threat of a security incident in public electronic communications networks or publicly available electronic communications services, providers of such networks or services shall inform their users potentially affected by such a threat of any possible protective measures or remedies which can be taken by the users. Where appropriate, providers shall also inform their users of the threat itself.

4. This Article is without prejudice to Regulation (EU) 2016/679 and Directive 2002/58/EC.

5. The Commission, taking utmost account of ENISA's opinion, may adopt implementing acts detailing the technical and organisational measures referred to in paragraph 1, as well as the circumstances, format and procedures applicable to notification requirements pursuant to paragraph 2. They shall be based on European and international standards to the greatest extent possible, and shall not prevent Member States from adopting additional requirements in order to pursue the objectives set out in paragraph 1.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 118(4).

*Article 41***Implementation and enforcement**

1. Member States shall ensure that, in order to implement Article 40, the competent authorities have the power to issue binding instructions, including those regarding the measures required to remedy a security incident or prevent one from occurring when a significant threat has been identified and time-limits for implementation, to providers of public electronic communications networks or publicly available electronic communications services.

2. Member States shall ensure that competent authorities have the power to require providers of public electronic communications networks or publicly available electronic communications services to:

(a) provide information needed to assess the security of their networks and services, including documented security policies; and

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(b) submit to a security audit carried out by a qualified independent body or a competent authority and make the results thereof available to the competent authority; the cost of the audit shall be paid by the provider.

3. Member States shall ensure that the competent authorities have all the powers necessary to investigate cases of non-compliance and the effects thereof on the security of the networks and services.

4. Member States shall ensure that, in order to implement Article 40, the competent authorities have the power to obtain the assistance of a Computer Security Incident Response Team ('CSIRT') designated pursuant to Article 9 of Directive (EU) 2016/1148 in relation to issues falling within the tasks of the CSIRTs pursuant to point 2 of Annex I to that Directive.

5. The competent authorities shall, where appropriate and in accordance with national law, consult and cooperate with the relevant national law enforcement authorities, the competent authorities within the meaning of Article 8(1) of Directive (EU) 2016/1148 and the national data protection authorities.

PART II
NETWORKS

TITLE I
MARKET ENTRY AND DEPLOYMENT

CHAPTER I

Fees

Article 42

Fees for rights of use for radio spectrum and rights to install facilities

1. Member States may allow the competent authority to impose fees for the rights of use for radio spectrum or 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 which ensure the optimal use of those resources. Member States shall ensure that such fees are objectively justified, transparent, non-discriminatory and proportionate in relation to their intended purpose and shall take into account the general objectives of this Directive.

2. With respect to rights of use for radio spectrum, Member States shall seek to ensure that applicable fees are set at a level which ensures efficient assignment and use of radio spectrum, including by:

- (a) setting reserve prices as minimum fees for rights of use for radio spectrum by having regard to the value of those rights in their possible alternative uses;
- (b) taking into account costs entailed by conditions attached to those rights; and

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- (c) applying, to the extent possible, payment arrangements linked to the actual availability for use of the radio spectrum.

*CHAPTER II**Access to land**Article 43***Rights of way**

1. Member States shall ensure that, when a competent authority considers an application for the granting of rights:

- to install facilities on, over or under public or private property to an undertaking authorised to provide public electronic communications networks, or
- to install facilities on, over or under public property to an undertaking authorised to provide electronic communications networks other than to the public,

that competent authority:

- (a) acts on the basis of simple, efficient, transparent and publicly available procedures, applied without discrimination and without delay, and in any event makes its decision within six months of the application, except in the case of expropriation; and
- (b) follows the principles of transparency and non-discrimination in attaching conditions to any such rights.

The procedures referred to in points (a) and (b) may differ depending on whether the applicant is providing public electronic communications networks or not.

2. Member States shall ensure that, where public or local authorities retain ownership or control of undertakings providing public electronic communications networks or publicly available electronic communications services, there is 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 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 protect the environment, public health, public security or to meet town- and country-planning objectives.

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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.

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.

*CHAPTER III**Access to radio spectrum*

Section 1

Authorisations*Article 45***Management of radio spectrum**

1. Taking due account of the fact that radio spectrum is a public good that has an important social, cultural and economic value, Member States shall ensure the effective management of radio spectrum for electronic communications networks and services in their territory in accordance with Articles 3 and 4. They shall ensure that the allocation of, the issuing of general authorisations in respect of, and the granting of individual rights of use for radio spectrum for electronic communications networks and services by competent authorities are based on objective, transparent, pro-competitive, non-discriminatory and proportionate criteria.

In applying this Article, Member States shall respect relevant international agreements, including the ITU Radio Regulations and other agreements adopted in the framework of the ITU applicable to radio spectrum, such as the agreement reached at the Regional Radiocommunications Conference of 2006, and may take public policy considerations into account.

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2. Member States shall promote the harmonisation of use of radio spectrum by electronic communications networks and services across the Union, consistent with the need to ensure effective and efficient use thereof and in pursuit of benefits for the consumer such as competition, economies of scale and interoperability of networks and services. In so doing, they shall act in accordance with Article 4 of this Directive and with Decision No 676/2002/EC, inter alia, by:

- (a) pursuing wireless broadband coverage of their national territory and population at high quality and speed, as well as coverage of major national and European transport paths, including trans-European transport network as referred to in Regulation (EU) No 1315/2013 of the European Parliament and of the Council ⁽¹⁾;
- (b) facilitating the rapid development in the Union of new wireless communications technologies and applications, including, where appropriate, in a cross-sectoral approach;
- (c) ensuring predictability and consistency in the granting, renewal, amendment, restriction and withdrawal of rights of use for radio spectrum in order to promote long-term investments;
- (d) ensuring the prevention of cross-border or national harmful interference in accordance with Articles 28 and 46 respectively, and taking appropriate pre-emptive and remedial measures to that end;
- (e) promoting the shared use of radio spectrum between similar or different uses of radio spectrum in accordance with competition law;
- (f) applying the most appropriate and least onerous authorisation system possible in accordance with Article 46 in such a way as to maximise flexibility, sharing and efficiency in the use of radio spectrum;
- (g) applying rules for the granting, transfer, renewal, modification and withdrawal of rights of use for radio spectrum that are clearly and transparently laid down in order to guarantee regulatory certainty, consistency and predictability;
- (h) pursuing consistency and predictability throughout the Union regarding the way the use of radio spectrum is authorised in protecting public health taking into account Recommendation 1999/519/EC.

⁽¹⁾ Regulation (EU) No 1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union guidelines for the development of the trans-European transport network and repealing Decision No 661/2010/EU (OJ L 348 20.12.2013, p. 1).

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For the purpose of the first subparagraph, and in the context of the development of technical implementing measures for a radio spectrum band under Decision No 676/2002/EC, the Commission may request the RSPG to issue an opinion recommending the most appropriate authorisation regimes for the use of radio spectrum in that band or parts thereof. Where appropriate and taking utmost account of such opinion, the Commission may adopt a recommendation with a view to promoting a consistent approach in the Union with regard to the authorisation regimes for the use of that band.

Where the Commission is considering the adoption of measures in accordance with Article 39(1), (4), (5) and (6), it may request the opinion of the RSPG with regard to the implications of any such standard or specification for the coordination, harmonisation and availability of radio spectrum. The Commission shall take utmost account of the RSPG's opinion in taking any subsequent steps.

3. In the case of a national or regional lack of market demand for the use of a band in the harmonised radio spectrum, Member States may allow an alternative use of all or part of that band, including the existing use, in accordance with paragraphs 4 and 5 of this Article, provided that:

- (a) the finding of a lack of market demand for the use of such a band is based on a public consultation in accordance with Article 23, including a forward-looking assessment of market demand;
- (b) such alternative use does not prevent or hinder the availability or the use of such a band in other Member States; and
- (c) the Member State concerned takes due account of the long-term availability or use of such a band in the Union and the economies of scale for equipment resulting from using the harmonised radio spectrum in the Union.

Any decision to allow alternative use on an exceptional basis shall be subject to a regular review and shall in any event be reviewed promptly upon a duly justified request by a prospective user to the competent authority for use of the band in accordance with the technical implementing measure. The Member State shall inform the Commission and the other Member States of the decision taken, together with the reasons therefor, as well as of the outcome of any review.

4. Without prejudice to the second subparagraph, Member States shall ensure that all types of technology used for the provision of electronic communications networks or services may be used in the radio spectrum declared available for electronic communications services in their National Frequency Allocation Plan in accordance with Union law.

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Member States may, however, provide for proportionate and non-discriminatory restrictions to the types of radio network or wireless access technology used for electronic communications services where this is necessary to:

- (a) avoid harmful interference;
- (b) protect public health against electromagnetic fields, taking utmost account of Recommendation 1999/519/EC;
- (c) ensure technical quality of service;
- (d) ensure maximisation of radio spectrum sharing;
- (e) safeguard efficient use of radio spectrum; or
- (f) ensure the fulfilment of a general interest objective in accordance with paragraph 5.

5. Without prejudice to the second subparagraph, Member States shall ensure that all types of electronic communications services may be provided in the radio spectrum declared available for electronic communications services in their National Frequency Allocation Plan in accordance with Union law. Member States may, however, provide for proportionate and non-discriminatory restrictions to the types of electronic communications services to be provided, including, where necessary, to fulfil a requirement under the ITU Radio Regulations.

Measures that require an electronic communications service to be provided in a specific band available for electronic communications services shall be justified in order to ensure the fulfilment of a general interest objective as laid down by the Member States in accordance with Union law, including, but not limited to:

- (a) safety of life;
- (b) the promotion of social, regional or territorial cohesion;
- (c) the avoidance of inefficient use of radio spectrum; or
- (d) the promotion of cultural and linguistic diversity and media pluralism, for example the provision of radio and television broadcasting services.

A measure which prohibits the provision of any other electronic communications service in a specific band may be provided for only where justified by the need to protect the safety of life services. Member States may, on an exceptional basis, also extend such a measure in order to fulfil other general interest objectives as laid down by the Member States in accordance with Union law.

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6. Member States shall regularly review the necessity of the restrictions referred to in paragraphs 4 and 5, and shall make the results of those reviews public.

7. Restrictions established prior to 25 May 2011 shall comply with paragraphs 4 and 5 by 20 December 2018.

*Article 46***Authorisation of the use of radio spectrum**

1. Member States shall facilitate the use of radio spectrum, including shared use, under general authorisations and limit the granting of individual rights of use for radio spectrum to situations where such rights are necessary to maximise efficient use in light of demand and taking into account the criteria set out in the second subparagraph. In all other cases, they shall set out the conditions for the use of radio spectrum in a general authorisation.

To that end, Member States shall decide on the most appropriate regime for authorising the use of radio spectrum, taking account of:

- (a) the specific characteristics of the radio spectrum concerned;
- (b) the need to protect against 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.

When considering whether to issue general authorisations or to grant individual rights of use for the harmonised radio spectrum, taking into account technical implementing measures adopted in accordance with Article 4 of Decision No 676/2002/EC, Member States shall seek to minimise problems of harmful interference, including in cases of shared use of radio spectrum on the basis of a combination of general authorisation and individual rights of use.

Where appropriate, Member States shall consider the possibility to authorise the use of radio spectrum based on a combination of general authorisation and individual rights of use, taking into account the likely effects of different combinations of general authorisations and individual rights of use and of gradual transfers from one category to the other on competition, innovation and market entry.

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Member States shall seek to minimise restrictions on the use of radio spectrum by taking appropriate account of technological solutions for managing harmful interference in order to impose the least onerous authorisation regime possible.

2. When taking a decision pursuant to paragraph 1 with a view to facilitating the shared use of radio spectrum, the competent authorities shall ensure that the conditions for the shared use of radio spectrum are clearly set out. Such conditions shall facilitate efficient use of radio spectrum, competition and innovation.

*Article 47***Conditions attached to individual rights of use for radio spectrum**

1. Competent authorities shall attach conditions to individual rights of use for radio spectrum in accordance with Article 13(1) in such a way as to ensure optimal and the most effective and efficient use of radio spectrum. They shall, before the assignment or renewal of such rights, clearly establish any such conditions, including the level of use required and the possibility to fulfil that requirement through trading or leasing, in order to ensure the implementation of those conditions in accordance with Article 30. Conditions attached to renewals of right of use for radio spectrum shall not provide undue advantages to existing holders of those rights.

Such conditions shall specify the applicable parameters, including any deadline for exercising the rights of use, the non-fulfilment of which would entitle the competent authority to withdraw the right of use or impose other measures.

Competent authorities shall, in a timely and transparent manner, consult and inform interested parties regarding conditions attached to individual rights of use before their imposition. They shall determine in advance and inform interested parties, in a transparent manner, of the criteria for the assessment of the fulfilment of those conditions.

2. When attaching conditions to individual rights of use for radio spectrum, competent authorities may, in particular with a view to ensuring effective and efficient use of radio spectrum or promoting coverage, provide for the following possibilities:

- (a) sharing passive or active infrastructure which relies on radio spectrum or radio spectrum;
- (b) commercial roaming access agreements;
- (c) joint roll-out of infrastructures for the provision of networks or services which rely on the use of radio spectrum.

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Competent authorities shall not prevent the sharing of radio spectrum in the conditions attached to the rights of use for radio spectrum. Implementation by undertakings of conditions attached pursuant to this paragraph shall remain subject to competition law.

Section 2
Rights of use

Article 48

Granting of individual rights of use for radio spectrum

1. Where it is necessary to grant individual rights of use for radio spectrum, Member States shall grant such rights, upon request, to any undertaking for the provision of electronic communications networks or services under the general authorisation referred to in Article 12, subject to Article 13, to point (c) of Article 21(1) and to Article 55 and to any other rules ensuring the efficient use of those resources in accordance with this Directive.

2. Without prejudice to specific criteria and procedures adopted by Member States to grant individual rights of use for radio spectrum to providers of radio or television broadcast content services with a view to pursuing general interest objectives in accordance with Union law, the individual rights of use for radio spectrum shall be granted through open, objective, transparent, non-discriminatory and proportionate procedures, and in accordance with Article 45.

3. 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 by Member States in accordance with Union law.

4. Competent authorities shall consider applications for individual rights of use for radio spectrum in the context of selection procedures 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. Competent authorities shall be able to request all necessary information from applicants in order to assess, on the basis of those criteria, their ability to comply with those conditions. Where the competent authority concludes that an applicant does not possess the required ability, it shall provide a duly reasoned decision to that effect.

5. When granting individual rights of use for radio spectrum, Member States shall specify whether those rights can be transferred or leased by the holder of the rights, and under which conditions. Articles 45 and 51 shall apply.

▼B

6. The competent authority 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 their National Frequency Allocation Plan. That time limit shall be without prejudice to Article 55(7) and to any applicable international agreements relating to the use of radio spectrum or of orbital positions.

*Article 49***Duration of rights**

1. Where Member States authorise the use of radio spectrum through individual rights of use for a limited period, they shall ensure that the right of use is granted for a period that is appropriate in light of the objectives pursued in accordance with Article 55(2), taking due account of the need to ensure competition, as well as, in particular, effective and efficient use of radio spectrum, and to promote innovation and efficient investments, including by allowing for an appropriate period for investment amortisation.

2. Where Member States grant 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') for a limited period, they shall ensure regulatory predictability for the holders of the rights over a period of at least 20 years regarding conditions for investment in infrastructure which relies on the use of such radio spectrum, taking account of the requirements referred to in paragraph 1 of this Article. This Article is subject, where relevant, to any modification of the conditions attached to those rights of use in accordance with Article 18.

To that end, Member States shall ensure that such rights are valid for a duration of at least 15 years and include, where necessary to comply with the first subparagraph, an adequate extension thereof, under the conditions laid down in this paragraph.

Member States shall make available the general criteria for an extension of the duration of rights of use, in a transparent manner, to all interested parties in advance of granting rights of use, as part of the conditions laid down under Article 55(3) and (6). Such general criteria shall relate to:

- (a) the need to ensure the effective and efficient use of the radio spectrum concerned, the objectives pursued in points (a) and (b) of Article 45(2), or the need to fulfil general interest objectives related to ensuring safety of life, public order, public security or defence; and
- (b) the need to ensure undistorted competition.

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At the latest two years before the expiry of the initial duration of an individual right of use, the competent authority shall conduct an objective and forward-looking assessment of the general criteria laid down for extension of the duration of that right of use in light of point (c) of Article 45(2). Provided that the competent authority has not initiated enforcement action for non-compliance with the conditions of the rights of use pursuant to Article 30, it shall grant the extension of the duration of the right of use unless it concludes that such an extension would not comply with the general criteria laid down in point (a) or (b) of the third subparagraph of this paragraph.

On the basis of that assessment, the competent authority shall notify the holder of the right as to whether the extension of the duration of the right of use is to be granted.

If such extension is not to be granted, the competent authority shall apply Article 48 for granting rights of use for that specific radio spectrum band.

Any measure under this paragraph shall be proportionate, non-discriminatory, transparent and reasoned.

By way of derogation from Article 23, interested parties shall have the opportunity to comment on any draft measure pursuant to the third and the fourth subparagraphs of this paragraph for a period of at least three months.

This paragraph is without prejudice to the application of Articles 19 and 30.

When establishing fees for rights of use, Member States shall take account of the mechanism provided for under this paragraph.

3. Where duly justified, Member States may derogate from paragraph 2 of this Article in the following cases:

- (a) in limited geographical areas, where access to high-speed networks is severely deficient or absent and this is necessary to ensure achievement of the objectives of Article 45(2);
- (b) for specific short-term projects;
- (c) for experimental use;
- (d) for uses of radio spectrum which, in accordance with Article 45(4) and (5), can coexist with wireless broadband services; or
- (e) for alternative use of radio spectrum in accordance with Article 45(3).

4. Member States 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.



Article 50

Renewal of individual rights of use for harmonised radio spectrum

1. National regulatory or other competent authorities shall take a decision on the renewal of individual rights of use for harmonised radio spectrum in a timely manner before the duration of those rights expired, except where, at the time of assignment, the possibility of renewal has been explicitly excluded. For that purpose, those authorities shall assess the need for such renewal at their own initiative or upon request by the holder of the right, in the latter case not earlier than five years prior to expiry of the duration of the rights concerned. This shall be without prejudice to renewal clauses applicable to existing rights.

2. In taking a decision pursuant to paragraph 1 of this Article, competent authorities shall consider, *inter alia*:

- (a) the fulfilment of the objectives set out in Article 3, Article 45(2) and Article 48(2), as well as public policy objectives under Union or national law;
- (b) the implementation of a technical implementing measure adopted in accordance with Article 4 of Decision No 676/2002/EC;
- (c) the review of the appropriate implementation of the conditions attached to the right concerned;
- (d) the need to promote, or avoid any distortion of, competition in line with Article 52;
- (e) the need to render the use of radio spectrum more efficient in light of technological or market evolution;
- (f) the need to avoid severe service disruption.

3. When considering possible renewal of individual rights of use for harmonised radio spectrum for which the number of rights of use is limited pursuant to paragraph 2 of this Article, competent authorities shall conduct an open, transparent and non-discriminatory procedure, and shall, *inter alia*:

- (a) give all interested parties the opportunity to express their views through a public consultation in accordance with Article 23; and
- (b) clearly state the reasons for such possible renewal.

The national regulatory or other competent authority shall take into account any evidence arising from the consultation pursuant to the first subparagraph of this paragraph of market demand from undertakings other than those holding rights of use for radio spectrum in the band concerned when deciding whether to renew the rights of use or to organise a new selection procedure in order to grant the rights of use pursuant to Article 55.

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4. A decision to renew the individual rights of use for harmonised radio spectrum may be accompanied by a review of the fees as well as of the other terms and conditions attached thereto. Where appropriate, national regulatory or other competent authorities may adjust the fees for the rights of use in accordance with Article 42.

*Article 51***Transfer or lease of individual rights of use for radio spectrum**

1. Member States shall ensure that undertakings may transfer or lease to other undertakings individual rights of use for radio spectrum.

Member States may determine that this paragraph does not apply where the undertaking's individual right of use for radio spectrum was initially granted free of charge or assigned for broadcasting.

2. Member States shall ensure that an undertaking's intention to transfer or lease rights of use for radio spectrum, as well as the effective transfer thereof is notified in accordance with national procedures to the competent authority and is made public. In the case of harmonised radio spectrum, any such transfer shall comply with such harmonised use.

3. Member States shall allow the transfer or lease of rights of use for radio spectrum where the original conditions attached to the rights of use are maintained. Without prejudice to the need to ensure the absence of a distortion of competition, in particular in accordance with Article 52, Member States shall:

- (a) submit transfers and leases to the least onerous procedure possible;
- (b) not refuse the lease of rights of use for radio spectrum where the lessor undertakes to remain liable for meeting the original conditions attached to the rights of use;
- (c) not refuse the transfer of rights of use for radio spectrum unless there is a clear risk that the new holder is unable to meet the original conditions for the right of use.

Any administrative charge imposed on undertakings in connection with processing an application for the transfer or lease of rights of use for radio spectrum shall comply with Article 16.

Points (a), (b) and (c) of the first subparagraph are 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 lessor and the lessee, in accordance with their national law.

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.

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In light of any transfer or lease of rights of use for radio spectrum, competent authorities shall make relevant details relating to tradable individual rights publicly available in a standardised electronic format when the rights are created and keep those details for as long as the rights exist.

The Commission may adopt implementing acts specifying those relevant details.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 118(4).

*Article 52***Competition**

1. National regulatory and other competent authorities shall promote effective competition and avoid distortions of competition in the internal market when deciding to grant, amend or renew rights of use for radio spectrum for electronic communications networks and services in accordance with this Directive.

2. When Member States grant, amend or renew rights of use for radio spectrum, their national regulatory or other competent authorities upon the advice provided by national regulatory authority may take appropriate measures 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, if 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 Directive where this is necessary to remedy ex post a distortion of competition by any transfer or accumulation of rights of use for radio spectrum.

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National regulatory and other competent authorities shall, taking into account market conditions and available benchmarks, base their decisions on an objective and forward-looking assessment of the market competitive conditions, of whether such measures are necessary to maintain or achieve effective competition, and of the likely effects of such measures on existing and future investments by market participants in particular for network roll-out. In doing so, they shall take into account the approach to market analysis as set out in Article 67(2).

3. When applying paragraph 2 of this Article, national regulatory and other competent authorities shall act in accordance with the procedures provided in Articles 18, 19, 23 and 35.

Section 3

Procedures

Article 53

Coordinated timing of assignments

1. Member States shall cooperate in order to coordinate the use of harmonised radio spectrum for electronic communications networks and services in the Union taking due account of the different national market situations. This may include identifying one, or, where appropriate, several common dates by which the use of specific harmonised radio spectrum is to be authorised.

2. Where harmonised conditions have been set by technical implementing measures in accordance with Decision No 676/2002/EC in order to enable the radio spectrum use for wireless broadband networks and services, Member States shall allow the use of that radio spectrum, as soon as possible and at the latest 30 months after 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 45(3) of this Directive. This is without prejudice to Decision (EU) 2017/899 and to the Commission's right of initiative to propose legislative acts.

3. A Member State may delay the deadline provided for in paragraph 2 of this Article for a specific band under the following circumstances:

- (a) to the extent justified by a restriction to the use of that band based on the general interest objective provided in point (a) or (d) of Article 45(5);
- (b) in the case of unresolved cross-border coordination issues resulting in harmful interference with third countries, provided the affected Member State has, where appropriate, requested Union assistance pursuant to Article 28(5);
- (c) safeguarding national security and defence; or
- (d) force majeure.

The Member State concerned shall review such a delay at least every two years.

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4. A Member State may delay the deadline provided for in paragraph 2 for a specific band to the extent necessary and up to 30 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 28(3) and (4);
- (b) the need to ensure, and the complexity of ensuring, the technical migration of existing users of that band.

5. In the event of a delay under paragraph 3 or 4, the Member State concerned shall inform the other Member States and the Commission in a timely manner, stating the reasons.

*Article 54***Coordinated timing of assignments for specific 5G bands**

1. By 31 December 2020, for terrestrial systems capable of providing wireless broadband services, Member States shall, where necessary in order to facilitate the roll-out of 5G, take all appropriate measures to:

- (a) reorganise and allow the use of sufficiently large blocks of the 3,4-3,8 GHz band;
- (b) allow the use of at least 1 GHz of the 24,25-27,5 GHz band, provided that there is clear evidence of market demand and of the absence of significant constraints for migration of existing users or band clearance.

2. Member States may, however, extend the deadline laid down in paragraph 1 of this Article, where justified, in accordance with Article 45(3) or Article 53(2), (3) or (4).

3. Measures taken pursuant paragraph 1 of this Article shall comply with the harmonised conditions set by technical implementing measures in accordance with Article 4 of Decision No 676/2002/EC.

*Article 55***Procedure for limiting the number of rights of use to be granted for radio spectrum**

1. Without prejudice to Article 53, where a Member State concludes that a right to use radio spectrum cannot be subject to a general authorisation and where it considers whether to limit the number of rights of use to be granted for radio spectrum, it shall, inter alia:

- (a) clearly state the reasons for limiting the rights of use, in particular by giving due weight to the need to maximise benefits for users and to facilitate the development of competition, and review, as appropriate, the limitation at regular intervals or at the reasonable request of affected undertakings;

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- (b) give all interested parties, including users and consumers, the opportunity to express their views on any limitation through a public consultation in accordance with Article 23.

2. When a Member State concludes that the number of rights of use is to be limited, it shall clearly establish, and give reasons for, the objectives pursued by means of a competitive or comparative selection procedure under this Article, and where possible quantify them, giving due weight to the need to fulfil national and internal market objectives. The objectives that the Member State may set out with a view to designing the specific selection procedure shall, in addition to promoting competition, be limited to one or more of the following:

- (a) promoting coverage;
- (b) ensuring the required quality of service;
- (c) promoting efficient use of radio spectrum, including by taking into account the conditions attached to the rights of use and the level of fees;
- (d) promoting innovation and business development.

The national regulatory or other competent authority shall clearly define and justify the choice of the selection procedure, including any preliminary phase to access the selection procedure. It shall also clearly state the outcome of any related assessment of the competitive, technical and economic situation of the market and provide reasons for the possible use and choice of measures pursuant to Article 35.

3. Member States shall publish any decision on the selection procedure chosen and the related rules, clearly stating the reasons therefor. It shall also publish the conditions that are to be attached to the rights of use.

4. After having determined the selection procedure, the Member State shall invite applications for rights of use.

5. Where a Member State 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.

6. Where the granting of rights of use for radio spectrum needs to be limited, Member States shall grant such rights on the basis of selection criteria and a selection procedure which are objective, transparent, non-discriminatory and proportionate. Any such selection criteria shall give due weight to the achievement of the objectives and requirements of Articles 3, 4, 28 and 45.

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7. Where competitive or comparative selection procedures are to be used, Member States may extend the maximum period of six weeks referred to in Article 48(6) for as long as necessary to ensure that such procedures are fair, reasonable, open and transparent to all interested parties, but by no longer than eight months, subject to any specific timetable established pursuant to Article 53.

Those time limits shall be without prejudice to any applicable international agreements relating to the use of radio spectrum and satellite coordination.

8. This Article is without prejudice to the transfer of rights of use for radio spectrum in accordance with Article 51.

*CHAPTER IV****Deployment and use of wireless network equipment****Article 56***Access to radio local area networks**

1. Competent authorities shall allow the provision of access through RLANs to a public electronic communications network, as well as the 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 46(1).

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 12, to obligations regarding end-users rights pursuant to Title II of Part III, or to obligations to interconnect their networks pursuant to Article 61(1).

2. Article 12 of Directive 2000/31/EC shall apply.

3. Competent authorities shall not prevent providers of public electronic communications networks or publicly available electronic communications services from allowing access to their networks to the public, through RLANs, which may be located at an end-user's premises, subject to compliance with the applicable general authorisation conditions and the prior informed agreement of the end-user.

4. In accordance in particular with Article 3(1) of Regulation (EU) 2015/2120, competent authorities shall ensure that providers of public electronic communications networks or publicly available electronic communications services do not unilaterally restrict or prevent end-users from:

(a) accessing RLANs of their choice provided by third parties; or

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(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.

5. Competent authorities shall not limit or prevent end-users from allowing 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.

6. Competent authorities shall not unduly restrict the provision of access to RLANs to the public:

(a) by public sector bodies or in public spaces close to premises occupied by such public sector bodies, when that provision is ancillary to the public services provided on those premises;

(b) 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 57***Deployment and operation of small-area wireless access points**

1. Competent authorities shall not unduly restrict the deployment of small-area wireless access points. Member States shall seek to ensure that any rules governing the deployment of small-area wireless access points are nationally consistent. Such rules shall be published in advance of their application.

In particular, competent authorities shall not subject the deployment of small-area wireless access points complying with the characteristics laid down pursuant to paragraph 2 to any individual town planning permit or other individual prior permits.

By way of derogation from the second subparagraph of this paragraph, competent authorities may require permits for 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. Article 7 of Directive 2014/61/EU shall apply to the granting of those permits.

2. 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.

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Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 118(4).

The first such implementing act shall be adopted by 30 June 2020.

3. 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.

4. Member States shall, by applying, where relevant, the procedures adopted in accordance with Directive 2014/61/EU, ensure that operators 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. Public authorities shall meet all reasonable requests for access on fair, reasonable, transparent and non-discriminatory terms and conditions, which shall be made public at a single information point.

5. 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 16.

*Article 58***Technical regulations on electromagnetic fields**

The procedures laid down in Directive (EU) 2015/1535 shall apply with respect to any draft measure by a Member State that would impose on the deployment of small-area wireless access points different requirements with respect to electromagnetic fields than those provided for in Recommendation 1999/519/EC.

TITLE II

ACCESS

CHAPTER I

*General provisions, access principles**Article 59***General framework for access and interconnection**

1. Member States shall ensure that there are no restrictions which prevent undertakings in the same Member State or in different Member States from negotiating between themselves agreements on technical and commercial arrangements for access or interconnection, in accordance with Union law. The undertaking requesting access or interconnection does 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.

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2. Without prejudice to Article 114, Member States shall not maintain legal or administrative measures which require undertakings, when granting access or interconnection, 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 Annex I.

*Article 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 15, 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 61, 62 and 68.

2. Without prejudice to Article 21, Member States shall require that undertakings which acquire information from another undertaking before, during or after the process of negotiating access or interconnection arrangements 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. Member States may provide for negotiations to be conducted through neutral intermediaries when conditions of competition so require.

*CHAPTER II**Access and interconnection**Article 61***Powers and responsibilities of the national regulatory and other competent authorities with regard to access and interconnection****▼C1**

1. National regulatory authorities or, in the case of points (b) and (c) of the first subparagraph of paragraph 2 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 Directive, adequate access and interconnection, and the interoperability of services, exercising their responsibility in a way that promotes efficiency, sustainable competition, the deployment of very high capacity networks, efficient investment and innovation, and gives the maximum benefit to end-users.

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They shall provide guidance and make publicly available the procedures applicable to gain access and interconnection to ensure that small and medium-sized enterprises and operators with a limited geographical reach can benefit from the obligations imposed.

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2. In particular, without prejudice to measures that may be taken regarding undertakings designated as having significant market power in accordance with Article 68, 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:

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- (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 II on fair, reasonable and non-discriminatory terms.

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

- (i) 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 39(1) or of any other relevant European or international standards;

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- (ii) where the Commission, after consulting BEREC 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 point (ii) of the second subparagraph shall be adopted in accordance with the examination procedure referred to in Article 118(4).

3. In particular, and without prejudice to paragraphs 1 and 2, national regulatory authorities may impose obligations, upon reasonable request, 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 apportioning the costs of access, which, where appropriate, are adjusted to take into account risk factors.

Where a national regulatory authority concludes, having regard, where applicable, to the obligations resulting from any relevant market analysis, that the obligations imposed in accordance with the first subparagraph do 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 extend the imposition of such access obligations, on fair and reasonable terms and conditions, beyond the first concentration or distribution point, to a point that it determines to be the closest to end-users, capable of hosting a sufficient number of end-user connections to be commercially viable for efficient access seekers. In determining the extent of the extension beyond the first concentration or distribution point, the national regulatory authority shall take utmost account of relevant BEREC guidelines. If justified on technical or economic grounds, national regulatory authorities may impose active or virtual access obligations.

National regulatory authorities shall not impose obligations in accordance with the second subparagraph on providers of electronic communications networks where they determine that:

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- (a) the provider has the characteristics listed in Article 80(1) and makes available a viable and similar alternative means of reaching end-users by providing access to a very high capacity 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 very high capacity network; or
- (b) the imposition of obligations would compromise the economic or financial viability of a new network deployment, in particular by small local projects.

By way of derogation from point (a) of the third subparagraph, national regulatory authorities may impose obligations on providers of electronic communications networks fulfilling the criteria laid down in that point where the network concerned is publicly funded.

By 21 December 2020, BEREC shall publish guidelines to foster a consistent application of this paragraph, by setting out the relevant criteria for determining:

- (a) the first concentration or distribution point;
- (b) the point, beyond the first concentration or distribution point, capable of hosting a sufficient number of end-user connections to enable an efficient undertaking to overcome the significant replicability barriers identified;
- (c) which network deployments can be considered to be new;
- (d) which projects can be considered to be small; and
- (e) which economic or physical barriers to replication are high and non-transitory.

4. Without prejudice to paragraphs 1 and 2, Member States shall ensure that competent authorities 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. Competent 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.

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Competent 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, competent authorities may, inter alia, impose on the beneficiary of the sharing or access obligation, the obligation to share radio spectrum with the infrastructure host in the relevant area.

5. Obligations and conditions imposed in accordance with paragraphs 1 to 4 of this Article shall be objective, transparent, proportionate and non-discriminatory, they shall be implemented in accordance with the procedures referred to in Articles 23, 32 and 33. 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 23, 32 and 33.

6. For the purpose of paragraphs 1 and 2 of this Article, Member States shall ensure that the national regulatory authority is empowered to intervene on its own initiative where justified in order to secure the policy objectives of Article 3, in accordance with this Directive and, in particular, with the procedures referred to in Articles 23 and 32.

7. By 21 June 2020 in order to contribute to a consistent definition of the location of network termination points by national regulatory authorities, BEREC shall, after consulting stakeholders and in close cooperation with the Commission, adopt guidelines on common approaches to the identification of the network termination point in different network topologies. National regulatory authorities shall take utmost account of those guidelines when defining the location of network termination points.

*Article 62***Conditional access systems and other facilities**

1. Member States shall ensure that the conditions laid down in Part I of Annex II 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.

2. Where, as a result of a market analysis carried out in accordance with Article 67(1), a national regulatory authority finds that one or more undertakings do not have significant market power on the relevant market, it may amend or withdraw the conditions with respect to those undertakings, in accordance with the procedures referred to in Articles 23 and 32, only to the extent that:

- (a) accessibility for end-users to radio and television broadcasts and broadcasting channels and services specified in accordance with Article 114 would not be adversely affected by such amendment or withdrawal; and
- (b) the prospects for effective competition in the following markets would not be adversely affected by such amendment or withdrawal:
 - (i) retail digital television and radio broadcasting services; and
 - (ii) conditional access systems and other associated facilities.

An appropriate notice period shall be given to parties affected by such amendment or withdrawal of conditions.

3. Conditions applied in accordance with this Article are 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.

4. Notwithstanding paragraph 1 of this Article, Member States may allow their national regulatory authority, as soon as possible after 20 December 2018 and periodically thereafter, to review the conditions applied in accordance with this Article, by undertaking a market analysis in accordance with Article 67(1) to determine whether to maintain, amend or withdraw the conditions applied.

*CHAPTER III****Market analysis and significant market power****Article 63***Undertakings with significant market power**

1. Where this Directive requires national regulatory authorities to determine whether undertakings have significant market power in accordance with the procedure referred to in Article 67, paragraph 2 of this Article shall apply.

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2. An undertaking shall be deemed to have significant market power if, 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.

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 the utmost account the guidelines on market analysis and the assessment of significant market power published by the Commission pursuant to Article 64.

3. 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 69, 70, 71 and 74.

*Article 64***Procedure for the identification and definition of markets**

1. After public consultation including with national regulatory authorities and taking the utmost account of the opinion of BEREC, the Commission shall adopt a Recommendation on Relevant Product and Service Markets ('the Recommendation'). 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 Directive, without prejudice to markets that may be defined in specific cases under competition law. The Commission shall define markets in accordance with the principles of competition law.

The Commission shall include product and service markets in the Recommendation where, after observing overall trends in the Union, it finds that each of the three criteria listed in Article 67(1) is met.

The Commission shall review the Recommendation by 21 December 2020 and regularly thereafter.

2. 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 listed in Article 67(1).

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3. National regulatory authorities shall, taking the utmost account of the Recommendation and the SMP guidelines, define relevant markets appropriate to national circumstances, in particular relevant geographic markets within their territory by taking into account, inter alia, the degree of infrastructure competition in those areas, in accordance with the principles of competition law. National regulatory authorities shall, where relevant, also take into account the results of the geographical survey conducted in accordance with Article 22(1). They shall follow the procedures referred to in Articles 23 and 32 before defining the markets that differ from those identified in the Recommendation.

*Article 65***Procedure for the identification of transnational markets**

1. If 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 and taking utmost account of the Recommendation and SMP guidelines adopted in accordance with Article 64.

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 67(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 Articles 32 and 33.

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 66***Procedure for the identification of transnational demand**

1. BEREC shall conduct an analysis of transnational end-user demand for products and services that are provided within the Union in one or more of the markets listed in the Recommendation, if 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 if 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 65(1) and to any findings of national or sub-national geographical markets by national regulatory authorities in accordance with Article 64(3).

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That analysis of transnational end-user demand may include products and services that are supplied within product or service markets that have been defined in different ways by one or more national regulatory authorities when taking into account national circumstances, provided that those products and services are substitutable to those supplied in one of the markets listed in the Recommendation.

2. If BEREC concludes that a transnational end-user demand exists, is significant and is not sufficiently met by supply provided on a commercial or regulated basis, it shall, after consulting stakeholders and in close cooperation with the Commission, issue guidelines on common approaches for national regulatory authorities to meet the identified transnational demand, including, where appropriate, when they impose remedies in accordance with Article 68. National regulatory authorities shall take into utmost account those guidelines when performing their regulatory tasks within their jurisdiction. Those guidelines may provide the basis for interoperability of wholesale access products across the Union and may include guidance for the harmonisation of technical specifications of wholesale access products capable of meeting such identified transnational demand.

*Article 67***Market analysis procedure**

1. National regulatory authorities shall determine whether a relevant market defined in accordance with Article 64(3) is such as to justify the imposition of the regulatory obligations set out in this Directive. Member States shall ensure that an analysis is carried out, where appropriate, in collaboration with the national competition authorities. National regulatory authorities shall take utmost account of the SMP guidelines and shall follow the procedures referred to in Articles 23 and 32 when conducting such analysis.

A market may be considered to justify the imposition of regulatory obligations set out in this Directive if all of 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).

Where a national regulatory authority conducts an analysis of a market that is included in the Recommendation, it shall consider that points (a), (b) and (c) of the second subparagraph have been met, unless the national regulatory authority determines that one or more of such criteria is not met in the specific national circumstances.

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2. Where a national regulatory authority conducts the analysis required by paragraph 1, it shall consider developments from a forward-looking perspective in the absence of regulation imposed on the basis of this Article in that relevant market, and taking into account all of the following:

- (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 44, 60 and 61;
- (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 or maintain any specific regulatory obligations in accordance with Article 68. Where there already are sector specific regulatory obligations imposed in accordance with Article 68, it shall withdraw such obligations placed on undertakings in that relevant market.

National regulatory authorities shall ensure that parties affected by such a withdrawal of obligations receive an appropriate notice period, defined by balancing 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.

4. 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 63. The national regulatory authority shall impose on such undertakings appropriate specific regulatory obligations in accordance with Article 68 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.

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5. Measures taken in accordance with paragraphs 3 and 4 of this Article shall be subject to the procedures referred to in Articles 23 and 32. National regulatory authorities shall carry out an analysis of the relevant market and notify the corresponding draft measure in accordance with Article 32:

- (a) 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; that five-year period may, on an exceptional basis, be extended for up to one year, where the national regulatory authority has notified a reasoned proposal for an extension to the Commission no later than four months before the expiry of the five-year period, and the Commission has not objected within one month of the notified extension;
- (b) within three years from the adoption of a revised Recommendation on relevant markets, for markets not previously notified to the Commission; or
- (c) within three years from their accession, for Member States which have newly joined the Union.

6. Where a national regulatory authority considers that it may not complete or has not completed its analysis of a relevant market identified in the Recommendation within the time limit laid down in paragraph 5 of this Article, BEREC shall, upon request, provide assistance to the national regulatory authority concerned in completing the analysis of the specific market and the specific obligations to be imposed. With this assistance, the national regulatory authority concerned shall, within six months of the limit laid down in paragraph 5 of this Article, notify the draft measure to the Commission in accordance with Article 32.

*CHAPTER IV**Access remedies imposed on undertakings with significant market power**Article 68***Imposition, amendment or withdrawal of obligations**

1. Member States shall ensure that national regulatory authorities are empowered to impose the obligations set out in Articles 69 to 74 and Articles 76 to 81.

2. 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 67, national regulatory authorities shall, as appropriate, impose any of the obligations set out in Articles 69 to 74 and Articles 76 and 80. In accordance with the principle of proportionality, a national regulatory authority shall choose the least intrusive way of addressing the problems identified in the market analysis.

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3. National regulatory authorities shall impose the obligations set out in Articles 69 to 74 and Articles 76 and 80 only on undertakings that have been designated as having significant market power in accordance with paragraph 2 of this Article, without prejudice to:

- (a) Articles 61 and 62;
- (b) Articles 44 and 17 of this Directive, Condition 7 in Part D of Annex I as applied by virtue of Article 13(1) of this Directive, Articles 97 and 106 of this Directive and the relevant provisions of Directive 2002/58/EC containing obligations on undertakings other than those designated as having significant market power; or
- (c) the need to comply with international commitments.

In exceptional circumstances, where a national regulatory authority intends to impose on undertakings designated as having significant market power obligations for access or interconnection other than those set out in Articles 69 to 74 and Articles 76 and 80, it shall submit a request to the Commission.

The Commission shall, taking utmost account of the opinion of BEREC, adopt decisions by means of implementing acts, authorising or preventing the national regulatory authority from taking such measures.

Those implementing acts shall be adopted in accordance with the advisory procedure referred to in Article 118(3).

4. 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 66;
- (b) proportionate, having regard, where possible, to the costs and benefits;
- (c) justified in light of the objectives laid down in Article 3; and
- (d) imposed following consultation in accordance with Articles 23 and 32.

5. In relation to the need to comply with international commitments referred to in paragraph 3 of this Article, 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 32.

6. National regulatory authorities shall consider the impact of new market developments, such as in relation to commercial agreements, including co-investment agreements, influencing competitive dynamics.

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If those developments are not sufficiently important to require a new market analysis in accordance with Article 67, 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 23 and 32.

*Article 69***Obligation of transparency**

1. National regulatory authorities may, in accordance with Article 68, impose obligations of transparency in relation to interconnection or access, requiring undertakings to make public specific information, such as accounting information, prices, technical specifications, network characteristics and expected developments thereof, as well as terms and conditions for supply and use, including any conditions altering access to or use of services and applications, in particular with regard to migration from legacy infrastructure, where such conditions are allowed by Member States in accordance with Union law.

2. In particular, where an undertaking has obligations of non-discrimination, national regulatory authorities may require that undertaking to publish a reference offer, which shall be sufficiently unbundled to ensure that undertakings are not required to pay for facilities which are not necessary for the service requested. That offer shall contain a description of the relevant offerings broken down into components according to market needs, and the associated terms and conditions, including prices. The national regulatory authority may, inter alia, impose changes to reference offers to give effect to obligations imposed under this Directive.

3. National regulatory authorities may specify the precise information to be made available, the level of detail required and the manner of publication.

4. By 21 December 2019, in order to contribute to the consistent application of transparency obligations, BEREC shall, after consulting stakeholders and in close cooperation with the Commission, issue guidelines on the minimum criteria for a reference offer and shall review them where necessary in order to adapt them to technological and market developments. In providing such minimum criteria, BEREC shall pursue the objectives in Article 3, and shall have regard to the needs of the beneficiaries of access obligations and of end-users that are active in more than one Member State, as well as to any BEREC guidelines identifying transnational demand in accordance with Article 66 and to any related decision of the Commission.

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Notwithstanding paragraph 3 of this Article, where an undertaking has obligations under Article 72 or 73 concerning wholesale access to network infrastructure, national regulatory authorities shall ensure the publication of a reference offer taking utmost account of the BEREC guidelines on the minimum criteria for a reference offer, shall ensure that key performance indicators are specified, where relevant, as well as corresponding service levels, and closely monitor and ensure compliance with them. In addition, national regulatory authorities may, where necessary, predetermine the associated financial penalties in accordance with Union and national law.

*Article 70***Obligations of non-discrimination**

1. A national regulatory authority may, in accordance with Article 68, impose obligations of non-discrimination, in relation to interconnection or access.

2. Obligations of non-discrimination shall ensure, in particular, that the undertaking applies equivalent conditions in equivalent circumstances to other providers of equivalent services, and provides services and information to others under the same conditions and of the same quality as it provides for its own services, or those of its subsidiaries or partners. National regulatory authorities may impose on that undertaking obligations to supply access products and services to all undertakings, including to itself, on the same timescales, terms and conditions, including those relating to price and service levels, and by means of the same systems and processes, in order to ensure equivalence of access.

*Article 71***Obligation of accounting separation**

1. A national regulatory authority may, in accordance with Article 68, impose obligations for accounting separation in relation to specified activities related to interconnection or access.

In particular, a national regulatory authority may require a vertically integrated undertaking to make transparent its wholesale prices and its internal transfer prices, inter alia to ensure compliance where there is an obligation of non-discrimination under Article 70 or, where necessary, to prevent unfair cross-subsidy. National regulatory authorities may specify the format and accounting methodology to be used.

2. Without prejudice to Article 20, to facilitate the verification of compliance with obligations of transparency and non-discrimination, national regulatory authorities shall have the power to require that accounting records, including data on revenues received from third parties, are provided on request. National regulatory authorities may publish information that would contribute to an open and competitive market, while complying with Union and national rules on commercial confidentiality.

▼B*Article 72***Access to civil engineering**

1. A national regulatory authority may, in accordance with Article 68, impose obligations on undertakings to meet reasonable requests for access to, and use of, 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 73***Obligations of access to, and use of, specific network elements and associated facilities**

1. National regulatory authorities may, in accordance with Article 68, impose obligations on undertakings to meet reasonable requests for access to, and use of, specific network elements and associated facilities, 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;

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- (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 may 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 Article 61, 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, very high capacity 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;

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- (g) where appropriate, any relevant intellectual property rights;

- (h) the provision of pan-European services.

Where a national regulatory authority considers, in accordance with Article 68, imposing obligations on the basis of Articles 72 or of this Article, it shall examine whether the imposition of obligations in accordance with Article 72 alone would be a proportionate means by which to promote competition and the end-user's interest.

3. When imposing obligations on an undertaking to provide access in accordance with this Article, national regulatory authorities may 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 39.

*Article 74***Price control and cost accounting obligations**

1. A national regulatory authority may, in accordance with Article 68, 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 next-generation networks, and in particular of very high capacity networks. In particular, to encourage investments by the undertaking, including in next-generation networks, national regulatory authorities shall take into account the investment made by the undertaking. 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 Articles 69 to 73, including, in particular, any economic replicability test imposed in accordance with Article 70, ensures effective and non-discriminatory access.

When 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.

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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 75***Termination rates**

1. By 31 December 2020, the Commission shall, taking utmost account of the opinion of BEREC, adopt a delegated act in accordance with Article 117 supplementing this Directive 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.

To that end, the Commission shall:

- (a) comply with the principles, criteria and parameters provided in Annex III;
- (b) when setting the Union-wide voice termination rates for the first time, take into account the weighted average of efficient costs in fixed and mobile networks established in accordance with the principles provided in Annex III, applied across the Union; the Union-wide voice termination rates in the first delegated act shall not be higher than the highest rate among the rates that were in force six months before the adoption of that delegated act in all Member States, after any necessary adjustment for exceptional national circumstances;

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- (c) take into account the total number of end-users in each Member State, in order to ensure a proper weighting of the maximum termination rates, as well as national circumstances which result in significant differences between Member States when determining the maximum termination rates in the Union;
- (d) take into account market information provided by BEREC, national regulatory authorities or, directly, by undertakings providing electronic communications networks and services; and
- (e) consider the need to allow for a transitional period of no longer than 12 months in order to allow adjustments in Member States where this is necessary on the basis of rates previously imposed.

2. Taking utmost account of the opinion of BEREC, the Commission shall review the delegated act adopted pursuant to this Article every five years and shall consider on each such occasion, by applying the criteria listed in Article 67(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 67, to assess whether the imposition of regulatory obligations is necessary. If 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 23, 32 and 33.

3. 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. National regulatory authorities shall annually report to the Commission and to BEREC with regard to the application of this Article.

*Article 76***Regulatory treatment of new very high capacity network elements**

1. Undertakings which have been designated as having significant market power in one or several relevant markets in accordance with Article 67 may offer commitments, in accordance with the procedure set out in Article 79 and subject to the second subparagraph of this paragraph, to open the deployment of a new very high capacity network that consists of optical fibre elements up to the end-user premises or base station to co-investment, for example by offering co-ownership or long-term risk sharing through co-financing or through purchase agreements giving rise to specific rights of a structural character by other providers of electronic communications networks or services.

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When the national regulatory authority assesses those commitments, it shall determine, in particular, whether the offer to co-invest complies with all of the following conditions:

- (a) it is open at any moment during the lifetime of the network to any provider of electronic communications networks or services;
- (b) it would allow other co-investors which are providers of electronic communications networks or services to compete effectively and sustainably in the long term in downstream markets in which the undertaking designated as having significant market power is active, on terms which include:
 - (i) fair, reasonable and non-discriminatory terms allowing access to the full capacity of the network to the extent that it is subject to co-investment;
 - (ii) flexibility in terms of the value and timing of the participation of each co-investor;
 - (iii) the possibility to increase such participation in the future; and
 - (iv) reciprocal rights awarded by the co-investors after the deployment of the co-invested infrastructure;
- (c) it is made public by the undertaking in a timely manner and, if the undertaking does not have the characteristics listed in Article 80(1), at least six months before the start of the deployment of the new network; that period may be prolonged based on national circumstances;
- (d) access seekers not participating in the co-investment can benefit from the outset from the same quality, speed, conditions and end-user reach as were available before the deployment, accompanied by a mechanism of adaptation over time confirmed by the national regulatory authority in light of developments on the related retail markets, that maintains the incentives to participate in the co-investment; such mechanism shall ensure that access seekers have access to the very high capacity elements of the network at a time, and on the basis of transparent and non-discriminatory terms, which reflect appropriately the degrees of risk incurred by the respective co-investors at different stages of the deployment and take into account the competitive situation in retail markets;
- (e) it complies at a minimum with the criteria set out in Annex IV and is made in good faith.

2. If the national regulatory authority concludes, taking into account the results of the market test conducted in accordance with Article 79(2), that the co-investment commitment offered complies with the conditions set out in paragraph 1 of this Article, it shall make that commitment binding pursuant to Article 79(3), and shall not impose any additional obligations pursuant to Article 68 as regards the elements of the new very high capacity network that are subject to the commitments, if at least one potential co-investor has entered into a co-investment agreement with the undertaking designated as having significant market power.

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The first subparagraph shall be without prejudice to the regulatory treatment of circumstances that do not comply with the conditions set out in paragraph 1 of this Article, taking into account the results of any market test conducted in accordance with Article 79(2), but that have an impact on competition and are taken into account for the purposes of Articles 67 and 68.

By way of derogation from the first subparagraph of this paragraph, a national regulatory authority may, in duly justified circumstances, impose, maintain or adapt remedies in accordance with Articles 68 to 74 as regards new very high capacity networks in order to address significant competition problems on specific markets, where the national regulatory authority establishes that, given the specific characteristics of these markets, those competition problems would not otherwise be addressed.

3. National regulatory authorities shall, on an ongoing basis, monitor compliance with the conditions set out in paragraph 1 and may require the undertaking designated as having significant market power to provide it with annual compliance statements.

This Article shall be without prejudice to the power of a national regulatory authority to take decisions pursuant to Article 26(1) in the event of a dispute arising between undertakings in connection with a co-investment agreement considered by it to comply with the conditions set out in paragraph 1 of this Article.

4. BEREC, after consulting stakeholders and in close cooperation with the Commission, shall publish guidelines to foster the consistent application by national regulatory authorities of the conditions set out in paragraph 1, and the criteria set out in Annex IV.

*Article 77***Functional separation**

1. Where the national regulatory authority concludes that the appropriate obligations imposed under Articles 69 to 74 have failed to achieve effective competition and that there are important and persisting competition problems or market failures identified in relation to the wholesale provision of certain access product markets, it may, on an exceptional basis, in accordance with the second subparagraph of Article 68(3), impose an obligation on vertically integrated undertakings to place activities related to the wholesale provision of relevant access products in a business entity operating independently.

That business entity shall supply access products and services to all undertakings, including to other business entities within the parent company, on the same timescales, terms and conditions, including those relating to price and service levels, and by means of the same systems and processes.

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2. When a national regulatory authority intends to impose an obligation of functional separation, it shall submit a request to the Commission that includes:

- (a) evidence justifying the conclusions of the national regulatory authority as referred to in paragraph 1;
- (b) a reasoned assessment concluding that there is no or little prospect of effective and sustainable infrastructure-based competition within a reasonable time-frame;
- (c) an analysis of the expected impact on the national regulatory authority, on the undertaking, in particular on the workforce of the separated undertaking, and on the electronic communications sector as a whole, and on incentives to invest therein, in particular with regard to the need to ensure social and territorial cohesion, and on other stakeholders including, in particular, the expected impact on competition and any potential resulting effects on consumers;
- (d) an analysis of the reasons justifying that this obligation would be the most efficient means to enforce remedies aimed at addressing the competition problems or the markets failures identified.

3. The draft measure shall include the following elements:

- (a) the precise nature and level of separation, specifying in particular the legal status of the separate business entity;
- (b) an identification of the assets of the separate business entity, and the products or services to be supplied by that entity;
- (c) the governance arrangements to ensure the independence of the staff employed by the separate business entity, and the corresponding incentive structure;
- (d) rules for ensuring compliance with the obligations;
- (e) rules for ensuring transparency of operational procedures, in particular towards other stakeholders;
- (f) a monitoring programme to ensure compliance, including the publication of an annual report.

Following the Commission's decision taken in accordance with Article 68(3) on that draft measure, the national regulatory authority shall conduct a coordinated analysis of the different markets related to the access network in accordance with the procedure set out in Article 67. On the basis of that analysis, the national regulatory authority shall impose, maintain, amend or withdraw obligations, in accordance with the procedures set out in Articles 23 and 32.

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4. An undertaking on which functional separation has been imposed may be subject to any of the obligations referred to in Articles 69 to 74 in any specific market where it has been designated as having significant market power in accordance with Article 67, or any other obligations authorised by the Commission pursuant to Article 68(3).

*Article 78***Voluntary separation by a vertically integrated undertaking**

1. Undertakings which have been designated as having significant market power in one or several relevant markets in accordance with Article 67 shall inform the national regulatory authority at least three months before any intended 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 in order to provide all retail providers, including its own retail divisions, with fully equivalent access products.

Those undertakings shall also inform the national regulatory authority of any change of that intent, as well as the final outcome of the process of separation.

Such undertakings may also offer commitments regarding access conditions that are to apply to their network during an implementation period after the proposed form of separation is implemented, with a view to ensuring effective and non-discriminatory access by third parties. The offer of commitments shall include sufficient details, including in terms of timing of implementation and duration, in order to allow the national regulatory authority to conduct its tasks in accordance with paragraph 2 of this Article. Such commitments may extend beyond the maximum period for market reviews set out in Article 67(5).

2. The national regulatory authority shall assess the effect of the intended transaction, together with the commitments offered, where applicable, on existing regulatory obligations under this Directive.

For that purpose, the national regulatory authority shall conduct an analysis of the different markets related to the access network in accordance with the procedure set out in Article 67.

The national regulatory authority shall take into account any commitments offered by the undertaking, having regard in particular to the objectives set out in Article 3. In so doing, the national regulatory authority shall consult third parties in accordance with Article 23, and shall address, in particular, those third parties which are directly affected by the intended transaction.

On the basis of its analysis, the national regulatory authority shall impose, maintain, amend or withdraw obligations, in accordance with the procedures set out in Articles 23 and 32, applying, if appropriate, Article 80. In its decision, the national regulatory authority may make the commitments binding, wholly or in part. By way of derogation from Article 67(5), the national regulatory authority may make the commitments binding, wholly or in part, for the entire period for which they are offered.

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3. Without prejudice to Article 80, the legally or operationally separate business entity that has been designated as having significant market power in any specific market in accordance with Article 67 may be subject, as appropriate, to any of the obligations referred to in Articles 69 to 74 or any other obligations authorised by the Commission pursuant to Article 68(3), where any commitments offered are insufficient to meet the objectives set out in Article 3.

4. The national regulatory authority shall monitor the implementation of the commitments offered by the undertakings that it has made binding in accordance with paragraph 2 and shall consider their extension when the period for which they are initially offered has expired.

*Article 79***Commitments procedure**

1. 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 68;
- (b) co-investment in very high capacity networks pursuant to Article 76;
or
- (c) effective and non-discriminatory access by third parties pursuant to Article 78, both during an implementation period of voluntary separation by a vertically integrated undertaking and after the proposed form of separation is implemented.

The offer for commitments shall be sufficiently detailed including as to the timing and scope of their implementation and their duration, 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 in Article 67(5).

2. 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 68, 76 or 78 and may propose changes.

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As regards the commitments offered under this Article, the national regulatory authority shall, when assessing obligations pursuant to Article 68(4), 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, including to very high capacity networks, before the launch of related retail services; and
- (d) the overall adequacy of the commitments offered to enable sustainable competition on downstream markets and to facilitate cooperative deployment and take-up of very high capacity 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 whether the commitments offered comply with the objectives, criteria and procedures set out in this Article and, as applicable, in Article 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 Article 68, 76 or 78.

3. Without prejudice to first subparagraph of Article 76(2), the national regulatory authority may issue a decision to make the commitments binding, wholly or in part.

By way of derogation from Article 67(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 pursuant to first subparagraph of Article 76(2), it shall make them binding for a period of minimum seven years.

Subject to Article 76, this Article is without prejudice to the application of the market analysis procedure pursuant to Article 67 and the imposition of obligations pursuant to Article 68.

Where the national regulatory authority makes commitments binding pursuant to this Article, it shall assess under Article 68 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 69 to 74. 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.

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4. 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 68 and shall consider the extension of the period for which they have been made binding when the initial period expires. If 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 29. 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).

*Article 80***Wholesale-only undertakings**

1. A national regulatory authority that designates an undertaking which is absent from any retail markets for electronic communications services as having significant market power in one or several wholesale markets in accordance with Article 67 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 Union;
- (b) the undertaking is not bound to deal with a single and separate undertaking operating downstream that is active in any retail market for electronic communications services provided to end-users, because of an exclusive agreement, or an agreement which de facto amounts to an exclusive agreement.

2. If 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 Articles 70 and 73 or relative to fair and reasonable pricing if 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 67 to 74. The undertakings shall, without undue delay, inform the national regulatory authority of any change of circumstance relevant to points (a) and (b) of paragraph 1 of this Article.

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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 provided in Article 69, 71, 72 or 74, or the amendment of the obligations imposed in accordance with paragraph 2 of this Article.

5. The imposition of obligations and their review in accordance with this Article shall be implemented in accordance with the procedures referred to in Articles 23, 32 and 33.

*Article 81***Migration from legacy infrastructure**

1. Undertakings which have been designated as having significant market power in one or several relevant markets in accordance with Article 67 shall notify the national regulatory authority in advance and in a timely manner when they plan to decommission or replace with a new infrastructure parts of the network, including legacy infrastructure necessary to operate a copper network, which are subject to obligations pursuant to Articles 68 to 80.

2. The national regulatory authority shall ensure that the decommissioning or replacement process includes a transparent timetable and conditions, including an appropriate notice period for transition, and establishes the availability of alternative products of at least comparable quality providing access to the upgraded network infrastructure substituting the replaced elements if necessary to safeguard competition and the rights of end-users.

With regard to assets which are proposed for decommissioning or replacement, the national regulatory authority may withdraw the obligations after having ascertained that the access provider:

- (a) has established the appropriate conditions for migration, including making available an alternative access product of at least comparable quality as was available using the legacy infrastructure enabling the access seekers to reach the same end-users; and
- (b) has complied with the conditions and process notified to the national regulatory authority in accordance with this Article.

Such withdrawal shall be implemented in accordance with the procedures referred to in Articles 23, 32 and 33.

3. This Article shall be without prejudice to the availability of regulated products imposed by the national regulatory authority on the upgraded network infrastructure in accordance with the procedures set out in Articles 67 and 68.

*Article 82***BEREC guidelines on very high capacity networks**

By 21 December 2020, BEREC shall, after consulting stakeholders and in close cooperation with the Commission, issue guidelines on the criteria that a network is to fulfil in order to be considered a very high capacity network, in particular in terms of down- and uplink bandwidth, resilience, error-related parameters, and latency and its variation. The national regulatory authorities shall take those guidelines into utmost account. BEREC shall update the guidelines by 31 December 2025, and regularly thereafter.

*CHAPTER V**Regulatory control of retail services**Article 83***Regulatory control of retail services**

1. Member States may ensure that national regulatory authorities impose appropriate regulatory obligations on undertakings identified as having significant market power on a given retail market in accordance with Article 63, where:

- (a) as a result of a market analysis carried out in accordance with Article 67, a national regulatory authority determines that a given retail market identified in accordance with Article 64 is not effectively competitive; and
- (b) the national regulatory authority concludes that obligations imposed under Articles 69 to 74 would not result in the achievement of the objectives set out in Article 3.

2. Obligations imposed under paragraph 1 of this Article shall be based on the nature of the problem identified and be proportionate and justified in light of the objectives laid down in Article 3. The obligations imposed may include requirements that the identified undertakings do not charge excessive prices, inhibit market entry or restrict competition by setting predatory prices, show undue preference to specific end-users or unreasonably bundle services. National regulatory authorities may apply to such undertakings appropriate retail price cap measures, measures to control individual tariffs, or measures to orient tariffs towards costs or prices on comparable markets, in order to protect end-user interests whilst promoting effective competition.

3. National regulatory authorities shall ensure that, where an undertaking is subject to retail tariff regulation or other relevant retail controls, the necessary and appropriate cost-accounting systems are implemented. National regulatory authorities may specify the format and accounting methodology to be used. Compliance with the cost-accounting system shall be verified by a qualified independent body. National regulatory authorities shall ensure that a statement concerning compliance is published annually.

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4. Without prejudice to Articles 85 and 88, national regulatory authorities shall not apply retail control mechanisms under paragraph 1 of this Article to geographical or retail markets where they are satisfied that there is effective competition.

PART III
SERVICES

TITLE I
UNIVERSAL SERVICE OBLIGATIONS

Article 84

Affordable universal service

1. Member States shall ensure that all consumers in their territories have access at an affordable price, in light of specific national conditions, to an available adequate broadband internet access service and to voice communications services at the quality specified in their territories, including the underlying connection, at a fixed location.

2. In addition, Member States may also ensure the affordability of the services referred to in paragraph 1 that are not provided at a fixed location where they consider this to be necessary to ensure consumers' full social and economic participation in society.

3. Each Member State shall, in light of national conditions and the minimum bandwidth enjoyed by the majority of consumers within the territory of that Member State, and taking into account the BEREC report on best practices, define the adequate broadband internet access service for the purposes of paragraph 1 with a view to ensuring the bandwidth necessary for social and economic participation in society. The adequate broadband internet access service shall be capable of delivering the bandwidth necessary for supporting at least the minimum set of services set out in Annex V.

By 21 June 2020, 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, draw up a report on Member States' best practices to support the defining of adequate broadband internet access service pursuant to the first subparagraph. That report shall be updated regularly to reflect technological advances and changes in consumer usage patterns.

4. When a consumer so requests, the connection referred to in paragraph 1 and, where applicable, in paragraph 2 may be limited to support voice communications services.

5. Member States may extend the scope of application of this Article to end-users that are microenterprises and small and medium-sized enterprises and not-for-profit organisations.

*Article 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 84(1) available on the market, 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 84(1) are not affordable, because consumers with a low income or special social needs are prevented from accessing such services, they shall take measures to ensure affordability for such consumers of adequate broadband internet access service and voice communications services at least at a fixed location.

To that end, Member States may ensure that support is provided to such consumers for communication purposes or require providers of such services to offer to those consumers tariff options or packages different from those provided under normal commercial conditions, or both. For that purpose, Member States may require such providers to apply common tariffs, including geographic averaging, throughout the territory.

In exceptional circumstances, in particular where the imposition of obligations under the second subparagraph of this paragraph on all providers would result in a demonstrated excessive administrative or financial burden for providers or the Member State, a Member State may, on an exceptional basis, decide to impose the obligation to offer those specific tariff options or packages only on designated undertakings. Article 86 shall apply to such designations *mutatis mutandis*. Where a Member State designates undertakings, it shall ensure that all consumers with a low-income or special social needs benefit from a choice of undertakings offering tariff options addressing their needs, unless ensuring such choice is impossible or would create an excessive additional organisational or financial burden.

Member States shall ensure that consumers entitled to such tariff options or packages have a right to conclude a contract either with a provider of the services referred to in Article 84(1), or with an undertaking designated in accordance with this paragraph, and that their number remains available to them for an adequate period and unwarranted disconnection of the service is avoided.

3. Member States shall ensure that undertakings which provide tariff options or packages to consumers with a low income or special social needs pursuant to paragraph 2 keep the national regulatory and other competent authorities informed of the details of such offers. National regulatory authorities in coordination with other competent authorities shall ensure that the conditions under which undertakings provide tariff options or packages pursuant to paragraph 2 are fully transparent and are published and applied in accordance with the principle of non-discrimination. National regulatory authorities in coordination with other competent authorities may require such tariff options or packages to be modified or withdrawn.

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4. Member States shall ensure, in light of national conditions, that support is provided, as appropriate, to consumers with disabilities, and that other specific measures are taken, 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.

5. When applying this Article, Member States shall seek to minimise market distortions.

6. Member States may extend the scope of application of this Article to end-users that are microenterprises and small and medium-sized enterprises and not-for-profit organisations.

*Article 86***Availability of universal service**

1. Where a Member State has established, taking into account the results, where available, of the geographical survey conducted in accordance with Article 22(1), and any additional evidence where necessary, that the availability at a fixed location of an adequate broadband internet access service as defined in accordance with Article 84(3) and of voice communications services cannot be ensured under normal commercial circumstances or through other potential public policy tools in its national territory or different parts thereof, it may impose appropriate universal service obligations to meet all reasonable requests by end-users for accessing those services in the relevant parts of its territory.

2. Member States shall determine the most efficient and appropriate approach for ensuring the availability at a fixed location of an adequate broadband internet access service as defined in accordance with Article 84(3) and of voice communications services, whilst respecting the principles of objectivity, transparency, non-discrimination and proportionality. Member States shall seek to minimise market distortions, in particular the provision of services at prices or subject to other terms and conditions which depart from normal commercial conditions, whilst safeguarding the public interest.

3. In particular, where Member States decide to impose obligations to ensure for end-users the availability at a fixed location of an adequate broadband internet access service as defined in accordance with Article 84(3) and of voice communications services, they may designate one or more undertakings to guarantee such availability throughout the national territory. Member States may designate different undertakings or sets of undertakings to provide an adequate broadband internet access service and voice communications services at a fixed location or to cover different parts of the national territory.

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4. When Member States designate undertakings in part or all of the national territory to ensure availability of services in accordance with paragraph 3 of this Article, they shall use an efficient, objective, transparent and non-discriminatory designation mechanism, whereby no undertaking is a priori excluded from being designated. Such designation methods shall ensure that an adequate broadband internet access service and voice communications services at a fixed location are provided in a cost-effective manner and may be used as a means of determining the net cost of the universal service obligations in accordance with Article 89.

5. When an undertaking designated in accordance with paragraph 3 of this Article intends to dispose of a substantial part or all of its local access network assets to a separate legal entity under different ownership, it shall inform the national regulatory or other competent authority in advance and in a timely manner, in order to allow that authority to assess the effect of the intended transaction on the provision at a fixed location of an adequate broadband internet access service as defined in accordance with Article 84(3) and of voice communications services. The national regulatory or other competent authority may impose, amend or withdraw specific obligations in accordance with Article 13(2).

*Article 87***Status of the existing universal service**

Member States may continue to ensure the availability or affordability of other services than adequate broadband internet access service as defined in accordance with Article 84(3) and voice communications services at a fixed location that were in force on 20 December 2018, if the need for such services is established in light of national circumstances. When Member States designate undertakings in part or all of the national territory for the provision of those services, Article 86 shall apply. Financing of those obligations shall comply with Article 90.

Member States shall review the obligations imposed pursuant to this Article by 21 December 2021, and every three years thereafter.

*Article 88***Control of expenditure**

1. Member States shall ensure that, in providing facilities and services additional to those referred to in Article 84, providers of an adequate broadband internet access service and of voice communications services in accordance with Articles 84 to 87 establish terms and conditions in such a way that the end-user is not obliged to pay for facilities or services which are not necessary or not required for the service requested.

2. Member States shall ensure that the providers of an adequate broadband internet access service and of voice communications services referred to in Article 84 that provide services pursuant to Article 85 offer the specific facilities and services set out in Part A of Annex VI as applicable, in order that consumers can monitor and control expenditure. Member States shall ensure that such providers put in place a system to avoid unwarranted disconnection of voice

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communications services or of an adequate broadband internet access service with regard to consumers as referred to in Article 85, including an appropriate mechanism to check continued interest in using the service.

Member States may extend the scope of application of this paragraph to end-users that are microenterprises and small and medium-sized enterprises and not-for-profit organisations.

3. Each Member State shall ensure that the competent authority is able to waive the requirements of paragraph 2 in all or part of its national territory if the competent authority is satisfied that the facility is widely available.

*Article 89***Cost of universal service obligations**

1. Where national regulatory authorities consider that the provision of an adequate broadband internet access service as defined in accordance with Article 84(3) and of voice communications services as set out in Articles 84, 85 and 86 or the continuation of the existing universal service as set out in Article 87 may represent an unfair burden on providers of such services that request compensation, national regulatory authorities shall calculate the net costs of such provision.

For that purpose, national regulatory authorities shall:

(a) calculate the net cost of the universal service obligations, taking into account any market benefit which accrues to a provider of an adequate broadband internet access service as defined in accordance with Article 84(3) and voice communications services as set out in Articles 84, 85 and 86 or the continuation of the existing universal service as set out in Article 87, in accordance with Annex VII; or

(b) make use of the net costs of providing universal service identified by a designation mechanism in accordance with Article 86(4).

2. The accounts and other information serving as the basis for the calculation of the net cost of universal service obligations under point (a) of the second subparagraph of paragraph 1 shall be audited or verified by the national regulatory authority or a body independent of the relevant parties and approved by the national regulatory authority. The results of the cost calculation and the conclusions of the audit shall be publicly available.

*Article 90***Financing of universal service obligations**

1. Where, on the basis of the net cost calculation referred to in Article 89, national regulatory authorities find that a provider is subject to an unfair burden, Member States shall, upon request from the provider concerned, decide to do one or both of the following:

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- (a) introduce a mechanism to compensate that provider for the determined net costs under transparent conditions from public funds;
- (b) share the net cost of universal service obligations between providers of electronic communications networks and services.

2. Where the net cost is shared in accordance with point (b) of paragraph 1 of this Article, Member States shall establish a sharing mechanism administered by the national regulatory authority or a body independent from the beneficiaries under the supervision of the national regulatory authority. Only the net cost, as determined in accordance with Article 89, of the obligations laid down in Articles 84 to 87 may be financed.

The sharing mechanism shall respect the principles of transparency, least market distortion, non-discrimination and proportionality, in accordance with the principles set out in Part B of Annex VII. Member States may choose not to require contributions from undertakings the national turnover of which is less than a set limit.

Any charges related to the sharing of the cost of universal service obligations shall be unbundled and identified separately for each undertaking. Such charges shall not be imposed on, or collected from, undertakings that are not providing services in the territory of the Member State that has established the sharing mechanism.

*Article 91***Transparency**

1. Where the net cost of universal service obligations is to be calculated in accordance with Article 89, national regulatory authorities shall ensure that the principles for net cost calculation, including the details of methodology to be used are publicly available.

Where a mechanism for sharing the net cost of universal service obligations as referred to in Article 90(2) is established, national regulatory authorities shall ensure that the principles for cost sharing and compensation of the net cost are publicly available.

2. Subject to Union and national rules on commercial confidentiality, national regulatory authorities shall publish an annual report providing the details of calculated cost of universal service obligations, identifying the contributions made by all undertakings involved, including any market benefits that may have accrued to the undertakings pursuant to universal service obligations laid down in Articles 84 to 87.

*Article 92***Additional mandatory services**

Member States may decide to make services additional to those included in the universal service obligations referred to in Articles 84 to 87, publicly available on their territories. In such cases, no compensation mechanism involving specific undertakings shall be imposed.



TITLE II
NUMBERING RESOURCES

Article 93

Numbering resources

1. Member States shall ensure that national regulatory or other competent authorities control the granting of rights of use for all national numbering resources and the management of the national numbering plans and that they provide adequate numbering resources for the provision of publicly available electronic communications services. Member States shall ensure that objective, transparent and non-discriminatory procedures for granting rights of use for national numbering resources are established.

2. National regulatory or other competent authorities may 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 94. 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.

By 21 June 2020, in order to contribute to the consistent application of this paragraph, BEREC shall adopt, after consulting stakeholders and in close cooperation with the Commission, guidelines on common criteria for the assessment of the ability to manage numbering resources and of the risk of exhaustion of numbering resources.

3. National regulatory or other competent authorities shall ensure that national numbering plans and procedures are applied 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. In particular, Member States shall ensure that an undertaking to which the right of use for numbering resources has been granted does not discriminate against other providers of electronic communications services as regards the numbering resources used to give access to their services.

4. Each Member State shall ensure that national regulatory or other competent authorities 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) No 531/2012 and Article 97(2) of this Directive. 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.

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National regulatory or other competent authorities shall ensure that the conditions listed in Part E of Annex I 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 Directive. National regulatory or other competent authorities shall also ensure in accordance with Article 94(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.

BEREC shall assist national regulatory or other competent 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 or other competent authorities of compliance with the requirements of this paragraph, BEREC shall establish 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 the relevant information to BEREC. Where numbering resources with a right of extraterritorial use within the Union are not granted by the national regulatory authority, the competent authority responsible for their granting or management shall consult the national regulatory authority.

5. Member States shall ensure that the '00' code is the standard international access code. Special arrangements for the use of number-based interpersonal communications services between locations adjacent to one another across borders between Member States may be established or continued.

Member States may agree to share a common numbering plan for all or specific categories of numbers.

End-users affected by such arrangements or agreements shall be fully informed.

6. Without prejudice to Article 106, Member States shall promote over-the-air provisioning, where technically feasible, to facilitate switching of providers of electronic communications networks or services by end-users, in particular providers and end-users of machine-to-machine services.

7. Member States shall ensure that the national numbering plans, and all subsequent additions or amendments thereto, are published, subject only to limitations imposed on the grounds of national security.

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8. Member States shall support the harmonisation of specific numbers or numbering ranges within the Union where it promotes both the functioning of the internal market and the development of pan-European services. Where necessary to address unmet cross-border or pan-European demand for numbering resources, the Commission shall, taking utmost account of the opinion of BEREC, adopt implementing acts harmonising specific numbers or numbering ranges.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 118(4).

*Article 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 or other competent 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 12, subject to Article 13 and to point (c) of Article 21(1) and to any other rules ensuring the efficient use of those numbering resources in accordance with this Directive.

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 or other competent authorities shall specify whether those rights can be transferred by the holder of the rights, and under which conditions.

Where national regulatory or other competent 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 or other competent 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 or other competent authorities have determined, after consulting interested parties in accordance with Article 23, that rights of use for numbering resources of exceptional economic value are to be granted through competitive or comparative selection procedures, national regulatory or other competent authorities may extend the three-week period referred to in paragraph 3 of this Article by up to a further three weeks.

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5. National regulatory or other competent 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 93(4), national regulatory or other competent 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 or other competent 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 or other competent 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 30, including, in serious cases, by withdrawing the rights of extraterritorial use for the numbering resources granted to the undertaking concerned.

BEREC shall facilitate and coordinate the exchange of information between the competent 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 or other competent authorities grant rights of use for numbering resources to undertakings other than providers of electronic communications networks or services in accordance with Article 93(2).

*Article 95***Fees for rights of use for numbering resources**

Member States may allow national regulatory or other competent authorities to impose fees for the rights of use for numbering resources which reflect the need to ensure the optimal use of those resources. Member States shall ensure that such fees are objectively justified, transparent, non-discriminatory and proportionate in relation to their intended purpose and shall take into account the objectives set out in Article 3.

*Article 96***Missing children and child helpline hotlines**

1. Member States shall ensure that end-users have access free of charge to a service operating a hotline to report cases of missing children. The hotline shall be available on the number '116000'.

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2. Member States shall ensure that end-users with disabilities are able to access services provided under the number ‘116000’ to the greatest extent possible. Measures taken to facilitate access by end-users with disabilities to such services whilst travelling in other Member States shall be based on compliance with relevant standards or specifications laid down in accordance with Article 39.

3. 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.

4. 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 97***Access to numbers and services**

1. Member States shall ensure that, where economically feasible, except where a called end-user has chosen for commercial reasons to limit access by calling parties located in specific geographical areas, national regulatory or other competent authorities take all necessary steps to ensure that end-users are able to:

- (a) access and use services using non-geographic numbers within the Union; and
- (b) access 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).

2. Member States shall ensure that national regulatory or other competent authorities are able to require providers of public electronic communications networks or publicly available electronic communications services to block, on a case-by-case basis, 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.

TITLE III

END-USER RIGHTS*Article 98***Exemption of certain microenterprises**

With the exception of Articles 99 and 100, this Title shall not apply to microenterprises providing number-independent interpersonal communications services unless they also provide other electronic communications services.

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Member States shall ensure that end-users are informed of an exemption under the first paragraph before concluding a contract with a micro-enterprise benefitting from such an exemption.

*Article 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, for reasons related to the end-user's nationality, place of residence or place of establishment, unless such different treatment is objectively justified.

*Article 100***Fundamental rights safeguard**

1. National measures regarding end-users' access to, or use of, services and applications through electronic communications networks shall respect the Charter of Fundamental Rights of the Union (the 'Charter') and general principles of Union law.

2. Any measure regarding end-users' access to, or use of, services and applications through electronic communications networks liable to limit the exercise of the rights or freedoms recognised by the Charter shall be imposed only if it is provided for by law and respects those rights or freedoms, is proportionate, necessary, and genuinely meets general interest objectives recognised by Union law or the need to protect the rights and freedoms of others in line with Article 52(1) of the Charter and with general principles of Union law, including the right to an effective remedy and to a fair trial. Accordingly, such measures shall be taken only with due respect for the principle of the presumption of innocence and the right to privacy. A prior, fair and impartial procedure shall be guaranteed, including the right to be heard of the person or persons concerned, subject to the need for appropriate conditions and procedural arrangements in duly substantiated cases of urgency in accordance with the Charter.

*Article 101***Level of harmonisation**

1. Member States shall not maintain or introduce in their national law end-user protection provisions diverging from Articles 102 to 115, including more, or less, stringent provisions to ensure a different level of protection, unless otherwise provided for in this Title.

2. Until 21 December 2021, Member States may continue to apply more stringent national consumer protection provisions diverging from those laid down in Articles 102 to 115, provided that those provisions were in force on 20 December 2018 and any restrictions to the functioning of the internal market resulting therefrom are proportionate to the objective of consumer protection.

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Member States shall notify the Commission by 21 December 2019 of any national provisions to be applied on the basis of this paragraph.

*Article 102***Information requirements for contracts**

1. Before a consumer is bound by a contract or any corresponding offer, providers of publicly available electronic communications services other than transmission services used for the provision of machine-to-machine services shall provide the information referred to in Articles 5 and 6 of Directive 2011/83/EU, and, in addition, the information listed in Annex VIII of this Directive to the extent that that information relates to a service they provide.

The information shall be provided in a clear and comprehensible manner on a durable medium as defined in point (10) of Article 2 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.

The information shall, upon request, be provided in an accessible format for end-users with disabilities in accordance with Union law harmonising accessibility requirements for products and services.

2. The information referred to in paragraphs 1, 3 and 5 shall also be provided to end-users that are microenterprises or small enterprises or not-for-profit organisations, unless they have explicitly agreed to waive all or parts of those provisions.

3. Providers of publicly available electronic communications services other than transmission services used for the provision of machine-to-machine 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 at least:

- (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;

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- (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 Article 4(1) of Regulation (EU) 2015/2120.

By 21 December 2019, the Commission shall, 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 118(4).

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 the contract shall become effective when the consumer has confirmed his or her agreement after reception of the contract summary.

4. The information referred to in paragraphs 1 and 3 shall become an integral part of the contract and shall not be altered unless the contracting parties expressly agree otherwise.

5. 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 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, as established by competent authorities in coordination, where relevant, with national regulatory authorities, included in their tariff plan, is reached and when a service included in their tariff plan is fully consumed.

6. Member States may maintain or introduce in their national law provisions requiring providers to provide additional information on the consumption level and temporarily prevent further use of the relevant service in excess of a financial or volume limit determined by the competent authority.

7. Member States shall remain free to maintain or introduce in their national law provisions relating to aspects not regulated by this Article, in particular in order to address newly emerging issues.

*Article 103***Transparency, comparison of offers and publication of information**

1. Competent authorities in coordination, where relevant, with national regulatory authorities shall ensure that, where providers of internet access services or publicly available interpersonal communication services make the provision of those services subject to terms and conditions, the information referred to in Annex IX is published in a clear, comprehensive, machine-readable manner and in an accessible format for end-users with disabilities in accordance with Union law harmonising accessibility requirements for products and services, by all such providers, or by the competent authority itself in coordination, where relevant, with the national regulatory authority. Such information shall be updated regularly. Competent authorities in coordination, where relevant, with national regulatory authorities may specify additional requirements regarding the form in which such information is to be published. That information shall, on request, be supplied to the competent authority and, where relevant, to the national regulatory authority before its publication.

2. Competent authorities shall, in coordination, where relevant, with national regulatory authorities, ensure that end-users have access free of charge to at least one independent comparison tool which enables them to compare and evaluate different internet access services and publicly available number-based interpersonal communications services, and, where applicable, publicly available number-independent interpersonal communications services, with regard to:

- (a) prices and tariffs of services provided against recurring or consumption-based direct monetary payments; and
- (b) the quality of service performance, where minimum quality of service is offered or the undertaking is required to publish such information pursuant to Article 104.

3. The comparison tool referred to in paragraph 2 shall:

- (a) be operationally independent from the providers of such services, thereby ensuring that those providers are given equal treatment in search results;
- (b) clearly disclose the owners and operators of the comparison tool;
- (c) set out clear and objective criteria on which the comparison is to be based;
- (d) use plain and unambiguous language;
- (e) provide accurate and up-to-date information and state the time of the last update;

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- (f) be open to any provider of internet access services or publicly available interpersonal communications services making available the relevant information, and include a broad range of offers covering a significant part of the market and, where the information presented is not a complete overview of the market, a clear statement to that effect, before displaying results;
- (g) provide an effective procedure to report incorrect information;
- (h) include the possibility to compare prices, tariffs and quality of service performance between offers available to consumers and, if required by Member States, between those offers and the standard offers publicly available to other end-users.

Comparison tools fulfilling the requirements in points (a) to (h) shall, upon request by the provider of the tool, be certified by competent authorities in coordination, where relevant, with national regulatory authorities.

Third parties shall have a right to use, free of charge and in open data formats, the information published by providers of internet access services or publicly available interpersonal communications services, for the purposes of making available such independent comparison tools.

4. Member States may require that providers of internet access services or publicly available number-based interpersonal communications services, or both, 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. In such a case, that public interest information shall be provided by the relevant public authorities in a standardised format and shall, inter alia, cover the following topics:

- (a) the most common uses of internet access services and publicly available number-based 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; and
- (b) the means of protection against risks to personal security, privacy and personal data when using internet access services and publicly available number-based interpersonal communications services.

*Article 104***Quality of service related to internet access services and publicly available interpersonal communications services**

1. National regulatory authorities in coordination with other competent authorities may require providers of internet access services and of publicly available interpersonal communications services to publish comprehensive, comparable, reliable, user-friendly and up-to-date information for end-users on the quality of their services, to the extent that they control at least some elements of the network either directly or by virtue of a service level agreement to that effect, and on measures taken to ensure equivalence in access for end-users with disabilities. National regulatory authorities in coordination with other competent authorities may also require providers of publicly available interpersonal communication services to inform consumers if the quality of the services they provide depends on any external factors, such as control of signal transmission or network connectivity.

That information shall, on request, be supplied to the national regulatory and, where relevant, to other competent authorities before its publication.

The measures to ensure quality of service shall comply with Regulation (EU) 2015/2120.

2. National regulatory authorities in coordination with other competent authorities shall specify, taking utmost account of BEREC guidelines, the quality of service parameters to be measured, the applicable measurement methods, and the content, form and manner of the information to be published, including possible quality certification mechanisms. Where appropriate, the parameters, definitions and measurement methods set out in Annex X shall be used.

By 21 June 2020, in order to contribute to a consistent application of this paragraph and of Annex X, BEREC shall, after consulting stakeholders and in close cooperation with the Commission, adopt guidelines detailing the relevant quality of service parameters, including parameters relevant for end-users with disabilities, the applicable measurement methods, the content and format of publication of the information, and quality certification mechanisms.

*Article 105***Contract duration and termination**

1. Member States shall ensure that conditions and procedures for contract termination do not act as a disincentive to changing service provider and that 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, do not mandate a commitment period longer than 24 months. Member States may adopt or maintain provisions which mandate shorter maximum contractual commitment periods.

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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 very high capacity 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. Paragraph 1 shall also apply to end-users that are microenterprises, small enterprises or not-for-profit organisations, unless they have explicitly agreed to waive those provisions.

3. 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, Member States shall ensure that, after such prolongation, end-users are entitled to terminate the contract at any time with a maximum one-month notice period, as determined by Member States, 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 end-users, 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 end-users best tariff advice relating to their services. Providers shall provide end-users with best tariff information at least annually.

4. End-users 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 end-user, are of a purely administrative nature and have no negative effect on the end-user, or are directly imposed by Union or national law.

Providers shall notify end-users 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. Member States may extend that period by up to three months. Member States shall ensure that notification is made in a clear and comprehensible manner on a durable medium.

5. 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.

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6. Where an end-user 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 Directive or to other provisions of Union or national law, no compensation shall be due by the end-user other than for retained subsidised terminal equipment.

Where the end-user 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.

Member States may determine other methods to calculate the compensation rate, provided that such methods do not result in a level of compensation exceeding that calculated in accordance with the second subparagraph.

The provider shall lift any condition on the use of that terminal equipment on other networks free of charge at a time specified by Member States and at the latest upon payment of the compensation.

7. As far as transmission services used for machine-to-machine services are concerned, the rights mentioned in paragraphs 4 and 6 shall benefit only end-users that are consumers, microenterprises, small enterprises or not-for-profit organisations.

*Article 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.

National regulatory authorities shall ensure the efficiency and simplicity of the switching process for the end-user.

2. Member States shall ensure that all end-users with numbers from the national numbering plan have the right to retain their numbers, upon request, independently of the undertaking providing the service, in accordance with Part C of Annex VI.

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3. Where an end-user terminates a contract, Member States shall ensure that the end-user can retain the right to port a number from the national numbering plan to another provider for a minimum of one month after the date of termination, unless that right is renounced by the end-user.

4. 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.

5. 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.

6. 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.

National regulatory authorities may establish the details of the switching and porting processes, taking into account national provisions on contracts, technical feasibility and the need to maintain continuity of service to the end-users. 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.

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7. Member States shall lay down rules on penalties in the case of the failure of a provider to comply with the obligations laid down in this Article, including delays in, or abuses of, porting by, or on behalf of, a provider.

8. Member States shall lay down rules on the compensation of end-users by their providers in an easy and timely manner 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.

9. In addition to the information required under Annex VIII, Member States shall ensure that end-users are adequately informed about the existence of the rights to compensation referred to in paragraphs 7 and 8.

*Article 107***Bundled offers**

1. If 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 102(3), Article 103(1), Article 105 and Article 106(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, Member States shall provide that 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. Paragraphs 1 and 3 shall also apply to end-users that are micro-enterprises, small enterprises, or not-for-profit organisations, unless they have explicitly agreed to waive all or parts of those provisions.

5. Member States may also apply paragraph 1 as regards other provisions laid down in this Title.

*Article 108***Availability of services**

Member States shall take all necessary measures to ensure the fullest possible availability of voice communications services and internet access services provided over public electronic communications networks in the event of catastrophic network breakdown or in cases of force majeure. Member States shall ensure that providers of voice communications services take all necessary measures to ensure uninterrupted access to emergency services and uninterrupted transmission of public warnings.

*Article 109***Emergency communications and the single European emergency number**

1. Member States shall ensure that all end-users of the services referred to in paragraph 2, including users of public pay telephones, are able to access the emergency services through emergency communications free of charge and without having to use any means of payment, by using the single European emergency number '112' and any national emergency number specified by Member States.

Member States shall promote the access to emergency services through the single European emergency number '112' from electronic communications networks which are not publicly available but which enable calls to public networks, in particular when the undertaking responsible for that network does not provide an alternative and easy access to an emergency service.

2. Member States shall, after consulting national regulatory authorities and emergency services and providers of electronic communications services, ensure that providers of publicly available number-based interpersonal communications services, where those services allow end-users to originate calls to a number in a national or international numbering plan, provide access to emergency services through emergency communications to the most appropriate PSAP.

3. Member States shall ensure that all emergency communications to the single European emergency number '112' are appropriately answered and handled in the manner best suited to the national organisation of emergency systems. Such emergency communications shall be answered and handled at least as expeditiously and effectively as emergency communications to the national emergency number or numbers, where those continue to be in use.

4. By 21 December 2020 and every two years thereafter, the Commission shall submit a report to the European Parliament and to the Council on the effectiveness of the implementation of the single European emergency number '112'.

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5. Member States 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, in accordance with Union law harmonising accessibility requirements for products and services. The Commission and the national regulatory or other competent authorities shall take appropriate measures to ensure that, whilst travelling in another Member State, end-users with disabilities can access emergency services on an equivalent basis with other end-users, where feasible without any pre-registration. Those measures shall seek to ensure interoperability across Member States and shall be based, to the greatest extent possible, on European standards or specifications laid down in accordance with Article 39. Such measures shall not prevent Member States from adopting additional requirements in order to pursue the objectives set out in this Article.

6. Member States 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 available, handset-derived caller location information. Member States 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'. Member States may extend that obligation to cover emergency communications to national emergency numbers. Competent regulatory authorities, if necessary after consulting BEREC, shall lay down criteria for the accuracy and reliability of the caller location information provided.

7. Member States shall ensure that end-users are adequately informed about the existence and the use of the single European emergency number '112', as well as its accessibility features, including through initiatives specifically targeting persons travelling between Member States and end-users with disabilities. That information shall be provided in accessible formats, addressing different types of disabilities. The Commission shall support and complement Member States' action.

8. In order to ensure effective access to emergency services through emergency communications to the single European emergency number '112' in the Member States, the Commission shall, after consulting BEREC, adopt delegated acts in accordance with Article 117 supplementing paragraphs 2, 5 and 6 of this Article on the measures necessary to ensure the compatibility, interoperability, quality, reliability and continuity of emergency communications in the Union with regard to caller location information solutions, access for end-users with disabilities and routing to the most appropriate PSAP. The first such delegated act shall be adopted by 21 December 2022.

Those delegated acts shall be adopted without prejudice to, and shall have no impact on, the organisation of emergency services, which remains in the exclusive competence of Member States.

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BEREC shall maintain a database of E.164 numbers of Member State emergency services to ensure that they are able to contact each other from one Member State to another, if such a database is not maintained by another organisation.

*Article 110***Public warning system**

1. By 21 June 2022, Member States shall ensure that, when public warning systems regarding imminent or developing major emergencies and disasters are in place, public warnings are transmitted by providers of mobile number-based interpersonal communications services to the end-users concerned.

2. Notwithstanding paragraph 1, Member States may determine that public warnings be transmitted through publicly available electronic communications services other than those referred to in paragraph 1, and other than broadcasting services, or through a mobile application relying on an internet access service, provided that the effectiveness of the public warning system is equivalent in terms of coverage and capacity to reach end-users, including those only temporarily present in the area concerned, taking utmost account of BEREC guidelines. Public warnings shall be easy for end-users to receive.

By 21 June 2020, and after consulting the authorities in charge of PSAPs, BEREC shall publish guidelines on how to assess whether the effectiveness of public warning systems under this paragraph is equivalent to the effectiveness of those under paragraph 1.

*Article 111***Equivalent access and choice for end-users with disabilities**

1. Member States shall ensure that the competent authorities specify requirements to be met by providers of publicly available electronic communications services to ensure that end-users with disabilities:

- (a) have access to electronic communications services, including the related contractual information provided pursuant to Article 102, equivalent to that enjoyed by the majority of end-users; and
- (b) benefit from the choice of undertakings and services available to the majority of end-users.

2. In taking the measures referred to in paragraph 1 of this Article, Member States shall encourage compliance with the relevant standards or specifications laid down in accordance with Article 39.

*Article 112***Directory enquiry services**

1. Member States shall ensure that all providers of number-based interpersonal communications services which attribute numbers from a numbering plan meet all reasonable requests to make available, for the purposes of the provision of publicly available directory enquiry services and directories, the relevant information in an agreed format, on terms which are fair, objective, cost oriented and non-discriminatory.

2. National regulatory authorities shall be empowered to impose obligations and conditions on undertakings that control access to end-users, for the provision of directory enquiry services, in accordance with Article 61. Such obligations and conditions shall be objective, equitable, non-discriminatory and transparent.

3. Member States shall not maintain any regulatory restrictions which prevent end-users in one Member State from accessing directly the directory enquiry service in another Member State by voice call or SMS, and shall take measures to ensure such access in accordance with Article 97.

4. This Article shall apply subject to the requirements of Union law on the protection of personal data and privacy and, in particular, Article 12 of Directive 2002/58/EC.

*Article 113***Interoperability of car radio and consumer radio receivers and consumer digital television equipment**

1. Member States shall ensure the interoperability of car radio receivers and consumer digital television equipment in accordance with Annex XI.

2. Member States may adopt measures to ensure the interoperability of other consumer radio receivers, while limiting the impact on the market for low-value radio broadcast receivers and ensuring that such measures are not applied to products where a radio receiver is purely ancillary, such as smartphones, and to equipment used by radio amateurs.

3. Member States shall encourage providers of digital television services to 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.

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Without prejudice to Article 5(2) of Directive 2012/19/EU of the European Parliament and of the Council⁽¹⁾, Member States shall ensure that, upon termination of their contract, end-users 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.

*Article 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. By 21 December 2019 and every five years thereafter, Member States shall review the obligations referred to in the paragraph 1, except where Member States have carried out such a review within the previous four years.

3. Neither paragraph 1 of this Article nor Article 59(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 ensure that the obligation to remunerate is clearly set out in national law, including, where relevant, the criteria for calculating such remuneration. Member States shall also ensure that it is applied in a proportionate and transparent manner.

⁽¹⁾ Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE) (OJ L 197, 24.7.2012, p. 38).

▼B*Article 115***Provision of additional facilities**

1. Without prejudice to Article 88(2), Member States shall ensure that competent authorities in coordination, where relevant, with national regulatory authorities are able to require all providers of internet access services or publicly available number-based interpersonal communications services to make available free of charge all or part of the additional facilities listed in Part B of Annex VI, subject to technical feasibility, as well as all or part of the additional facilities listed in Part A of Annex VI.
2. When applying paragraph 1, Member States may go beyond the list of additional facilities in Parts A and B of Annex VI in order to ensure a higher level of consumer protection.
3. A Member State may decide to waive the application of paragraph 1 in all or part of its territory if it considers, after taking into account the views of interested parties, that there is sufficient access to those facilities.

*Article 116***Adaptation of annexes**

The Commission is empowered to adopt delegated acts in accordance with Article 117 amending Annexes V, VI, IX, X, and XI in order to take account of technological and social developments or changes in market demand.

PART IV

FINAL PROVISIONS*Article 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 Articles 75, 109 and 116 shall be conferred on the Commission for a period of five years from 20 December 2018. 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 Articles 75, 109 and 116 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.

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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 Articles 75, 109 and 116 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 118***Committee**

1. The Commission shall be assisted by a committee ('the Communications Committee'). That committee shall be a committee within the meaning of Regulation (EU) No 182/2011.

2. For the implementing acts referred to in the second subparagraph of Article 28(4), 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.

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. In such a case, the chair shall convene a committee meeting within a reasonable time.

4. Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply, having regard to Article 8 thereof.

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. In such a case, the chair shall convene a committee meeting within a reasonable time.

*Article 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.

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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 120***Publication of information**

1. Member States shall ensure that up-to-date information regarding the implementation of this Directive 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 21 December 2020 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 Directive 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 121

Notification and monitoring

1. National regulatory authorities shall notify to the Commission by 21 December 2020, and immediately following any change thereafter, the names of undertakings designated as having universal service obligations under Article 85(2), Article 86 or 87.

2. National regulatory authorities shall notify to the Commission the names of undertakings designated as having significant market power for the purposes of this Directive, and the obligations imposed upon them under this Directive. Any changes affecting the obligations imposed upon undertakings or of the undertakings affected under this Directive shall be notified to the Commission without delay.

Article 122

Review procedures

1. By 21 December 2025 and every five years thereafter, the Commission shall review the functioning of this Directive and report to the European Parliament and to the Council.

Those reviews shall evaluate in particular the market implications of Article 61(3) and Articles 76, 78 and 79 and whether the ex ante and other intervention powers pursuant to this Directive are sufficient to enable national regulatory authorities to address uncompetitive oligopolistic market structures, and to ensure that competition in electronic communications markets continues to thrive to the benefit of end-users.

To that end, the Commission may request information from the Member States, which shall be supplied without undue delay.

2. By 21 December 2025, and every five years thereafter, the Commission shall review the scope of universal service, in particular with a view to proposing to the European Parliament and to the Council that the scope be changed or redefined.

That review shall be undertaken in light of social, economic and technological developments, taking into account, inter alia, mobility and data rates in light of the prevailing technologies used by the majority of end-users. The Commission shall submit a report to the European Parliament and to the Council regarding the outcome of the review.

3. BEREC shall, by 21 December 2021 and every three years thereafter, publish an opinion on the national implementation and functioning of the general authorisation, and on their impact on the functioning of the internal market.

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The Commission may, taking utmost account of the BEREC opinion, publish a report on the application of Chapter II of Title II of Part I and of Annex I, and may 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 123***Specific review procedure on end-user rights**

1. BEREC shall monitor the market and technological developments regarding the different types of electronic communications services and shall, by 21 December 2021 and every three years thereafter, or upon a reasoned request from at least two of its Member State members, publish an opinion on such developments and on their impact on the application of Title III of Part III.

In that opinion, BEREC shall assess to what extent Title III of Part III meets the objectives set out in Article 3. The opinion shall in particular take into account the scope of Title III of Part III as regards the types of electronic communications services covered. As a basis for the opinion, BEREC shall in particular analyse:

- (a) to what extent end-users of all electronic communications services are able to make free and informed choices, including on the basis of complete contractual information, and are able to switch easily their provider of electronic communications services;
- (b) to what extent any lack of abilities referred to in point (a) has resulted in market distortions or end-user harm;
- (c) to what extent effective access to emergency services is appreciably threatened, in particular due to an increased use of number-independent interpersonal communications services, by a lack of interoperability or technological developments;
- (d) the likely cost of any potential readjustments of obligations in Title III of Part III or impact on innovation for providers of electronic communications services.

2. The Commission, taking utmost account of the BEREC opinion, shall publish a report on the application of Title III of Part III and shall submit a legislative proposal to amend that Title where it considers this to be necessary to ensure that the objectives set out in Article 3 continue to be met.

*Article 124***Transposition**

1. Member States shall adopt and publish, by 21 December 2020, the laws, regulations and administrative provisions necessary to comply with this Directive. They shall immediately communicate the text of those measures to the Commission.

Member States shall apply those measures from 21 December 2020.

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When Member States adopt those measures, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. They shall also include a statement that references in existing laws, regulations and administrative provisions to the Directives repealed by this Directive shall be construed as references to this Directive. Member States shall determine how such reference is to be made and how that statement is to be formulated.

2. By way of derogation from paragraph 1 of this Article, Article 53(2), (3) and (4) of this Directive shall apply from 20 December 2018 where harmonised conditions have been set by technical implementing measures in accordance with Decision No 676/2002/EC in order to enable the radio spectrum use for wireless broadband networks and services. In relation to radio spectrum bands for which harmonised conditions have not been set by 20 December 2018, Article 53(2), (3) and (4) of this Directive shall apply from the date of the adoption of the technical implementing measures in accordance with Article 4 of Decision No 676/2002/EC.

By way of derogation from paragraph 1 of this Article, Member States shall apply the measures necessary to comply with Article 54 from 31 December 2020.

3. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

*Article 125***Repeal**

Directives 2002/19/EC, 2002/20/EC, 2002/21/EC, 2002/22/EC, as listed in Annex XII, Part A, are repealed with effect from 21 December 2020, without prejudice to the obligations of the Member States relating to the time-limits for the transposition into national law and the dates of application of the Directives set out in Annex XII, Part B.

Article 5 of Decision No 243/2012/EU is deleted with effect from 21 December 2020.

References to the repealed Directives shall be construed as references to this Directive and shall be read in accordance with the correlation table in Annex XIII.

*Article 126***Entry into force**

This Directive shall enter into force on the third day following that of its publication in the *Official Journal of the European Union*.

*Article 127***Addressees**

This Directive is addressed to the Member States.

*ANNEX I*

LIST OF CONDITIONS WHICH MAY BE ATTACHED TO GENERAL AUTHORISATIONS, RIGHTS OF USE FOR RADIO SPECTRUM AND RIGHTS OF USE FOR NUMBERING RESOURCES

This Annex provides for the maximum list of conditions which may be attached to general authorisations for electronic communications networks and services, except number-independent interpersonal communications services (Part A), electronic communications networks (Part B), electronic communications services, except number-independent interpersonal communications services (Part C), rights of use for radio spectrum (Part D), and rights of use for numbering resources (Part E)

A. General conditions which may be attached to a general authorisation

1. Administrative charges in accordance with Article 16.
2. Personal data and privacy protection specific to the electronic communications sector in accordance with Directive 2002/58/EC
3. Information to be provided under a notification procedure in accordance with Article 12 and for other purposes as included in Article 21.
4. Enabling of legal interception by competent national authorities in accordance with Regulation (EU) 2016/679 and Directive 2002/58/EC.
5. 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.
6. Terms of use during major disasters or national emergencies to ensure communications between emergency services and authorities.
7. Access obligations other than those provided for in Article 13 applying to undertakings providing electronic communications networks or services.
8. Measures designed to ensure compliance with the standards or specifications referred to in Article 39.
9. Transparency obligations on providers of public electronic communications network providing publicly available electronic communications services to ensure end-to-end connectivity, in accordance with the objectives and principles set out in Article 3 and, where necessary and proportionate, access by competent authorities to such information needed to verify the accuracy of such disclosure.

B. Specific conditions which may be attached to a general authorisation for the provision of electronic communications networks

1. Interconnection of networks in accordance with this Directive.
2. ‘Must carry’ obligations in accordance with this Directive.
3. Measures for the protection of public health against electromagnetic fields caused by electronic communications networks in accordance with Union law, taking utmost account of Recommendation 1999/519/EC.

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4. Maintenance of the integrity of public electronic communications networks in accordance with this Directive including by conditions to prevent electromagnetic interference between electronic communications networks or services in accordance with Directive 2014/30/EU.
5. Security of public networks against unauthorised access in accordance with Directive 2002/58/EC.
6. Conditions for the use of radio spectrum, in accordance with Article 7(2) of Directive 2014/53/EU, where such use is not made subject to the granting of individual rights of use in accordance with Article 46(1) and Article 48 of this Directive.
- C. Specific conditions which may be attached to a general authorisation for the provision of electronic communications services, except number-independent interpersonal communications services
 1. Interoperability of services in accordance with this Directive.
 2. Accessibility by end-users of numbers from the national numbering plan, numbers from the UIFN and, where technically and economically feasible, from numbering plans of other Member States, and conditions in accordance with this Directive.
 3. Consumer protection rules specific to the electronic communications sector.
 4. Restrictions in relation to the transmission of illegal content in accordance with Directive 2000/31/EC and restrictions in relation to the transmission of harmful content in accordance with Directive 2010/13/EU.
- D. Conditions which may be attached to rights of use for radio spectrum
 1. Obligation to provide a service or to use a type of technology within the limits of Article 45 including, where appropriate, coverage and quality of service requirements.
 2. Effective and efficient use of radio spectrum in accordance with this Directive.
 3. 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 included in the general authorisation.
 4. Maximum duration in accordance with Article 49, subject to any changes in the National Frequency Allocation Plan.
 5. Transfer or leasing of rights at the initiative of the holder of the rights and conditions for such transfer in accordance with this Directive.
 6. Fees for rights of use in accordance with Article 42.
 7. Any commitments which the undertaking obtaining the rights of use has 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.
 8. Obligations to pool or share radio spectrum or allow access to radio spectrum for other users in specific regions or at national level.

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9. Obligations under relevant international agreements relating to the use of radio spectrum bands.
 10. Obligations specific to an experimental use of radio spectrum bands.
- E. Conditions which may be attached to rights of use for numbering resources
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 point (d) of Article 3(2).
 2. Effective and efficient use of numbering resources in accordance with this Directive.
 3. Number portability requirements in accordance with this Directive.
 4. Obligation to provide public directory end-user information for the purposes of Article 112.
 5. Maximum duration in accordance with Article 94, subject to any changes in the national numbering plan.
 6. Transfer of rights at the initiative of the holder of the rights and conditions for such transfer in accordance with this Directive, including any condition that the right of use for a number be binding on all the undertakings to which the rights are transferred.
 7. Fees for rights of use in accordance with Article 95.
 8. Any commitments which the undertaking obtaining the rights of use has made in the course of a competitive or comparative selection procedure.
 9. Obligations under relevant international agreements relating to the use of numbers.
 10. 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.

*ANNEX II***CONDITIONS FOR ACCESS TO DIGITAL TELEVISION AND RADIO SERVICES BROADCAST TO VIEWERS AND LISTENERS IN THE UNION***Part I***Conditions for conditional access systems to be applied in accordance with Article 62(1)**

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, Member States shall ensure in accordance with Article 62 that the following conditions apply:

- (a) all undertakings providing conditional access services, irrespective of the means of transmission, which provide access services to digital television and radio services and the access services of which broadcasters depend on to reach any group of potential viewers or listeners are to:
 - offer to all broadcasters, on a fair, reasonable and non-discriminatory basis compatible with Union competition law, technical services enabling the broadcasters' digitally-transmitted services to be received by viewers or listeners authorised by means of decoders administered by the service operators, and comply with Union competition law,
 - keep separate financial accounts regarding their activity as conditional access providers.
- (b) when granting licences to manufacturers of consumer equipment, holders of industrial property rights to conditional access products and systems are to ensure that this is done on fair, reasonable and non-discriminatory terms. Taking into account technical and commercial factors, holders of rights are not to subject the granting of licences to conditions prohibiting, deterring or discouraging the inclusion in the same product of:
 - a common interface allowing connection with several other access systems, or
 - means specific to another access system, provided that the licensee complies with the relevant and reasonable conditions ensuring, as far as he is concerned, the security of transactions of conditional access system operators.

*Part II***Other facilities to which conditions may be applied under point (D) of Article 61(2)**

- (a) Access to APIs;
- (b) Access to EPGs.

*ANNEX III*

CRITERIA FOR THE DETERMINATION OF WHOLESALE VOICE TERMINATION RATES

Principles, criteria and parameters for the determination of rates for wholesale voice termination on fixed and mobile markets referred to in Article 75(1):

- (a) rates shall be based on the recovery of costs incurred by an efficient operator; the evaluation of efficient costs shall be based on current cost values; the cost methodology to calculate efficient costs shall be based on a bottom-up modelling approach using long-run incremental traffic-related costs of providing the wholesale voice termination service to third parties;
- (b) the relevant incremental costs of the wholesale voice termination service shall be determined by the difference between the total long-run costs of an operator providing its full range of services and the total long-run costs of that operator not providing a wholesale voice termination service to third parties;
- (c) only those traffic-related costs which would be avoided in the absence of a wholesale voice termination service being provided shall be allocated to the relevant termination increment;
- (d) costs related to additional network capacity shall be included only to the extent that they are driven by the need to increase capacity for the purpose of carrying additional wholesale voice termination traffic;
- (e) radio spectrum fees shall be excluded from the mobile voice termination increment;
- (f) only those wholesale commercial costs shall be included which are directly related to the provision of the wholesale voice termination service to third parties;
- (g) all fixed network operators shall be considered to provide voice termination services at the same unit costs as the efficient operator, regardless of their size;
- (h) for mobile network operators, the minimum efficient scale shall be set at a market share not below 20 %;
- (i) the relevant approach for asset depreciation shall be economic depreciation; and
- (j) the technology choice of the modelled networks shall be forward looking, based on an IP core network, taking into account the various technologies likely to be used over the period of validity of the maximum rate; in the case of fixed networks, calls shall be considered to be exclusively packet switched.

*ANNEX IV*

CRITERIA FOR ASSESSING CO-INVESTMENT OFFERS

When assessing a co-investment offer pursuant to Article 76(1), the national regulatory authority shall verify whether the following criteria have at a minimum been met. National regulatory authorities may consider additional criteria to the extent they are necessary to ensure accessibility of potential investors to the co-investment, in light of specific local conditions and market structure:

- (a) The co-investment offer shall be open to any undertaking over the lifetime of the network built under a co-investment offer on a non-discriminatory basis. The undertaking designated as having significant market power may include in the offer reasonable conditions regarding the financial capacity of any undertaking, so that for instance potential co-investors need to demonstrate their ability to deliver phased payments on the basis of which the deployment is planned, the acceptance of a strategic plan on the basis of which medium-term deployment plans are prepared, and so on.
- (b) The co-investment offer shall be transparent:
 - the offer shall be available and easily identified on the website of the undertaking designated as having significant market power;
 - full detailed terms shall be made available without undue delay to any potential bidder that has expressed an interest, including the legal form of the co-investment agreement and, when relevant, the heads of term of the governance rules of the co-investment vehicle; and
 - the process, like the road map for the establishment and development of the co-investment project shall be set in advance, shall be clearly explained in writing to any potential co-investor, and all significant milestones shall be clearly communicated to all undertakings without any discrimination.
- (c) The co-investment offer shall include terms to potential co-investors which favour sustainable competition in the long term, in particular:
 - All undertakings shall be offered fair, reasonable and non-discriminatory terms and conditions for participation in the co-investment agreement relative to the time they join, including in terms of financial consideration required for the acquisition of specific rights, in terms of the protection awarded to the co-investors by those rights both during the building phase and during the exploitation phase, for example by granting infeasible rights of use (IRUs) for the expected lifetime of the co-invested network and in terms of the conditions for joining and potentially terminating the co-investment agreement. Non-discriminatory terms in this context do not entail that all potential co-investors shall be offered exactly the same terms, including financial terms, but that all variations of the terms offered shall be justified on the basis of the same objective, transparent, non-discriminatory and predictable criteria such as the number of end-user lines committed for.
 - The offer shall allow flexibility in terms of the value and timing of the commitment provided by each co-investor, for example by means of an agreed and potentially increasing percentage of the total end-user lines in a given area, to which co-investors have the possibility to commit gradually and which is set at a unit level enabling smaller co-investors with limited resources to enter the co-investment at a reasonably minimum scale and to gradually increase their participation while ensuring adequate levels of initial commitment. The determination of the financial consideration to be provided by each co-investor needs to reflect the fact that early investors accept greater risks and engage capital sooner.

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- A premium increasing over time shall be considered to be justified for commitments made at later stages and for new co-investors entering the co-investment after the commencement of the project, to reflect diminishing risks and to counteract any incentive to withhold capital in the earlier stages.
 - The co-investment agreement shall allow the assignment of acquired rights by co-investors to other co-investors, or to third parties willing to enter into the co-investment agreement subject to the transferee undertaking being obliged to fulfil all original obligations of the transferor under the co-investment agreement.
 - Co-investors shall grant each other reciprocal rights on fair and reasonable terms and conditions to access the co-invested infrastructure for the purposes of providing services downstream, including to end-users, in accordance with transparent conditions which are to be made transparent in the co-investment offer and subsequent agreement, in particular where co-investors are individually and separately responsible for the deployment of specific parts of the network. If a co-investment vehicle is created, it shall provide access to the network to all co-investors, whether directly or indirectly, on an equivalence of inputs basis and in accordance with fair and reasonable terms and conditions, including financial conditions that reflect the different levels of risk accepted by the individual co-investors.
- (d) The co-investment offer shall ensure a sustainable investment likely to meet future needs, by deploying new network elements that contribute significantly to the deployment of very high capacity networks.

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ANNEX V

MINIMUM SET OF SERVICES WHICH THE ADEQUATE BROADBAND
INTERNET ACCESS SERVICE IN ACCORDANCE WITH ARTICLE 84(3)
SHALL BE CAPABLE OF SUPPORTING

- (1) E-mail
- (2) search engines enabling search and finding of all type of information
- (3) basic training and education online tools
- (4) online newspapers or news
- (5) buying or ordering goods or services online
- (6) job searching and job searching tools
- (7) professional networking
- (8) internet banking
- (9) eGovernment service use
- (10) social media and instant messaging
- (11) calls and video calls (standard quality)

▼B*ANNEX VI*

DESCRIPTION OF FACILITIES AND SERVICES REFERRED TO IN ARTICLE 88 (CONTROL OF EXPENDITURE), ARTICLE 115 (ADDITIONAL FACILITIES) AND ARTICLE 106 (PROVIDER SWITCHING AND NUMBER PORTABILITY)

*Part A***Facilities and services referred to in Articles 88 and 115**

When applied on the basis of Article 88, Part A is applicable to consumers and other categories of end-users where Member States have extended the beneficiaries of Article 88(2).

When applied on the basis of Article 115, Part A is applicable to the categories of end-users determined by Member States, except for points (c), (d) and (g) of this Part which are applicable only to consumers.

(a) Itemised billing

Member States shall ensure that competent authorities in coordination, where relevant, with national regulatory authorities, subject to the requirements of relevant law on the protection of personal data and privacy, may lay down the basic level of itemised bills which are to be offered by providers to end-users free of charge in order that they can:

- (i) allow verification and control of the charges incurred in using internet access services or voice communications services, or number-based interpersonal communications services in the case of Article 115; and
- (ii) adequately monitor their usage and expenditure and thereby exercise a reasonable degree of control over their bills.

Where appropriate, additional levels of detail may be offered to end-users at reasonable tariffs or at no charge.

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 end-user 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 end-user's itemised bill.

National regulatory authorities may require operators to provide calling-line identification free of charge.

(b) Selective barring for outgoing calls or premium SMS or MMS, or, where technically feasible, other kinds of similar applications, free of charge

namely, the facility whereby the end-users can, on request to the providers of voice communications services, or number-based interpersonal communications services in the case of Article 115, bar outgoing calls or premium SMS or MMS or other kinds of similar applications of defined types or to defined types of numbers free of charge.

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(c) Pre-payment systems

Member States shall ensure that competent authorities in coordination, where relevant, with national regulatory authorities may require providers to offer means for consumers to pay for access to the public electronic communications network and use of voice communications services, or internet access services, or number-based interpersonal communications services in the case of Article 115, on pre-paid terms.

(d) Phased payment of connection fees

Member States shall ensure that competent authorities in coordination, where relevant, with national regulatory authorities may require providers to allow consumers to pay for connection to the public electronic communications network on the basis of payments phased over time.

(e) Non-payment of bills

Member States shall authorise specified measures, which are to be proportionate, non-discriminatory and published, to cover non-payment of bills issued by providers. Those measures are to ensure that due warning of any consequent service interruption or disconnection is given to the end-users beforehand. Except in cases of fraud, persistent late payment or non-payment, those measures shall ensure, as far as is technically feasible, that any service interruption is confined to the service concerned. Disconnection for non-payment of bills shall take place only after due warning is given to the end-users. Member States may allow a period of limited service prior to complete disconnection, during which only calls that do not incur a charge to the end-users (for example, calls to the '112' number) and minimum service level of internet access services, defined by Member States in light of national conditions, are permitted.

(f) Tariff advice

namely, the facility whereby end-users may request the provider to offer information regarding alternative lower-cost tariffs, if available.

(g) Cost control

namely, the facility whereby providers offer other means, if determined to be appropriate by competent authorities in coordination, where relevant, with national regulatory authorities, to control the costs of voice communications services or internet access services, or number-based interpersonal communications services in the case of Article 115, including free-of-charge alerts to consumers in the case of abnormal or excessive consumption patterns.

(h) facility to deactivate third party billing

namely, the facility for end-users to deactivate the ability for third party service providers to use the bill of a provider of an internet access service or a provider of a publicly available interpersonal communications service to charge for their products or services.

*Part B***Facilities referred to in Article 115**

(a) Calling-line identification

namely, the calling party's number is presented to the called party prior to the call being established.

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This facility shall be provided in accordance with relevant law on protection of personal data and privacy, in particular Directive 2002/58/EC.

To the extent technically feasible, operators shall provide data and signals to facilitate the offering of calling-line identity and tone dialling across Member State boundaries.

- (b) E-mail forwarding or access to e-mails after termination of the contract with a provider of an internet access service.

This facility shall, on request and free-of-charge, enable end-users who terminate their contract with a provider of an internet access service to either access their e-mails received on the e-mail address(es) based on the commercial name or trade mark of the former provider, during a period that the national regulatory authority considers necessary and proportionate, or to transfer e-mails sent to that (or those) address(es) during that period to a new email address specified by the end-user.

*Part C***Implementation of the number portability provisions referred to in Article 106**

The requirement that all end-users with numbers from the national numbering plan, who so request can retain their numbers independently of the undertaking providing the service shall apply:

- (a) in the case of geographic numbers, at a specific location; and
(b) in the case of non-geographic numbers, at any location.

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

*ANNEX VII***CALCULATING THE NET COST, IF ANY, OF UNIVERSAL SERVICE OBLIGATIONS AND ESTABLISHING ANY COMPENSATION OR SHARING MECHANISM IN ACCORDANCE WITH ARTICLES 89 AND 90***Part A***Calculation of net cost**

Universal service obligations refer to those obligations placed upon an undertaking by a Member State which concern the provision of universal service as set out in Articles 84 to 87.

National regulatory authorities are to consider all means to ensure appropriate incentives for undertakings (designated or not) to provide universal service obligations cost efficiently. In undertaking a calculation exercise, the net cost of universal service obligations is to be calculated as the difference between the net cost for any undertaking operating with the universal service obligations and operating without the universal service obligations. Due attention is to be given to correctly assessing the costs that any undertaking would have chosen to avoid had there been no universal service obligations. The net cost calculation shall assess the benefits, including intangible benefits, to the universal service provider.

The calculation is to be based upon the costs attributable to:

- (i) elements of the identified services which can only be provided at a loss or provided under cost conditions falling outside normal commercial standards.

This category may include service elements such as access to emergency telephone services, provision of certain public pay telephones, provision of certain services or equipment for end-users with disabilities, and so on;

- (ii) specific end-users or groups of end-users who, taking into account the cost of providing the specified network and service, the revenue generated and any geographical averaging of prices imposed by the Member State, can only be served at a loss or under cost conditions falling outside normal commercial standards.

This category includes those end-users or groups of end-users which would not be served by a commercial provider which did not have an obligation to provide universal service.

The calculation of the net cost of specific aspects of universal service obligations is to be made separately and in order to avoid the double counting of any direct or indirect benefits and costs. The overall net cost of universal service obligations to any undertaking is to be calculated as the sum of the net costs arising from the specific components of universal service obligations, taking account of any intangible benefits. The responsibility for verifying the net cost lies with the national regulatory authority.

▼B*Part B***Compensation of net costs of universal service obligations**

The recovery or financing of any net costs of universal service obligations may require undertakings with universal service obligations to be compensated for the services they provide under non-commercial conditions. Because such a compensation involves financial transfers, Member States are to ensure that those are undertaken in an objective, transparent, non-discriminatory and proportionate manner. This means that the transfers result in the least distortion to competition and to user demand.

In accordance with Article 90(3), a sharing mechanism based on a fund shall use a transparent and neutral means for collecting contributions that avoids the danger of a double imposition of contributions falling on both outputs and inputs of undertakings.

The independent body administering the fund is to be responsible for collecting contributions from undertakings which are assessed as liable to contribute to the net cost of universal service obligations in the Member State and is to oversee the transfer of sums due or administrative payments to the undertakings entitled to receive payments from the fund.

▼B*ANNEX VIII*INFORMATION REQUIREMENTS TO BE PROVIDED IN ACCORDANCE WITH
ARTICLE 102 (INFORMATION REQUIREMENTS FOR CONTRACTS)A. Information requirements for providers of publicly available electronic
communications services other than transmission services used for the
provision of machine-to-machine services

Providers of publicly available electronic communications services other than
transmission services used for the provision of machine-to-machine services
shall provide the following information:

- (1) as part of the main characteristics of each service provided, any minimum
levels of quality of service to the extent that those are offered and, for
services other than internet access services, the specific quality parameters
assured.

Where no minimum levels of quality of service are offered, a statement to
this effect shall be made;

- (2) as part of the information on price, where and to the extent applicable, the
respective prices for activating the electronic communications service and
for any recurring or consumption-related charges;
- (3) as part of the information on the duration of the contract and the
conditions for renewal and termination of the contract, including
possible termination fees, to the extent that such conditions apply:
 - (i) any minimum use or duration required to benefit from promotional
terms;
 - (ii) any charges related to switching and compensation and refund
arrangements for delay or abuse of switching, as well as information
about the respective procedures;
 - (iii) information on the right of consumers using pre-paid services to a
refund, upon request, of any remaining credit in the event of
switching, as set out in Article 106(6);
 - (iv) any fees due on early termination of the contract, including
information on unlocking the terminal equipment and any cost
recovery with respect to terminal equipment;
- (4) any compensation and refund arrangements, including, where applicable,
explicit reference to rights of consumers, which apply if contracted levels
of quality of service are not met or if the provider responds inadequately
to a security incident, threat or vulnerability;
- (5) the type of action that might be taken by the provider in reaction to
security incidents or threats or vulnerabilities.

B. Information requirements for providers of internet access services and
publicly available interpersonal communications services

- I. In addition to the requirements set out in Part A, providers of internet
access services and publicly available interpersonal communications
services shall provide the following information:

▼B

- (1) as part of the main characteristics of each service provided:
 - (i) any minimum levels of quality of service to the extent that these are offered, and taking utmost account of the BEREC guidelines adopted in accordance with Article 104(2) regarding:
 - for internet access services: at least latency, jitter, packet loss,
 - for publicly available interpersonal communications services, where they exert control over at least some elements of the network or have a service level agreement to that effect with undertakings providing access to the network: at least the time for the initial connection, failure probability, call signalling delays in accordance with Annex X; and
 - (ii) without prejudice to the right of end-users to use terminal equipment of their choice in accordance with Article 3(1) of Regulation (EU) 2015/2120, any conditions, including fees, imposed by the provider on the use of terminal equipment supplied;
- (2) as part of the information on price, where and to the extent applicable, the respective prices for activating the electronic communications service and for any recurring or consumption-related charges:
 - (i) details of specific tariff plan or plans under the contract and, for each such tariff plan the types of services offered, including where applicable, the volumes of communications (such as MB, minutes, messages) included per billing period, and the price for additional communication units;
 - (ii) in the case of tariff plan or plans with a pre-set volume of communications, the possibility for consumers to defer any unused volume from the preceding billing period to the following billing period, where this option is included in the contract;
 - (iii) facilities to safeguard bill transparency and monitor the level of consumption;
 - (iv) tariff information regarding any numbers or services subject to particular pricing conditions; with respect to individual categories of services, competent authorities in coordination, where relevant, with national regulatory authorities may require in addition such information to be provided immediately prior to connecting the call or to connecting to the provider of the service;
 - (v) for bundled services and bundles including both services and terminal equipment the price of the individual elements of the bundle to the extent they are also marketed separately;
 - (vi) details and conditions, including fees, of any after-sales service, maintenance, and customer assistance; and
 - (vii) the means by which up-to-date information on all applicable tariffs and maintenance charges may be obtained;

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- (3) as part of the information on the duration of the contract for bundled services and the conditions for renewal and termination of the contract, where applicable, the conditions of termination of the bundle or of elements thereof;
 - (4) without prejudice to Article 13 of the Regulation (EU) 2016/679, information on what personal data shall be provided before the performance of the service or collected in the context of the provision of the service;
 - (5) details on products and services designed for end-users with disabilities and how updates on this information can be obtained;
 - (6) the means of initiating procedures for the resolution of disputes including national and cross-border disputes in accordance with Article 25.
- II. In addition to the requirements set out in Part A and under Point I, providers of publicly available number-based interpersonal communications services shall also provide the following information:
- (1) any constraints on access to emergency services or caller location information due to a lack of technical feasibility insofar as the service allows end-users to originate calls to a number in a national or international numbering plan;
 - (2) the end-user's right to determine whether to include his or her personal data in a directory, and the types of data concerned, in accordance with Article 12 of Directive 2002/58/EC;
- III. In addition to the requirements set out in Part A and under Point I, providers of internet access services shall also provide the information required pursuant to Article 4(1) of Regulation (EU) 2015/2120.

*ANNEX IX*INFORMATION TO BE PUBLISHED IN ACCORDANCE WITH
ARTICLE 103 (TRANSPARENCY AND PUBLICATION OF
INFORMATION)

The competent authority in coordination, where relevant, with the national regulatory authority is responsible for ensuring that the information in this Annex is published, in accordance with Article 103. The competent authority in coordination, where relevant, with the national regulatory authority shall decide which information is relevant to be published by the providers of internet access services or publicly available interpersonal communications services, and which information is to be published by the competent authority itself in coordination, where relevant, with the national regulatory authority, in order to ensure that all end-users are able to make informed choices. If considered to be appropriate, competent authorities in coordination, where relevant, with national regulatory authorities may promote self- or co-regulatory measures prior to imposing any obligation.

1. Contact details of the undertaking
2. Description of the services offered
 - 2.1. Scope of the services offered and the main characteristics of each service provided, including any minimum levels of quality of service where offered and any restrictions imposed by the provider on the use of terminal equipment supplied.
 - 2.2. Tariffs of the services offered, including information on communications volumes (such as restrictions of data usage, numbers of voice minutes, numbers of messages) of specific tariff plans and the applicable tariffs for additional communication units, numbers or services subject to particular pricing conditions, charges for access and maintenance, all types of usage charges, special and targeted tariff schemes and any additional charges, as well as costs with respect to terminal equipment.
 - 2.3. After-sales, maintenance and customer assistance services offered and their contact details.
 - 2.4. Standard contract conditions, including contract duration, charges due on early termination of the contract, rights related to the termination of bundled offers or of elements thereof, and procedures and direct charges related to the portability of numbers and other identifiers, if relevant.
 - 2.5. If the undertaking is a provider of number-based interpersonal communications services, information on access to emergency services and caller location, or any limitation on the latter. If the undertaking is a provider of number-independent interpersonal communications services, information on the degree to which access to emergency services may be supported or not.
 - 2.6. Details of products and services, including any functions, practices, policies and procedures and alterations in the operation of the service, specifically designed for end-users with disabilities, in accordance with Union law harmonising accessibility requirements for products and services.
3. Dispute resolution mechanisms, including those developed by the undertaking.



ANNEX X

QUALITY OF SERVICE PARAMETERS

Quality-of-Service Parameters, Definitions and Measurement Methods referred to in Article 104

For providers of access to a public electronic communications network

PARAMETER (Note 1)	DEFINITION	MEASUREMENT METHOD
Supply time for initial connection	ETSI EG 202 057	ETSI EG 202 057
Fault rate per access line	ETSI EG 202 057	ETSI EG 202 057
Fault repair time	ETSI EG 202 057	ETSI EG 202 057

For providers of interpersonal communications services who exert control over at least some elements of the network or have a service level agreement to that effect with undertakings providing access to the network

PARAMETER (Note 2)	DEFINITION	MEASUREMENT METHOD
Call set up time	ETSI EG 202 057	ETSI EG 202 057
Bill correctness complaints	ETSI EG 202 057	ETSI EG 202 057
Voice connection quality	ETSI EG 202 057	ETSI EG 202 057
Dropped call ratio	ETSI EG 202 057	ETSI EG 202 057
Unsuccessful call ratio (Note 2)	ETSI EG 202 057	ETSI EG 202 057
Failure probability		
Call signalling delays		

Version number of ETSI EG 202 057-1 is 1.3.1 (July 2008)

For providers of internet access services

PARAMETER	DEFINITION	MEASUREMENT METHOD
Latency (delay)	ITU-T Y.2617	ITU-T Y.2617
Jitter	ITU-T Y.2617	ITU-T Y.2617
Packet loss	ITU-T Y.2617	ITU-T Y.2617

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Note 1

Parameters shall allow for performance to be analysed at a regional level (namely, no less than level 2 in the Nomenclature of Territorial Units for Statistics (NUTS) established by Eurostat).

Note 2

Member States may decide not to require up-to-date information concerning the performance for those two parameters to be kept if evidence is available to show that performance in those two areas is satisfactory.

*ANNEX XI*

INTEROPERABILITY OF CAR RADIO RECEIVERS AND CONSUMER DIGITAL TELEVISION EQUIPMENT REFERRED TO IN ARTICLE 113

1. Common scrambling algorithm and free-to-air reception

All consumer equipment intended for the reception of digital television signals (namely, broadcasting via terrestrial, cable or satellite transmission), for sale or rent or otherwise made available in the Union, capable of descrambling digital television signals, is to possess the capability to:

- (a) allow the descrambling of such signals in accordance with a common European scrambling algorithm as administered by a recognised European standardisation organisation (currently ETSI);
- (b) display signals that have been transmitted in the clear, provided that, in the event that such equipment is rented, the renter complies with the relevant rental agreement.

2. Interoperability for digital television sets

Any digital television set with an integral screen of visible diagonal larger than 30 cm which is put on the market for sale or rent in the Union is to be fitted with at least one open interface socket (either standardised by, or conforming to a standard adopted by, a recognised European standardisation organisation, or conforming to an industry-wide specification) permitting simple connection of peripherals, and able to pass all relevant elements of a digital television signal, including information relating to interactive and conditionally accessed services.

3. Interoperability for car radio receivers

Any car radio receiver integrated in a new vehicle of category M which is made available on the market for sale or rent in the Union from 21 December 2020 shall comprise a receiver capable of receiving and reproducing at least radio services provided via digital terrestrial radio broadcasting. Receivers which are in accordance 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 that requirement covered by those standards or parts thereof.



ANNEX XII

Part A

Repealed Directives with list of the successive amendments thereto

(referred to in Article 125)

Directive 2002/21/EC of the European Parliament and of the Council

(OJ L 108, 24.4.2002, p. 33)

Directive 2009/140/EC of the European Parliament and of the Council

(OJ L 337, 18.12.2009, p. 37)

Regulation (EC) No 544/2009 of the European Parliament and of the Council

(OJ L 167, 29.6.2009, p. 12)

Regulation (EC) No 717/2007 of the European Parliament and of the Council

(OJ L 171, 29.6.2007, p. 32)

Directive 2002/20/EC of the European Parliament and of the Council

(OJ L 108, 24.4.2002, p. 21)

Directive 2009/140/EC of the European Parliament and of the Council

(OJ L 337, 18.12.2009, p. 37)

Directive 2002/19/EC of the European Parliament and of the Council

(OJ L 108, 24.4.2002, p. 7)

Directive 2009/140/EC of the European Parliament and of the Council

(OJ L 337, 18.12.2009, p. 37)

Directive 2002/22/EC of the European Parliament and of the Council

(OJ L 108, 24.4.2002, p. 51)

Directive 2009/136/EC of the European Parliament and of the Council

(OJ L 337, 18.12.2009, p. 11)

Regulation (EU) 2015/2120 of the European Parliament and of the Council

(OJ L 310, 26.11.2015, p. 1)

Part B

Time-limits for transposition into national law and dates of application

(referred to in Article 125)

Directive	Time-limit for transposition	Date of application
2002/19/EC	24 July 2003	25 July 2003
2002/20/EC	24 July 2003	25 July 2003
2002/21/EC	24 July 2003	25 July 2003
2002/22/EC	24 July 2003	25 July 2003



ANNEX XIII

CORRELATION TABLE

Directive 2002/21/EC	Directive 2002/20/EC	Directive 2002/19/EC	Directive 2002/22/EC	This Directive
Article 1(1), (2) and (3)				Article 1(1), (2) and (3)
Article 1(3a)				Article 1(4)
Article 1(4) and (5)				Article 1(5) and (6)
Point (a) of Article 2				Point (1) of Article 2
—	—	—	—	Point (2) of Article 2
Point (b) of Article 2				Point (3) of Article 2
Point (c) of Article 2				Point (4) of Article 2
—	—	—	—	Point (5) of Article 2
—	—	—	—	Point (6) of Article 2
—	—	—	—	Point (7) of Article 2
Point (d) of Article 2				Point (8) of Article 2
Point (da) of Article 2				Point (9) of Article 2
Point (e) of Article 2				Point (10) of Article 2
Point (ea) of Article 2				Point (11) of Article 2
Point (f) of Article 2				Point (12) of Article 2
Point (g) of Article 2				—
Point (h) of Article 2				Point (13) of Article 2
Point (i) of Article 2				Point (14) of Article 2
Point (j) of Article 2				—
Point (k) of Article 2				—
Point (l) of Article 2				—
Point (m) of Article 2				Point (15) of Article 2
Point (n) of Article 2				Point (16) of Article 2
Point (o) of Article 2				Point (17) of Article 2
Point (p) of Article 2				Point (18) of Article 2
Point (q) Article 2				Point (19) of Article 2
Point (r) Article 2				Point (20) of Article 2
Point (s) Article 2				Point (31) of Article 2
—	—	—	—	Point (22) of Article 2
Article 3(1)				Article 5(1)
—	—	—	—	Article 5(2)
Article 3(2)				Article 6(1)
Article 3(3)				Article 6(2)

▼B

Directive 2002/21/EC	Directive 2002/20/EC	Directive 2002/19/EC	Directive 2002/22/EC	This Directive
Article 3(3a) first subparagraph				Article 8(1)
—	—	—	—	Article 8(2)
—	—	—	—	Article 7(1)
Article 3(3a) second subparagraph				Article 7(2) and (3)
Article 3(3a) third subparagraph				Article 9(1) and (3)
—	—	—	—	Article 9(2)
Article 3(3b)				Article 10(1)
Article 3(3c)				Article 10(2)
Article 3(4)				Article 5(3)
Article 3(5)				Article 11
Article 3(6)				Article 5(4)
Article 4				Article 31
Article 5				Article 20
—	—	—	—	Article 22
Article 6				Article 23
Article 7				Article 32
Article 7a				Article 33
—	—	—	—	Point (c) of Article 33(5)
Article 8(1) and (2)				Article 3(1) and (2)
Article 8(5)				Article 3(3)
Article 8a(1) and (2)				Article 4(1) and (2)
—	—	—	—	Article 4(3)
Article 8a(3)				Article 4(4)
—	—	—	—	Article 29
Article 9(1) and (2)				Article 45(1) and (2)
—	—	—	—	Article 45(3)
Article 9(3)				Article 45(4)
Article 9(4) and (5)				Article 45(5) and (6)
Article 9(6) and (7)				—
Article 9a				—

▼B

Directive 2002/21/EC	Directive 2002/20/EC	Directive 2002/19/EC	Directive 2002/22/EC	This Directive
Article 9b(1) and (2)				Article 51(1) and (2)
Article 9b(3)				Article 51(4)
—	—	—	—	Article 51(3)
Article 10(1)				Article 95(1)
Article 10(2)				Article 95(3)
—	—	—	—	Article 95(2)
—	—	—	—	Article 95(4)
—	—	—	—	Article 95(5)
—	—	—	—	Article 95(6)
Article 10(3)				Article 95(7)
Article 10(4)				Article 95(8)
Article 10(5)				—
Article 11				Article 43
Article 12(1)				Article 44(1)
Article 12(2)				—
Article 12(3)				Article 61(2)
Article 12(4)				—
Article 12(5)				Article 44(2)
Article 13				Article 17
Article 13a(1), (2) and (3)				Article 40(1), (2) and (3)
Article 13a(4)				—
—				Article 40(5)
—	—	—	—	Article 40(4)
Article 13b(1), (2) and (3)				Article 41(1), (2) and (3)
—	—	—	—	Article 41(4)

▼B

Directive 2002/21/EC	Directive 2002/20/EC	Directive 2002/19/EC	Directive 2002/22/EC	This Directive
Article 13b(4)				Article 41(7)
—	—	—	—	Article 41(5)
—	—	—	—	Article 41(6)
Article 14				Article 63
Article 15(1),(2),(3)				Article 64(1), (2), (3)
Article 15 (4)	—	—	—	—
—	—	—	—	Article 66
Article 16				Article 67
Article 17				Article 39
Article 18				—
Article 19				Article 38
Article 20				Article 26
Article 21(1)				Article 27(1)
Article 21(2) first and second subparagraphs				Article 27(2)
Article 21(2) third subparagraph				Article 27(3)
Article 21(2) fourth and fifth subparagraphs				Article 27(4)
—				Article 27(5)
Article 21(3)				—
Article 21(4)				Article 27(6)
Article 21a				Article 29
Article 22(1)				Article 118(1)
Article 22(2)				Article 118(3)
Article 22(3)				Article 118(4)
—	—	—	—	Article 11(2)
—	—	—	—	Article 118(5)
—	—	—	—	Article 117
Article 23				Article 119

▼B

Directive 2002/21/EC	Directive 2002/20/EC	Directive 2002/19/EC	Directive 2002/22/EC	This Directive
Article 24				Article 120(1) and (2)
Article 25				Article 122(1)
Article 26				Article 125
Article 28				Article 124
Article 29				Article 127
Article 30				Article 128
Annex II				—
	Article 1			Article 1(1)
	Article 2(1)			—
	Article 2(2)			Point (22) of Article 2
—	—	—	—	Point (23) of Article 2
—	—	—	—	Point (24) of Article 2
—	—	—	—	Point (25) of Article 2
—	—	—	—	Point (26) of Article 2
	Article 3(1)			Article 12(1)
	Article 3(2) first sentence			Article 12(2)
	Article 3(2) 2nd, 3rd and 4th sentences			Article 12(3)
	Article 3(3)			Article 12(4)
—	—	—	—	—
	Article 4			Article 15
	Article 5(1)			Article 46(1)
—	—	—	—	Article 46(2) and (3)
	Article 5(2) first subparagraph			Article 48(1)
	Article 5(2) second subparagraph first sentence			Article 48(2)
	Article 5(2) third subparagraph			Article 48(5)
	Article 5(2) second subparagraph second sentence			Article 48(3)
—	—	—	—	Article 48(4)

▼B

Directive 2002/21/EC	Directive 2002/20/EC	Directive 2002/19/EC	Directive 2002/22/EC	This Directive
	Article 5(3)			Article 48(6)
	Article 5(4) and (5)			Article 93(4) and (5)
	Article 5(6)			Article 52
—	—	—	—	Article 93
	Article 6(1),(2),(3) and (4)			Article 13
—	—	—	—	Article 47
	Article 7			—
	—			Article 55
	Article 8			Article 36
	Article 9			Article 14
	Article 10			Article 30
—	—	—	—	
	Article 11			Article 21
	Article 12			Article 16
	Article 13			Article 42
—	—	—	—	Article 94
	Article 14(1)			Article 18
	Article 14(2)			Article 19
	Article 15			Article 120(3) and (4)
	Article 16			—
	Article 17			—
	Article 18			—
	Article 19			—
	Article 20			—
	Annex			Annex I
		Article 1 (1 and 2)		Article 1(2) and (3)
		Point (a) of Article 2		Point (27) of Article 2
		Point (b) of Article 2		Point (28) of Article 2
		Point (c) of Article 2		Point (29) of Article 2
		Point (d) of Article 2		—
		Point (e) of Article 2		Point (30) of Article 2
		Article 3		Article 59

▼B

Directive 2002/21/EC	Directive 2002/20/EC	Directive 2002/19/EC	Directive 2002/22/EC	This Directive
		Article 4		Article 60
		Article 5		Article 61
		Article 6		Article 62
				—
		Article 8		Article 68
		Article 9		Article 69
		Article 10		Article 70
		Article 11		Article 71
—	—	—	—	Article 72
		Article 12		Article 73
		Article 13		Article 74
—	—	—	—	Article 75
—	—	—	—	Article 76
		Article 13a		Article 77
		Article 13b		Article 78
—	—	—	—	Article 80
—	—	—	—	Article 81
		Article 14		—
		Article 15		Article 120(5)
		Article 16(1)		—
		Article 16(2)		Article 121(4)
		Article 17		—
		Article 18		—
		Article 19		—
		Article 20		—
		Annex I		Annex II
		Annex II		—
—	—	—	—	Annex III
			Article 1	Article 1(4) and (5)
			Point (a) of Article 2	—
			Point (c) of Article 2	Point (32) of Article 2
			Point (d) of Article 2	Point (33) of Article 2
			Point (f) of Article 2	Point (34) of Article 2
—	—	—	—	Point (35) of Article 2

▼B

Directive 2002/21/EC	Directive 2002/20/EC	Directive 2002/19/EC	Directive 2002/22/EC	This Directive
—	—	—	—	Point (37) of Article 2
—	—	—	—	Point (38) of Article 2
—	—	—	—	Point (39) of Article 2
—	—	—	—	Article 84
—	—	—	—	Article 85
			Article 3	Article 86(1) and (2)
			Article 4	—
			Article 5	—
			Article 6	—
			Article 7	—
			Article 8(1)	Article 86(3)
			Article 8(2)	Article 86(4)
			Article 8(3)	Article 86(5)
			Article 9	—
—	—	—	—	Article 87
			Article 10	Article 88
			Article 11	—
			Article 12	Article 89
			Article 13	Article 90
			Article 14	Article 91
			Article 15	Article 122(2) and (3)
			Article 17	—
—	—	—	—	Article 99
—	—	—	—	Article 101
			Article 20(1)	Article 102
			Article 20(2)	Article 105(3)
			Article 21	Article 103
			Article 22	Article 104
			Article 23	Article 108
			Article 23a	Article 111
			Article 24	Article 113

▼B

Directive 2002/21/EC	Directive 2002/20/EC	Directive 2002/19/EC	Directive 2002/22/EC	This Directive
			Article 25	Article 112
			Article 26	Article 109
			Article 27	—
			Article 27a	Article 96
			Article 28	Article 97
			Article 29	Article 115
			Article 30(1)	Article 106(2)
			Article 30(2)	Article 106(4)
			Article 30(3)	Article 106(4)
			Article 30(4)	Article 106(5)
			Article 30(5)	Article 105(1)
			Article 31	Article 114
			Article 32	Article 92
			Article 33	Article 24
			Article 34	Article 25
			Article 35	Article 116
			Article 36	Article 121
			Article 37	—
			Article 38	—
			Article 39	—
			Article 40	—
			Annex I	Annex V
			Annex II	Annex VII
			Annex III	Annex IX
			Annex IV	Annex VI
			Annex V	—
			Annex VI	Annex X
				Annex IV