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NOTE

From:	Presidency
To:	Delegations
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Subject:	Proposal for a Directive of the European Parliament and of the Council establishing the European Electronic Communications Code (Recast) - Examination of the Presidency text (Services)

1. Following the discussions in WP TELE of 31/03/2017, 26/04/2017 and 11/05/2017 **the Presidency intends to, in WP TELE of 19 May, hold a final discussion of certain elements of the Services section of the Code with a view to establishing support on this compromise text ahead of the Progress Report at the TTE Council on 09/06/2017.**
2. For ease of reading **the amendments** set out in annex B **have been made to the original version of the recast**. Changes to the Commission recast are in **bold** and ~~strikethrough~~. Underline notifies changes made compared to document 08748/17. *Italics* represent text from the current Telecommunications Framework that has been moved or reintroduced following its deletion in the Commission proposal.
3. Paragraph numbering, references, spelling and grammar have been reviewed and amended through the text.

4. The issue of whether it should be National Regulatory Authorities or Competent Authorities that are responsible for different elements is to be discussed further in the context of the institutional arrangements, in particular in Article 5. The areas most likely to require discussion have the relevant references in square brackets.

Security

5. A subparagraph has been added to **Article 40(2)** which makes clear that only when the relevant information is available to the provider are they obliged to take it into account. This wording is taken from Article 16 of the NIS Directive and updated to make the provisions relevant to the services covered under this article.

At the Working Party on 19 May the Presidency will ask if any Member State can not support the compromise text as set out in the Annex.

Universal Service Obligation

6. **Article 83(2)** has been amended to make clear that the provisions apply to both internet access service providers and voice communications service providers.
7. All relevant text in **Article 85** has now been reinstated.
8. Further clarifications have been made to **Recital 196** regarding the provision of affordable mobile access.
9. The word 'capacity' is deleted in **Recital 197** to improve the clarity of the sentence
10. **Recital 221** has been amended to reflect the reintroduction of financing options for the Universal Service Obligation.

At the Working Party on 19 May the Presidency will ask if any Member State can not support the compromise text as set out in the Annex.

Numbering

11. The definitions in **Article 2(6 and 7)** now make clear that it is use of or connection with **publicly** assigned numbering resources that distinguishes between number-independent and number-based services..
12. References to BEREC in **Article 87(4)** have been put in square brackets to indicate the need for further discussion about these functions as part of the work on institutional set-up and governance and the proposed BEREC Regulation.
13. Economic feasibility has been reintroduced as a relevant condition for access to numbers in **Article 91(1)**.
14. The word 'provisioning' has been reinstated following its accidental deletion in **Article 87(6)**.
15. **Recital 228** has been amended to make clear that refunding of fraud may not always be technically feasible.

At the Working Party on 19 May the Presidency will ask if any Member State can not support the compromise text as set out in the Annex.

End User Rights

16. The Presidency believes that the approach taken, which focuses on the relevant characteristics of each Electronic Communications Service remains appropriate for end user rights. For an end user, whether a service requires a **financial payment**, imposes a **minimum contract duration**, or commits to provide a certain **quality of service**, is more relevant than the type of infrastructure on which it relies. As such, throughout the text reference to 'types' of service are only included where this is relevant to the provision (e.g. porting of numbers is only relevant when switching between number-based services). Based on comments received the Presidency recognises that **there may be scope to further improve the clarity of communication as regards this approach at a later stage**. This could, for example, include the introduction of an annex or reorganisation of the text.

17. **Article 95(5)** is therefore amended to be relevant to all interpersonal communications services that are billed on the basis of either time or volume consumption and **Annex VIIbis** has been amended including the removal of 'jitter' and 'packet loss'.
18. The reference to 'undertakings' has been changed to 'providers' in **Article 96(1)** to bring this language into line with the rest of the article.
19. **Article 100(2)** has been updated to include number-based interpersonal communications services, aligning it with the previous paragraph..
20. **Recital 230** has been updated to align the recital with the article.
21. **Recital 231** now refers to 'competent authorities' rather than 'national regulatory authorities', in line with the article.
22. **Recital 237** on transparency of information has replaced 'consumer' with 'end user' and removed the reference to number-independent services as being exempt to align with the article.
23. The word 'imposed' has been changed to 'proposed' in **Recital 246** to align with the article.
24. The reference to 'devices' in **Recital 252** has been changed to 'terminal equipment' to bring it into line with the article.

At the Working Party on 19 May the Presidency will ask if any Member State can not support the approach to end-user rights whereby all ECS are in scope, but where most provisions apply only where services have specific characteristics relevant to the article.

At the Working Party on 19 May the Presidency ask if any Member State can not support the compromise text as set out in the Annex.

SERVICES TEXTRECITALS

(90) 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. 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 supplies, access control to networks and integrity of networks; as regards incident handling: incident-handling procedures, incident detection capability, incident reporting and communication; as regards business continuity management: service continuity strategy and contingency plans, disaster recovery capabilities; and 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.

(91) 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 ~~commensurate with the degree of~~ **appropriate to the** risk posed ~~to the security of the electronic communications services they provide~~. 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 lower than for traditional electronic communications services. Therefore, whenever it is justified by the actual assessment of the security risks involved, the ~~security requirements for~~ **measures taken by** number-independent interpersonal communications services should be lighter. ~~In that context, the providers should be able to decide about the measures they consider appropriate to manage the risks posed to the security of their services.~~ 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.

(91a) Providers of public communications networks or of publicly available electronic communications services should inform end-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 end-users of such threats should not discharge a service provider from the obligation to take, at its own costs, 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 end-user should be free of charge.

(92) Competent authorities should ensure that the integrity and availability of public communications networks are maintained. The European Network and Information Security Agency ('ENISA') should contribute to an enhanced level of security of electronic communications by, amongst other things, providing expertise and advice, and promoting the exchange of best practices. The competent authorities should have the necessary means to 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 under Article 9 of Directive (EU) 2016/1148/EU¹. In particular, CSIRTs may be required to provide competent authorities with information about risks and incidents affecting public communications networks and publicly available electronic communications services and recommend ways to address them.

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).

(93) Where the provision of electronic communications relies on public resources whose use is subject to specific authorisation, Member States may grant the authority competent for issuance thereof the right to impose fees to ensure optimal use of those resource, 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 coherent 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 undertakings providing electronic communications networks and services.

(192) 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. ~~The regulatory framework established for the full liberalisation of the telecommunications market in 1998 in the Community defined the minimum scope of universal service obligations and established rules for its costing and financing.~~

(193) Under Article ~~153~~ 169 of the Treaty on the Functioning of the European Union , the ~~Community~~ Union is to contribute to the protection of consumers.

~~The Community and its Member States have undertaken commitments on the regulatory framework of telecommunications networks and services in the context of the World Trade Organisation (WTO) agreement on basic telecommunications. Any member of the WTO has the right to define the kind of universal service obligation it wishes to maintain. Such obligations will not be regarded as anti-competitive per se, provided they are administered in a transparent, non-discriminatory and competitively neutral manner and are not more burdensome than necessary for the kind of universal service defined by the member.~~

~~Since the objectives of the proposed action, namely setting a common level of universal service for telecommunications for all European users and of harmonising conditions for access to and use of public telephone networks at a fixed location and related publicly available telephone services and also achieving a harmonised framework for the regulation of electronic communications services, electronic communications networks and associated facilities, cannot be sufficiently achieved by the Member States and can therefore by reason of the scale or effects of the action be better achieved at Community level, the Community may adopt measures in accordance with the principles of subsidiarity as set out in Article 5 of the Treaty. 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 those objectives.~~

~~In a competitive market, certain obligations should apply to all undertakings providing publicly available telephone services at fixed locations and others should apply only to undertakings enjoying significant market power or which have been designated as a universal service operator.~~

- (194) Universal service is a safety net to ensure that a set of minimum services is available to all end-users at an affordable price, where a risk of social exclusion arising from the lack of such access prevents citizens from full social and economic participation in society.
- (195) Basic broadband internet access is virtually universally available across the Union and very widely used for a wide range of activities. However, the overall take-up rate is lower than availability as there are still those who are disconnected by reasons related to awareness, cost, skills and by choice. Affordable functional 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.

(196) ~~Where Member States have established that availability of functional internet access or of voice communications cannot be ensured under normal commercial circumstances or through other potential public policy tools, they should be able to address the lack of availability with universal service obligations. The obligation to ensure such availability of access should be limited to fixed location only, as there are more proportionate tools to ensure wireless coverage. This access at a fixed location may be restricted to the end-user's primary location or residence. However, there should be no limitations on the technical means by which the connection at a fixed location is provided, allowing for wired or wireless technologies, nor any limitations on the category of operators which provide part or all of universal service obligations.~~ A fundamental requirement of universal service is to ~~ensure that all end-users have access at an affordable price to available functional internet access and voice communications services, at least provide users on request with a connection to the public telephone network at a fixed location, at an affordable price.~~ ⇒ In the same way, This means that Member States should also have the possibility to ensure affordability **of functional internet access and voice communications via wireless means** of services not provided at a fixed location but to citizens on the move, where they deem this consider that **this** a mobile internet connection affordable functional internet access and voice communications via wireless means is necessary to ensure their end-users' full social and economic participation in society. ⇐ ~~The requirement is limited to a single narrowband network connection, the provision of which may be restricted by Member States to the end-user's primary location/residence, and does not extend to the Integrated Services Digital Network (ISDN) which provides two or more connections capable of being used simultaneously. There should be no constraints limitations on the technical means by which the connection is provided, allowing for wired or wireless technologies, nor any constraints limitations on which the category of operators which provide part or all of universal service obligations. 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 operators which provide part or all of universal service obligations.~~

Connections to the public telephone network at a fixed location should be capable of supporting speech and data communications at rates sufficient for access to online services such as those provided via the public Internet. The speed of Internet access experienced by a given user may depend on a number of factors including the provider(s) of Internet connectivity as well as the given application for which a connection is being used. The data rate that can be supported by a single narrowband connection to the public telephone network depends on the capabilities of the subscriber's terminal equipment as well as the connection. For this reason it is not appropriate to mandate a specific data or bit rate at Community level. Currently available voice band modems typically offer a data rate of 56 kbit/s and employ automatic data rate adaptation to cater for variable line quality, with the result that the achieved data rate may be lower than 56 kbit/s. Flexibility is required on the one hand to allow Member States to take measures where necessary to ensure that connections are capable of supporting such a data rate, and on the other hand to allow Member States where relevant to permit data rates below this upper limit of 56 kbits/s in order, for example, to exploit the capabilities of wireless technologies (including cellular wireless networks) to deliver universal service to a higher proportion of the population. This may be of particular importance in some accession countries where household penetration of traditional telephone connections remains relatively low. In specific cases where the connection to the public telephony network at a fixed location is clearly insufficient to support satisfactory Internet access, Member States should be able to require the connection to be brought up to the level enjoyed by the majority of subscribers so that it supports data rates sufficient for access to the Internet. Where such specific measures produce a net cost burden for those consumers concerned, the net effect may be included in any net cost calculation of universal service obligations.

(197) ~~Data connections to the public communications network at a fixed location should be capable of supporting data communications at rates sufficient for access to online services such as those provided via the public Internet.~~ The speed of Internet access experienced by a given user may depend on a number of factors, including the provider(s) of Internet connectivity as well as the given application for which a connection is being used. ~~The data rate that can be supported by a connection to the public communications network depends on the capabilities of the subscriber's terminal equipment as well as the connection. For this reason, it is not appropriate to mandate a specific data or bit rate at Community level.~~ ⇒ The affordable functional internet access service should ~~be~~ **have** sufficient **capacity** ~~in order to~~ support access to and use of a minimum set of basic services that reflect the services used by the majority of end-users. **To this end, the Commission should monitor the development in the usage of internet to identify online services used by a majority of end-users across the EU and update the list accordingly.** ~~This~~ **The minimum list of services sets out the minimum capacity requirements for functional internet access at EU level is appropriate at this point in time,** but should be further defined by Member States, **including to ensure that it remains up to date with end-user needs. It is for the Member States to define the most appropriate way to ensure that the functional internet access supports the minimum list of services. For instance, they may determine the capacity of functional internet by reference to a list of services to be supported by the internet access or they may define the capacity in terms of bandwidth that is needed to support the minimum list of services with the aim** ~~in order to~~ allow an adequate level of social inclusion and participation in the digital society and economy in their territory. **The requirements of Union legislation on open internet, in particular of Regulation (EU) No 2015/2120² of the European Parliament and of the Council of 25 November 2015, should apply to any functional internet access service.**

² 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 (Text with EEA relevance) [OJ L 310 of 26.11.2015, p. 1–18.]

~~⇨ Flexibility is required to allow Member States to take measures, where necessary, to ensure that a data connection is capable of supporting satisfactory data rates which are sufficient to permit functional Internet access, as defined by the Member States, taking due account of specific circumstances in national markets, for instance the prevailing bandwidth used by the majority of subscribers in that Member State, and technological feasibility, provided that these measures seek to minimise market distortion. Where such measures result in an unfair burden on a designated undertaking, taking due account of the costs and revenues as well as the intangible benefits resulting from the provision of the services concerned, this may be included in any net cost calculation of universal obligations. Alternative financing of underlying network infrastructure, involving Community funding or national measures in accordance with Community law, may also be implemented.~~

(198) End-users should not be obliged to access services they do not want and it should therefore be possible for eligible end-users to limit, on request, the affordable universal service to voice communications service only.

(199) National regulatory authorities should be able to monitor the evolution and level of retail tariffs for services that fall under the scope of universal service obligations, ~~even where a Member State has not yet designated an undertaking to provide universal service. In such a case, †~~ The monitoring should be carried out in such a way that it would not represent an excessive administrative burden for either national regulatory authorities or undertakings providing such service.

(200) Affordable price means a price defined by Member States at national level in the light of specific national conditions, and may involve ~~setting common tariffs irrespective of location~~ ~~or~~ special tariff options ~~⇒~~ or packages ~~⇨~~ to deal with the needs of low-income users ~~⊗~~ or users with special social needs, including the elderly, the disabled and the end-users living in rural or geographically isolated areas. These offers should be provided with basic features, in order to avoid distortion of the functioning of the market. ~~⊗~~ Affordability for individual ~~consumers~~ ~~⇒~~ end-users should be founded upon ~~⇨~~ their ~~⇒~~ right to contract with an undertaking, availability of a number, continued connection of service and their ~~⇨~~ ability to monitor and control their expenditure.

(201) It should no longer be possible to refuse end-users access to the minimum set of connectivity services. A right to contract with an undertaking should mean that end-users who might face refusal, in particular those with low incomes or special social needs, should have the possibility to enter into a contract for the provision of affordable functional internet access and voice communications services at least at a fixed location with any undertaking providing such services in that location. In order to minimise the financial risks such as non-payment of bills, undertakings should be free to provide the contract under pre-payment terms, on the basis of affordable individual pre-paid units.

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

(203) ~~Ensuring universal service (that is to say, the provision of a defined minimum set of services to all end users at an affordable price) may involve the provision of some services to some end users at prices that depart from those resulting from normal market conditions.~~ However, compensating undertakings designated to providing such services in such circumstances need not result in ~~any~~ distortion of competition, provided that ~~designated~~ such undertakings are compensated for the specific net cost involved and provided that the net cost burden is recovered in a competitively neutral way.

(204) In order to assess the need for affordability measures, national regulatory authorities should be able to monitor the evolution and details of offers of tariff options or packages for end-users with low incomes or special social needs.

(205) Where **Member States conclude that additional specific measures are needed to ensure** beyond the basic tariff options or packages provided by undertakings are insufficient for ensuring affordability for end-users with low incomes or special needs, **they may, having regard to the need to minimise market distortions, provide those end-users with direct support, which may be realised by social allowances,** such as ~~for example vouchers to such end-users can be an appropriate alternative having regard to the need to minimise market distortions~~ **or require undertakings to offer basic tariff options or packages to those end-users.**

(206) Member States should introduce measures to promote the creation of a market for affordable ~~widely available~~ products and services incorporating facilities for disabled end-users , including equipment with assistive technologies . This can be achieved, inter alia, by referring to European standards, or by introducing ~~electronic accessibility~~ ~~(eAccessibility)~~ requirements in accordance with Directive xxx/YYYY/EU of the European Parliament and of the Council on the approximation of the laws, regulations and administrative provisions of the Member States as regards the accessibility requirements for products and services³ ~~for public procurement procedures and calls for tender relating to the provision of services, and by implementing legislation upholding the rights of disabled end-users.~~ ⇒ Member States should define appropriate measures according to 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 disabled end-users under normal economic conditions. **Those measures could include direct financial support to end users and may involve the designation of certain providers for the provision of such services.** ⇐

³ OJ C [...], [...], p. [...].

- (207) For data communications at data rates that are sufficient to permit a functional Internet access, fixed-line connections are nearly universally available and used by a majority of citizens across the Union . The standard fixed broadband coverage and availability in the Union stands 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.
- (208) 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 functional 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 EFSI and CEF, 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 conformity with Union State aid rules.

(209) ~~A fundamental requirement of universal service is to provide users on request with a connection to the public communications network at a fixed location and at an affordable price.~~ ⇒ If after carrying out a due assessment, taking into account the results of the geographical survey of networks deployment conducted by the national regulatory 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 functional internet access service as defined by Member States ~~in accordance with Article 79 (2)~~ and voice communications services at a fixed location, the Member State should be able to exceptionally designate different undertakings or sets of undertakings to provide these services in the different relevant parts of the national territory. ⇐ ~~The requirement is for the provision of local, national and international telephone calls, facsimile communications and data services, the provision of which~~ ⇒ Universal service obligations in support of availability of functional internet access service ⇐ may be restricted by Member States to the end-user's primary location or residence. There should be no constraints on the technical means by which ~~this is~~ ⇒ the functional internet access and voice communications services at a fixed location are ⇐ provided, allowing for wired or wireless technologies, nor any constraints on which operators provide part or all of universal service obligations.

(210) 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 that Member States ~~may~~ ⊗ can ⊗ include, in the designation process, specific conditions justified on grounds of efficiency, including, inter alia, grouping geographical areas or components or setting minimum periods for the designation.

(211) The costs of ensuring the availability of a connection capable of delivering functional internet access service as identified in accordance with Article 79 (2) and voice communications service 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 undertakings and users in the electronic communications sector.

(212) 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 time period may also lead to an a priori exclusion of certain undertakings.

~~The provisions of this Directive do not preclude Member States from designating different undertakings to provide the network and service elements of universal service. Designated undertakings providing network elements may be required to ensure such construction and maintenance as are necessary and proportionate to meet all reasonable requests for connection at a fixed location to the public telephone network and for access to publicly available telephone services at a fixed location.~~

~~Directory information and a directory enquiry service constitute an essential access tool for publicly available telephone services and form part of the universal service obligation. Users and consumers desire comprehensive directories and a directory enquiry service covering all listed telephone subscribers and their numbers (including fixed and mobile numbers) and want this information to be presented in a non-preferential fashion. Directive 97/66/EC of the European Parliament and of the Council of 15 December 1997 concerning the processing of personal data and the protection of privacy in the telecommunications sector⁴ ensures the subscribers' right to privacy with regard to the inclusion of their personal information in a public directory.~~

⁴ ~~OJL 24, 30.1.1998, p. 1.~~

For the citizen, it is important for there to be adequate provision of public pay telephones, and for users to be able to call emergency telephone numbers and, in particular, the single European emergency call number ('112') free of charge from any telephone, including public pay telephones, without the use of any means of payment. Insufficient information about the existence of '112' deprives citizens of the additional safety ensured by the existence of this number at European level especially during their travel in other Member States.

Member States should take suitable measures in order to guarantee access to and affordability of all publicly available telephone services at a fixed location for disabled users and users with special social needs. Specific measures for disabled users could include, as appropriate, making available accessible public telephones, public text telephones or equivalent measures for deaf or speech-impaired people, providing services such as directory enquiry services or equivalent measures free of charge for blind or partially sighted people, and providing itemised bills in alternative format on request for blind or partially sighted people. Specific measures may also need to be taken to enable disabled users and users with special social needs to access emergency services '112' and to give them a similar possibility to choose between different operators or service providers as other consumers. Quality of service standards have been developed for a range of parameters to assess the quality of services received by subscribers and how well undertakings designated with universal service obligations perform in achieving these standards. Quality of service standards do not yet exist in respect of disabled users. Performance standards and relevant parameters should be developed for disabled users and are provided for in Article 11 of this Directive. Moreover, national regulatory authorities should be enabled to require publication of quality of service performance data if and when such standards and parameters are developed. The provider of universal service should not take measures to prevent users from benefiting fully from services offered by different operators or service providers, in combination with its own services offered as part of universal service.

~~The importance of access to and use of the public telephone network at a fixed location is such that it should be available to anyone reasonably requesting it. In accordance with the principle of subsidiarity, it is for Member States to decide on the basis of objective criteria which undertakings have universal service obligations for the purposes of this Directive, where appropriate taking into account the ability and the willingness of undertakings to accept all or part of the universal service obligations. It is important that universal service obligations are fulfilled in the most efficient fashion so that users generally pay prices that correspond to efficient cost provision. It is likewise important that universal service operators maintain the integrity of the network as well as service continuity and quality. The development of greater competition and choice provide more possibilities for all or part of the universal service obligations to be provided by undertakings other than those with significant market power. Therefore, universal service obligations could in some cases be allocated to operators demonstrating the most cost effective means of delivering access and services, including by competitive or comparative selection procedures. Corresponding obligations could be included as conditions in authorisations to provide publicly available services.~~

- (213) When an undertaking designated to ~~provide universal service~~ ☒ ensure the availability at a fixed location of functional internet access or voice communications services ☒, as identified in Article 81 4 of ☒ this ☒ Directive 2002/22/EC (Universal Service Directive), chooses to dispose of a substantial part, viewed in light of its universal service obligation, or all, of its local access network assets in the national territory to a separate legal entity under different ultimate ownership, the national regulatory 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 this end, the national regulatory authority which imposed the universal service obligations should be informed by the undertaking in advance of the disposal. The assessment of the national regulatory authority should not prejudice the completion of the transaction.

(214) In order to provide stability and support a gradual transition, Member States should be able to continue to ensure the provision of universal services in their territory, other than functional internet access and voice communications services at a fixed location, that are included in the scope of their universal obligations on the basis of Directive 2002/22/EC at the 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, directories and directory enquiry services under the universal service regime, as long as the need is still demonstrated, would give Member States the flexibility necessary to duly take into account the varying national circumstances. However, the financing of such services should be done via public funds as for the other universal service obligations.

~~(215)~~ Member States should monitor the situation of ~~consumers~~ ⇒ end-users ⇐ with respect to their use of ⇒ functional internet access and voice communications services ⇐ ~~publicly available telephone services~~ and in particular with respect to affordability. The affordability of ⇒ functional internet access and voice communications services ⇐ ~~telephone service~~ is related to the information which users receive regarding ~~telephone~~ usage expenses as well as the relative cost of ~~telephone~~ 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 undertakings ~~designated as having universal service obligations~~. These 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), the possibility for consumers to control expenditure via pre-payment means and the possibility for consumers to offset up-front connection fees. Such measures may need to be reviewed and changed in the light of market developments. ~~Current conditions do not warrant a requirement for operators with universal service obligations to alert subscribers where a predetermined limit of expenditure is exceeded or an abnormal calling pattern occurs. Review of the relevant legislative provisions in future should consider whether there is a possible need to alert subscribers for these reasons.~~

(216) Except in cases of persistent late payment or non-payment of bills, consumers \Rightarrow entitled to affordable tariffs \Leftarrow should be protected from immediate disconnection from the network on the grounds of an unpaid bill and, particularly in the case of disputes over high bills for premium-rate services, should continue to have access to essential ~~telephone~~ \boxtimes voice communications \boxtimes services pending resolution of the dispute. Member States may decide that such access may continue to be provided only if the subscriber continues to pay line rental charges.

~~Quality and price are key factors in a competitive market and national regulatory authorities should be able to monitor achieved quality of service for undertakings which have been designated as having universal service obligations. In relation to the quality of service attained by such undertakings, national regulatory authorities should be able to take appropriate measures where they deem it necessary. National regulatory authorities should also be able to monitor the achieved quality of services of other undertakings providing public telephone networks and/or publicly available telephone services to users at fixed locations.~~

(217) Where the provision of functional internet access and voice communications services or the provision of other universal services in accordance with Article 85 result in an unfair burden on an undertaking, 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 obligations.

- (218) Member States should, where necessary, establish mechanisms for financing the net cost of universal service obligations in cases 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 the provisions of Articles ~~87~~ 107 and ~~88~~ 108 of the Treaty on the Functioning of the European Union .
- (219) Any calculation of the net cost of universal service 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.
- (220) 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 provider of universal service, should be deducted from the direct net cost of universal service obligations in order to determine the overall cost burden.

(221) When a universal service obligation represents an unfair burden on an undertaking, 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 of 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, and/or to finance the net costs of some or all elements from either of the mechanisms or a combination of both.* ~~The net costs of universal service obligations should be recovered via public funds.~~ Functional 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 ~~at least as much~~ **both** the public interest ~~as it serves~~ **and** the interests of electronic communications providers. **These facts should be taken into account by Member States when choosing and designing mechanism for recovering net costs.** ~~Therefore Member States should compensate the net costs of such connections supporting broadband speeds as part of the universal service from public funds, which should be understood to comprise funding from general government budgets.~~ *In the case of cost recovery by means of sharing the net cost of universal service obligation between providers of electronic communications networks and services, Member States should ensure that that the method of allocation amongst them 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 yet 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 in all cases 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 universal service costs in another Member State, for example when making calls from one Member State to another. ↵ Recovery via public funds constitutes one method of recovering the net costs of universal service obligations. It is also reasonable for established net costs to be recovered from all users in a transparent fashion by means of levies on undertakings. Member States should be able to finance the net costs of different elements of universal service through different mechanisms, and/or to finance the net costs of some or all elements from either of the mechanisms or a combination of both. In the case of cost recovery by means of levies on undertakings, Member States should ensure that that the method of allocation amongst them 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 yet 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 in all cases respect the principles of Community 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 universal service costs in another Member State, for example when making calls from one Member State to another.

Where Member States decide to finance the net cost of universal service obligations from public funds, this should be understood to comprise funding from general government budgets including other public financing sources such as state lotteries.

~~The net cost of universal service obligations may be shared between all or certain specified classes of undertaking. 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.~~

- (222) ~~National regulatory authorities should satisfy themselves that those u~~Undertakings benefiting from universal service funding ~~⊗~~ should ~~⊗~~ provide ~~⊗~~ to national regulatory authorities ~~⊗~~ 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 Treaty. ~~There are incentives for designated operators to raise the assessed net cost of universal service obligations. Therefore~~ 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 operators. 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.~~ ⇐

~~Communications markets continue to evolve in terms of the services used and the technical means used to deliver them to users. The universal service obligations, which are defined at a Community level, should be periodically reviewed with a view to proposing that the scope be changed or redefined. Such a review should take account of evolving social, commercial and technological conditions and the fact that any change of scope should be subject to the twin test of services that become available to a substantial majority of the population, with a consequent risk of social exclusion for those who can not afford them. Care should be taken in any change of the scope of universal service obligations to ensure that certain technological choices are not artificially promoted above others, that a disproportionate financial burden is not imposed on sector undertakings (thereby endangering market developments and innovation) and that any financing burden does not fall unfairly on consumers with lower incomes. Any change of scope automatically means that any net cost can be financed via the methods permitted in this Directive. Member States are not permitted to impose on market players financial contributions which relate to measures which are not part of universal service obligations. Individual Member States remain free to impose special measures (outside the scope of universal service obligations) and finance them in conformity with Community law but not by means of contributions from market players.~~

More effective competition across all access and service markets will give greater choice for users. The extent of effective competition and choice varies across the Community and varies within Member States between geographical areas and between access and service markets. Some users may be entirely dependent on the provision of access and services by an undertaking with significant market power. In general, for reasons of efficiency and to encourage effective competition, it is important that the services provided by an undertaking with significant market power reflect costs. For reasons of efficiency and social reasons, end-user tariffs should reflect demand conditions as well as cost conditions, provided that this does not result in distortions of competition. There is a risk that an undertaking with significant market power may act in various ways to inhibit entry or distort competition, for example by charging excessive prices, setting predatory prices, compulsory bundling of retail services or showing undue preference to certain customers. Therefore, national regulatory authorities should have powers to impose, as a last resort and after due consideration, retail regulation on an undertaking with significant market power. Price cap regulation, geographical averaging or similar instruments, as well as non-regulatory measures such as publicly available comparisons of retail tariffs, may be used to achieve the twin objectives of promoting effective competition whilst pursuing public interest needs, such as maintaining the affordability of publicly available telephone services for some consumers. Access to appropriate cost accounting information is necessary, in order for national regulatory authorities to fulfil their regulatory duties in this area, including the imposition of any tariff controls. However, regulatory controls on retail services should only be imposed where national regulatory authorities consider that relevant wholesale measures or measures regarding carrier selection or pre-selection would fail to achieve the objective of ensuring effective competition and public interest.

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

~~National regulatory authorities may also, in the light of an analysis of the relevant market, require mobile operators with significant market power to enable their subscribers to access the services of any interconnected provider of publicly available telephone services on a call-by-call basis or by means of pre-selection.~~

- (223) 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 throughout the territory of the Union. In view of the considerable risk of fraud with respect to interpersonal communications, such extraterritorial use should **only** be allowed for **the provision of** electronic communications services ~~with the exception of other than~~ interpersonal communications services. Member States should therefore ensure ~~e~~**Enforcement of that** relevant national laws, in particular consumer protection rules and other rules related to the use of ~~numbers~~ **numbering resources**, are ~~enforced~~ **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.** ~~independently of the Member State where the rights of use for numbers~~ **numbering resources** have been granted. That should entail that the national regulatory and other competent authorities of those Member States **remain competent to apply their national laws to numbering resources used in their territory, including where rights have been granted in another Member State.** ~~where a number is used are competent to apply their national laws to the undertaking to which the number has been assigned. In addition,~~ **the national regulatory authorities of the Member States where numbering resources from another Member State are used do not have control over those numbering resources. It is therefore essential that the national regulatory authorities 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 view of achieving effective protection, a national regulatory authority granting rights of extraterritorial use should attach conditions [in accordance with Annex I, Part E] regarding the respect by the provider of the consumer protection rules and other rules related to the use of numbers numbering resources in those Member States where the numbering resources will be used.**

The national regulatory authorities of those Member States where a numbering resource is used should have the possibility to may request the support of the national regulatory authority responsible for the assignment which has that granted the rights of use for the numbering resources to assist them in enforcing the respect of the those its rules applicable in those Member states where the number is used. Such support Enforcement measures by the national regulatory authority that granted the rights of use for the numbering resources should include dissuasive sanctions, in particular in case of a serious breach the withdrawal of the right of extraterritorial use for the ~~numbers~~ **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 ~~numbers~~ **numbering resources** should be without prejudice to Union's 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.

- (224) 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 telecommunication 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 view of the emerging machine-to-machine market and new technologies, Member States should strive to ensure technological neutrality in promoting over-the-air provisioning.

~~(225)~~ 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 ~~numbers~~ **numbering resources** to undertakings other than providers of electronic communications networks or services in view of the increasing relevance of numbers for various Internet of Things services. ⇐ All elements of national numbering plans should be managed by national regulatory authorities, including point codes used in network addressing. Where there is a need for harmonisation of numbering resources in the ~~Community~~ 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 ~~may~~ can take ~~technical~~ implementing measures ~~using its executive powers~~ ⇒ with the assistance of BEREC ⇐.

~~Where this is appropriate to ensure full global interoperability of services, Member States should coordinate their national positions in accordance with the Treaty in international organisations and fora where numbering decisions are taken. The provisions of this Directive do not establish any new areas of responsibility for the national regulatory authorities in the field of Internet naming and addressing.~~

- (226) The requirement to publish decisions on the granting of rights to ~~to~~ of ~~to~~ use ~~frequencies~~ ~~of~~ ~~to~~ for ~~to~~ **numbering resources** may be fulfilled by making these decisions publicly accessible via a website.
- (227) Considering the particular aspects related to reporting missing children ~~and the currently limited availability of such a service~~, Member States ~~to~~ should maintain their commitment ~~to~~ ~~should not only reserve a number, but also make every effort~~ to ensure that a ~~to~~ well-functioning ~~to~~ service for reporting missing children is actually available in their territories under the number '116000' ~~, without delay. To that end, Member States should, if appropriate, inter alia, organise tendering procedures in order to invite interested parties to provide that service.~~
- (228) A single 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 ~~to~~ , including freephone and premium-rate numbers, ~~to~~ within the ~~Community~~ ~~to~~ Union ~~to~~ , ~~including, among others, freephone and premium-rate numbers~~ ~~to~~ except where the called end-user has chosen, for commercial reasons, to limit access from certain geographical areas ~~to~~ . End-users should also be able to access numbers from the ~~European Telephone Numbering Space (ETNS) and~~ 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 (e.g. in connection with certain premium-rate services), when the number is defined as having a national scope only (e.g. a national short code) or when it is technically or economically unfeasible. ~~to~~ 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.~~ ~~to~~ 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 by 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.**

~~Access by end users to all numbering resources in the Community is a vital pre-condition for a single market. It should include freephone, premium rate, and other non-geographic numbers, except where the called subscriber has chosen, for commercial reasons, to limit access from certain geographical areas. 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.~~

(229) 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. Differentiation should, however, be possible on the basis of objectively justifiable differences in costs and risks, which may go beyond the measures provided for in Regulation 531/2012 in respect of abusive or anomalous use of regulated retail roaming services.

(230) 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 single market resulting from such national end-user provisions 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 end-user provisions should be reasonably enhanced in this Directive in the 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 only extend to the subject matters governed by the provisions on end-user rights. Therefore, it should not affect national law with respect to aspects of end-user protection which are not covered by these provisions. Moreover, Member States may maintain or introduce national provisions on issues not specifically addressed in this Directive, in particular in order to address newly emerging issues. Furthermore, Member States should maintain the possibility to have a higher level of end-user protection where an explicit derogation is provided for in this Directive, ~~and to act in areas not covered by this Directive.~~**

(231) Contracts are an important tool for ~~end- users~~ and consumers to ensure a minimum level of transparency of information and legal security ~~certainty~~. Most service providers in a competitive environment will conclude contracts with their customers for reasons of commercial desirability. In addition to the provisions of this Directive, the requirements of existing Community ~~Union~~ consumer protection legislation relating to contracts, in particular ~~Council Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts⁵ and Directive 97/7/EC of the European Parliament and of the Council of 20 May 1997 on the protection of consumers in respect of distance contracts⁶ Directive 2011/83/EU of the European Parliament and of the Council on consumer rights⁷ and Council Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts~~, apply to consumer transactions relating to electronic ~~communications~~ networks and services. ~~Specifically, consumers should enjoy a minimum level of legal certainty in respect of their contractual relations with their direct telephone service provider, such that the contractual terms, conditions, quality of service, condition for termination of the contract and the service, compensation measures and dispute resolution are specified in their contracts. Where service providers other than direct telephone service providers conclude contracts with consumers, the same information should be included in those contracts as well. The measures to ensure transparency on prices, tariffs, terms and conditions will increase the ability of consumers to optimise their choices and thus to benefit fully from competition.~~

⁵ ~~OJ L 95, 21.4.1993, p. 29.~~

⁶ ~~OJ L 144, 4.6.1997, p. 19.~~

⁷ 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).

(232) Provisions on contracts ~~☒~~ in this Directive ~~☒~~ ⇒ should apply irrespective of the amount of any payment to be made by the customer. ~~☒~~ They ~~☒~~ should ~~apply~~ **benefit** not only to consumers but also to ~~other end-users, primarily~~ micro enterprises and small ~~and medium-sized~~ enterprises (SMEs) ~~☒~~ as defined in Commission Recommendation 2003/361/EC, ~~☒~~ ~~which may prefer a contract adapted to consumer needs~~ **and not-for-profit organisations** ⇒ whose bargaining position is comparable to that of consumers and which should therefore benefit from the same level of protection ~~☒~~. ~~To avoid unnecessary administrative burdens for providers and the complexity related to the definition of SMEs,~~ ~~☒~~ The provisions on contracts ~~☒~~, including those contained in Directive 2011/83/EU on consumer rights, ~~☒~~ should ~~not~~ apply automatically to those ~~☒~~ undertakings ~~☒~~ ~~other end-users, but only where they so request~~ ⇒ unless they prefer negotiating individualised contract terms with providers of electronic communications services ~~☒~~. ⇒ As opposed to micro and 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. ~~☒~~ ~~Member States should take appropriate measures to promote awareness amongst SMEs of this possibility.~~

- (233) The specificities of the electronic communications sector require, beyond horizontal contract rules, a limited number of additional end-user protection provisions. End-users should inter alia be informed 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 **internet access services and, to some extent, also for most publicly available electronic interpersonal communications services. Some types of information, for instance on quality of service or pricing, are relevant only for those interpersonal communications services which offer such such quality of service or bill a price for their services, respectively** but not for number independent interpersonal communications services. 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. For the same reason, providers should present a summary of the essential contract terms. In order to facilitate comparability and reduce compliance cost, ~~BEREC~~ **the Commission** should issue a template for such contract summaries.
- (234) Following the adoption of Regulation (EU) 2015/2120 the provisions in this Directive regarding information on conditions limiting access to and/or use of services and applications and as regards traffic shaping became obsolete and should be repealed.
- (235) With respect to terminal equipment, the customer contract should specify any restrictions imposed by the provider on the use of the equipment, such as by way of ‘SIM-locking’ mobile devices, if such restrictions are not prohibited under national legislation, 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. ⇒ Any charges due at early termination for terminal equipment ~~and other promotional advantages~~ should be calculated on the basis of customary depreciation methods and on a pro rata temporis basis, respectively. ⇐
- (236) Without ☒ prejudice to the substantive ☒ ~~imposing any~~ obligations on the provider ⇒ related to security by virtue of this Directive ⇐ ~~to take action over and above what is required under Community law~~, the customer contract should ~~also~~ specify the type of action, ~~if any,~~ the provider might take in case of security ~~or integrity~~ incidents, threats or vulnerabilities.

(237) The availability of transparent, up-to-date and comparable information on offers and services is a key element for consumers end-users in competitive markets where several providers offer services. End-users ~~and consumers of electronic communications services~~ should be able to easily compare the prices of various services offered on the market based on information published in an easily accessible form. In order to allow them to make price ~~⇒ and service ⇐~~ comparisons easily, national regulatory authorities should be able to require from undertakings providing electronic communications networks and/or ~~⇒ electronic communications ⇐ services ⇒ other than number independent interpersonal communications services ⇐~~ greater transparency as regards information (including tariffs, ~~⇒ quality of service, restrictions on terminal equipment supplied, ⇐ consumption patterns and other relevant statistics).~~ ~~⇒ Any such requirements should take due account of the characteristics of those networks or services. ⇐ ☒~~ They should also ~~☒ and to~~ ensure that third parties have the right to use, without charge, publicly available information published by such undertakings ~~⇒~~ , in view of providing comparison tools ~~⇐~~. ~~National regulatory authorities should also be able to make price guides available, in particular where the market has not provided them free of charge or at a reasonable price. Undertakings should not be entitled to any remuneration for the use of information where it has already been published and thus belongs in the public domain. In addition, end users and consumers should be adequately informed of the price and the type of service offered before they purchase a service, in particular if a freephone number is subject to additional charges. National regulatory authorities should be able to require that such information is provided generally, and, for certain categories of services determined by them, immediately prior to connecting the call, unless otherwise provided for by national law. When determining the categories of call requiring pricing information prior to connection, national regulatory authorities should take due account of the nature of the service, the pricing conditions which apply to it and whether it is offered by a provider who is not a provider of electronic communications services. Without prejudice to Directive 2000/31/EC (Directive on electronic commerce), undertakings should also, if required by Member States, provide subscribers with public interest information produced by the relevant public authorities regarding, inter alia, the most common infringements and their legal consequences.~~

- (238) End-users are often not aware of the cost of their consumption behaviour or have difficulties to estimate their time or data consumption when using electronic communications services. In order to increase transparency and to allow 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 may maintain provisions on consumption limits protecting end-users against “bill-shocks”.**
- (239) Independent comparison tools, such as websites, are an effective means for end-users to assess the merits of different providers of publicly available electronic communications services other than number independent interpersonal communications services, 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, which means that no service provider should be given favourable treatment in search results, and** should aim at providing information that is both clear and concise and complete and comprehensive. They should also aim at including the broadest possible range of offers, so as 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.

(240) Independent comparison tools should be operationally independent from providers of publicly available electronic communications services. They 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 on publicly available electronic communications services other than number-independent interpersonal communications services, 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 publicly available electronic communications services other than number-independent interpersonal communications services, generally update their tariff and quality information. 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.

(241) In order to address public interest issues with respect to the use of ~~publicly available~~ ~~electronic~~ ~~communications services~~ and to encourage protection of the rights and freedoms of others, the ~~relevant national~~ ~~competent~~ ~~authorities~~ should be able to produce and have disseminated, with the aid of providers, public interest information related to the use of such services. This could 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, which may for example arise 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 ~~Article 33(3) of~~ ~~this~~ ~~Directive 2002/22/EC (Universal Service Directive)~~. Such public interest information should be updated whenever necessary and should be presented in easily comprehensible ~~printed and electronic~~ formats, as determined by each Member State, and on national public authority websites. [National regulatory authorities] should be able to oblige providers to disseminate this standardised information to all their customers in a manner deemed appropriate by the national regulatory authorities. ~~When required by Member States, the information should also be included in contracts.~~ Dissemination of such information should however not impose an excessive burden on undertakings. Member States should require this dissemination by the means used by undertakings in communications with ~~subscribers~~ ~~end-users~~ made in the ordinary course of business.

- (242) In the absence of relevant rules of ~~Community~~ Union law, content, applications and services are deemed 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. ~~The Framework~~ This Directive and the and the ePrivacy Directive 2002/58/EC ~~Specific Directives~~ are without prejudice to 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)⁸, which, inter alia, contains a ‘mere conduit’ rule for intermediary service providers, as defined therein.
- (243) ~~End users should have access to publicly available information on communications services. Member States should be able to monitor the quality of services which are offered in their territories.~~ [National regulatory authorities] should be ~~able~~ empowered to monitor the quality of services ~~systematically~~ and to collect ~~systematically~~ information on the quality of services , including that related to the provision of services to disabled end-users. This information should be collected on the basis of criteria which allow comparability between service providers and between Member States. Undertakings providing 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] should nonetheless be able to require publication of such information where it is demonstrated that such information is not effectively available to the public. National regulatory 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 should take into utmost account.

⁸ OJ L 178, 17.7.2000, p. 1.

(244) 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~~ interests. It is essential to ensure that they ~~can~~ are able to do so without being hindered by legal, technical or practical obstacles, including contractual conditions, procedures, charges etc ~~and so on. This~~ That does not preclude ~~the imposition~~ undertakings ~~of~~ from setting reasonable minimum contractual periods ~~of~~ up to 24 months in consumer contracts. However, Member States should have the possibility to set a shorter maximum duration 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 connectivity 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.

~~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 user does not experience a loss of service lasting longer than one working day. Competent national authorities may prescribe the global process of the porting of numbers, taking into account national provisions on contracts and technological developments. Experience in certain Member States has shown that there is a risk of consumers 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 sanctions, as are necessary to minimise such risks, and to ensure that consumers are protected throughout the switching process without making the process less attractive for them.~~

- (245) Consumers should be able to terminate their contract without incurring any costs also in cases of automatic prolongation after the expiration of the ~~initial~~ contract term.
- (246) Any changes to the contractual conditions ~~imposed~~ **proposed** by providers of publicly available electronic communications services ~~other than number-independent interpersonal communications services~~, to the detriment of the end-user, for example in relation to charges, tariffs, data volume limitations, data speeds, coverage, or the processing of personal data should be considered as giving 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 strictly necessary to implement legislative or regulatory changes, such as new contract information requirements imposed by Union or national law. End-users should be notified of any changes to the contractual conditions in a durable medium. Such medium could be in particular paper, USB sticks, CD-ROMs, DVDs, memory cards or the hard disks of computers as well as e-mails.**
- (247) 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.
- (248) Number portability is a key facilitator of consumer choice and effective competition in a competitive ~~telecommunications environment~~ ⇨ electronic communications markets. ⇐ ~~such that~~ End-users who so request should be able to retain their number(s) on the public telephone network independently of the ~~organisation~~ ⊗ undertaking ⊗ providing 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 may apply provisions for porting numbers between networks providing services at a fixed location and mobile networks.

- (249) The impact of number portability is considerably strengthened when there is transparent tariff information, both for end-users who port their numbers and also 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.
- (250) When ensuring that pricing for interconnection related to the provision of number portability is cost-oriented, national regulatory authorities may also take account of prices available in comparable markets.
- (251) ~~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 interests. It is essential to ensure that they can do so without being hindered by legal, technical or practical obstacles, including contractual conditions, procedures, charges and so on. This does not preclude the imposition of reasonable minimum contractual periods in consumer contracts.~~ 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 user does not experience a loss of service lasting longer than one working day. ☒ **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. ☒ ~~Competent~~ [National ⇒ regulatory ⇐ authorities] may prescribe the global process of the porting of numbers, taking into account national provisions on contracts and technological developments. Experience in certain Member States has shown that there is a risk of consumers 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 sanctions, as are necessary to minimise such risks, and to ensure that consumers 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.**

(252) Bundles comprising **an internet access service or a number-based** publicly available ~~electronic communications services other than number-independent~~ interpersonal communications services, and other services such as linear broadcasting, or ~~devices~~ **terminal equipment** sold by the same provider in the same or a closely related contract, have become increasingly widespread and are an important element of competition. While they often bring about benefits for end-users, they can make switching more difficult or costly and raise risks of contractual "lock-in". Where divergent contractual rules on contract termination and switching apply to the different services, and to any contractual commitment regarding acquisition of products which form part of a bundle, consumers are effectively hampered in their rights under this Directive to switch to competitive offers for the entire bundle or parts of it. The provisions of this Directive regarding contracts, transparency, contract duration and termination and switching should, therefore, apply to all elements of a bundle, except to the extent that other rules applicable to the non-electronic communications elements of the bundle are more favourable to the consumer. 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. For the same reasons consumers should not be locked in with a provider by means of a contractual de facto extension of the initial contract period.

(253) Providers of ~~electronic~~ ⇒ number-based interpersonal ⇐ communications services ~~that allow calls~~ ⇒ 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. ⇐ ~~should ensure that their customers are adequately informed as to whether or not access to emergency services is provided and of any limitation on service (such as a limitation on the provision of caller location information or the routing of emergency calls)~~. Such providers should ~~also~~ provide their customers with clear and transparent information in the initial contract and ⇒ update it ⇐ in the event of any change in the ~~access~~ provision ⇒ of access to emergency services ⇐ , for example in ⊗ invoices ⊗ ~~billing information~~. This 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 ~~switched telephony network~~ ⇒ 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 ~~switched telephony network~~ ⇒ connection ⇐ , taking into account current technology and quality standards, as well as any quality of service parameters specified under ⊗ this ⊗ Directive ~~2002/22/EC~~ (Universal Service Directive).

(254) In line with the objectives of the Charter of Fundamental Rights of the European Union and the United Nations Convention on the Rights of Persons with Disabilities, the regulatory framework should ensure that all users, including disabled end-users, the elderly, and users with special social needs, have easy access to affordable high quality services. Declaration 22 annexed to the final Act of Amsterdam provides that the institutions of the ~~Community~~ ⊗ Union ⊗ shall take account of the needs of persons with a disability in drawing up measures under Article ~~95 of the Treaty~~ ⊗ 114 of the TFEU ⊗ .

(255) 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 means of communication, that include not only voice communications but also SMS, messaging, video or other types of communications, that are enabled in a Member State to access emergency services. Emergency communication can be triggered on behalf of a person by the eCall in-vehicle system as defined by Regulation 2015/758/EU of the European Parliament and of the Council⁹.

(256) Member States should ensure that undertakings providing end-users with number-based interpersonal communications services provide reliable and accurate access to emergency services, taking into account national specifications and criteria. 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 undertakings, namely undertakings which are not integrated with a public communications network provider, 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.

⁹ Regulation 2015/758/EU of the European Parliament and of the Council concerning type-approval requirements for the eCall in-vehicle system based on the 112 service and amending Directive 2007/46/EC(OJ L 123, 19.5.2015, p. 77)

~~It is important that users should be able to call the single European emergency number ‘112’, and any other national emergency telephone numbers, free of charge, from any telephone, including public pay telephones, without the use of any means of payment. Member States should have already made the necessary organisational arrangements best suited to the national organisation of the emergency systems, in order to ensure that calls to this number are adequately answered and handled. Caller location information, to be made available to the emergency services, will improve the level of protection and the security of users of ‘112’ services and assist the emergency services, to the extent technically feasible, in the discharge of their duties, provided that the transfer of calls and associated data to the emergency services concerned is guaranteed. The reception and use of such information should comply with relevant Community law on the processing of personal data. Steady information technology improvements will progressively support the simultaneous handling of several languages over the networks at a reasonable cost. This in turn will ensure additional safety for European citizens using the ‘112’ emergency call number~~

~~Easy access to international telephone services is vital for European citizens and European businesses. ‘00’ has already been established as the standard international telephone access code for the Community. Special arrangements for making calls between adjacent locations across borders between Member States may be established or continued. The ITU has assigned, in accordance with ITU Recommendation E.164, code ‘3883’ to the European Telephony Numbering Space (ETNS). In order to ensure connection of calls to the ETNS, undertakings operating public telephone networks should ensure that calls using ‘3883’ are directly or indirectly interconnected to ETNS serving networks specified in the relevant European Telecommunications Standards Institute (ETSI) standards. Such interconnection arrangements should be governed by the provisions of 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)¹⁰.~~

¹⁰ [See page 7 of this Official Journal.](#)

(257) Member States should take specific measures to ensure that emergency services, including '112', are equally accessible to disabled end-users, in particular deaf, hearing-impaired, speech-impaired and deaf-blind users. This could involve the provision of special terminal devices for hearing-impaired users, text relay services, or other specific equipment.

(258) ~~End users should be able to call and access the emergency services using any telephone service capable of originating voice calls through a number or numbers in national telephone numbering plans. Member States that use national emergency numbers besides '112' may impose on undertakings similar obligations for access to such national emergency numbers. Emergency authorities should be able to handle and answer calls to the number '112' at least as expeditiously and effectively as calls to national emergency numbers.~~ It is important to increase awareness of '112' in order to improve the level of protection and security of citizens travelling in the European Union. To this 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, ~~payphone kiosks, subscriber~~ ⇒ end-user ⇐ and billing material, that '112' can be used as a single emergency number throughout the ~~Community~~ ☒ 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 '112' and periodically to evaluate the public's awareness of it. ~~The obligation to provide caller location information should be strengthened so as to increase the protection of citizens. In particular, undertakings should make caller location information available to emergency services as soon as the call reaches that service independently of the technology used. In order to respond to technological developments, including those leading to increasingly accurate caller location information, the Commission should be empowered to adopt technical implementing measures to ensure effective access to '112' services in the Community for the benefit of citizens. Such measures should be without prejudice to the organisation of emergency services of Member States.~~

- (259) Caller location information 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 should comply with relevant Union law on the processing of personal data. 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 EGNOS 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 may become available only after the emergency communication is set up. Member States should ensure that the PSAPs are able to retrieve and manage the caller location information available. 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 Internet Protocol-based.
- (260) In order to respond to technological developments concerning accurate caller location information, equivalent access for disabled end-users and call routing to the most appropriate PSAP, the Commission should be empowered to adopt measures necessary to ensure the compatibility, interoperability, quality and continuity of emergency communications in the Union. Those measures may consist of functional provisions determining the role of various parties within the communications chain, for example interpersonal communications service providers, electronic communications 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.

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

(262) In addition to the affordability measures for disabled users set out in this Directive, Directive xxx/YYYY/EU of the European Parliament and of the Council on the approximation of the laws, regulations and administrative provisions of the Member States as regards the accessibility requirements for products and services sets out several compulsory requirements for the harmonisation of a number of accessibility features for disabled users of electronic communications services and related consumer terminal equipment. Therefore the corresponding obligation in this Directive that required Member States to encourage the availability of terminal equipment for disabled users has become obsolete and should be repealed.

(263) ☒ Effective competition has developed in the ☒ ~~The~~ provision of directory enquiry services and directories ☒ pursuant inter alia to Article 5 of Commission Directive 2002/77/EC¹¹ ☒. ~~is already open to competition. The provisions of this Directive complement the provisions of Directive 97/66/EC by giving subscribers a right to have their personal data included in a printed or electronic directory~~ ☒ In order to maintain this effective competition, ☒ ~~a~~All service providers which assign telephone numbers to their ~~subscribers are~~ ☒ end-users should continue to be ☒ obliged to make relevant information available in a fair, cost-oriented and non-discriminatory manner.

(264) End-users should be informed about their right to determine whether or not 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.

(265) End-users should be able to enjoy a guarantee of interoperability in respect of all equipment sold in the ~~Community~~ ☒ Union ☒ for the reception 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 the light of technological and market developments.

¹¹ 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).

(266) It is desirable to enable consumers to achieve the fullest connectivity possible to digital television sets. Interoperability is an evolving concept in dynamic markets. Standards 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, application program interface (API) information and copy protection information. This Directive ☒ should ☒ therefore ensure that the functionality ⇒ associated to and/or implemented in connectors ⇐ ~~of the open interface for digital television sets~~ 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 ~~digital interactive~~ ⇒ 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 may take policy initiatives, consistent with the Treaty, to encourage this development.

(267) ~~Directory enquiry services should be, and frequently are, provided under competitive market conditions, pursuant to Article 5 of Commission Directive 2002/77/EC of 16 September 2002 on competition in the markets for electronic communications networks and services¹².~~ Wholesale measures ensuring the inclusion of end-user data (both fixed and mobile) in databases should comply with the safeguards for the protection of personal data ~~☒~~ under Directive 95/46/EC which will be replaced by Regulation (EU) 2016/697¹³ on 25 May 2018, and ~~☒~~ including Article 12 of Directive 2002/58/EC (Directive on privacy and electronic communications). 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 benefit fully from competition, ~~with the ultimate aim of ☒~~ which has largely allowed ~~☒~~ enabling the removal of retail regulation from these services and the provision of offers of directory services under reasonable and transparent conditions.

(268) 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 not necessary any more. 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.

¹² ~~OJ L 249, 17.9.2002, p. 21~~

¹³ 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

~~(269) Currently, Member States impose certain ‘must carry’ obligations on networks for the distribution of radio or television broadcasts to the public. Member States should be able to lay down proportionate 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 conformity with Community ~~and~~ Union ~~and~~ law and should be proportionate ~~and~~ ~~and~~ transparent ~~and subject to periodical review~~. ‘Must carry’ ~~and~~ obligations may be applied to specified radio and television broadcast channels and complementary services supplied by a specified media service provider. ~~and~~ Obligations imposed by Member States should be reasonable, that is they should be proportionate and transparent in the light of clearly defined general interest objectives. ~~and~~ Member States should provide an objective justification for the ‘must carry’ obligations that they impose in their national law so as 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. 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. ~~and~~ ~~and~~ Obligations ~~and~~ could, where appropriate, entail a provision for proportionate remuneration. ~~Such ‘must carry’ obligations may include the transmission of services specifically designed to enable appropriate access by disabled users.~~~~

(270) Networks used for the distribution of radio or television broadcasts to the public include cable, ~~and~~ IPTV, ~~and~~ 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. ~~and~~ Must carry obligations can include the transmission of services specifically designed to enable appropriate access by disabled users. Accordingly complementary services include, amongst others, services designed to improve accessibility for end-users with disabilities, such as videotext, subtitling, audio description and sign language. Because of the growing provision and reception of connected TV services and the continued importance of electronic programme guides for user choice the transmission of programme-related data supporting those functionalities can be included in must carry obligations. ~~and~~

- (271) ~~Tone dialling and e~~Calling line identification facilities are normally available on modern telephone exchanges and can therefore increasingly be provided at little or no expense. ~~Tone dialling is increasingly being used for user interaction with special services and facilities, including value added services, and the absence of this facility can prevent the user from making use of these services.~~ Member States are not required to impose obligations to provide these facilities when they are already available. Directive ~~97/66/EC~~ 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 these services on a pan-European basis would benefit consumers and is encouraged by this Directive.
- (275) In order to take account of market, social and technological developments, 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 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of specifying measures to address security risks; adapting conditions for access to digital television and radio services; setting a single wholesale voice call termination rate in fixed and mobile markets ; adopting measures related to emergency communications in the Union; and adapting annexes II, IV, V, VI, VIII, IX and X of 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 on Better Law-Making of 13 April 2016. 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.

(278a) Future technological and market developments, in particular an increased use of number-independent communications services, might jeopardise the achievement of the objectives of this Directive. BEREC should therefore monitor those developments and regularly publish a report including an assessment of whether or not the provisions of this directive relating to end users should be amended in order to ensure that the objectives set out in this Directive continue to be met The Commission, taking utmost account of that report, should submit a legislative proposal to amend Title III where this would be necessary in order to ensure that the objectives of this Directive continue to be met.

ARTICLES

Article 2

Definitions

For the purposes of this Directive:

(1~~a~~) '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 terrestrial 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 an electronic communications network which either consists wholly of optical fibre elements at least up to the distribution point at the serving location or which is capable of delivering under usual peak-time conditions similar network performance in terms of available down- 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~~b~~) 'transnational markets' means markets identified in accordance with Article ~~15(4)~~63 covering the ~~Community~~ 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~~ via electronic communications networks, ~~which consists~~ which encompasses 'internet access service' as defined in Article 2(2) of Regulation (EU) 2015/2120; and/or 'interpersonal communications service'; and/or services consisting wholly or mainly in the conveyance of signals ~~on electronic communications networks, including telecommunications services and~~ such as ~~transmission services in networks used for~~ the provision of machine-to-machine services and for broadcasting, but ~~exclude~~ excludes services providing, or exercising editorial control over, content transmitted using electronic communications networks and services; ~~it does not include information society services, as defined in Article 1 of Directive 98/34/EC, which do not consist wholly or mainly in the conveyance of signals on electronic communications networks;~~

(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); it does not include services which enable interpersonal and interactive communication merely as an ~~minor~~ ancillary feature that is intrinsically linked to another service;

(6) 'number-based interpersonal communications service' means an interpersonal communications service which **uses or** connects with ~~the public switched telephone network, either by means of~~ **publicly** assigned numbering resources, i.e. a number or numbers in national or international ~~telephone~~ numbering plans, or by enabling communication with a number or numbers in national or international ~~telephone~~ numbering plans;

(7) 'number-independent interpersonal communications service' means an interpersonal communications service which does not **use or** connect with ~~the public switched telephone network, either by means of~~ **publicly** assigned numbering resources, i.e. a number or numbers in national or international ~~telephone~~ numbering plans, or by enabling communication with a number or numbers in national or international ~~telephone~~ numbering plans;

(~~e~~8) 'public communications network' means an electronic communications network used wholly or mainly for the provision of electronic communications services available to the public which support the transfer of information between network termination points;

(~~e~~9) 'network termination point (~~NTP~~)' ☒ or 'NTP' ☒ means the physical point at which ~~a subscriber~~ ⇒ an end-user ⇐ is provided with access to a public communications network; in the case of networks involving switching or routing, the NTP is identified by means of a specific network address, which may be linked to ~~a subscriber~~ ⇒ an end-user's ⇐ number or name.

(~~e~~10) 'associated facilities' means those associated services, physical infrastructures and other facilities or elements associated with an electronic communications network and/or an electronic communications service which enable and/or support the provision of services via that network and/or service or have the potential to do so, and include, inter alia, buildings or entries to buildings, building wiring, antennae, towers and other supporting constructions, ducts, conduits, masts, manholes, and cabinets;

(~~e~~11) 'associated services' means those services associated with an electronic communications network and/or an electronic communications service which enable and/or support the provision of services , ⇒ self-provision or automated-provision ⇐ via that network and/or service or have the potential to do so and include, inter alia, number translation or systems offering equivalent functionality, conditional access systems and electronic programme guides, ⇒ voice command, multi-language or language translation ⇐ as well as other services such as identity, location and presence service;

(~~f~~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 other form of prior individual authorisation;

~~(g) 'national regulatory authority' means the body or bodies charged by a Member State with any of the regulatory tasks assigned in this Directive and the Specific Directives;~~

~~(n13)~~ ‘user’ means a legal entity or natural person using or requesting a publicly available electronic communications service;

~~(n14)~~ ‘end-user’ means a user not providing public communications networks or publicly available electronic communications services.

~~(n15)~~ ‘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;

~~(j) ‘universal service’ means the minimum set of services, defined in Directive 2002/22/EC (Universal Service Directive), of specified quality which is available to all users regardless of their geographical location and, in the light of specific national conditions, at an affordable price;~~

~~(k) ‘subscriber’ means any natural person or legal entity who or which is party to a contract with the provider of publicly available electronic communications services for the supply of such services;~~

~~(l) ‘Specific Directives’ means Directive 2002/20/EC (Authorisation Directive), Directive 2002/19/EC (Access Directive), Directive 2002/22/EC (Universal Service Directive) and 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)¹⁴;~~

~~(n16)~~ ‘provision of an electronic communications network’ means the establishment, operation, control or making available of such a network;

~~(e17)~~ ‘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;

¹⁴ ~~OJ L 201, 31.7.2002, p. 37.~~

(p18) ‘application program interface (API)’ means the software interfaces between applications, made available by broadcasters or service providers, and the resources in the enhanced digital television equipment for digital television and radio services;

(~~e~~19) ‘spectrum allocation’ means the designation of a given frequency band for use by one or more types of radio communications services, where appropriate, under specified conditions;

(~~e~~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, ~~Community~~ Union or national regulations;

(~~e~~21) ‘call’ means a connection established by means of a publicly available ~~electronic~~ interpersonal communications service allowing two-way voice communication;u

(22) ‘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.

~~2. The following definition shall also apply:~~

(23) ‘general authorisation’ means a legal framework established by the 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.

(24) ‘small-area wireless access point’ means a low power wireless network access equipment of small size operating within a small range, using licenced radio spectrum or licence-exempt radio spectrum or a combination thereof, which may or may not be part of a public terrestrial mobile communications network, and be equipped with one or more low visual impact antennae, which allows wireless access by users to electronic communications networks regardless of the underlying network topology be it mobile or fixed;

(25) 'radio local area network' (RLAN) means a low power wireless access system, operating within a small range, with a low risk of interference to other such systems deployed in close proximity by other users, using on a non-exclusive basis, radio spectrum for which the conditions of availability and efficient use for this purpose are harmonised at Union level;

(26) 'shared use of radio spectrum' means access by two or more users to use the same frequencies under a defined sharing arrangement, authorised by a national regulatory authority on the basis of a general authorisation, individual rights of use or a combination thereof, including regulatory approaches such as licenced shared access aiming to facilitate the shared use of a frequency band, subject to a binding agreement of all parties involved, in accordance with sharing rules as included in their rights of use so as to guarantee to all users predictable and reliable sharing arrangements, and without prejudice to the application of competition law;

(27) 'harmonised radio spectrum' means radio spectrum for whose availability and efficient use harmonised conditions have been established by way of a technical implementing measure in line with Article 4 of Decision No 676/2002/EC (Radio Spectrum Decision).

(28) 'access' means the making available of facilities and/or services to another undertaking, under defined conditions, on either an exclusive or 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, \Rightarrow including software emulated networks, \Leftarrow in particular for roaming; access to conditional access systems for digital television services and access to virtual network services;

(b29) ‘interconnection’ means the physical and logical linking of public 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. Services may be provided by the parties involved or other parties who have access to the network. Interconnection is a specific type of access implemented between public network operators;

(e30) ‘operator’ means an undertaking providing or authorised to provide a public communications network or an associated facility;

~~(d) ‘wide screen television service’ means a television service that consists wholly or partially of programmes produced and edited to be displayed in a full height wide screen format. The 16:9 format is the reference format for wide screen television services;~~

(e31) ‘local loop’ means the physical \boxtimes path used by electronic communications signals \boxtimes circuit connecting the network termination point to a distribution frame or equivalent facility in the fixed public electronic communications network.

~~(a) ‘public pay telephone’ means a telephone available to the general public, for the use of which the means of payment may include coins and/or credit/debit cards and/or pre-payment cards, including cards for use with dialling codes;~~

(e32) ~~‘publicly available telephone service~~ \Rightarrow voice communications’ \Leftarrow means a service made available to the public for originating and receiving, directly or indirectly, national or national and international calls through a number or numbers in a national or international telephone numbering plan;

(e33) ‘geographic number’ means a number from the national telephone numbering plan where part of its digit structure contains geographic significance used for routing calls to the physical location of the network termination point (NTP);

(e34) ‘non-geographic number’ means a number from the national telephone numbering plan that is not a geographic number. It includes, *inter alia*, \boxtimes such as \boxtimes mobile, freephone and premium-rate numbers; ;

(35) ‘public safety answering point’ (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;

(36) ‘most appropriate PSAP’ means a PSAP defined beforehand by responsible authorities to cover emergency communications from a certain area or for emergency communications of a certain type;

(37) ‘emergency communication’: 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;

(38) ‘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 legislation.

TITLE V: SECURITY ~~AND INTEGRITY~~

Article ~~13~~40

Security ~~and integrity~~ ☒ of networks and services ☒

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

2. Member States shall ensure that undertakings providing public communications networks take all appropriate steps to guarantee the integrity of their networks, and thus ensure the continuity of supply of services provided over those networks.

32. Member States shall ensure that ~~undertakings providing~~ **providers of** public communications networks or **of** publicly available electronic communications services notify \Rightarrow without undue delay \Leftarrow the competent ~~national regulatory~~ authority of a ~~breach of security~~ **incident** ~~or loss of integrity~~ 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, the following parameters shall, in particular, be taken into account:

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

The obligation to notify an incident shall only apply where the provider of publicly available electronic communications services has access to the information needed to assess the impact of an incident against the parameters referred to in the second subparagraph.

Where appropriate, the ~~national regulatory~~ \Rightarrow competent \Leftarrow authority concerned shall inform the ~~national regulatory~~ \Rightarrow competent \Leftarrow authorities in other Member States and the European Network and Information Security Agency (ENISA). The ~~national regulatory~~ \Rightarrow competent \Leftarrow authority concerned may inform the public or require the ~~undertakings~~ **providers** to do so, where it determines that disclosure of the ~~breach incident~~ is in the public interest.

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

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

~~4. The Commission, taking the utmost account of the opinion of ENISA, may adopt appropriate technical implementing measures with a view to harmonising the measures referred to in paragraphs 1, 2, and 3, including measures defining the circumstances, format and procedures applicable to notification requirements. These technical implementing measures 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 paragraphs 1 and 2.~~

~~These implementing measures, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 22(3).~~

4. This Article is without prejudice to Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data and Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector.

5. The Commission, **taking utmost account of the opinion of ENISA**, ~~shall~~ **may be empowered to adopt delegated acts in accordance with Article 109 with a view to specifying decisions detailing the technical and organisational measures referred to in paragraphs 1 and 2, including measures defining as well as the circumstances, format and procedures applicable to notification requirements pursuant to paragraph 3. The delegated Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 110(4). 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 paragraphs 1 and 2.**

Implementation and enforcement

1. Member States shall ensure that in order to implement Article ~~13a~~40, the competent ~~national regulatory~~ authorities have the power to issue binding instructions, including those regarding the measures required to remedy a breach **security incident or prevent one from occurring when a significant threat has been identified** and time-limits for implementation, to ~~undertakings providing~~ **providers of** public communications networks or publicly available electronic communications services.
2. Member States shall ensure that competent ~~national regulatory~~ authorities have the power to require ~~undertakings providing~~ **providers of** public communications networks or publicly available electronic communications services to:
 - (a) provide information needed to assess the security ~~and/or integrity~~ of their services and networks, including documented security policies; and
 - (b) submit to a security audit carried out by a qualified independent body or a competent ~~national~~ authority and make the results thereof available to the ~~national regulatory~~ competent authority. The cost of the audit shall be paid by the ~~undertaking~~ **provider**.
3. Member States shall ensure that ~~national regulatory~~ the competent authorities have all the powers necessary to investigate cases of non-compliance and the effects thereof on the security ~~and integrity~~ 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 **their** Computer Security Incident Response Teams ('CSIRTs') under Article 9 of Directive (EU) 2016/1148/EU in relation to issues falling within the tasks of the CSIRTs pursuant to Annex I, point 2 of that Directive.
5. The competent authorities shall, whenever appropriate and in accordance with national law, consult and cooperate with the relevant national law enforcement authorities, the competent authorities as defined in Article 8 (1) of Directive (EU) 2016/1148 and the national data protection authorities.

~~4. These provisions shall be without prejudice to Article 3 of this Directive.~~

~~Article 13~~

~~Fees for rights of use and rights to install facilities~~

~~Member States may allow the relevant authority to impose fees for the rights of use for radio frequencies or numbers or rights to install facilities on, over or under public or private property which reflect the need to ensure the optimal use of these resources. Member States shall ensure that such fees shall be objectively justified, transparent, non-discriminatory and proportionate in relation to their intended purpose and shall take into account the objectives in Article 8 of Directive 2002/21/EC (Framework Directive).~~

PART III. SERVICES

TITLE I: UNIVERSAL SERVICE OBLIGATIONS

Article 79

Affordable universal service

1. Member States shall ensure that all end-users in their territory have access at an affordable price, in the light of specific national conditions, to available functional internet access and voice communications services at the quality specified in their territory, including the underlying connection, at least at a fixed location.
2. Member States shall, **in the light of national conditions**, define the functional internet access service referred to in paragraph 1 with a view to adequately reflect services used by the majority of end-users in their territory. To that end, the functional internet access service shall **at least** be capable of supporting the minimum set of services set out in Annex V.
3. When an end-user so requests, the connection referred to in paragraph 1 may be limited to support voice communications only.

Provision of affordable universal service

1. National regulatory authorities shall monitor the evolution and level of retail tariffs of services identified in Article 79(1) available on the market, in particular in relation to national prices and national end-user income.

2. Where Member States establish that, in the light of national conditions, retail prices for services identified in Article 79(1) are not affordable, because low-income or special social needs end-users are prevented from accessing such services, ***they may ensure that support is provided to those end-users in view of ensuring affordability of functional internet access and voice communications services at least at a fixed location*** or they may require undertakings which provide such services to offer to those end-users tariff options or packages different from those provided under normal commercial conditions. To that end, Member States may require such undertakings to apply common tariffs, including geographic averaging, throughout the territory. Member States shall ensure that end-users entitled to such tariff options or packages have a right to contract with an undertaking providing the services identified in Article 79(1) and that such undertaking provides them with an adequate period of availability of a number and avoid unwarranted disconnection of service.

3. Member States shall ensure that undertakings which provide tariff options or packages to low-income or special social needs end-users pursuant to paragraph 2, keep the national regulatory authorities informed of the details of such offers. National regulatory 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 may require that specific schemes be modified or withdrawn.

~~4. Member States may, in the light of national conditions, ensure that support is provided to low-income or special social needs end-users in view of ensuring affordability of functional internet access and voice communications services at least at a fixed location.~~

54. Member States shall ensure, in the light of national conditions, that support is provided as appropriate to end-users with disabilities, or that other specific measures are taken, in view of ensuring that related terminal equipment, specific equipment and specific services enhancing equivalent access are **available and** affordable.

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

~~Article 3~~

~~Availability of universal service~~

~~1. Member States shall ensure that the services set out in this Chapter are made available at the quality specified to all end users in their territory, independently of geographical location, and, in the light of specific national conditions, at an affordable price.~~

~~2. Member States shall determine the most efficient and appropriate approach for ensuring the implementation of universal service, whilst respecting the principles of objectivity, transparency, non-discrimination and proportionality. They 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.~~

~~Article 8~~

~~Designation of undertakings~~

~~1. Member States may designate one or more undertakings to guarantee the provision of universal service as identified in Articles 4, 5, 6 and 7 and, where applicable, Article 9(2) so that the whole of the national territory can be covered. Member States may designate different undertakings or sets of undertakings to provide different elements of universal service and/or to cover different parts of the national territory.~~

~~2. When Member States designate undertakings in part or all of the national territory as having universal service obligations, they shall do so using 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 universal service is provided in a cost-effective manner and may be used as a means of determining the net cost of the universal service obligation in accordance with Article 12.~~

~~3. When an undertaking designated in accordance with paragraph 1 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 in advance the national regulatory authority in a timely manner, in order to allow that authority to assess the effect of the intended transaction on the provision of access at a fixed location and of telephone services pursuant to Article 4. The national regulatory authority may impose, amend or withdraw specific obligations in accordance with Article 6(2) of Directive 2002/20/EC (Authorisation Directive).~~

Article 81

Availability of universal service

1. Where a Member State has **duly demonstrated established, account taken of taking into account** the results of the geographical survey, **where available**, conducted in accordance with Article 22(1), that the availability at a fixed location of functional internet access service as defined in accordance with Article 79(2) and of voice communications service 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 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 functional internet access service as defined in accordance with Article 79(2) and of voice communications service, whilst respecting the principles of objectivity, transparency, non-discrimination and proportionality. They 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 the availability at a fixed location of functional internet access service as defined in accordance with Article 79(2) and of voice communications service, they may designate one or more undertakings to guarantee the availability at a fixed location of functional internet access service as identified in accordance with Article 79(2) and of voice communications service in order to cover all the national territory. Member States may designate different undertakings or sets of undertakings to provide functional internet access and voice communications services at a fixed location and/or to cover different parts of the national territory.

4. When Member States designate undertakings in part or all of the national territory as undertakings having the obligation to ensure the availability at a fixed location of functional internet access service as defined in accordance with Article 79(2) and of voice communications service, they shall do so using 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 functional internet access 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 obligation in accordance with Article 84.

5. When an undertaking designated in accordance with paragraph 3 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 in advance the national regulatory authority 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 functional internet access service as defined in accordance with Article 79(2) and of voice communications service. The national regulatory authority may impose, amend or withdraw specific obligations in accordance with Article 13(2).

~~Article 4~~

~~Provision of access at a fixed location and provision of telephone services~~

~~1. Member States shall ensure that all reasonable requests for connection at a fixed location to a public communications network are met by at least one undertaking.~~

~~2. The connection provided shall be capable of supporting voice, facsimile and data communications at data rates that are sufficient to permit functional Internet access, taking into account prevailing technologies used by the majority of subscribers and technological feasibility.~~

~~3. Member States shall ensure that all reasonable requests for the provision of a publicly available telephone service over the network connection referred to in paragraph 1 that allows for originating and receiving national and international calls are met by at least one undertaking.~~

~~Article 5~~

~~Directory enquiry services and directories~~

~~1. Member States shall ensure that:~~

~~(a) at least one comprehensive directory is available to end users in a form approved by the relevant authority, whether printed or electronic, or both, and is updated on a regular basis, and at least once a year;~~

~~(b) at least one comprehensive telephone directory enquiry service is available to all end users, including users of public pay telephones.~~

~~2. The directories referred to in paragraph 1 shall comprise, subject to the provisions of Article 12 of 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)¹⁵, all subscribers of publicly available telephone services.~~

~~3. Member States shall ensure that the undertaking(s) providing the services referred to in paragraph 1 apply the principle of non-discrimination to the treatment of information that has been provided to them by other undertakings.~~

¹⁵ ~~OJL 201, 31.7.2002, p. 37.~~

~~Article 6~~

~~Public pay telephones and other public voice telephony access points~~

~~1. Member States shall ensure that national regulatory authorities may impose obligations on undertakings in order to ensure that public pay telephones or other public voice telephony access points are provided to meet the reasonable needs of end-users in terms of the geographical coverage, the number of telephones or other access points, accessibility to disabled end-users and the quality of services.~~

~~2. A Member State shall ensure that its national regulatory authority can decide not to impose obligations under paragraph 1 in all or part of its territory, if it is satisfied that these facilities or comparable services are widely available, on the basis of a consultation of interested parties as referred to in Article 33.~~

~~3. Member States shall ensure that it is possible to make emergency calls from public pay telephones using the single European emergency call number '112' and other national emergency numbers, all free of charge and without having to use any means of payment.~~

~~Article 7~~

~~Measures for disabled end-users~~

~~1. Unless requirements have been specified under Chapter IV which achieve the equivalent effect, Member States shall take specific measures to ensure that access to, and affordability of, the services identified in Article 4(3) and Article 5 for disabled end-users is equivalent to the level enjoyed by other end-users. Member States may oblige national regulatory authorities to assess the general need and the specific requirements, including the extent and concrete form of such specific measures for disabled end-users.~~

~~2. Member States may take specific measures, in the light of national conditions, to ensure that disabled end-users can also take advantage of the choice of undertakings and service providers available to the majority of end-users.~~

~~3. In taking the measures referred to in paragraphs 1 and 2, Member States shall encourage compliance with the relevant standards or specifications published in accordance with Articles 17 and 18 of Directive 2002/21/EC (Framework Directive).~~

~~Article 9~~

~~Affordability of tariffs~~

~~1. National regulatory authorities shall monitor the evolution and level of retail tariffs of the services identified in Articles 4 to 7 as falling under the universal service obligations and either provided by designated undertakings or available on the market, if no undertakings are designated in relation to those services, in particular in relation to national consumer prices and income.~~

~~2. Member States may, in the light of national conditions, require that designated undertakings provide to consumers tariff options or packages which depart from those provided under normal commercial conditions, in particular to ensure that those on low incomes or with special social needs are not prevented from accessing the network referred to in Article 4(1) or from using the services identified in Article 4(3) and Articles 5, 6 and 7 as falling under the universal service obligations and provided by designated undertakings.~~

~~3. Member States may, besides any provision for designated undertakings to provide special tariff options or to comply with price caps or geographical averaging or other similar schemes, ensure that support is provided to consumers identified as having low incomes or special social needs.~~

~~4. Member States may require undertakings with obligations under Articles 4, 5, 6 and 7 to apply common tariffs, including geographical averaging, throughout the territory, in the light of national conditions or to comply with price caps.~~

~~5. National regulatory authorities shall ensure that, where a designated undertaking has an obligation to provide special tariff options, common tariffs, including geographical averaging, or to comply with price caps, the conditions are fully transparent and are published and applied in accordance with the principle of non-discrimination. National regulatory authorities may require that specific schemes be modified or withdrawn.~~

Article 11

Quality of service of designated undertakings

~~1. National regulatory authorities shall ensure that all designated undertakings with obligations under Articles 4, 5, 6, 7 and 9(2) publish adequate and up-to-date information concerning their performance in the provision of universal service, based on the quality of service parameters, definitions and measurement methods set out in Annex III. The published information shall also be supplied to the national regulatory authority.~~

~~2. National regulatory authorities may specify, *inter alia*, additional quality of service standards, where relevant parameters have been developed, to assess the performance of undertakings in the provision of services to disabled end-users and disabled consumers. National regulatory authorities shall ensure that information concerning the performance of undertakings in relation to these parameters is also published and made available to the national regulatory authority.~~

~~3. National regulatory authorities may, in addition, specify the content, form and manner of information to be published, in order to ensure that end-users and consumers have access to comprehensive, comparable and user-friendly information.~~

~~4. National regulatory authorities shall be able to set performance targets for undertakings with universal service obligations. In so doing, national regulatory authorities shall take account of views of interested parties, in particular as referred to in Article 33.~~

~~5. Member States shall ensure that national regulatory authorities are able to monitor compliance with these performance targets by designated undertakings.~~

~~6. Persistent failure by an undertaking to meet performance targets may result in specific measures being taken in accordance with 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)¹⁶. National regulatory authorities shall be able to order independent audits or similar reviews of the performance data, paid for by the undertaking concerned, in order to ensure the accuracy and comparability of the data made available by undertakings with universal service obligations.~~

Article 82

Status of existing universal services

Member States may continue to ensure the availability or affordability of other services than functional internet access service as defined in accordance with Article 79(2) and voice communications service at a fixed location that were in force prior to [set date], if the need for such services is ~~duly demonstrated~~ **established** in the light of national circumstances. When Member States designate undertakings in part or all of the national territory for the provision of those services, Article 81 shall apply. Financing of these obligations shall comply with Article 85.

Member States shall review the obligations imposed pursuant to this Article at the latest 3 years after the entry into force of this Directive and thereafter once every ~~year~~ **3 years**.

Article ~~1083~~

Control of expenditure

1. Member States shall ensure that ~~designated undertakings~~, in providing facilities and services additional to those referred to in ~~Articles 4, 5, 6, 7 and 9(2)~~ Article 79 , those ~~undertakings providing~~ **providers of** the services in accordance with Article 79, ~~81 and to 82~~ establish terms and conditions in such a way that the ~~subscriber~~ end-user is not obliged to pay for facilities or services which are not necessary or not required for the service requested.

¹⁶ ~~See page 21 of this Official Journal.~~

2. Member States shall ensure that ~~designated~~ ~~those~~ ~~undertakings with obligations under~~ ~~Articles 4, 5, 6, 7 and 9(2)~~ ~~providing~~ **providers of the functional internet access and/or** voice communications services referred to in Article 79 and ~~implemented~~ **providing services** pursuant to Article 80 ~~provide~~ **offer** the specific facilities and services set out in Annex VI, Part A, **as applicable**, in order that ~~subscribers~~ ~~end-users~~ can monitor and control expenditure and ~~put~~ ~~in place a system to~~ ~~avoid unwarranted disconnection of~~ ~~voice communications~~ **service or of functional internet access** ~~service~~ ~~for the end-users who are entitled thereto, including an~~ ~~appropriate mechanism to check continued interest in using the service~~.

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

Article ~~12~~ 84

Costing of universal service obligations

1. Where national regulatory authorities consider that the provision of ~~universal service~~ ~~functional internet access service as defined in accordance with Article 79(2) and of voice~~ ~~communications service;~~ ~~as set out in Articles~~ ~~79, 80 and 81 or the continuation of existing~~ ~~universal services as set out in Article 82~~ ~~3 to 10~~ may represent an unfair burden on ~~undertakings designated to provide universal service;~~ ~~providing providers of such services and~~ ~~requesting for compensation~~, they shall calculate the net costs of its provision.

For that purpose, national regulatory authorities shall:

- (a) calculate the net cost of the universal service obligation, taking into account any market benefit which accrues to an undertaking ~~providing functional internet access service as defined in accordance with Article 79(2) and voice communications service; as set out in~~ ~~Articles 79, 80 and 81 or the continuation of existing universal services as set out in Article~~ ~~82~~ ~~designated to provide universal service~~, in accordance with Annex IVII, ~~Part A~~; or

(b) make use of the net costs of providing universal service identified by a designation mechanism in accordance with Article ~~8(2)~~ 81(3), 81(4) and 81(5).

2. The accounts and/or other information serving as the basis for the calculation of the net cost of universal service obligations under paragraph 1(a) 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 ~~13~~85

Financing of universal service obligations

1. Where, on the basis of the net cost calculation referred to in Article ~~84~~84, national regulatory authorities find that an undertaking is subject to an unfair burden, Member States shall, upon request from the a designated undertaking concerned , decide:

(a) to introduce a mechanism to compensate that undertaking for the determined net costs under transparent conditions from public funds; *and/or* ~~⇒ Only the net cost, as determined in accordance with Article 84, of the obligations laid down in Articles 79, 81 and 82 may be financed. ⇐~~

(b) to share the net cost of universal service obligations between providers of electronic communications networks and services.

2. Where the net cost is shared under second sub-paragraph of paragraph 1(b), 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 ~~12~~ 84, of the obligations laid down in Articles ~~3 to 10~~ 79 to 82 may be financed.

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

4. 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 or collected from undertakings that are not providing services in the territory of the Member State that has established the sharing mechanism.

Article ~~14~~86

Transparency

1. Where ~~a mechanism for sharing~~ **a mechanism for sharing** the net cost of universal service obligations **as referred to in Article 85 is established**, ~~as referred to~~ ~~is to be calculated~~ ~~in accordance with~~ ~~Article 13 85~~ ~~is established~~, national regulatory authorities shall ensure that the principles for **cost sharing** ~~cost sharing~~ ~~net cost calculation~~, including **and** the ~~and~~ details of **the mechanism used** ~~the mechanism~~ ~~methodology~~ **methodology** to be ~~used~~ **to compensate the net cost** are publicly available.

2. Subject to ~~Community~~ ~~Union~~ and national rules on business confidentiality, national regulatory authorities shall ensure that an annual report is published ~~giving~~ ~~the~~ details of ~~the~~ calculated cost of universal service obligations, **identifying the contributions made by all the undertakings involved**, ~~identifying the contributions made by all the undertakings involved, and identifying~~ including ~~any~~ market benefits that may have accrued to the undertaking(s) ~~designated~~ ~~pursuant~~ ~~to provide universal service, where a fund is actually~~ obligations laid down ~~in~~ ~~Articles 79, 81 and to 82~~ ~~place and working~~.

Article ~~32~~86a

Additional mandatory services

Member States may decide to make additional services, apart from services within the universal service obligations as defined in Chapter II Articles 79-82, publicly available in its own territory but, in such circumstances, no compensation mechanism involving specific undertakings may be imposed.

~~CHAPTER V~~

~~GENERAL AND FINAL PROVISIONS~~

~~☒ TITLE II: NUMBERS NUMBERING RESOURCES ☒~~

Article ~~4087~~

Numbering resources

1. Member States shall ensure that [national regulatory authorities] control the granting of rights of use ~~of~~ ☒ for ☒ all national numbering resources and the management of the national numbering plans. ~~Member States shall ensure~~ ☒ and ☒ that ☒ they provide ☒ adequate numbers and numbering ranges ~~are provided~~ **numbering resources** for **the provision of** all publicly available electronic communications services. [National regulatory authorities] shall establish objective, transparent and non-discriminatory procedures for granting rights of use for national numbering resources.

2. [National regulatory authorities] may **also** grant rights of use for ~~numbers~~ **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 ~~those undertakings demonstrate their ability to manage those numbers and sufficient and 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 comply with any relevant requirements set out pursuant to Article 88.** [National regulatory authorities] may suspend the **further** granting of ~~numbering resources~~ **rights of use for numbering resources** to such undertakings if it is demonstrated that there is a risk of exhaustion of numbering resources. By [entry into force plus 18 months] 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 the risk of exhaustion of numbering resources.

23. [National regulatory 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 \Rightarrow and ~~other~~ **the** undertakings ~~if they are~~ eligible in accordance with paragraph 2 \Leftarrow . In particular, Member States shall ensure that an undertaking to which the right of use for ~~a range of numbers~~ **numbering resources** has been granted does not discriminate against other providers of electronic communications services as regards the ~~number sequences~~ **numbering resources** used to give access to their services.

4. Each Member State shall ~~determine~~ **ensure that [national regulatory authorities] make available** a range of its non-geographic ~~numbering resources~~ **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 implementing acts based thereon~~, and Article 91 (2) of this Directive. Where rights of use for ~~numbers~~ **numbering resources** have been granted in accordance with paragraph 2 to undertakings other than providers of electronic communications networks or services, this paragraph shall apply to the specific services **for whose provision the rights of use have been granted** ~~provided by those undertakings~~. [National regulatory authorities] shall ensure that the conditions, **attached in accordance with Part E of Annex I**, for the right of use for ~~numbers~~ **numbering resources** used for the provision of services outside the Member State of the country code, and their enforcement, are ~~not~~ **neither less stringent nor more stringent** than the conditions and enforcement applicable to services provided within the Member State of the country code, **in accordance with this Directive**. [National regulatory authorities] shall also ensure **in accordance with Article 88(6)** that providers using ~~numbers~~ **numbering resources** of their country code in other Member States comply with consumer protection and other national rules related to the use of ~~numbers~~ **numbering resources** applicable in those Member States where the ~~numbers~~ **numbering resources** are used. This obligation is without prejudice to the enforcement powers of the competent authorities of those Member States.

~~BEREC shall assist a~~ [National regulatory authorities] **may request [BEREC's] assistance** in coordinating their activities to ensure an efficient management of numbering resources ~~and with a right of~~ extraterritorial use **within the Union** ~~in compliance with the regulatory framework~~.

In order to facilitate the monitoring by the [national regulatory authorities] of compliance with the requirements of this paragraph, [BEREC] shall establish a ~~central registry~~ **database** on the **numbering resources** with a right of extraterritorial use **within the Union**. **For this purpose**, ~~to which~~ national regulatory authorities shall transmit the relevant information **to [BEREC]**.

5. Member States shall ensure that the '00' code is the standard international access code. Special arrangements for ~~making calls~~ **the use of number-based interpersonal communications services** between locations adjacent to one another across borders between Member States may be established or continued. ~~End users in the locations concerned shall be fully informed of such arrangements.~~

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

End-users in the locations concerned shall be fully informed of such arrangements or agreements.

6. **Without prejudice to Article 99**, Member States shall promote ~~the over—the-air provisioning of numbering resources,~~ where technically feasible - to facilitate **change switching** of providers of electronic communications networks or services by end-users other than consumers, in particular providers and users of machine-to-machine services..

~~37.~~ 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.

~~48.~~ Member States shall support the harmonisation of specific numbers or numbering ranges within the ~~Community~~ Union where it promotes both the functioning of the internal market and the development of pan-European services. ~~The Commission~~ shall continue to monitor market developments and participate in international organisations and fora where numbering decisions are taken. ~~Where the Commission considers it justified and appropriate, it shall~~ may take appropriate technical implementing measures in the interest of the Single Market, **Where necessary to address unmet cross-border or pan-European demand for numbers, the Commission shall, taking utmost account of the opinion of BEREC, adopt implementing acts harmonising specific numbers or numbering ranges** which would otherwise constitute an obstacle to trade between Member States ~~on this matter.~~

⇒ Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 110(4). ⇐ ~~These measures designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 22(3).~~

~~5. Where this is appropriate in order to ensure full global interoperability of services, Member States shall coordinate their positions in international organisations and forums in which decisions are taken on issues relating to the numbering, naming and addressing of electronic communications networks and services.~~

Article 88

~~⊗~~ Procedure of ~~⊗~~ granting of ~~⊗~~ rights of use for radio frequencies and **numbers-numbering resources**

~~1. Member States shall facilitate the use of radio frequencies under general authorisations. Where necessary, Member States may grant individual rights of use in order to:~~

~~— avoid harmful interference;~~

~~— ensure technical quality of service;~~

~~— safeguard efficient use of spectrum, or~~

~~— fulfil other objectives of general interest as defined by Member States in conformity with Community law.~~

21. Where it is necessary to grant individual rights of use for **radio frequencies and numbers-numbering resources**, ⇒ [national regulatory authorities] ⇐ ~~Member States~~ shall grant such rights, upon request, to any undertaking for the provision of ~~⊗~~ electronic communications ~~⊗~~ networks or services ~~under the~~ ~~⊗~~ covered by a ~~⊗~~ general authorisation referred to in Article ~~312~~, subject to the provisions of Articles ~~613, 7~~ and ~~11~~ 21(1)(c) ~~of this Directive~~ and any other rules ensuring the efficient use of those **numbering resources** in accordance with this Directive 2002/21/EC (Framework Directive). ⇒ National regulatory authorities may also grant rights of use for numbers to undertakings other than providers of electronic communications networks or services in accordance with Article 87(2). ⇐

~~2. Without prejudice to specific criteria and procedures adopted by Member States to grant rights of use of radio frequencies to providers of radio or television broadcast content services with a view to pursuing general interest objectives in conformity with Community law, ¶The rights of use for radio frequencies and numbers numbering resources shall be granted through open, objective, transparent, non-discriminatory and proportionate procedures, and, in the case of radio frequencies, in accordance with the provisions of Article 9 of Directive 2002/21/EC (Framework Directive). An exception to the requirement of open procedures may apply in cases where the granting of individual rights of use of radio frequencies to the providers of radio or television broadcast content services is necessary to achieve a general interest objective as defined by Member States in conformity with Community law.~~

When granting rights of use ⇨ for numbers numbering resources ⇩ , ⇨ [national regulatory authorities] ⇩ Member States shall specify whether those rights can be transferred by the holder of the rights, and under which conditions. ~~In the case of radio frequencies, such provision shall be in accordance with Articles 9 and 9b of Directive 2002/21/EC (Framework Directive).~~

Where ⇨ [national regulatory authorities] ⇩ Member States grant rights of use for numbering resources for a limited period of time, the duration shall be appropriate for the service concerned in view of the objective pursued taking due account of the need to allow for an appropriate period for investment amortisation.

~~Where individual rights to use radio frequencies are granted for 10 years or more and such rights may not be transferred or leased between undertakings pursuant to Article 9b of Directive 2002/21/EC (Framework Directive) the competent national authority shall ensure that the criteria to grant individual rights of use apply and are complied with for the duration of the licence, in particular upon a justified request of the holder of the right. If those criteria are no longer applicable, the individual right of use shall be changed into a general authorisation for the use of radio frequencies, subject to prior notice and after a reasonable period, or shall be made transferable or leaseable between undertakings in accordance with Article 9b of Directive 2002/21/EC (Framework Directive).~~

3. Decisions on the granting of rights of use \Rightarrow for **numbers numbering resources** \Leftarrow shall be taken, communicated and made public as soon as possible after receipt of the complete application by the [national regulatory authority], within three weeks in the case of **numbers numbering resources** that have been allocated for specific purposes within the national numbering plan ~~and within six weeks in the case of radio frequencies that have been allocated to be used by electronic communications services within the national frequency plan. The latter time limit shall be without prejudice to any applicable international agreements relating to the use of radio frequencies or of orbital positions.~~

4. Where it has been decided [**national regulatory authorities**] **have determined**, after consultation with interested parties in accordance with Article ~~623 of Directive 2002/21/EC (Framework Directive)~~, that rights ~~for~~ \boxtimes of \boxtimes use ~~of~~ \boxtimes for \boxtimes **numbers numbering resources** of exceptional economic value are to be granted through competitive or comparative selection procedures, \Rightarrow [national regulatory authorities] \Leftarrow \Rightarrow **Member States** \Leftarrow may extend the maximum period of three weeks by up to a further three weeks.

~~With regard to competitive or comparative selection procedures for radio frequencies, Article 7 shall apply.~~

5. **Member States** \Rightarrow [National regulatory authorities] \Leftarrow shall not limit the number of rights of use to be granted except where this is necessary to ensure the efficient use of \Rightarrow numbering resources \Leftarrow ~~radio frequencies in accordance with Article 7.~~

~~6. Competent national authorities shall ensure that radio frequencies are efficiently and effectively used in accordance with Articles 8(2) and 9(2) of Directive 2002/21/EC (Framework Directive). They shall ensure competition is not distorted by any transfer or accumulation of rights of use of radio frequencies. For such purposes, Member States may take appropriate measures such as mandating the sale or the lease of rights to use radio frequencies.~~

6. Where the rights of use for **numbers numbering resources** includes their extraterritorial use within the Union in accordance with Article 87(4), the [national regulatory authority] shall attach to the right of use specific conditions in order to ensure compliance with all the relevant national consumer protection rules and national laws related to the use of **numbers numbering resources** applicable in the Member States where the **numbers numbering resources** are used.

Upon request from a [national regulatory authority] of another a Member State where the numbering resources are used, demonstrating a breach of relevant consumer protection rules or number-related national laws related to the use of numbering resources of that Member State, the [national regulatory authority] of the Member State where the rights of use for the numbers numbering resources have been granted, shall enforce the conditions attached under the first subparagraph in accordance with Article 30, including in serious cases by withdrawing the right of extraterritorial use for the numbers numbering resources granted to the undertaking concerned.

BEREC shall facilitate and coordinate the exchange of information between the [national regulatory authorities] of the different Member States involved and ensure the appropriate coordination of work among them.

6a. This Article shall also apply where [national regulatory authorities] grant rights of use for numbering resources to undertakings other than providers of electronic communications networks or services in accordance with Article 87(2).

Article ~~13~~89

Fees for rights of use for numbers

Member States may allow the relevant [national regulatory authority] to impose fees for the rights of use for ~~radio frequencies or numbers~~ numbering resources ~~or rights to install facilities on, over or under public or private property~~ which reflect the need to ensure the optimal use of these resources. Member States shall ensure that such fees ~~shall be~~ are objectively justified, transparent, non-discriminatory and proportionate in relation to their intended purpose and shall take into account the objectives in Article ~~3 8 of Directive 2002/21/EC (Framework Directive)~~.

~~Article 27~~

~~European telephone access codes~~

~~1. Member States shall ensure that the '00' code is the standard international access code. Special arrangements for making calls between locations adjacent to one another across borders between Member States may be established or continued. End users in the locations concerned shall be fully informed of such arrangements.~~

~~2. A legal entity, established within the Community and designated by the Commission, shall have sole responsibility for the management, including number assignment, and promotion of the European Telephony Numbering Space (ETNS). The Commission shall adopt the necessary implementing rules.~~

~~3. Member States shall ensure that all undertakings that provide publicly available telephone services allowing international calls handle all calls to and from the ETNS at rates similar to those applied for calls to and from other Member States.~~

~~Article 27a~~

~~Harmonised numbers for harmonised services of social value, including the missing children
hotline number~~

~~1. Member States shall promote the specific numbers in the numbering range beginning with '116' identified by Commission Decision 2007/116/EC of 15 February 2007 on reserving the national numbering range beginning with '116' for harmonised numbers for harmonised services of social value¹⁷. They shall encourage the provision within their territory of the services for which such numbers are reserved.~~

¹⁷ ~~OJL 49, 17.2.2007, p. 30.~~

~~2. Member States shall ensure that disabled end users are able to access services provided under the '116' numbering range to the greatest extent possible. Measures taken to facilitate disabled end users' access to such services whilst travelling in other Member States shall be based on compliance with relevant standards or specifications published in accordance with Article 17 of Directive 2002/21/EC (Framework Directive).~~

~~3. Member States shall ensure that citizens are adequately informed of the existence and use of services provided under the '116' numbering range, in particular through initiatives specifically targeting persons travelling between Member States.~~

~~4. Member States shall, in addition to measures of general applicability to all numbers in the '116' numbering range taken pursuant to paragraphs 1, 2, and 3, make every effort to ensure that citizens have access to a service operating a hotline to report cases of missing children. The hotline shall be available on the number '116000'.~~

~~5. In order to ensure the effective implementation of the '116' numbering range, in particular the missing children hotline number '116000', in the Member States, including access for disabled end users when travelling in other Member States, the Commission, having consulted BEREC, may adopt technical implementing measures. However, these technical implementing measures shall be adopted without prejudice to, and shall have no impact on, the organisation of these services, which remains of the exclusive competence of Member States.~~

~~Those measures, designed to amend non essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 37(2).~~

Article 90

The missing children hotline number

1. Member States shall ensure that citizens have access 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 disabled end-users are able to access services provided under the number '116000' numbering range to the greatest extent possible. Measures taken to facilitate disabled end-users' access to such services whilst travelling in other Member States shall be based on compliance with relevant standards or specifications published in accordance with Article 39.

Article ~~28~~91

Access to numbers and services

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

(a) access and use services using non-geographic numbers within the ~~Community~~ ⇨ Union ⇨ ; and

(b) access all numbers provided in the ~~Community~~ ⇨ Union ⇨, regardless of the technology and devices used by the operator, including those in the national numbering plans of Member States, ~~those from the ETNS~~ and Universal International Freephone Numbers (UIFN).

2. Member States shall ensure that the ~~relevant~~ ⇒ [national regulatory ⇐ authorities] are able to require undertakings providing public communications networks and/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.

~~CHAPTER III~~

~~REGULATORY CONTROLS ON UNDERTAKINGS WITH SIGNIFICANT MARKET POWER IN SPECIFIC RETAIL MARKETS~~

Article 17

~~Regulatory controls on retail services~~

~~1. Member States shall 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 14 of Directive 2002/21/EC (Framework Directive) where:~~

~~— (a) as a result of a market analysis carried out in accordance with Article 16 of Directive 2002/21/EC (Framework Directive), a national regulatory authority determines that a given retail market identified in accordance with Article 15 of that Directive is not effectively competitive; and~~

~~— (b) the national regulatory authority concludes that obligations imposed under Articles 9 to 13 of Directive 2002/19/EC (Access Directive) would not result in the achievement of the objectives set out in Article 8 of Directive 2002/21/EC (Framework Directive).~~

~~2. Obligations imposed under paragraph 1 shall be based on the nature of the problem identified and be proportionate and justified in the light of the objectives laid down in Article 8 of Directive 2002/21/EC (Framework Directive). 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.~~

~~4. 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.~~

~~5. Without prejudice to Article 9(2) and Article 10, national regulatory authorities shall not apply retail control mechanisms under paragraph 1 of this Article to geographical or user markets where they are satisfied that there is effective competition.~~

TITLE III: END-USER RIGHTS

Article 92

Non-discrimination

Providers of electronic communications networks or services shall not apply any **discriminatory different** requirements or conditions of access or use to end-users based on the end-user's nationality or **place Member State of residence or of establishment** unless such differences are objectively justified.

Article 93

☒ Fundamental rights safeguard ☒

~~31.~~ National measures regarding end-users' access to, or use of, services and applications through electronic communications networks shall respect ~~the fundamental rights and freedoms of natural persons, including in relation to privacy and due process, as defined~~ ☒ guaranteed by ☒ in ~~Article 6 of the European Convention for the Protection of Human Rights and Fundamental Freedoms~~ ☒ the Charter of Fundamental Rights of the Union (**'the Charter'**) and general principles of Union law ☒.

~~3a Measures taken by Member States regarding end-users access to, or use of, services and applications through electronic communications networks shall respect the fundamental rights and freedoms of natural persons, as guaranteed by the European Convention for the Protection of Human Rights and Fundamental Freedoms and general principles of Community law.~~

2. Any of these measures regarding end-users' access to, or use of, services and applications through electronic communications networks liable to ~~restrict~~ **limit the exercise of those fundamental** the rights or freedoms **recognised by the Charter** may only be imposed if they ⇒ are provided for by law and respect the essence of those rights or freedoms, ⇐ are appropriate, proportionate, and necessary ~~within a democratic society, and their implementation shall be subject to adequate procedural safeguards~~ ⇒ genuinely meet objectives of general interest recognised by the Union or the need to protect the rights and freedoms of others ⇐ ~~in conformity with the European Convention for the Protection of Human Rights and Fundamental Freedoms~~ ⊗ in line with Article 52(1) of the Charter of Fundamental Rights of the European Union ⊗ and with general principles of ~~Community~~ ⊗ Union ⊗ law, including **the right to an effective judicial protection and due process remedy and to a fair trial**. Accordingly, these measures may only be taken 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 conformity with the ~~European Convention for the Protection of Human Rights and Fundamental Freedoms~~ ⊗ Charter of Fundamental Rights of the European Union ⊗. ~~The right to effective and timely judicial review shall be guaranteed.~~

Article 94

Level of harmonisation

1. Member States shall not maintain or introduce in their national law end-user protection provisions on the subject matters covered by this Title and **number-independent interpersonal communication services** diverging from the provisions laid down in this Title, including more or less stringent provisions to ensure a different level of protection, unless otherwise provided for in this Title.

2. Member States may maintain or introduce in their national law more stringent end-user protection provisions than those laid down in this Title on electronic communications networks and services other than number-independent interpersonal communications services.

~~Article 20~~

~~Contracts~~

~~1. Member States shall ensure that, when subscribing to services providing connection to a public communications network and/or publicly available electronic communications services, consumers, and other end users so requesting, have a right to a contract with an undertaking or undertakings providing such connection and/or services. The contract shall specify in a clear, comprehensive and easily accessible form at least:~~

~~(a) the identity and address of the undertaking;~~

~~(b) the services provided, including in particular,~~

~~whether or not access to emergency services and caller location information is being provided, and any limitations on the provision of emergency services under Article 26;~~

~~information on any other conditions limiting access to and/or use of services and applications, where such conditions are permitted under national law in accordance with Community law;~~

~~the minimum service quality levels offered, namely the time for the initial connection and, where appropriate, other quality of service parameters, as defined by the national regulatory authorities;~~

~~information on any procedures put in place by the undertaking to measure and shape traffic so as to avoid filling or overfilling a network link, and information on how those procedures could impact on service quality;~~

~~the types of maintenance service offered and customer support services provided, as well as the means of contacting these services;~~

~~any restrictions imposed by the provider on the use of terminal equipment supplied;~~

~~(e) where an obligation exists under Article 25, the subscriber's options as to whether or not to include his or her personal data in a directory, and the data concerned;~~

~~(d) details of prices and tariffs, the means by which up to date information on all applicable tariffs and maintenance charges may be obtained, payment methods offered and any differences in costs due to payment method;~~

~~(e) the duration of the contract and the conditions for renewal and termination of services and of the contract, including:~~

~~any minimum usage or duration required to benefit from promotional terms;~~

~~any charges related to portability of numbers and other identifiers;~~

~~any charges due on termination of the contract, including any cost recovery with respect to terminal equipment, (f) any compensation and the refund arrangements which apply if contracted service quality levels are not met;~~

~~(g) the means of initiating procedures for the settlement of disputes in accordance with Article 34;~~

~~(h) the type of action that might be taken by the undertaking in reaction to security or integrity incidents or threats and vulnerabilities;~~

~~Member States may also require that the contract include any information which may be provided by the relevant public authorities for this purpose on the use of electronic communications networks and services to engage in unlawful activities or to disseminate harmful content, and on the means of protection against risks to personal security, privacy and personal data, referred to in Article 21(4) and relevant to the service provided.~~

~~2. Member States shall ensure that subscribers have a right to withdraw from their contract without penalty upon notice of modification to the contractual conditions proposed by the undertakings providing electronic communications networks and/or services. Subscribers shall be given adequate notice, not shorter than one month, of any such modification, and shall be informed at the same time of their right to withdraw, without penalty, from their contract if they do not accept the new conditions. Member States shall ensure that national regulatory authorities are able to specify the format of such notifications.~~

Article 95

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 number independent interpersonal communications services~~, shall provide the information required pursuant to Articles 5 and 6 of Directive 2011/83/EU, irrespective of the amount of any payment to be made, and the following information **listed in Annex VII bis** in a clear and comprehensible manner **on a durable medium**.

~~(a) as part of the main characteristics of each service provided:~~

~~(i) any minimum service quality levels to the extent that these are offered, and in accordance with BEREC guidelines to be adopted after consultation of stakeholders and in close cooperation with the Commission, regarding:~~

~~for internet access services: at least latency, jitter, packet loss,~~

~~for publicly available number based interpersonal communications services: at least the time for the initial connection, failure probability, call signalling delays and~~

~~for services other than internet access services within the meaning of Article 3(5) of Regulation 2015/2120: the specific quality parameters assured,~~

~~(ii) without prejudice to the right of end users to use terminal equipment of their choice in accordance with Article 3(1) of Regulation 2015/2120/EC, any restrictions imposed by the provider on the use of terminal equipment supplied;~~

~~(b) any compensation and refund arrangements, which apply if contracted service quality levels are not met;~~

~~(c) as part of the information on price:~~

~~(i) details of tariff plans under the contract and, where applicable, the volumes of communications (MB, minutes, SMS) included per billing period, and the price for additional communication units;~~

~~(ii) tariff information regarding any numbers or services subject to particular pricing conditions; with respect to individual categories of services, NRAs may require such information to be provided immediately prior to connecting the call;~~

~~(iii) for bundled services and bundles including both services and equipment the price of the individual elements of the bundle to the extent they are also marketed separately;~~

~~(iv) details of after sales service and maintenance charges, and~~

~~(v) the means by which up to date information on all applicable tariffs and maintenance charges may be obtained;~~

~~(d) as part of the information on the duration of the contract and the conditions for renewal and termination of the contract:~~

~~(i) any minimum usage or duration required to benefit from promotional terms;~~

~~(ii) any charges related to switching and the portability of numbers and other identifiers and compensation and refund arrangements for delay or abuse of switching;~~

~~(iii) any charges due on early termination of the contract, including any cost recovery with respect to terminal equipment and other promotional advantages;~~

~~(iv) for bundled services the conditions of termination of the bundle or of elements thereof;~~

~~(e) details on products and services designed for disabled end users and how updates on this information can be obtained;~~

~~(f) the means of initiating procedures for the settlement of disputes in accordance with Article 25;~~

~~(g) the type of action that might be taken by the undertaking in reaction to security or integrity incidents or threats and vulnerabilities.~~

~~2. In addition to the requirements set out in paragraph 1 providers of publicly available number-based interpersonal communications services shall provide the following information in a clear and comprehensible manner:~~

~~any constraints on access to emergency services and/or caller location information due to a lack of technical feasibility;~~

~~the end user's right to determine whether or not 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;~~

~~32. The information referred to in paragraphs 1 and 2 shall apply also be provided to micro or small enterprises as end-users and not-for-profit organisations unless they have explicitly agreed to waive all or parts of those provisions,~~

~~4. Providers of internet access services shall provide the information mentioned in paragraphs 1 and 2 in addition to the information required pursuant to Article 4(1) of Regulation (EU) 2015/2120.~~

~~543. By [entry into force + 12 months], BEREC the Commission shall issue adopt a decision on a contract summary template, which identifies the main elements of the information requirements in accordance with paragraphs 1 and 2. Those main elements shall include at least complete information on:~~

- (a) the name and address of the provider,
- (b) the main characteristics of each service provided,
- (c) the respective prices **to the extent the contract entails elements of monetary remuneration,**
- (d) the duration of the contract and the conditions for its renewal and termination **to the extent such elements apply,**
- (e) the extent to which the products and services are designed for disabled end-users,
- (f) with respect to internet access services, the information required pursuant to Article 4 (1)(d) of Regulation (EU) 2015/2120.

That implementing act shall be adopted in accordance with the examination procedure referred to in Article 110(4).

Providers subject to the obligations under paragraphs 1–4 **and 2** shall duly complete this contract summary template with the required information and provide it **free of charge** to consumers, and micro and small enterprises **and not-for-profit organisations,** prior to the conclusion of the contract. The contract summary shall become an integral part of the contract.

5bis 4. The information referred to in paragraphs 1 and 43 shall become an integral part of the contract.

65. Providers of internet access services and providers of publicly available ~~number-based~~ interpersonal communications services shall offer end-users the facility to monitor and control the usage of each of those services which is billed on the basis of either time or volume consumption. This facility shall include access to timely information on the level of consumption of services included in a tariff plan **and shall inform the end-users before/when any of the service volumes included in their tariff plan is consumed. In particular, end-users shall receive a notification before they fully consume a service included in their tariff plan. Member States may maintain or introduce in their national law provisions to temporarily prevent further usage of the relevant service in excess of a financial or volume limit determined by the competent authority.**

Article 21

Transparency and publication of information

~~1. Member States shall ensure that national regulatory authorities are able to oblige undertakings providing public electronic communications networks and/or publicly available electronic communications services to publish transparent, comparable, adequate and up-to-date information on applicable prices and tariffs, on any charges due on termination of a contract and on standard terms and conditions in respect of access to, and use of, services provided by them to end-users and consumers in accordance with Annex II. Such information shall be published in a clear, comprehensive and easily accessible form. National regulatory authorities may specify additional requirements regarding the form in which such information is to be published.~~

~~2. National regulatory authorities shall encourage the provision of comparable information to enable end-users and consumers to make an independent evaluation of the cost of alternative usage patterns, for instance by means of interactive guides or similar techniques. Where such facilities are not available on the market free of charge or at a reasonable price, Member States shall ensure that national regulatory authorities are able to make such guides or techniques available themselves or through third-party procurement. Third parties shall have a right to use, free of charge, the information published by undertakings providing electronic communications networks and/or publicly available electronic communications services for the purposes of selling or making available such interactive guides or similar techniques.~~

~~3. Member States shall ensure that national regulatory authorities are able to oblige undertakings providing public electronic communications networks and/or publicly available electronic communications services to inter alia:~~

~~(a) provide applicable tariff information to subscribers regarding any number or service subject to particular pricing conditions; with respect to individual categories of services, national regulatory authorities may require such information to be provided immediately prior to connecting the call;~~

~~(b) inform subscribers of any change to access to emergency services or caller location information in the service to which they have subscribed;~~

~~(c) inform subscribers of any change to conditions limiting access to and/or use of services and applications, where such conditions are permitted under national law in accordance with Community law;~~

~~(d) provide information on any procedures put in place by the provider to measure and shape traffic so as to avoid filling or overfilling a network link, and on how those procedures could impact on service quality;~~

~~(e) inform subscribers of their right to determine whether or not to include their personal data in a directory, and of the types of data concerned, in accordance with Article 12 of Directive 2002/58/EC (Directive on privacy and electronic communications); and~~

~~(f) regularly inform disabled subscribers of details of products and services designed for them.~~

~~If deemed appropriate, national regulatory authorities may promote self- or co-regulatory measures prior to imposing any obligation.~~

~~4. Member States may require that the undertakings referred to in paragraph 3 distribute public interest information free of charge to existing and new subscribers, where appropriate, by the same means as those ordinarily used by them in their communications with subscribers. In such a case, that 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 electronic communications services to engage in unlawful activities or to disseminate harmful content, particularly where it may prejudice respect for the rights and freedoms of others, including infringements of 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 electronic communications services.~~

Article 96

Transparency, comparison of offers and publication of information ~~of internet access services and/or publicly available interpersonal communications services~~

1. [National regulatory authorities] shall ensure that, **where ~~undertakings providers~~ make the provision of relevant services subject to terms and conditions**, the information referred to in Annex VIII is published in a clear, comprehensive and easily accessible form by ~~the undertakings providing all providers of internet access services and/or publicly available electronic communications services other than number-independent interpersonal communications services~~, or by the [national regulatory authority] itself. [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 [national regulatory authority] in advance of its publication.**

2. [National regulatory authorities] shall ensure that end-users have access free of charge to at least one independent comparison tool which enables them to compare and evaluate prices and tariffs, **of services provided against monetary remuneration**, and the quality of service performance **where minimum service quality is offered**, of different **internet access services and publicly available ~~electronic communications services other than number-independent interpersonal communications services~~**.

The comparison tool shall:

- (a) be operationally independent by ensuring that service providers are given equal treatment in search results;
- (b) clearly disclose ~~their~~ **the owners and operators of the comparison tool**;
- (c) set out clear, objective criteria on which the comparison will 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 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.

Comparison tools fulfilling the requirements in points (a) to (g) shall, upon request **by the provider of the tool**, be certified by [national regulatory authorities]. Third parties shall have a right to use, free of charge, the information published by ~~undertakings providing~~ **providers of internet access services and/or** publicly available ~~electronic communications services, other than number-independent~~ interpersonal communications services, for the purposes of making available such independent comparison tools.

3. Member States may require that the ~~undertakings providing~~ **providers of internet access services** or publicly available ~~number-based~~ interpersonal communications services distribute public interest information free of charge to existing and new end-users, where appropriate, by the same means as those 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, particularly where it may prejudice respect for the rights and freedoms of others, including infringements of 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 ~~97~~22

Quality of service **of internet access services and interpersonal communications services**

1. ~~Member States shall ensure that n~~ [National regulatory authorities] ~~are, after taking account of the views of interested parties, able to~~ ☒ may ☒ require ~~undertakings that provide~~ ☒ providers of ☒ ⇒ internet access services and of ⇐ publicly available ~~electronic~~ ⇒ number based interpersonal ⇐ communications ~~networks and/or~~ services to publish ⇒ comprehensive, ⇐ comparable, ~~adequate~~ ⇒ reliable, user-friendly ⇐ and up-to-date information for end-users on the quality of their services, **to the extent that they offer minimum levels of service quality**, and on measures taken to ensure equivalence in access for disabled end-users. That information shall, on request, be supplied to the [national regulatory authority] in advance of its publication.

2. **Where N** [national regulatory authorities] ~~may~~ ⇒ **require publication of quality of service information pursuant to paragraph 1, they** shall ⇐ specify, ⇒ taking utmost account of BEREC guidelines ⇐ ~~inter alia~~, the quality of service parameters to be measured ⇒ and the applicable measurement methods, ⇐ and the content, form and manner of the information to be published, including possible quality certification mechanisms, ~~in order to ensure that end users, including disabled end users, have access to comprehensive, comparable, reliable and user friendly information.~~ Where appropriate, the parameters, definitions and measurement methods set out in Annex ~~III~~ IX ~~may~~ ⇒ shall ⇐ be used.

~~3. In order to prevent the degradation of service and the hindering or slowing down of traffic over networks, Member States shall ensure that national regulatory authorities are able to set minimum quality of service requirements on an undertaking or undertakings providing public communications networks.~~

~~National regulatory authorities shall provide the Commission, in good time before setting any such requirements, with a summary of the grounds for action, the envisaged requirements and the proposed course of action. This information shall also be made available to the Body of European Regulators for Electronic Communications (BEREC). The Commission may, having examined such information, make comments or recommendations thereupon, in particular to ensure that the envisaged requirements do not adversely affect the functioning of the internal market. National regulatory authorities shall take the utmost account of the Commission's comments or recommendations when deciding on the requirements.~~

By [entry into force plus 18 months], in order to contribute to a consistent application of this paragraph **and of Annex IX**, BEREC shall adopt, after consultation of stakeholders and in close cooperation with the Commission, guidelines ~~on~~ **detailing** the relevant quality of service parameters, including parameters relevant for disabled end-users, the applicable measurement methods, the content and format of publication of the information, and quality certification mechanisms.

Article 98

Contract duration and termination

1. Member States shall ensure that conditions and procedures for contract termination are not a disincentive against changing service provider and that contracts concluded between consumers and ~~undertakings providing~~ **providers of internet access services and** publicly available ~~electronic communications services, other than number independent~~ interpersonal communications services, do not mandate ~~an initial~~ **a** commitment period longer than 24 months. Member States may adopt or maintain shorter maximum durations for the initial commitment period.

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.

1a. Paragraphs 1 and 2 shall also apply to micro or small enterprises and not-for-profit organisations as end-users unless they have explicitly agreed to waive those provisions.

2. Where a contract or national law provides for a fixed duration contract to be automatically prolonged, the Member State shall ensure that, after the expiration of the initial period **such an automatic prolongation**, and unless the consumer has explicitly agreed to the extension of the contract, consumers **end-users** are entitled to terminate the contract at any time with a ~~one month~~ notice period **not exceeding one month** and without incurring any costs except the ~~cost~~ **charges of providing for receiving** the service during the notice period.

3. 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 or they are ~~strictly necessary to implement~~ **directly imposed by legislative or regulatory provisions**. ~~changes~~. Providers shall notify end-users, at least one month in advance, of any ~~such~~ change **in the contractual conditions**, and shall inform them at the same time of their right to terminate their contract without incurring any **further** costs ~~except the charges for receiving the service during the notice period~~ if they do not accept the new conditions. Member States shall ensure that notification is made in a clear and comprehensible manner on a durable medium and in a format chosen by the end-user ~~at the time of concluding the contract~~.

4. Where an **end-user has the right to terminate** ~~early termination of a contract on~~ for a publicly available electronic communications service **before the end of the agreed contract term** by the end-user is possible in accordance with **on the basis of** this Directive, other provisions of Union law or national law, no compensation shall be due by the end-user. **If the end-user chooses to retain terminal equipment bundled with the contract, any compensation due shall not exceed its** ~~other than for the pro rata temporis value of subsidised equipment bundled with the contract at the moment of the contract conclusion and a pro rata temporis reimbursement for any other promotional advantages marked as such~~ **at the moment of the contract conclusion**. Any restriction on the usage of terminal equipment on other networks shall be lifted, free of charge, by the provider at the latest upon payment of such compensation.

~~Facilitating~~ Change of ~~p~~Provider ~~⊗~~ **switching** and number portability ~~⊗~~

1. In 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 service. The receiving provider shall ensure that the activation of the service shall occur on the date **explicitly** agreed with the end-user. The transferring provider shall continue to provide its services on the same terms until the services of the receiving provider are activated. ~~Loss of service during the switching process shall not exceed one working day.~~

[National regulatory authorities] shall ensure the efficiency of the switching process for the end-user.

~~12.~~ Member States shall ensure that all ~~subscribers~~ ⇒ end-users ⇐ with numbers from the national telephone numbering plan who so request can retain their number(s) independently of the undertaking providing the service in accordance with the provisions of Part C of Annex ~~IV~~.

~~23.~~ [National regulatory authorities] shall ensure that pricing between operators and/or service providers related to the provision of number portability is cost-oriented, and that ⇒ no ⇐ direct charges ⇒ are applied ⇐ to ⇒ end-users ⇐ ~~subscribers if any, do not act as a disincentive for subscribers against changing service provider.~~

~~34.~~ National regulatory authorities shall not impose retail tariffs for the porting of numbers in a manner that would distort competition, such as by setting specific or common retail tariffs.

~~44.~~ **Switching of providers and/or P**orting of numbers and their subsequent activation shall be carried out within the shortest possible time **on the date(s) agreed with the end user**. In any case, ~~subscribers~~ ⇒ end-users ⇐ who have concluded an agreement to port a number to a new undertaking shall have that number activated within one working day ⇒ ~~from the conclusion of such an agreement~~ **date agreed with the end-user. In case of failure of the porting process, the transferring provider shall reactivate the number of the end-user until the porting is successful. The transferring provider shall continue to provide its services on the same terms until the services of the receiving provider are activated.** ⇐

⇒ **5a** The receiving provider shall lead the switching and porting process **and both the receiving and transferring providers shall cooperate in good faith.** ~~Without prejudice to the first subparagraph, competent~~ ~~n~~ [National ⇒ regulatory ⇐ authorities] may establish the global process of ⇒ switching and of ⇐ porting of numbers, taking into account national provisions on contracts, technical feasibility and the need to maintain continuity of service to the ~~subscriber~~ ⇒ end-user ⇐. In any event, loss of service during the process of **switching and** porting shall not exceed one working day. ⇒ ~~In case of failure of the porting process, the transferring provider shall reactivate the number of the end user until the porting is successful.~~ ~~Competent n~~ [National ⇒ regulatory ⇐ authorities] shall also take ~~into account, where necessary,~~ ⇒ appropriate ⇐ measures ensuring that ~~subscribers~~ ⇒ end-users ⇐ are ⇒ adequately informed and ⇐ protected throughout the switching **and porting** process and are not switched to another provider against their will.

56. Member States shall ensure that appropriate sanctions on undertakings are provided for, including an obligation to compensate ~~subscribers~~ ⇒ end-users ⇐ in case of delay in porting **or switching** or abuse of porting **or switching** by them or on their behalf.

~~5. Member States shall ensure that contracts concluded between consumers and undertakings providing electronic communications services do not mandate an initial commitment period that exceeds 24 months. Member States shall also ensure that undertakings offer users the possibility to subscribe to a contract with a maximum duration of 12 months.~~

~~6. Without prejudice to any minimum contractual period, Member States shall ensure that conditions and procedures for contract termination do not act as a disincentive against changing service provider.~~

Article 100

Bundled offers

1. If a bundle of services or a bundle of services and ~~goods~~ **terminal equipment** offered to ~~an end-user~~ **consumers, micro or small enterprises, or not-for-profit organisations** comprises ~~at least a publicly available electronic communications service other than number independent interpersonal communications services~~ **an internet access service or number-based interpersonal communications service**, Articles ~~95, 96 (1), 98 and 99 (1)~~ **95(43)** shall apply *mutatis mutandis* to all elements of the bundle except where the provisions applicable to another element of the bundle are more favourable to the end-user.

2. Any subscription to additional services or ~~goods~~ **terminal equipment** provided or distributed by the same provider of **an internet access service or number-based interpersonal communications service** ~~publicly available electronic communications services other than number independent interpersonal communications services~~ shall not ~~re-start the contract period~~ **extend the term** of the initial contract unless **explicitly agreed otherwise when subscribing to the additional services-or goods terminal equipment** are offered at a special promotional price available only on the ~~condition that the existing contract period is re-started.~~

Article ~~22~~101

Availability of services

Member States shall take all necessary measures to ensure the fullest possible availability of ~~publicly available telephone services~~ **voice communications and internet access service** provided over public communications networks in the event of catastrophic network breakdown or in cases of force majeure. Member States shall ensure that ~~undertakings providing~~ **providers of publicly available telephone services voice communications and internet access service** take all necessary measures to ensure uninterrupted access to emergency services.

Emergency services ~~and~~ communications ~~and~~ the single European emergency call number

1. Member States shall ensure that all end-users of the service referred to in paragraph 2, including users of public pay telephones, are able to ~~call~~ ⇒ 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 ~~call~~ number ‘112’ and any national emergency ~~call~~ number specified by Member States.

2. Member States, in consultation with national regulatory authorities ~~and~~ ~~and~~ emergency services and providers ⇒ of electronic communications services ⇐, shall ensure that undertakings providing end-users with ~~an electronic~~ ⇒ number-based interpersonal ⇐ communications services ~~for originating national calls to a number or numbers in a national telephone numbering plan~~ provide access to emergency services ⇒ through emergency communications to the most appropriate PSAP. In case of an appreciable threat to effective access to emergency services the obligation for undertakings may be extended by **[national regulatory authorities]** to all interpersonal communications services in accordance with the conditions and procedure set out in Article 59 (1) (c). ⇐

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

4. Member States shall ensure that access for disabled end-users to emergency services is
⇒ available through emergency communications and ⇐ equivalent to that enjoyed by other end-
users. Measures taken to ensure that disabled end-users are able to access emergency services
⇒ through emergency communications ⇐ whilst travelling in other Member States shall be based
to the greatest extent possible on European standards or specifications published in accordance with
the provisions of Article ~~39~~ 17 of Directive 2002/21/EC (Framework Directive), and they shall not
prevent Member States from adopting additional requirements in order to pursue the objectives set
out in this Article.

5. Member States shall ensure that ~~undertakings concerned make~~ caller location information is
⇒ **made** available to the PSAP ⇐ ~~available free of charge~~ ⇒ without delay after the emergency
communication is set up. ⇐ ~~to the authority handling emergency calls as soon as the call reaches
that authority.~~ ⇒ Member States shall ensure that the establishment and the transmission of the
caller location information are free of charge for the end-user and to the ~~authority handling the
emergency communication~~ **PSAP** ⇐ ~~This shall apply~~ ☒ with regard ☒ to all ~~calls~~ ⇒ emergency
communications ⇐ to the single European emergency ~~call~~ number '112'. Member States may
extend ~~this~~ ☒ that ☒ obligation to cover ~~calls~~ ⇒ emergency communications ⇐ to national
emergency numbers. Competent regulatory authorities shall lay down criteria for the accuracy and
reliability of the caller location information provided.

6. Member States shall ensure that citizens are adequately informed about the existence and use of
the single European emergency ~~call~~ number '112', in particular through initiatives specifically
targeting persons travelling between Member States.

7. In order to ensure effective access ⇒ to emergency services through emergency
communications ⇐ to '112' services in the Member States, the Commission ~~, having consulted
BEREC, may~~ ☒ shall be empowered to ☒ adopt ⇒ delegated acts in accordance with Article 109
supplementing paragraphs 2, 4 and 5 by laying down guidelines on the measures necessary to
ensure the compatibility, interoperability, quality, reliability and continuity of emergency
communications in the Union with regard to caller location solutions, access for disabled end-users
and routing to the most appropriate PSAP ⇐ ~~technical implementing measures~~.

~~However, these technical implementing~~ Those measures shall be adopted without prejudice to, and shall have no impact on, the organisation of emergency services, which remains ~~of~~ in the exclusive competence of Member States.

~~Those measures, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 37(2).~~

Article ~~23a~~103

~~Ensuring equivalence in~~ **Equivalent** **access and choice for disabled end-users**

1. Member States shall ~~enable~~ ensure that the competent ~~relevant national~~ authorities ~~to~~ specify, where appropriate, requirements to be met by ~~undertakings providing~~ **providers of** publicly available electronic communications services to ensure that disabled end-users:

(a) have access to electronic communications services, **including the related contractual information provided pursuant to Article 95**, 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 order to be able to adopt and implement specific arrangements for disabled end-users, Member States shall encourage the availability of terminal equipment offering the necessary services and functions.~~

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

➔₁ Telephone directory enquiry services ←

~~1. Member States shall ensure that subscribers to publicly available telephone services have the right to have an entry in the publicly available directory referred to in Article 5(1)(a) and to have their information made available to providers of directory enquiry services and/or directories in accordance with paragraph 2.~~

~~2~~1. Member States shall ensure that all undertakings which assign telephone numbers to ~~subscribers~~ ⇒ end-users ⇐ 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.

~~3~~2. ~~Member States shall ensure that all end-users provided with a publicly available telephone service can access directory enquiry services.~~ [National regulatory authorities] shall be able to impose obligations and conditions on undertakings that control access of end-users for the provision of directory enquiry services in accordance with the provisions of Article ~~59~~ 5 of Directive ~~2002/19/EC (Access Directive)~~. Such obligations and conditions shall be objective, equitable, non-discriminatory and transparent.

~~4~~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 ~~91~~28.

~~5~~4. Paragraphs 1 to ~~4~~ 3 shall apply subject to the requirements of ~~Community~~ ☒ Union ☒ legislation on the protection of personal data and privacy and, in particular, Article 12 of Directive 2002/58/EC (~~Directive on privacy and electronic communications~~).

Article ~~24~~105

Interoperability of consumer digital television equipment

In accordance with the provisions of Annex ~~VIX~~, Member States shall ensure the interoperability of the consumer digital television equipment referred to therein.

Article ~~31~~106

‘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, particularly accessibility services to enable appropriate access for disabled end-users ~~⇒~~ and data supporting ~~connected TV services and electronic programme guides ⇐~~ , on undertakings under their jurisdiction providing electronic communications networks used for the distribution of radio or television broadcast channels to the public where a significant number of end-users of such networks use them as their principal means to receive radio and television broadcast channels. Such obligations shall only be imposed where they are necessary to meet general interest objectives as clearly defined by each Member State and shall be proportionate and transparent.

The obligations referred to in the first subparagraph shall be reviewed by the Member States at the latest within one year of ~~25 May 2011~~ [~~⊗~~] date of entry into force of this Directive ~~⊗~~ , except where Member States have carried out such a review within the previous ~~two~~ [~~⊗~~] four [~~⊗~~] years.

Member States shall review ‘must carry’ obligations ~~on a regular basis~~ [~~⊗~~] at least every five years [~~⊗~~] .

2. Neither paragraph 1 of this Article nor Article ~~357(2) of Directive 2002/19/EC (Access Directive)~~ 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 ~~undertakings providing~~ **providers of** electronic communications networks. Where remuneration is provided for, Member States shall ensure that it is applied in a proportionate and transparent manner.

Article ~~29~~107

Provision of additional facilities

1. Without prejudice to Article ~~8340~~(2), Member States shall ensure that [national regulatory authorities] are able to require all undertakings that provide ~~⇒ internet access services ⇐ publicly available telephone services~~ and/or ~~⇒ publicly available number-based interpersonal communications services ⇐ access to public communications networks~~ to make available all or part of the additional facilities listed in Part B of Annex ~~IV~~ **free of charge**, subject to technical feasibility ~~and economic viability~~, as well as all or part of the additional facilities listed in Part A of Annex ~~IV~~.
2. A Member State ~~may decide to~~ shall ~~not~~ waive **the requirements 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 these facilities.

Adaptation of annexes

⇒ The Commission is empowered to adopt delegated acts in accordance with Article 109 concerning the adaptations of ~~↵ Measures designed to amend non-essential elements of this Directive and necessary to adapt~~ Annexes V, VI, ~~II~~ VIII, ~~III~~ IX, and ~~VI~~ X ⇒ in order to take account of ~~↵ to~~ technological ⇒ and social ~~↵~~ developments or changes in market demand ~~shall be adopted by the Commission in accordance with the regulatory procedure with scrutiny referred to in Article 37(2).~~

Article 114a

Specific review procedure on end user rights

1. BEREC shall monitor the market and technological developments regarding in particular number-independent interpersonal communications services and shall, [three] years from the entry into force of this Directive and every [three] years thereafter, publish a report on such developments and on their impact on the application of Title III.

That report shall include an assessment by BEREC of whether or not Title III should be amended in order to ensure that the objectives set out in Article 3 continue to be met. The report should in particular examine the question of the scope of Title III.

2. The Commission, taking utmost account of the BEREC report, shall submit a legislative proposal to amend Title III where this would be necessary in order to ensure that the objectives set out in Article 3 continue to be met.

ANNEX V

MINIMUM SET LIST OF SERVICES WHICH THE FUNCTIONAL INTERNET ACCESS SERVICE SHALL BE CAPABLE OF SUPPORTING IN ACCORDANCE WITH ARTICLE 79(2)

- (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/news
- (5) buying/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)

↓ 2009/136/EC Art. 1.28 and Annex I
(adapted)
⇒ new

ANNEX IVI

DESCRIPTION OF FACILITIES AND SERVICES REFERRED TO IN ARTICLE ~~10~~ 83
(CONTROL OF EXPENDITURE), ARTICLE ~~29~~ 107 (ADDITIONAL FACILITIES) AND
ARTICLE ~~30~~ 99 (~~FACILITATING CHANGE OF PROVIDER SWITCHING~~ AND NUMBER
PORTABILITY)

PART A: FACILITIES AND SERVICES REFERRED TO IN ARTICLE 1083

(a) Itemised billing

Member States are to ensure that [national regulatory authorities], subject to the requirements of relevant legislation on the protection of personal data and privacy, may lay down the basic level of itemised bills which are to be ~~provided~~ **offered** by ~~undertakings~~ **providers of voice communications services** to ~~subscribers~~ ⇒ end-users ⇐ free of charge in order that they can:

(i) allow verification and control of the charges incurred in using the public communications network at a fixed location and/or ~~related publicly available telephone~~ ⇒ voice communications ⇐ services ⇐ , or number-based interpersonal communications services in the case of Article 107 ⇐ ; 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 ~~subscribers~~ ⇒ end-users ⇐ at reasonable tariffs or at no charge.

Calls which are free of charge to the calling ~~subscriber~~ ⇒ end-user's ⇐, including calls to helplines, are not to be identified in the calling ~~subscriber's~~ ⇒ end user's ⇐ itemised bill.

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

i.e. the facility whereby the ~~subscribers~~ ⇒ end-users ⇐ can, on request to the ~~designated undertaking that provides~~ **providers of telephone** ⇒ voice communications ⇐ services ⇒ , or number-based interpersonal communications services in the case of Article 107 ⇐ , 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 are to ensure that [national regulatory authorities] may require ~~designated undertakings~~ **providers** to ~~provide~~ **offer** means for consumers to pay for access to the public communications network and use of ~~publicly available telephone~~ ⇒ voice communications ⇐ services ⇒ , **or functional internet access**, or number-based interpersonal communications services in the case of Article 107, ⇐ on pre-paid terms.

(d) Phased payment of connection fees

Member States are to ensure that [national regulatory authorities] may require ~~designated undertakings~~ **providers** to allow consumers to pay for connection to the public communications network on the basis of payments phased over time.

(e) Non-payment of bills

Member States are to authorise specified measures, which are to be proportionate, non-discriminatory and published, to cover non-payment of ~~telephone~~ bills issued by ~~undertakings~~ **providers**. These measures are to ensure that due warning of any consequent service interruption or disconnection is given to the ~~subscribers~~ ⇒ end-users ⇐ beforehand. Except in cases of fraud, persistent late payment or non-payment, these measures are to ensure, as far as is technically feasible that any service interruption is confined to the service concerned. Disconnection for non-payment of bills should take place only after due warning is given to the ~~subscribers~~ ⇒ 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 ~~subscribers~~ ⇒ end-users ⇐ (e.g. ‘112’ calls) **and minimal functional internet access, defined by Member States in the light of national conditions**, are permitted.

(f) Tariff advice

i.e. the facility whereby ~~subscribers~~ ⇒ end-users ⇐ may request the ~~undertaking~~ **provider** to ~~provide~~ **offer** information regarding alternative lower-cost tariffs, if available.

(g) Cost control

i.e. the facility whereby ~~undertakings~~ **providers** offer other means, if determined to be appropriate by [national regulatory authorities], to control the costs of ~~publicly available telephone~~ ⇒ voice ~~communications~~ **or functional internet access** ⇐ services, ⇒ or number-based interpersonal ~~communications services in the case of Article 107,~~ ⇐ including free-of-charge alerts to consumers in case of abnormal or excessive consumption patterns.

PART B: FACILITIES REFERRED TO IN ARTICLE ~~29~~107

~~**(a) Tone dialling or DTMF (dual tone multi frequency operation)**~~

~~i.e. the public communications network and/or publicly available telephone services supports the use of DTMF tones as defined in ETSI ETR 207 for end to end signalling throughout the network both within a Member State and between Member States.~~

~~**(b) Calling-line identification**~~

i.e. the calling party's number is presented to the called party prior to the call being established.

This facility should be provided in accordance with relevant legislation on protection of personal data and privacy, in particular Directive 2002/58/EC (Directive on privacy and electronic communications).

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

**PART C: IMPLEMENTATION OF THE NUMBER PORTABILITY PROVISIONS REFERRED TO IN
ARTICLE ~~3099~~**

The requirement that all ~~subscribers~~ ⇒ end-users ⇐ with numbers from the national numbering plan, who so request can retain their number(s) 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 IVVII

**CALCULATING THE NET COST, IF ANY, OF UNIVERSAL SERVICE OBLIGATIONS
AND ESTABLISHING ANY RECOVERY OR SHARING MECHANISM AND
~~ESTABLISHING ANY RECOVERY OR SHARING MECHANISM~~ IN ACCORDANCE
WITH ARTICLES ~~12~~ 84 AND ~~13~~ 85**

~~PART A: CALCULATION OF NET COST~~

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 79, 81 and 82 ⇐ ~~a network and service throughout a specified geographical area, including, where required, averaged prices in that geographical area for the provision of that service or provision of specific tariff options for consumers with low incomes or with special social needs.~~

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 ⊗ ~~designated~~ undertaking of operating with the universal service obligations and operating without the universal service obligations. ~~This applies whether the network in a particular Member State is fully developed or is still undergoing development and expansion.~~ Due attention is to be given to correctly assessing the costs that any ~~designated~~ undertaking would have chosen to avoid had there been no universal service obligation. The net cost calculation should assess the benefits, including intangible benefits, to the universal service operator.

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 disabled people, etc;

(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 operator 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 so as 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: RECOVERY OF ~~ANY~~ NET COSTS OF UNIVERSAL SERVICE OBLIGATIONS

*The recovery or financing of any net costs of universal service obligations **may** requires ~~designated~~ 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 these 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 85 ~~13~~(3), a sharing mechanism based on a fund should 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 and/or administrative payments to the undertakings entitled to receive payments from the fund.

ANNEX VII bis

**INFORMATION REQUIREMENTS TO BE PROVIDED IN ACCORDANCE WITH
ARTICLE 95 (INFORMATION REQUIREMENTS FOR CONTRACTS)**

**A. INFORMATION REQUIREMENTS FOR PROVIDERS OF PUBLICLY AVAILABLE ELECTRONIC
COMMUNICATIONS SERVICES**

Providers of publicly available electronic communications services shall provide the following information:

(1) as part of the main characteristics of each service provided:

(i) any minimum service quality levels to the extent that these are offered,

(2) as part of the information on the duration of the contract and the conditions for renewal and termination of the contract, where relevant limitations on such termination apply:

(i) any minimum usage 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,

(iii) any charges due on early termination of the contract, including any cost recovery with respect to terminal equipment and other promotional advantages,

(3) any compensation and refund arrangements, which apply if contracted service quality levels are not met;

(4) the type of action that might be taken by the provider in reaction to security or integrity incidents or threats and 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 service quality levels to the extent that these are offered, and taking utmost account of the BEREC guidelines ~~to be adopted in accordance with Article 97(2) regarding after consultation of stakeholders and in close cooperation with the Commission, regarding:~~

– for internet access services: at least latency, jitter, packet loss;

– for publicly available number-based interpersonal communications services, ~~where relevant~~: at least the time for the initial connection, failure probability, call signaling delays;

(ii) without prejudice to the right of end-users to use terminal equipment of their choice in accordance with Article 3(1) of Regulation 2015/2120/EC, any restrictions imposed by the provider on the use of terminal equipment supplied;

(2) as part of the information on price, to the extent the contract entails elements of monetary remuneration:

(i) details of tariff plans under the contract and, where applicable, the volumes of communications (such as MB, minutes, ~~SMS~~messages) included per billing period, and the price for additional communication units,

(ii) tariff information regarding any numbers or services subject to particular pricing conditions; with respect to individual categories of services, competent authorities ~~NRAs~~ may require such information to be provided immediately prior to connecting the call or to providing the service,

(iii) 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,

(iv) details of after-sales service and maintenance charges, and

(v) 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 ~~relevant~~ applicable, the conditions of termination of the bundle or of elements thereof;

(4) details on products and services designed for disabled end-users and how updates on this information can be obtained;

(5) the means of initiating procedures for the settlement of disputes in accordance with Article 25;

II. In addition to the requirements set out in part A and under I, providers of publicly available number-based interpersonal communications services shall also provide the following information:

(1) any constraints on access to emergency services and/or caller location information due to a lack of technical feasibility;

(2) the end-user's right to determine whether or not 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 I, providers of internet access services shall also provide the information required pursuant to Article 4(1) of Regulation (EU) 2015/2120.

INFORMATION TO BE PUBLISHED IN ACCORDANCE WITH ARTICLE ~~21~~96

(TRANSPARENCY AND PUBLICATION OF INFORMATION)

The [national regulatory authority] has a responsibility to ensure that the information in this Annex is published, in accordance with Article ~~21~~96. It is for the [national regulatory authority] to decide which information is to be published by the undertakings providing \Rightarrow publicly available electronic communications services, except number-independent interpersonal communications services \Leftarrow ~~public communications networks and/or publicly available telephone services~~ and which information is to be published by the [national regulatory authority] itself, so as to ensure that consumers are able to make informed choices. \Rightarrow If deemed appropriate, [national regulatory authorities] may promote self- or co-regulatory measures prior to imposing any obligation. \Leftarrow

~~1. Name(s) and address(es) \boxtimes Contact details \boxtimes of \boxtimes the \boxtimes undertaking(s)~~

~~i.e. names and head office addresses of undertakings providing public communications networks and/or publicly available telephone services.~~

2. Description of \boxtimes the \boxtimes services offered

2.1. Scope of \boxtimes the \boxtimes services offered \Rightarrow and the main characteristics of each service provided, including any minimum service quality levels offered and any restrictions imposed by the provider on the use of terminal equipment supplied \Leftarrow .

2.2. ~~Standard~~ ~~†~~ Tariffs \Rightarrow of the services offered, including information on communications volumes of specific tariff plans and the applicable tariffs for additional communication units, numbers or services subject to particular pricing conditions, \Leftarrow ~~indicating the services provided and the content of each tariff element (e.g. charges for access \Rightarrow and maintenance \Leftarrow , all types of usage charges, maintenance charges), and including details of standard discounts applied and~~ special and targeted tariff schemes and any additional charges, as well as costs with respect to terminal equipment.

~~2.3. Compensation/refund policy, including specific details of any compensation/refund schemes offered.~~

2.43. Types of ⇒ After-sales and ⇐ maintenance service ⊗ services ⊗ offered ⇒ and their contact details ⇐ .

2.54. Standard contract conditions, including ~~any minimum contractual period~~ ⇒ 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.

↓ new

2.5. If the undertaking is a provider of number-based interpersonal communications services, information on access to emergency services and caller location information.

2.6. Details of products and services designed for disabled users.

↓ 2002/22/EC (adapted)

⇒ new

3. Dispute settlement mechanisms, including those developed by the undertaking.

~~4. Information about rights as regards universal service, including, where appropriate, the facilities and services mentioned in Annex I.~~

QUALITY OF SERVICE PARAMETERS

Quality-of-Service Parameters, Definitions and Measurement Methods referred to in
Articles ~~11 and 22~~ 97

For undertakings providing access to a public 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 ~~⇒ number-based interpersonal communications services~~ ~~⇐ undertakings providing a publicly available telephone service~~

<input checked="" type="checkbox"/> PARAMETER (Note 2) <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> DEFINITION <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> MEASUREMENT METHOD <input checked="" type="checkbox"/>
Call set up time (Note 2)	ETSI EG 202 057	ETSI EG 202 057
Response times for directory enquiry services	ETSI EG 202 057	ETSI EG 202 057

Proportion of coin and card operated public pay telephones in working order	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 ⇐		

↓ new

For Internet access services

PARAMETER	DEFINITION	MEASUREMENT METHOD
Latency		
Jitter		
Packet loss		

↓ 2002/22/EC

Note 1

Parameters should allow for performance to be analysed at a regional level (i.e. 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 these two parameters to be kept if evidence is available to show that performance in these two areas is satisfactory.

↓ 2002/22/EC

ANNEX V

PROCESS FOR REVIEWING THE SCOPE OF UNIVERSAL SERVICE IN ACCORDANCE WITH ARTICLE 15

~~In considering whether a review of the scope of universal service obligations should be undertaken, the Commission is to take into consideration the following elements:~~

- ~~1. social and market developments in terms of the services used by consumers;~~
- ~~2. social and market developments in terms of the availability and choice of services to consumers;~~
- ~~3. technological developments in terms of the way services are provided to consumers.~~

~~In considering whether the scope of universal service obligations be changed or redefined, the Commission is to take into consideration the following elements:~~

- ~~4. are specific services available to and used by a majority of consumers and does the lack of availability or non-use by a minority of consumers result in social exclusion, and~~
- ~~5. does the availability and use of specific services convey a general net benefit to all consumers such that public intervention is warranted in circumstances where the specific services are not provided to the public under normal commercial circumstances?~~

ANNEX VI X

**INTEROPERABILITY OF DIGITAL CONSUMER EQUIPMENT REFERRED TO IN
ARTICLE 24105**

1. COMMON SCRAMBLING ALGORITHM AND FREE-TO-AIR RECEPTION

All consumer equipment intended for the reception of conventional digital television signals (i.e. broadcasting via terrestrial, cable or satellite transmission which is primarily intended for fixed reception, such as DVB-T, DVB-C or DVB-S), for sale or rent or otherwise made available in the ~~Community~~ ☒ Union ☒, capable of descrambling digital television signals, is to possess the capability to:

- allow the descrambling of such signals according to a common European scrambling algorithm as administered by a recognised European standards organisation, currently ETSI,
- display signals that have been transmitted in the clear provided that, in the event that such equipment is rented, the renter is in compliance with the relevant rental agreement.

2. INTEROPERABILITY FOR ~~ANALOGUE AND~~ DIGITAL TELEVISION SETS

~~Any analogue television set with an integral screen of visible diagonal greater than 42 cm which is put on the market for sale or rent in the Community is to be fitted with at least one open interface socket, as standardised by a recognised European standards organisation, e.g. as given in the Cenelec EN 50 049 1:1997 standard, permitting simple connection of peripherals, especially additional decoders and digital receivers.~~

Any digital television set with an integral screen of visible diagonal greater than 30 cm which is put on the market for sale or rent in the ~~Community~~ 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 standards organisation, or conforming to an industry-wide specification) ~~e.g. the DVB common interface connector~~, permitting simple connection of peripherals, and able to pass all ~~the~~ relevant elements of a digital television signal, including information relating to interactive and conditionally accessed services.
