

ANNEX I

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

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

- A. General conditions which may be attached to a general authorisation
1. Administrative charges in accordance with Article 16.
 2. Personal data and privacy protection specific to the electronic communications sector in accordance with Directive 2002/58/EC
 3. Information to be provided under a notification procedure in accordance with Article 12 and for other purposes as included in Article 21.
 4. Enabling of legal interception by competent national authorities in accordance with Regulation (EU) 2016/679 and Directive 2002/58/EC.
 5. Terms of use for communications from public authorities to the general public for warning the public of imminent threats and for mitigating the consequences of major catastrophes.
 6. Terms of use during major disasters or national emergencies to ensure communications between emergency services and authorities.
 7. Access obligations other than those provided for in Article 13 applying to undertakings providing electronic communications networks or services.
 8. Measures designed to ensure compliance with the standards or specifications referred to in Article 39.
 9. Transparency obligations on providers of public electronic communications network providing publicly available electronic communications services to ensure end-to-end connectivity, in accordance with the objectives and principles set out in Article 3 and, where necessary and proportionate, access by competent authorities to such information needed to verify the accuracy of such disclosure.
- B. Specific conditions which may be attached to a general authorisation for the provision of electronic communications networks
1. Interconnection of networks in accordance with this Directive.
 2. 'Must carry' obligations in accordance with this Directive.
 3. Measures for the protection of public health against electromagnetic fields caused by electronic communications networks in accordance with Union law, taking utmost account of Recommendation 1999/519/EC.
 4. Maintenance of the integrity of public electronic communications networks in accordance with this Directive including by conditions to prevent electromagnetic

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

- interference between electronic communications networks or services in accordance with Directive 2014/30/EU.
5. Security of public networks against unauthorised access in accordance with Directive 2002/58/EC.
 6. Conditions for the use of radio spectrum, in accordance with Article 7(2) of Directive 2014/53/EU, where such use is not made subject to the granting of individual rights of use in accordance with Article 46(1) and Article 48 of this Directive.
 - C. Specific conditions which may be attached to a general authorisation for the provision of electronic communications services, except number-independent interpersonal communications services
 1. Interoperability of services in accordance with this Directive.
 2. Accessibility by end-users of numbers from the national numbering plan, numbers from the UIFN and, where technically and economically feasible, from numbering plans of other Member States, and conditions in accordance with this Directive.
 3. Consumer protection rules specific to the electronic communications sector.
 4. Restrictions in relation to the transmission of illegal content in accordance with Directive 2000/31/EC and restrictions in relation to the transmission of harmful content in accordance with Directive 2010/13/EU.
 - D. Conditions which may be attached to rights of use for radio spectrum
 1. Obligation to provide a service or to use a type of technology within the limits of Article 45 including, where appropriate, coverage and quality of service requirements.
 2. Effective and efficient use of radio spectrum in accordance with this Directive.
 3. Technical and operational conditions necessary for the avoidance of harmful interference and for the protection of public health against electromagnetic fields, taking utmost account of Recommendation 1999/519/EC where such conditions are different from those included in the general authorisation.
 4. Maximum duration in accordance with Article 49, subject to any changes in the National Frequency Allocation Plan.
 5. Transfer or leasing of rights at the initiative of the holder of the rights and conditions for such transfer in accordance with this Directive.
 6. Fees for rights of use in accordance with Article 42.
 7. Any commitments which the undertaking obtaining the rights of use has made in the framework of an authorisation or authorisation renewal process prior to the authorisation being granted or, where applicable, to the invitation for application for rights of use.
 8. Obligations to pool or share radio spectrum or allow access to radio spectrum for other users in specific regions or at national level.
 9. Obligations under relevant international agreements relating to the use of radio spectrum bands.
 10. Obligations specific to an experimental use of radio spectrum bands.

- E. Conditions which may be attached to rights of use for numbering resources
1. Designation of service for which the number shall be used, including any requirements linked to the provision of that service and, for the avoidance of doubt, tariff principles and maximum prices that can apply in the specific number range for the purposes of ensuring consumer protection in accordance with point (d) of Article 3(2).
 2. Effective and efficient use of numbering resources in accordance with this Directive.
 3. Number portability requirements in accordance with this Directive.
 4. Obligation to provide public directory end-user information for the purposes of Article 112.
 5. Maximum duration in accordance with Article 94, subject to any changes in the national numbering plan.
 6. Transfer of rights at the initiative of the holder of the rights and conditions for such transfer in accordance with this Directive, including any condition that the right of use for a number be binding on all the undertakings to which the rights are transferred.
 7. Fees for rights of use in accordance with Article 95.
 8. Any commitments which the undertaking obtaining the rights of use has made in the course of a competitive or comparative selection procedure.
 9. Obligations under relevant international agreements relating to the use of numbers.
 10. Obligations concerning the extraterritorial use of numbers within the Union to ensure compliance with consumer protection and other number-related rules in Member States other than that of the country code.

ANNEX II

CONDITIONS FOR ACCESS TO DIGITAL TELEVISION AND RADIO SERVICES BROADCAST TO VIEWERS AND LISTENERS IN THE UNION

Part I

Conditions for conditional access systems to be applied in accordance with Article 62(1)

In relation to conditional access to digital television and radio services broadcast to viewers and listeners in the Union, irrespective of the means of transmission, Member States shall ensure in accordance with Article 62 that the following conditions apply:

- (a) all undertakings providing conditional access services, irrespective of the means of transmission, which provide access services to digital television and radio services and the access services of which broadcasters depend on to reach any group of potential viewers or listeners are to:
 - offer to all broadcasters, on a fair, reasonable and non-discriminatory basis compatible with Union competition law, technical services enabling the broadcasters' digitally-transmitted services to be received by viewers or

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

- listeners authorised by means of decoders administered by the service operators, and comply with Union competition law,
 - keep separate financial accounts regarding their activity as conditional access providers.
- (b) when granting licences to manufacturers of consumer equipment, holders of industrial property rights to conditional access products and systems are to ensure that this is done on fair, reasonable and non-discriminatory terms. Taking into account technical and commercial factors, holders of rights are not to subject the granting of licences to conditions prohibiting, deterring or discouraging the inclusion in the same product of:
- a common interface allowing connection with several other access systems, or
 - means specific to another access system, provided that the licensee complies with the relevant and reasonable conditions ensuring, as far as he is concerned, the security of transactions of conditional access system operators.

Part II

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

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

ANNEX III

CRITERIA FOR THE DETERMINATION OF WHOLESALE VOICE TERMINATION RATES

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

- (a) rates shall be based on the recovery of costs incurred by an efficient operator; the evaluation of efficient costs shall be based on current cost values; the cost methodology to calculate efficient costs shall be based on a bottom-up modelling approach using long-run incremental traffic-related costs of providing the wholesale voice termination service to third parties;
- (b) the relevant incremental costs of the wholesale voice termination service shall be determined by the difference between the total long-run costs of an operator providing its full range of services and the total long-run costs of that operator not providing a wholesale voice termination service to third parties;
- (c) only those traffic-related costs which would be avoided in the absence of a wholesale voice termination service being provided shall be allocated to the relevant termination increment;
- (d) costs related to additional network capacity shall be included only to the extent that they are driven by the need to increase capacity for the purpose of carrying additional wholesale voice termination traffic;

- (e) radio spectrum fees shall be excluded from the mobile voice termination increment;
- (f) only those wholesale commercial costs shall be included which are directly related to the provision of the wholesale voice termination service to third parties;
- (g) all fixed network operators shall be considered to provide voice termination services at the same unit costs as the efficient operator, regardless of their size;
- (h) for mobile network operators, the minimum efficient scale shall be set at a market share not below 20 %;
- (i) the relevant approach for asset depreciation shall be economic depreciation; and
- (j) the technology choice of the modelled networks shall be forward looking, based on an IP core network, taking into account the various technologies likely to be used over the period of validity of the maximum rate; in the case of fixed networks, calls shall be considered to be exclusively packet switched.

ANNEX IV

CRITERIA FOR ASSESSING CO-INVESTMENT OFFERS

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

- (a) The co-investment offer shall be open to any undertaking over the lifetime of the network built under a co-investment offer on a non-discriminatory basis. The undertaking designated as having significant market power may include in the offer reasonable conditions regarding the financial capacity of any undertaking, so that for instance potential co-investors need to demonstrate their ability to deliver phased payments on the basis of which the deployment is planned, the acceptance of a strategic plan on the basis of which medium-term deployment plans are prepared, and so on.
- (b) The co-investment offer shall be transparent:
 - the offer shall be available and easily identified on the website of the undertaking designated as having significant market power;
 - full detailed terms shall be made available without undue delay to any potential bidder that has expressed an interest, including the legal form of the co-investment agreement and, when relevant, the heads of term of the governance rules of the co-investment vehicle; and
 - the process, like the road map for the establishment and development of the co-investment project shall be set in advance, shall be clearly explained in writing to any potential co-investor, and all significant milestones shall be clearly communicated to all undertakings without any discrimination.
- (c) The co-investment offer shall include terms to potential co-investors which favour sustainable competition in the long term, in particular:
 - All undertakings shall be offered fair, reasonable and non-discriminatory terms and conditions for participation in the co-investment agreement relative to the time they join, including in terms of financial consideration

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

- required for the acquisition of specific rights, in terms of the protection awarded to the co-investors by those rights both during the building phase and during the exploitation phase, for example by granting indefeasible rights of use (IRUs) for the expected lifetime of the co-invested network and in terms of the conditions for joining and potentially terminating the co-investment agreement. Non-discriminatory terms in this context do not entail that all potential co-investors shall be offered exactly the same terms, including financial terms, but that all variations of the terms offered shall be justified on the basis of the same objective, transparent, non-discriminatory and predictable criteria such as the number of end-user lines committed for.
- The offer shall allow flexibility in terms of the value and timing of the commitment provided by each co-investor, for example by means of an agreed and potentially increasing percentage of the total end-user lines in a given area, to which co-investors have the possibility to commit gradually and which is set at a unit level enabling smaller co-investors with limited resources to enter the co-investment at a reasonably minimum scale and to gradually increase their participation while ensuring adequate levels of initial commitment. The determination of the financial consideration to be provided by each co-investor needs to reflect the fact that early investors accept greater risks and engage capital sooner.
 - A premium increasing over time shall be considered to be justified for commitments made at later stages and for new co-investors entering the co-investment after the commencement of the project, to reflect diminishing risks and to counteract any incentive to withhold capital in the earlier stages.
 - The co-investment agreement shall allow the assignment of acquired rights by co-investors to other co-investors, or to third parties willing to enter into the co-investment agreement subject to the transferee undertaking being obliged to fulfil all original obligations of the transferor under the co-investment agreement.
 - Co-investors shall grant each other reciprocal rights on fair and reasonable terms and conditions to access the co-invested infrastructure for the purposes of providing services downstream, including to end-users, in accordance with transparent conditions which are to be made transparent in the co-investment offer and subsequent agreement, in particular where co-investors are individually and separately responsible for the deployment of specific parts of the network. If a co-investment vehicle is created, it shall provide access to the network to all co-investors, whether directly or indirectly, on an equivalence of inputs basis and in accordance with fair and reasonable terms and conditions, including financial conditions that reflect the different levels of risk accepted by the individual co-investors.
- (d) The co-investment offer shall ensure a sustainable investment likely to meet future needs, by deploying new network elements that contribute significantly to the deployment of very high capacity networks.

ANNEX V

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

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

ANNEX VI

DESCRIPTION OF FACILITIES AND SERVICES REFERRED TO IN ARTICLE 88
(CONTROL OF EXPENDITURE), ARTICLE 115 (ADDITIONAL FACILITIES)
AND ARTICLE 106 (PROVIDER SWITCHING AND NUMBER PORTABILITY)*Part A***Facilities and services referred to in Articles 88 and 115**

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

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

(a) Itemised billing

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

- (i) allow verification and control of the charges incurred in using internet access services or voice communications services, or number-based interpersonal communications services in the case of Article 115; and

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

- (ii) adequately monitor their usage and expenditure and thereby exercise a reasonable degree of control over their bills.

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

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

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

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

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

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

- (c) Pre-payment systems

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

- (d) Phased payment of connection fees

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

- (e) Non-payment of bills

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

- (f) Tariff advice

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

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

(g) Cost control

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

(h) facility to deactivate third party billing

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

Part B

Facilities referred to in Article 115

(a) Calling-line identification

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

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

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

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

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

Part C

Implementation of the number portability provisions referred to in Article 106

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

(a) in the case of geographic numbers, at a specific location; and

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

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

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

ANNEX VII

CALCULATING THE NET COST, IF ANY, OF UNIVERSAL SERVICE OBLIGATIONS AND ESTABLISHING ANY COMPENSATION OR SHARING MECHANISM IN ACCORDANCE WITH ARTICLES 89 AND 90

Part A

Calculation of net cost

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

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

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

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

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

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

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

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

Part B

Compensation of net costs of universal service obligations

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

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

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

ANNEX VIII

INFORMATION REQUIREMENTS TO BE PROVIDED IN ACCORDANCE WITH ARTICLE 102 (INFORMATION REQUIREMENTS FOR CONTRACTS)

A. Information requirements for providers of publicly available electronic communications services other than transmission services used for the provision of machine-to-machine services

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

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

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

- (2) as part of the information on price, where and to the extent applicable, the respective prices for activating the electronic communications service and for any recurring or consumption-related charges;
- (3) as part of the information on the duration of the contract and the conditions for renewal and termination of the contract, including possible termination fees, to the extent that such conditions apply:
 - (i) any minimum use or duration required to benefit from promotional terms;

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

- (ii) any charges related to switching and compensation and refund arrangements for delay or abuse of switching, as well as information about the respective procedures;
- (iii) information on the right of consumers using pre-paid services to a refund, upon request, of any remaining credit in the event of switching, as set out in Article 106(6);
- (iv) any fees due on early termination of the contract, including information on unlocking the terminal equipment and any cost recovery with respect to terminal equipment;
- (4) any compensation and refund arrangements, including, where applicable, explicit reference to rights of consumers, which apply if contracted levels of quality of service are not met or if the provider responds inadequately to a security incident, threat or vulnerability;
- (5) the type of action that might be taken by the provider in reaction to security incidents or threats or vulnerabilities.

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

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

- (1) as part of the main characteristics of each service provided:
 - (i) any minimum levels of quality of service to the extent that these are offered, and taking utmost account of the BEREC guidelines adopted in accordance with Article 104(2) regarding:
 - for internet access services: at least latency, jitter, packet loss,
 - for publicly available interpersonal communications services, where they exert control over at least some elements of the network or have a service level agreement to that effect with undertakings providing access to the network: at least the time for the initial connection, failure probability, call signalling delays in accordance with Annex X; and
 - (ii) without prejudice to the right of end-users to use terminal equipment of their choice in accordance with Article 3(1) of Regulation (EU) 2015/2120, any conditions, including fees, imposed by the provider on the use of terminal equipment supplied;
- (2) as part of the information on price, where and to the extent applicable, the respective prices for activating the electronic communications service and for any recurring or consumption-related charges:

- (i) details of specific tariff plan or plans under the contract and, for each such tariff plan the types of services offered, including where applicable, the volumes of communications (such as MB, minutes, messages) included per billing period, and the price for additional communication units;
 - (ii) in the case of tariff plan or plans with a pre-set volume of communications, the possibility for consumers to defer any unused volume from the preceding billing period to the following billing period, where this option is included in the contract;
 - (iii) facilities to safeguard bill transparency and monitor the level of consumption;
 - (iv) tariff information regarding any numbers or services subject to particular pricing conditions; with respect to individual categories of services, competent authorities in coordination, where relevant, with national regulatory authorities may require in addition such information to be provided immediately prior to connecting the call or to connecting to the provider of the service;
 - (v) for bundled services and bundles including both services and terminal equipment the price of the individual elements of the bundle to the extent they are also marketed separately;
 - (vi) details and conditions, including fees, of any after-sales service, maintenance, and customer assistance; and
 - (vii) the means by which up-to-date information on all applicable tariffs and maintenance charges may be obtained;
 - (3) as part of the information on the duration of the contract for bundled services and the conditions for renewal and termination of the contract, where applicable, the conditions of termination of the bundle or of elements thereof;
 - (4) without prejudice to Article 13 of the Regulation (EU) 2016/679, information on what personal data shall be provided before the performance of the service or collected in the context of the provision of the service;
 - (5) details on products and services designed for end-users with disabilities and how updates on this information can be obtained;
 - (6) the means of initiating procedures for the resolution of disputes including national and cross-border disputes in accordance with Article 25.
- II. In addition to the requirements set out in Part A and under Point I, providers of publicly available number-based interpersonal communications services shall also provide the following information:

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

- (1) any constraints on access to emergency services or caller location information due to a lack of technical feasibility insofar as the service allows end-users to originate calls to a number in a national or international numbering plan;
 - (2) the end-user's right to determine whether to include his or her personal data in a directory, and the types of data concerned, in accordance with Article 12 of Directive 2002/58/EC;
- III. In addition to the requirements set out in Part A and under Point I, providers of internet access services shall also provide the information required pursuant to Article 4(1) of Regulation (EU) 2015/2120.

ANNEX IX

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

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

1. Contact details of the undertaking
2. Description of the services offered
 - 2.1. Scope of the services offered and the main characteristics of each service provided, including any minimum levels of quality of service where offered and any restrictions imposed by the provider on the use of terminal equipment supplied.
 - 2.2. Tariffs of the services offered, including information on communications volumes (such as restrictions of data usage, numbers of voice minutes, numbers of messages) of specific tariff plans and the applicable tariffs for additional communication units, numbers or services subject to particular pricing conditions, charges for access and maintenance, all types of usage charges, special and targeted tariff schemes and any additional charges, as well as costs with respect to terminal equipment.
 - 2.3. After-sales, maintenance and customer assistance services offered and their contact details.
 - 2.4. Standard contract conditions, including contract duration, charges due on early termination of the contract, rights related to the termination of bundled offers or of elements thereof, and procedures and direct charges related to the portability of numbers and other identifiers, if relevant.

- 2.5. If the undertaking is a provider of number-based interpersonal communications services, information on access to emergency services and caller location, or any limitation on the latter. If the undertaking is a provider of number-independent interpersonal communications services, information on the degree to which access to emergency services may be supported or not.
- 2.6. Details of products and services, including any functions, practices, policies and procedures and alterations in the operation of the service, specifically designed for end-users with disabilities, in accordance with Union law harmonising accessibility requirements for products and services.
3. Dispute resolution mechanisms, including those developed by the undertaking.

ANNEX X

QUALITY OF SERVICE PARAMETERS

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

For providers of access to a public electronic communications network

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

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

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

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

For providers of internet access services

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

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

Note 1

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

Note 2

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

ANNEX XI

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

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

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

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

2. Interoperability for digital television sets

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

3. Interoperability for car radio receivers

Any car radio receiver integrated in a new vehicle of category M which is made available on the market for sale or rent in the Union from 21 December 2020 shall comprise a receiver capable of receiving and reproducing at least radio services provided via digital terrestrial radio broadcasting. Receivers which are in accordance with harmonised standards the references of which have been published in the *Official Journal of the European Union* or with parts thereof shall be considered to comply with that requirement covered by those standards or parts thereof.

ANNEX XII

*Part A***Repealed Directives with list of the successive amendments thereto****(referred to in Article 125)**

Directive 2002/21/EC of the European Parliament and of the Council (OJ L 108, 24.4.2002, p. 33)		
	Directive 2009/140/EC of the European Parliament and of the Council (OJ L 337, 18.12.2009, p. 37)	Article 1
	Regulation (EC) No 544/2009 of the European Parliament and of the Council (OJ L 167, 29.6.2009, p. 12)	Article 2
	Regulation (EC) No 717/2007 of the European Parliament and of the Council (OJ L 171, 29.6.2007, p. 32)	Article 10
Directive 2002/20/EC of the European Parliament and of the Council (OJ L 108, 24.4.2002, p. 21)		
	Directive 2009/140/EC of the European Parliament and of the Council (OJ L 337, 18.12.2009, p. 37)	Article 3 and Annex
Directive 2002/19/EC of the European Parliament and of the Council (OJ L 108, 24.4.2002, p. 7)		
	Directive 2009/140/EC of the European Parliament and of the Council (OJ L 337, 18.12.2009, p. 37)	Article 2
Directive 2002/22/EC of the European Parliament and of the Council (OJ L 108, 24.4.2002, p. 51)		
	Directive 2009/136/EC of the European Parliament and of the Council (OJ L 337, 18.12.2009, p. 11)	Article 1 and Annex I

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

	Regulation (EU) 2015/2120 of the European Parliament and of the Council (OJ L 310, 26.11.2015, p. 1)	Article 8
--	--	-----------

Part B

**Time-limits for transposition into national law and dates of application
(referred to in Article 125)**

Directive	Time-limit for transposition	Date of application
2002/19/EC	24 July 2003	25 July 2003
2002/20/EC	24 July 2003	25 July 2003
2002/21/EC	24 July 2003	25 July 2003
2002/22/EC	24 July 2003	25 July 2003

ANNEX XIII

CORRELATION TABLE

Directive 2002/21/EC	Directive 2002/20/EC	Directive 2002/19/EC	Directive 2002/22/EC	This Directive
Article 1(1), (2) and (3)				Article 1(1), (2) and (3)
Article 1(3a)				Article 1(4)
Article 1(4) and (5)				Article 1(5) and (6)
Point (a) of Article 2				Point (1) of Article 2
—	—	—	—	Point (2) of Article 2
Point (b) of Article 2				Point (3) of Article 2
Point (c) of Article 2				Point (4) of Article 2
—	—	—	—	Point (5) of Article 2
—	—	—	—	Point (6) of Article 2

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

—	—	—	—	Point (7) of Article 2
Point (d) of Article 2				Point (8) of Article 2
Point (da) of Article 2				Point (9) of Article 2
Point (e) of Article 2				Point (10) of Article 2
Point (ea) of Article 2				Point (11) of Article 2
Point (f) of Article 2				Point (12) of Article 2
Point (g) of Article 2				—
Point (h) of Article 2				Point (13) of Article 2
Point (i) of Article 2				Point (14) of Article 2
Point (j) of Article 2				—
Point (k) of Article 2				—
Point (l) of Article 2				—
Point (m) of Article 2				Point (15) of Article 2
Point (n) of Article 2				Point (16) of Article 2
Point (o) of Article 2				Point (17) of Article 2
Point (p) of Article 2				Point (18) of Article 2
Point (q) of Article 2				Point (19) of Article 2
Point (r) of Article 2				Point (20) of Article 2
Point (s) of Article 2				Point (31) of Article 2
—	—	—	—	Point (22) of Article 2
Article 3(1)				Article 5(1)

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

—	—	—	—	Article 5(2)
Article 3(2)				Article 6(1)
Article 3(3)				Article 6(2)
Article 3(3a) first subparagraph				Article 8(1)
—	—	—	—	Article 8(2)
—	—	—	—	Article 7(1)
Article 3(3a) second subparagraph				Article 7(2) and (3)
Article 3(3a) third subparagraph				Article 9(1) and (3)
—	—	—	—	Article 9(2)
Article 3(3b)				Article 10(1)
Article 3(3c)				Article 10(2)
Article 3(4)				Article 5(3)
Article 3(5)				Article 11
Article 3(6)				Article 5(4)
Article 4				Article 31
Article 5				Article 20
—	—	—	—	Article 22
Article 6				Article 23
Article 7				Article 32
Article 7a				Article 33
—	—	—	—	Point (c) of Article 33(5)
Article 8(1) and (2)				Article 3(1) and (2)
Article 8(5)				Article 3(3)
Article 8a(1) and (2)				Article 4(1) and (2)
—	—	—	—	Article 4(3)
Article 8a(3)				Article 4(4)
—	—	—	—	Article 29
Article 9(1) and (2)				Article 45(1) and (2)

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

—	—	—	—	Article 45(3)
Article 9(3)				Article 45(4)
Article 9(4) and (5)				Article 45(5) and (6)
Article 9(6) and (7)				—
Article 9a				—
Article 9b(1) and (2)				Article 51(1) and (2)
Article 9b(3)				Article 51(4)
—	—	—	—	Article 51(3)
Article 10(1)				Article 95(1)
Article 10(2)				Article 95(3)
—	—	—	—	Article 95(2)
—	—	—	—	Article 95(4)
—	—	—	—	Article 95(5)
—	—	—	—	Article 95(6)
Article 10(3)				Article 95(7)
Article 10(4)				Article 95(8)
Article 10(5)				—
Article 11				Article 43
Article 12(1)				Article 44(1)
Article 12(2)				—
Article 12(3)				Article 61(2)
Article 12(4)				—
Article 12(5)				Article 44(2)
Article 13				Article 17
Article 13a(1), (2) and (3)				Article 40(1), (2) and (3)
Article 13a(4)				—
—				Article 40(5)
—	—	—	—	Article 40(4)
Article 13b(1), (2) and (3)				Article 41(1), (2) and (3)
—	—	—	—	Article 41(4)
Article 13b(4)				Article 41(7)

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

—	—	—	—	Article 41(5)
—	—	—	—	Article 41(6)
Article 14				Article 63
Article 15(1),(2), (3)				Article 64(1), (2), (3)
Article 15 (4)	—	—	—	—
—	—	—	—	Article 66
Article 16				Article 67
Article 17				Article 39
Article 18				—
Article 19				Article 38
Article 20				Article 26
Article 21(1)				Article 27(1)
Article 21(2) first and second subparagraphs				Article 27(2)
Article 21(2) third subparagraph				Article 27(3)
Article 21(2) fourth and fifth subparagraphs				Article 27(4)
—				Article 27(5)
Article 21(3)				—
Article 21(4)				Article 27(6)
Article 21a				Article 29
Article 22(1)				Article 118(1)
Article 22(2)				Article 118(3)
Article 22(3)				Article 118(4)
—	—	—	—	Article 11(2)
—	—	—	—	Article 118(5)
—	—	—	—	Article 117
Article 23				Article 119
Article 24				Article 120(1) and (2)
Article 25				Article 122(1)
Article 26				Article 125

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

Article 28				Article 124
Article 29				Article 127
Article 30				Article 128
Annex II				—
	Article 1			Article 1(1)
	Article 2(1)			—
	Article 2(2)			Point (22) of Article 2
—	—	—	—	Point (23) of Article 2
—	—	—	—	Point (24) of Article 2
—	—	—	—	Point (25) of Article 2
—	—	—	—	Point (26) of Article 2
	Article 3(1)			Article 12(1)
	Article 3(2) first sentence			Article 12(2)
	Article 3(2) 2nd, 3rd and 4th sentences			Article 12(3)
	Article 3(3)			Article 12(4)
—	—	—	—	
	Article 4			Article 15
	Article 5(1)			Article 46(1)
—	—	—	—	Article 46(2) and (3)
	Article 5(2) first subparagraph			Article 48(1)
	Article 5(2) second subparagraph first sentence			Article 48(2)
	Article 5(2) third subparagraph			Article 48(5)
	Article 5(2) second subparagraph second sentence			Article 48(3)

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

—	—	—	—	Article 48(4)
	Article 5(3)			Article 48(6)
	Article 5(4) and (5)			Article 93(4) and (5)
	Article 5(6)			Article 52
—	—	—	—	Article 93
	Article 6(1),(2), (3) and (4)			Article 13
—	—	—	—	Article 47
	Article 7			—
	—			Article 55
	Article 8			Article 36
	Article 9			Article 14
	Article 10			Article 30
—	—	—	—	
	Article 11			Article 21
	Article 12			Article 16
	Article 13			Article 42
—	—	—	—	Article 94
	Article 14(1)			Article 18
	Article 14(2)			Article 19
	Article 15			Article 120(3) and (4)
	Article 16			—
	Article 17			—
	Article 18			—
	Article 19			—
	Article 20			—
	Annex			Annex I
		Article 1 (1 and 2)		Article 1(2) and (3)
		Point (a) of Article 2		Point (27) of Article 2
		Point (b) of Article 2		Point (28) of Article 2
		Point (c) of Article 2		Point (29) of Article 2

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

		Point (d) of Article 2		—
		Point (e) of Article 2		Point (30) of Article 2
		Article 3		Article 59
		Article 4		Article 60
		Article 5		Article 61
		Article 6		Article 62
				—
		Article 8		Article 68
		Article 9		Article 69
		Article 10		Article 70
		Article 11		Article 71
—	—	—	—	Article 72
		Article 12		Article 73
		Article 13		Article 74
—	—	—	—	Article 75
—	—	—	—	Article 76
		Article 13a		Article 77
		Article 13b		Article 78
—	—	—	—	Article 80
—	—	—	—	Article 81
		Article 14		—
		Article 15		Article 120(5)
		Article 16(1)		—
		Article 16(2)		Article 121(4)
		Article 17		—
		Article 18		—
		Article 19		—
		Article 20		—
		Annex I		Annex II
		Annex II		—
—	—	—	—	Annex III
			Article 1	Article 1(4) and (5)

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

			Point (a) of Article 2	—
			Point (c) of Article 2	Point (32) of Article 2
			Point (d) of Article 2	Point (33) of Article 2
			Point (f) of Article 2	Point (34) of Article 2
—	—	—	—	Point (35) of Article 2
—	—	—	—	Point (37) of Article 2
—	—	—	—	Point (38) of Article 2
—	—	—	—	Point (39) of Article 2
—	—	—	—	Article 84
—	—	—	—	Article 85
			Article 3	Article 86(1) and (2)
			Article 4	—
			Article 5	—
			Article 6	—
			Article 7	—
			Article 8(1)	Article 86(3)
			Article 8(2)	Article 86(4)
			Article 8(3)	Article 86(5)
			Article 9	—
—	—	—	—	Article 87
			Article 10	Article 88
			Article 11	—
			Article 12	Article 89
			Article 13	Article 90
			Article 14	Article 91
			Article 15	Article 122(2) and (3)
			Article 17	—
—	—	—	—	Article 99

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

—	—	—	—	Article 101
			Article 20(1)	Article 102
			Article 20(2)	Article 105(3)
			Article 21	Article 103
			Article 22	Article 104
			Article 23	Article 108
			Article 23a	Article 111
			Article 24	Article 113
			Article 25	Article 112
			Article 26	Article 109
			Article 27	—
			Article 27a	Article 96
			Article 28	Article 97
			Article 29	Article 115
			Article 30(1)	Article 106(2)
			Article 30(2)	Article 106(4)
			Article 30(3)	Article 106(4)
			Article 30(4)	Article 106(5)
			Article 30(5)	Article 105(1)
			Article 31	Article 114
			Article 32	Article 92
			Article 33	Article 24
			Article 34	Article 25
			Article 35	Article 116
			Article 36	Article 121
			Article 37	—
			Article 38	—
			Article 39	—
			Article 40	—
			Annex I	Annex V
			Annex II	Annex VII
			Annex III	Annex IX
			Annex IV	Annex VI
			Annex V	—

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

			Annex VI	Annex X
				Annex IV