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([1]) Text with EEA relevance.

EN

Acts whose titles are printed in light type are those relating to day-to-day management of agricultural matters, and are generally valid for a limited period.

The titles of all other acts are printed in bold type and preceded by an asterisk.

I

(Legislative acts)

REGULATIONS

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

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

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

Having regard to the proposal from the European Commission,

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

Having regard to the opinion of the European Economic and Social Committee ([1]),

After consulting the Committee of the Regions,

Acting in accordance with the ordinary legislative procedure ([2]),

Whereas:

(1) Directive (EU) 2018/1972 of the European Parliament and of the Council ([3]) aims to create an internal market for electronic communications within the Union while ensuring a high level of investment, innovation and consumer protection through enhanced competition. That Directive also establishes a significant number of new tasks for the Body of European Regulators for Electronic Communications ('BEREC') such as issuing guidelines on several topics, reporting on technical matters, keeping registers, lists or databases and delivering opinions on internal market procedures for draft national measures on market regulation.

(2) Regulation (EU) No 531/2012 of the European Parliament and of the Council ([4]) complements and supports, in so far as Union-wide roaming is concerned, the rules provided for by the regulatory framework for electronic communications and lays down certain tasks for BEREC.

([1]) OJ C 125, 21.4.2017, p. 65.
([2]) Position of the European Parliament of 14 November 2018 (not yet published in the Official Journal) and decision of the Council of 4 December 2018.
([3]) Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (see page 36 of this Official Journal).
([4]) Regulation (EU) No 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communications networks within the Union (OJ L 172, 30.6.2012, p. 10).

(3) Regulation (EU) 2015/2120 of the European Parliament and of the Council ([1]) lays down additional tasks for BEREC in relation to open internet access. Moreover, the BEREC Guidelines of 30 August 2016 on the Implementation by National Regulators of European Net Neutrality Rules have been welcomed as providing a valuable clarification of the guarantee of a strong, free and open internet by ensuring the consistent application of the rules to safeguard equal and non-discriminatory treatment of traffic in the provision of internet access services and related end-users' rights.

(4) In view of the need to ensure the development of consistent regulatory practice and the consistent application of the Union's regulatory framework for electronic communications, the Commission established, by Commission Decision 2002/627/EC ([2]), the European Regulators Group for Electronic Communications Networks and Services (ERG) to advise and assist the Commission in consolidating the internal market for electronic communications networks and services and, more generally, to provide an interface between national regulatory authorities (NRAs) and the Commission.

(5) BEREC and the Office were established by Regulation (EC) No 1211/2009 of the European Parliament and of the Council ([3]). BEREC replaced the ERG and was intended to contribute, on one hand, to the development and, on the other, to the better functioning, of the internal market for electronic communications networks and services by aiming to ensure the consistent implementation of the regulatory framework for electronic communications. BEREC acts as a forum for cooperation among NRAs and between NRAs and the Commission in the exercise of the full range of their responsibilities under the Union regulatory framework. BEREC was established to provide expertise and to act independently and transparently.

(6) BEREC also serves as a body for reflection, debate and advice for the European Parliament, the Council and the Commission in the field of electronic communications.

(7) The Office was established as a Community body with legal personality to carry out the tasks referred to in Regulation (EC) No 1211/2009, in particular the provision of professional and administrative support services to BEREC. In order to support BEREC efficiently, the Office was given legal, administrative and financial autonomy.

(8) By Decision 2010/349/EU ([4]), the Representatives of the Governments of the Member States decided that the Office would have its seat in Riga. The Seat Agreement between the Government of the Republic of Latvia and the Office entered into force on 5 August 2011.

(9) In its communication of 6 May 2015 entitled 'A Digital Single Market Strategy for Europe', the Commission envisaged presenting proposals in 2016 for an ambitious overhaul of the regulatory framework for electronic communications focusing, inter alia, on a more effective regulatory institutional framework in order to make the rules on electronic communications fit for purpose as part of the creation of the right conditions for the digital single market. Those include the deployment of very high capacity networks, more coordinated management of radio spectrum for wireless networks and creating a level playing field for advanced digital networks and innovative services. That communication pointed out that the changing market and technological environment make it necessary to strengthen the institutional framework by enhancing the role of BEREC.

(10) In its resolution of 19 January 2016 entitled 'Towards a Digital Single Market Act', the European Parliament called on the Commission to integrate the digital single market further by ensuring that a more efficient institutional framework is in place.

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

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

([3]) Regulation (EC) No 1211/2009 of the European Parliament and of the Council of 25 November 2009 establishing the Body of European Regulators for Electronic Communications (BEREC) and the Office (OJ L 337, 18.12.2009, p. 1).

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

(11) BEREC and the Office have made a positive contribution towards the consistent implementation of the regulatory framework for electronic communications. However, there are still significant disparities between Member States as regards regulatory practice, which affects companies engaged in cross-border business or active in a significant number of Member States, including where BEREC guidelines exist, but could be further developed. In order to further contribute to the development of the internal market for electronic communications throughout the Union as well as to the promotion of access to, and take-up of, very high capacity networks, competition in the provision of electronic communications networks, services and associated facilities and the interests of the citizens of the Union, this Regulation aims to strengthen the role of BEREC. Such a strengthened role would complement the enhanced role played by BEREC following Regulations (EU) No 531/2012 and (EU) 2015/2120 and Directive (EU) 2018/1972.

(12) In light of market and technological developments, which often entail an increased cross-border dimension, and of the experience gained so far in seeking to ensure the consistent implementation in the field of electronic communications, it is necessary to build on the work of BEREC and the Office. Their governance and activities should be streamlined and adapted to the tasks that they are to carry out. Taking into account settled procedures and the new set of tasks assigned to BEREC and to the Office and in order to strengthen their effectiveness, additional stability for their management should be provided for and the decision-making process should be simplified.

(13) BEREC should provide expertise and establish confidence by virtue of its independence, the quality of its advice and information, the transparency of its procedures and methods of operation, and its diligence in carrying out its tasks. BEREC's independence should not prevent its Board of Regulators from deliberating on the basis of drafts prepared by working groups.

(14) The new official name of the Office should be 'Agency for Support for BEREC' (the 'BEREC Office'). The designation 'BEREC Office' should be used as the Agency's short name. The BEREC Office should enjoy legal, administrative and financial autonomy. To that end, it is necessary and appropriate that the BEREC Office should be a body of the Union with legal personality that exercises the powers conferred upon it. As a Union decentralised agency, the BEREC Office should operate within its mandate and the existing institutional framework. It should not be seen as representing a Union position to an outside audience or as committing the Union to legal obligations.

(15) Moreover, the rules on the governance and operation of the BEREC Office should, where appropriate, be aligned with the principles of the Joint Statement of the European Parliament, the Council and the European Commission of 19 July 2012 on decentralised agencies.

(16) The Union institutions and the NRAs should benefit from BEREC's assistance and advice, including on the relevant regulatory impact of any issue concerning the overall dynamics of digital markets or with regard to their relationship, discussions and exchanges with, and the dissemination of regulatory best practices to, third parties. In addition to its contribution to the Commission's public consultation, BEREC should, when requested, advise the Commission in the preparation of legislative proposals. BEREC should also be able to provide advice to the European Parliament and to the Council, on their request or on its own initiative.

(17) BEREC, as a technical body with expertise on electronic communications and composed of representatives from NRAs and the Commission, is best placed to be entrusted with tasks such as contributing to efficient internal market procedures for draft national measures as regards market regulation, providing the necessary guidelines to NRAs and other competent authorities in order to ensure common criteria and a consistent regulatory approach, and keeping certain registries, databases and lists at Union level. This is without prejudice to the tasks established for NRAs, which are closest to the electronic communications markets and their local conditions.

(18) In order to carry out its tasks, BEREC should continue to pool expertise from NRAs. BEREC should aim to ensure the participation of all NRAs in the fulfilment of its regulatory tasks and its functioning. To strengthen BEREC, make it more representative and safeguard its expertise, experience and knowledge of the specific situation in the full range of national markets, each Member State should ensure that its NRA has adequate financial and human resources required to participate fully in the work of BEREC.

(19) In light of the increasing convergence between the sectors providing electronic communications services, and the horizontal dimension of regulatory issues related to their development, BEREC and the BEREC Office should be allowed to cooperate with, and without prejudice to the role of, NRAs, other Union bodies, offices, agencies and advisory groups, in particular the Radio Spectrum Policy Group established by Commission Decision 2002/622/EC ([1]), the European Data Protection Supervisor established by Regulation (EU) 2018/1725 of the European Parliament and of the Council ([2]), the European Data Protection Board established by Regulation (EU) 2016/679 of the European Parliament and of the Council ([3]), the European Regulators Group for Audiovisual Media Services established by the Directive 2010/13/EU of the European Parliament and the Council ([4]), the European Union Agency for Network and Information Security established by Regulation (EU) No 526/2013 of the European Parliament and of the Council ([5]), the European GNSS Agency established by Regulation (EU) No 912/2010 of the European Parliament and of the Council ([6]), the Consumer Protection Cooperation Network established pursuant to Regulation (EC) No 2006/2004 of the European Parliament and the Council ([7]), the European Competition Network and European standardisation organisations, as well as with existing committees (such as the Communications Committee and the Radio Spectrum Committee). BEREC and the BEREC Office should also be able to cooperate with relevant competent authorities of Member States responsible for competition, consumer protection and data protection, and with the competent authorities of third countries, in particular, regulatory authorities competent in the field of electronic communications or groups of those authorities, as well as with international organisations when necessary for the carrying out of their tasks. BEREC should also be able to consult interested parties by means of public consultation.

(20) BEREC should be entitled to establish working arrangements with competent Union bodies, offices, agencies and advisory groups, with competent authorities of third countries and with international organisations, which should not create legal obligations. The goal of such working arrangements could be, for instance, to develop cooperative relationships and exchange views on regulatory issues. The Commission should ensure that the necessary working arrangements are consistent with Union policy and priorities, and that BEREC operates within its mandate and the existing institutional framework and is not seen as representing the Union position to an outside audience or as committing the Union to international obligations.

(21) BEREC should be composed of the Board of Regulators and working groups. The rotation of the role of Chair of the Board of Regulators is intended to ensure continuity of BEREC's work. A rotation of the roles of Vice-Chairs representing various NRAs is also promoted.

(22) BEREC should be able to act in the interests of the Union, independently from any external intervention, including political pressure or commercial interference. It is therefore important to ensure that the persons appointed to the Board of Regulators enjoy the highest guarantees of personal and functional independence. The head of an NRA, a member of its collegiate body, or the replacement of either of them, enjoy such a level of personal and functional independence. More specifically, they should act independently and objectively, should not seek or take instructions

([1]) Commission Decision 2002/622/EC of 26 July 2002 establishing a Radio Spectrum Policy Group (OJ L 198, 27.7.2002, p. 49).
([2]) Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC (OJ L 295, 21.11.2018, p. 39).
([3]) Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (OJ L 119, 4.5.2016, p. 1).
([4]) Directive 2010/13/EU of the European Parliament and the Council of 10 March 2010 on the coordination of certain provisions laid down by law, regulation and administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive) (OJ L 95, 15.4.2010, p. 1).
([5]) 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).
([6]) Regulation (EU) No 912/2010 of the European Parliament and of the Council of 22 September 2010 setting up the European GNSS Agency, repealing Council Regulation (EC) No 1321/2004 on the establishment of structures for the management of the European satellite radio navigation programmes and amending Regulation (EC) No 683/2008 of the European Parliament and of the Council (OJ L 276, 20.10.2010, p. 11).
([7]) Regulation (EC) No 2006/2004 of the European Parliament and of the Council of 27 October 2004 on cooperation between national authorities responsible for the enforcement of consumer protection laws (the Regulation on consumer protection cooperation) (OJ L 364, 9.12.2004, p. 1).

in the exercise of their functions, and should be protected against arbitrary dismissal. The function of the alternate on the Board of Regulators could also be performed by the head of the NRA, a member of its collegiate body, the replacement of either of them, or by another member of staff of the NRA, who acts on behalf of, and in accordance with the scope of the mandate of, the member of the Board of Regulators replaced.

(23) Experience has shown that most of BEREC's tasks are better carried out through working groups, which should always ensure equal consideration of all NRAs' views and contributions. The Board of Regulators should therefore set up working groups and appoint their Chairs. NRAs should promptly respond to nomination requests in order to ensure the quick establishment of working groups, in particular those related to procedures with time-limits. The working groups should be open to the participation of experts from the Commission. The staff of the BEREC Office should support and contribute to the working groups' activities.

(24) If necessary, and on a case-by-case basis, the Board of Regulators and the Management Board should be able to invite any person whose opinion may be of interest to participate in their meetings as an observer.

(25) Where appropriate and depending on the allocation of tasks to authorities in each Member State, the views of other competent authorities should be taken into consideration in the relevant working group, for example through consultation at national level or by inviting those other authorities to the relevant meetings where their expertise is needed. In any event, the independence of BEREC should be maintained.

(26) The Board of Regulators and the Management Board should operate in parallel, with the former deciding mainly on regulatory matters and the latter on administrative matters such as the budget, staff and audits. In principle and in addition to the representatives of the Commission, the representatives of the NRAs on the Management Board should be the same persons as those appointed to the Board of Regulators, but NRAs should be able to appoint other representatives fulfilling the same requirements.

(27) The appointing authority powers were previously exercised by the Vice-Chair of the Management Committee of the Office. This Regulation provides for the Management Board to delegate relevant appointing authority powers to the Director, who is authorised to sub-delegate those powers. This is intended to contribute to the efficient management of the staff of the BEREC Office.

(28) The Board of Regulators and the Management Board should hold at least two ordinary meetings a year. In light of past experience and the enhanced role of BEREC, the Board of Regulators or the Management Board may need to hold additional meetings.

(29) The Director should remain the representative of the BEREC Office with regard to legal and administrative matters. The Management Board should appoint the Director following an open and transparent selection procedure in order to guarantee a rigorous evaluation of the candidates and a high level of independence. The term of office of the Administrative Manager of the Office was previously three years. It is necessary that the Director has a sufficiently long mandate in order to ensure stability and delivery of a long-term strategy for the BEREC Office.

(30) Commission Delegated Regulation (EU) No 1271/2013 ([1]) should apply to the BEREC Office.

(31) The BEREC Office should provide all necessary professional and administrative support for the work of BEREC, including financial, organisational and logistical support, and should contribute to BEREC's regulatory work.

(32) In order to guarantee the BEREC Office's autonomy and independence, and in order to provide support to the work of BEREC, the BEREC Office should have its own budget, most of which should derive from a contribution from the Union. The budget should be adequate and should reflect the additional tasks assigned and the enhanced role of BEREC and the BEREC Office. The financing of the BEREC Office should be subject to an agreement by the budgetary authority as set out in point 31 of the Inter-institutional Agreement of 2 December 2013 between the European Parliament, the Council and the Commission on budgetary discipline, on cooperation in budgetary matters and on sound financial management ([2]).

([1]) Commission Delegated Regulation (EU) No 1271/2013 of 30 September 2013 on the framework financial regulation for the bodies referred to in Article 208 of Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council (OJ L 328, 7.12.2013, p. 42).

([2]) OJ C 373, 20.12.2013, p. 1.

(33) The BEREC Office should be adequately staffed for the purpose of carrying out its duties. All tasks assigned to the BEREC Office, including professional and administrative services supporting BEREC in carrying out its regulatory tasks, together with compliance with the financial, staff and other applicable regulations, and the increased weight of operational tasks required of the BEREC Office vis-à-vis administrative ones should be duly assessed and reflected in the resource programming.

(34) In order to further extend the consistent implementation of the regulatory framework for electronic communications, the Board of Regulators, the working groups and the Management Board should be open to the participation of regulatory authorities of third countries competent in the field of electronic communications where those third countries have entered into agreements with the Union to that effect, such as EEA EFTA States and candidate countries.

(35) In line with the principle of transparency, BEREC and the BEREC Office should, where relevant, publish information on their work on their webpage. In particular, BEREC should make public any final documents issued in carrying out its tasks, such as opinions, guidelines, reports, recommendations, common positions and best practices, as well as any study which is commissioned to support its tasks. BEREC and the BEREC Office should also make public up-to-date lists of their tasks and up-to-date lists of members, alternates and other participants in the meetings of their organisational bodies, and the declarations of interests made by the members of the Board of Regulators, the members of the Management Board and the Director.

(36) BEREC, supported by the BEREC Office, should be able to engage in communication activities within its field of competence, which are not detrimental to BEREC's core tasks. The content and implementation of the BEREC's communication strategy should be consistent, objective, relevant and coordinated with the strategies and activities of the Commission and the other institutions in order to take into consideration the broader image of the Union. The BEREC Office's communication activities should be carried out in accordance with relevant communication and dissemination plans adopted by the Management Board.

(37) In order to carry out their tasks effectively, BEREC and the BEREC Office should have the right to request all necessary information from the Commission, the NRAs, and, as a last resort, other authorities and undertakings. Requests for information should provide reasons, should be proportionate and should not impose an undue burden on the addressees. NRAs should cooperate with BEREC and the BEREC Office and should provide them with timely and accurate information to ensure that BEREC and the BEREC Office are able to fulfil their tasks. BEREC and the BEREC Office should also, pursuant to the principle of sincere cooperation, share with the Commission, the NRAs and other competent authorities all necessary information. Where relevant, the confidentiality of information should be ensured. When assessing if a request is duly justified, BEREC should take into consideration if the information requested is related to the carrying out of tasks exclusively attributed to the relevant authorities.

(38) The BEREC Office should establish a common information and communication system to avoid duplication of information requests and facilitate communications between all authorities involved.

(39) In order to ensure a high level of confidentiality and to avoid conflicts of interests, the rules on those matters applying to members of the organisational bodies of BEREC and the BEREC Office should apply to their alternates.

(40) Since this Regulation confers new tasks on BEREC and the BEREC Office and other Union legal acts may confer additional tasks, the Commission should carry out a regular evaluation of the operation of BEREC and the BEREC Office and the effectiveness of their institutional structure in a changing digital environment. If, as the outcome of that evaluation, the Commission finds that the institutional structure is not suited to the carrying out BEREC's and the BEREC Office's tasks, and, in particular, to ensure the consistent implementation of the regulatory framework for electronic communications, it should explore all possible options for improving that structure.

(41) The Office which was established as a Community body with legal personality by Regulation (EC) No 1211/2009, is succeeded by the BEREC Office established by this Regulation as regards all ownership, agreements, including the Seat Agreement, legal obligations, employment contracts, financial commitments and liabilities. The BEREC Office should take over the staff of the Office whose rights and obligations should not be affected. In order to ensure continuity in the work of BEREC and the Office, their representatives, namely the Chair and Vice-Chairs of the Board of Regulators, the Management Committee and the Administrative Manager, should continue in office until the end of their term of office.

(42) A significant number of consumers in most Member States continue to rely on traditional international communications such as telephony calls and SMS messages, despite an increasing number of consumers having access to number-independent interpersonal communications services for their international calling needs at lower charges than traditional services or without monetary payment.

(43) In 2013 the Commission proposed an impact-assessed Regulation which included a provision with regulatory measures applicable to intra-EU communications. Additional data on the intra-EU communications market was collected from 2017 to 2018 by BEREC and by the Commission through a Commission study and the Eurobarometer. As shown by that data, significant price differences continue to prevail, for both fixed and mobile communications, between domestic voice and SMS communications and those terminating in another Member State in a context of substantial variations of prices between countries, providers and tariff packages, and between mobile and fixed voice communications. Providers of publicly available number-based interpersonal communications services often charge consumption based intra-EU communications prices that largely exceed the prices for domestic tariffs plus additional costs. On average, the standard price of a fixed or mobile intra-EU call tends to be three times higher than the standard price of a domestic call and the standard price of an intra-EU SMS message more than twice as expensive as a domestic one. However, those arithmetic averages hide significant differences across Member States. In some cases the standard price of an intra-EU call can be up to eight times higher than the standard price for domestic calls. As a consequence, customers in several Member States are exposed to very high prices for intra-EU communications. Those high prices mainly affect consumers, in particular those placing such communications infrequently or having a low volume of consumption, which represent the vast majority of the consumers using intra-EU communications. At the same time, several providers propose special offers particularly attractive for business customers and consumers with a significant consumption of intra-EU communications. Such offers are often not charged based on actual consumption and may consist in a certain number of intra-EU call minutes or SMS messages for a fixed monthly fee (add-on offers) or in the inclusion of a certain number of intra-EU call minutes or SMS messages in the monthly allowance of call minutes or SMS messages, either without any surcharge or with a small surcharge. However, the terms of those offers are often not attractive for consumers with only occasional, unpredictable or relatively low volumes of intra-EU communications. Consequently, those consumers risk paying excessive prices for their intra-EU communications and should be protected.

(44) Moreover, high prices for intra-EU communications represent a barrier to the functioning of the internal market as they discourage seeking and purchasing goods and services from a provider located in another Member State. It is hence necessary to set specific and proportionate limits to the price that providers of publicly available number-based interpersonal communications services may charge consumers for intra-EU communications in order to eliminate such high prices.

(45) When providers of publicly available number-based interpersonal communications services charge their consumers for intra-EU communications at rates wholly or partly based on the consumption of such services, including in cases of consumption-based deduction from a monthly or prepaid allowance for such services, those rates should not exceed EUR 0,19 per minute for calls and EUR 0,06 per SMS message. Those caps correspond to the maximum prices which currently apply, respectively, to regulated roaming calls and SMS messages. When roaming in the Union, consumers benefit from the protection of the euro-voice tariff and the euro-SMS tariff that have been progressively replaced by roaming 'like at home'. Those caps are also considered to be a suitable benchmark for setting the maximum rate for regulated intra-EU communications for five years starting from 15 May 2019. The current level of the cap represents a simple, transparent and proven safety-net for protection against high prices and is suitable as a cap for retail prices of all regulated intra-EU communications. Both roaming calls within the Union and intra-EU calls share a similar cost structure.

(46) The caps should allow the providers of publicly available number-based interpersonal communications services to recoup their costs, thus ensuring a proportionate intervention on both the mobile and fixed calls market. The caps will apply directly only to rates based on actual consumption. They should have a disciplining effect also on those

offers where a certain volume of intra-EU communications is included without being charged separately as consumers have the choice to switch to a consumption-based tariff for their intra-EU communications. Intra-EU communication volumes which go beyond those included in a bundle and are charged separately should be subject to the caps. The measure should ensure, in a proportionate manner, that consumers with a low level of consumption of intra-EU communications are protected against high prices and should, at the same time, have only a moderate impact on providers.

(47) Providers of publicly available number-based interpersonal communications services should be able to propose to their consumers alternative tariff offers for international communications with different rates for regulated intra-EU communications and consumers should be free to opt for such offers expressly, and to switch back any time and free of charge, even for offers to which consumers subscribed before the entry into force of such provisions. Only alternative offers for international communications, such as those covering all or some third countries, should, where accepted by a consumer, be able to free a provider from its obligation not to exceed the caps for regulated intra-EU communications. Other advantages, such as subsidised terminal equipment or discounts on other electronic communications services, offered by providers to consumers are a normal part of competitive interaction and should not affect the applicability of the price caps for regulated intra-EU communications.

(48) Some providers of publicly available number-based interpersonal communications services may be significantly more affected than the majority of other providers in the Union by a price cap for regulated intra-EU communications. This could, in particular, be the case for those providers which generate a particularly high share of their revenues or operational profits with intra-EU communications or whose domestic margins are low compared to industry benchmarks. As a consequence of margin compression as regards regulated intra-EU communications, a provider might not be able to sustain its domestic pricing model. Such scenarios are highly unlikely to occur because the maximum prices are clearly above the costs for providing intra-EU communications. Nevertheless, in order to address such very exceptional scenarios in a proportionate manner, NRAs should be able to grant a derogation upon the request of such provider in justified and exceptional cases.

(49) Any derogation should be granted only where a provider can demonstrate, against a relevant benchmark established by BEREC, that it is significantly more affected than most other providers in the Union and that that impact would significantly weaken that provider's capacity to maintain its charging model for domestic communications. Where an NRA grants a derogation, it should determine the maximum price level that a provider could apply for regulated intra-EU communications and which would enable it to maintain a competitive price level for domestic communications. Any such derogation should be limited to one year and be renewable if the provider demonstrates that the conditions for a derogation continue to be fulfilled.

(50) In light of the principle of proportionality, the applicability of the price caps for regulated intra-EU communications should be limited in time and should expire five years after its entry into force. Such a limited duration should allow proper assessment of the effects of the measures and evaluation to what extent there is an ongoing need to protect consumers.

(51) In order to ensure Union-wide, consistent, timely and most effective protection of consumers negatively affected by the significant price differences of intra-EU communications, such provisions should be directly applicable and enshrined in a regulation. The most suitable regulation for that purpose is Regulation (EU) 2015/2120, which was adopted after an impact assessment which proposed, inter alia, a provision on intra-EU communications as a necessary means by which to complete the internal market for electronic communications. The likely impacts on providers' revenues generated by the provision of intra-EU communications are further mitigated by the application

of the roaming euro-voice tariff and euro-SMS tariff as caps to both fixed and mobile communications, which serve as a safety mechanism; and by evidence, provided by BEREC's 2018 analysis, of a considerable decline in relevant volumes of fixed traffic affected by the measure in the intervening period. Those provisions should therefore be introduced as an amendment to Regulation (EU) 2015/2120, which should also be adapted to ensure that Member States adopt rules on penalties for the infringement of such provisions.

(52) Since the objectives of this Regulation, namely to ensure the consistent implementation of the regulatory framework for electronic communications, in particular in relation to cross-border aspects and through efficient internal market procedures for draft national measures, and to ensure that consumers are not charged excessive prices for making number-based interpersonal communications originating in the Member State of the consumer's domestic provider and terminating at any fixed or mobile number in another Member State, cannot be sufficiently achieved by the Member States but can rather, by reason of the scale and effects of the action, be better achieved at the level of the Union, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve those objectives.

(53) This Regulation amends and extends the scope of Regulation (EC) No 1211/2009. Since the amendments to be made are of a substantial nature, that act should, in the interests of clarity, be repealed. References to the repealed regulation should be construed as references to this Regulation,

HAVE ADOPTED THIS REGULATION:

CHAPTER I

SUBJECT MATTER AND SCOPE

Article 1

Subject matter and scope

1. This Regulation establishes the Body of European Regulators for Electronic Communications ('BEREC') and the Agency for Support for BEREC (the 'BEREC Office').

2. BEREC and the BEREC Office shall, respectively, replace and succeed the Body of European Regulators for Electronic Communications and the Office, which were established by Regulation (EC) No 1211/2009.

Article 2

Legal personality of the BEREC Office

1. The BEREC Office shall be a body of the Union. It shall have legal personality.

2. In each Member State the BEREC Office shall enjoy the most extensive legal capacity accorded to legal persons under national law. It shall, in particular, be capable of acquiring and disposing of movable and immovable property and being party to legal proceedings.

3. The BEREC Office shall be represented by its Director.

4. The BEREC Office shall have sole responsibility for the tasks assigned to and the powers conferred on it.

5. The BEREC Office shall have its seat in Riga.

CHAPTER II

OBJECTIVES AND TASKS OF BEREC

Article 3

Objectives of BEREC

1. BEREC shall act within the scope of Regulations (EU) No 531/2012 and (EU) 2015/2120 and Directive (EU) 2018/1972.

2. BEREC shall pursue the objectives set out in Article 3 of Directive (EU) 2018/1972. In particular, BEREC shall aim to ensure the consistent implementation of the regulatory framework for electronic communications within the scope referred to in paragraph 1 of this Article.

3. BEREC shall carry out its tasks independently, impartially, transparently and in a timely manner.

4. BEREC shall draw upon the expertise available in the national regulatory authorities (NRAs).

5. In accordance with Article 9(3) of Directive (EU) 2018/1972, each Member State shall ensure that its NRAs are able to participate fully in the work of organisational bodies of BEREC.

6. In Member States where there is more than one NRA responsible under Directive (EU) 2018/1972, those NRAs shall coordinate with each other as necessary.

Article 4

Regulatory tasks of BEREC

1. BEREC shall have the following regulatory tasks:

(a) to assist and advise the NRAs, the European Parliament, the Council and the Commission, and cooperate with the NRAs and the Commission, upon request or on its own initiative, on any technical matter regarding electronic communications within its competence;

(b) to assist and advise the Commission, upon request, in relation to the preparation of legislative proposals in the field of electronic communications, including on any proposed amendment of this Regulation or of Directive (EU) 2018/1972;

(c) to issue opinions as referred to in Regulation (EU) No 531/2012 and Directive (EU) 2018/1972, in particular on:

(i) the resolution of cross-border disputes, in accordance with Article 27 of Directive (EU) 2018/1972;

(ii) draft national measures related to the internal market procedures for market regulation, in accordance with Articles 32, 33 and 68 of Directive (EU) 2018/1972;

(iii) draft decisions and recommendations on harmonisation, in accordance with Articles 38 and 93 of Directive (EU) 2018/1972;

(iv) end-to-end connectivity between end-users, in accordance with Article 61(2) of Directive (EU) 2018/1972;

(v) the determination of a single maximum Union-wide mobile voice termination rate and a single maximum Union-wide fixed voice termination rate, in accordance with Article 75 of Directive (EU) 2018/1972;

(vi) the contract summary template, in accordance with Article 102 of Directive (EU) 2018/1972;

(vii) the national implementation and functioning of the general authorisation, and their impact on the functioning of the internal market, in accordance with Article 122(3) of Directive (EU) 2018/1972;

(viii) where relevant, the market and technological developments regarding the different types of electronic communications services and their impact on the application of Title III of Part III of Directive (EU) 2018/1972, in accordance with Article 123(1) of that Directive;

(d) to issue guidelines on the implementation of the Union regulatory framework for electronic communications, in particular, as referred to in Regulations (EU) No 531/2012 and (EU) 2015/2120 and Directive (EU) 2018/1972, on:

(i) the notification template, in accordance with Article 12 of Directive (EU) 2018/1972;

(ii) the consistent implementation of obligations as regards geographical surveys and forecasts, in accordance with Article 22 of Directive (EU) 2018/1972;

(iii) relevant criteria to foster the consistent application of Article 61(3) of Directive (EU) 2018/1972;

(iv) common approaches to the identification of the network termination point in different network topologies, in accordance with Article 61(7) of Directive (EU) 2018/1972;

(v) common approaches to meet transnational end-user demand, in accordance with Article 66 of Directive (EU) 2018/1972;

(vi) minimum criteria for a reference offer, in accordance with Article 69 of Directive (EU) 2018/1972;

(vii) the fostering of the consistent application by NRAs of the conditions set out in Article 76(1) of, and the criteria set out in Annex IV to, Directive (EU) 2018/1972;

(viii) criteria for a network to be considered a very high capacity network, in accordance with Article 82 of Directive (EU) 2018/1972;

(ix) common criteria for the assessment of the ability to manage numbering resources and of the risk of exhaustion of numbering resources, in accordance with Article 93 of Directive (EU) 2018/1972;

(x) relevant quality of service parameters, the applicable measurement methods, the content and format of publication of the information, and quality certification mechanisms, in accordance with Article 104 of Directive (EU) 2018/1972;

(xi) how to assess whether the effectiveness of public warning systems under Article 110(2) of Directive (EU) 2018/1972 is equivalent to the effectiveness of those under paragraph 1 of that Article;

(xii) wholesale roaming access, in accordance with Article 3(8) of Regulation (EU) No 531/2012;

(xiii) the implementation of NRAs' obligations as regards open internet access, in accordance with Article 5(3) of Regulation (EU) 2015/2120;

(xiv) the parameters to be taken into account by NRAs in their assessment of the sustainability of the domestic charging model, in accordance with Article 5a(6) of Regulation (EU) 2015/2120;

(e) to issue other guidelines ensuring the consistent implementation of the regulatory framework for electronic communications and consistent regulatory decisions by the NRAs, on its own initiative or upon the request of an NRA, the European Parliament, the Council or the Commission, in particular for regulatory issues affecting a significant number of Member States or with a cross-border element;

(f) where relevant, to participate in the Peer Review Forum on draft measures on selection procedures, in accordance with Article 35 of Directive (EU) 2018/1972;

(g) to participate on issues concerning its competence relating to market regulation and competition related to radio spectrum, in accordance with Article 4 of Directive (EU) 2018/1972;

(h) to conduct analyses of potential transnational markets in accordance with Article 65 of Directive (EU) 2018/1972 and of transnational end-user demand, in accordance with Article 66 of that Directive;

(i) to monitor and collect information and, where relevant, make up-to-date information publicly available on the application of Regulation (EU) No 531/2012, in accordance with Articles 16 and 19 thereof;

(j) to report on technical matters within its competence, in particular on:

(i) the practical application of the opinions and guidelines referred to in points (c), (d) and (e);

(ii) Member States' best practices to support the defining of adequate broadband internet access service, in accordance with Article 84 of Directive (EU) 2018/1972;

(iii) the evolution of pricing and consumption patterns both for domestic and roaming services, the evolution of actual wholesale roaming rates for unbalanced traffic, the relationship between retail prices, wholesale charges and wholesale costs for roaming services as well as on transparency and comparability of tariffs, in accordance with Article 19 of Regulation (EU) No 531/2012;

(iv) the outcomes of the annual reports that NRAs shall provide in accordance with Article 5 of Regulation (EU) 2015/2120, through the publication of an annual synthesis report;

(v) the market developments in the electronic communications sector, on an annual basis;

(k) to issue recommendations and common positions, and disseminate regulatory best practices addressed to the NRAs in order to encourage the consistent and better implementation of the regulatory framework for electronic communications;

(l) to establish and maintain a database of:

(i) the notifications transmitted to the competent authorities by undertakings subject to general authorisation, in accordance with Article 12 of Directive (EU) 2018/1972;

(ii) the numbering resources with a right of extraterritorial use within the Union, in accordance with the fourth subparagraph of Article 93(4) of Directive (EU) 2018/1972;

(iii) where relevant, E.164 numbers of Member State emergency services, in accordance with the third subparagraph of Article 109(8) of Directive (EU) 2018/1972;

(m) to evaluate the needs for regulatory innovation and coordinate actions between NRAs to enable the development of new innovative electronic communications;

(n) to promote the modernisation, coordination and standardisation of the collection of data by NRAs, such data being made available to the public in an open, reusable and machine-readable format on the BEREC website and the European data portal, without prejudice to intellectual property rights, personal data protection rules and the required level of confidentiality;

(o) to carry out other tasks assigned to it by legal acts of the Union, in particular by Regulations (EU) No 531/2012 and (EU) 2015/2120 and Directive (EU) 2018/1972.

2. BEREC shall make public its regulatory tasks and shall update that information when new tasks are assigned to it.

3. BEREC shall make public all of its final opinions, guidelines, reports, recommendations, common positions and best practices, and any commissioned studies, as well as the relevant draft documents for the purpose of the public consultations referred to in paragraph 5.

4. Without prejudice to compliance with relevant Union law, NRAs and the Commission shall take the utmost account of any guideline, opinion, recommendation, common position and best practices adopted by BEREC with the aim of ensuring the consistent implementation of the regulatory framework for electronic communications within the scope referred to in Article 3(1).

Where an NRA deviates from the guidelines referred to in point (e) of paragraph 1, it shall provide the reasons therefor.

5. BEREC shall, where appropriate, consult interested parties and give them the opportunity to comment within a reasonable period having regard to the complexity of the matter. Save in exceptional circumstances, that period shall not be shorter than 30 days. BEREC shall, without prejudice to Article 38, make the results of such public consultations publicly available. Such consultations shall take place as early as possible in the decision-making process.

6. BEREC may, where appropriate, consult and cooperate with relevant national authorities, such as those competent in the fields of competition, consumer protection and data protection.

7. BEREC may, where appropriate, cooperate with competent Union bodies, offices, agencies and advisory groups, as well as with the competent authorities of third countries and with international organisations, in accordance with Article 35(1).

CHAPTER III

TASKS OF THE BEREC OFFICE

Article 5

Tasks of the BEREC Office

The BEREC Office shall have the following tasks:

(a) to provide professional and administrative support services to BEREC, in particular in fulfilling its regulatory tasks pursuant to Article 4;

(b) to collect information from NRAs and to exchange and transmit information in relation to the regulatory tasks assigned to BEREC pursuant to Article 4;

(c) to produce, on the basis of the information referred to in point (b), regular draft reports on specific aspects of developments in the European electronic communications market, such as roaming and benchmarking reports, to be submitted to BEREC;

(d) to disseminate regulatory best practices among NRAs, in accordance with point (k) of Article 4(1);

(e) to assist BEREC in establishing and maintaining registries and databases, in accordance with point (l) of Article 4(1);

(f) to assist BEREC in establishing and managing an information and communications system, in accordance with Article 41;

(g) to assist BEREC in conducting public consultations, in accordance with Article 4(5);

(h) to assist in the preparation of the work and provide other administrative and content-related support to ensure the smooth functioning of the Board of Regulators;

(i) to assist in setting up working groups, upon the request of the Board of Regulators, contribute to the regulatory work and provide administrative support to ensure the smooth functioning of those groups;

(j) to carry out other tasks assigned to it by this Regulation or by other legal acts of the Union.

CHAPTER IV

ORGANISATION OF BEREC

Article 6

Organisational structure of BEREC

BEREC shall comprise:

(a) a Board of Regulators;

(b) working groups.

Article 7

Composition of the Board of Regulators

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

Each member shall be appointed by the NRA that has primary responsibility for overseeing the day-to-day operation of the markets for electronic communications networks and services under Directive (EU) 2018/1972. The member shall be appointed from among the head of the NRA, a member of its collegiate body, or the replacement of either of them.

2. Each member of the Board of Regulators shall have an alternate, appointed by the NRA. The alternate shall represent the member in his or her absence. The alternate shall be appointed from among the head of the NRA, a member of its collegiate body, the replacement of either of them, or the staff of the NRA.

3. Members of the Board of Regulators and their alternates shall be appointed in light of their knowledge in the field of electronic communications, taking into account relevant managerial, administrative and budgetary skills. In order to ensure continuity of the work of the Board of Regulators, all appointing NRAs shall make efforts to limit the turnover of their members and, where possible, also of their alternates, and shall aim to achieve a balanced representation between men and women.

4. The Commission shall participate in all deliberations of the Board of Regulators without the right to vote and shall be represented at an appropriately high level.

5. An up-to-date list of members of the Board of Regulators and their alternates, together with their declarations of interest, shall be made public.

Article 8

Independence of the Board of Regulators

1. When carrying out the tasks conferred upon it and without prejudice to its members acting on behalf of their respective NRA, the Board of Regulators shall act independently and objectively in the interests of the Union, regardless of any particular national or personal interests.

2. Without prejudice to coordination as referred to in Article 3(6), the members of the Board of Regulators and their alternates shall neither seek nor take instructions from any government, institution, person or body.

Article 9

Functions of the Board of Regulators

The Board of Regulators shall have the following functions:

(a) to fulfil the regulatory tasks of BEREC set out in Article 4, namely to adopt the opinions, guidelines, reports, recommendations and common positions and disseminate best practices referred to in that Article, relying, in doing so, on the preparatory work carried out by the working groups;

(b) to take administrative decisions relating to the organisation of BEREC's work;

(c) to adopt BEREC's annual work programme as referred to in Article 21;

(d) to adopt BEREC's annual report on its activities as referred to in Article 22;

(e) to adopt rules for the prevention and management of conflicts of interests as referred to in Article 42, as well as in respect of members of the working groups;

(f) to adopt detailed rules on the right of access to documents held by BEREC in accordance with Article 36;

(g) to adopt and regularly update the communication and dissemination plans as referred to in Article 37(2), based on an analysis of needs;

(h) to adopt, acting by a two-thirds majority of its members, and make public, its rules of procedure;

(i) to authorise, together with the Director, the conclusion of working arrangements with competent Union bodies, offices, agencies and advisory groups and with competent authorities of third countries and with international organisations in accordance with Article 35;

(j) to set up working groups and appoint their Chairs;

(k) to provide the Director of the BEREC Office with guidance with regard to the carrying out of the tasks of the BEREC Office.

Article 10

Chair and Vice-Chairs of the Board of Regulators

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

2. One of the Vice-Chairs shall automatically assume the duties of the Chair if the latter is not in a position to perform those duties.

3. The term of office of the Chair shall be one year, renewable once. In order to ensure continuity of BEREC's work, the incoming Chair shall serve, where possible, one year as Vice-Chair before his or her term of office as Chair. The rules of procedure shall provide for a shorter term where it is not possible for the incoming Chair to serve as Vice-Chair one year before his or her term of office as Chair.

4. Without prejudice to the role of the Board of Regulators in relation to the Chair's tasks, the Chair shall neither seek nor take instruction from any government, institution, person or body.

5. The Chair shall report to the European Parliament and to the Council on the performance of BEREC's tasks when invited to do so.

Article 11

Meetings of the Board of Regulators

1. The Chair shall convene the meetings of the Board of Regulators and shall set the agendas for those meetings, which shall be made public.

2. The Board of Regulators shall hold at least two ordinary meetings a year.

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

3. The Director of the BEREC Office shall take part in all deliberations without the right to vote.

4. The Board of Regulators may invite any person whose opinion may be of interest to it, to participate in its meetings as an observer.

5. The members and the alternates of the Board of Regulators may, subject to its rules of procedure, be assisted at the meetings by their advisers or other experts.

6. The BEREC Office shall provide the secretariat for the Board of Regulators.

Article 12

Voting rules of the Board of Regulators

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

A majority of two thirds of the members of the Board of Regulators shall be required for the opinions referred to in points (c)(ii) and (v) of Article 4(1) and the guidelines referred to in points (d)(i) to (iv), (vi), (vii) and (x) of Article 4(1).

Notwithstanding the second subparagraph of this paragraph, the Board of Regulators may decide, by a simple majority and on a case-by-case basis, to adopt opinions referred to in point (c)(ii) of Article 4(1) of this Regulation by simple majority, related to draft measures falling under Article 76(2) of Directive (EU) 2018/1972, that lead to the launching of the procedure under Article 33(5) of that Directive.

The decisions of the Board of Regulators shall be made public and shall indicate any reservations of any member upon his or her request.

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

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

The Chair may delegate the right to vote in any event. The Chair shall take part in the voting unless he or she has delegated the right to vote.

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

Article 13

Working groups

1. Where justified and, in particular, in order to implement BEREC's annual work programme, the Board of Regulators may set up working groups.

2. The Board of Regulators shall appoint the Chairs of the working groups, representing, where possible, different NRAs.

3. The working groups shall be open to the participation of experts from all the NRAs participating in the work of BEREC and the Commission.

The working groups shall also be open to the participation of the staff of the BEREC Office, who shall contribute to the regulatory work of, and provide administrative support to, the working groups.

In the case of the working groups which are set up to carry out the tasks referred to in point (c)(ii) of Article 4(1), the experts from the Commission shall not participate.

In working groups which are set up to carry out the tasks referred to in points (c)(iv), (vi), (vii) and (viii), points (d)(i), (ii), (ix), (x) and (xi), point (j)(ii) and point (l), of Article 4(1) of this Regulation as well as, where relevant, point (c)(iii) and point (j)(i) of Article 4(1) thereof, the views of experts from other competent authorities notified pursuant to Article 5(4) of Directive (EU) 2018/1972 shall be taken into consideration.

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

4. The Board of Regulators shall adopt rules of procedure laying down the practical arrangements for the operation of the working groups.

CHAPTER V

ORGANISATION OF THE BEREC OFFICE

Article 14

Organisational structure of the BEREC Office

The BEREC Office shall comprise:

(a) a Management Board;

(b) a Director.

Article 15

Composition of the Management Board

1. The Management Board shall be composed of the persons appointed as members of the Board of Regulators and of one high level representative of the Commission. Each member of the Management Board shall have the right to vote.

Each appointing NRA, as referred to in the second subparagraph of Article 7(1), may appoint a person other than the member of the Board of Regulators as member of the Management Board. That person shall be the head of the NRA, a member of its collegiate body, or the replacement of either of them.

2. Each member of the Management Board shall have an alternate who represents the member in his or her absence.

The alternates of each member shall be the persons appointed as alternates of the members of the Board of Regulators. The representative of the Commission shall also have an alternate.

Each appointing NRA, as referred to in the second subparagraph of Article 7(1), may appoint a person other than the alternate of the member of the Board of Regulators as the alternate of the member of the Management Board. That person shall be the head of the NRA, a member of its collegiate body, the replacement of either of them, or the staff of the NRA.

3. The members of the Management Board and their alternates shall neither seek nor take instructions from any government, institution, person or body.

4. An up-to-date list of members of the Management Board and their alternates, together with their declarations of interests, shall be made public.

Article 16

Administrative Functions of the Management Board

1. The Management Board shall have the following administrative functions:

(a) to provide general orientations for the BEREC Office's activities and adopt, on an annual basis, the BEREC Office's single programming document by a majority of two thirds of its members, taking into account the opinion of the Commission and in accordance with Article 23;

(b) to adopt, by a majority of two thirds of its members, the annual budget of the BEREC Office and exercise other functions in respect of the BEREC Office's budget pursuant to Chapter VII;

(c) to adopt, make public and proceed with an assessment of the consolidated annual activity report on the BEREC Office's activities referred to in Article 27 and submit both the report and its assessment, by 1 July each year to the European Parliament, the Council, the Commission and the Court of Auditors;

(d) to adopt the financial rules applicable to the BEREC Office in accordance with Article 29;

(e) to adopt an anti-fraud strategy proportionate to fraud risks, taking into account the costs and benefits of the measures to be implemented;

(f) to ensure adequate follow-up to findings and recommendations stemming from the internal or external audit reports and evaluations, as well as from investigations of the European Anti-Fraud Office (OLAF);

(g) to adopt rules for the prevention and management of conflicts of interests as referred to in Article 42(3);

(h) to adopt and regularly update the communication and dissemination plans referred to in Article 37(2), based on an analysis of needs;

(i) to adopt its rules of procedure;

(j) to adopt implementing rules for giving effect to the Staff Regulations of Officials of the European Union and the Conditions of Employment of Other Servants of the European Union ([1]), in accordance with Article 110 of the Staff Regulations;

(k) without prejudice to the decision referred to in the first subparagraph of paragraph 2, to exercise, with respect to the staff of the BEREC Office, the powers conferred by the Staff Regulations on the Appointing Authority and by the Conditions of Employment of Other Servants on the Authority Empowered to Conclude a Contract of Employment (the 'appointing authority powers');

(l) to appoint the Director and, where relevant, extend his or her term of office or remove him or her from office in accordance with Article 32;

(m) to appoint an Accounting Officer, subject to the Staff Regulations and the Conditions of Employment of Other Servants, who shall be wholly independent in the performance of his or her duties;

(n) to take all decisions on the establishment of the BEREC Office's internal structures and, where necessary, their modification, taking into consideration the BEREC Office's activity needs as well as having regard to sound budgetary management.

([1]) Regulation (EEC, Euratom, ECSC) No 259/68 of the Council of 29 February 1968 laying down the Staff Regulations of Officials and the Conditions of Employment of Other Servants of the European Communities and instituting special measures temporarily applicable to officials of the Commission (OJ L 56, 4.3.1968, p. 1).

With regard to point (m) of the first subparagraph, the BEREC Office may appoint the same Accounting Officer as another Union body or institution. In particular, the BEREC Office and the Commission may agree that the Commission's accounting officer shall also act as Accounting Officer of the BEREC Office.

2. The Management Board shall adopt, in accordance with Article 110 of the Staff Regulations, a decision based on Article 2(1) of the Staff Regulations and on Article 6 of the Conditions of Employment of Other Servants, delegating relevant appointing authority powers to the Director and specifying the conditions under which this delegation of powers can be suspended. The Director shall be authorised to sub-delegate those powers.

Where exceptional circumstances so require, the Management Board may, by way of a decision, temporarily suspend the delegation of the appointing authority powers to the Director and those sub-delegated by the latter and exercise them itself or delegate them to one of its members or to a member of staff other than the Director.

Article 17

Chairperson and Deputy Chairpersons of the Management Board

1. The Chairperson and the Deputy Chairpersons of the Management Board shall be the persons appointed as the Chair and Vice-Chairs of the Board of Regulators. The same term of office shall apply.

By derogation from the first subparagraph, the Management Board may, by a majority of two thirds of its members, elect other members of the Management Board as Chairperson or Deputy Chairperson(s) from among its members, representing Member States. Their term of office shall be the same as that of the Chair and Vice-Chairs of the Board of Regulators.

2. One of the Deputy Chairpersons shall automatically assume the duties of the Chairperson if the latter is not in a position to perform those duties.

3. The Chairperson of the Management Board shall report to the European Parliament and to the Council on the carrying out of the tasks of the BEREC Office when invited to do so.

Article 18

Meetings of the Management Board

1. The Chairperson shall convene the meetings of the Management Board.

2. The Director of the BEREC Office shall take part in the deliberations, except those related to Article 32, without the right to vote.

3. The Management Board shall hold at least two ordinary meetings a year. In addition, the Chairperson shall convene extraordinary meetings on his or her own initiative, upon the request of the Commission, or of at least three of its members.

4. The Management Board may invite any person whose opinion may be of interest to attend its meetings as an observer.

5. The members of the Management Board and their alternates may, subject to its rules of procedure, be assisted at the meetings by advisers or experts.

6. The BEREC Office shall provide the secretariat for the Management Board.

Article 19

Voting rules of the Management Board

1. The Management Board shall take decisions by a simple majority of its members, unless otherwise provided for in this Regulation.

2. Each member shall have one vote. In the absence of a member, the alternate shall be entitled to exercise the right to vote.

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

3. The Chairperson may delegate the right to vote in any event. He or she shall take part in the voting unless he or she has delegated the right to vote.

4. The Management Board's rules of procedure shall establish more detailed voting arrangements, in particular the procedure for voting on urgent matters and the circumstances in which a member may act on behalf of another member.

Article 20

Responsibilities of the Director

1. The Director shall be in charge of the administrative management of the BEREC Office. The Director shall be accountable to the Management Board.

2. The Director shall assist the Chair of the Board of Regulators and the Chairperson of the Management Board in preparing the meetings of their respective bodies.

3. Without prejudice to the powers of the Board of Regulators, the Management Board and the Commission, the Director shall be independent in the performance of his or her duties and shall neither seek nor take instructions from any government, institution, person or body.

4. The Director shall report to the European Parliament and to the Council on the performance of his or her duties when invited to do so.

5. The Director shall be the legal representative of the BEREC Office.

6. The Director shall be responsible for the implementation of the BEREC Office's tasks and following the guidance provided by the Board of Regulators and the Management Board. In particular, the Director shall be responsible for:

(a) the day-to-day administration of the BEREC Office;

(b) implementing administrative decisions adopted by the Board of Regulators and the Management Board;

(c) preparing, and submitting to the Management Board, the single programming document referred to in Article 23;

(d) assisting the Board of Regulators in the preparation of BEREC's annual activity report as referred to in Article 22;

(e) assisting the Board of Regulators in the preparation of BEREC's annual work programme as referred to in Article 21;

(f) implementing the single programming document, and reporting to the Management Board on its implementation;

(g) preparing the draft consolidated annual report on the BEREC Office's activities as referred to in Article 27 and presenting it to the Management Board for assessment and adoption;

(h) preparing an action plan following-up conclusions of internal or external audit reports and evaluations, as well as investigations by the OLAF and reporting on progress at least once a year to the Management Board;

(i) protecting the financial interests of the Union by applying preventive measures against fraud, corruption and any other illegal activities, by carrying out effective checks and, if irregularities are detected, by recovering amounts wrongly paid and, where appropriate, by imposing effective, proportionate and dissuasive administrative measures, including financial penalties;

(j) preparing an anti-fraud strategy for the BEREC Office and presenting it to the Management Board for approval;

(k) preparing draft financial rules applicable to the BEREC Office;

(l) preparing the BEREC Office's draft statement of estimates of revenue and expenditure and implementing its budget;

(m) authorising, together with the Board of Regulators, the conclusion of working arrangements with competent Union bodies, offices, agencies and advisory groups and with competent authorities of third countries and with international organisations in accordance with Article 35.

7. The Director shall, under the supervision of the Management Board, take the necessary measures, in particular with regard to adopting internal administrative instructions and publishing notices, in order to ensure the functioning of the BEREC Office in accordance with this Regulation.

8. The Director shall, subject to the prior consent of the Commission, the Management Board and the Member States concerned, decide whether it is necessary for the purpose of carrying out the BEREC Office's tasks in an efficient and effective manner to locate one or more members of staff in one or more Member States. The decision shall specify the scope of the activities to be carried out in a manner that avoids unnecessary costs and duplication of administrative functions of the BEREC Office. Before such a decision is taken, its impact in terms of staff allocation and budget shall be set out in the multi-annual programming document referred to in Article 23(4).

CHAPTER VI

BEREC PROGRAMMING

Article 21

Annual Work Programme of BEREC

1. The Board of Regulators shall adopt the outline of the annual work programme by 31 January of the year preceding that to which the annual work programme relates. After consulting the European Parliament, the Council and the Commission on their priorities, as well as other interested parties in accordance with Article 4(5), the Board of Regulators shall adopt the final annual work programme by 31 December of that year.

2. The Board of Regulators shall transmit the annual work programme to the European Parliament, the Council and the Commission as soon as it is adopted.

Article 22

Annual Activity Report of BEREC

1. The Board of Regulators shall adopt the annual report on the activities of BEREC.

2. The Board of Regulators shall transmit the annual activity report to the European Parliament, the Council, the Commission and the European Economic and Social Committee by 15 June each year.

CHAPTER VII

BUDGET AND PROGRAMMING OF THE BEREC OFFICE

Article 23

Annual and multi-annual programming

1. Each year, the Director shall draw up a draft programming document containing annual and multiannual programming ('single programming document') in line with Article 32 of Delegated Regulation (EU) No 1271/2013, taking into account guidelines set by the Commission.

By 31 January each year, the Management Board shall adopt the draft single programming document and forward it to the Commission for it to provide its opinion. The draft single programming document shall also be submitted to the European Parliament and to the Council.

The Management Board shall subsequently adopt the single programming document, taking into account the opinion of the Commission. It shall submit the single programming document, as well as any subsequent updates, to the European Parliament, the Council and the Commission.

The single programming document shall become definitive after adoption of the general budget of the Union and, if necessary, shall be adjusted accordingly.

2. The annual programming document shall comprise detailed objectives and expected results, including performance indicators. It shall also contain a description of the actions to be financed and an indication of the financial and human resources allocated to each action, in accordance with the principles of activity-based budgeting and management, as referred to in Article 31. The annual programming document shall be consistent with the BEREC's outline of the annual work programme and the final annual work programme as referred to in Article 21 and with the multiannual programming document of the BEREC Office referred to in paragraph 4 of this Article. It shall clearly indicate tasks that have been added, changed or deleted in comparison with the previous financial year.

3. The Management Board shall, where necessary, amend the annual programming document after adoption of BEREC's final annual work programme referred to in Article 21 and where a new task is assigned to BEREC or to the BEREC Office.

Any substantial amendment to the annual programming document shall be adopted by the same procedure as that used to adopt the initial annual programming document. The Management Board may delegate the power to make non-substantial amendments to the annual programming document to the Director.

4. The multiannual programming document shall set out overall strategic programming including objectives, expected results and performance indicators. It shall also set out resource programming including multi-annual budget and staff.

The resource programming shall be updated annually. The strategic programming shall be updated where appropriate, and in particular to address the outcome of the evaluation referred to in Article 48.

5. The single programming document of the BEREC Office shall include the implementation of BEREC's strategy for relations with competent Union bodies, offices, agencies and advisory groups, with competent authorities of third countries and with international organisations as referred to in Article 35(3), the actions linked to that strategy and the specification of associated resources.

Article 24

Establishment of the budget

1. Each year, the Director shall draw up a provisional draft estimate of the BEREC Office's revenue and expenditure (the 'draft estimate') for the following financial year, including the establishment plan, and submit it to the Management Board.

The information contained in the draft estimate shall be consistent with the draft single programming document referred to in Article 23(1).

2. The Director shall submit the draft estimate to the Commission by 31 January each year.

3. The Commission shall submit the draft estimate to the budgetary authority together with the draft general budget of the Union.

4. On the basis of the draft estimate, the Commission shall enter in the draft general budget of the Union the estimates it considers necessary for the establishment plan and the amount of the contribution to be charged to the general budget, which it shall place before the budgetary authority in accordance with Articles 313 and 314 of the Treaty on the Functioning of the European Union (TFEU).

5. The budgetary authority shall authorise the appropriations for the contribution to the BEREC Office.

6. The budgetary authority shall adopt the BEREC Office's establishment plan.

7. The Management Board shall adopt the BEREC Office's budget. The budget shall become final following final adoption of the general budget of the Union. Where necessary, it shall be adjusted accordingly.

8. For any building project likely to have significant implications for the budget of the BEREC Office, Delegated Regulation (EU) No 1271/2013 shall apply.

Article 25

Structure of the budget

1. Estimates of all revenue and expenditure for the BEREC Office shall be prepared each financial year, corresponding to the calendar year, and shall be shown in the BEREC Office's budget.

2. The BEREC Office's budget shall be balanced in terms of revenue and of expenditure.

3. Without prejudice to other resources, the BEREC Office's revenue shall comprise:

(a) a contribution from the Union;

(b) any voluntary financial contribution from the Member States or the NRAs;

(c) charges for publications and any other service provided by the BEREC Office;

(d) any contribution from third countries or the regulatory authorities competent in the field of electronic communications of third countries participating in the work of the BEREC Office, as provided for in Article 35.

4. The expenditure of the BEREC Office shall include staff remuneration, administrative and infrastructure expenses and operational expenditure.

Article 26

Implementation of the budget

1. The Director shall implement the BEREC Office's budget.

2. Each year the Director shall submit to the European Parliament and the Council all information relevant to the findings of evaluation procedures.

Article 27

Consolidated Annual Activity Report

The Management Board shall adopt consolidated annual activity reports in accordance with Article 47 of Delegated Regulation (EU) No 1271/2013, taking into account guidelines set by the Commission.

Article 28

Presentation of accounts and discharge

1. The BEREC Office's accounting officer shall submit the provisional accounts for the financial year to the Commission's Accounting Officer and to the Court of Auditors by 1 March of the following financial year.

2. The BEREC Office shall submit the report on the budgetary and financial management to the European Parliament, the Council and the Court of Auditors by 31 March of the following financial year.

3. On receipt of the Court of Auditors' observations on the BEREC Office's provisional accounts, the BEREC Office's accounting officer shall draw up the BEREC Office's final accounts under his or her own responsibility. The Director shall submit the final accounts to the Management Board for an opinion.

4. The Management Board shall deliver an opinion on the BEREC Office's final accounts.

5. The Director shall submit the final accounts to the European Parliament, the Council, the Commission and the Court of Auditors, together with the Management Board's opinion by 1 July following each financial year.

6. The BEREC Office shall publish the final accounts in the Official Journal of the European Union by 15 November of the following year.

7. The Director shall submit to the Court of Auditors a reply to its observations by 30 September of the following financial year. The Director shall also submit that reply to the Management Board.

8. The Director shall submit to the European Parliament, upon the latter's request, any information required for the smooth application of the discharge procedure for the financial year in question, in accordance with Article 165(3) of Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council ([1]).

9. On a recommendation from the Council acting by a qualified majority, the European Parliament shall, before 15 May of year N + 2, give a discharge to the Director in respect of the implementation of the budget for year N.

Article 29

Financial rules

The financial rules applicable to the BEREC Office shall be adopted by the Management Board after consulting the Commission. They shall not diverge from Delegated Regulation (EU) No 1271/2013 unless such a divergence is required for the BEREC Office's operation and the Commission has given its prior consent.

CHAPTER VIII

STAFF OF THE BEREC OFFICE

Article 30

General provision

The Staff Regulations and the Conditions of Employment of Other Servants and the rules adopted by agreement between the institutions of the Union for giving effect to those Staff Regulations and the Conditions of Employment of Other Servants shall apply to the staff of the BEREC Office.

Article 31

Number of staff of the BEREC Office

1. In accordance with the principle of activity-based management of human resources, the BEREC Office shall have the staff required to carry out its duties.

2. The number of staff and corresponding financial resources shall be proposed in accordance with Article 23(2) and (4) and Article 24(1), taking account of point (a) of Article 5 and all other tasks assigned to the BEREC Office by this Regulation or by other Union legal acts, as well as the need for compliance with the regulations applicable to all Union decentralised agencies.

Article 32

Appointment of the Director

1. The Director shall be engaged as a temporary agent of the BEREC Office in accordance with point (a) of Article 2 of the Conditions of Employment of Other Servants.

2. The Director shall be appointed by the Management Board, following an open and transparent selection procedure, on the basis of merit, management, administrative and budgetary skills and the skills and experience relevant to electronic communications networks and services.

([1]) Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union, amending Regulations (EU) No 1296/2013, (EU) No 1301/2013, (EU) No 1303/2013, (EU) No 1304/2013, (EU) No 1309/2013, (EU) No 1316/2013, (EU) No 223/2014, (EU) No 283/2014, and Decision No 541/2014/EU and repealing Regulation (EU, Euratom) No 966/2012 (OJ L 193, 30.7.2018, p. 1).

The list of candidates shall not be proposed by the Chairperson or by a Deputy Chairperson alone. The rules of procedure of the Management Board shall set out in detail the arrangements governing a procedure to shortlist the number of eligible candidates and a voting procedure.

3. For the purpose of concluding the contract with the Director, the BEREC Office shall be represented by the Chairperson of the Management Board.

4. Before appointment, the candidate selected by the Management Board shall be invited to make a statement before the competent committee of the European Parliament and to answer questions put by its members.

5. The term of office of the Director shall be five years. By the end of that period, the Chairperson of the Management Board shall carry out an assessment that takes into account an evaluation of the Director's performance and the BEREC Office's tasks and challenges. That assessment shall be submitted to the European Parliament and to the Council.

6. The Management Board, taking into account the assessment referred to in paragraph 5, may extend the Director's term of office once, for no more than five years.

7. The Management Board shall inform the European Parliament if it intends to extend the Director's term of office. Within one month before any such extension, the Director may be invited to make a statement before the competent committee of the European Parliament and to answer questions put by its members.

8. A Director whose term of office has been extended shall not participate in another selection procedure for the same post after the end of the cumulative period.

9. Where the term of office is not extended, the Director shall, upon a decision of the Management Board, remain in office beyond the expiry of the initial term of office until the appointment of a successor.

10. The Director may be removed from office only upon a decision of the Management Board acting on a proposal from a member.

11. The Management Board shall reach decisions on appointment, extension of the term of office or removal from office of the Director on the basis of a vote of a two-thirds majority of its members.

Article 33

Seconded national experts and other staff

1. The BEREC Office may make use of seconded national experts or other staff not employed by it. The Staff Regulations and the Conditions of Employment of Other Servants shall not apply to such staff.

2. The Management Board shall adopt a decision laying down rules on the secondment of national experts to the BEREC Office.

CHAPTER IX

GENERAL PROVISIONS

Article 34

Privileges and immunities

The Protocol on the Privileges and Immunities of the European Union shall apply to the BEREC Office and its staff.

Article 35

Cooperation with Union bodies, third countries and international organisations

1. In so far as necessary in order to achieve the objectives set out in this Regulation and carry out its tasks, and without prejudice to the competences of the Member States and the institutions of the Union, BEREC and the BEREC Office may cooperate with competent Union bodies, offices, agencies and advisory groups, with competent authorities of third countries and with international organisations.

To that end, BEREC and the BEREC Office may, subject to prior approval by the Commission, establish working arrangements. Those arrangements shall not create legal obligations.

2. The Board of Regulators, the working groups and the Management Board shall be open to the participation of regulatory authorities of third countries with primary responsibility in the field of electronic communications, where those third countries have entered into agreements with the Union to that effect.

Under the relevant provisions of those agreements, working arrangements shall be developed specifying, in particular, the nature, extent and manner in which the regulatory authorities of the third countries concerned will participate without the right to vote in the work of BEREC and of the BEREC Office, including provisions relating to participation in the initiatives carried out by BEREC, financial contributions and staff to the BEREC Office. As regards staff matters, those arrangements shall, in any event, comply with the Staff Regulations.

3. As part of the annual work programme referred to in Article 21, the Board of Regulators shall adopt BEREC's strategy for relations with competent Union bodies, offices, agencies and advisory groups, with competent authorities of third countries and with international organisations concerning matters for which BEREC is competent. The Commission, BEREC and the BEREC Office shall conclude an appropriate working arrangement for the purpose of ensuring that BEREC and the BEREC Office operate within their mandate and the existing institutional framework.

Article 36

Access to documents and data protection

1. Regulation (EC) No 1049/2001 of the European Parliament and of the Council [1] shall apply to documents held by BEREC and the BEREC Office.

2. The Board of Regulators and the Management Board shall, by 21 June 2019, adopt detailed rules for applying Regulation (EC) No 1049/2001.

3. The processing of personal data by BEREC and the BEREC Office shall be subject to Regulation (EU) 2018/1725.

4. The Board of Regulators and the Management Board shall, by 21 June 2019, establish measures for the application of Regulation (EU) 2018/1725 by BEREC and the BEREC Office, including those concerning the appointment of a Data Protection Officer of the BEREC Office. Those measures shall be established after consulting the European Data Protection Supervisor.

Article 37

Transparency and communication

1. BEREC and the BEREC Office shall carry out their activities with a high level of transparency. BEREC and the BEREC Office shall ensure that the public and any interested parties are given appropriate, objective, reliable and easily accessible information, in particular in relation to their tasks and the results of their work.

2. BEREC, supported by the BEREC Office, may engage in communication activities on its own initiative within its field of competence in accordance with relevant communication and dissemination plans adopted by the Board of Regulators. The allocation of resources for such support for communication activities within the BEREC Office's budget shall not be detrimental to the effective exercise of BEREC's tasks as referred to in Article 4 or the BEREC Office's tasks as referred to in Article 5.

Communication activities of the BEREC Office shall be carried out in accordance with relevant communication and dissemination plans adopted by the Management Board.

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[1] Regulation (EC) No 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents (OJ L 145, 31.5.2001, p. 43).

Article 38

Confidentiality

1. Without prejudice to Article 36(1) and Article 40(2), BEREC and the BEREC Office shall not disclose to third parties information that they process or receive in relation to which a reasoned request for confidential treatment has been made in whole or in part.

2. Members and other participants at the meetings of the Board of Regulators, the Management Board and the working groups, the Director, seconded national experts and other staff not employed by the BEREC Office shall comply with the confidentiality requirements under Article 339 TFEU, even after their duties have ceased.

3. The Board of Regulators and the Management Board shall lay down the practical arrangements for implementing the confidentiality rules referred to in paragraphs 1 and 2.

Article 39

Security rules on the protection of classified and sensitive non-classified information

BEREC and the BEREC Office shall adopt their own security rules equivalent to the Commission's security rules for protecting European Union Classified Information and sensitive non-classified information, inter alia, provisions for the exchange, processing and storage of such information as set out in Commission Decisions (EU, Euratom) 2015/443 ([1]) and (EU, Euratom) 2015/444 ([2]). Alternatively, BEREC or the BEREC Office may adopt a decision applying the Commission's rules mutatis mutandis.

Article 40

Exchange of information

1. Upon the reasoned request of BEREC or the BEREC Office, the Commission and the NRAs represented in the Board of Regulators and other competent authorities shall provide BEREC or the BEREC Office with all the necessary information, in a timely and accurate manner, to carry out their tasks, provided that they have legal access to the relevant information and that the request for information is necessary in relation to the nature of the task in question.

BEREC or the BEREC Office may also request such information to be provided at regular intervals and in specified formats. Such requests shall, where possible, be made using common reporting formats.

2. Upon the reasoned request of the Commission or an NRA, BEREC or the BEREC Office shall provide, in a timely and accurate manner, any information that is necessary to enable the Commission, the NRA or other competent authority, to carry out their tasks, pursuant to the principle of sincere cooperation. Where BEREC or the BEREC Office considers information to be confidential, the Commission, the NRA or the other competent authority shall ensure such confidentiality in accordance with Union and national law, including Regulation (EC) No 1049/2001. Business confidentiality shall not prevent the timely sharing of information.

3. Before requesting information in accordance with this Article and in order to avoid the duplication of reporting obligations, BEREC or the BEREC Office shall take account of any relevant existing information publicly available.

4. Where information is not made available by the NRAs in a timely manner, BEREC or the BEREC Office may address a reasoned request either to other NRAs and other competent authorities of the Member State concerned, or directly to the relevant undertakings providing electronic communications networks, services and associated facilities.

([1]) Commission Decision (EU, Euratom) 2015/443 of 13 March 2015 on Security in the Commission (OJ L 72, 17.3.2015, p. 41).
([2]) Commission Decision (EU, Euratom) 2015/444 of 13 March 2015 on the security rules for protecting EU classified information (OJ L 72, 17.3.2015, p. 53).

BEREC or the BEREC Office shall notify the NRAs that have failed to provide the information of requests in accordance with the first subparagraph.

Upon the request of BEREC or the BEREC Office, the NRAs shall assist BEREC in collecting the information.

5. Member States shall ensure that NRAs and other competent authorities have the power to require other responsible national authorities or undertakings providing electronic communications networks and services, associated facilities, or associated services to submit all information necessary to carry out their tasks referred to in this Article.

Other responsible national authorities or undertakings as referred to in the first subparagraph shall provide such information promptly upon request and in accordance with the timescales and level of detail required.

Member States shall ensure that NRAs and other competent authorities are empowered to enforce such information requests by imposing penalties that are appropriate, effective, proportionate and dissuasive.

Article 41

Information and communication system

1. The BEREC Office shall establish and manage an information and communication system with at least the following functions:

(a) a common platform for the exchange of information, providing BEREC, the Commission and NRAs with the necessary information for the consistent implementation of the Union regulatory framework for electronic communications;

(b) a dedicated interface for requests for information and notification of those requests as referred to in Article 40, for access by BEREC, the BEREC Office, the Commission and NRAs;

(c) a platform for early identification of the need for coordination between NRAs.

2. The Management Board shall adopt the technical and functional specifications for the purpose of establishing the information and communication system referred to in paragraph 1. That system shall be subject to intellectual property rights and the required confidentiality level.

3. The information and communication system shall be operational by 21 June 2020.

Article 42

Declarations of interests

1. Members of the Board of Regulators and the Management Board, the Director, seconded national experts and other staff not employed by the BEREC Office shall each make a written declaration indicating their commitments and the absence or presence of any direct or indirect interests that might be considered to prejudice their independence.

Such declarations shall be made at the time of taking up responsibilities, shall be accurate and complete, and shall be updated where there is a risk of there being any direct or indirect interest that might be considered to prejudice the independence of the person making the declaration.

The declarations made by the members of the Board of Regulators, the members of the Management Board and the Director shall be made public.

2. Members of the Board of Regulators, the Management Board and the working groups, and other participants in their meetings, the Director, seconded national experts and other staff not employed by the BEREC Office shall each accurately and completely declare, at the latest at the start of each meeting, any interest which might be considered to be prejudicial to their independence in relation to the items on the agenda, and shall abstain from participating in the discussion and the voting on, such points.

3. The Board of Regulators and the Management Board shall lay down the rules for the prevention and management of conflicts of interests and, in particular, for the practical arrangements for the application of paragraphs 1 and 2.

Article 43

Combating fraud

1. In order to facilitate combating fraud, corruption and other unlawful activities under Regulation (EU, Euratom) No 883/2013 of the European Parliament and of the Council ([1]), by 21 June 2019, the BEREC Office shall accede to the Interinstitutional Agreement of 25 May 1999 between the European Parliament, the Council of the European Union and the Commission of the European Communities concerning internal investigations by the European Anti-Fraud Office (OLAF) ([2]) and adopt appropriate provisions applicable to all staff of the BEREC Office using the template set out in the Annex to that Agreement.

2. The Court of Auditors shall have the power of audit, on the basis of documents and on-the-spot inspections, over all grant beneficiaries, contractors and subcontractors who have received Union funds from the BEREC Office.

3. OLAF may carry out investigations, including on-the-spot checks and inspections, in accordance with the provisions and procedures laid down in Regulation (EU, Euratom) No 883/2013 and Council Regulation (Euratom, EC) No 2185/96 ([3]) with a view to establishing whether there has been fraud, corruption or any other illegal activity affecting the financial interests of the Union in connection with a grant agreement or grant decision or a contract funded by the BEREC Office.

4. Without prejudice to paragraphs 1, 2 and 3, cooperation agreements with third countries and international organisations, contracts, grant agreements and grant decisions shall contain provisions expressly empowering the Court of Auditors and OLAF to conduct such audits and investigations, in accordance with their respective competences.

Article 44

Liability

1. The BEREC Office's contractual liability shall be governed by the law applicable to the contract in question.

2. The Court of Justice of the European Union (Court of Justice) shall have jurisdiction to give judgment pursuant to any arbitration clause contained in a contract concluded by the BEREC Office.

3. In the case of non-contractual liability, the BEREC Office shall, in accordance with the general principles common to the laws of the Member States, make good any damage caused by its departments or by its staff in the performance of their duties.

4. The Court of Justice shall have jurisdiction in disputes over compensation for damages referred to in paragraph 3.

5. The personal liability of its staff towards the BEREC Office shall be governed by the provisions laid down in the Staff Regulations or the Conditions of Employment of Other Servants applicable to them.

([1]) Regulation (EU, Euratom) No 883/2013 of the European Parliament and of the Council of 11 September 2013 concerning investigations conducted by the European Anti-Fraud Office (OLAF) and repealing Regulation (EC) No 1073/1999 of the European Parliament and of the Council and Council Regulation (Euratom) No 1074/1999 (OJ L 248, 18.9.2013, p. 1).

([2]) OJ L 136, 31.5.1999, p. 15.

([3]) Council Regulation (Euratom, EC) No 2185/96 of 11 November 1996 concerning on-the-spot checks and inspections carried out by the Commission in order to protect the European Communities' financial interests against fraud and other irregularities (OJ L 292, 15.11.1996, p. 2).

Article 45

Administrative inquiries

The activities of BEREC and of the BEREC Office shall be subject to the inquiries of the European Ombudsman in accordance with Article 228 TFEU.

Article 46

Language arrangements

1. Regulation No 1 ([1]) shall apply to the BEREC Office.

2. The translation services required for the functioning of the BEREC Office shall be provided by the Translation Centre of the Bodies of the European Union.

CHAPTER X

FINAL PROVISIONS

Article 47

Headquarters Agreement and operating conditions

1. The arrangements concerning the accommodation to be provided for the BEREC Office in the host Member State and the facilities to be made available by that Member State as well as the specific rules applicable in the host Member State to the Director, members of the Management Board, the BEREC Office staff and members of their families shall be laid down in a Headquarters Agreement between the BEREC Office and the host Member State, concluded after obtaining the approval of the Management Board and no later than 21 December 2020.

2. The host Member State shall provide the necessary conditions to ensure the smooth and efficient functioning of the BEREC Office, including multilingual, European-oriented schooling and appropriate transport connections.

Article 48

Evaluation

1. By 21 December 2023, and every five years thereafter, the Commission shall carry out an evaluation in compliance with the Commission guidelines to assess BEREC's and the BEREC Office's performance in relation to their objectives, mandate, tasks and location. The evaluation shall, in particular, address the possible need to modify the structure or mandate of BEREC and the BEREC Office, and the financial implications of any such modification.

2. Where the Commission considers that the continuation of BEREC or the BEREC Office is no longer justified with regard to its assigned objectives, mandate and tasks, it may propose that this Regulation be amended or repealed accordingly.

3. The Commission shall report to the European Parliament, the Council and the Management Board on the findings of its evaluation and shall make those findings public.

Article 49

Transitional Provisions

1. The BEREC Office shall succeed the Office that was established by Regulation (EC) No 1211/2009 as regards all ownership, agreements, legal obligations, employment contracts, financial commitments and liabilities.

([1]) Regulation No 1 determining the languages to be used by the European Economic Community (OJ 17, 6.10.1958, p. 385).

In particular, this Regulation shall not affect the rights and obligations of the staff of the Office. Their contracts may be renewed under this Regulation in accordance with the Staff Regulations and the Conditions of Employment of Other Servants and in accordance with the budgetary constraints of the BEREC Office.

2. With effect from 20 December 2018, the Administrative Manager appointed on the basis of Regulation (EC) No 1211/2009 shall act as Director with the functions provided for in this Regulation. The other conditions of the Administrative Manager's contract shall remain unchanged.

3. The Management Board may decide to renew the term of office of the Director referred to in paragraph 2 of this Article for a further term. Article 32(5) and (6) shall apply mutatis mutandis. The cumulative term of office of the Director shall not exceed 10 years.

4. The Board of Regulators and the Management Board referred to in Articles 7 and 15 of this Regulation shall be composed of the members of the Board of Regulators and Management Committee referred to in Articles 4 and 7 of Regulation (EC) No 1211/2009, until new representatives are appointed.

5. The Chairs and the Vice-Chairs of the Board of Regulators and of the Management Committee who have been appointed on the basis of Regulation (EC) No 1211/2009, shall remain in office as Chair and Vice-Chairs of the Board of Regulators as referred to in Article 10 of this Regulation, and as Chairperson and Deputy Chairpersons of the Management Board as referred to in Article 17 of this Regulation for the remaining period of their one-year term. Appointments of the Chairs and Vice-Chairs of the Board of Regulators and of the Management Committee on the basis of Regulation (EC) No 1211/2009, which are made before 20 December 2018 but extend beyond that date, shall be respected.

6. The discharge procedure in respect of the budget approved on the basis of Article 11 of Regulation (EC) No 1211/2009 shall be carried out in accordance with the rules established by that Regulation.

Article 50

Amendments to Regulation (EU) 2015/2120

Regulation (EU) 2015/2120 is amended as follows:

(1) the title is replaced by the following:

'Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and retail charges for regulated intra-EU communications and amending Directive 2002/22/EC and Regulation (EU) No 531/2012';

(2) in Article 1, the following paragraph is added:

'3. This Regulation also lays down common rules to ensure that consumers are not charged excessive prices for making number-based interpersonal communications originating in the Member State of the consumer's domestic provider and terminating at any fixed or mobile number in another Member State.';

(3) in the second paragraph of Article 2, the following points are added:

'(3) "regulated intra-EU communications" means any number-based interpersonal communications service originating in the Member State of the consumer's domestic provider and terminating at any fixed or mobile number of the national numbering plan of another Member State, and which is charged wholly or partly based on actual consumption;

(4) "number-based interpersonal communications service" means number-based interpersonal communications service as defined in point (6) of Article 2 of Directive (EU) 2018/1972 of the European Parliament and of the Council (*).

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

(4) the following Article is inserted:

'*Article 5a*

Retail charges for regulated intra-EU communications

1. From 15 May 2019, any retail price (excluding VAT) charged to consumers for regulated intra-EU communications shall not exceed EUR 0,19 per minute for calls and EUR 0,06 per SMS message.

2. Notwithstanding the obligations laid down in paragraph 1, providers of regulated intra-EU communications may additionally offer, and consumers may expressly choose, a tariff for international communications including regulated intra-EU communications different from that set in accordance with paragraph 1, by virtue of which consumers benefit from a different tariff for regulated intra-EU communications than they would have been accorded in the absence of such a choice. Before consumers choose such a different tariff, the provider of regulated intra-EU communications shall inform them of the nature of the advantages which would thereby be lost.

3. Where a tariff for regulated intra-EU communications as referred to in paragraph 2 exceeds the caps laid down in paragraph 1, consumers who have not confirmed or expressed, within a period of two months from 15 May 2019, a choice for any tariff as referred to in paragraph 2, shall automatically be provided with the tariffs laid down in paragraph 1.

4. Consumers may switch from or back to the tariffs laid down in paragraph 1 within one working day of receipt of the request by the provider, free of charge and providers shall ensure that such a switch does not entail conditions or restrictions with regard to elements of the subscriptions other than regulated intra-EU communications.

5. Where the maximum prices referred to in paragraph 1 are denominated in a currency other than the euro, the initial limits shall be determined in those currencies by applying the average of the reference exchange rates published on 15 January, 15 February and 15 March 2019 by the European Central Bank in the Official Journal of the European Union. The limits in currencies other than the euro shall be revised annually from 2020. The annually revised limits in those currencies shall apply from 15 May using the average of the reference exchange rates published on 15 January, 15 February and 15 March of the same year.

6. National regulatory authorities shall monitor the market and price developments for regulated intra-EU communications and shall report to the Commission.

Where a provider of regulated intra-EU communications establishes that, due to specific and exceptional circumstances distinguishing it from most other Union providers, the application of the cap referred to in paragraph 1 would have significant impact on that provider's capacity to sustain its existing prices for domestic communications, a national regulatory authority may, upon that provider's request, grant a derogation from paragraph 1 only to the extent necessary and for a renewable period of one year. The assessment of the sustainability of the domestic charging model shall be based on relevant objective factors specific to the provider of regulated intra-EU communications, as well as the level of domestic prices and revenues.

Where the applicant provider has discharged the applicable evidentiary burden, the national regulatory authority shall determine the maximum price level in excess of one or both of the caps set out in paragraph 1 which would be indispensable in order to ensure the sustainability of the provider's domestic charging model. BEREC shall publish guidelines on the parameters to be taken into account by national regulatory authorities in their assessments.';

(5) in Article 6, the following paragraph is added:

'Member States shall lay down the rules on penalties applicable to infringements of Article 5a and shall take all measures necessary to ensure that they are implemented. The penalties provided for shall be effective, proportionate and dissuasive. Member States shall notify the Commission of the rules and measures laid down to ensure the implementation of Article 5a by 15 May 2019 and shall notify the Commission without delay of any subsequent amendment affecting them.';

(6) in Article 10, the following paragraph is added:

'5. Article 5a shall expire on 14 May 2024.'.

Article 51

Repeal

Regulation (EC) No 1211/2009 is repealed.

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

Article 52

Entry into force

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

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Strasbourg, 11 December 2018.

For the European Parliament	*For the Council*
The President	*The President*
.A. TAJANI	J. BOGNER-STRAUSS

ANNEX

Correlation table

Regulation (EC) No 1211/2009	This Regulation
Article 1(1)	Article 1
Article 1(2)	Article 3(1)
Article 1(3)	Article 3(2) and (3)
Article 1(4)	Article 3(4) and points (a) and (b) of Article 4(1)
Article 2	Article 4
Article 3	Article 4
Article 4(1)	Article 6
Article 4(2)	Article 7(1), (2) and (4), Article 8(1) and (2)
Article 4(3)	Article 11(4) and (5) and Article 36
Article 4(4)	Article 10(1), (2) and (3)
Article 4(5)	Article 10(4)
Article 4(6)	Article 11
Article 4(7)	Article 13
Article 4(8)	Article 7(4)
Article 4(9)	Article 12(1) and (2)
Article 4(10)	Article 12(3)
Article 4(11)	Article 5
Article 5	Article 4
Article 6(1)	Article 2(1)
Article 6(2)	Article 5
Article 6(3)	Article 14(1)
Article 6(4)	Article 2(2)
Article 6(5)	Articles 20 and 31
Article 7(1)	Article 15(1)
Article 7(2)	Article 32
Article 7(3)	Article 20(6)
Article 7(4)	Point (k) of Article 16(1)
Article 7(5)	Article 13
Article 8	Article 32
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Article 10(1)	Articles 30 and 34
Article 10(2)	Point (j) of Article 16(1)
Article 10(3)	Article 16(2)
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Regulation (EC) No 1211/2009	This Regulation
Article 11	Article 25
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DIRECTIVES

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)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

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

Having regard to the proposal from the European Commission,

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

Having regard to the opinion of the European Economic and Social Committee ([1]),

Having regard to the opinion of the Committee of the Regions ([2]),

Acting in accordance with the ordinary legislative procedure ([3]),

Whereas:

(1) Directives 2002/19/EC ([4]), 2002/20/EC ([5]), 2002/21/EC ([6]) and 2002/22/EC ([7]) of the European Parliament and of the Council have been substantially amended. Since further amendments are to be made, those Directives should be recast in the interests of clarity.

(2) The functioning of the five Directives which are part of the existing regulatory framework for electronic communications networks and services, namely Directives 2002/19/EC, 2002/20/EC, 2002/21/EC and 2002/22/EC, and Directive 2002/58/EC of the European Parliament and of the Council ([8]), is subject to periodic review by the Commission, with a view, in particular, to determining the need for modification in light of technological and market developments.

(3) In its communication or 6 May 2015 setting out a Digital Single Market Strategy for Europe, the Commission stated that its review of the telecommunications framework would focus on measures that aim to provide incentives for investment in high-speed broadband networks, bring a more consistent internal market approach to radio spectrum policy and management, deliver conditions for a true internal market by tackling regulatory fragmentation, ensure effective protection of consumers, a level playing field for all market players and consistent application of the rules, as well as provide a more effective regulatory institutional framework.

([1]) OJ C 125, 21.4.2017, p. 56.
([2]) OJ C 207, 30.6.2017, p. 87.
([3]) Position of the European Parliament of 14 November 2018 (not yet published in the Official Journal) and decision of the Council of 4 December 2018.
([4]) Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive) (OJ L 108, 24.4.2002, p. 7).
([5]) Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive) (OJ L 108, 24.4.2002, p. 21).
([6]) Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) (OJ L 108, 24.4.2002, p. 33)
([7]) Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive) (OJ L 108, 24.4.2002, p. 51).
([8]) Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications) (OJ L 201, 31.7.2002, p. 37).

(4) This Directive is part of a 'Regulatory Fitness' (REFIT) exercise, the scope of which includes four Directives, namely 2002/19/EC, 2002/20/EC, 2002/21/EC and 2002/22/EC, and Regulation (EC) No 1211/2009 of the European Parliament and of the Council ([1]). Each of those Directives contains measures applicable to providers of electronic communications networks and of electronic communications services, consistently with the regulatory history of the sector under which undertakings were vertically integrated, namely, active in both the provision of networks and of services. The review offers an occasion to recast the four Directives in order to simplify the current structure with a view to reinforcing its consistency and accessibility in relation to the REFIT objective. It also offers the possibility to adapt the structure to the new market reality, where the provision of communications services is no longer necessarily bundled to the provision of a network. As provided in the Interinstitutional Agreement of 28 November 2001 on a more structured use of the recasting technique for legal acts ([2]), recasting consists in the adoption of a new legal act which incorporates in a single text both the substantive amendments which it makes to an earlier act and the unchanged provisions of that act. The proposal for recasting deals with the substantive amendments which it makes to an earlier act, and on a secondary level, includes the codification of the unchanged provisions of the earlier act with those substantive amendments.

(5) This Directive creates a legal framework to ensure freedom to provide electronic communications networks and services, subject only to the conditions laid down in this Directive and to any restrictions in accordance with Article 52(1) of the Treaty on the Functioning of the European Union (TFEU), in particular measures regarding public policy, public security and public health, and consistent with Article 52(1) of the Charter of Fundamental Rights of the European Union (the 'Charter').

(6) This Directive is without prejudice to the possibility for each Member State to take the necessary measures to ensure the protection of its essential security interests, to safeguard public policy and public security, and to permit the investigation, detection and prosecution of criminal offences, taking into account that any limitation to the exercise of the rights and freedoms recognised by the Charter, in particular in Articles 7, 8 and 11 thereof, such as limitations regarding the processing of data, are to be provided for by law, respect the essence of those rights and freedoms and be subject to the principle of proportionality, in accordance with Article 52(1) of the Charter.

(7) The convergence of the telecommunications, media and information technology sectors means that all electronic communications networks and services should be covered to the extent possible by a single European electronic communications code established by means of a single Directive, with the exception of matters better dealt with through directly applicable rules established by means of regulations. It is necessary to separate the regulation of electronic communications networks and services from the regulation of content. Therefore, this Directive does not cover the content of services delivered over electronic communications networks using electronic communications services, such as broadcasting content, financial services and certain information society services, and is without prejudice to measures taken at Union or national level in respect of such services, in accordance with Union law, in order to promote cultural and linguistic diversity and to ensure the defence of media pluralism. The content of television programmes is covered by Directive 2010/13/EU of the European Parliament and of the Council ([3]). The regulation of audiovisual policy and content aims at achieving general interest objectives, such as freedom of expression, media pluralism, impartiality, cultural and linguistic diversity, social inclusion, consumer protection and the protection of minors. The separation between the regulation of electronic communications and the regulation of content does not affect the taking into account of the links existing between them, in particular in order to guarantee media pluralism, cultural diversity and consumer protection. Within the limits of their competences, competent authorities should contribute to ensuring the implementation of policies aiming to promote those objectives.

(8) This Directive does not affect the application to radio equipment of Directive 2014/53/EU of the European Parliament and of the Council ([4]), but does cover car radio and consumer radio receivers, and consumer digital television equipment.

([1]) Regulation (EC) No 1211/2009 of the European Parliament and of the Council of 25 November 2009 establishing the Body of European Regulators for Electronic Communications (BEREC) and the Office (OJ L 337, 18.12.2009, p. 1).

([2]) OJ C 77, 28.3.2002, p. 1.

([3]) Directive 2010/13/EU of the European Parliament and of the Council of 10 March 2010 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive) (OJ L 95, 15.4.2010, p. 1).

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

(9) In order to allow national regulatory and other competent authorities to meet the objectives set out in this Directive, in particular concerning end-to-end interoperability, the scope of the Directive should cover certain aspects of radio equipment as defined in Directive 2014/53/EU and consumer equipment used for digital television, in order to facilitate access for end-users with disabilities. It is important for national regulatory and other competent authorities to encourage network operators and equipment manufacturers to cooperate in order to facilitate access by end-users with disabilities to electronic communications services. The non-exclusive use of radio spectrum for the self-use of radio terminal equipment, although not related to an economic activity, should also be the subject of this Directive in order to ensure a coordinated approach with regard to their authorisation regime.

(10) Certain electronic communications services under this Directive could also fall within the scope of the definition of 'information society service' set out in Article 1 of Directive (EU) 2015/1535 of the European Parliament and of the Council ([1]). The provisions of that Directive that govern information society services apply to those electronic communications services to the extent that this Directive or other Union legal acts do not contain more specific provisions applicable to electronic communications services. However, electronic communications services such as voice telephony, messaging services and electronic mail services are covered by this Directive. The same undertaking, for example an internet service provider, can offer both an electronic communications service, such as access to the internet, and services not covered by this Directive, such as the provision of web-based and not communications-related content.

(11) The same undertaking, for example a cable operator, can offer both an electronic communications service, such as the conveyance of television signals, and services not covered under this Directive, such as the commercialisation of an offer of sound or television broadcasting content services, and therefore additional obligations can be imposed on such an undertaking in relation to its activity as a content provider or distributor, in accordance with provisions other than those of this Directive, without prejudice to the conditions laid in an annex to this Directive.

(12) The regulatory framework should cover the use of radio spectrum by all electronic communications networks, including the emerging self-use of radio spectrum by new types of networks consisting exclusively of autonomous systems of mobile radio equipment that is connected via wireless links without a central management or centralised network operator, and not necessarily within the exercise of any specific economic activity. In the developing 5G wireless communications environment, such networks are likely to develop in particular outside buildings and on the roads, for transport, energy, research and development, eHealth, public protection and disaster relief, the Internet of Things, machine-to-machine and connected cars. As a result, the application by Member States, based on Article 7 of Directive 2014/53/EU, of additional national requirements regarding the putting into service or use of such radio equipment, or both, in relation to the effective and efficient use of radio spectrum and avoidance of harmful interference should reflect the principles of the internal market.

(13) The requirements concerning the capabilities of electronic communications networks are constantly increasing. While in the past the focus was mainly on growing bandwidth available overall and to each individual user, other parameters such as latency, availability and reliability are becoming increasingly important. The current response towards that demand is to bring optical fibre closer and closer to the user, and future 'very high capacity networks' require performance parameters which are equivalent to those that a network based on optical fibre elements at least up to the distribution point at the serving location can deliver. In the case of fixed-line connection, this corresponds to network performance equivalent to that achievable by an optical fibre installation up to a multi-dwelling building, considered to be the serving location. In the case of wireless connection, this corresponds to network performance similar to that achievable based on an optical fibre installation up to the base station, considered to be the serving location. Variations in end-users' experience which are due to the different characteristics of the medium by which the network ultimately connects with the network termination point should not be taken into account for the purposes of establishing whether a wireless network could be considered as providing similar network performance.

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

In accordance with the principle of technology neutrality, other technologies and transmission media should not be excluded, where they compare with that baseline scenario in terms of their capabilities. The roll-out of such 'very high capacity networks' is likely to further increase the capabilities of networks and pave the way for the roll-out of future wireless network generations based on enhanced air interfaces and a more densified network architecture.

(14) Definitions need to be adjusted to ensure that they are in line with the principle of technology neutrality and to keep pace with technological development, including new forms of network management such as through software emulation or software-defined networks. Technological and market evolution has brought networks to move to internet protocol (IP) technology, and enabled end-users to choose between a range of competing voice service providers. Therefore, the term 'publicly available telephone service', which is exclusively used in Directive 2002/22/EC and widely perceived as referring to traditional analogue telephone services, should be replaced by the more current and technological neutral term 'voice communications service'. Conditions for the provision of a service should be separated from the actual definitional elements of a voice communications service, namely, 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, whether such a service is based on circuit switching or packet switching technology. It is the nature of such a service that it is bidirectional, enabling both parties to communicate. A service which does not fulfil all those conditions, such as for example a 'click-through' application on a customer service website, is not such a service. Voice communications services also include means of communication specifically intended for end-users with disabilities using text relay or total conversation services.

(15) The services used for communications purposes, and the technical means of their delivery, have evolved considerably. End-users increasingly substitute traditional voice telephony, text messages (SMS) and electronic mail conveyance services by functionally equivalent online services such as Voice over IP, messaging services and web-based e-mail services. In order to ensure that end-users and their rights are effectively and equally protected when using functionally equivalent services, a future-oriented definition of electronic communications services should not be purely based on technical parameters but rather build on a functional approach. The scope of necessary regulation should be appropriate to achieve its public interest objectives. While 'conveyance of signals' remains an important parameter for determining the services falling into the scope of this Directive, the definition should cover also other services that enable communication. From an end-user's perspective it is not relevant whether a provider conveys signals itself or whether the communication is delivered via an internet access service. The definition of electronic communications services should therefore contain three types of services which may partly overlap, that is to say internet access services as defined in point (2) of Article 2 of Regulation (EU) 2015/2120 of the European Parliament and of the Council ([1]), interpersonal communications services as defined in this Directive, and services consisting wholly or mainly in the conveyance of signals. The definition of electronic communications service should eliminate ambiguities observed in the implementation of the definition as it existed prior to the adoption of this Directive and allow a calibrated provision-by-provision application of the specific rights and obligations contained in the framework to the different types of services. The processing of personal data by electronic communications services, whether as remuneration or otherwise, should comply with Regulation (EU) 2016/679 of the European Parliament and of the Council ([2]).

(16) In order to fall within the scope of the definition of electronic communications service, a service needs to be provided normally in exchange for remuneration. In the digital economy, market participants increasingly consider information about users as having a monetary value. Electronic communications services are often supplied to the

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

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

end-user not only for money, but increasingly and in particular for the provision of personal data or other data. The concept of remuneration should therefore encompass situations where the provider of a service requests and the end-user knowingly provides personal data within the meaning of Regulation (EU) 2016/679 or other data directly or indirectly to the provider. It should also encompass situations where the end-user allows access to information without actively supplying it, such as personal data, including the IP address, or other automatically generated information, such as information collected and transmitted by a cookie. In line with the case-law of the Court of Justice of the European Union (Court of Justice) on Article 57 TFEU ([1]), remuneration also exists within the meaning of the TFEU if the service provider is paid by a third party and not by the service recipient. The concept of remuneration should therefore also encompass situations in which the end-user is exposed to advertisements as a condition for gaining access to the service, or situations in which the service provider monetises personal data it has collected in accordance with Regulation (EU) 2016/679.

(17) Interpersonal communications services are services that enable interpersonal and interactive exchange of information, covering services like traditional voice calls between two individuals but also all types of emails, messaging services, or group chats. Interpersonal communications services only cover communications between a finite, that is to say not potentially unlimited, number of natural persons, which is determined by the sender of the communication. Communications involving legal persons should fall within the scope of the definition where natural persons act on behalf of those legal persons or are involved at least on one side of the communication. Interactive communication entails that the service allows the recipient of the information to respond. Services which do not meet those requirements, such as linear broadcasting, video on demand, websites, social networks, blogs, or exchange of information between machines, should not be considered to be interpersonal communications services. In exceptional circumstances a service should not be considered to be an interpersonal communications service if the interpersonal and interactive communication facility is a minor and purely ancillary feature to another service and for objective technical reasons cannot be used without that principal service, and its integration is not a means to circumvent the applicability of the rules governing electronic communications services. As elements of an exemption from the definition the terms 'minor' and 'purely ancillary' should be interpreted narrowly and from an objective end-user's perspective. An interpersonal communications feature could be considered to be minor where its objective utility for an end-user is very limited and where it is in reality barely used by end-users. An example of a feature that could be considered to fall outside the scope of the definition of interpersonal communications services might be, in principle, a communication channel in online games, depending on the features of the communication facility of the service.

(18) Interpersonal communications services using numbers from national and international numbering plans connect with publicly assigned numbering resources. Those number-based interpersonal communications services comprise both services to which end-users numbers are assigned for the purpose of ensuring end-to-end connectivity and services enabling end-users to reach persons to whom such numbers have been assigned. The mere use of a number as an identifier should not be considered to be equivalent to the use of a number to connect with publicly assigned numbers and should therefore, in itself, not be considered to be sufficient to qualify a service as a number-based interpersonal communications service. Number-independent interpersonal communications services should be subject to obligations only where public interests require that specific regulatory obligations apply to all types of interpersonal communications services, regardless of whether they use numbers for the provision of their service. It is justified to treat number-based interpersonal communications services differently, as they participate in, and hence also benefit from, a publicly assured interoperable ecosystem.

(19) The network termination point represents a boundary for regulatory purposes between the regulatory framework for electronic communications networks and services and the regulation of telecommunications terminal equipment. Defining the location of the network termination point is the responsibility of the national regulatory

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

authority. In light of the practice of national regulatory authorities, and given the variety of fixed and wireless topologies, the Body of European Regulators for Electronic Communications ('BEREC') should, in close cooperation with the Commission, adopt guidelines on common approaches to the identification of the network termination point, in accordance with this Directive, in various concrete circumstances.

(20) Technical developments make it possible for end-users to access emergency services not only by voice calls but also by other interpersonal communications services. The concept of emergency communication should therefore cover all interpersonal communications services that allow such emergency services access. It builds on the emergency system elements already enshrined in Union law, namely a public safety answering point ('PSAP') and a most appropriate PSAP as defined in Regulation (EU) 2015/758 of the European Parliament and of the Council ([1]), and on emergency services as defined in Commission Delegated Regulation (EU) No 305/2013 ([2]).

(21) National regulatory and other competent authorities should have a harmonised set of objectives and principles to underpin their work, and should, where necessary, coordinate their actions with the authorities of other Member States and with BEREC in carrying out their tasks under this regulatory framework.

(22) The tasks assigned to competent authorities by this Directive contribute to the fulfilment of broader policies in the areas of culture, employment, the environment, social cohesion and town and country planning.

(23) The regulatory framework should, in addition to the existing three primary objectives of promoting competition, the internal market and end-user interests, pursue an additional connectivity objective, articulated in terms of outcomes: widespread access to and take-up of very high capacity networks for all citizens of the Union and Union businesses on the basis of reasonable price and choice, effective and fair competition, open innovation, efficient use of radio spectrum, common rules and predictable regulatory approaches in the internal market and the necessary sector-specific rules to safeguard the interests of citizens of the Union. For the Member States, the national regulatory and other competent authorities and the stakeholders, that connectivity objective translates, on the one hand, into aiming for the highest capacity networks and services economically sustainable in a given area, and, on the other, into pursuing territorial cohesion, in the sense of convergence in capacity available in different areas.

(24) Progress towards the achievement of the general objectives of this Directive should be supported by a robust system of continuous assessment and benchmarking by the Commission of Member States with respect to the availability of very high capacity networks in all major socio-economic drivers such as schools, transport hubs and major providers of public services, and highly digitised businesses, the availability of uninterrupted 5G coverage for urban areas and major terrestrial transport paths, and the availability to all households in each Member State of electronic communications networks which are capable of providing at least 100 Mbps, and which are promptly upgradeable to gigabit speeds. To that end, the Commission should continue monitoring the performance of Member States, including, by way of an example, indexes that summarise relevant indicators on the Union's digital performance and track the evolution of Member States in digital competitiveness, such as the Digital Economy and Society Index, and, where necessary, establish new methods and new objective, concrete and quantifiable criteria for benchmarking the effectiveness of Member States.

(25) The principle that Member States should apply Union law in a technologically neutral fashion, that is to say that a national regulatory or other competent authority should neither impose nor discriminate in favour of the use of a particular type of technology, does not preclude the taking of proportionate steps to promote certain specific services where justified in order to attain the objectives of the regulatory framework, for example digital television as

([1]) Regulation (EU) 2015/758 of the European Parliament and of the Council of 29 April 2015 concerning type-approval requirements for the deployment of the eCall in-vehicle system based on the 112 service and amending Directive 2007/46/EC (OJ L 123, 19.5.2015, p 77).

([2]) Commission Regulation (EU) No 305/2013 of 26 November 2012 supplementing Directive 2010/40/EU of the European Parliament and of the Council with regard to the harmonised provision for an interoperable EU-wide eCall (OJ L 91, 3.4.2013, p. 1).

a means for increasing radio spectrum efficiency. Furthermore, that principle does not preclude taking into account that certain transmission media have physical characteristics and architectural features that can be superior in terms of quality of service, capacity, maintenance cost, energy efficiency, management flexibility, reliability, robustness and scalability, and, ultimately, performance, which can be reflected in actions taken with a view to pursuing the various regulatory objectives.

(26) Both efficient investment and competition should be encouraged in tandem, in order to increase economic growth, innovation and consumer choice.

(27) Competition can best be fostered through an economically efficient level of investment in new and existing infrastructure, complemented by regulation, where necessary, to achieve effective competition in retail services. An efficient level of infrastructure-based competition is the extent of infrastructure duplication at which investors can reasonably be expected to make a fair return based on reasonable expectations about the evolution of market shares.

(28) It is necessary to give appropriate incentives for investment in new very high capacity networks that support innovation in content-rich internet services and strengthen the international competitiveness of the Union. Such networks have enormous potential to deliver benefits to consumers and businesses across the Union. It is therefore vital to promote sustainable investment in the development of those new networks, while safeguarding competition, as bottlenecks and barriers to entry remain at the infrastructure level, and boosting consumer choice through regulatory predictability and consistency.

(29) This Directive aims to progressively reduce ex ante sector-specific rules as competition in the markets develops and, ultimately, to ensure that electronic communications are governed only by competition law. Considering that the markets for electronic communications have shown strong competitive dynamics in recent years, it is essential that ex ante regulatory obligations are imposed only where there is no effective and sustainable competition on the markets concerned. The objective of ex ante regulatory intervention is to produce benefits for end-users by making retail markets effectively competitive on a sustainable basis. Obligations at wholesale level should be imposed where otherwise one or more retail markets are not likely to become effectively competitive in the absence of those obligations. It is likely that national regulatory authorities are gradually, through the process of market analysis, able to find retail markets to be competitive even in the absence of wholesale regulation, especially taking into account expected improvements in innovation and competition. In such a case, the national regulatory authority should conclude that regulation is no longer needed at wholesale level, and assess the corresponding relevant wholesale market with a view to withdrawing ex ante regulation. In doing so, the national regulatory authority should take into account any leverage effects between wholesale and related retail markets which might require the removal of barriers to entry at the infrastructure level in order to ensure long-term competition at the retail level.

(30) Electronic communications are becoming essential for an increasing number of sectors. The Internet of Things is an illustration of how the radio signal conveyance underpinning electronic communications continues to evolve and shape societal and business reality. To derive the greatest benefit from those developments, the introduction and accommodation of new wireless communications technologies and applications in radio spectrum management is essential. As other technologies and applications relying on radio spectrum are equally subject to growing demand, and can be enhanced by integrating or combining them with electronic communications, radio spectrum management should adopt, where appropriate, a cross-sectorial approach to improve the efficient use of radio spectrum.

(31) Strategic planning, coordination and, where appropriate, harmonisation at Union level can help ensure that radio spectrum users derive the full benefits of the internal market and that Union interests can be effectively defended globally. For those purposes it should be possible to adopt multiannual radio spectrum policy programmes, where appropriate. The first such programme was established by Decision No 243/2012/EU of the European Parliament

and of the Council ([1]), setting out policy orientations and objectives for the strategic planning and harmonisation of the use of radio spectrum in the Union. It should be possible for those policy orientations and objectives to refer to the availability and efficient use of radio spectrum necessary for the establishment and functioning of the internal market, in accordance with this Directive.

(32) National borders are increasingly irrelevant in determining optimal radio spectrum use. Undue fragmentation amongst national policies result in increased costs and lost market opportunities for radio spectrum users and slows down innovation to the detriment of the proper functioning of the internal market and prejudice to consumers and the economy as a whole.

(33) The radio spectrum management provisions of this Directive should be consistent with the work of international and regional organisations dealing with radio spectrum management, such as the International Telecommunications Union (ITU) and the European Conference of Postal and Telecommunications Administrations (CEPT), in order to ensure the effective management of and harmonisation of the use of radio spectrum across the Union and between the Member States and other members of the ITU.

(34) In accordance with the principle of the separation of regulatory and operational functions, Member States should guarantee the independence of the national regulatory and other competent authorities with a view to ensuring the impartiality of their decisions. This requirement of independence is without prejudice to the institutional autonomy and constitutional obligations of the Member States or to the principle of neutrality with regard to the rules in Member States governing the system of property ownership laid down in Article 345 TFEU. National regulatory and other competent authorities should be in possession of all the necessary resources, in terms of staffing, expertise, and financial means, for the performance of their tasks.

(35) Certain tasks pursuant to the Directive, such as ex ante market regulation, including the imposition of obligations for access and interconnection, and the resolution of disputes between undertakings are tasks which should be undertaken only by national regulatory authorities, namely, bodies which are independent both from the sector and from any external intervention or political pressure. Unless otherwise provided, Member States should be able to assign other regulatory tasks provided for in this Directive either to the national regulatory authorities or to other competent authorities. In the course of transposition, Member States should promote the stability of competences of the national regulatory authorities with regard to the assignment of tasks which resulted from the transposition of the Union electronic communications regulatory framework as amended in 2009, in particular those related to market competition or market entry. Where tasks are assigned to other competent authorities, those other competent authorities should seek to consult the national regulatory authorities before taking a decision. Pursuant to the principle of good cooperation, national regulatory and other competent authorities should exchange information for the exercise of their tasks.

(36) This Directive does not include substantive provisions on open internet access or roaming and is without prejudice to the allocation of competences to national regulatory authorities in Regulation (EU) No 531/2012 of the European Parliament and of the Council ([2]) and in Regulation (EU) 2015/2120. However, this Directive provides, in addition, for national regulatory authorities to be competent for assessing and monitoring closely market access and competition issues which potentially affect the rights of end-users to an open internet access.

(37) The independence of the national regulatory authorities was strengthened in the review of the electronic communications regulatory framework completed in 2009 in order to ensure a more effective application of the regulatory framework and to increase their authority and the predictability of their decisions. To that end, express provision had to be made in national law to ensure that, in the exercise of its tasks, a national regulatory authority is protected against external intervention or political pressure liable to jeopardise its independent assessment of matters coming before it. Such outside influence makes a national legislative body unsuited to act as a national regulatory authority under the regulatory framework. For that purpose, rules had to be laid down at the outset regarding the

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

([2]) Regulation (EU) No 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communications networks within the Union (OJ L 172, 30.6.2012, p. 10).

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

(38) There is a need to further reinforce the independence of the national regulatory authorities to ensure the imperviousness of its head and members to external pressure, by providing minimum appointment qualifications, and a minimum duration for their mandate. Furthermore, to address the risk of regulatory capture, ensure continuity and enhance independence, Member States should consider limiting the possibility of renewing the mandates of the head or members of the board and set up an appropriate rotation scheme for the board and the top management. This could be arranged, for instance, by appointing the first members of the collegiate body for different periods in order for their mandates, as well as that of their successors, not to lapse at the same moment.

(39) National regulatory authorities should be accountable for, and should be required to report on, the way in which they are exercising their tasks. That obligation should normally take the form of an annual reporting obligation rather than ad hoc reporting requests, which, if disproportionate, could limit their independence or hinder them in the exercise of their tasks. Indeed, according to the case-law of the Court of Justice ([1]), extensive or unconditional reporting obligations may indirectly affect the independence of an authority.

(40) Member States should notify the Commission of the identity of the national regulatory and other competent authorities. For authorities competent for granting rights of way, it should be possible to fulfil the notification requirement by a reference to the single information point established pursuant to Directive 2014/61/EU of the European Parliament and of the Council ([2]).

(41) The least onerous authorisation system possible should be used to allow the provision of electronic communications networks and services in order to stimulate the development of new communications services and pan-European communications networks and services and to allow service providers and consumers to benefit from the economies of scale of the internal market.

(42) The benefits of the internal market to service providers and end-users can be best achieved by general authorisation of electronic communications networks and of electronic communications services other than number-independent interpersonal communications services, without requiring any explicit decision or administrative act by the national regulatory authority and by limiting any procedural requirements to a declaratory notification only. Where Member States require notification by providers of electronic communications networks or services when they start their activities, such notification should not entail administrative cost for the providers and could be made available via an entry point at the website of the competent authorities. In order to support effective cross-border coordination, in particular for pan-European operators, BEREC should establish and maintain a database of such notifications. Competent authorities should transmit only complete notifications to BEREC. Member States should not impede the provision of networks or services in any way, including on grounds of incompleteness of a notification.

(43) Notifications should entail a mere declaration of the provider's intention to commence the provision of electronic communications networks and services. A provider should be required to complement that declaration only with the information set out in this Directive. Member States should not impose additional or separate notification requirements.

([1]) in particular the judgment of the Court of Justice of 16 October 2012, European Commission v Republic of Austria, Case C-614/10, ECLI:EU:C:2012:631.

([2]) Directive 2014/61/EU of the European Parliament and of the Council of 15 May 2014 on measures to reduce the cost of deploying high-speed electronic communications networks (OJ L 155, 23.5.2014, p. 1).

(44) Contrary to the other categories of electronic communications networks and services as defined in this Directive, number-independent interpersonal communications services do not benefit from the use of public numbering resources and do not participate in a publicly assured interoperable ecosystem. It is therefore not appropriate to subject those types of services to the general authorisation regime.

(45) When granting rights of use for radio spectrum, for numbering resources or rights to install facilities, the competent authorities should inform the undertakings to which they grant such rights of the relevant conditions. Member States should be able to lay down such conditions for the use of radio spectrum in individual rights of use or in the general authorisation.

(46) General authorisations should contain only conditions which are specific to the electronic communications sector. They should not be made subject to conditions which are already applicable by virtue of other existing national law, in particular regarding consumer protection, which is not specific to the communications sector. For instance, competent authorities should be able to inform undertakings about the applicable environmental and town-and-country-planning requirements. Conditions imposed under the general authorisation do not affect the determination of applicable law pursuant to Regulation (EC) No 593/2008 of the European Parliament and of the Council ([1]).

(47) The conditions that could be attached to general authorisations should cover specific conditions governing accessibility for end-users with disabilities and the need of public authorities and emergency services to communicate between themselves and with the general public before, during and after major disasters.

(48) It is necessary to include the rights and obligations of undertakings under general authorisations explicitly in such authorisations in order to ensure a level playing field throughout the Union and to facilitate cross-border negotiation of interconnection between public electronic communications networks.

(49) General authorisations entitle undertakings providing electronic communications networks and services to the public to negotiate interconnection under the conditions of this Directive. Undertakings providing electronic communications networks and services other than to the public can negotiate interconnection on commercial terms.

(50) Competent authorities should duly take into account, when attaching conditions to general authorisations and applying administrative charges, situations in which electronic communications networks or services are provided by natural persons on a not-for-profit basis. In the case of electronic communications networks and services not provided to the public it is appropriate to impose fewer and lighter conditions, if any, than are justified for electronic communications networks and services provided to the public.

(51) Specific obligations imposed on undertakings providing electronic communications networks and electronic communications services in accordance with Union law by virtue of their designation as having significant market power as defined in this Directive should be imposed separately from the general rights and obligations under the general authorisation.

(52) It is possible that undertakings providing electronic communications networks and services need confirmation of their rights under the general authorisation with respect to interconnection and rights of way, in particular to facilitate negotiations with other, regional or local, levels of government or with service providers in other Member States. To that end competent authorities should provide declarations to undertakings either upon request or alternatively as an automatic response to a notification under the general authorisation. Such declarations should not by themselves constitute entitlements to rights, nor should any rights under the general authorisation, rights of use or the exercise of such rights depend upon a declaration.

([1]) Regulation (EC) No 593/2008 of the European Parliament and of the Council of 17 June 2008 on the law applicable to contractual obligations (Rome I) (OJ L 177, 4.7.2008, p. 6).

(53) It should be possible to impose administrative charges on undertakings providing electronic communications services in order to finance the activities of the national regulatory or other competent authority in managing the general authorisation system and the granting of rights of use. Such charges should be limited to cover the actual administrative costs for those activities. To that end, transparency should be ensured in the income and expenditure of national regulatory and other competent authorities by means of annual reporting about the total sum of charges collected and the administrative costs incurred, in order to allow undertakings to verify that they are in balance.

(54) Systems for administrative charges should not distort competition or create barriers to market entry. A general authorisation system renders it impossible to attribute administrative costs and hence charges to individual undertakings, except for the granting of rights of use for numbering resources, radio spectrum and for rights to install facilities. Any applicable administrative charges should be in line with the principles of a general authorisation system. An example of a fair, simple and transparent alternative for those charge attribution criteria could be a turnover related distribution key. Where administrative charges are very low, flat rate charges, or charges combining a flat rate basis with a turnover related element could also be appropriate. To the extent that the general authorisation system extends to undertakings with very small market shares, such as community-based network providers, or to service providers the business model of which generates very limited revenues even in the case of significant market penetration in terms of volumes, Member States should assess the possibility to establish an appropriate de minimis threshold for the imposition of administrative charges.

(55) Member States might need to amend rights, conditions, procedures, charges and fees relating to general authorisations and rights of use where this is objectively justified. Such proposed amendments should be duly notified to all interested parties in good time, giving them adequate opportunity to express their views. Unnecessary procedures should be avoided in the case of minor amendments to existing rights to install facilities or rights of use for radio spectrum or for numbering resources when such amendments do not have an impact on third parties' interests. Minor amendments to rights and obligations are amendments which are mainly administrative, do not change the substantial nature of the general authorisations and the individual rights of use and thus cannot generate any competitive advantage over other undertakings.

(56) Considering the importance of ensuring legal certainty and in order to promote regulatory predictability to provide a safe environment for investments, in particular for new wireless broadband communications, any restriction or withdrawal of any existing rights of use for radio spectrum or for numbering resources or right to install facilities should be subject to predictable and transparent justifications and procedures. Hence, stricter requirements or a notification mechanism could be imposed in particular where rights of use have been assigned pursuant to competitive or comparative procedures and in the case of harmonised radio spectrum bands to be used for wireless broadband electronic communications services ('wireless broadband services'). Justifications referring to effective and efficient use of radio spectrum and technological evolution could rely on technical implementing measures adopted under Decision No 676/2002/EC of the European Parliament and of the Council ([1]). Furthermore, except where proposed amendments are minor, where general authorisations and individual rights of use for radio spectrum need to be restricted, withdrawn or amended without the consent of the holder of the right, this can take place after consulting interested parties. As restrictions or withdrawals of general authorisations or rights may have significant consequences for their holders, the competent authorities should take particular care and assess in advance the potential harm that such measures may cause before adopting such measures.

(57) National regulatory authorities, other competent authorities and BEREC need to gather information from market players in order to carry out their tasks effectively, including assessing the compliance of general terms and conditions with this Directive without suspending the applicability of those terms and conditions during the

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

assessment. It may, by way of exception, also be necessary to gather information from other undertakings active in sectors that are closely related to the electronic communications services sector, such as content providers, that hold information which could be necessary for them to exercise their tasks under Union law. It might also be necessary to gather such information on behalf of the Commission, to allow it to fulfil its respective obligations under Union law. Requests for information should be proportionate and not impose an undue burden on undertakings. Information gathered by national regulatory and other competent authorities should be publicly available, except in so far as it is confidential in accordance with national rules on public access to information and subject to Union and national rules on commercial confidentiality.

(58) In order to ensure that national regulatory authorities carry out their regulatory tasks in an effective manner, the data which they gather should include accounting data on the retail markets that are associated with wholesale markets where an undertaking is designated as having significant market power and as such are regulated by the national regulatory authority. The data should also include data which enable the national regulatory authority to assess compliance with conditions attached to rights of use, the possible impact of planned upgrades or changes to network topology on the development of competition or on wholesale products made available to other parties. Information regarding compliance with coverage obligations attached to rights of use for radio spectrum is key to ensure completeness of the geographical surveys of network deployments. In that respect, the competent authority should be able to require that information is provided at disaggregated local level with a granularity adequate to conduct a geographical survey of networks.

(59) To alleviate the burden of reporting and information obligations for network and service providers and the competent authority concerned, such obligations should be proportionate, objectively justified and limited to what is strictly necessary. In particular, duplication of requests for information by the competent authority and by BEREC, and the systematic and regular proof of compliance with all conditions under a general authorisation or a right of use, should be avoided. Undertakings should be aware of the intended use of the information sought. Provision of information should not be a condition for market access. For statistical purposes, a notification may be required from providers of electronic communications networks or services when they cease activities.

(60) Member States' obligations to provide information for the defence of Union interests under international agreements as well as reporting obligations under law that is not specific to the electronic communications sector such as competition law should not be affected.

(61) It should be possible to exchange information that is considered to be confidential by a competent authority, in accordance with Union and national rules on commercial confidentiality and on the protection of personal data, with the Commission, BEREC and any other authorities where such exchange is necessary for the application of national law transposing this Directive. The information exchanged should be limited to that which is relevant and proportionate to the purpose of such an exchange.

(62) Electronic communications broadband networks are becoming increasingly diverse in terms of technology, topology, medium used and ownership. Therefore, regulatory intervention must rely on detailed information regarding network roll-out in order to be effective and to target the areas where it is needed. That information is essential for the purpose of promoting investment, increasing connectivity across the Union and providing information to all relevant authorities and citizens. It should include surveys regarding both deployment of very high capacity networks, as well as significant upgrades or extensions of existing copper or other networks which might not match the performance characteristics of very high capacity networks in all respects, such as roll-out of fibre to the cabinet coupled with active technologies like vectoring. The relevant forecasts should concern periods of up to three years. The level of detail and territorial granularity of the information that competent authorities should gather should be guided by the specific regulatory objective, and should be adequate for the regulatory purposes that it serves. Therefore, the size of the territorial unit will also vary between Member States, depending on the regulatory needs in the specific national circumstances, and on the availability of local data. Level 3 in the Nomenclature of Territorial Units for Statistics (NUTS) is unlikely to be a sufficiently small territorial unit in most circumstances.

National regulatory and other competent authorities should be guided by BEREC guidelines on best practice to approach such a task, and such guidelines will be able to rely on the existing experience of national regulatory and/or other competent authorities in conducting geographical surveys of networks roll-out. Without prejudice to commercial confidentiality requirements, competent authorities should, where the information is not already available on the market, make data directly accessible in an open format in accordance with Directive 2003/98/EC of the European Parliament and of the Council ([1]) and without restrictions on reuse the information gathered in such surveys and should make available tools to end-users as regards quality of service to contribute towards the improvement of their awareness of the available connectivity services. In gathering any of that information, all authorities concerned should respect the principle of confidentiality, and should avoid causing a competitive disadvantage to any undertaking.

(63) Bridging the digital divide in the Union is essential to enable all citizens of the Union to have access to the internet and digital services. To that end, in the case of specific and well-defined areas, the relevant authorities should have the possibility to invite undertakings and public authorities to declare their intention to deploy very high capacity networks in these areas, allowing them sufficient time to provide a thoroughly considered response. The information included in the forecasts should reflect the economic prospects of the electronic communications networks sector and investment intentions of undertakings at the time when the data are gathered, in order to allow the identification of available connectivity in different areas. Where an undertaking or public authority declares an intention to deploy in an area, the national regulatory or other competent authority should be able to require other undertakings and public authorities to declare whether or not they intend to deploy very high capacity networks, or significantly upgrade or extend their network to a performance of at least 100 Mbps download speeds in this area. That procedure will create transparency for undertakings and public authorities that have expressed their interest in deploying in this area, so that, when designing their business plans, they can assess the likely competition that they will face from other networks. The positive effect of such transparency relies on market participants responding truthfully and in good faith.

(64) While market participants can change their deployment plans for unforeseen, objective and justifiable reasons, competent authorities should intervene, including if public funding is affected, and, where appropriate, impose penalties if they have been provided, knowingly or due to gross negligence, by an undertaking or public authority with misleading erroneous or incomplete information. For the purpose of the relevant provisions on penalties, gross negligence should refer to a situation where an undertaking or a public authority provides misleading, erroneous or incomplete information due to its behaviour or internal organisation which falls significantly below due diligence regarding the information provided. Gross negligence should not require that the undertaking or public authority knows that the information provided is misleading, erroneous or incomplete, but, rather, that it would have known, had it acted or been organised with due diligence. It is important that the penalties are sufficiently dissuasive in light of the negative impact on competition and on publicly funded projects. The provisions on penalties should be without prejudice to any rights to claim compensation for damages in accordance with national law.

(65) In the interests of predictable investment conditions, competent authorities should be able to share information with undertakings and public authorities expressing interest in deploying very high capacity networks on whether other types of network upgrades, including those below 100 Mbps download speed, are present or foreseen in the area in question.

(66) It is important that national regulatory and other competent authorities consult all interested parties on proposed decisions, give them sufficient time to the complexity of the matter to provide their comments, and take account of their comments before adopting a final decision. In order to ensure that decisions at national level do not have an adverse effect on the functioning of the internal market or other TFEU objectives, national regulatory authorities should also notify certain draft decisions to the Commission and other national regulatory authorities to give them the opportunity to comment. It is appropriate for competent authorities to consult interested parties in the cases defined in this Directive on all draft measures which have an effect on trade between Member States.

([1]) Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information (OJ L 345, 31.12.2003, p. 90).

(67) In the context of a competitive environment, the views of interested parties, including users and consumers, should be taken into account. In order to appropriately address the interests of citizens, Member States should put in place an appropriate consultation mechanism. Such a mechanism could take the form of a body which would, independently of the national regulatory authority and service providers, carry out research into consumer-related issues, such as consumer behaviour and mechanisms for changing suppliers, and which would operate in a transparent manner and contribute to the existing mechanisms for stakeholder consultation. Furthermore, a mechanism could be established for the purpose of enabling appropriate cooperation on issues relating to the promotion of lawful content. Any cooperation procedures agreed pursuant to such a mechanism should, however, not allow for the systematic surveillance of internet use.

(68) Out-of-court dispute resolution procedures may constitute a fast and cost-efficient way for end-users to enforce their rights, in particular for consumers and microenterprises and small enterprises as defined in the Annex to Commission Recommendation 2003/361/EC ([1]). Member States should enable the national regulatory authority or another competent authority responsible for, or at least one independent body with proven expertise in dealing with, end-user rights to act as an alternative dispute resolution entity. With respect to such dispute resolutions, those authorities should not be subject to any instructions. As many Member States have established dispute resolution procedures also for end-users other than consumers, to whom Directive 2013/11/EU of the European Parliament and of the Council ([2]) does not apply, it is reasonable to maintain the sector-specific dispute resolution procedure for both consumers and, where Member States extend it, also for other end-users, in particular microenterprises and small enterprises. In relation to out-of-court dispute resolution, Member States should be able to maintain or introduce rules that go beyond those laid down by Directive 2013/11/EU in order to ensure a higher level of consumer protection.

(69) In the event of a dispute between undertakings in the same Member State in an area covered by this Directive, for example relating to obligations for access and interconnection or to the means of transferring end-user lists, an aggrieved party that has negotiated in good faith but failed to reach agreement should be able to call on the national regulatory authority to resolve the dispute. National regulatory authorities should be able to impose a solution on the parties. The intervention of a national regulatory authority in the resolution of a dispute between providers of electronic communications networks or services or associated facilities in a Member State should seek to ensure compliance with the obligations arising under this Directive.

(70) In addition to the rights of recourse granted under Union or national law, there is a need for a simple procedure to be initiated at the request of either party in a dispute, to resolve cross-border disputes between undertakings providing, or authorised to provide, electronic communications networks or services in different Member States.

(71) One important task assigned to BEREC is to adopt, where appropriate, opinions in relation to cross-border disputes. National regulatory authorities should therefore fully reflect any opinion submitted by BEREC in their measures imposing any obligation on an undertaking or otherwise resolving the dispute in such cases.

(72) Lack of coordination between Member States when organising the use of radio spectrum in their territory can, if not solved through bilateral Member States negotiations, create large-scale interference issues severely impacting on the development of the Digital Single Market. Member States should take all necessary measures to avoid cross-border and harmful interference between them. The Radio Spectrum Policy Group (RSPG) established by Commission Decision 2002/622/EC ([3]) should be tasked with supporting the necessary cross-border coordination and be the

([1]) Commission Recommendation 2003/361/EC of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (OJ L 124, 20.5.2003, p. 36).

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

([3]) Commission Decision 2002/622/EC of 26 July 2002 establishing a Radio Spectrum Policy Group (OJ L 198, 27.7.2002, p. 49).

designated forum for resolving disputes between Member States on cross border issues. Building on the RSPG's proposed solution, an implementing measure is required in some circumstances to resolve cross-border interference definitively or to enforce under Union law a coordinated solution agreed by two or several Member States in bilateral negotiations. Lack of coordination between Member States and countries neighbouring the Union can also create large-scale interference issues. Member States should take appropriate measures to avoid cross-border and harmful interference with countries neighbouring the Union, and cooperate with each other to that end. Upon the request of Member States affected by cross-border interference from third countries, the Union should provide its full support for those Member States.

(73) The RSPG is a Commission high-level advisory group which was created by Decision 2002/622/EC to contribute to the development of the internal market and to support the development of a Union-level radio spectrum policy, taking into account economic, political, cultural, strategic, health and social considerations, as well as technical parameters. It should be composed of the heads of the bodies that have overall political responsibility for strategic radio spectrum policy. It should assist and advise the Commission with respect to radio spectrum policy. This should further increase the visibility of radio spectrum policy in the various Union policy areas and help to ensure cross-sectorial consistency at Union and national and level. It should also provide advice to the European Parliament and to the Council upon their request. Moreover, the RSPG should also be the forum for the coordination of implementation by Member States of their obligations related to radio spectrum under this Directive and should play a central role in fields essential for the internal market such as cross-border coordination or standardisation. Technical or expert working groups could also be created to assist plenary meetings, at which strategic policy is framed through senior-level representatives of the Member States and the Commission. The Commission has indicated its intention to amend Decision 2002/622/EC within six months of the entry into force of this Directive, in order to reflect the new tasks conferred on the RSPG by this Directive.

(74) Competent authorities should monitor and secure compliance with the terms and conditions of the general authorisation and rights of use, and in particular to ensure effective and efficient use of radio spectrum and compliance with coverage and quality of service obligations, through administrative penalties including financial penalties and injunctions and withdrawals of rights of use in the event of breaches of those terms and conditions. Undertakings should provide the most accurate and complete information possible to competent authorities to allow them to fulfil their surveillance tasks.

(75) The conditions attached to general authorisations and individual rights of use should be limited to those strictly necessary to ensure compliance with requirements and obligations under national law and Union law.

(76) Any party subject to a decision of a competent authority should have the right to appeal to a body that is independent of the parties involved and of any external intervention or political pressure which could jeopardise its independent assessment of matters coming before it. That body can be a court. Furthermore, any undertaking which considers that its applications for the granting of rights to install facilities have not been dealt with in accordance with the principles set out in this Directive should be entitled to appeal against such decisions. That appeal procedure should be without prejudice to the division of competences within national judicial systems and to the rights of legal entities or natural persons under national law. In any case, Member States should grant effective judicial review against such decisions.

(77) In order to ensure legal certainty for market players, appeal bodies should carry out their functions effectively. In particular, appeal proceedings should not be unduly lengthy. Interim measures suspending the effect of the decision of a competent authority should be granted only in urgent cases in order to prevent serious and irreparable damage to the party applying for those measures and if the balance of interests so requires.

(78) There has been a wide divergence in the manner in which appeal bodies have applied interim measures to suspend the decisions of the national regulatory or other competent authorities. In order to achieve greater consistency of approach common standards should be applied in line with the case law of the Court of Justice. Appeal bodies

should also be entitled to request available information published by BEREC. Given the importance of appeals for the overall operation of the regulatory framework, a mechanism should be set up, in all the Member States, for collecting information on appeals and decisions to suspend decisions taken by the competent authorities and for the reporting of that information to the Commission and to BEREC. That mechanism should ensure that the Commission or BEREC can retrieve from Member States the text of the decisions and judgments with a view to developing a database.

(79) Transparency in the application of the Union mechanism for consolidating the internal market for electronic communications should be increased in the interest of citizens and stakeholders and to enable parties concerned to make their views known, including by way of requiring national regulatory authorities to publish any draft measure at the same time as it is communicated to the Commission, to BEREC, and to the national regulatory authorities in other Member States. Any such draft measure should be reasoned and should contain a detailed analysis.

(80) The Commission should be able, after taking utmost account of the opinion of BEREC, to require a national regulatory authority to withdraw a draft measure where it concerns the definition of relevant markets or the designation of undertakings as having significant market power, and where such decisions would create a barrier to the internal market or would be incompatible with Union law and in particular the policy objectives that national regulatory authorities should follow. This procedure is without prejudice to the notification procedure provided for in Directive (EU) 2015/1535 and the Commission's prerogatives under TFEU in respect of infringements of Union law.

(81) The national consultation of interested parties should be conducted prior to the consultation at Union level for the purposes of consolidating the internal market for electronic communications and within the procedure for the consistent application of remedies, in order to allow the views of interested parties to be reflected in the consultation at Union level. This would also avoid the need for a second consultation at Union level in the event of changes to a planned measure as a result of the national consultation.

(82) It is important that the regulatory framework is implemented in a timely manner. When the Commission has taken a decision requiring a national regulatory authority to withdraw a planned measure, national regulatory authorities should withdraw its draft measure or submit a revised measure to the Commission. A deadline should be laid down for the notification of the revised measure to the Commission in order to inform market players of the duration of the market review and in order to increase legal certainty.

(83) The Union mechanism allowing the Commission to require national regulatory authorities to withdraw planned measures concerning market definition and the designation of undertakings as having significant market power has contributed significantly to a consistent approach in identifying the circumstances in which ex ante regulation may be applied and those in which the undertakings are subject to such regulation. The experience of the procedures under Articles 7 and 7a of Directive 2002/21/EC has shown that inconsistencies in the national regulatory authorities' application of remedies under similar market conditions undermine the internal market in electronic communications. Therefore, the Commission and BEREC should participate in ensuring, within their respective responsibilities, a higher level of consistency in the application of remedies concerning draft measures proposed by national regulatory authorities. In addition, for draft measures relating to the extension of obligations beyond the first concentration or distribution point, where needed to address high and non-transitory economic or physical barriers to replication, on undertakings irrespective of a designation as having significant market power, or to the regulatory treatment of new very high-capacity network elements where BEREC shares the Commission's concerns, the Commission should be able to require a national regulatory authority to withdraw a draft measure. In order to benefit from the expertise of national regulatory authorities on the market analysis, the Commission should consult BEREC prior to adoption of its decisions or recommendations.

(84) Having regard to the short time-limits in the consultation mechanism at Union level, powers should be conferred on the Commission to adopt recommendations or guidelines to simplify the procedures for exchanging information between the Commission and national regulatory authorities, for example in cases concerning stable markets, or involving only minor changes to previously notified measures. Powers should also be conferred on the Commission in order to allow for the introduction of a notification exemption in order to streamline procedures in certain cases.

(85) National regulatory authorities should be required to cooperate with each other, with BEREC and with the Commission, in a transparent manner, to ensure the consistent application, in all Member States, of this Directive.

(86) The discretion of national regulatory authorities needs to be reconciled with the development of consistent regulatory practices and the consistent application of the regulatory framework in order to contribute effectively to the development and completion of the internal market. National regulatory authorities should therefore support the internal market activities of the Commission and of BEREC.

(87) Measures that could affect trade between Member States are measures that could have an influence, direct or indirect, actual or potential, on the pattern of trade between Member States in a manner which might create a barrier to the internal market. They comprise measures that have a significant impact on undertakings or users in other Member States, which include: measures which affect prices for users in other Member States; measures which affect the ability of an undertaking established in another Member State to provide an electronic communications service, and in particular measures which affect the ability to offer services on a transnational basis; and measures which affect market structure or access, leading to repercussions for undertakings in other Member States.

(88) A more convergent use and definition of elements of selection procedures and the conditions attached to the rights of use for radio spectrum which have a significant impact on market conditions and the competitive situation, including conditions for entry and expansion, would be enhanced by a coordination mechanism whereby the RSPG, at the request of the national regulatory or other competent authority or, exceptionally, on its own initiative, convenes a Peer Review Forum to examine draft measures in advance of the granting of rights of use by a given Member State with a view to exchanging best practices. The Peer Review Forum is an instrument of peer learning. It should contribute to a better exchange of best practices between Member States and increase the transparency of the competitive or comparative selection procedures. The Peer Review Process should not be a formal condition of national authorisation procedures. The exchange of views should be based on information provided by the national regulatory or other competent authority that requests the Peer Review Forum and should be a subset of a wider national measure, which may more broadly consist of the granting, trade and lease, duration, renewal or the amendment of rights of use. Therefore, the national regulatory or other competent authority should also be able to provide information on other draft national measures or aspects thereof related to the relevant selection procedure for limiting rights of use for radio spectrum which are not covered by the peer review mechanism. To reduce administrative burden, the national regulatory or other competent authority should be able to submit such information by way of a common reporting format, where available, for transmission to the RSPG members.

(89) Where the harmonised assignment of radio spectrum to particular undertakings has been agreed at Union level, Member States should strictly implement such agreements in the granting of rights of use for radio spectrum from the National Frequency Allocation Plan.

(90) Member States should be able to consider joint authorisation processes as an option when issuing rights of use where the expected usage covers cross-border situations.

(91) Any Commission decision to ensure the harmonised application of this Directive should be limited to regulatory principles, approaches and methodologies. For the avoidance of doubt, it should not prescribe any detail normally required to reflect national circumstances, and it should not prohibit alternative approaches which can reasonably be expected to have equivalent effect. Such a decision should be proportionate and should not have an effect on decisions taken by national regulatory or other competent authorities that do not create a barrier to the internal market.

(92) The Union and the Member States have entered into commitments in relation to standards and the regulatory framework of telecommunications networks and services in the World Trade Organization.

(93) Standardisation should remain primarily a market-driven process. However there may still be situations where it is appropriate to require compliance with specified standards at Union level in order to improve interoperability, freedom of choice for users and encourage interconnectivity in the internal market. At national level, Member States are subject to Directive (EU) 2015/1535. Standardisation procedures under this Directive are without prejudice to Directives 2014/30/EU ([1]) and 2014/35/EU ([2]) of the European Parliament and of the Council, and Directive 2014/53/EU.

(94) Providers of public electronic communications networks or publicly available electronic communications services, or of both, should be required to take measures to safeguard the security of their networks and services, respectively, and to prevent or minimise the impact of security incidents. Having regard to the state of the art, those measures should ensure a level of security of networks and services appropriate to the risks posed. Security measures should take into account, as a minimum, all the relevant aspects of the following elements: as regards security of networks and facilities: physical and environmental security, security of supply, access control to networks and integrity of networks; as regards handling of security incidents: handling procedures, security incident detection capability, security incident reporting and communication; as regards business continuity management: service continuity strategy and contingency plans, disaster recovery capabilities; as regards monitoring, auditing and testing: monitoring and logging policies, exercise contingency plans, network and service testing, security assessments and compliance monitoring; and compliance with international standards.

(95) Given the growing importance of number-independent interpersonal communications services, it is necessary to ensure that they are also subject to appropriate security requirements in accordance with their specific nature and economic importance. Providers of such services should thus also ensure a level of security appropriate to the risk posed. Given that providers of number-independent interpersonal communications services normally do not exercise actual control over the transmission of signals over networks, the degree of risk for such services can be considered in some respects to be lower than for traditional electronic communications services. Therefore, where justified on the basis of the actual assessment of the security risks involved, the measures taken by providers of number-independent interpersonal communications services should be lighter. The same approach should apply mutatis mutandis to interpersonal communications services which make use of numbers and which do not exercise actual control over signal transmission.

(96) Providers of public electronic communications networks or of publicly available electronic communications services should inform users of particular and significant security threats and of measures they can take to protect the security of their communications, for instance by using specific types of software or encryption technologies. The requirement to inform users of such threats should not discharge a service provider from the obligation to take, at its own expense, appropriate and immediate measures to remedy any security threats and restore the normal security level of the service. The provision of such information about security threats to the user should be free of charge.

(97) In order to safeguard security of networks and services, and without prejudice to the Member States' powers to ensure the protection of their essential security interests and public security, and to permit the investigation, detection and prosecution of criminal offences, the use of encryption for example, end-to-end where appropriate, should be promoted and, where necessary, encryption should be mandatory in accordance with the principles of security and privacy by default and by design.

(98) Competent authorities should ensure that the integrity and availability of public electronic communications networks are maintained. The European Union Agency for Network and Information Security ('ENISA') should contribute to an enhanced level of security of electronic communications by, inter alia, providing expertise and advice, and promoting the exchange of best practices. The competent authorities should have the necessary means to

([1]) Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility (OJ L 96, 29.3.2014, p. 79).

([2]) Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits (OJ L 96, 29.3.2014, p. 357).

perform their duties, including powers to request the information necessary to assess the level of security of networks or services. They should also have the power to request comprehensive and reliable data about actual security incidents that have had a significant impact on the operation of networks or services. They should, where necessary, be assisted by Computer Security Incident Response Teams ('CSIRTs') established by Directive (EU) 2016/1148 of the European Parliament and of the Council ([1]). In particular, CSIRTs may be required to provide competent authorities with information about risks and security incidents affecting public electronic communications networks and publicly available electronic communications services, and recommend ways to address them.

(99) Where the provision of electronic communications relies on public resources the use of which is subject to specific authorisation, Member States should be able to grant the authority competent for issuance thereof the right to impose fees to ensure optimal use of those resources, in accordance with the procedures envisaged in this Directive. In line with the case-law of the Court of Justice, Member States cannot levy any charges or fees in relation to the provision of networks and electronic communications services other than those provided for by this Directive. In that regard, Member States should have a consistent approach in establishing those charges or fees in order not to provide an undue financial burden linked to the general authorisation procedure or rights of use for providers of electronic communications networks and services.

(100) To ensure optimal use of resources, fees should reflect the economic and technical situation of the market concerned as well as any other significant factor determining their value. At the same time, fees should be set in a manner that ensures efficient assignment and use of radio spectrum. This Directive is without prejudice to the purpose for which fees for rights of use and rights to install facilities are employed. It should be possible, for example, to use such fees to finance activities of national regulatory and other competent authorities that cannot be covered by administrative charges. Where, in the case of competitive or comparative selection procedures, fees for rights of use for radio spectrum consist entirely or partly of a one-off amount, payment arrangements should ensure that such fees do not in practice lead to selection on the basis of criteria unrelated to the objective of ensuring optimal use of radio spectrum. The Commission should be able to publish, on a regular basis, benchmark studies and, as appropriate, other guidance with regard to best practices for the assignment of radio spectrum, the assignment of numbering resources or the granting of rights of way.

(101) Fees imposed on undertakings for rights of use for radio spectrum can influence decisions about whether to seek such rights and put into use radio spectrum resources. With a view to ensuring optimal use of radio spectrum, Member States should therefore set reserve prices in a way that leads to the efficient assignment of those rights, irrespective of the type of selection procedure used. Member States could also take into account possible costs associated with the fulfilment of authorisation conditions imposed to further policy objectives. In doing so, regard should also be had to the competitive situation of the market concerned including the possible alternative uses of the resources.

(102) Optimal use of radio spectrum resources depends on the availability of appropriate networks and associated facilities. In that regard, Member States should aim to ensure that, where national regulatory or other competent authorities apply fees for rights of use for radio spectrum and for rights to install facilities, they take into consideration the need to facilitate continuous infrastructure development with a view to achieving the most efficient use of the resources. Member States should seek to ensure the application, to the best extent possible, of arrangements for the payment of the fees for rights of use for radio spectrum linked with the actual availability of the resource in a manner that supports the investments necessary to promote such infrastructure development and the provision of related services. The payment arrangements should be specified in an objective, transparent, proportionate and non-discriminatory manner before opening procedures for the granting of rights of use for radio spectrum.

(103) It should be ensured that procedures exist for the granting of rights to install facilities that are timely, non-discriminatory and transparent, in order to guarantee the conditions for fair and effective competition. This Directive is without prejudice to national provisions governing the expropriation or use of property, the normal exercise of property rights, the normal use of the public domain, or to the principle of neutrality with regard to the rules in Member States governing the system of property ownership.

([1]) Directive (EU) 2016/1148 of the European Parliament and of the Council of 6 July 2016 concerning measures for a high common level of security of network and information systems across the Union (OJ L 194, 19.7.2016, p. 1).

(104) Permits issued to providers of electronic communications networks and services allowing them to gain access to public or private property are essential factors for the establishment of electronic communications networks or new network elements. Unnecessary complexity and delay in the procedures for granting rights of way may therefore represent important obstacles to the development of competition. Consequently, the acquisition of rights of way by authorised undertakings should be simplified. Competent authorities should coordinate the acquisition of rights of way, making relevant information accessible on their websites.

(105) It is necessary to strengthen the powers of the Member States as regards holders of rights of way to ensure the entry or roll-out of a new network in a fair, efficient and environmentally responsible way and independently of any obligation on an undertaking designated as having significant market power to grant access to its electronic communications network. Improving facility sharing can lower the environmental cost of deploying electronic communications infrastructure and serve public health, public security and meet town and country planning objectives. Competent authorities should be empowered to require that the undertakings which have benefitted from rights to install facilities on, over or under public or private property share such facilities or property, including physical co-location, after an appropriate period of public consultation, during which all interested parties should be given the opportunity to state their views, in the specific areas where such general interest reasons impose such sharing. That can be the case for instance where the subsoil is highly congested or where a natural barrier needs to be crossed. Competent authorities should in particular be able to impose the sharing of network elements and associated facilities, such as ducts, conduits, masts, manholes, cabinets, antennae, towers and other supporting constructions, buildings or entries into buildings, and a better coordination of civil works on environmental or other public policy grounds. On the contrary, it should be for national regulatory authorities to define rules for apportioning the costs of the facility or property sharing, to ensure that there is an appropriate reward of risk for the undertakings concerned. In light of the obligations imposed by Directive 2014/61/EU, the competent authorities, in particular, local authorities, should also establish appropriate coordination procedures, in cooperation with national regulatory authorities, with respect to public works and other appropriate public facilities or property which should be able to include procedures that ensure that interested parties have information concerning appropriate public facilities or property and ongoing and planned public works, that they are notified in a timely manner of such works, and that sharing is facilitated to the maximum extent possible.

(106) Where mobile operators are required to share towers or masts for environmental reasons, such mandated sharing could lead to a reduction in the maximum transmitted power levels allowed for each operator for reasons of public health, and this in turn could require operators to install more transmission sites to ensure national coverage. Competent authorities should seek to reconcile the environmental and public health considerations in question, taking due account of the precautionary approach set out in Council Recommendation 1999/519/EC ([1]).

(107) Radio spectrum is a scarce public resource with an important public and market value. It is an essential input for radio-based electronic communications networks and services and, insofar as it relates to such networks and services, should therefore be efficiently allocated and assigned by national regulatory or other competent authorities in accordance with harmonised objectives and principles governing their action as well as to objective, transparent and non-discriminatory criteria, taking into account the democratic, social, linguistic and cultural interests related to the use of radio spectrum. Decision No 676/2002/EC establishes a framework for harmonisation of radio spectrum.

(108) Radio spectrum policy activities in the Union should be without prejudice to measures taken, at Union or national level, in accordance with Union law, to pursue general interest objectives, in particular with regard to public governmental and defence networks, content regulation and audiovisual and media policies, and the right of Member States to organise and use their radio spectrum for public order, public security and defence.

([1]) Council Recommendation 1999/519/EC of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz) (OJ L 199, 30.7.1999, p. 59).

(109) Ensuring widespread connectivity in each Member State is essential for economic and social development, participation in public life and social and territorial cohesion. As connectivity and the use of electronic communications become an integral element to European society and welfare, Member States should strive to ensure Union-wide wireless broadband coverage. Such coverage should be achieved by relying on the imposition by Member States of appropriate coverage requirements, which should be adapted to each area served and limited to proportionate burdens in order not to hinder deployment by service providers. Given the major role systems such as radio local area networks (RLANs) play in providing high-speed wireless broadband indoors, measures should aim to ensure the release of sufficient radio spectrum in bands which are particularly valuable assets for the cost-efficient deployment of wireless networks with universal coverage, in particular indoors. Moreover, consistent and coordinated measures for high-quality terrestrial wireless coverage across the Union, building on best national practices for operators' licence obligations, should aim to meet the radio spectrum policy programme objective that all citizens of the Union should have access both indoors and outdoors, to the fastest broadband speeds of not less than 30 Mbps by 2020, and should aim to achieve an ambitious vision for a gigabit society in the Union. Such measures will promote innovative digital services and ensure long-term socioeconomic benefits. Seamless coverage of the territory as well as connectivity across Member States should be maximised and reliable, with a view to promoting in-border and cross-border services and applications such as connected cars and e-health.

(110) The need to ensure that citizens are not exposed to electromagnetic fields at a level harmful to public health is imperative. Member States should pursue consistency across the Union to address this issue, having particular regard to the precautionary approach taken in Recommendation 1999/519/EC, in order to work towards ensuring more consistent deployment conditions. Member States should apply the procedure set out in Directive (EU) 2015/1535, where relevant, with a view also to providing transparency to stakeholders and to allow other Member States and the Commission to react.

(111) Radio spectrum harmonisation and coordination, and equipment regulation supported by standardisation, are complementary and need to be coordinated closely to meet their joint objectives effectively, with the support of the RSPG. Coordination between the content and timing of mandates to CEPT under Decision No 676/2002/EC and standardisation requests to standardisation bodies, such as the European Telecommunications Standards Institute, including with regard to radio receivers parameters, should facilitate the introduction of future systems, support radio spectrum sharing opportunities and ensure efficient radio spectrum management.

(112) The demand for harmonised radio spectrum is not uniform in all parts of the Union. Where there is lack of demand for all or part of a harmonised band at regional or national level, Member States could, by way of exception, allow an alternative use of the band, for example to cover lack of market supply for certain uses, for as long as such lack of demand persists and provided that the alternative use does not prejudice the harmonised use of the band by other Member States and that it ceases when demand for the harmonised use materialises.

(113) Flexibility in radio spectrum management and access to radio spectrum has been established through technology and service-neutral authorisations to allow radio spectrum users to choose the best technologies and services to apply in radio spectrum bands declared available for electronic communications services in the relevant National Frequency Allocation Plans in accordance with Union law ('the principle of technology neutrality and the principle of service neutrality'). The administrative determination of technologies and services should apply only when general interest objectives are at stake and should be clearly justified and subject to regular review.

(114) Restrictions to the principle of technology neutrality should be appropriate and justified by the need to avoid harmful interference, for example by imposing emission masks and power levels, to ensure the protection of public health by limiting public exposure to electromagnetic fields, to ensure the proper functioning of services through an

adequate level of technical quality of service, while not necessarily precluding the possibility of using more than one service in the same radio spectrum band, to ensure proper sharing of radio spectrum, in particular where its use is subject only to general authorisations, to safeguard efficient use of radio spectrum, or to fulfil a general interest objective in accordance with Union law.

(115) Radio spectrum users should also be able to choose freely the services they wish to offer over the radio spectrum. On the other hand, measures should be allowed which require the provision of a specific service to meet clearly defined general interest objectives such as safety of life, the need to promote social, regional and territorial cohesion, or the avoidance of the inefficient use of radio spectrum to be permitted where necessary and proportionate. Those objectives should include the promotion of cultural and linguistic diversity and media pluralism, as defined by Member States in accordance with Union law. Except where necessary to protect safety of life or, by way of exception, to fulfil other general interest objectives as defined by Member States in accordance with Union law, exceptions should not result in certain services having exclusive use, but should rather grant them priority so that, insofar as possible, other services or technologies could coexist in the same radio spectrum band. It lies within the competence of the Member States to define the scope and nature of any exception regarding the promotion of cultural and linguistic diversity and media pluralism.

(116) As the allocation of radio spectrum to specific technologies or services is an exception to the principles of technology and service neutrality and reduces the freedom to choose the service provided or technology used, any proposal for such allocation should be transparent and subject to public consultation.

(117) Where Member States decide, by way of exception, to limit the freedom to provide electronic communications networks and services based on grounds of public policy, public security or public health, Member States should explain the reasons for such a limitation.

(118) Radio spectrum should be managed in a manner that ensures the avoidance of harmful interference. The basic concept of harmful interference should therefore be properly defined to ensure that regulatory intervention is limited to the extent necessary to prevent such interference, having regard also to the need to take into consideration advanced methods for protection against harmful interference, with the aim of applying those technologies and radio spectrum management methods in order to avoid, to the extent possible, the application of the non-interference and non-protection principle. Transport has a strong cross-border element and its digitalisation brings challenges. Vehicles (such as metro, bus, cars, trucks, trains,) are becoming increasingly autonomous and connected. In the internal market, vehicles travel beyond national borders more easily. Reliable communications, and avoiding harmful interference, are critical for the safe and good operation of vehicles and their on-board communications systems.

(119) With growing radio spectrum demand and new varying applications and technologies which necessitate more flexible access and use of radio spectrum, Member States should promote the shared use of radio spectrum by determining the most appropriate authorisation regimes for each scenario and by establishing appropriate and transparent rules and conditions therefor. Shared use of radio spectrum increasingly ensures its effective and efficient use by allowing several independent users or devices to access the same radio spectrum band under various types of legal regimes in order to make additional radio spectrum resources available, raise usage efficiency and facilitate radio spectrum access for new users. Shared use can be based on general authorisations or licence-exempt use allowing, under specific sharing conditions, several users to access and use the same radio spectrum in different geographic areas or at different moments in time. It can also be based on individual rights of use under arrangements such as licensed shared access where all users (with an existing user and new users) agree on the terms and conditions for shared access, under the supervision of the competent authorities, in such a way as to ensure a minimum guaranteed radio transmission quality. When allowing shared use under different authorisation regimes, Member States should not set widely diverging durations for such use under different authorisation regimes.

(120) General authorisations for the use of radio spectrum may facilitate the most effective use of radio spectrum and foster innovation in some cases and are pro-competitive, whereas individual rights of use for radio spectrum in other cases may be the most appropriate authorisation regime in the presence of certain specific circumstances. Individual rights of use should be considered, for example, when favourable propagation characteristics of the radio spectrum or the envisaged power level of the transmission imply that general authorisations cannot address the interference concerns in light of the required quality of service. Technical measures such as solutions to improve receiver resilience might enable the use of general authorisations or radio spectrum sharing, and possibly avoid systematic recourse to the non-interference and non-protection principle.

(121) In order to ensure predictability and preserve legal certainty and investment stability, Member States should establish, in advance, appropriate criteria to determine compliance with the objective of efficient use of radio spectrum by the holders of the rights when implementing the conditions attached to individual rights of use and general authorisations. Interested parties should be involved in the definition of such conditions and informed, in a transparent manner, about how the fulfilment of their obligations will be assessed.

(122) In order to avoid the creation of barriers to market entry, namely through anti-competitive hoarding, enforcement of conditions attached to radio spectrum rights by Member States should be effective and all competent authorities should participate where necessary. Enforcement conditions should include the application of a 'use it or lose it' clause. In order to ensure legal certainty in respect of the possible exposure to any penalty for failure to use radio spectrum, thresholds of use, including in terms of time, quantity or identity of radio spectrum, should be established in advance. Trading and leasing of radio spectrum should ensure the effective use by the original holder of the right.

(123) Where harmonised conditions for a radio spectrum band are established under Decision No 676/2002/EC, competent authorities are to decide on the most appropriate authorisation regime to be applied in that band or parts thereof. Where all Member States are likely to face similar problems for which diverging solutions could fragment the internal market in equipment, and thereby delay the rollout of 5G systems, it may be necessary for the Commission, taking utmost account of the opinion of the RSPG, to recommend common solutions, acknowledging technical harmonisation measures in force. This could provide a common toolbox for Member States which they could take into account when identifying appropriate consistent authorisation regimes to be applied to a band, or part of a band, depending on factors such as population density, propagation characteristics of the bands, divergence between urban and rural uses, the possible need to protect existing services and the resulting implications for economies of scale in manufacturing.

(124) Network infrastructure sharing, and in some instances radio spectrum sharing, can allow for a more effective and efficient use of radio spectrum and ensure the rapid deployment of networks, especially in less densely populated areas. When establishing the conditions to be attached to rights of use for radio spectrum, competent authorities should also consider authorising forms of sharing or coordination between undertakings with a view to ensuring effective and efficient use of radio spectrum or compliance with coverage obligations, in accordance with competition law principles.

(125) The requirement to respect the principles of technology and service neutrality in granting rights of use, together with the possibility to transfer rights between undertakings, underpin the freedom and means to deliver electronic communications services to the public, thereby also facilitating the achievement of general interest objectives. This Directive is without prejudice whether radio spectrum is assigned directly to providers of electronic communications networks or services or to entities that use those networks or services. Such entities may be radio or television broadcast content providers. The responsibility for compliance with the conditions attached to the right of use for radio spectrum and the relevant conditions attached to the general authorisation should in any case lie with the undertaking to which the right of use for radio spectrum has been granted. Certain obligations imposed on broadcasters for the delivery of audiovisual media services may require the use of specific criteria and procedures for the granting of radio spectrum usage rights to meet a specific general interest objective set out by Member States in accordance with Union law. However, the procedure for the granting of such right should in any event be objective, transparent, non-discriminatory and proportionate.

(126) The case-law of the Court of Justice requires that any national restrictions to the rights guaranteed by Article 56 TFEU should be objectively justified and proportionate and should not exceed those necessary to achieve their objectives. Moreover, radio spectrum granted without following an open procedure should not be used for purposes other than the general interest objective for which they were granted. In such a case, the interested parties should be given the opportunity to comment within a reasonable period. As part of the application procedure for granting rights, Member States should verify whether the applicant is able to comply with the conditions to be attached to such rights. Those conditions should be reflected in eligibility criteria set out in objective, transparent, proportionate and non-discriminatory terms prior to the launch of any competitive selection procedure. For the purpose of applying such criteria, the applicant may be requested to submit the necessary information to prove his ability to comply with those conditions. Where such information is not provided, the application for the right of use for radio spectrum may be rejected.

(127) Member States should, prior to the granting of the right, impose only the verification of elements that can reasonably be demonstrated by an applicant exercising ordinary care, taking due account of the important public and market value of radio spectrum as a scarce public resource. This is without prejudice to the possibility for subsequent verification of the fulfilment of eligibility criteria, for example through milestones, where criteria could not reasonably be met initially. To preserve effective and efficient use of radio spectrum, Member States should not grant rights where their review indicates applicants' inability to comply with the conditions, without prejudice to the possibility of facilitating time-limited experimental use. Sufficiently long duration of authorisations for the use of radio spectrum should increase investment predictability to contribute to faster network roll-out and better services, as well as stability to support radio spectrum trading and leasing. Unless use of radio spectrum is authorised for an unlimited period, such a duration should both take account of the objectives pursued and be sufficient to facilitate recoupment of the investments made. While a longer duration can ensure investment predictability, measures to ensure effective and efficient use of radio spectrum, such as the power of the competent authority to amend or withdraw the right in the case of non-compliance with the conditions attached to the rights of use, or the facilitation of radio spectrum tradability and leasing, will serve to prevent inappropriate accumulation of radio spectrum and support greater flexibility in distributing radio spectrum resources. Greater recourse to annualised fees is also a means to ensure a continuous assessment of the use of the radio spectrum by the holder of the right.

(128) Considering the importance of technical innovation, Member States should be able to provide for rights to use radio spectrum for experimental purposes, subject to specific restrictions and conditions strictly justified by the experimental nature of such rights.

(129) In deciding whether to renew already granted rights of use for harmonised radio spectrum, competent authorities should take into account the extent to which renewal would further the objectives of the regulatory framework and other objectives under Union and national law. Any such decision should be subject to an open, non-discriminatory and transparent procedure and based on a review of how the conditions attached to the rights concerned have been fulfilled. When assessing the need to renew rights of use, Member States should weigh the competitive impact of renewing assigned rights against the promotion of more efficient exploitation or of innovative new uses that might result if the band were opened to new users. Competent authorities should be able to make their determination in this regard by allowing for only a limited duration for renewal in order to prevent severe disruption of established use. While decisions on whether to renew rights assigned prior to the applicability of this Directive should respect any rules already applicable, Member States should also ensure that they do not prejudice the objectives of this Directive.

(130) When renewing existing rights of use for harmonised radio spectrum, Member States should, together with the assessment of the need to renew the right, review the fees attached thereto with a view to ensuring that those fees continue to promote optimal use, taking account, inter alia, of market developments and technological evolution. For reasons of legal certainty, it is appropriate for any adjustments to the existing fees to be based on the same principles as those applicable to the award of new rights of use.

(131) Effective management of radio spectrum can be ensured by facilitating the continued efficient use of radio spectrum that has already been assigned. In order to ensure legal certainty to holders of the rights, the possibility of renewal of rights of use should be considered within an appropriate time-span prior to the expiry of the rights concerned, for example, where rights have been assigned for 15 years or more, at least two years before expiry of those rights, unless the possibility of renewal was explicitly excluded at the time of assignment of the rights. In the interest of continuous resource management, competent authorities should be able to undertake such consideration at their own initiative as well as in response to a request from the assignee. The renewal of the right to use should not be granted contrary to the will of the assignee.

(132) Transfer of rights of use for radio spectrum can be an effective means of increasing the efficient use of spectrum. For the sake of flexibility and efficiency, and to allow valuation of radio spectrum by the market, Member States should by default allow radio spectrum users to transfer or lease their rights of use for radio spectrum to third parties following a simple procedure and subject to the conditions attached to such rights and to competition rules, under the supervision of the national regulatory authorities responsible. In order to facilitate such transfers or leases, provided that technical implementing measures adopted under Decision No 676/2002/EC are respected, Member States should also consider requests to have radio spectrum rights partitioned or disaggregated and conditions for use reviewed.

(133) Measures taken specifically to promote competition when granting or renewing rights of use for radio spectrum should be decided by national regulatory and other competent authorities, which have the necessary economic, technical and market knowledge. Radio spectrum assignment conditions can influence the competitive situation in electronic communications markets and conditions for entry. Limited access to radio spectrum, in particular when radio spectrum is scarce, can create a barrier to entry or hamper investment, network roll-out, the provision of new services or applications, innovation and competition. New rights of use, including those acquired through transfer or leasing, and the introduction of new flexible criteria for radio spectrum use can also influence existing competition. Where unduly applied, certain conditions used to promote competition, can have other effects; for example, radio spectrum caps and reservations can create artificial scarcity, wholesale access obligations can unduly constrain business models in the absence of market power, and limits on transfers can impede the development of secondary markets. Therefore, a consistent and objective competition test for the imposition of such conditions is necessary and should be applied consistently. The use of such measures should therefore be based on a thorough and objective assessment, by national regulatory and other competent authorities, of the market and the competitive conditions thereof. National competent authorities should, however, always ensure the effective and efficient use of radio spectrum and avoid distortion of competition through anti-competitive hoarding.

(134) Building on opinions from the RSPG, the adoption of a common deadline for allowing the use of a radio spectrum band which has been harmonised under Decision No 676/2002/EC can be necessary to avoid cross-border interference and beneficial to ensure release of the full benefits of the related technical harmonisation measures for equipment markets and for the deployment of very high capacity networks and services. Allowing the use of a radio spectrum band entails assigning radio spectrum under a general authorisation regime or individual rights of use in order to permit the use of radio spectrum as soon as the assignment process is completed. In order to assign radio spectrum bands, it might be necessary to release a band occupied by other users and to compensate them. Implementation of a common deadline for allowing the use of harmonised bands for electronic communications services, including for 5G, might however be affected in a particular Member State by problems relating to unresolved cross-border coordination issues between Member States or with third countries, to the complexity of ensuring the technical migration of existing users of a band; a restriction to the use of the band based on a general interest objective, to the safeguarding of national security and defence or to force majeure. In any case, Member States should take all measures to reduce any delay to the minimum in terms of geographical coverage, timing and radio spectrum range. Moreover, Member States should be able, where appropriate in light of their

assessment of the relevant circumstances, to request the Union to provide legal, political and technical support to resolve radio spectrum coordination issues with countries neighbouring the Union, including candidate and acceding countries, in such a way that the Member States concerned can observe their obligations under Union law.

(135) In order to ensure increased coordinated availabilities of radio spectrum by 2020 to achieve very high speed fixed and wireless networks in the context of 5G, the 3,4-3,8 GHz and the 24,25-27,5 GHz bands have been identified by the RSPG as priority bands suitable to fulfil the objectives of the 5G Action Plan by 2020. The 40,5-43,5 GHz and 66-71 GHz bands have also been identified for further study. It is therefore necessary to ensure that, by 31 December 2020, the 3,4-3,8 GHz and the 24,25-27,5 GHz bands or parts thereof are available for terrestrial systems capable of providing wireless broadband services under harmonised conditions established by technical implementing measures adopted in accordance with Article 4 of Decision No 676/2002/EC, complementing Decision (EU) 2017/899 of the European Parliament and of the Council ([1]), as those bands have specific qualities, in terms of coverage and data capacity, which allow them to be combined appropriately to meet 5G requirements. Member States could, however, be affected by interference likely to arise from third countries which, in accordance with the ITU Radio Regulations, have identified those bands for services other than international mobile telecommunications. This might have an effect on the obligation to meet a common implementation date. Future use of the 26 GHz band for 5G terrestrial wireless services is likely, inter alia, to target urban areas and sub-urban hotspot areas, while some deployment can be foreseen along major roads and railway tracks in rural areas. This provides the opportunity to use the 26 GHz band for services other than 5G wireless outside those geographic areas, for example, for business specific communications or indoor use, and therefore allows Member States to designate and make that band available on a non-exclusive basis.

(136) Where demand for a radio spectrum band exceeds the availability and, as a result, a Member State concludes that the rights of use for radio spectrum is to be limited, appropriate and transparent procedures should apply for the granting of such rights to avoid any discrimination and optimise the use of the scarce resource. Such limitation should be justified, proportionate and based on a thorough assessment of market conditions, giving due weight to the overall benefits for users and to national and internal market objectives. The objectives governing any limitation procedure should be clearly established in advance. When considering the most appropriate selection procedure, and in accordance with coordination measures taken at Union level, Member States should, in a timely and transparent manner, consult all interested parties on the justification, objectives and conditions of the procedure. Member States should be able to use, inter alia, competitive or comparative selection procedures for the assignment of radio spectrum or of numbering resources with exceptional economic value. In administering such schemes, competent authorities should take into account the objectives of this Directive. If a Member State finds that further rights can be made available in a band, it should start the process therefor.

(137) Massive growth in radio spectrum demand, and in end-user demand for wireless broadband capacity, calls for solutions allowing alternative, complementary, spectrally efficient access solutions, including low-power wireless access systems with a small-area operating range, such as RLANs and networks of low-power small-size cellular access points. Such complementary wireless access systems, in particular publicly accessible RLAN access points, increase access to the internet for end-users and mobile traffic off-loading for mobile operators. RLANs use harmonised radio spectrum without requiring an individual authorisation or a right of use for radio spectrum. To date, most RLAN access points are used by private users as local wireless extension of their fixed broadband connection. End-users, within the limits of their own internet subscription, should not be prevented from sharing access to their RLAN with others, in order to increase the number of available access points, in particular, in densely populated areas, maximise wireless data capacity through radio spectrum re-use and create a cost-effective complementary wireless broadband infrastructure accessible to other end-users. Therefore, unnecessary restrictions to the deployment and interlinkage of RLAN access points should also be removed.

([1]) Decision (EU) 2017/899 of the European Parliament and of the Council of 17 May 2017 on the use of the 470-790 MHz frequency band in the Union (OJ L 138, 25.5.2017, p. 131).

(138) Public authorities or public service providers that use RLANs in their premises for their personnel, visitors or clients, for example to facilitate access to e-Government services or for information on public transport or road traffic management, could also provide access to such access points for general use by citizens as an ancillary service to services they offer to the public on such premises, to the extent allowed by competition and public procurement rules. Moreover, the provider of such local access to electronic communications networks within or around a private property or a limited public area on a non-commercial basis or as an ancillary service to another activity that is not dependent on such access, such as RLAN hotspots made available to customers of other commercial activities or to the general public in that area, can be subject to compliance with general authorisations for rights of use for radio spectrum but should not be subject to any conditions or requirements attached to general authorisations applicable to providers of public electronic communications networks or services or to obligations regarding end-users or interconnection. However, such a provider should remain subject to the liability rules set out in Directive 2000/31/EC of the European Parliament and of the Council ([1]). Further technologies, such as LiFi, are emerging and will complement current radio spectrum capabilities of RLANs and wireless access point to include optical visible light-based access points and lead to hybrid local area networks allowing optical wireless communication.

(139) Since low power small-area wireless access points, such as femtocells, picocells, metrocells or microcells, can be very small and make use of unobtrusive equipment similar to that of domestic RLAN routers, which do not require any permits beyond those necessary for the use of radio spectrum, and considering the positive impact of such access points on the use of radio spectrum and on the development of wireless communications, any restriction to their deployment should be limited to the greatest extent possible. As a result, in order to facilitate the deployment of small-area wireless access points, and without prejudice to any applicable requirement related to radio spectrum management, Member States should not subject to any individual permits the deployment of such devices on buildings which are not officially protected as part of a designated environment or because of their special architectural or historical merit, except for reasons of public safety. To that end, their characteristics, such as maximum size, weight and emission characteristics, should be specified at Union level in a proportionate way for local deployment and to ensure a high level of protection of public health, as laid down in Recommendation 1999/519/EC. For the operation of small-area wireless access points, Article 7 of Directive 2014/53/EU should apply. This is without prejudice to private property rights set out in Union or national law. The procedure for considering permit applications should be streamlined and without prejudice to any commercial agreements and any administrative charge involved should be limited to the administrative costs relating to the processing of the application. The process of assessing a request for a permit should take as little time as possible, and in principle no longer than four months.

(140) Public buildings and other public infrastructure are visited and used daily by a significant number of end-users who need connectivity to consume eGovernment, eTransport and other services. Other public infrastructure, such as street lamps, traffic lights, offer very valuable sites for deploying small cells, for instance, due to their density. Without prejudice to the possibility for competent authorities to subject the deployment of small-area wireless access points to individual prior permits, operators should have the right to access to those public sites for the purpose of adequately serving demand. Member States should therefore ensure that such public buildings and other public infrastructure are made available on reasonable conditions for the deployment of small-cells with a view to complementing Directive 2014/61/EU and without prejudice to the principles set out in this Directive. Directive 2014/61/EU follows a functional approach and imposes obligations of access to physical infrastructure only when it is part of a network and only if it is owned or used by a network operator, thereby leaving many buildings owned or used by public authorities outside its scope. On the contrary, a specific obligation is not necessary for physical infrastructure, such as ducts or poles, used for intelligent transport systems, which are owned by network operators (providers of transport services or providers of public electronic communications networks), and host parts of a network, thus falling within the scope of Directive 2014/61/EU.

(141) The provisions of this Directive as regards access and interconnection apply to public electronic communications networks. Providers of electronic communications networks other than to the public do not have access or interconnection obligations under this Directive except where, in benefiting from access to public networks, they may be subject to conditions laid down by Member States.

([1]) Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce) (OJ L 178, 17.7.2000, p. 1).

(142) The term 'access' has a wide range of meanings, and it is therefore necessary to define precisely how that term is used in this Directive, without prejudice to how it is used in other Union measures. An operator may own the underlying network or facilities or may rent some or all of them.

(143) In an open and competitive market, there should be no restrictions that prevent undertakings from negotiating access and interconnection arrangements between themselves, in particular on cross-border agreements, subject to the competition rules laid down in the TFEU. In the context of achieving a more efficient, truly pan-European market, with effective competition, more choice and competitive services to end-users, undertakings which receive requests for access or interconnection from other undertakings that are subject to general authorisation in order to provide electronic communications networks or services to the public should in principle conclude such agreements on a commercial basis, and negotiate in good faith.

(144) In markets where there continue to be large differences in negotiating power between undertakings, and where some undertakings rely on infrastructure provided by others for delivery of their services, it is appropriate to establish a regulatory framework to ensure that the market functions effectively. National regulatory authorities should have the power to secure, where commercial negotiation fails, adequate access and interconnection and interoperability of services in the interest of end-users. In particular, they can ensure end-to-end connectivity by imposing proportionate obligations on undertakings that are subject to the general authorisation and that control access to end-users. Control of means of access may entail ownership or control of the physical link to the end-user (either fixed or mobile), or the ability to change or withdraw the national number or numbers needed to access an end-user's network termination point. This would be the case for example if network operators were to restrict unreasonably end-user choice for access to internet portals and services.

(145) In light of the principle of non-discrimination, national regulatory authorities should ensure that all undertakings, irrespective of their size and business model, whether vertically integrated or separated, can interconnect on reasonable terms and conditions, with a view to providing end-to-end connectivity and access to the internet.

(146) National legal or administrative measures that link the terms and conditions for access or interconnection to the activities of the party seeking interconnection, and specifically to the degree of its investment in network infrastructure, and not to the interconnection or access services provided, may cause market distortion and may therefore not be compatible with competition rules.

(147) Network operators who control access to their own customers do so on the basis of unique numbers or addresses from a published numbering or addressing range. Other network operators need to be able to deliver traffic to those customers, and so need to be able to interconnect directly or indirectly to each other. It is therefore appropriate to lay down rights and obligations to negotiate interconnection.

(148) Interoperability is of benefit to end-users and is an important aim of that regulatory framework. Encouraging interoperability is one of the objectives for national regulatory and other competent authorities as set out in that framework. That framework also provides for the Commission to publish a list of standards or specifications covering the provision of services, technical interfaces or network functions, as the basis for encouraging harmonisation in electronic communications. Member States should encourage the use of published standards or specifications to the extent strictly necessary to ensure interoperability of services and to improve freedom of choice for users.

(149) Currently both end-to-end connectivity and access to emergency services depend on end-users using number-based interpersonal communications services. Future technological developments or an increased use of number-independent interpersonal communications services could entail a lack of sufficient interoperability between communications services. As a consequence, significant barriers to market entry and obstacles to further onward innovation could emerge and appreciably threaten effective end-to-end connectivity between end-users.

(150) Where such interoperability issues arise, the Commission should be able to request a BEREC report which should provide a factual assessment of the market situation at Union and Member State level. Taking utmost account of the BEREC report and other available evidence and taking into account the effects on the internal market, the Commission should decide whether there is a need for regulatory intervention by national regulatory or other competent authorities. If the Commission considers that such regulatory intervention should be considered by national regulatory or other competent authorities, it should be able to adopt implementing measures specifying the nature and scope of possible regulatory interventions by national regulatory or other competent authorities, including in particular obligations to publish and allow the use, modification and redistribution of relevant information by the authorities and other providers and measures to impose the mandatory use of standards or specifications on all or specific providers.

(151) National regulatory or other competent authorities should assess, in light of the specific national circumstances, whether any intervention is necessary and justified to ensure end-to-end-connectivity, and if so, impose proportionate obligations, in accordance with the Commission's implementing measures, on those providers of number-independent interpersonal communications services with a significant level of coverage and user-uptake. The term significant should be interpreted in the sense that the geographic coverage and the number of end-users of the provider concerned represent a critical mass with a view to achieving the goal of ensuring end-to-end connectivity between end-users. Providers with a limited number of end-users or limited geographic coverage which would contribute only marginally to achieving that goal, should normally not be subject to such interoperability obligations.

(152) In situations where undertakings are deprived of access to viable alternatives to non-replicable wiring, cables and associated facilities inside buildings or up to the first concentration or distribution point and in order to promote competitive outcomes in the interest of end-users, national regulatory authorities should be empowered to impose access obligations on all undertakings, irrespective of a designation as having significant market power. In that regard, national regulatory authorities should take into consideration all technical and economic barriers to future replication of networks. However, as such obligations can in certain cases be intrusive, can undermine incentives for investments, and can have the effect of strengthening the position of dominant players, they should be imposed only where justified and proportionate to achieving sustainable competition in the relevant markets. The mere fact that more than one such infrastructure already exists should not necessarily be interpreted as showing that its assets are replicable. If necessary in combination with such access obligations, undertakings should also be able to rely on the obligations to provide access to physical infrastructure on the basis of Directive 2014/61/EU. Any obligations imposed by the national regulatory authority under this Directive and decisions taken by other competent authorities under Directive 2014/61/EU to ensure access to in-building physical infrastructure or to physical infrastructure up to the access point should be consistent.

(153) National regulatory authorities should be able, to the extent necessary, to impose obligations on undertakings to provide access to the facilities referred to in an annex to this Directive, namely application programming interfaces (APIs) and electronic programme guides (EPGs), to ensure not only accessibility for end-users to digital radio and television broadcast services but also to related complementary services. Such complementary services should be able to include programme related services which are specifically designed to improve accessibility for end-users with disabilities, and programme related connected television services.

(154) It is important that when national regulatory authorities assess the concentration or distribution point up to which they intend to impose access, they choose a point in accordance with BEREC guidelines. Selecting a point nearer to end-users will be more beneficial to infrastructure competition and the roll-out of very high capacity networks. In this way the national regulatory authority should first consider choosing a point in a building or just outside a building. It could be justified to extend access obligations to wiring and cables beyond the first concentration or distribution point while confining such obligations to points as close as possible to end-users capable of hosting a sufficient number of end-users, where it is demonstrated that replication faces high and non-transitory physical or economic barriers, leading to important competition problems or market failures at the retail level to the detriment of end-users. The assessment of the replicability of network elements requires a market review which is different from an analysis assessing significant market power, and so the national regulatory authority does not need to

establish significant market power in order to impose these obligations. On the other hand, such review requires a sufficient economic assessment of market conditions, to establish whether the criteria necessary to impose obligations beyond the first concentration or distribution point are met. Such extended access obligations are more likely to be necessary in geographical areas where the business case for alternative infrastructure rollout is more risky, for example because of low population density or because of the limited number of multi-dwelling buildings. Conversely, a high concentration of households might indicate that the imposition of such obligations is unnecessary. National regulatory authorities should also consider whether such obligations have the potential to strengthen the position of undertakings designated as having significant market power. National regulatory authorities should be able to impose access to active or virtual network elements used for service provision on such infrastructure if access to passive elements would be economically inefficient or physically impracticable, and if the national regulatory authority considers that, absent such an intervention, the purpose of the access obligation would be circumvented. In order to enhance consistent regulatory practice across the Union, the Commission should be able to require the national regulatory authority to withdraw its draft measures extending access obligations beyond the first concentration or distribution point, where BEREC shares the Commission's serious doubts as to the compatibility of the draft measure with Union law and in particular the regulatory objectives of this Directive.

(155) In such cases, in order to comply with the principle of proportionality, it can be appropriate for national regulatory authorities to exempt certain categories of owners or undertakings, or both, from obligations going beyond the first concentration or distribution point, which should be determined by national regulatory authorities, on the grounds that an access obligation not based on an undertaking's designation as having significant market power would risk compromising their business case for recently deployed network elements, in particular by small local projects. Wholesale-only undertakings should not be subject to such access obligations if they offer an effective alternative access on a commercial basis to a very high capacity network, on fair, non-discriminatory and reasonable terms and conditions, including as regards price. It should be possible to extend that exemption to other providers on the same terms. The exemption may not be appropriate for providers that are in receipt of public funding.

(156) Sharing of passive infrastructure used in the provision of wireless electronic communications services in compliance with competition law principles can be particularly useful to maximise very high capacity connectivity throughout the Union, especially in less dense areas where replication is impracticable and end-users risk being deprived of such connectivity. National regulatory or other competent authorities should, by way of exception, be able to impose such sharing or localised roaming access, in accordance with Union law, if that possibility has been clearly established in the original conditions for the granting of the right of use and they demonstrate the benefits of such sharing in terms of overcoming insurmountable economic or physical obstacles and access to networks or services is therefore severely deficient or absent, and taking into account several factors, including in particular the need for coverage along major transport paths, choice and a higher quality of service for end-users as well as the need to maintain infrastructure roll-out incentives. In circumstances where there is no access by end-users, and sharing of passive infrastructure alone does not suffice to address the situation, the national regulatory authorities should be able to impose obligations on the sharing of active infrastructure. In so doing, national regulatory or other competent authorities retain the flexibility to choose the most appropriate sharing or access obligation which should be proportionate and justified based on the nature of the problem identified.

(157) While it is appropriate in some circumstances for a national regulatory or other competent authority to impose obligations on undertakings irrespective of a designation of significant market power in order to achieve goals such as end-to-end connectivity or interoperability of services, it is necessary to ensure that such obligations are imposed in accordance with the regulatory framework and, in particular, its notification procedures. Such obligations should be imposed only where justified in order to secure the objectives of this Directive, and where they are objectively justified, transparent, proportionate and non-discriminatory for the purpose of promoting efficiency, sustainable competition, efficient investment and innovation, and giving the maximum benefit to end-users, and imposed in accordance with the relevant notification procedures.

(158) In order to overcome insurmountable economic or physical obstacles for providing end-users with services or networks which rely on the use of radio spectrum and where mobile coverage gaps persist, their closing may require the access and sharing of passive infrastructure, or, where this is not sufficient, the sharing of active infrastructure, or

localised roaming access agreements. Without prejudice to sharing obligations attached to the rights of use on the basis of other provisions of this Directive, and in particular measures to promote competition, where national regulatory or other competent authorities intend to take measures to impose the sharing of passive infrastructure, or when passive access and sharing are not sufficient, active infrastructure sharing or localised roaming access agreements, they may, however, also be called to consider the possible risk for market participants in underserved areas.

(159) Competition rules alone may not always be sufficient to ensure cultural diversity and media pluralism in the area of digital television. Technological and market developments make it necessary to review obligations to provide conditional access on fair, reasonable and non-discriminatory terms on a regular basis, by a Member State for its national market, in particular to determine whether it is justified to extend obligations to EPGs and APIs, to the extent necessary to ensure accessibility for end-users to specified digital broadcasting services. Member States should be able to specify the digital broadcasting services to which access by end-users is to be ensured by any legislative, regulatory or administrative means that they consider to be necessary.

(160) Member States should also be able to permit their national regulatory authority to review obligations in relation to conditional access to digital broadcasting services in order to assess through a market analysis whether to withdraw or amend conditions for undertakings that do not have significant market power on the relevant market. Such a withdrawal or amendment should not adversely affect access for end-users to such services or the prospects for effective competition.

(161) There is a need for ex ante obligations in certain circumstances in order to ensure the development of a competitive market, the conditions of which favour the deployment and take-up of very high capacity networks and services, and the maximisation of end-user benefits. The definition of significant market power used in this Directive is equivalent to the concept of dominance as defined in the case-law of the Court of Justice.

(162) Two or more undertakings can be found to enjoy a joint dominant position not only where there exist structural or other links between them but also where the structure of the relevant market is conducive to coordinated effects, that is, it encourages parallel or aligned anti-competitive behaviour on the market.

(163) It is essential that ex ante regulatory obligations should be imposed on a wholesale market only where there are one or more undertakings with significant market power, with a view to ensuring sustainable competition and where Union and national competition law remedies are not sufficient to address the problem. The Commission has drawn up guidelines at Union level in accordance with the principles of competition law for national regulatory authorities to follow in assessing whether competition is effective in a given market and in assessing significant market power. National regulatory authorities should analyse whether a given product or service market is effectively competitive in a given geographical area, which could be the whole or a part of the territory of the Member State concerned or neighbouring parts of territories of Member States considered together. An analysis of effective competition should include an analysis as to whether the market is prospectively competitive, and thus whether any lack of effective competition is durable. Those guidelines should also address the issue of newly emerging markets, where de facto the market leader is likely to have a substantial market share but should not be subjected to inappropriate obligations. The Commission should review the guidelines regularly, in particular on the occasion of a review of the existing law, taking into account the case-law of the Court of Justice, economic thinking and actual market experience and with a view to ensuring that they remain appropriate in a rapidly developing market. National regulatory authorities will need to cooperate with each other where the relevant market is found to be transnational.

(164) In determining whether an undertaking has significant market power in a specific market, national regulatory authorities should act in accordance with Union law and take utmost account of the Commission guidelines on market analysis and the assessment of significant market power.

(165) National regulatory authorities should define relevant geographic markets within their territory taking into utmost account the Commission Recommendation on relevant product and service markets (the 'Recommendation') adopted pursuant to this Directive and taking into account national and local circumstances. Therefore, national regulatory authorities should at least analyse the markets that are contained in the Recommendation, including those markets that are listed but no longer regulated in the specific national or local context. National regulatory authorities should also analyse markets that are not contained in that Recommendation, but that are regulated within the territory of their jurisdiction on the basis of previous market analyses, or other markets, if they have sufficient grounds to consider that the three criteria provided in this Directive are met.

(166) Transnational markets can be defined when it is justified by the geographic market definition, taking into account all supply-side and demand-side factors in accordance with competition law principles. BEREC is the most appropriate body to undertake such analysis, benefiting from the extensive collective experience of national regulatory authorities when defining markets on a national level. National circumstances should be taken into account when an analysis of potential transnational markets is undertaken. If transnational markets are defined and warrant regulatory intervention, concerned national regulatory authorities should cooperate to identify the appropriate regulatory response, including in the process of notification to the Commission. They can also cooperate in the same manner where transnational markets are not identified but on their territories market conditions are sufficiently homogeneous to benefit from a coordinated regulatory approach, such as for example in terms of similar costs, market structures or operators, or in the case of transnational or comparable end-user demand.

(167) In some circumstances geographic markets are defined as national or sub-national, for example due to the national or local nature of network roll-out which determines the boundaries of undertakings' potential market power in respect of wholesale supply, but there is still a significant transnational demand from one or more categories of end-users. That can in particular be the case for demand from business end-users with multisite facility operations in different Member States. If that transnational demand is not sufficiently met by suppliers, for example if they are fragmented along national borders or locally, a potential internal market barrier arises. Therefore, BEREC should be empowered to provide guidelines to national regulatory authorities on common regulatory approaches to ensure that transnational demand can be met in a satisfactory way, providing a basis for the interoperability of wholesale access products across the Union and permitting efficiencies and economies of scale despite the fragmented supply side. BEREC's guidelines should shape the choices of national regulatory authorities in pursuing the internal market objective when imposing regulatory obligations on undertakings designated as having significant market power at national level while providing guidance for the harmonisation of technical specifications of wholesale access products capable of meeting such identified transnational demand, in the interest of the internal market.

(168) The objective of any ex ante regulatory intervention is ultimately to produce benefits for end-users in terms of price, quality and choice by making retail markets effectively competitive on a sustainable basis. It is likely that national regulatory authorities will gradually be able to find many retail markets to be competitive even in the absence of wholesale regulation, especially taking into account expected improvements in innovation and competition.

(169) For national regulatory authorities, the starting point for the identification of wholesale markets susceptible to ex ante regulation is the analysis of corresponding retail markets. The analysis of effective competition at the retail and at the wholesale level is conducted from a forward-looking perspective over a given time horizon, and is guided by competition law, including, as appropriate, the relevant case law of the Court of Justice. If it is concluded that a retail market would be effectively competitive in the absence of ex ante wholesale regulation on the corresponding relevant markets, this should lead the national regulatory authority to conclude that regulation is no longer needed at the relevant wholesale level.

(170) During the gradual transition to deregulated markets, commercial agreements, including for co-investment and access between operators will gradually become more common, and if they are sustainable and improve competitive dynamics, they can contribute to the conclusion that a particular wholesale market does not warrant ex ante regulation. A similar logic would apply in reverse, to the unforeseeable termination of commercial agreements on a

deregulated market. The analysis of such agreements should take into account that the prospect of regulation can be a motive for network owners to enter into commercial negotiations. With a view to ensuring adequate consideration of the impact of regulation imposed on related markets when determining whether a given market warrants ex ante regulation, national regulatory authorities should ensure markets are analysed in a consistent manner and where possible, at the same time or as close as possible to each other in time.

(171) When assessing wholesale regulation to solve problems at the retail level, national regulatory authorities should take into account the fact that several wholesale markets can provide wholesale upstream inputs for a particular retail market, and, conversely, that a single wholesale market can provide wholesale upstream inputs for a variety of retail markets. Furthermore, competitive dynamics in a particular market can be influenced by markets that are contiguous but not in a vertical relationship, such as can be the case between certain fixed and mobile markets. National regulatory authorities should conduct that assessment for each individual wholesale market considered for regulation, starting with remedies for access to civil infrastructure, as such remedies are usually conducive to more sustainable competition including infrastructure competition, and thereafter analysing any wholesale markets considered susceptible to ex ante regulation in order of their likely suitability to address identified competition problems at retail level. When deciding on the specific remedy to be imposed, national regulatory authorities should assess its technical feasibility and carry out a cost-benefit analysis, having regard to its degree of suitability to address the identified competition problems at retail level, and enabling competition based on differentiation and technology neutrality. National regulatory authorities should consider the consequences of imposing any specific remedy which, if feasible only on certain network topologies, could constitute a disincentive for the deployment of very high capacity networks in the interest of end-users.

(172) Without prejudice to the principle of technology neutrality, the national regulatory authorities should provide incentives through the remedies imposed, and, where possible, before the roll-out of infrastructure, for the development of flexible and open network architecture, which would reduce eventually the burden and complexity of remedies imposed at a later stage. At each stage of the assessment, before the national regulatory authority determines whether any additional, more burdensome, remedy should be imposed on the undertaking designated as having significant market power, it should seek to determine whether the retail market concerned would be effectively competitive, also taking into account any relevant commercial arrangements or other wholesale market circumstances, including other types of regulation already in force, such as for example general access obligations to non-replicable assets or obligations imposed pursuant to Directive 2014/61/EU, and of any regulation already considered to be appropriate by the national regulatory authority for an undertaking designated as having significant market power. Such an assessment, aiming to ensure that only the most appropriate remedies necessary to effectively address any problems identified in the market analysis are imposed, does not preclude a national regulatory authority from finding that a mix of such remedies together, even if of differing intensity, in line with the proportionality principle, offers the least intrusive way of addressing the problem. Even if such differences do not result in the definition of distinct geographic markets, they should be able to justify differentiation in the appropriate remedies imposed in light of the differing intensity of competitive constraints.

(173) Ex ante regulation imposed at the wholesale level, which is in principle less intrusive than retail regulation, is considered to be sufficient to tackle potential competition problems on the related downstream retail market or markets. The advances in the functioning of competition since the regulatory framework for electronic communications has been in place are demonstrated by the progressive deregulation of retail markets across the Union. Furthermore, the rules relating to the imposition of ex ante remedies on undertakings designated as having significant market power should, where possible, be simplified and be made more predictable. Therefore, the imposition of ex ante regulatory controls based on an undertaking's designation as having significant market power in wholesale markets should prevail.

(174) When a national regulatory authority withdraws wholesale regulation, it should define an appropriate notice period to ensure a sustainable transition to a de-regulated market. In defining such a notice period, the national regulatory

authority should take into account the existing agreements between access providers and access seekers that have been entered into on the basis of the imposed regulatory obligations. In particular, such agreements can provide a contractual legal protection to access seekers for a determined period. The national regulatory authority should also take into account the effective possibility for market participants to take up any commercial wholesale access or co-investment offers which can be present in the market and the need to avoid an extended period of possible regulatory arbitrage. Transition arrangements established by the national regulatory authority should consider the extent and timing of regulatory oversight of pre-existing agreements, once the notice period starts.

(175) In order to provide market players with certainty as to regulatory conditions, a time limit for market reviews is necessary. It is important to conduct a market analysis on a regular basis and within a reasonable and appropriate time-frame. There is a risk that failure by a national regulatory authority to analyse a market within the time-limit jeopardises the internal market, and normal infringement proceedings do not produce their desired effect on time. Alternatively, the national regulatory authority concerned should be able to request the assistance of BEREC to complete the market analysis. Such assistance could, for example, take the form of a specific task force composed of representatives of other national regulatory authorities.

(176) Due to the high level of technological innovation and highly dynamic markets in the electronic communications sector, there is a need to adapt regulation rapidly in a coordinated and harmonised way at Union level, as experience has shown that divergence among the national regulatory authorities in the implementation of the regulatory framework may create a barrier to the internal market.

(177) However, in the interest of greater stability and predictability of regulatory measures, the maximum period allowed between market analyses should be extended from three to five years, provided market changes in the intervening period do not require a new analysis. In determining whether a national regulatory authority has complied with its obligation to analyse markets and notified the corresponding draft measure at a minimum every five years, only a notification including a new assessment of the market definition and of significant market power will be considered to be starting a new five-year market cycle. A mere notification of new or amended regulatory remedies, imposed on the basis of a previous and unrevised market analysis will not be considered to have satisfied that obligation. Non-compliance by a national regulatory authority with the obligation to conduct market analysis at regular intervals laid down in this Directive should not be considered, in itself, to be a ground for the invalidity or inapplicability of existing obligations imposed by that national regulatory authority in the market in question.

(178) The imposition of a specific obligation on an undertaking designated as having significant market power does not require an additional market analysis but rather a justification that the obligation in question is appropriate and proportionate in relation to the nature of the problem identified on the market in question, and on the related retail market.

(179) When assessing the proportionality of the obligations and conditions to be imposed, national regulatory authorities should take into account the different competitive conditions existing in the different areas within their Member States having regard in particular to the results of the geographical survey conducted in accordance with this Directive.

(180) When considering whether to impose remedies to control prices, and if so in what form, national regulatory authorities should seek to allow a fair return for the investor on a particular new investment project. In particular, there are risks associated with investment projects specific to new access networks which support products for which demand is uncertain at the time the investment is made.

(181) Reviews of obligations imposed on undertakings designated as having significant market power during the timeframe of a market analysis should allow national regulatory authorities to take into account the impact on competitive conditions of new developments, for instance of newly concluded voluntary agreements between undertakings, such as access and co-investment agreements, thus providing the flexibility which is particularly necessary in the context of longer regulatory cycles. A similar logic should apply in the case of an unforeseeable breach or termination of a commercial agreement, or if such an agreement has effects diverging from the market

analysis. If the termination of an existing agreement occurs in a deregulated market, it is possible that a new market analysis is required. In the absence of a single important change in the market but in the case of dynamic markets, it may be necessary to conduct a market analysis more often than every five years, for example not earlier than every three years as was the case until the date of application of this Directive. Markets should be considered to be dynamic if the technological evolution and end-user demand patterns are likely to evolve in such a way that the conclusions of the analysis would be superseded within the medium term for a significant group of geographic areas or of end-users within the geographic and product market defined by the national regulatory authority.

(182) Transparency of terms and conditions for access and interconnection, including prices, serve to speed up negotiation, avoid disputes and give confidence to market players that a service is not being provided on discriminatory terms. Openness and transparency of technical interfaces can be particularly important in ensuring interoperability. Where a national regulatory authority imposes obligations to make information public, it should also be able to specify the manner in which the information is to be made available, and whether it is free of charge, taking into account the nature and purpose of the information concerned.

(183) In light of the variety of network topologies, access products and market circumstance that have arisen since 2002, the objectives of Annex II to Directive 2002/19/EC, concerning local loop unbundling, and access products for providers of digital television and radio services, can be better achieved and in a more flexible manner, by providing guidelines on the minimum criteria for a reference offer to be developed by and periodically updated by BEREC. That Annex should therefore be deleted.

(184) The principle of non-discrimination ensures that undertakings with significant market power do not distort competition, in particular where they are vertically integrated undertakings that supply services to undertakings with whom they compete on downstream markets.

(185) In order to address and prevent non-price related discriminatory behaviour, equivalence of inputs (EoI) is in principle the surest way of achieving effective protection from discrimination. On the other hand, providing regulated wholesale inputs on an EoI basis is likely to trigger higher compliance costs than other forms of non-discrimination obligations. Those higher compliance costs should be measured against the benefits of more vigorous competition downstream, and of the relevance of non-discrimination guarantees in circumstances where the undertaking designated as having significant market power is not subject to direct price controls. In particular, national regulatory authorities might consider that the provision of wholesale inputs over new systems on an EoI basis is more likely to create sufficient net benefits, and thus be proportionate, given the comparatively lower incremental compliance costs to ensure that newly built systems are EoI-compliant. On the other hand, national regulatory authorities should also consider whether obligations are proportionate for affected undertakings, for example, by taking into account implementation costs and weigh up possible disincentives to the deployment of new systems, relative to more incremental upgrades, in the event that the former would be subject to more restrictive regulatory obligations. In Member States with a high number of small-scale undertakings designated as having significant market power, the imposition of EoI on each of those undertakings can be disproportionate.

(186) Accounting separation allows internal price transfers to be rendered visible, and allows national regulatory authorities to check compliance with obligations for non-discrimination where applicable. In this regard the Commission published Recommendation 2005/698/EC ([1]).

(187) Civil engineering assets that can host an electronic communications network are crucial for the successful roll-out of new networks because of the high cost of duplicating them, and the significant savings that can be made when they can be reused. Therefore, in addition to the rules on physical infrastructure laid down in Directive 2014/61/EU, a specific remedy is necessary in those circumstances where civil engineering assets are owned by an undertaking designated as having significant market power. Where civil engineering assets exist and are reusable, the positive

([1]) Commission Recommendation 2005/698/EC of 19 September 2005 on accounting separation and cost accounting systems under the regulatory framework for electronic communications (OJ L 266, 11.10.2005, p. 64).

effect of achieving effective access to them on the roll-out of competing infrastructure is very high, and it is therefore necessary to ensure that access to such assets can be used as a self-standing remedy for the improvement of competitive and deployment dynamics in any downstream market, to be considered before assessing the need to impose any other potential remedies, and not just as an ancillary remedy to other wholesale products or services or as a remedy limited to undertakings availing themselves of such other wholesale products or services. National regulatory authorities should value reusable legacy civil engineering assets on the basis of the regulatory accounting value net of the accumulated depreciation at the time of calculation, indexed by an appropriate price index, such as the retail price index, and excluding those assets which are fully depreciated, over a period of not less than 40 years, but still in use.

(188) National regulatory authorities should, when imposing obligations for access to new and enhanced infrastructures, ensure that access conditions reflect the circumstances underlying the investment decision, taking into account, inter alia, the roll-out costs, the expected rate of take up of the new products and services and the expected retail price levels. Moreover, in order to provide planning certainty to investors, national regulatory authorities should be able to set, if applicable, terms and conditions for access which are consistent over appropriate review periods. In the event that price controls are considered to be appropriate, such terms and conditions can include pricing arrangements which depend on volumes or length of contract in accordance with Union law and provided they have no discriminatory effect. Any access conditions imposed should respect the need to preserve effective competition in services to consumers and businesses.

(189) Mandating access to network infrastructure can be justified as a means of increasing competition, but national regulatory authorities need to balance the rights of an infrastructure owner to exploit its infrastructure for its own benefit, and the rights of other service providers to access facilities that are essential for the provision of competing services.

(190) In markets where an increased number of access networks can be expected on a forward-looking basis, end-users are more likely to benefit from improvements in network quality, by virtue of infrastructure-based competition, compared to markets where only one network persists. The adequacy of competition on other parameters, such as price and choice, is likely to depend on the national and local competitive circumstances. In assessing the adequacy of competition on such parameters and the need for regulatory intervention, national regulatory authorities should also take into account whether wholesale access is available to any interested undertaking on reasonable commercial terms permitting sustainable competitive outcomes for end-users on the retail market. The application of general competition rules in markets characterised by sustainable and effective infrastructure-based competition should be sufficient.

(191) Where obligations are imposed on undertakings that require them to meet reasonable requests for access to and use of networks elements and associated facilities, such requests should be refused only on the basis of objective criteria such as technical feasibility or the need to maintain network integrity. Where access is refused, the aggrieved party should be able to submit the case to the dispute resolutions procedures under this Directive. An undertaking with mandated access obligations cannot be required to provide types of access which it is not within its power to provide. The imposition by national regulatory authorities of mandated access that increases competition in the short term should not reduce incentives for competitors to invest in alternative facilities that will secure more sustainable competition or higher performance and end-user benefits in the long term. When choosing the least intrusive regulatory intervention, and in line with the principle of proportionality, national regulatory authorities could, for example, decide to review the obligations imposed on undertakings designated as having significant market power and amend any previous decision, including by withdrawing obligations, imposing or not imposing new access obligations if this is in the interests of users and sustainable service competition. National regulatory authorities should be able to impose technical and operational conditions on the provider or beneficiaries of mandated access in accordance with Union law. In particular the imposition of technical standards should comply with Directive (EU) 2015/1535.

(192) Price control may be necessary when market analysis in a particular market reveals inefficient competition. In particular, undertakings designated as having significant market power should avoid a price squeeze whereby the

difference between their retail prices and the interconnection or access prices charged to competitors who provide similar retail services is not adequate to ensure sustainable competition. When a national regulatory authority calculates costs incurred in establishing a service mandated under this Directive, it is appropriate to allow a reasonable return on the capital employed including appropriate labour and building costs, with the value of capital adjusted where necessary to reflect the current valuation of assets and efficiency of operations. The method of cost recovery should be appropriate to the circumstances taking account of the need to promote efficiency, sustainable competition and deployment of very high capacity networks and thereby maximise end-user benefits, and should take in account the need to have predictable and stable wholesale prices for the benefit of all operators seeking to deploy new and enhanced networks, in accordance with Commission Recommendation 2013/466/EU ([1]).

(193) Due to uncertainty regarding the rate of materialisation of demand for the provision of next-generation broadband services, it is important in order to promote efficient investment and innovation to allow those operators investing in new or upgraded networks a certain degree of pricing flexibility. National regulatory authorities should be able to decide to maintain or not to impose regulated wholesale access prices on next-generation networks if sufficient competition safeguards are present. More specifically, to prevent excessive prices in markets where there are undertakings designated as having significant market power, pricing flexibility should be accompanied by additional safeguards to protect competition and end-user interests, such as strict non-discrimination obligations, measures to ensure technical and economic replicability of downstream products, and a demonstrable retail price constraint resulting from infrastructure competition or a price anchor stemming from other regulated access products, or both. Those competitive safeguards do not prejudice the identification by national regulatory authorities of other circumstances under which it would be appropriate not to impose regulated access prices for certain wholesale inputs, such as where high price elasticity of end-user demand makes it unprofitable for the undertaking designated as having significant market power to charge prices appreciably above the competitive level or where lower population density reduces the incentives for the development of very high capacity networks and the national regulatory authority establishes that effective and non-discriminatory access is ensured through obligations imposed in accordance with this Directive.

(194) Where a national regulatory authority imposes obligations to implement a cost-accounting system in order to support price controls, it should be able to undertake an annual audit to ensure compliance with that cost-accounting system, provided that it has the necessary qualified staff, or to require such an audit to be carried out by another qualified body, independent of the undertaking concerned.

(195) The charging system in the Union for wholesale voice call termination is based on Calling Party Network Pays. An analysis of demand and supply substitutability shows that currently or in the foreseeable future, there are no substitutes at wholesale level which might constrain the setting of charges for termination in a given network. Taking into account the two-way access nature of termination markets, further potential competition problems include cross-subsidisation between operators. Those potential competition problems are common to both fixed and mobile voice call termination markets. Therefore, in light of the ability and incentives of terminating operators to raise prices substantially above cost, cost orientation is considered to be the most appropriate intervention to address this concern over the medium term. Future market developments may alter the dynamics of those markets to the extent that regulation would no longer be necessary.

(196) In order to reduce the regulatory burden in addressing the competition problems relating to wholesale voice call termination consistently across the Union, the Commission should establish, by means of a delegated act, a single maximum voice termination rate for mobile services and a single maximum voice termination rate for fixed services that apply Union-wide.

([1]) Commission Recommendation 2013/466/EU of 11 September 2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment (OJ L 251, 21.9.2013, p. 13).

(197) This Directive should lay down the detailed criteria and parameters on the basis of which the values of voice call termination rates are set. Termination rates across the Union have decreased consistently and are expected to continue to do so. When the Commission determines the maximum termination rates in the first delegated act that it adopts pursuant to this Directive, it should disregard any unjustified exceptional national deviation from that trend.

(198) Due to current uncertainty regarding the rate of materialisation of demand for very high capacity broadband services as well as general economies of scale and density, co-investment agreements offer significant benefits in terms of pooling of costs and risks, enabling smaller-scale undertakings to invest on economically rational terms and thus promoting sustainable, long-term competition, including in areas where infrastructure-based competition might not be efficient. Such co-investments can take different forms, including co-ownership of network assets or long-term risk sharing through co-financing or through purchase agreements. In that context, purchase agreements which constitute co-investments entail the acquisition of specific rights to capacity of a structural character, involving a degree of co-determination and enabling co-investors to compete effectively and sustainably in the long term in downstream markets in which the undertaking designated as having significant market power is active. By contrast, commercial access agreements that are limited to the rental of capacity do not give rise to such rights and therefore should not be considered to be co-investments.

(199) Where an undertaking designated as having significant market power makes an offer for co-investment on fair, reasonable and non-discriminatory terms in very high capacity networks that consist of optical fibre elements up to the end-user premises or the base station, providing an opportunity to undertakings of different sizes and financial capacity to become infrastructure co-investors, the national regulatory authority should be able to refrain from imposing obligations pursuant to this Directive on the new very high capacity network if at least one potential co-investor has entered into a co-investment agreement with that undertaking. Where a national regulatory authority decides to make binding a co-investment offer that has not resulted in an agreement, and decides, not to impose additional regulatory obligations, it can do so, subject to the condition that such an agreement is to be concluded before the deregulatory measure takes effect. Where it is technically impracticable to deploy optical fibre elements up to the end-user's premises, very high capacity networks consisting of optical fibre elements up to the immediate proximity of, meaning just outside, such premises should also be able to benefit from the same regulatory treatment.

(200) When making a determination to refrain from imposing obligations, the national regulatory authority should take such steps after ensuring that the co-investment offers comply with the necessary criteria and are made in good faith. The differential regulatory treatment of new very high capacity networks should be subject to review in subsequent market analyses which, in particular after some time has elapsed, may require adjustments to the regulatory treatment. In duly justified circumstances, national regulatory authorities should be able to impose obligations on such new network elements when they establish that certain markets would, in the absence of regulatory intervention, face significant competition problems. In particular, when there are multiple downstream markets that have not reached the same degree of competition, national regulatory authorities could require specific asymmetric remedies to promote effective competition, for instance, but not limited to, niche retail markets, such as electronic communications products for business end-users. To maintain the competitiveness of the markets, national regulatory authorities should also safeguard the rights of access seekers who do not participate in a given co-investment. This should be achieved through the maintenance of existing access products or, where legacy network elements are dismantled in due course, through the imposition of access products with at least comparable functionality and quality to those previously available on the legacy infrastructure, in both cases subject to an appropriate adaptable mechanism validated by the national regulatory authority that does not undermine the incentives for co-investors.

(201) In order to enhance the consistent regulatory practice across the Union, where national regulatory authorities conclude that the conditions of the co-investment offer are met, the Commission should be able to require the national regulatory authority to withdraw its draft measures either refraining from imposing obligations or

intervening with regulatory obligations in order to address significant competition problems, where BEREC shares the Commission's serious doubts as to the compatibility of the draft measure with Union law and in particular the regulatory objectives of this Directive. In the interest of efficiency, a national regulatory authority should be able to submit a single notification to the Commission of a draft measure that relates to a co-investment scheme that meets the relevant conditions. Where the Commission does not exercise its powers to require the withdrawal of the draft measure, it would be disproportionate for subsequent simplified notifications of individual draft decisions of the national regulatory authority on the basis of the same scheme, including in addition evidence of actual conclusion of an agreement with at least one co-investor, to be subject to a decision requiring withdrawal in the absence of a change in circumstances. Furthermore, obligations imposed on undertakings, irrespective of whether they are designated as having significant market power, pursuant to this Directive or to Directive 2014/61/EU continue to apply. Obligations in relation to co-investment agreements are without prejudice to the application of Union law.

(202) The purpose of functional separation, whereby the vertically integrated undertaking is required to establish operationally separate business entities, is to ensure the provision of fully equivalent access products to all downstream operators, including the operator's own vertically integrated downstream divisions. Functional separation has the capacity to improve competition in several relevant markets by significantly reducing the incentive for discrimination and by making it easier to verify and enforce compliance with non-discrimination obligations. In exceptional cases, it should be possible for functional separation to be justified as a remedy where there has been persistent failure to achieve effective non-discrimination in several of the markets concerned, and where there is little or no prospect of infrastructure competition within a reasonable time-frame after recourse to one or more remedies previously considered to be appropriate. However, it is very important to ensure that its imposition preserves the incentives of the undertaking concerned to invest in its network and that it does not entail any potential negative effects on consumer welfare. Its imposition requires a coordinated analysis of different relevant markets related to the access network, in accordance with the market analysis procedure. When undertaking the market analysis and designing the details of that remedy, national regulatory authorities should pay particular attention to the products to be managed by the separate business entities, taking into account the extent of network roll-out and the degree of technological progress, which may affect the substitutability of fixed and wireless services. In order to avoid distortions of competition in the internal market, proposals for functional separation should be approved in advance by the Commission.

(203) The implementation of functional separation should not prevent appropriate coordination mechanisms between the different separate business entities in order to ensure that the economic and management supervision rights of the parent company are protected.

(204) Where a vertically integrated undertaking chooses to transfer a substantial part or all of its local access network assets to a separate legal entity under different ownership or by establishing a separate business entity for dealing with access products, the national regulatory authority should assess the effect of the intended transaction, including any access commitments offered by this undertaking, on all existing regulatory obligations imposed on the vertically integrated undertaking in order to ensure the compatibility of any new arrangements with this Directive. The national regulatory authority concerned should undertake a new analysis of the markets in which the segregated entity operates, and impose, maintain, amend or withdraw obligations accordingly. To that end, the national regulatory authority should be able to request information from the undertaking.

(205) It is already possible today in some markets that as part of the market analysis the undertakings designated as having significant market power are able to offer commitments which aim to address competition problems identified by the national regulatory authority and which the national regulatory authority then takes into account in deciding on the appropriate regulatory obligations. Any new market developments should be taken into account in deciding on the most appropriate remedies. However, and without prejudice to the provisions on regulatory treatment of co-investments, the nature of the commitments offered as such does not limit the discretion accorded to the national regulatory authority to impose remedies on undertakings designated as having significant market power. In order to enhance transparency and to provide legal certainty across the Union, the procedure for undertakings to offer

commitments and for the national regulatory authorities to assess them, taking into account the views of market participants by means of a market test, and if appropriate to make them binding on the committing undertaking and enforceable by the national regulatory authority, should be laid down in this Directive. Unless the national regulatory authority has made commitments on co-investments binding and decided not to impose obligations, that procedure is without prejudice to the application of the market analysis procedure and the obligation to impose appropriate and proportionate remedies to address the identified market failure.

(206) National regulatory authorities should be able to make the commitments binding, wholly or in part, for a specific period which should not exceed the period for which they are offered, after having conducted a market test by means of a public consultation of interested parties. Where the commitments have been made binding, the national regulatory authority should consider the consequences of this decision in its market analysis and take them into account when choosing the most appropriate regulatory measures. National regulatory authorities should consider the commitments made from a forward-looking perspective of sustainability, in particular when choosing the period for which they are made binding, and should have regard to the value placed by stakeholders in the public consultation on stable and predictable market conditions. Binding commitments related to voluntary separation by a vertically integrated undertaking which has been designated as having significant market power in one or more relevant markets can add predictability and transparency to the process, by setting out the process of implementation of the planned separation, for example by providing a roadmap for implementation with clear milestones and predictable consequences if certain milestones are not met.

(207) The commitments can include the appointment of a monitoring trustee, whose identity and mandate should be approved by the national regulatory authority, and the obligation on the undertaking offering them to provide periodic implementation reports.

(208) Network owners whose business model is limited to the provision of wholesale services to others, can be beneficial to the creation of a thriving wholesale market, with positive effects on retail competition downstream. Furthermore, their business model can be attractive to potential financial investors in less volatile infrastructure assets and with longer term perspectives on deployment of very high capacity networks. Nevertheless, the presence of a wholesale-only undertaking does not necessarily lead to effectively competitive retail markets, and wholesale-only undertakings can be designated as having significant market power in particular product and geographic markets. Certain competition risks arising from the behaviour of undertakings following wholesale-only business models might be lower than for vertically integrated undertakings, provided the wholesale-only model is genuine and no incentives to discriminate between downstream providers exist. The regulatory response should therefore be commensurately less intrusive, but should preserve in particular the possibility to introduce obligations in relation to fair and reasonable pricing. On the other hand, national regulatory authorities should be able to intervene if competition problems have arisen to the detriment of end-users. An undertaking active on a wholesale market that supplies retail services solely to business users larger than small and medium-sized enterprises should be regarded as a wholesale-only undertaking.

(209) To facilitate the migration from legacy copper networks to next-generation networks, which is in the interests of end-users, national regulatory authorities should be able to monitor network operators' own initiatives in this respect and to establish, where necessary, the conditions for an appropriate migration process, for example by means of prior notice, transparency and availability of alternative access products of at least comparable quality, once the network owner has demonstrated the intent and readiness to switch to upgraded networks. In order to avoid unjustified delays to the migration, national regulatory authorities should be empowered to withdraw access obligations relating to the copper network once an adequate migration process has been established and compliance with conditions and process for migration from legacy infrastructure is ensured. However, network owners should be able to decommission legacy networks. Access seekers migrating from an access product based on legacy

infrastructure to an access product based on a more advanced technology or medium should be able to upgrade their access to any regulated product with higher capacity, but should not be required to do so. In the case of an upgrade, access seekers should adhere to the regulatory conditions for access to the higher capacity access product, as determined by the national regulatory authority in its market analysis.

(210) The liberalisation of the telecommunications sector and increasing competition and choice for communications services go hand in hand with parallel action to create a harmonised regulatory framework which secures the delivery of universal service. The concept of universal service should evolve to reflect advances in technology, market developments and changes in user demand.

(211) Under Article 169 TFEU, the Union is to contribute to the protection of consumers.

(212) Universal service is a safety net to ensure that a set of at least the minimum services is available to all end-users and at an affordable price to consumers, where a risk of social exclusion arising from the lack of such access prevents citizens from full social and economic participation in society.

(213) Basic broadband internet access is virtually universally available across the Union and very widely used for a broad range of activities. However, the overall take-up rate is lower than availability as there are still those who are disconnected due to reasons related to awareness, cost, skills and due to choice. Affordable adequate broadband internet access has become of crucial importance to society and the wider economy. It provides the basis for participation in the digital economy and society through essential online internet services.

(214) A fundamental requirement of universal service is to ensure that all consumers have access at an affordable price to an available adequate broadband internet access and voice communications services, at a fixed location. Member States should also have the possibility to ensure affordability of adequate broadband internet access and voice communications services other than at a fixed location to citizens on the move, where they consider that this is necessary to ensure consumers' full social and economic participation in society. Particular attention should be paid in that context to ensuring that end-users with disabilities have equivalent access. There should be no limitations on the technical means by which the connection is provided, allowing for wired or wireless technologies, nor any limitations on the category of providers which provide part or all of universal service obligations.

(215) The speed of internet access experienced by a given user depends on a number of factors, including the providers of internet connectivity as well as the given application for which a connection is being used. It is for the Member States, taking into account BEREC's report on best practices, to define adequate broadband internet access in light of national conditions and the minimum bandwidth enjoyed by the majority of consumers within a Member State's territory in order to allow an adequate level of social inclusion and participation in the digital economy and society in their territory. The affordable adequate broadband internet access service should have sufficient bandwidth to support access to and use of at least a minimum set of basic services that reflect the services used by the majority of end-users. To that end, the Commission should monitor the development in the use of the internet to identify those online services used by a majority of end-users across the Union and necessary for social and economic participation in society and update the list accordingly. The requirements of Union law on open internet access, in particular of Regulation (EU) 2015/2120, should apply to any adequate broadband internet access service.

(216) Consumers should not be obliged to access services they do not want and it should therefore be possible for eligible consumers to restrict, on request, the affordable universal service to voice communications services.

(217) Member States should be able to extend measures related to affordability and control of expenditure measures to microenterprises and small and medium-sized enterprises and not-for-profit organisations, provided they fulfil the relevant conditions.

(218) National regulatory authorities in coordination with other competent authorities should be able to monitor the evolution and level of retail tariffs for services that fall within the scope of universal service obligations. Such monitoring should be carried out in such a way that it would not represent an excessive administrative burden for either national regulatory and other competent authorities or providers of such services.

(219) An affordable price means a price defined by Member States at national level in light of specific national conditions. Where Member States establish that retail prices for adequate broadband internet access and voice communications services are not affordable to consumers with low-income or special social needs, including older people, end-users with disabilities and consumers living in rural or geographically isolated areas, they should take appropriate measures. To that end, Member States could provide those consumers with direct support for communication purposes, which could be part of social allowances or vouchers for, or direct payments to, those consumers. This can be an appropriate alternative having regard to the need to minimise market distortions. Alternatively, or in addition, Member States could require providers of such services to offer basic tariff options or packages to those consumers.

(220) Ensuring affordability may involve special tariff options or packages to deal with the needs of low-income users or users with special social needs. Such offers should be provided with basic features, in order to avoid distortion of the functioning of the market. Affordability for individual consumers should be founded upon their right to contract with a provider, availability of a number, continued connection of service and their ability to monitor and control their expenditure.

(221) Where a Member State requires providers to offer to consumers with a low-income or special social needs tariff options or packages different from those provided under normal commercial conditions, those tariff options or packages should be provided by all providers of internet access and voice communication services. In accordance with the principle of proportionality, requiring all providers of internet access and voice communication services to offer tariff options or packages should not result in excessive administrative or financial burden for those providers or Member States. Where a Member State demonstrates such an excessive administrative or financial burden, on the basis of an objective assessment, it might exceptionally decide to impose the obligation to offer specific tariff options or packages only on designated providers. The objective assessment should also consider the benefits arising for consumers with a low-income or special social needs from a choice of providers and the benefits for all providers being able to benefit from being a universal service provider. Where a Member State exceptionally decides to impose the obligation to offer specific tariff options or packages only on designated providers, they should ensure that consumers with low income or special needs have a choice of providers offering social tariffs. However, in certain situations Member States might not be able to guarantee a choice of providers, for example where only one undertaking provides services in the area of residence of the beneficiary, or if providing a choice would put an excessive additional organisational and financial burden on the Member State.

(222) Affordability should no longer be a barrier to consumers' access to the minimum set of connectivity services. A right to contract with a provider should mean that consumers who might face refusal, in particular those with a low-income or special social needs, should have the possibility to enter into a contract for the provision of affordable adequate broadband internet access and voice communications services at least at a fixed location with any provider of such services in that location or a designated provider, where a Member State has exceptionally decided to designate one or more providers to offer those tariff options or packages. In order to minimise the financial risks such as non-payment of bills, providers should be free to provide the contract under pre-payment terms, on the basis of affordable individual pre-paid units.

(223) In order to ensure that citizens are reachable by voice communications services, Member States should ensure the availability of a number for a reasonable period also during periods of non-use of voice communications services. Providers should be able to put in place mechanisms to check the continued interest of the consumer in keeping the availability of the number.

(224) Compensating providers of such services in such circumstances need not result in the distortion of competition, provided that such providers are compensated for the specific net cost involved and provided that the net cost burden is recovered in a competitively neutral way.

(225) In order to assess the need for affordability measures, national regulatory authorities in coordination with other competent authorities should be able to monitor the evolution and details of offers of tariff options or packages for consumers with a low-income or special social needs.

(226) Member States should introduce measures to promote the creation of a market for affordable products and services incorporating facilities for consumers with disabilities, including equipment with assistive technologies. This can be achieved, inter alia, by referring to European standards, or by supporting the implementation of requirements under Union law harmonising accessibility requirements for products and services. Member States should introduce appropriate measures in accordance with national circumstances, which gives flexibility for Member States to take specific measures for instance if the market is not delivering affordable products and services incorporating facilities for consumers with disabilities under normal economic conditions. Those measures could include direct financial support to end-users. The cost to consumers with disabilities of relay services should be equivalent to the average cost of voice communications services.

(227) Relay services refer to services which enable two-way communication between remote end-users of different modes of communication (for example text, sign, speech) by providing conversion between those modes of communication, normally by a human operator. Real time text is defined in accordance with Union law harmonising accessibility requirements for products and services and refers to form of text conversation in point to point situations or in multipoint conferencing where the text being entered is sent in such a way that the communication is perceived by the user as being continuous on a character-by-character basis.

(228) For data communications at data rates that are sufficient to permit an adequate broadband internet access, fixed-line connections are nearly universally available and used by a majority of citizens of the Union. The standard fixed broadband coverage and availability in the Union stood at 97 % of homes in 2015, with an average take-up rate of 72 %, and services based on wireless technologies have even greater reach. However, there are differences between Member States as regards availability and affordability of fixed broadband across urban and rural areas.

(229) The market has a leading role to play in ensuring availability of broadband internet access with constantly growing capacity. In areas where the market would not deliver, other public policy tools to support availability of adequate broadband internet access connections appear, in principle, more cost-effective and less market-distortive than universal service obligations, for example recourse to financial instruments such as those available under the European Fund for Strategic Investments and Connecting Europe Facility, the use of public funding from the European structural and investment funds, attaching coverage obligations to rights of use for radio spectrum to support the deployment of broadband networks in less densely populated areas and public investment in accordance with Union State aid rules.

(230) If, after carrying out a due assessment, taking into account the results of the geographical survey of networks deployment conducted by the competent authority, or the latest information available to the Member States before the results of the first geographical survey are available, it is shown that neither the market nor public intervention mechanisms are likely to provide end-users in certain areas with a connection capable of delivering adequate broadband internet access service as defined by Member States and voice communications services at a fixed

location, the Member State should be able to exceptionally designate different providers or sets of providers of those services in the different relevant parts of the national territory. In addition to the geographical survey, Member States should be able to use, where necessary, any additional evidence to establish to what extent adequate broadband internet access and voice communications services are available at a fixed location. That additional evidence could include data available to the national regulatory authorities through the market analysis procedure and data collected from users. Member States should be able to restrict universal service obligations in support of availability of adequate broadband internet access services to the end-user's primary location or residence. There should be no constraints on the technical means by which the adequate broadband internet access and voice communications services at a fixed location are provided, allowing for wired or wireless technologies, nor any constraints on which undertakings provide part or all of universal service obligations.

(231) In accordance with the principle of subsidiarity, it is for the Member States to decide on the basis of objective criteria which undertakings are designated as universal service providers, where appropriate taking into account the ability and the willingness of undertakings to accept all or part of the universal service obligations. This does not preclude Member States from including, in the designation process, specific conditions justified on grounds of efficiency, including grouping geographical areas or components or setting minimum periods for the designation.

(232) The costs of ensuring the availability of a connection capable of delivering an adequate broadband internet access service as identified in accordance with this Directive and voice communications services at a fixed location at an affordable price within the universal service obligations should be estimated, in particular by assessing the expected financial burden for providers and users in the electronic communications sector.

(233) A priori, requirements to ensure nation-wide territorial coverage imposed in the designation procedure are likely to exclude or dissuade certain undertakings from applying for being designated as universal service providers. Designating providers with universal service obligations for an excessive or indefinite period might also lead to an a priori exclusion of certain providers. Where a Member State decides to designate one or more providers for affordability purposes, it should be possible for those providers to be different from those designated for the availability element of universal service.

(234) When a provider that is, on an exceptional basis, designated to provide tariff options or packages different from those provided under normal commercial conditions, as identified in accordance with this Directive or to ensure the availability at a fixed location of an adequate broadband internet access service or voice communications services, as identified in accordance with this Directive, chooses to dispose of a substantial part, viewed in light of its universal service obligations, or all, of its local access network assets in the national territory to a separate legal entity under different ultimate ownership, the competent authority should assess the effects of the transaction in order to ensure the continuity of universal service obligations in all or parts of the national territory. To that end, the competent authority which imposed the universal service obligations should be informed by the provider in advance of the disposal. The assessment of the competent authority should not prejudice the completion of the transaction.

(235) In order to provide stability and support a gradual transition, Member States should be able to continue to ensure the provision of universal service in their territory, other than adequate broadband internet access and voice communications services at a fixed location, that are included in the scope of their universal service obligations on the basis of Directive 2002/22/EC on the date of entry into force of this Directive, provided the services or comparable services are not available under normal commercial circumstances. Allowing the continuation of the provision of public payphones to the general public by use of coins, credit or debit cards, or pre-payment cards, including cards for use with dialling codes, directories and directory enquiry services under the universal service regime, for as long as the need is demonstrated, would give Member States the flexibility necessary to duly take into

account the varying national circumstances. This can include providing public pay telephones in the main entry points of the country, such as airports or train and bus stations, as well as places used by people in the case of an emergency, such as hospitals, police stations and highway emergency areas, to meet the reasonable needs of end-users, including in particular end-users with disabilities.

(236) Member States should monitor the situation of consumers with respect to their use of adequate broadband internet access and voice communications services and in particular with respect to affordability. The affordability of adequate broadband internet access and voice communications services is related to the information which users receive regarding usage expenses as well as the relative cost of usage compared to other services, and is also related to their ability to control expenditure. Affordability therefore means giving power to consumers through obligations imposed on providers. Those obligations include a specified level of itemised billing, the possibility for consumers selectively to block certain calls, such as high-priced calls to premium services, to control expenditure via pre-payment means, and to offset up-front connection fees. Such measures may need to be reviewed and changed in light of market developments. Itemised bills on the usage of internet access should indicate only the time, duration and amount of consumption during a usage session but not indicate the websites or internet end-points connected to during such a usage session.

(237) Except in cases of persistent late payment or non-payment of bills, consumers entitled to affordable tariffs should, pending resolution of the dispute, be protected from immediate disconnection from the network on the grounds of an unpaid bill and, in particular, in the case of disputes over high bills for premium-rate services, continue to have access to essential voice communications services and a minimum service level of internet access as defined by Member States. It should be possible for Member States to decide that such access is to continue to be provided only if the subscriber continues to pay line rental or basic internet access charges.

(238) Where the provision of adequate broadband internet access and voice communications services or the provision of other services in accordance with this Directive result in an unfair burden on a provider, taking due account of the costs and revenues as well as the intangible benefits resulting from the provision of the services concerned, that unfair burden can be included in any net cost calculation of universal service obligations.

(239) Member States should, where necessary, establish mechanisms for financing the net cost of universal service obligations where it is demonstrated that the obligations can only be provided at a loss or at a net cost which falls outside normal commercial standards. It is important to ensure that the net cost of universal service obligations is properly calculated and that any financing is undertaken with minimum distortion to the market and to undertakings, and is compatible with Articles 107 and 108 TFEU.

(240) Any calculation of the net cost of universal service obligations should take due account of costs and revenues, as well as the intangible benefits resulting from providing universal service, but should not hinder the general aim of ensuring that pricing structures reflect costs. Any net costs of universal service obligations should be calculated on the basis of transparent procedures.

(241) Taking into account intangible benefits means that an estimate in monetary terms, of the indirect benefits that an undertaking derives by virtue of its position as universal service provider, should be deducted from the direct net cost of universal service obligations in order to determine the overall cost burden.

(242) When a universal service obligation represents an unfair burden on a provider, it is appropriate to allow Member States to establish mechanisms for efficiently recovering net costs. Recovery via public funds constitutes one method of recovering the net costs of universal service obligations. Sharing the net costs of universal service obligations between providers of electronic communications networks and services is another method.

Member States should be able to finance the net costs of different elements of universal service through different mechanisms, or to finance the net costs of some or all elements from either of the mechanisms or a combination of both. Adequate broadband internet access brings benefits not only to the electronic communications sector but also to the wider online economy and to society as a whole. Providing a connection which supports broadband speeds to an increased number of end-users enables them to use online services and so actively to participate in the digital society. Ensuring such connections on the basis of universal service obligations serves both the public interest and the interests of electronic communications providers. Those facts should be taken into account by Member States when choosing and designing mechanisms for recovering net costs.

(243) In the case of cost recovery by means of sharing the net cost of universal service obligations between providers of electronic communications networks and services, Member States should ensure that the method of allocation amongst providers is based on objective and non-discriminatory criteria and is in accordance with the principle of proportionality. This principle does not prevent Member States from exempting new entrants which have not achieved any significant market presence. Any funding mechanism should ensure that market participants only contribute to the financing of universal service obligations and not to other activities which are not directly linked to the provision of the universal service obligations. Recovery mechanisms should respect the principles of Union law, and in particular in the case of sharing mechanisms those of non-discrimination and proportionality. Any funding mechanism should ensure that users in one Member State do not contribute to the costs of providing universal service in another Member State. It should be possible to share the net cost of universal service obligations between all or certain specified classes of providers. Member States should ensure that the sharing mechanism respects the principles of transparency, least market distortion, non-discrimination and proportionality. Least market distortion means that contributions should be recovered in a way that as far as possible minimises the impact of the financial burden falling on end-users, for example by spreading contributions as widely as possible.

(244) Providers benefiting from universal service funding should provide national regulatory authorities with a sufficient level of detail of the specific elements requiring such funding in order to justify their request. Member States' schemes for the costing and financing of universal service obligations should be communicated to the Commission for verification of compatibility with the TFEU. Member States should ensure effective transparency and control of amounts charged to finance universal service obligations. Calculation of the net costs of providing universal service should be based on an objective and transparent methodology to ensure the most cost-effective provision of universal service and promote a level playing field for market participants. Making the methodology intended to be used to calculate the net costs of individual universal service elements known in advance before implementing the calculation could help to achieve increased transparency.

(245) Member States are not permitted to impose on market participants financial contributions which relate to measures which are not part of the universal service obligations. Individual Member States remain free to impose special measures (outside the scope of universal service obligations) and finance them in accordance with Union law but not by means of contributions from market participants.

(246) In order to effectively support the free movement of goods, services and persons within the Union, it should be possible to use certain national numbering resources, in particular certain non-geographic numbers, in an extraterritorial manner, that is to say outside the territory of the assigning Member State. In light of the considerable risk of fraud with respect to interpersonal communications, such extraterritorial use should be allowed only for the provision of electronic communications services other than interpersonal communications services. Enforcement of relevant national laws, in particular consumer protection rules and other rules related to the use of numbering resources should be ensured by Member States independently of where the rights of use have been granted and where the numbering resources are used within the Union. Member States remain competent to apply their national law to numbering resources used in their territory, including where rights have been granted in another Member State.

(247) The national regulatory or other competent authorities of the Member States where numbering resources from another Member State are used, do not have control over those numbering resources. It is therefore essential that the national regulatory or other competent authority of the Member State which grants the rights of extraterritorial use should also ensure the effective protection of the end-users in the Member States where those numbers are used. In order to achieve effective protection, national regulatory or other competent authority granting rights of extraterritorial use should attach conditions in accordance with this Directive regarding the respect by the provider of consumer protection rules and other rules related to the use of numbering resources in those Member States where those resources will be used.

(248) The national regulatory or other competent authorities of those Member States where numbering resources are used should be able to request the support of the national regulatory or other competent authorities that granted the rights of use for the numbering resources to assist in enforcing its rules. Enforcement measures by the national regulatory or other competent authorities that granted the rights of use should include dissuasive penalties, in particular in the case of a serious breach the withdrawal of the right of extraterritorial use for the numbering resources assigned to the undertaking concerned. The requirements on extraterritorial use should be without prejudice to Member States' powers to block, on a case-by-case basis, access to numbers or services where that is justified by reasons of fraud or misuse. The extraterritorial use of numbering resources should be without prejudice to Union rules related to the provision of roaming services, including those relative to preventing anomalous or abusive use of roaming services which are subject to retail price regulation and which benefit from regulated wholesale roaming rates. Member States should continue to be able to enter into specific agreements on extraterritorial use of numbering resources with third countries.

(249) Member States should promote over-the-air provisioning of numbering resources to facilitate switching of electronic communications providers. Over-the-air provisioning of numbering resources enables the reprogramming of communications equipment identifiers without physical access to the devices concerned. This feature is particularly relevant for machine-to-machine services, that is to say services involving an automated transfer of data and information between devices or software-based applications with limited or no human interaction. Providers of such machine-to-machine services might not have recourse to physical access to their devices due to their use in remote conditions, or to the large number of devices deployed or to their usage patterns. In light of the emerging machine-to-machine market and new technologies, Member States should strive to ensure technology neutrality in promoting over-the-air provisioning.

(250) Access to numbering resources on the basis of transparent, objective and non-discriminatory criteria is essential for undertakings to compete in the electronic communications sector. Member States should be able to grant rights of use for numbering resources to undertakings other than providers of electronic communications networks or services in light of the increasing relevance of numbers for various Internet of Things services. All elements of national numbering plans should be managed by national regulatory or other competent authorities, including point codes used in network addressing. Where there is a need for harmonisation of numbering resources in the Union to support the development of pan-European services or cross-border services, in particular new machine-to-machine-based services such as connected cars, and where the demand could not be met on the basis of the existing numbering resources in place, the Commission can take implementing measures with the assistance of BEREC.

(251) It should be possible to fulfil the requirement to publish decisions on the granting of rights of use for numbering resources by making those decisions publicly accessible via a website.

(252) Considering the particular aspects related to the reporting of missing children, Member States should maintain their commitment to ensure that a well-functioning service for reporting missing children is actually available in their territories under the number '116000'. Member States should take appropriate measures to ensure that a sufficient level of service quality in operating the '116000' number is achieved.

(253) In parallel with the missing children hotline number '116000', many Member States also ensure that children have access to a child-friendly service operating a helpline that helps children in need of care and protection through the use of the '116111' number. Such Member States and the Commission should ensure that awareness is raised among citizens, and in particular among children and among national child protection systems, about the existence of the '116111' helpline.

(254) An internal market implies that end-users are able to access all numbers included in the national numbering plans of other Member States and to access services using non-geographic numbers, including freephone and premium-rate numbers, within the Union, except where the called end-user has chosen, for commercial reasons, to limit access from certain geographical areas. End-users should also be able to access numbers from the Universal International Freephone Numbers (UIFN). Cross-border access to numbering resources and associated services should not be prevented, except in objectively justified cases, for example to combat fraud or abuse (for example, in connection with certain premium-rate services), when the number is defined as having a national scope only (for example, a national short code) or when it is economically unfeasible. Tariffs charged to parties calling from outside the Member State concerned need not be the same as for those parties calling from inside that Member State. Users should be fully informed in advance and in a clear manner of any charges applicable to freephone numbers, such as international call charges for numbers accessible through standard international dialling codes. Where interconnection or other service revenues are withheld by providers of electronic communications services for reasons of fraud or misuse, Member States should ensure that retained service revenues are refunded to the end-users affected by the relevant fraud or misuse where possible.

(255) In accordance with the principle of proportionality, a number of provisions on end-user rights in this Directive should not apply to microenterprises which provide only number-independent interpersonal communications services. According to the case law of the Court of Justice, the definition of small and medium-sized enterprises, which includes microenterprises, is to be interpreted strictly. In order to include only enterprises that are genuinely independent microenterprises, it is necessary to examine the structure of microenterprises which form an economic group, the power of which exceeds the power of a microenterprise, and to ensure that the definition of microenterprise is not circumvented by purely formal means.

(256) The completion of the single market for electronic communications requires the removal of barriers for end-users to have cross-border access to electronic communications services across the Union. Providers of electronic communications to the public should not deny or restrict access or discriminate against end-users on the basis of their nationality, or Member State of residence or of establishment. Differentiation should, however, be possible on the basis of objectively justifiable differences in costs and risks, not limited to the measures provided for in Regulation (EU) No 531/2012 in respect of abusive or anomalous use of regulated retail roaming services.

(257) Divergent implementation of the rules on end-user protection has created significant internal market barriers affecting both providers of electronic communications services and end-users. Those barriers should be reduced by the applicability of the same rules ensuring a high common level of protection across the Union. A calibrated full harmonisation of the end-user rights covered by this Directive should considerably increase legal certainty for both end-users and providers of electronic communications services, and should significantly lower entry barriers and unnecessary compliance burden stemming from the fragmentation of the rules. Full harmonisation helps to

overcome barriers to the functioning of the internal market resulting from such national provisions concerning end-user rights which at the same time protect national providers against competition from other Member States. In order to achieve a high common level of protection, several provisions concerning end-user rights should be reasonably enhanced in this Directive in light of best practices in Member States. Full harmonisation of their rights increases the trust of end-users in the internal market as they benefit from an equally high level of protection when using electronic communications services, not only in their Member State but also while living, working or travelling in other Member States. Full harmonisation should extend only to the subject matters covered by the provisions on end-user rights in this Directive. Therefore, it should not affect national law with respect to those aspects of end-user protection, including some aspects of transparency measures which are not covered by those provisions. For example, measures relating to transparency obligations which are not covered by this Directive should be considered to be compatible with the principle of full harmonisation whereas additional requirements regarding transparency issues covered by this Directive, such as publication of information, should be considered to be incompatible. Moreover, Member States should be able to maintain or introduce national provisions on issues not specifically addressed in this Directive, in particular in order to address newly emerging issues.

(258) Contracts are an important tool for end- users to ensure transparency of information and legal certainty. Most service providers in a competitive environment will conclude contracts with their customers for reasons of commercial desirability. In addition to this Directive, the requirements of existing Union consumer protection law relating to contracts, in particular Council Directive 93/13/EEC ([1]) and Directive 2011/83/EU of the European Parliament and of the Council ([2]), apply to consumer transactions relating to electronic communications networks and services. The inclusion of information requirements in this Directive, which might also be required pursuant to Directive 2011/83/EU, should not lead to duplication of the information within pre-contractual and contractual documents. Relevant information provided in respect of this Directive, including any more prescriptive and more detailed informational requirements, should be considered to fulfil the corresponding requirements pursuant to Directive 2011/83/EU.

(259) Some of those end-user protection provisions which a priori apply only to consumers, namely those on contract information, maximum contract duration and bundles, should benefit not only consumers, but also microenterprises and small enterprises, and not-for-profit organisations as defined in national law. The bargaining position of those categories of enterprises and organisations is comparable to that of consumers and they should therefore benefit from the same level of protection unless they explicitly waive those rights. Obligations on contract information in this Directive, including those of Directive 2011/83/EU that are referred to in this Directive, should apply irrespective of whether any payment is made and of the amount of the payment to be made by the customer. The obligations on contract information, including those contained in Directive 2011/83/EU, should apply automatically to microenterprises, small enterprises and not-for-profit organisations unless they prefer negotiating individualised contract terms with providers of electronic communications services. As opposed to microenterprises, small enterprises and not-for-profit organisations, larger enterprises usually have stronger bargaining power and do, therefore, not depend on the same contractual information requirements as consumers. Other provisions, such as number portability, which are important also for larger enterprises should continue to apply to all end-users. Not-for-profit organisations are legal entities that do not earn a profit for their owners or members. Typically, not-for-profit organisations are charities or other types of public interest organisations. Hence, in light of the comparable situation, it is legitimate to treat such organisations in the same way as microenterprises or small enterprises under this Directive, insofar as end-user rights are concerned.

([1]) Council Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts (OJ L 95, 21.4.1993, p. 29).
([2]) Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council (OJ L 304, 22.11.2011, p. 64).

(260) The specificities of the electronic communications sector require, beyond horizontal contract rules, a limited number of additional end-user protection provisions. End-users should be informed, inter alia, of any quality of service levels offered, conditions for promotions and termination of contracts, applicable tariff plans and tariffs for services subject to particular pricing conditions. That information is relevant for providers of publicly available electronic communications services other than transmission services used for the provision of machine-to-machine services. Without prejudice to the applicable rules on the protection of personal data, a provider of publicly available electronic communications services should not be subject to the obligations on information requirements for contracts where that provider, and affiliated companies or persons, do not receive any remuneration directly or indirectly linked to the provision of electronic communications services, such as where a university gives visitors free access to its Wi-Fi network on campus without receiving any remuneration, whether through payment from the users or through advertising revenues.

(261) In order to enable the end-user to make a well-informed choice, it is essential that the required relevant information is provided prior to the conclusion of the contract and in clear and understandable language and on a durable medium or, where not feasible and without prejudice to the definition of durable medium set out in Directive 2011/83/EU, in a document, made available by the provider and notified to the user, that is easy to download, open and consult on devices commonly used by consumers. In order to facilitate choice, providers should also present a summary of the essential contract terms. In order to facilitate comparability and reduce compliance cost, the Commission should, after consulting BEREC, adopt a template for such contract summaries. The pre-contractually provided information as well as the summary template should constitute an integral part of the final contract. The contract summary should be concise and easily readable, ideally no longer than the equivalent of one single-sided A4 page or, where a number of different services are bundled into a single contract, the equivalent of up to three single-sided A4 pages.

(262) Following the adoption of Regulation (EU) 2015/2120, the provisions in this Directive regarding information on conditions limiting access to, or the use of, services and applications as well as information on traffic shaping became obsolete and should be repealed.

(263) With respect to terminal equipment, the customer contract should specify any conditions imposed by the provider on the use of the equipment, such as by way of 'SIM-locking' mobile devices, if such conditions are not prohibited under national law, and any charges due on termination of the contract, whether before or on the agreed expiry date, including any cost imposed in order to retain the equipment. Where the end-user chooses to retain terminal equipment bundled at the moment of the contract conclusion, any compensation due should not exceed its pro rata temporis value calculated on the basis of the value at the moment of the contract conclusion, or on the remaining part of the service fee until the end of the contract, whichever amount is smaller. Member States should be able to choose other methods of calculating the compensation rate, where such a rate is equal to or less than that compensation calculated. Any restriction to the usage of terminal equipment on other networks should be lifted, free of charge, by the provider at the latest upon payment of such compensation.

(264) Without prejudice to the substantive obligation on the provider related to security by virtue of this Directive, the contract should specify the type of action the provider might take in the case of security incidents, threats or vulnerabilities. In addition, the contract should also specify any compensation and refund arrangements available if a provider responds inadequately to a security incident, including if a security incident, notified to the provider, takes place due to known software or hardware vulnerabilities, for which patches have been issued by the manufacturer or developer and the service provider has not applied those patches or taken any other appropriate counter-measure.

(265) The availability of transparent, up-to-date and comparable information on offers and services is a key element for consumers in competitive markets where several providers offer services. End-users should be able to compare the prices of various services offered on the market easily on the basis of information published in an easily accessible

form. In order to allow them to make price and service comparisons easily, competent authorities in coordination, where relevant, with national regulatory authorities should be able to require from providers of internet access services or publicly available interpersonal communication services greater transparency as regards information, including tariffs, quality of service, conditions on terminal equipment supplied, and other relevant statistics. Any such requirements should take due account of the characteristics of those networks or services. They should also ensure that third parties have the right to use, without charge, publicly available information published by such undertakings, with a view to providing comparison tools.

(266) End-users are often not aware of the cost of their consumption behaviour or have difficulties in estimating their time or data consumption when using electronic communications services. In order to increase transparency and to allow for better control of their communications budget, it is important to provide end-users with facilities that enable them to track their consumption in a timely manner. In addition, Member States should be able to maintain or introduce provisions on consumption limits protecting end-users against 'bill-shocks', including in relation to premium rate services and other services subject to particular pricing conditions. This allows competent authorities to require information about such prices to be provided prior to providing the service and does not prejudice the possibility of Member States to maintain or introduce general obligations for premium rate services to ensure the effective protection of end-users.

(267) Independent comparison tools, such as websites, are an effective means for end-users to assess the merits of different providers of internet access services and interpersonal communications services, where provided against recurring or consumption-based direct monetary payments, and to obtain impartial information, in particular by comparing prices, tariffs, and quality parameters in one place. Such tools should be operationally independent from service providers and no service provider should be given favourable treatment in search results. Such tools should aim to provide information that is both clear and concise, and complete and comprehensive. They should also aim to include the broadest possible range of offers, in order to give a representative overview and cover a significant part of the market. The information given on such tools should be trustworthy, impartial and transparent. End-users should be informed of the availability of such tools. Member States should ensure that end-users have free access to at least one such tool in their respective territories. Where there is only one tool in a Member State and that tool ceases to operate or ceases to comply with the quality criteria, the Member State should ensure that end-users have access within a reasonable time to another comparison tool at national level.

(268) Independent comparison tools can be operated by private undertakings, or by or on behalf of competent authorities, however they should be operated in accordance with specified quality criteria including the requirement to provide details of their owners, provide accurate and up-to-date information, state the time of the last update, set out clear, objective criteria on which the comparison will be based, and include a broad range of offers covering a significant part of the market. Member States should be able to determine how often comparison tools are required to review and update the information they provide to end-users, taking into account the frequency with which providers of internet access services and of publicly available interpersonal communications services, generally update their tariff and quality information.

(269) In order to address public interest issues with respect to the use of internet access services and publicly available number-based interpersonal communications services and to encourage protection of the rights and freedoms of others, Member States should be able to produce and disseminate or have disseminated, with the aid of providers of such services, public-interest information related to the use of such services. It should be possible for such information to include public-interest information regarding the most common infringements and their legal

consequences, for instance regarding copyright infringement, other unlawful uses and the dissemination of harmful content, and advice and means of protection against risks to personal security, for example those arising from disclosure of personal information in certain circumstances, as well as risks to privacy and personal data, and the availability of easy-to-use and configurable software or software options allowing protection for children or vulnerable persons. The information could be coordinated by way of the cooperation procedure established in this Directive. Such public-interest information should be updated where necessary and should be presented in easily comprehensible formats, as determined by each Member State, and on national public authority websites. Member States should be able to oblige providers of internet access services and publicly available number-based interpersonal communications services to disseminate this standardised information to all of their customers in a manner considered to be appropriate by the national public authorities. Dissemination of such information should, however, not impose an excessive burden on providers. If it does so, Member States should require such dissemination by the means used by providers in communications with end-users made in the ordinary course of business.

(270) In the absence of relevant rules of Union law, content, applications and services are considered to be lawful or harmful in accordance with national substantive and procedural law. It is a task for the Member States, not for providers of electronic communications networks or services, to decide, in accordance with due process, whether content, applications or services are lawful or harmful. This Directive and Directive 2002/58/EC are without prejudice to Directive 2000/31/EC, which, inter alia, contains a 'mere conduit' rule for intermediary service providers, as defined therein.

(271) National regulatory authorities in coordination with other competent authorities, or where relevant, other competent authorities in co-ordination with national regulatory authorities should be empowered to monitor the quality of services and to collect systematically information on the quality of services offered by providers of internet access services and of publicly available interpersonal communications services, to the extent that the latter are able to offer minimum levels of service quality either through control of at least some elements of the network or by virtue of a service level agreement to that end, including the quality related to the provision of services to end-users with disabilities. That information should be collected on the basis of criteria which allow comparability between service providers and between Member States. Providers of such electronic communications services, operating in a competitive environment, are likely to make adequate and up-to-date information on their services publicly available for reasons of commercial advantage. National regulatory authorities in coordination with other competent authorities, or where relevant, other competent authorities in co-ordination with national regulatory authorities should nonetheless be able to require publication of such information where it is demonstrated that such information is not effectively available to the public. Where the quality of services of publicly available interpersonal communication services depends on any external factors, such as control of signal transmission or network connectivity, national regulatory authorities in coordination with other competent authorities should be able to require providers of such services to inform their consumers accordingly.

(272) National regulatory authorities in coordination with other competent authorities should also set out the measurement methods to be applied by the service providers in order to improve the comparability of the data provided. In order to facilitate comparability across the Union and to reduce compliance cost, BEREC should adopt guidelines on relevant quality of service parameters which national regulatory authorities in coordination with other competent authorities should take into utmost account.

(273) In order to take full advantage of the competitive environment, consumers should be able to make informed choices and to change providers when it is in their best interest to do so. It is essential to ensure that they are able to do so without being hindered by legal, technical or practical obstacles, including contractual conditions, procedures and charges. That does not preclude providers from setting reasonable minimum contractual periods of up to 24 months in consumer contracts. However, Member States should have the possibility to maintain or introduce provisions for a shorter maximum duration and to permit consumers to change tariff plans or terminate the contract within the

contract period without incurring additional costs in light of national conditions, such as levels of competition and stability of network investments. Independently from the electronic communications service contract, consumers might prefer and benefit from a longer reimbursement period for physical connections. Such consumer commitments can be an important factor in facilitating deployment of very high capacity networks up to or very close to end-user premises, including through demand aggregation schemes which enable network investors to reduce initial take-up risks. However, the rights of consumers to switch between providers of electronic communications services, as established in this Directive, should not be restricted by such reimbursement periods in contracts on physical connections and such contracts should not cover terminal or internet access equipment, such as handsets, routers or modems. Member States should ensure the equal treatment of entities, including operators, financing the deployment of a very high capacity physical connection to the premises of an end-user, including where such financing is by way of an instalment contract.

(274) Automatic prolongation of contracts for electronic communications services is also possible. In those cases, end-users should be able to terminate their contract without incurring any costs after the expiry of the contract term.

(275) Any changes to the contractual conditions proposed by providers of publicly available electronic communications services other than number-independent interpersonal communications services, which are not to the benefit of the end-user, for example in relation to charges, tariffs, data volume limitations, data speeds, coverage, or the processing of personal data, should give rise to the right of the end-user to terminate the contract without incurring any costs, even if they are combined with some beneficial changes. Any change to the contractual conditions by the provider should therefore entitle the end-user to terminate the contract unless each change is in itself beneficial to the end-user, or the changes are of a purely administrative nature, such as a change in the provider's address, and have no negative effect on the end-user, or the changes are strictly imposed by legislative or regulatory changes, such as new contract information requirements imposed by Union or national law. Whether a change is exclusively to the benefit of the end-user should be assessed on the basis of objective criteria. The end-user's right to terminate the contract should be excluded only if the provider is able to demonstrate that all contract changes are exclusively to the benefit of the end-user or are of a purely administrative nature without any negative effect on the end-user.

(276) End-users should be notified of any changes to the contractual conditions by means of a durable medium. End-users other than consumers, microenterprises or small enterprises, or not-for-profit organisations should not benefit from the termination rights in the case of contract modification, insofar as transmission services used for machine-to-machine services are concerned. Member States should be able to provide for specific end-user protections regarding contract termination where the end-users change their place of residence. The provisions on contract termination should be without prejudice to other provisions of Union or national law concerning the grounds on which contracts can be terminated or on which contractual terms and conditions can be changed by the service provider or by the end-user.

(277) The possibility of switching between providers is key for effective competition in a competitive environment. The availability of transparent, accurate and timely information on switching should increase the end-users' confidence in switching and make them more willing to engage actively in the competitive process. Service providers should ensure continuity of service so that end-users are able to switch providers without being hindered by the risk of a loss of service and, where technically possible, allow for switching on the date requested by end-users.

(278) Number portability is a key facilitator of consumer choice and effective competition in competitive electronic communications markets. End-users who so request should be able to retain their numbers independently of the

provider of service and for a limited time between the switching of providers of service. The provision of this facility between connections to the public telephone network at fixed and non-fixed locations is not covered by this Directive. However, Member States should be able to apply provisions for porting numbers between networks providing services at a fixed location and mobile networks.

(279) The impact of number portability is considerably strengthened when there is transparent tariff information, both for end-users who port their numbers and for end-users who call those who have ported their numbers. National regulatory authorities should, where feasible, facilitate appropriate tariff transparency as part of the implementation of number portability.

(280) When ensuring that pricing for interconnection related to the provision of number portability is cost-oriented, national regulatory authorities should also be able to take account of prices available in comparable markets.

(281) Number portability is a key facilitator of consumer choice and effective competition in competitive markets for electronic communications and should be implemented with the minimum delay, so that the number is functionally activated within one working day and the end-user does not experience a loss of service lasting longer than one working day from the agreed date. The right to port the number should be attributed to the end-user who has the relevant (pre- or post-paid) contract with the provider. In order to facilitate a one-stop-shop enabling a seamless switching experience for end- users, the switching process should be led by the receiving provider of electronic communications to the public. National regulatory or, where relevant, other competent authorities should be able to prescribe the global process of the switching and of the porting of numbers, taking into account national provisions on contracts and technological developments. This should include, where available, a requirement for the porting to be completed though over-the-air provisioning, unless an end-user requests otherwise. Experience in certain Member States has shown that there is a risk of end-users being switched to another provider without having given their consent. While that is a matter that should primarily be addressed by law enforcement authorities, Member States should be able to impose such minimum proportionate measures regarding the switching process, including appropriate penalties, as are necessary to minimise such risks, and to ensure that end-users are protected throughout the switching process without making the process less attractive for them. The right to port numbers should not be restricted by contractual conditions.

(282) In order to ensure that switching and porting take place within the time-limits provided for in this Directive, Member States should provide for the compensation of end-users by providers in an easy and timely manner where an agreement between a provider and an end-user is not respected. Such measures should be proportionate to the length of the delay in complying with the agreement. End-users should at least be compensated for delays exceeding one working day in activation of service, porting of a number, or loss of service, and where providers miss agreed service or installation appointments. Additional compensation could also be in the form of an automatic reduction of the remuneration where the transferring provider is to continue providing its services until the services of the receiving provider are activated.

(283) Bundles comprising at least either an internet access service or a publicly available number-based interpersonal communications service, as well as other services, such as publicly available number-independent interpersonal communications services, linear broadcasting and machine-to-machine services, or terminal equipment, have become increasingly widespread and are an important element of competition. For the purposes of this Directive, a bundle should be considered to exist in situations where the elements of the bundle are provided or sold by the same provider under the same or a closely related or linked contract. While bundles often bring about benefits for consumers, they can make switching more difficult or costly and raise risks of contractual 'lock-in'. Where different services and terminal equipment within a bundle are subject to divergent rules on contract termination and switching or on contractual commitments regarding the acquisition of terminal equipment, consumers are effectively hampered in their rights under this Directive to switch to competitive offers for the entire bundle or parts

of it. Certain essential provisions of this Directive regarding contract summary information, transparency, contract duration and termination and switching should, therefore, apply to all elements of a bundle, including terminal equipment, other services such as digital content or digital services, and electronic communications services which are not directly covered by the scope of those provisions. All end-user obligations applicable under this Directive to a given electronic communications service when provided or sold as a stand-alone service should also be applicable when it is part of a bundle with at least an internet access service or a publicly available number-based interpersonal communications service. Other contractual issues, such as the remedies applicable in the event of non-conformity with the contract, should be governed by the rules applicable to the respective element of the bundle, for instance by the rules of contracts for the sales of goods or for the supply of digital content. However, a right to terminate any element of a bundle comprising at least an internet access service or a publicly available number-based interpersonal communications service before the end of the agreed contract term because of a lack of conformity or a failure to supply should give a consumer the right to terminate all elements of the bundle. Also, in order to maintain their capacity to switch easily providers, consumers should not be locked in with a provider by means of a contractual de facto extension of the initial contract period.

(284) Providers of number-based interpersonal communications services have an obligation to provide access to emergency services through emergency communications. In exceptional circumstances, namely due to a lack of technical feasibility, they might not be able to provide access to emergency services or caller location, or to both. In such cases, they should inform their customers adequately in the contract. Such providers should provide their customers with clear and transparent information in the initial contract and update it in the event of any change in the provision of access to emergency services, for example in invoices. That information should include any limitations on territorial coverage, on the basis of the planned technical operating parameters of the communications service and the available infrastructure. Where the service is not provided over a connection which is managed to give a specified quality of service, the information should also include the level of reliability of the access and of caller location information compared to a service that is provided over such a connection, taking into account current technology and quality standards, as well as any quality of service parameters specified under this Directive.

(285) End-users should be able to access emergency services through emergency communications free of charge and without having to use any means of payment, from any device which enables number-based interpersonal communications services, including when using roaming services in a Member State. Emergency communications are a means of communication that includes not only voice communications services, but also SMS, messaging, video or other types of communications, for example real time text, total conversation and relay services. Member States, taking into account the capabilities and technical equipment of the PSAPs, should be able to determine which number-based interpersonal communications services are appropriate for emergency services, including the possibility to limit those options to voice communications services and their equivalent for end-users with disabilities, or to add additional options as agreed with national PSAPs. Emergency communication can be triggered on behalf of a person by an in-vehicle emergency call or an eCall as defined in Regulation (EU) 2015/758.

(286) Member States should ensure that providers of number-based interpersonal communications services provide reliable and accurate access to emergency services, taking into account national specifications and criteria and the capabilities of national PSAPs. Member States should consider the PSAP's ability to handle emergency communications in more than one language. Where the number-based interpersonal communications service is not provided over a connection which is managed to give a specified quality of service, the service provider might not be able to ensure that emergency calls made through their service are routed to the most appropriate PSAP with the same reliability. For such network-independent providers, namely providers which are not integrated with a provider of public electronic communications networks, providing caller location information may not always be technically feasible. Member States should ensure that standards ensuring accurate and reliable routing and

connection to the emergency services are implemented as soon as possible in order to allow network-independent providers of number-based interpersonal communications services to fulfil the obligations related to access to emergency services and caller location information provision at a level comparable to that required of other providers of such communications services. Where such standards and the related PSAP systems have not been implemented, network-independent number-based interpersonal communications services should not be required to provide access to emergency services except in a manner that is technically feasible or economically viable. This may, for example, include the designation by a Member State of a single, central PSAP for receiving emergency communications. Nonetheless, such providers should inform end-users when access to the single European emergency number '112' or to caller location information is not supported.

(287) In order to improve the reporting and performance measurement by Member States with respect to the answering and handling of emergency calls, the Commission should, every two years, report to the European Parliament and to the Council on the effectiveness of the implementation of the single European emergency number '112'.

(288) Member States should take specific measures to ensure that emergency services, including the single European emergency number '112', are equally accessible to end-users with disabilities, in particular deaf, hearing-impaired, speech-impaired and deaf-blind end-users and in accordance with Union law harmonising accessibility requirements for products and services. This could involve the provision of special terminal devices for end-users with disabilities when other ways of communication are not suitable for them.

(289) It is important to increase awareness of the single European emergency number '112' in order to improve the level of protection and security of citizens travelling in the Union. To that end, citizens should be made fully aware, when travelling in any Member State, in particular through information provided in international bus terminals, train stations, ports or airports and in telephone directories, end-user and billing material, that the single European emergency number '112' can be used as a single emergency number throughout the Union. This is primarily the responsibility of the Member States, but the Commission should continue both to support and to supplement initiatives of the Member States to heighten awareness of the single European emergency number '112' and periodically to evaluate the public's awareness of it.

(290) Caller location information, which applies to all emergency communications, improves the level of protection and the security of end-users and assists the emergency services in the discharge of their duties, provided that the transfer of emergency communication and associated data to the emergency services concerned is guaranteed by the national system of PSAPs. The reception and use of caller location information, which includes both network-based location information and where available, enhanced handset caller location information, should comply with relevant Union law on the processing of personal data and security measures. Undertakings that provide network-based location should make caller location information available to emergency services as soon as the call reaches that service, independently of the technology used. However, handset-based location technologies have proven to be significantly more accurate and cost effective due to the availability of data provided by the European Geostationary Navigation Overlay Service and Galileo Satellite system and other Global Navigation Satellite Systems and Wi-Fi data. Therefore, handset-derived caller location information should complement network-based location information even if the handset-derived location becomes available only after the emergency communication is set up. Member States should ensure that, where available, the handset-derived caller location information is made available to the most appropriate PSAP. This might not be always possible, for example when the location is not available on the handset or through the interpersonal communications service used, or when it is not technically feasible to obtain that information. Furthermore, Member States should ensure that the PSAPs are able to retrieve and manage the caller location information available, where feasible. The establishment and transmission of caller location information

should be free of charge for both the end-user and the authority handling the emergency communication irrespective of the means of establishment, for example through the handset or the network, or the means of transmission, for example through voice channel, SMS or IP-based.

(291) In order to respond to technological developments concerning accurate caller location information, equivalent access for end-users with disabilities and call routing to the most appropriate PSAP, the Commission should be empowered to adopt by means of a delegated act measures necessary to ensure the compatibility, interoperability, quality, reliability and continuity of emergency communications in the Union, such as functional provisions determining the role of various parties within the communications chain, for example number-based interpersonal communications service providers, network operators and PSAPs, as well as technical provisions determining the technical means to fulfil the functional provisions. Such measures should be without prejudice to the organisation of emergency services of Member States.

(292) A citizen in one Member State who needs to contact the emergency services in another Member State cannot do so because the emergency services may not have any contact information for emergency services in other Member States. A Union-wide, secure database of numbers for a lead emergency service in each country should therefore be introduced. To that end, BEREC should maintain a secure database of E.164 numbers of Member State emergency service numbers, if such a database is not maintained by another organisation, in order to ensure that the emergency services in one Member State can be contacted by the emergency services in another.

(293) Diverging national law has developed in relation to the transmission by electronic communications services of public warnings regarding imminent or developing major emergencies and disasters. In order to approximate law in that area, this Directive should therefore provide that, when public warning systems are in place, public warnings should be transmitted by providers of mobile number-based interpersonal communication services to all end-users concerned. The end-users concerned should be considered to be those who are located in the geographic areas potentially being affected by imminent or developing major emergencies and disasters during the warning period, as determined by the competent authorities.

(294) Where the effective reach of all end-users concerned, independently of their place or Member State of residence, is ensured and fulfils the highest level of data security, Member States should be able to provide for the transmission of public warnings by publicly available electronic communications services other than mobile number-based interpersonal communications services and other than transmission services used for broadcasting or by mobile application transmitted via internet access services. In order to inform end-users entering a Member State of the existence of such a public warning system, that Member State should ensure that those end-users receive, automatically by means of SMS, without undue delay and free of charge, easily understandable information on how to receive public warnings, including by means of mobile terminal equipment not enabled for internet access services. Public warnings other than those relying on mobile number-based interpersonal communications services should be transmitted to end-users in an easily receivable manner. Where a public warning system relies on an application, it should not require end-users to log in or register with the authorities or the application provider. End-users' location data should be used in accordance with Directive 2002/58/EC. The transmission of public warnings should be free of charge for end-users. In its review of the implementation of this Directive, the Commission could also assess whether it is possible in accordance with Union law, and feasible to set up a single Union-wide public warning system in order to alert the public in the event of an imminent or developing disaster or major state of emergency across different Member States.

(295) Member States should be able to determine if proposals for alternative systems, other than through mobile number-based interpersonal communication services, are truly equivalent to such services, taking utmost account of the corresponding BEREC guidelines. Such guidelines should be developed after consulting national authorities in charge

of PSAPs in order to ensure that emergency experts have a role in their development and that there is a common understanding between different Member State authorities as to what is needed to ensure full implementation of such public warning systems within the Member States while ensuring that the citizens of the Union are effectively protected while travelling in another Member State.

(296) In line with the objectives of the Charter and the obligations enshrined in the United Nations Convention on the Rights of Persons with Disabilities, the regulatory framework should ensure that all end-users, including end-users with disabilities, older people, and users with special social needs, have easy and equivalent access to affordable high quality services regardless of their place of residence within the Union. Declaration 22 annexed to the final Act of Amsterdam provides that the institutions of the Union are to take account of the needs of persons with disabilities in drawing up measures under Article 114 TFEU.

(297) In order to ensure that end-users with disabilities benefit from competition and the choice of service providers enjoyed by the majority of end-users, competent authorities should specify, where appropriate and in light of national conditions, and after consulting end-users with disabilities, consumer protection requirements for end-users with disabilities to be met by providers of publicly available electronic communications services. Such requirements can include, in particular, that providers ensure that end-users with disabilities take advantage of their services on equivalent terms and conditions, including prices, tariffs and quality, as those offered to their other end-users, irrespective of any additional costs incurred by those providers. Other requirements can relate to wholesale arrangements between providers. In order to avoid creating an excessive burden on service providers competent authorities should verify, whether the objectives of equivalent access and choice can be achieved without such measures.

(298) In addition to Union law harmonising accessibility requirements for products and services, this Directive sets out new enhanced affordability and availability requirements on related terminal equipment and specific equipment and specific services for end-users with disabilities. Therefore, the corresponding obligation in Directive 2002/22/EC that required Member States to encourage the availability of terminal equipment for end-users with disabilities has become obsolete and should be repealed.

(299) Effective competition has developed in the provision of directory enquiry services and directories pursuant, inter alia, to Article 5 of Commission Directive 2002/77/EC ([1]). In order to maintain that effective competition, all providers of number-based interpersonal communications services which attribute numbers from a numbering plan to their end-users should continue to be obliged to make relevant information available in a fair, cost-oriented and non-discriminatory manner.

(300) End-users should be informed about their right to determine whether they want to be included in a directory. Providers of number-based interpersonal communications services should respect the end-users' decision when making data available to directory service providers. Article 12 of Directive 2002/58/EC ensures the end-users' right to privacy with regard to the inclusion of their personal information in a public directory.

(301) Measures at wholesale level ensuring the inclusion of end-user data in databases should comply with the safeguards for the protection of personal data under Regulation (EU) 2016/679 and Article 12 of Directive 2002/58/EC. The cost-oriented supply of that data to service providers, with the possibility for Member States to establish a centralised mechanism for providing comprehensive aggregated information to directory providers, and the provision of network access under reasonable and transparent conditions, should be put in place in order to ensure that end-users

([1]) Commission Directive 2002/77/EC of 16 September 2002 on competition in the markets for electronic communications networks and services (OJ L 249, 17.9.2002, p. 21).

benefit fully from competition, which has largely allowed the enabling of the removal of retail regulation from these services and the provision of offers of directory services under reasonable and transparent conditions.

(302) Following the abolition of the universal service obligation for directory services and given the existence of a functioning market for such services, the right to access directory enquiry services is no longer necessary. However, the national regulatory authorities should still be able to impose obligations and conditions on undertakings that control access to end-users in order to maintain access and competition in that market.

(303) End-users should be able to enjoy a guarantee of interoperability in respect of all equipment sold in the Union for the reception of radio in new vehicles of category M and of digital television. Member States should be able to require minimum harmonised standards in respect of such equipment. Such standards could be adapted from time to time in light of technological and market developments.

(304) Where Member States decide to adopt measures in accordance with Directive (EU) 2015/1535 for the interoperability of consumer radio receivers, they should be capable of receiving and reproducing radio services provided via digital terrestrial radio broadcasting or via IP networks, in order to ensure that interoperability is maintained. This may also improve public safety, by enabling users to rely on a wider set of technologies for accessing and receiving emergency information in the Member States.

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

(306) The provisions on interoperability of consumer radio and television equipment do not prevent car radio receivers in new vehicles of category M from being capable of receiving and reproducing radio services provided via analogue terrestrial radio broadcasting and those provisions do not prevent Member States from imposing obligations to ensure that digital radio receivers are capable of receiving and reproducing analogue terrestrial radio broadcasts.

(307) Without prejudice to Union law, this Directive does not prevent Member States from adopting technical regulations related to digital terrestrial television equipment, to prepare the migration of consumers to new terrestrial broadcasting standards, and avoid the supply of equipment that would not be compliant with the standards to be rolled out.

(308) Member States should be able to lay down proportionate 'must carry' obligations on undertakings under their jurisdiction, in the interest of legitimate public policy considerations, but such obligations should only be imposed where they are necessary to meet general interest objectives clearly defined by Member States in accordance with Union law and should be proportionate and transparent. It should be possible to apply 'must carry' obligations to specified radio and television broadcast channels and complementary services supplied by a specified media service provider. Obligations imposed by Member States should be reasonable, that is they should be proportionate and transparent in light of clearly defined general interest objectives. Member States should provide an objective

justification for the 'must carry' obligations that they impose in their national law in order to ensure that such obligations are transparent, proportionate and clearly defined. The obligations should be designed in a way which provides sufficient incentives for efficient investment in infrastructure.

(309) 'Must carry' obligations should be subject to periodic review at least every five years in order to keep them up-to-date with technological and market evolution and in order to ensure that they continue to be proportionate to the objectives to be achieved. Such obligations could, where appropriate, entail a provision for proportionate remuneration which should be set out in national law. Where that is the case, national law should also determine the applicable methodology for calculating appropriate remuneration. That methodology should avoid inconsistency with access remedies that may be imposed by national regulatory authorities on providers of transmission services used for broadcasting which have been designated as having significant market power. However, where a fixed-term contract signed before 20 December 2018 provides for a different methodology, it should be possible to continue to apply that methodology for the duration of the contract. In the absence of a national provision on remuneration, providers of radio or television broadcast channels and providers of electronic communications networks used for the transmission of those radio or television broadcast channels should be able to agree contractually on a proportionate remuneration.

(310) Electronic communications networks and services used for the distribution of radio or television broadcasts to the public include cable, IPTV, satellite and terrestrial broadcasting networks. They might also include other networks to the extent that a significant number of end-users use such networks as their principal means to receive radio and television broadcasts. 'Must carry' obligations related to analogue television broadcast transmissions should be considered only where the lack of such an obligation would cause significant disruption for a significant number of end-users or where there are no other means of transmission for specified television broadcast channels. 'Must carry' obligations can include the transmission of services specifically designed to enable equivalent access by end-users with disabilities. Accordingly complementary services include services designed to improve accessibility for end-users with disabilities, such as videotext, subtitling for end-users who are deaf or hard of hearing, audio description, spoken subtitles and sign language interpretation, and could include access to the related raw-data where necessary. In light of the growing provision and reception of connected television services and the continued importance of EPGs for end-user choice the transmission of programme-related data necessary to support connected television and EPG functionalities can be included in 'must carry' obligations. It should be possible for such programme-related data to include information about the programme content and how to access it, but not the programme content itself.

(311) Calling line identification facilities are normally available on modern telephone exchanges and can therefore increasingly be provided at little or no expense. Member States are not required to impose obligations to provide these facilities when they are already available. Directive 2002/58/EC safeguards the privacy of users with regard to itemised billing, by giving them the means to protect their right to privacy when calling line identification is implemented. The development of those services on a pan-European basis would benefit consumers and is encouraged by this Directive. A common practice by providers of internet access services is to provide customers with an e-mail address using their commercial name or trade mark. In order to ensure end-users do not suffer lock-in effects related to the risk of losing access to e-mails when changing internet access services, Member States should be able to impose obligations on providers of such services, on request, either to provide access to their e-mails, or to transfer e-mails sent to the relevant e-mail account(s). The facility should be provided free of charge and for a duration that is considered to be appropriate by the national regulatory authority.

(312) The publication of information by Member States will ensure that market players and potential market entrants understand their rights and obligations, and know where to find the relevant detailed information. Publication in the national gazette helps interested parties in other Member States to find the relevant information.

(313) In order to ensure that the pan-European electronic communications market is effective and efficient, the Commission should monitor and publish information on charges which contribute to determining prices to end-users.

(314) In order to determine the correct application of Union law, the Commission needs to know which undertakings have been designated as having significant market power and which obligations have been placed upon market players by national regulatory authorities. In addition to publication of that information at national level, it is therefore necessary for Member States to submit that information to the Commission. Where Member States are required to send information to the Commission, they should be able to do so by electronic means, subject to agreement on appropriate authentication procedures.

(315) In order to take account of market, social and technological developments, including evolution of technical standards, to manage the risks posed to security of networks and services and to ensure effective access to emergency services through emergency communications, the power to adopt acts in accordance with Article 290 TFEU should be delegated to the Commission in respect of setting a single maximum Union-wide voice termination rate in fixed and mobile markets; adopting measures related to emergency communications in the Union; and adapting the annexes to this Directive. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making ([1]). In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.

(316) In order to ensure uniform conditions for the implementation of this Directive, implementing powers should be conferred on the Commission to adopt decisions to resolve cross-border harmful interference between Member States; to identify a harmonised or coordinated approach for the purpose of addressing inconsistent implementation of general regulatory approaches by national regulatory authorities on the regulation of electronic communications markets, as well as numbering, including number ranges, portability of numbers and identifiers, number and address translation systems, and access to emergency services through the single European emergency number '112'; to make the implementation of standards or specifications compulsory, or remove standards or specifications from the compulsory part of the list of standards; to adopt the technical and organisational measures to appropriately manage the risks posed to security of networks and services, as well as the circumstances, format and procedures applicable to notification of security incidents; to specify relevant details relating to tradable individual rights publicly available in a standardised electronic format when the rights of use for radio spectrum are created to specify the physical and technical characteristics of small-area wireless access points; to authorise or prevent a national regulatory authority from imposing on undertakings designated as having significant market power certain obligations for access or interconnection; to harmonise specific numbers or numbering ranges to address unmet cross-border or pan-European demand for numbering resources; and to specify the contract summary template to be provided to consumers. Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council ([2]).

(317) Finally, the Commission should be able to adopt, as necessary, having taken utmost account of the opinion of BEREC, recommendations in relation to the identification of the relevant product and service markets, the notifications under the procedure for consolidating the internal market and the harmonised application of the provisions of the regulatory framework.

(318) The Commission should review the functioning of this Directive periodically, in particular with a view to determining the need for amendments in light of changing technological or market conditions.

([1]) OJ L 123, 12.5.2016, p. 1.

([2]) Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p. 13).

(319) In carrying out its review of the functioning of this Directive, the Commission should assess whether, in light of developments in the market and with regard to both competition and consumer protection, there is a continued need for the provisions on sector-specific ex ante regulation or whether those provisions should be amended or repealed. As this Directive introduces novel approaches to the regulation of electronic communications sectors, such as the possibility to extend the application of symmetric obligations beyond the first concentration or distribution point and the regulatory treatment of co-investments, a particular regard should be given in assessing their functioning.

(320) Future technological and market developments, in particular changes in the use of different electronic communications services and their ability to ensure effective access to emergency services, might jeopardise the achievement of the objectives of this Directive on end-users' rights. BEREC should therefore monitor those developments in Member States and regularly publish an opinion including an assessment of the impact of such developments on the application in practice of the provisions of this Directive relating to end-users. The Commission, taking outmost account of BEREC's opinion, should publish a report and submit a legislative proposal where it considers it to be necessary to ensure that the objectives of this Directive are achieved.

(321) Directives 2002/19/EC, 2002/20/EC, 2002/21/EC, 2002/22/EC and Article 5 of Decision No 243/2012/EU should be repealed.

(322) The Commission should monitor the transition from the existing framework to the new framework.

(323) Since the objective of this Directive, namely achieving a harmonised and simplified framework for the regulation of electronic communications networks, electronic communications services, associated facilities and associated services, of the conditions for the authorisation of networks and services, of radio spectrum use and of numbering resources, of access to and interconnection of electronic communications networks and associated facilities and of end-user protection cannot be sufficiently achieved by the Member States but can rather, by reason of the scale and effects of the action, be better achieved at Union level, the Union may adopt measures in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve that objective.

(324) In accordance with the Joint Political Declaration of 28 September 2011 of Member States and the Commission on explanatory documents ([1]), Member States have undertaken to accompany, in justified cases, the notification of their transposition measures with one or more documents explaining the relationship between the components of a directive and the corresponding parts of national transposition instruments. With regard to this Directive, the legislator considers the transmission of such documents to be justified.

(325) The obligation to transpose this Directive into national law should be confined to those provisions which represent a substantive amendment as compared to the repealed Directives. The obligation to transpose the provisions which are unchanged arises under the repealed Directives.

(326) This Directive should be 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,

([1]) OJ C 369, 17.12.2011, p. 14.

HAVE ADOPTED THIS DIRECTIVE:

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;

(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;

(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;

(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;

(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;

(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;

(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.

([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).

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.

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:

(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.

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:

(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.

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.

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.

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.

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.

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:

(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 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.

([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).

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.

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;

(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.

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.

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.

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.

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.

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.

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.

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.

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

(b) designate an undertaking as having, either individually or jointly with others, significant market power, under Article 67 (3) or (4);

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.

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;

(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.

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.

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, Members 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.

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'.

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).

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.

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.

([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).

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

(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

(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.

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.

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;

([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).

(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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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;

(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.

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

(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.

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.

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

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

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.

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 other competent authorities in the case of points (b) and (c) of this subparagraph, shall be able to impose:

(a) to the extent necessary to ensure end-to-end connectivity, obligations on undertakings subject to general authorisation that control access to end-users, including, in justified cases, the obligation to interconnect their networks where this is not already the case;

(b) in justified cases and to the extent necessary, obligations on undertakings subject to general authorisation that control access to end-users to make their services interoperable;

(c) in justified cases, where end-to-end connectivity between end-users is endangered due to a lack of interoperability between interpersonal communications services, and to the extent necessary to ensure end-to-end connectivity between end-users, obligations on relevant providers of number-independent interpersonal communications services which reach a significant level of coverage and user uptake, to make their services interoperable;

(d) to the extent necessary to ensure accessibility for end-users to digital radio and television broadcasting services and related complementary services specified by the Member State, obligations on operators to provide access to the other facilities referred to in Part II of Annex 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;

(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:

(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.

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.

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).

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).

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.

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.

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.

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.

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.

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.

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;

(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;

(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.

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;

(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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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 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:

(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.

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.

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.

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'.

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.

Member States shall ensure that end-users are informed of an exemption under the first paragraph before concluding a contract with a microenterprise 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.

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;

(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;

(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.

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.

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.

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.

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 microenterprises, 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'.

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.

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.

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.

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[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).

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.

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.

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.

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.

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.

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.

Done at Strasbourg, 11 December 2018.

For the European Parliament	*For the Council*
The President	*The President*
A. TAJANI	J. BOGNER-STRAUSS

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.

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.

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 indefeasible 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.

— 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.

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)

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.

(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.

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.

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.

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:

(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;

(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

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)	Article 1
Regulation (EC) No 544/2009 of the European Parliament and of the Council (OJ L 167, 29.6.2009, p. 12)	Article 2
Regulation (EC) No 717/2007 of the European Parliament and of the Council (OJ L 171, 29.6.2007, p. 32)	Article 10

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)	Article 3 and Annex

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)	Article 2

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)	Article 1 and Annex I
Regulation (EU) 2015/2120 of the European Parliament and of the Council (OJ L 310, 26.11.2015, p. 1)	Article 8

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
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—	—	—	—	Article 5(2)
Article 3(2)				Article 6(1)
Article 3(3)				Article 6(2)

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—	—	—	—	Article 8(2)
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Article 3(3a) third sub-paragraph				Article 9(1) and (3)
—	—	—	—	Article 9(2)
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Article 3(3c)				Article 10(2)
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Article 3(5)				Article 11
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—	—	—	—	Point (c) of Article 33(5)
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Article 8a(3)				Article 4(4)
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Article 9(1) and (2)				Article 45(1) and (2)
—	—	—	—	Article 45(3)
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Article 9(6) and (7)				—
Article 9a				—
Article 9b(1) and (2)				Article 51(1) and (2)

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—	—	—	—	Article 95(2)
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Article 13b(1), (2) and (3)				Article 41(1), (2) and (3)
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