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CHAPTER II

THE REGULATION OF ELECTRONIC COMMUNICATIONS NETWORKS AND SERVICES

Alexandre de Streel and Christian Hocepied[1]

Overview of the chapter This chapter reviews the EU rules governing the way in which Member States regulate electronic communications networks and services (hereinafter, the regulatory framework) within their jurisdiction. Substantive rules are formulated in the Directive establishing the European Electronic Communications Code ("EECC") of 2018, which is the main EU law governing the operation of providers of electronic communications networks and services in the EU;[2] this Code is complemented by more specific laws, mainly: **2-001**

- the Competition Directive of 2002, which consolidates the liberalisation measures of the sector; [3]
- the Spectrum Decision of 2002 and the Multiannual Radio Spectrum Policy Programme of 2012 which aims for better coordination and harmonisation of spectrum policies in the EU; [4]

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1 This chapter is a fully revised version of Chapter I of the third edition of this book. The authors want to thank Michèle Ledger and Robert Queck for their useful comments.

2 Directive 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (Recast) [2018] OJ L321/36 ("EECC"). This Code replaces a series of four Directives (Framework 2002/21, Authorisation 2002/20, Access 2002/19, Universal Service 2002/22) which had been adopted in 2002 and reviewed in 2009. Those previous Directives have been analysed in the third edition of this book. In the context of its Proposal for the EECC, the Commission Staff carried out a thorough evaluation of the functioning of this previous regulatory framework: Commission Staff Working Document of 14 September 2016, Evaluation of the regulatory framework for electronic communications, SWD(2016)313. For an insightful analysis of the evolution of EU electronic communications law, see Hancher and Larouche "The coming of age of EU regulation of network industries and services of general economic interest" in Craig and de Búrca (eds) *The Evolution of EU Law*, 2nd edn (Oxford, Oxford University Press, 2011). The Commission Staff also carried out a thorough impact assessment: Commission Staff Working Document of 14 September 2016, Impact assessment of the Proposal for a Directive establishing the European Electronic Communications Code Evaluation of the regulatory framework for electronic communications, SWD(2016) 303. This work was based on the six external studies commissioned by the Commission, available at *https://ec.europa.eu/digital-single-market/en/reports-and-studies/76022/3492* [Accessed 9 September 2019]. For a first critical analysis of the EECC: Vogelsang, "Has Europe missed the endgame of telecommunications policy?" (2019) 43 *Telecommunications Policy* 1.

3 Commission Directive 2002/77 of 16 September 2002 on competition in the markets for electronic communications networks and services [2002] OJ L249/21.

4 Decision 676/2002 of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community ("Radio Spectrum Decision") [2002] OJ L108/1, which encompasses sectors such as transport and research and development and Decision 243/2012 of the European Parliament and of the Council of 14 March 2012 establishing a multiannual radio spectrum policy programme [2012] OJ L81/7.

- the Roaming Regulation of 2012, which imposes price controls on retail and wholesale international roaming in the EU; [5]
- the Broadband Cost Regulation Directive ("BCRD") of 2014 which aims to reduce the costs of deploying high speed networks;[6] and
- the Open Internet Regulation of 2015, which imposes strict net neutrality requirements in the EU.[7]

The main institutional rules are formulated in the Directive establishing the European Electronic Communications Code ("EECC") of 2018, which is the main EU law setting up the institutional design and the governance of electronic communications in the European Union; this Code is complemented by more specific laws, mainly:

- the BEREC Regulation of 2018, which sets up a coordination network between the national regulatory authorities in order to promote regulatory consistency across the EU;[8] and
- the Radio Spectrum Policy Group Decision of 2019, which sets up a high-level expert group between the national authorities in charge of radio spectrum policy in order to promote coordination and harmonisation of spectrum policies across the EU and advice the Commission.[9]

2-002 **Structure of the chapter** The chapter, which has a similar structure to the EECC, is organised as follows: the first section deals with the scope, the objective and the principles of the regulatory framework; the second section deals with the institutional set-up and the governance; the third section deals with rules governing market entry (general authorisation and individual licences); the fourth section deals with the rules aimed at promoting competition in the market (access rules), which complement and strengthen the general competition law rules in the electronic communications sector reviewed in the second part of this book; the fifth section deals with the rules on universal service and other services of general economic interest; the sixth section deals with end-users' protection rules, which complement and strengthen the general consumer protection rules for the electronic communications sector, reviewed in Chapter VII of this book; the seventh section

[5] Regulation 531/2012 of 13 June 2012 on roaming on public mobile communications networks within the Union (recast) [2012] OJ L172/10 ("Roaming Regulation"), as amended by Regulation 2015/2120 and Regulation 2017/920. This Regulation replaces the previous Roaming Regulation 717/2007, which had been adopted in 2007 and was analysed in the third edition of this book.

[6] Directive 2014/61 on measures to reduce the cost of deploying high-speed electronic communications networks [2014] OJ L155/1 ("Broadband Cost Reduction Directive") or ("BCRD"), which deals with access to physical infrastructures of all utilities network operators and to any existing in-building physical infrastructures. See also, the Impact Assessment of the Commission proposal: Commission Staff Working Document of 26 March 2013, SWD(2013)73.

[7] Regulation 2015/2120 of 25 November 2015 laying down measures concerning open internet access and retail charges for regulated intra-EU communications [2015] OJ L310/1 ("Open Internet Regulation"), as amended by the BEREC Regulation 2018/1971. Also, the Impact Assessment of the Commission proposal: Commission Staff Working Document of 11 September 2013, SWD(2013)331.

[8] Regulation 2018/1971 of the European Parliament and of the Council of 11 December 2018 establishing the Body of European Regulators for Electronic Communications [2018] OJ L321/1 ("BEREC Regulation"). This Regulation replaces the previous BEREC Regulation 1211/2009, which had been adopted in 2009 and was reviewed in the third edition of this book.

[9] Commission Decision of 11 June 2019 setting up the Radio Spectrum Policy Group [2019] OJ C196/16. This Regulation replaces the previous Radio Spectrum Policy Group Decision which had been adopted in 2002 with a revision in 2009 and was reviewed in the third edition of this Book.

deals with net neutrality rules; and the last section deals with the specific regulation, in particular the price control for intra-EU international roaming services and international communications.

A. Scope, Objectives and Principles

1. Scope

***Summa divisio* between transmission and content** EU law makes an important distinction between the regulation of the content which implies an editorial responsibility and the transmission of this content. The EECC regulates the latter and establishes the legal framework for the provision of electronic communications networks and services.[10] Conversely, the EECC does not regulate the content of the services delivered over electronic communications networks using electronic communications services, such as broadcasting content. However, the EECC takes into account the links existing between transmission and content, for example to foster media pluralism and cultural diversity.[11] In addition, the regulation of the provision of electronic communications networks and services does not cover radio nor telecommunications terminal equipment,[12] except to ensure end-to-end interoperability of electronic communications services and/or to facilitate access for disabled users.[13] 2-003

Electronic communications networks Electronic communications networks are: 2-004

> "...transmission systems, whether or not based on a permanent infrastructure or centralised administration capacity, and, where applicable, switching or routing equipment and other resources, including network elements which are not active, which permit the conveyance of signals by wire, radio, optical or other electromagnetic means, including satellite networks, fixed (circuit—and packet–switched, including internet) and mobile networks, electricity cable systems, to the extent that they are used for the purpose of

[10] *UPC Nederland v Gemeente Hilversum* (C-518/11) EU:C:2013:709, para.47: the Court of Justice decided that a service consisting in the supply of a basic package of radio and television programmes via cable, the charge for which includes transmission costs as well as payments to broadcasters and royalties paid to copyright collecting societies in connection with the transmission of programme content, falls within the definition of an electronic communications service so far as that service primarily entails the transmission of television content on the cable distribution network to the receiving terminal of the final consumer. See also *UPC DTH v Nemzeti Média—és Hírközlési Hatóság Elnökhelyettese* (C-475/12) EU:C:2014:285, para.36: the Court of Justice decided that a service consisting in the supply of conditional access to a package of programmes which contains radio and television broadcast services and is retransmitted by satellite, falls within the definition of electronic communications service.

[11] EECC recital 7. The EECC allows Member States to grant rights of use of radio frequencies to certain providers of radio or television broadcast content services outside open objective, transparent, non-discriminatory and proportionate authorisation procedures (art.48(2) EECC) and to impose "must carry' obligations on certain electronic communications network and service providers for the transmission of specified radio and television broadcast channels (art.114(1) EECC)

[12] As explained in Chapter I of this Book, telecommunications terminal equipment are mainly regulated by the Directive 2014/53 of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of Member States relating to the making available on the market of radio equipment [2014] OJ L153/62 ("Radio Equipment Directive"), as amended.

[13] For this reason, art.113 EECC regulates certain aspects of car radio and consumer radio receivers, as well as consumer digital television equipment.

transmitting signals, networks used for radio and television broadcasting, and cable television networks, irrespective of the type of information conveyed."[14]

Accordingly, electronic communications networks are sets of systems, equipment and active and passive elements permitting the transmission of signals, regardless of the content that these signals carry. As all types of electronic communications networks are covered, irrespective of the technology used, the definition is flexible enough to accommodate future technological developments.

2-005 **Associated facilities** Associated facilities are:

"...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 buildings or entries to buildings, building wiring, antennae, towers and other supporting constructions, ducts, conduits, masts, manholes, and cabinets."[15]

The main component of associated facilities is the physical infrastructure which amounts to 80% of the cost of building the networks. Physical infrastructure is more precisely defined in the Broadband Cost Reduction Directive as:

"...any element of a network which is intended to host other elements of a network without becoming itself an active element of the network, such as pipes, masts, ducts, inspection chambers, manholes, cabinets, buildings or entries to buildings, antenna installations, towers and poles; cables, including dark fibre."[16]

2-006 **Electronic communications services** Electronic communications services are services, normally provided for remuneration via electronic communications networks, which consist of one of the following types of services: (i) internet access services; (ii) interpersonal communications service; or (iii) services consisting wholly or mainly in the conveyance of signals.[17]

2-007 *Normally provided for remuneration* To be considered as services under EU law,[18] electronic communications services must be provided for remuneration. The remuneration does not have to come directly from the recipient of the service.[19] For instance, an activity financed by advertisements can be a service provided for remuneration. Remuneration should therefore be assumed when end-users are exposed to advertisements as a condition for gaining access to online services. The concept of remuneration also covers non-monetary means of payment such as personal or non-personal data.[20] The concept of remuneration encompasses also situations where the end-user allows access to information even without actively

14 EECC art.2(1).
15 EECC art.2(10).
16 BCRD art.2(2).
17 EECC art.2(4).
18 In particular, art.57 TFEU on the free movement of services.
19 The case law of the Court of Justice, under art.57 TFEU, considers that there is a remuneration when the service provider is paid by a third party and not by the service recipient: *Deliège* (C-51/96 and C-191/97) EU:C:2000:199, paras 56 and 57 and *Sotiris Papasavvas v Fileleftheros Dimosia Etairia* (C-291/13) EU:C:2014:2209, para.30.
20 EECC recital 16, noting that: "In the digital economy, market participants increasingly consider information about users as having a monetary value. Electronic communications services are often

supplying it, such as information collected and transmitted by a cookie, enabling targeted advertisement and personal offers.

Internet access services Internet access services provide access to the internet, and thereby connectivity to virtually all end points of the internet, irrespective of the network technology and terminal equipment used.[21] **2-008**

Interpersonal communications service Interpersonal communications services are services that enable an interactive exchange of information between a finite number of natural persons, determined by the initiator of the communication and allowing the addressee to respond.[22] This can be the case for voice calls, emails, messaging services and group chats. Conversely, linear broadcasting, video on demand, websites, social networks, blogs, or exchange of information between machines are not interpersonal communications services. One of the main changes brought by the EECC is the inclusion of the Over-the-Top ("OTT") communications services[23] into the scope of the definition of electronic communications services. This change was justified as end-users increasingly substitute traditional voice telephony, text messages ("SMS") and electronic mail conveyance services with functionally equivalent online services such as Voice over IP, messaging services and web-based email services.[24] The interpersonal communications services are thus now divided into two subcategories with different sets of obligations: on the one hand, the traditional telecommunications services which are based on a phone number and, on the other hand, the OTT communications services which are not based on a phone number. **2-009**

Number based and number independent interpersonal communications service The "number-based interpersonal communications services" connect or enable connections (typically by terminating the communication on traditional fixed and mobile telephony networks) with national and international telephone numbers.[25] They include the traditional telephone services but also OTT communications services when they allow a call to a phone number such Skype Out.[26] Conversely, the "number-independent interpersonal communications services" do **2-010**

supplied to the end-user not only for money, but increasingly and, in particular, for the provision of personal data or other data."
21 Open Internet Regulation art.2(2) para.2.
22 Interpersonal communications service is defined as "a service normally provided for remuneration that enables direct interpersonal and interactive exchange of information via electronic communications networks between a finite number of persons, whereby the persons initiating or participating in the communication determine its recipient(s) and does not include services which enable interpersonal and interactive communication merely as a minor ancillary feature that is intrinsically linked to another service": EECC art.2(5).
23 On the regulatory treatment of the OTT under the previous regulatory framework, see BEREC Report of January 2016 on OTT services, BoR(16)35.
24 EECC recital 15. The EECC aims amongst other objectives, to ensure a level playing field for all market players and consistent application of the rules: EECC recital 3.
25 Number-based interpersonal communications service is defined as "an interpersonal communications service which connects with publicly assigned numbering resources, namely, a number or numbers in national or international numbering plans, or which enables communication with a number or numbers in national or international numbering plans': EECC art.2(6).
26 Under art.2(c) of the previous Framework Directive 2002/21 as amended, the Court of Justice clarified that Skype Out was an electronic communications services by judging that: "The provision, by a software publisher, of a feature offering a Voice over Internet Protocol (VoIP) service which allows the user to call a fixed or mobile number covered by a national numbering plan from a terminal

not connect or enable the connections with national and international telephone numbers.[27] They include most of the OTT communications services such as Skype or Gmail.[28] When an OTT communications service is ancillary to another service it does not constitute an interpersonal communications service—and thus is not regulated by the EECC. This is the case if the interactive communication facility is purely ancillary to another service and cannot be used without that principal service. For example, an interpersonal communications feature is minor where its objective utility for an end-user is very limited and where it is in reality barely used by end-users, such as a communication channel in online games.[29] As explained in the following sections, more obligations apply to number-based interpersonal communications services, whose provision is subject to authorisation and should comply with extensive end-users protection rules,[30] than to number-independent interpersonal communications services whose provision is not subject to authorisation and must comply with fewer end-users protection rules.[31]

2-011 *Services consisting wholly or mainly in the conveyance of signals* The third category of electronic communications services cover services consisting wholly or mainly of conveyance of signals between network termination points of electronic communications networks.[32] The EECC does not define further this category but gives two examples: the transmission services used for the provision of machine-to-machine services and for broadcasting. (i) With regard to machine-to-machine (M2M) communications, only the transmission element falls within the

via the public switched telephone network (PSTN) constitutes an 'electronic communications service' provided that, first, the software publisher is remunerated for the provision of that service and, second, the provision of that service involves the conclusion of agreements between that software publisher and telecommunications service providers that are duly authorised to send and terminate calls to the PSTN": *Skype Communications v Institut Belge des services Postaux et des Télécommunications (IBPT)* (C-142/18) EU:C:2019:460, para.49.

27 Number-independent interpersonal communications service is defined as "an interpersonal communications service which does not connect with publicly assigned numbering resources, namely, a number or numbers in national or international numbering plans, or which does not enable communication with a number or numbers in national or international numbering plans": EECC art.2(7).

28 Under the art.2(c) of the previous Framework Directive 2002/21 as amended, the Court of Justice clarified that Gmail was not an electronic communications services by judging that: "a web-based email service which does not itself provide internet access, such as the Gmail does not consist wholly or mainly in the conveyance of signals on electronic communications networks and therefore does not constitute an electronic communications service": *Google v Bundesrepublik Deutschland* (C-193/18) EU:C:2019:498, para.41.

29 EECC recital 17.

30 EECC art.40 (notification security incidents), art.90(1b) (contributing to universal service fund), art.99 (non-discrimination), art.102 (information requirements for contracts), art.103 and Annex IX (publication of information), art.104 (publication quality of service and measures taken to ensure equivalent access by end-users with disabilities), art.106 (contract duration and termination), art.109 (emergency calls), art.110 (public warnings to end-users concerned in case of emergencies), art.111 (equivalent access end-users with disabilities) and art.115 (additional facilities).

31 In particular, EECC art.40: notification security incidents; art.61(2c): interoperability; art.90(1b): contributing to universal service fund; art.99: non-discrimination; art.103: publication of information; art.107: additional obligations, if provided in a bundle; and art.110: public warnings to end-users concerned in case of emergencies.

32 Network termination point is defined as "the physical point at which an end-user is provided with access to a public electronic communications network, and which, in the case of networks involving switching or routing, is identified by means of a specific network address, which may be linked to an end-user's number or name": EECC art.2(9). The NRA should define the location of the network termination point: EECC recital 19. In that regard, see BEREC Report of 4 October 2018 on the location of the network termination point, BoR (18) 159.

scope of the EECC, whereas M2M services at the applications layer remain outside its scope. This fine balance ensures the necessary protection at the transmission layer while being open for innovative M2M services, irrespective of the undertaking providing them. Moreover, IoT users are in principle not subject to the rules of the EU regulatory framework.[33] (ii) With regard to broadcasting, cable and satellite TV operators generally offer, on the one hand, the conveyance of television signals which is covered by the EECC and, on the other hand, content services which are not covered by the EECC.[34] However, it is not necessary that the operator itself conveys signals to be considered as a provider of an electronic communications service. What matters is that the operator is responsible vis-à-vis the end-users for transmission of the signal which ensures that they are supplied with the service to which they have subscribed.[35] The interpretation of *mainly* implies a weighting of the respective value of the elements of the service that are conveyance and that are not. Technical and "functional" characteristics, i.e. demand-side related aspects such as the end user perspective with regard to the OTT-provider's contractual liability vis-à-vis the end-user, may also be relevant.[36]

Publicly available electronic communications services Most obligations under the EECC (for instance, on authorisation, access or security) are imposed only on providers of publicly available electronic communications services. Moreover, the definition of "user" limits the concept to persons using or requesting a publicly available electronic communications service,[37] exempting providers of not publicly available electronic communications services from the end-user protection rules. The EECC does not provide clarification of the circumstances under which a service is considered to be publicly available, but according to the case law, a service must be considered publicly available when any part of the public may choose to make use of the service offered.[38] Even if a service is made available only to the subscribers of a particular undertaking, it is considered to be publicly available where there is no limit placed on the number of potential subscribers and any part of the public may, de facto, make use of the service by becoming a subscriber. However, NRAs must take into account the extent to which the electronic communications network is used for the provision of publicly available electronic communications services, in contrast to other services to determine whether a network constitutes a "public network".[39] **2-012**

Associated services As for networks, electronic communications services make **2-013**

33 However, there would be a finding of an ECS if the IoT user wholly or mainly resells connectivity to the end-user: BEREC Report of 12 February 2016 on enabling the Internet of Things, BoR(16)39.

34 See also: *UPC Nederland* (C-518/11) EU:C:2013:709.

35 *UPC v Nemzeti Média* (C-475/12) EU:C:2014:285, para.43.

36 However, in "BEREC's view, there is considerable difficulty in applying the 'mainly' criterion, since it is usually not possible to quantify the amount of conveyance and non-conveyance elements in a service": BEREC Report of January 2016 on OTT services, BoR(16)35, p.13.

37 EECC art.2(13).

38 *Fjarskipti and Icelandic Post and Telecom Administration* (E-6/16) [2016] EFTA Ct. Rep. 1084, para.56. This reasoning is consistent with recital 55 of the Citizens' Rights Directive and an earlier position of the Commission that "The term 'for the public' ... must be understood in its common sense: a service for the public is a service available to all members of the public on the same basis. Particular examples of services which should not be considered 'for the public' ... are those provided over corporate networks and/or to closed user groups. Corporate networks and closed user groups (CUGs)": Communication on the status and implementation of Directive 90/388 on competition in the markets for telecommunications services [1995] OJ C 275/2, p.5.

39 *Fjarskipti and Icelandic Post and Telecom Administration* (E-6/16) [2016] EFTA Ct. Rep. 1084,

use of associated services and to be effective the EECC should also apply to those associated services. Those are services:

> "...associated with an electronic communications network or an electronic communications service which enable or support the provision, self-provision or automated-provision of services via that network or service, or has the potential to do so, and includes number translation or systems offering equivalent functionality, conditional access systems and electronic programme guides (EPGs), as well as other services such as identity, location and presence service."[40]

2. Policy objectives

2-014 **The four main objectives of the EECC** As already announced in the 1987 Commission Green Paper, which triggered the liberalisation programme, the overarching aim of EU regulation is to develop the conditions for the market to provide European users with a greater variety of electronic communications services, of better quality and at lower cost, affording Europe the full internal and external benefits of a strong electronic communications sector.[41] Today, the EECC subdivides this overarching aim into four primary general objectives that should be followed by all the institutions in charge of the electronic communications regulation, i.e. the NRAs and other competent authorities, BEREC and the Commission.[42] They should promote: (i) connectivity and access to very high capacity networks; (ii) effective competition in the provision of electronic communications networks and services; (iii) the development of the internal market for those networks and services; and (iv) the interests of EU citizens.

2-015 *The promotion of connectivity and access to very high capacity fixed and mobile networks* This first objective has been added to the objectives of the previous regulatory framework to underline the importance of protecting and stimulating the private incentives to invest in new infrastructures, at a time when very high capacity networks are key enablers for the development of the Internet of Things or artificial intelligence applications.[43] This new objective should contribute to the achievement of the 2025 connectivity targets set by the Commission.[44]

2-016 *Promotion of competition* This second objective aims at promoting effective competition in the provision of electronic communications networks and services, including efficient competition between different infrastructures as, when feasible, infrastructure-based competition has been shown to be more effective in bringing innovation and maximising consumer welfare than service-based competition.

2-017 *Promotion of the EU internal market* This third objective aims at: (i) the removal of the remaining obstacles and the facilitation of convergent conditions for the provision of electronic communications networks and services throughout the EU; (ii) the development of common rules and predictable regulatory approaches; (iii) the effective, efficient and coordinated use of radio spectrum; (iv) the establishment and development of trans-European networks; and (v) the provision, availability and interoperability of pan-European services and end-to-end connectivity.

2-018 *Promotion of citizens' interests* This fourth objective aims at: (i) ensuring connectivity and the widespread availability and take-up of very high capacity networks and services (in line with the first objective); (ii) enabling maximum benefits in terms of choice, price and quality on the basis of effective competition (in line with the second objective); (iii) maintaining the security of networks and services; (iv) ensuring a high and common level of protection for end-users through the necessary sector-specific rules; and (v) addressing the needs, such as affordable prices, of specific social groups, in particular end-users with disabilities or with special social needs.

2-019 **Achievement of the objectives** The EECC requires Member States to contribute to the achievement of these four objectives.[45] Contributing does not imply a binding obligation but rather a general commitment and Member States may also pursue other objectives which may be in conflict with the EECC's primary objectives. For example high reserve prices in spectrum auction, aiming to maximise tax revenues, can act as a barrier to entry. The EECC therefore allows the Commission to establish benchmarks and prepare reports on the effectiveness of Member States' measures towards achieving the primary objectives.[46] Similarly, when carrying out the regulatory tasks entrusted to them by the EECC, national competent authorities must take all reasonable measures for achieving those four main objectives and, in certain cases, they have to justify their decisions in light of these objectives.

2-020 **Balancing the objectives** Those four objectives do not have an order of priority.[47] Often, this is not an issue as they reinforce each other, for instance when competition promotes users' interests. However, they may at times conflict with each other, for instance when excessive competition delays investment in new networks. In such cases, the balancing should normally be done by the national authorities in charge of implementing them and Member States may not adopt measures depriving NRAs from their necessary margin of appreciation on how best the main objec-

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para.57.

40 EECC art.2(11).

41 Commission Green Paper of 30 June 1987 on the development of the common market for telecommunications services and equipment, COM(87)290.

42 EECC art.3(2). art.1(2) EECC bundles the four general policy objectives into two aims.

43 The evolution of connectivity in the Member States is monitored annually by the Commission in the Digital Society and Economy Index ("DESI") available at: *https://ec.europa.eu/digital-single-market/en/connectivity* [Accessed 10 September 2019].

44 Communication from the Commission of 14 September 2016, Towards a European Gigabit Society, COM(2016)587, sets three main objectives for 2025: (i) all main socio-economic drivers such as schools, universities, research centres, transport hubs and main providers of public services such as hospitals and administrations, as well as enterprises relying on digital technologies, should have access to gigabit connectivity (allowing users to download/upload 1 gigabit of data per second); (ii) all European households, rural or urban, should have access to connectivity offering a download speed of at least 100 Mbps, which can be upgraded to gigabit speed; and (iii) all urban areas as well as all major terrestrial transport paths (roads and railways) should have uninterrupted 5G coverage.

45 EECC art.3(1) and (2). Also TUE art.4(3) imposing the principle of sincere cooperation: *UPC Nederland v Gemeente Hilversum* (C-518/11) EU:C:2013:709, para.59.

46 EECC art.3(3). The mere possibility to establish benchmarks falls short of the ambitious demand of the European Parliament to empower the Commission to "submit legislative proposals for establishing programmes for enhanced cooperation between Member States ... [with] detailed policy orientations for achieving the objectives ... and quantifiable criteria for benchmarking the effectiveness of Member State measures ... [and] a yearly qualitative and quantitative assessment of the state of progress of each Member State" (ITRE, draft report on the proposal for a directive of the European Parliament and of the Council establishing the European Electronic Communications Code [2016] 2016/0288(COD), pp.35–36.

47 EECC art.3(2).

tives should be achieved and, where these objectives potentially conflict, on how a relative weighting of the conflicting objectives should be carried out in view of the specific circumstances.[48] The need for such a case-by-case weighting exercise is one of the "raisons d'être' of the independence granted to the NRAs.

3. Regulatory principles

2-021 **Good regulatory principles** Next to the policy objectives, the EECC imposes on the national competent authorities' six regulatory principles that they should follow in their market interventions: (i) regulatory predictability; (ii) non-discrimination; (iii) technological neutrality; (iv) promotion of efficient investment and innovation; (v) case-by-case analysis; and (vi) proportionality.[49] Moreover, authorities should be impartial and objective as well as transparent.

2-022 **Regulatory predictability and consistency** Regulatory predictability and consistency have a temporal and a geographical dimension. In its temporal dimension, predictability requires that the decisions of the national authorities are consistent over time and can be anticipated by the regulated undertakings. This principle protects private investors from public hold-up, which is essential in an industry where investments are important and amortised over a long period.[50] However, predictability should be combined with the flexibility of the law and the need to adapt regulation to technology and market evolutions. To best reconcile both principles, NRAs must, on the one hand, revise the application of the rules regularly, in general every five years[51] (to ensure flexibility) and, on the other hand, apply the known rules of the EECC (to ensure predictability). In its geographical dimension, predictability requires that the decisions of the national authorities are consistent throughout the EU and similar across Member States when the circumstances of the case are similar. This is essential to stimulate cross-border investment and operations. This is why NRAs must cooperate with each other and with the Commission and must take into account BEREC or Commission soft-law instruments.[52] An additional dimension of regulatory predictability is transparency. This is why national authorities should act transparently and publish such information needed to contribute to an open and competitive market.[53]

2-023 **Non-discrimination** National authorities must ensure that, in similar circumstances, there is no discrimination in the treatment of providers of electronic communications networks and services. This is a general principle of EU law which, according to the Court of Justice, implies that comparable situations must not be treated differently and different situations must not be treated in the same way, unless such treatment is objectively justified. The comparability of the situations must

[48] See infra, para.2-032 and the case-law cited.

[49] EECC art.3(4). On good regulatory principles, see Baldwin, Cave Lodge, *Understanding Regulation: Theory, Strategy and Practice*, 2nd edn (Oxford, Oxford University Press, 2012) and Decker, *Modern Economic Regulation: An Introduction to Theory and Practice* (Cambridge University Press, 2014).

[50] EECC recital 28. This is the reason why, for instance, the EECC requires a minimum duration period of at least 20 years for the spectrum assignment: EECC art.49(2).

[51] This is the case for instance, of market analysis: EECC art.67(5).

[52] See the coordination institutions and procedures at the EU level: paras 2-061 to 2-065.

[53] See the specific transparency requirements on NRAs and the other transparency obligations on NRAs and other competent authorities to publish geographic surveys and consult respectively: paras 2-033 to 2-041.

be determined and assessed in particular in the light of the subject matter and purpose of the measure in question.[54] Many applications of the non-discrimination principle are provided in the EECC, for instance regarding the assignment of individual rights of use for scarce resources, the imposition of economic or social regulatory remedies or the protection of end-users.

2-024 **Technological neutrality** National authorities must apply EU law in a technologically neutral manner, to the extent that this is consistent with the achievement of the four objectives of the EECC. In particular, even if the concept of "very high capacity networks" is defined by reference to the performance parameters which are equivalent to those of a network based on optical fibre elements, wireless networks are also covered.[55] Specific applications of the principle of technology neutrality are provided in the EECC. For instance, the national authorities should manage the radio spectrum in accordance with this principle.[56] As regards the provision of the universal service, there should be no constraints on the technical means by which the adequate broadband internet access and voice communications services at a fixed location are provided, allowing for wired or wireless technologies.[57]

2-025 **Promotion of efficient investment and innovation** National authorities must promote efficient investment and innovation in new and enhanced infrastructures. Again, several applications are provided in the EECC. For instance, when NRAs impose price control obligations, they should take appropriate account of the risk incurred by the investing network operators and the need to promote the deployment of very high capacity networks.[58] NRAs must also allow co-investment arrangements when they contribute to the deployment of very high capacity networks while safeguarding competition.[59]

2-026 **Case-by–case analysis** National authorities must take due account of the variety of conditions relating to infrastructure, competition, the circumstances of end-users and, in particular, consumers in the various geographic areas within a Member State. For this purpose, national authorities have broad power to gather information and should consult interested parties before adopting their decisions and should always justify their decisions on the basis of the problems they want to solve.[60]

2-027 **Proportionality** According to this general principle of EU law,[61] national authorities must choose the least intrusive regulatory intervention. Regarding market entry,

[54] *Persidera v Autorità per le Garanzie nelle Comunicazioni and Ministero dello Sviluppo Economico delle Infrastrutture e dei Trasporti* (C-112/16) EU:C:2017:597, para.46.

[55] Very high capacity network is defined as: "either an electronic communications network which consists wholly of optical fibre elements at least up to the distribution point at the serving location, or an electronic communications network which is capable of delivering, under usual peak-time conditions, similar network performance in terms of available downlink and uplink bandwidth, resilience, error-related parameters, and latency and its variation; network performance can be considered similar regardless of whether the end-user experience varies due to the inherently different characteristics of the medium by which the network ultimately connects with the network termination point": EECC art.2(2) and recital 13.

[56] EECC art.45(4) reviewed at para.2-096.

[57] EECC art.84(1) and recital 230.

[58] EECC art.74 reviewed at para.2-158.

[59] EECC art.76 on co-investment, reviewed at para.2-162.

[60] EECC arts 20 to 24, reviewed at para.2-041.

[61] Art.5(4) TEU.

the national authorities should reduce as much as possible legal barriers to entry and favour general authorisation over individual rights of use. Regarding the economic regulation of market operations, national authorities should always choose the least intrusive remedies to correct the identified market failures. Regarding the social regulation, national authorities should always choose the least intrusive obligations to meet social objectives.

B. INSTITUTIONAL FRAMEWORK

2-028 **Institutional design** The institutional design for the regulation of electronic communications is complex and aims to ensure, on the one hand, the best regulation possible to achieve the four main EECC objectives and, on the other hand, consistency of regulatory approaches across the Member States. At the national level, the regulatory and the other competent authorities are the keystone of the regulation and their decisions can be reviewed on the merits by national Courts. To guarantee regulatory consistency at the EU level, given that there is no European regulator for electronic communications, the Commission plays a very important role, sometimes under the control of comitology committees (e.g. the Communications Committee or Radio Spectrum Committee). A coordination network has been established between the NRAs (BEREC) as well as a high-level expert group on spectrum policies (Radio Spectrum Policy Group). Moreover, several coordination procedures should be followed before the Member States or their authorities take decisions impacting the market.

1. National level

(a) National regulatory and other competent authorities

2-029 **National authorities are the keystone of the regulatory framework** The national regulatory authorities and, since the EECC, other competent authorities, play the key roles in the regulation of the providers of electronic communications networks and services in Europe.[62] They are entrusted with numerous tasks and enjoy broad discretionary powers as the exercise of those tasks requires complex technical, economic assessment.[63] Those important and discretionary powers explain and justify the extensive independence enjoyed by the authorities. Two degrees of independence, discussed below, are relevant.

2-030 **First degree of independence: vis-à-vis the operators** Since the initial EU intervention in the sector, one of the main requirements under EU law was the separation of regulatory and operational functions. At the beginning of the liberalisation, both functions were often performed by the same legal entity as the incumbent telecommunications operator was part of the government administration. The continued exercise of regulatory functions by the telecommunications

[62] On the role of regulators, see Prosser, *Law and the Regulators* (Oxford, Oxford University Press, 1997).

[63] These broad discretionary powers have been recognised by the Court of Justice in many judgments, for instance: *Arcor v Bundesrepublik Deutschland* (C-55/06) EU:C:2008:244, paras 116, 132 and 153 to 158; *Commission v Germany—New Generation Networks* (C-424/04), para.61; *KPN v Autoriteit Consument en Markt (ACM)* (C-28/15) EU:C:2015:610, para.36; *Polkomtel v Prezes Urzędu Komunikacji Elektronicznej PUKE* (C-277/16) EU:C:2017:989, para.32.

administrations created a clear conflict of interest with the risk of discrimination against new entrants. Member States were therefore required to designate independent authorities for matters such as authorisation and licensing, the allocation of frequencies, the surveillance of usage conditions and the granting of type-approval to terminal equipment, as well as other regulatory functions (such as ensuring in general the applications of the rules). This first degree of independence requires that authorities concerned must be legally distinct and functionally independent of, any natural or legal person providing electronic communications networks, equipment or services.[64] This first degree of independence also implies that when public or local authorities retain ownership or control of public electronic communications operators, there should be an effective structural separation of the function responsible for granting the rights of ways from the activities associated with ownership or control.[65]

2-031 **Second degree of independence: vis-à-vis the Parliament and government** With the revision of the regulatory framework in 2009, a second degree of independence emerged. It implies a separation between the regulatory agencies and the Parliament and government (independently of its telecommunications operations) in order to guarantee the credibility of authorities in regulating the sector in the long-term interest of the users and ensure that they exercise their powers impartially, transparently and in a timely manner.[66] Such independence protects the authorities against political interferences which may, because of short political cycles, favour small short-term gains over high long term benefits. For instance, politicians may favour low retail tariffs to please voters at the next elections even though such tariffs reduce the ability and the incentives to invest in future networks. This independence and credibility is key at times when important investment in very high capacity networks is needed. Mapping both degrees of independence, the EECC distinguishes between two types of independent authorities: the NRAs, which enjoy both degrees of independence and the other competent authorities which enjoy only the first degree of independence.

2-032 **National Regulatory Authorities: double independence** To guarantee the first type of independence (from operators), NRAs should be legally distinct from, and functionally independent of, any provider of electronic communications networks, equipment or services. If the State retains the ownership or control of electronic communications providers, then an effective structural separation between the regulatory function and the activities associated with ownership or control should be ensured.[67] To guarantee the second degree of independence (from government or Parliament), NRAs should not seek or take instructions from any other body in relation to the exercise of their regulatory tasks, without prejudice to the control and appeal mechanism set up by EU law and any supervision mechanism in accord-

[64] EECC art.6(1). The EECC does not further specify the arrangements that Member States must make because of the institutional autonomy, possible constitutional obligations in the Member States and the principle of neutrality with regard to the rules in Member States governing the system of property ownership laid down in art.345 TFEU: EECC recital 34.

[65] EECC art.42(2).

[66] *Europa Way and Persidera v Autorità per le Garanzie nelle Comunicazioni et al.* (C-560/15) EU:C:2017:593, para.51.

[67] EECC art.6(1).

ance with national constitutional law.[68] To ensure the effectiveness of this political independence, NRAs should have separate annual budgets and be autonomous in the implementation of this budget.[69] This budget should also be adequate to carry the regulatory tasks at the national and EU levels.[70] Moreover, the head of the NRA (or, where applicable, the members of the collegiate body) must be appointed for a term of office of at least three years, following an open and transparent selection procedure and may only be dismissed if he/she no longer fulfils the conditions required for the performance of his or her duties which were laid down in national law before their appointment.[71] In several cases, the Court of Justice has reiterated those independence requirements protecting the NRAs from the intervention of their national Parliaments and/or governments.[72]

2-033 *National Regulatory Authorities: accountability* To balance this double independence and respect the principle of the rule of law, NRAs have strict accountability requirements. They should report annually and transparently, inter alia, on the state of the electronic communications market, on the decisions they adopt, on their human and financial resources and how those resources are attributed, as well as on future plans.[73] Moreover, their decisions are subject to the control of national appeal courts, and in some cases, the European Commission and BEREC. More generally, their actions should be guided by the four main EECC objectives[74] and comply with the six good governance principles of the EECC.

2-034 *National Regulatory Authorities: tasks* To ensure that the core regulatory functions are exercised under the principle of the double independence, the EECC requires that Member States entrust their NRAs with a list of minimum tasks defined at the EU level. Those tasks include: (i) ex ante market regulation, including the imposition of access and interconnection obligations; (ii) dispute resolution between undertakings; (iii) advising on radio-spectrum management; (iv)

68 EECC art.8(1).

69 However, this financial autonomy does not impede the application of provisions of national law on public finances and, in particular, provisions for limiting and streamlining public authority spending: *Autorità per le Garanzie nelle Comunicazioni (AGCOM) v Istituto Nazionale di Statistica—ISTAT* (C-240/15) EU:C:2016:608, para.44.

70 EECC art.9.

71 EECC art.7. The Court of Justice decided that the dismissal of the members of the board of the Spanish NRA, after the merger of the NRA with other national regulatory authorities in order to create a multi-sectoral regulatory body, was a violation of the members' political independence, in the absence of any rules guaranteeing that such dismissals do not jeopardise the independence and impartiality of such members: *Ormaetxea Garai et al. v Administración del Estado* (C-424/15) EU:C:2016:780, para.52.

72 See *Commission v Germany—New Generation Networks* (C-424/04) EU:C:2009:749, where the Court of Justice condemned Germany for having adopted a law restricting the power of the NRAs in analysing and regulating emerging markets; *Commission v France—Universal Service II* (C-220/07) EU:C:2008:354, para.34 and *Commission v Portugal—Universal Service* (C-154/09) EU:C:2010:591, where the Court of Justice condemned France and Portugal for adopting a law restricting the power of the NRAs in designating the universal service provider, according to a procedure which is efficient, objective and non-discriminatory; *UPC Nederland v Gemeente Hilversum* (C-518/11) EU:C:2013:709, para.54; *Europa Way and Persidera v Autorità per le Garanzie nelle Comunicazioni et al.* (C-560/15) EU:C:2017:593, para.57 where the Court of Justice considered that the Parliament and the government could not intervene in an ongoing selection procedure organised by the Italian NRA for radio spectrum assignment. See also *Deutsche Telekom v Bundesrepublik Deutschland* (C-543/09) EU:C:2011:279, para.43.

73 EECC art.8(2).

74 *Commission v Poland* (C-227/07) EU:C:2008:620, para.63.

contributing to end-users protection; (v) monitoring issues regarding net neutrality; (vi) calculating the net cost of the provision of universal service; and (vii) ensuring number portability. The EECC[75] and other EU legislative instruments may give additional tasks to the NRAs.[76] Moreover, Member States may assign other tasks provided for in EU law, in particular, those related to market entry, such as general authorisation[77] or additional tasks under national law.[78]

2-035 *National Regulatory Authorities: dispute resolution between undertakings* NRAs are competent to resolve disputes between providers of electronic communications networks or services in connection with EECC obligations.[79] At the request of either party, the NRA issues a binding decision to resolve the dispute in the shortest possible time-frame and in any case within four months save in exceptional circumstances.[80] In case of cross-border disputes affecting trade between Member States, BEREC first issues an opinion on the case in the shortest possible time-frame and in any case within four months and, then, the NRA adopts a decision within one month taking the utmost account of BEREC's opinion.[81] Those procedures do not preclude the parties from bringing their case before the courts.[82]

2-036 **Other competent authorities: single independence** The other competent authorities merely benefit from the first degree of independence with regard to electronic communications operators. Beyond the core regulatory tasks that the EECC reserves to the NRAs, Member States may choose to allocate the other EECC tasks to the NRAs or the other competent authorities. Thus important regulatory activities, especially the granting of rights of use for land, spectrum and numbers or with regard to universal service do not have to be entrusted to the NRAs but can be given to the other competent authorities. This might give the Member States additional discretion in the organisation of the functions concerned. In particular for the management of radio spectrum, the EECC favours the NRA but allows Member States to entrust the task to another competent authority, provided the latter seeks advice of the NRA on the market-shaping and competition elements of the management processes.[83]

2-037 **Division of tasks between independent competent authorities** According to the EU general principle of constitutional and procedural autonomy, Member States have a large degree of discretion in deciding the number of the national regulatory

75 EECC art.5(1).

76 Roaming Regulation art.16, Open Internet Regulation art.5(1) and art.5a(6).

77 e.g. in *Newscorp/Telepiu* (Case M.2876) [2004] OJ L110/73, an arbitration procedure before the Italian NRA is provided for, in order to guarantee the effectiveness of amongst other considerations, the commitment to make a wholesale offer.

78 Including in the framework of national state aid schemes, notably to review and set access prices to subsidised broadband infrastructure. See e.g. *National programme for broadband aggregation infrastructure—Croatia* (Case SA.41065, 6 June 2017), paras 53 to 54. See also BEREC Analysis of 7 December 2017, of individual NRAs' role around access conditions to state aid funded infrastructure, BoR (17) 246.

79 NRAs may also be competent to resolve disputes between providers and consumers: EECC art.25, see para.2-227. BCRD art.10 also provides for settlement mechanisms and bodies for the disputes arising under the BCRD.

80 EECC art.26 and Roaming Regulation art.17.

81 EECC art.27 and Roaming Regulation art.17.

82 EECC art.26(5) and 27(6).

83 EECC art.5(1c).

authorities and the division of regulatory tasks between them.[84] However, Member States must comply with the objectives and the obligations imposed by the EECC,[85] must publish in an easily accessible form and notify to the Commission such division of tasks[86] and ensure that all national authorities cooperate and exchange information with each other and with their counterparts in the other Member States of the EU.[87]

(b) Operations of the NRAs and other competent authorities

2-038 **Collection of information** One obstacle to good regulatory enforcement is the asymmetry of information between, on the one hand, the regulated undertakings and, on the other hand, the regulators and the end-users. Thus having good information and data amplifies the regulator's capacity to act in its core area of responsibility notably through better supervision of market players and enables users to make better informed choices, thereby steering the market in the right direction.[88] This is the reason why the EECC gives extensive powers to the competent authorities to collect the data and information they need. Authorities may require the providers of electronic communications networks and services to promptly give all necessary and proportionate information.[89] When necessary, authorities may even request information from other undertakings active in the electronic communications or closely related sectors. Specifically, undertakings with general authorisation and right of use (for rights of ways, radio spectrum or numbers) should provide information which is objectively justified and proportionate, in particular to control compliance with the conditions attached to the authorisations and rights of use, to publish comparative overviews of services quality and price, to produce statistics, carry market analysis, to ensure effective management of radio spectrum, to evaluate future network or service developments, to conduct geographical surveys and to respond to reasoned requests for information by BEREC.[90]

2-039 *Geographical surveys of network deployments* To have a better understanding of the current and future state of the market, in particular regarding the deployment of very high capacity networks, national competent authorities conduct every three years a geographical survey of the current and forecasted reach of electronic communications networks capable of delivering broadband.[91] On that basis, the authorities may designate "white" or "digital exclusion" areas where no undertaking or public authority has deployed or is planning to deploy a very high capacity network or significantly upgrade or extend its network to a performance of at least 100 Mbps download speeds.[92] Those surveys and designated areas should then be taken into account when allocating public funding for the deployment of very high capacity networks.[93]

[84] *KPN v Autoriteit Consument en Markt (ACM)* (C-28/15) EU:C:2015:610, para.57. The Court of Justice decided that a national legislative body could be designated as an NRA provided that (i) in the exercise of that function, it meets the requirements of competence, independence, impartiality and transparency; and (ii) its decisions in the exercise of that function are subject to an effective appeal to a body independent of the parties involved: *BASE et al v Council of Ministers* (C-389/08) EU:C:2010:584, para.30.

[85] *KPN v Autoriteit Consument en Markt (ACM)* (C-85/14) EU:C:2015:610, para.53 and the case law quoted.

[86] EECC art.5(3) and (4).

[87] EECC art.5(2) and art.11; BEREC Regulation art.3(6).

[88] Autorité de la concurrence, AMF, Arafer, Arcep, Arjel, CNIL, CRE, CSA, *Data-driven regulation*, July 2019, available at: *https://en.arcep.fr/news/press-releases/p/n/cooperation-between-regulators.html* [Accessed 10 September 2019]. Data-driven regulation is defined as: "using the power of information to understand the market and shed light on how it operates in a factual fashion, to then steer it more effectively in the right direction and better protect consumers and their rights in these different markets."

[89] EECC art.20(1). See also, Roaming Regulation art.16(4) and Open Internet Regulation art.5(2).

[90] EECC art.21.

Information sharing Another obstacle to good regulatory enforcement is the multiplication of authorities in charge of regulating the same undertaking. To remedy this obstacle, the EECC provides for cooperation between authorities in the same and across different Member States and with EU institutions and bodies.[94] For this cooperation to be effective, information needs to circulate smoothly among those authorities. Thus, when necessary to ensure the application of the EECC, the competent authorities should share the relevant information with other authorities in the same or different Member States, as well as with BEREC and the Commission.[95] This sharing obligation also applies to confidential information provided that the receiving authority maintains such confidentiality.[96] **2-040**

Public consultation Before the competent authorities take measures having significant market impact, they should run public consultations giving interested parties the opportunity to comment on the draft measure. Such consultation should last a reasonable period, given the complexity of the matter and, at least, one month unless there are exceptional circumstances. The consultations should also be accessible through a single information point. The results of the consultation should be made public, except in the case of confidential information.[97] For the decisions related to end-user rights, the authority should take into account the views of the end-users. In that regard, it is important that the consultation mechanisms are accessible to end-users with disabilities.[98] **2-041**

Powers to sanction To be credible, authorities need to have sanctioning powers which have sufficient deterrent effects. This is why the EECC entrusts competent authorities with the power to impose penalties which are be appropriate, effective, proportionate and dissuasive.[99] Specifically to ensure the compliance with conditions in general authorisation and rights of use, the competent authorities should have the power, after having heard the undertaking, to require the cessation of regulatory breach either immediately or within a reasonable time limit and take appropriate and proportionate measures to ensure compliance.[100] In the case of a serious breach or repeated breaches of the conditions, the authorities may even prevent **2-042**

[91] EECC art.22(1). To ensure consistency across Member States, BEREC has to issue guidelines on the consistent implementation of geographical surveys and forecasts: EECC art.22(7).

[92] EECC art.22(2).

[93] EECC art.22(5). See also, Briglauer and Vogelsang "A Regulatory Roadmap to Incentivize Investment in New High-Speed Broadband Networks" (2017) 106 *DigiWorld Economic Journal* 143.

[94] EECC arts 10 and 11.

[95] EECC art.20(2).

[96] EECC arts 11 and 20(3). A similar possibility of exchanging confidential information is provided in the Roaming Regulation art.16(4a).

[97] EECC arts 23 and 30(1).

[98] EECC art.24(1).

[99] EECC art.29. Also see Roaming Regulation art.18 and Open Internet Regulation art.6.

[100] EECC art.30(3).

an undertaking from continuing to provide electronic communications networks or services.[101] In urgent cases where there is an immediate and serious threat to public safety, security, health or risks creating serious economic or operational problems for other providers or users, the authorities may adopt interim measures.[102]

2-043 **Promotion of self- and co-regulation** The national competent authorities may encourage and provide guidance for the development and the monitoring of codes of conduct by the stakeholders to improve the general quality of service provision.[103] They may also encourage the cooperation between providers of electronic communications networks or services and sectors interested in the promotion of lawful content online.[104]

(c) Appeal bodies and courts

2-044 **Right of appeal against decisions of competent authorities** The decisions of the NRAs and other competent authorities are subject to an effective and independent national appeal mechanism. Any user or provider of electronic communications networks or services who is affected by a decision of the competent authority (including decisions when exercising its dispute resolution powers) has a right of appeal to an independent appeal body.[105] According to the general principle to ensure effective judicial protection against EU law violations, which is now guaranteed by the Charter of Fundamental Rights of the EU, this right of appeal has been construed broadly by the Court of Justice. It benefits not only the addressee of the decision under appeal but also the users and the providers which are in competition with the decision's addressees and whose rights are adversely affected by it.[106]

2-045 **Appeal body** The appeal body does not have to be a Court within the EU meaning,[107] but should be independent of the parties involved (internal independence) and of any external intervention or political pressure (external independence). It must

[101] EECC art.30(5).
[102] EECC art.30(6).
[103] EECC art.24(2).
[104] EECC art.24(3). On the measures to fight illegal content online, see Commission Recommendation 2018/334 of 1 March 2018 on measures to effectively tackle illegal content online [2018] OJ L63/50, reviewed in Chapter III of this book.
[105] EECC art.31.
[106] *Tele2 Telecommunications v Telekom-Control-Kommission* (C-426/05) EU:C:2008:103, para.48, related to a market analysis decision; *Arcor v Bundesrepublik Deutschland* (C-55/06) EU:C:2008:244, para.176 related to a cost orientation decision; *T-Mobile Austria v Telekom-Control-Kommission* (C-282/13) EU:C:2015:24, para.37, related to a procedure for the authorisation of a transfer of rights to use radio frequencies.
[107] In *TDC v Erhvervsstyrelsen* (C-222/13) EU:C:2014:2265, the Court of Justice recalled (see paras 27 to 31) the main factors to determine whether a body is a Court within the meaning of art.267 TFEU: whether the body is established by law, whether it is permanent, whether its jurisdiction is compulsory, whether its procedure is inter partes, whether it applies rules of law and whether it is independent externally (protection against external intervention or pressure) and internally (level playing field for the parties to the proceedings and their respective interests). In this case, the Court considered (see para.38) that the Teleklagenævnet, the Danish Telecommunications Complaints Board, was not meeting the independence factor because, on the one hand, the dismissal of members of the Teleklagenævnet is not subject to specific guarantees which would dispel any reasonable doubt as to it external independence and, on the other hand, the Teleklagenævnet has the status of a defendant when its decisions are appealed before an ordinary Court, hence it is not acting as a third party

have the appropriate expertise to enable it to carry out its functions effectively.[108] It must also have at its disposal all the information necessary to decide the case including, if necessary, the confidential information taken into account by the authority whose decision is appealed. In this case, the appeal body must maintain the confidentiality of the information whilst complying with the requirements of effective legal protection and ensuring protection of the rights of defence of the parties to the dispute.[109] If the appeal body is not a Court within the meaning of the TFEU, then its decision should be able to be reviewed by such a Court to ensure that a preliminary ruling question may be referred to the Court of Justice and that the EU judicial mechanism to guarantee the common interpretation of EU law is preserved.[110]

2-046 **Scope and effects of the appeal** The appeal body should take the merits of the case into account and not limit its control to procedural matters.[111] Even if the NRA decision under appeal has followed some Commission harmonisation guidelines, the appeal body can control the legality of such a decision.[112] The appeal process should be effective and the appeal proceedings should not be unduly lengthy. Pending the outcome of the appeal, the decision of the competent authority stands, unless interim measures are granted. Such interim measures should be granted in accordance with national law and only in order to prevent serious and irreparable damage to the party applying for those measures and if the balance of interests so requires.[113] The appeal body must be able to annul appealed decisions with retroactive effect when this is necessary to provide effective protection for the undertaking which has brought the appeal.[114]

2-047 **Appeal monitoring** Member States must collect information on appeals, including the number of requests for appeal, the duration of the appeal proceedings and the number of decisions to grant interim measures.[115] They should then provide this information and the appeal decisions to the Commission and/or BEREC.[116]

2. Coordination institutions at the EU level

(a) European Commission

2-048 **Objectives and tasks** The European Commission, which is the main executive branch of the EU, promotes the general interest of the Union and has very important

in relation to the interests at stake and does not possess the necessary impartiality necessary for the internal independence. See also *Prezes Urzędu Komunikacji Elektronicznej (PUKE) and Petrotel v Polkomtel* (C-231/15) EU:C:2016:769, para.24
[108] EECC art.31(1).
[109] *Mobistar v IBPT* (C-438/04) EU:C:2006:463, para.43.
[110] EECC art.31(2).
[111] EECC art.31(1) in fine.
[112] *KPN v Autoriteit Consument en Markt (ACM)* (C-28/15) EU:C:2015:610, para.51. However, in exercising such control, the national court should take the Commission's recommendation into account: see paras 41 to 42.
[113] EECC art.31(1) and recital 77.
[114] *Prezes Urzędu Komunikacji Elektronicznej (PUKE) and Petrotel v Polkomtel* (C-231/15), para.25.
[115] EECC art.31(3).
[116] EECC art.31(3).

powers and tasks in the regulation of the electronic communications sector.[117] First, it proposes draft legislation to the legislative branch of the EU (the European Parliament and the Council).[118] Second, when entrusted by the EU legislator, the Commission adopts delegated acts which supplement or amend non-essential elements of EU law or implementing acts which implement EU law uniformly for the whole Union.[119] Third, the Commission adopts soft-law instruments aimed at ensuring a consistent application of EU law by national authorities and Courts.[120] Fourth, the Commission is the guardian of EU law and monitors the correct and effective implementation of EU law by the Member States, and if that is not the case, it may bring Member States before the Court of Justice.[121]

2-049 **Organisation** The Commission is composed of a political level, the College, and of an administrative level, the Directorate Generals. The College comprises of one Commissioner per Member State but Commissioners are independent from the Member States.[122] One of them is responsible for the electronic communications policies and regulation. The College formally decides by simple majority but in practice decides by consensus.[123] The administrative level is made of several Directorate Generals with one of them, DG Communications Networks, Content and Technologies ("CONNECT"), responsible for the electronic communications policies and regulation.[124]

(b) The Communication Committee ("COCOM") and the Radio Spectrum Committee ("RSC")

2-050 **Comitology Committee** Two different comitology committees have been set up to control the exercise of the implementing power given to the Commission by the regulatory framework[125]: the "Communications Committee ("COCOM")[126] controls power given under the EECC and the Roaming Regulation, and the Radio Spectrum Committee ("RSC") controls the power given under the Radio Spectrum Decision.[127] Each committee is composed of representatives of the Member States

[117] Art.17 TEU.
[118] Art.289 TFEU and EECC arts 122 to 123.
[119] Respectively, art.290 TFEU and EECC art.117; art.291 TFEU and EECC art.118.
[120] EECC art.38.
[121] Arts 258 and 260 TFEU; Commission Staff Working Document of 7 July 2017, Better Regulation Guidelines, SWD(2017)350, Chapter V and EECC art.121. The implementation of the EU regulatory framework by the Member States is monitored annually by the Commission in the Telecoms chapters of the Digital Economy and Society Index ("DESI"), available at: *https://ec.europa.eu/digital-single-market/en/desi* [Accessed 10 September 2019].
[122] Art.17(3) and (5) TEU.
[123] Art.250 TFEU.
[124] The website of DG CONNECT is: *https://ec.europa.eu/info/departments/communications-networks-content-and-technology_en* [Accessed 10 September 2019].
[125] According to art.291 TFEU and Regulation 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers ("Comitology Regulation") [2011] OJ L55/13.
[126] EECC art.118 and Roaming Regulation art.6. The COCOM website is available at: *https://ec.europa.eu/digital-single-market/en/communications-committee* [Accessed 10 September 2019].
[127] Radio Spectrum Decision, arts 3 and 4. The RSC website is available at: *https://ec.europa.eu/digital-single-market/en/radio-spectrum-committee-rsc* [Accessed 10 September 2019].

and is chaired by a representative of the Commission, who does not have a right to vote.[128]

Powers The Committee adopts opinions according to two procedures depending on the implementing act to be adopted by the Commission and controlled by the Committee. (i) The Committee may decide under the *advisory procedure* which is organised by the art.4 of the Comitology Regulation.[129] In this case, the Committee votes by simple majority on the draft implementing act submitted by the Commission and the Commission adopts the final implementing act taking into the utmost account of the Committee opinion but without being bound by it. (ii) The Committee may also decide under the *examination procedure* which is organised by the art.5 of the Comitology Regulation.[130] In this case, the Committee votes by qualified majority on the draft implementing act submitted by the Commission and the Commission is bound by the opinion of the Committee. For each type of implementing act, the EU regulatory framework (EECC, Roaming Regulation and Radio Spectrum Decision) determines, on the basis of the general criteria of the Comitology Regulation,[131] whether the advisory or the examination procedures should be followed. **2-051**

(c) Radio Spectrum Policy Group ("RSPG")

Radio Spectrum Policy Group: role and tasks The Radio Spectrum Policy Group ("RSPG") is a high-level expert group set up by the Commission to assist EU institutions in the coordination and the harmonisation of spectrum policy.[132] To that end, the RSPG has the following tasks: (i) advise the Commission on strategic radio spectrum policy issues, the coordination of policy approaches or the harmonisation of spectrum use in the EU by issuing opinions on legislative proposal for multi-annual spectrum policy programmes (which set out the policy orientations and objectives for the strategic planning and harmonisation of the use of spectrum)[133] or on draft recommendations on the harmonised application of the regulatory framework in the field of radio spectrum; (ii) assist Member States in cooperating with each other and with the EU institutions by developing best practices, facilitating coordination in implementing EU law and coordinating national approaches to the assignment and authorisation of radio spectrum; (iii) assist Member States in the cross-border coordination of radio spectrum, especially to prevent cross-border harmful interference; and (iv) assist EU institutions in international negotiations in the field of radio spectrum.[134] The RSPG should become the forum for the coordination of implementation by Member States of their **2-052**

[128] Comitology Regulation art.3(2).
[129] EECC art.118(3) and Radio Spectrum Decision art.3(2).
[130] EECC art.118(4), Roaming Regulation art.6(2) and Radio Spectrum Decision art.3(3).
[131] Comitology Regulation art.2.
[132] See the website of the Radio Spectrum Policy Group ("RSPG"), available at: *http://rspg-spectrum.eu* [Accessed 10 September 2019].
[133] EECC art.4(4).
[134] RSPG Decision art.2. See RSPG Report of 30 January 2019 on impact of the EECC on the work of RSPG, RSPG 19–004.

obligations related to radio spectrum under the EECC[135] and could play a central role in fields such as cross-border coordination or standardisation.[136]

2-053 *RSPG: organisation* The RSPG comprises one senior representative in charge of strategic radio spectrum policy from each Member State and high-level representatives from the Commission.[137] The Group elects a chairperson from its members, for two years, and the secretariat is provided by the Commission. The opinions and reports are adopted by consensus or, if it is not possible, by simple majority.[138]

2-054 *RSPG: accountability* The RSPG should transmit relevant information to the European Parliament and may invite European Parliament experts to its meeting.[139] The RSPG should also consult extensively and at an early stage with market participants, consumers and end-users in an open and transparent manner.[140] It is also subject to the transparency rules applicable to the expert groups of the Commission.[141]

(d) Body of European Regulators for Electronic Communications ("BEREC")

2-055 **Introduction** As EU law remains enforced by national authorities and there is no EU regulator equivalent to the Federal Communications Commission in the US, it is essential that those national authorities coordinate themselves to adopt common interpretation and ensure the consistent application of common EU law. This coordination was first achieved within the European Regulators Group which was replaced and amplified in 2009 by the Body of European Regulators for Electronic Communications ("BEREC") and its Office.[142] BEREC is composed of two bodies: (i) BEREC—Board of Regulators ("BoR"), which performs this coordination role and does not have a legal personality; and (ii) the Agency for Support for BEREC (BEREC Office) which provides support for the Board of Regulators and is an EU agency, has a legal personality and is based in Riga.[143]

2-056 **BEREC: objective and tasks** The objective of BEREC is to ensure the consistent implementation of the regulatory framework for electronic communications throughout Europe.[144] To do that, BEREC assists and advises the NRAs and the Commission in particular by issuing opinions, guidelines, recommendations or common positions when foreseen by the EECC, the Roaming Regulation or the Open Internet Regulation. For example, BEREC is required to publish detailed guidelines to address technically complex issues such as those relating to the application of symmetric access obligations, the assessment of co-investment proposals or the criteria to be met for a network to be deemed of very high capacity.[145] BEREC also establishes databases of notifications and numbering resources.[146] However, BEREC has no genuine decisional regulatory powers even though NRAs and the Commission should take the utmost account of soft-law instruments adopted by BEREC.[147]

[135] EECC art.4(3).
[136] EECC art.28(2) to (4).
[137] RSPG Decision art.3.
[138] RSPG Decision art.4.
[139] RSPG Decision art.5.
[140] RSPG Decision art.6.
[141] RSPG Decision art.9 and Commission Decision of 30 May 2016 establishing horizontal rules on the creation and operation of Commission expert groups, C(2016) 3301.
[142] See paras 1-099 to 1–102 of the third edition of this book.
[143] See *https://berec.europa.eu* [Accessed 10 September 2019].
[144] BEREC Regulation art.3(2).

2-057 *BEREC: organisation* BEREC is composed of the Board of Regulators ("BoR"), which takes the decisions and several expert working groups which prepare the decisions for the Board.[148] The BoR is made of one member from each Member State, appointed by the NRA that has primary responsibility for overseeing the day-to-day operation of the electronic communications markets.[149] The Commission, represented by the Director-General in charge of electronic communications policy, participates in the BoR but does not have a right to vote. The BoR appoints its Chair and at least two Vice-Chairs from among its members for one year, renewable once.[150] The BoR acts independently and objectively in the interest of the EU and its members are forbidden from seeking or accepting any instruction from any Member State government, the Commission and any other public or private entity.[151] The BoR adopts the main decisions of BEREC (guidelines, common positions, opinions or reports) as well as its rules of procedures and its annual work programme and report of activities.[152] In principle, the BoR decides by a simple majority of its members except for some key decisions (such as the rules of procedures or some opinions or guidelines) where it decides by a majority of two-thirds.[153] Most of the decisions of the BoR are prepared by working groups composed of experts from the NRAs and the Commission.[154]

2-058 *BEREC: accountability* Like its NRA members, BEREC should, where appropriate, run public consultations and make public all its final decisions.[155] When justified, BEREC should also cooperate with relevant national authorities (such as those competent in the fields of competition, consumer protection and data protection) and the EU institutions and bodies.[156] Accountability towards EU institutions is also foreseen in its programming cycle.[157]

[145] Respectively EECC arts 61(3), 76(4) and 82.
[146] BEREC Regulation art.4.
[147] BEREC Regulation art.4(4) and EECC art.10(2).
[148] BEREC Regulation art.6 and BEREC Rules of Procedure of 19 April 2019 for the Board of Regulators, BoR(19)58.
[149] BEREC Regulation art.7(1). In Member States where there is more than one NRA responsible under the EECC, those NRAs shall coordinate with each other as necessary: BEREC Regulation art.3(6).
[150] BEREC Regulation art.10(1) and (3).
[151] BEREC Regulation art.8.
[152] BEREC Regulation art.9.
[153] BEREC Regulation art.12. A two-third majority is required e.g. for opinions on a Commission notification of serious doubts regarding an NRA's proposed remedy and on the determination of a single maximum Union-wide voice termination rates and for guidelines common approaches to the identification of the network termination point.
[154] BEREC Regulation art.13.
[155] BEREC Regulation art.4(3) and (5). Also Decision 2019/03 of the Board of Regulators of BEREC of 14 June 2019 on detailed rules on access to documents.
[156] BEREC Regulation art.4(5) and (6).
[157] BEREC Regulation art.21 provides that the BEREC annual work programme should be adopted after consulting the European Parliament, the Council and the Commission, and transmitted to those institutions after adoption. BEREC Regulation art.22 provides that the BEREC annual activity report

2-059 **BEREC Office: tasks** The BEREC Office is an EU agency which supports the work of BEREC. In particular, the Office: (i) provides professional and administrative support services to BEREC; (ii) collects information from NRAs and exchanges and transmits information in relation to BEREC's role and tasks; (iii) drafts reports on specific aspects of developments in the European electronic communications market, such as benchmarking reports; (iv) disseminates regulatory best practices among NRAs; (v) assists BEREC in establishing and managing an information and communications system, in maintaining registries and databases and in conducting public consultations; (vi) assists the Chair in the preparation of the work of the Board; and (vii) sets up the expert working groups, upon the request of the BoR and provides administrative support to ensure their smooth functioning. The Office executes its tasks under the guidance of the BoR.[158]

2-060 *BEREC Office: organisation* The Office comprises a Management Board, a Director and a limited number of staff.[159] The Management Board is composed of the members of the Board of Regulators and one high level representative of the Commission.[160] The Management Board, which decides in principle by simple majority, appoints the Director for a mandate of five years and the staff and adopts the budget.[161] The Director is in charge of the administrative management of the BEREC Office.[162]

3. Coordination procedures at the EU level

2-061 **Introduction** Next to the setting up of specific bodies to ensure institutional coordination, the EECC foresees procedures for coordination to contribute to a consistent regulatory approach in all the Member States and the development of the Digital Single Market.[163] Some procedures are specific to particular regulatory issues (such as the assignment of spectrum or the imposition of symmetric or asymmetric regulatory obligations) while others are more general and consist in the adoption of harmonisation soft-law (and in exceptional cases, hard-law) by the Commission or BEREC as well as harmonised technical standards. This section deals with the general procedures while the specific procedures are analysed later in the chapter.[164]

2-062 **Commission Recommendations** Where the Commission finds that divergences

should be transmitted to the European Parliament, the Council, the Commission and the European Economic and Social Committee.

158 BEREC Regulation art.5.

159 BEREC Regulation art.14 and Rules of Procedure of the Management Board of the BEREC Office of 18 April 2019, MB(19)26.

160 BEREC Regulation art.15.

161 BEREC Regulation art.16.

162 BEREC Regulation art.20. BEREC Regulation art.30 provides that the Staff Regulations of EU officials apply to the staff of the Office, in particular, Regulation 259/68 laying down the Staff Regulations of Officials and the Conditions of Employment of Other Servants of the European Communities and instituting special measures temporarily applicable to officials of the Commission [1968] OJ 1968 L56/1, as amended.

163 For an analysis of the optimal level of regulation in telecommunications, Defraigne and de Streel "Where Should the European Union Intervene to Foster the Internal Market for eComs" (2011) 82 *Communications & Strategies* 63.

164 The coordination procedure for spectrum assignment is analysed in paras 2-087 to 2-090 and the coordination procedures for the imposition of regulatory remedies is analysed in paras 2-171 to 2-175.

in the implementation by the national competent authorities of the regulatory tasks specified in the EECC could create a barrier to the internal market, the Commission may, taking the utmost account of the opinion of BEREC or the RSPG, adopt harmonisation recommendations.[165] Those recommendations contribute to a consistent regulatory approach in all the Member States because the EECC imposes on the national authorities to take them into the utmost account and, where authorities choose not to follow them because of the specificities of the national circumstances, they should inform the Commission and give the reason for deviating from them ("comply or explain").[166] The EECC does not impose such obligations on the national Courts which hear the appeal against NRAs decisions, thereby playing a key role in defining the national regulatory approach. Fortunately, the Court of Justice decided that, even if recommendations are not binding,[167] the national courts have to take them into consideration, in particular where the recommendations cast light on the interpretation of national measures adopted in order to implement them or where they are designed to supplement binding EU provisions.[168] Thus, a national court may depart from harmonisation recommendations only where it considers that this is required on grounds related to the facts of the individual case.[169]

2-063 **Commission Decisions** If those harmonisation recommendations of the Commission do not bring enough regulatory consistency, the Commission may, with the approval of the Communications Committee under the examination procedure, adopt harmonisation decisions in some specific cases. Those decisions force consistency because they are binding.[170] Such a radical solution is possible for regulatory issues regarding market definition and SMP designation.[171] It is also possible for regulatory issues regarding numbering, including number ranges, portability of numbers and identifiers, number and address translation systems, and access to emergency services through the single European emergency number "112".[172]

2-064 **BEREC soft-law** Next to the Commission, BEREC also plays an important role in ensuring regulatory consistency across the EU by adopting guidelines, common positions, best practices, recommendations, opinions or reports. They may be general and cover complex regulatory issues or specific and focus on a particular NRA draft decision.[173] This BEREC body of soft-law has increased over time and contributes to the EU regulatory consistency as the NRAs and the Commission have to take utmost account of it and where an NRA deviates from some of those guidelines, it should provide the reasons therefore.[174]

2-065 **National appeal and the EU internal market** Two other mechanisms contribute

165 EECC art.38(1).

166 EECC art.38(2).

167 Art.288 TFEU.

168 *Arcor v Bundesrepublik Deutschland* (C-55/06) EU:C:2008:244, para.94; *KPN v Autoriteit Consument en Markt (ACM)* (C-28/15) EU:C:2015:610, para.41.

169 *KPN v Autoriteit Consument en Markt (ACM)* (C-28/15) EU:C:2015:610, para.42.

170 Art.288 TFEU.

171 EECC art.38(3a). To ensure that the Commission does not use this possibility to circumvent its lack of veto power over regulatory remedies, such decisions may not refer to specific notifications made by the NRAs.

172 EECC art.38(3b). For instance, Commission Decision 2007/116 of 15 February 2007 on reserving the national numbering range beginning with 116 for harmonised numbers for harmonised services of social value [2007] OJ L49/30, as amended by the Decision 2007/698 and Decision 2009/884.

173 BEREC Regulation art.4(1).

174 EECC art.10(2) and BEREC Regulation art.4(4).

to a common interpretation of EU law by national courts. The first is general and formal: national courts may—or must when no other appeal is possible at the national level—ask the Court of Justice for preliminary rulings when they have doubt on the interpretation of an EU legal provision.[175] The second is specific to the electronic communications sector and informal: the Commission organises each year a seminar for national judges to exchange experience on the role of national courts in consistently implementing the EU electronic communications rules across the EU.[176]

2-066 **Technical standardisation** Next to the law, technical standards play an important role in regulating the digital industries. They are key to ensuring network and service interoperability, end-to-end connectivity in the Member States but also across the Member States and, ultimately, to improving the freedom of choice of the end-users. The standardisation process should remain primarily market-driven in order to promote technological innovation and the Commission prefers and encourages a "bottom-up" consensual approach, in which standards emerge as the result of industry cooperation. This is why the Commission, following the EU standardisation bodies,[177] may adopt a list of non-compulsory standards or specifications to encourage the harmonised provision of electronic communications networks and services.[178] If those standards or specifications have not been adequately implemented so that interoperability of services in one or more Member States cannot be ensured, the Commission may, after a public consultation and the approval of the Communications Committee under the examination procedure, make them compulsory to the extent necessary to ensure such interoperability and to improve freedom of choice for users.[179]

2-067 *DAB+ standard* The EECC itself promotes the DAB+ standard by requiring that new car radio receivers[180] must comprise a receiver capable of receiving and reproducing at least radio services provided via digital terrestrial radio broadcasting.[181]

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175 EECC art.31(2), which refers to art.267 TFEU.

176 See *https://ec.europa.eu/digital-single-market/en/judges-seminars* [Accessed 10 September 2019].

177 The European standardisation organisations are the European Committee for Standardisation ("CEN"), the European Committee for Electrotechnical Standardisation ("Cenelec"), and the European Telecommunications Standards Institute ("ETSI").

178 EECC art.39(1) and (2). Commission Decision 2007/176 of 11 December 2006 establishing a list of standards and/or specifications for electronic communications networks, services and associated facilities and services [2007] OJ L86/11, as amended by the Decision 2008/286. In addition, art.45(2) of the EECC provides that the Commission may request the opinion of the RSPG on the implications of an envisaged standard for the coordination, harmonisation and availability of radio spectrum. Also, art.5(5) of the Roaming Regulation provides for the possibility for the Commission to give a mandate to a European standardisation body for the adaptation of the relevant standards that are necessary for the harmonised implementation of the separate sale of regulated retail roaming services.

179 EECC art.39(3) and (4).

180 Integrated in new vehicles of M Category, consisting of motor vehicles designed and constructed primarily for the carriage of passengers and their luggage: Regulation 2018/858 on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles [2018] OJ L151/1 art.4.

181 EECC art.113(1) and Annex XI. In addition, Member States may adopt measures to ensure interoperability of other consumer radio equipment, while limiting the impact of such measures on the market for low-value radio broadcast receivers. However, no such measure should be applied to products where a radio receiver is purely ancillary (such as smartphones) and to equipment used by radio amateurs: EECC art.113(2).

182 EECC art.12(1), but no procedure is set yet for such a notification.

183 A general authorisation is defined as "a legal framework established by a Member State ensuring rights for the provision of electronic communications networks or services and laying down sector-specific obligations that may apply to all or to certain types of electronic communications networks and services, in accordance with the EECC": EECC art.2(22). Under art.56 TFEU, undertakings wishing to supply electronic communications services in a Member State other than that in which they are established cannot be required to establish in that State a branch or a legal entity separate from that located in the Member State of transmission: *UPC DTH v Nemzeti Média—és Hírközlési Hatóság Elnökhelyettese* (C-475/12) EU:C:2014:285, para.106.

184 EECC art.12(2) and recital 44.

185 The surveillance proceedings relating to electronic communications services ... will be subject to the authorities of the Member State in which the recipients of those services are resident": *UPC DTH v Nemzeti Média—és Hírközlési Hatóság Elnökhelyettese* (C-475/12) EU:C:2014:285, para.88.

186 "The least onerous authorisation system possible should be used to allow the provision of electronic communications networks and services in order to stimulate the development of new communications services and pan-European communications networks and services and to allow service provid-

C. RULES GOVERNING MARKET ENTRY

Introduction To reduce as much as possible legal entry barriers, the EECC strictly limits the powers of the Member States to regulate the entry of the providers of electronic communications networks and services. In general, Member States should favour general authorisations with light procedural and substantive conditions. Those authorisations are not recognised across Member States (there is no passport system) but their conditions have been harmonised to ease cross-border entry. When necessary to ensure efficient use of scare resources such as land, radio spectrum or numbers, Member States may impose individual rights of use. In this case, the granting of those rights of use should be non-discriminatory and proportionate. Their availability should only be limited to ensure efficient management of scarcity and in light of the objectives and principles of the EECC. **2-068**

1. General authorisation to operate electronic communications networks and services

Scope of general authorisation To stimulate the development of the electronic communications sector within each Member State and across the EU, the Member States could not prevent an undertaking from providing electronic communications networks or services, except where this is necessary on grounds of public policy, public security or public health. Those restrictions should be duly reasoned and notified to the Commission.[182] However, the Member State may subject the provision of electronic communications networks or services to a general authorisation.[183] As an exception, this authorisation requirement does not apply to the providers of number-independent interpersonal communications services as these services do not benefit from the use of public numbering resources and do not participate in a publicly assured interoperable ecosystem.[184] Operators providing electronic communications networks and/or services in more than one Member State must thus comply with the conditions of the general authorisation in each Member State in which they operate.[185] To foster the single market, the EECC seeks to fully harmonise the conditions under which the Member States regulate the entry and activity of operators of electronic communications services and networks in their respective jurisdictions; and alleviate disproportionate national obligations.[186] **2-069**

Procedure: notification requirement To alleviate heavy procedural require- **2-070**

ments, Member States may only impose, when justified, that an undertaking subject to the general authorisation submits a notification to the national competent authorities before starting its activities. Upon such notification, the undertaking could then begin its operations without having to wait for any explicit decision or other administrative act by the authorities.[187] Moreover, the information that could be requested in such prior notification should be kept to the minimum required for national authorities and BEREC to maintain a list of providers of electronic communications networks and services. Thus, information is limited to the name and the legal status of the providers, its geographical and website addresses with a contact person as well as a short description of the networks or services intended to be provided and an estimated date for starting the activities. Member States may not impose additional notification requirements. Moreover, the notification should not entail any administrative cost for the providers and could be made available via an entry point at the website of the competent authorities.[188] In order to harmonise notification requirements, BEREC will publish guidelines for the notification template and maintain an EU database of the notifications transmitted to the competent authorities.[189]

2-071 **Maximum conditions attached to the general authorisation** To alleviate heavy substantial requirements, the EECC provides for a maximum list of conditions that Member States may attach to the general authorisation. This list comprises nine general conditions for all the authorisations[190] as well as six additional specific conditions for the authorisation to provide electronic communications networks[191] and four other additional specific conditions to provide electronic communications services (except number–independent interpersonal communications services which are not subject to general authorisation).[192] Those conditions should be non-discriminatory, proportionate and transparent.[193] Moreover, the obligations which may be imposed under the economic symmetric and asymmetric regulation or because of a universal service designation should be legally separate from the obligations imposed under the general authorisation but the criteria and procedures

ers and consumers to benefit from the economies of scale of the internal market" (EECC recital 41).

187 EECC art.12(3).

188 EECC recital 42.

189 EECC art.12(4).

190 EECC Annex I Pt A listing the conditions related to: (1) administrative charges; (2) personal data and privacy protection specific to the electronic communications sector; (3) information to be provided under the notification procedure or required market analysis and for verifying compliance with the conditions or publishing comparative overviews; (4) enabling legal interception by competent national authorities; (5) terms of use for communications from public authorities to the general public for warning the public of imminent threats; (6) terms of use during major disasters or national emergencies to ensure communications between emergency services and authorities; (7) access obligations; (8) measures designed to ensure compliance with standards or specifications; and (9) transparency obligations to ensure end-to-end connectivity.

191 EECC Annex I Pt B listing the conditions related to: (1) interconnection; (2) must carry; (3) measures for the protection of public health against electromagnetic fields; (4) maintenance of the integrity of public electronic communications networks; (5) security of public networks against unauthorised access; and (6) use of shared radio-spectrum, which is not subject to individual rights of use.

192 EECC Annex I Pt C listing the conditions related to: (1) interoperability of services; (2) accessibility by end-users of numbers; (3) specific consumer protection rules; and (4) restrictions in relation to the transmission of illegal and harmful content.

193 EECC art.13(1).

for imposing such obligations should be referred to in the authorisation.[194] Also, the obligations of the general authorisation should not duplicate the generally applicable obligations imposed under other laws which are not specific to the electronic communications sector.[195]

Administrative charges As the operations of the NRAs and other competent authorities are costly, Member States may impose a one time and/or periodic[196] administrative charges on the providers of electronic communications networks or services under the general authorisation or to which rights of use (for land, spectrum or number) have been granted. However, the EECC sets strict conditions on the imposition of those charges to prevent them from raising entry barriers and/or creating distortion between operators. In order to prevent entry barriers, administrative charges can only be compensatory[197] and cover the administrative costs borne by the national authorities for the management of the general authorisation and the rights of use as well as the imposition of sector-specific obligations.[198] Member States may also choose not to apply administrative charges to small undertakings i.e., whose turnover is below a certain threshold, the activities of which do not reach a minimum market share or have a very limited territorial scope.[199] To avoid distortions of competition, the charges must be imposed in an objective, transparent and proportionate manner that minimises the additional administrative costs and associated charges.[200] A fair, simple and transparent criterion to determine charges could be the turnover of the operator.[201] Charges should be published in an appropriate and sufficiently detailed manner. Moreover, the national authorities should publish an annual report showing the total charges collected and the administrative costs incurred and, when there is a difference, appropriate adjustments must be made, for instance by reviewing charges for the following year.[202] **2-072**

Administrative charges and other taxes The rules and limits set by the EECC only apply to the charges the trigger for which is linked to a general authorisation procedure. They do not apply to other taxes which have a different trigger such as, **2-073**

194 EECC art.13(2). Those obligations are reviewed later in Sections D and E of this chapter.

195 EECC art.13(3).

196 The charge can be annual: *Telefónica v Administración del Estado* (C-284/10) EU:C:2011:513, para.34.

197 *Commission v France* (C-485/11) EU:C:2013:427, para.28. See also *Vodafone Malta et al. v Avukat Generali et al.* (C-71/12) EU:C:2013:431, para.22, noting that those administrative charges represent remuneration since, first, they may be levied only for the administrative services performed by the national regulatory authorities for electronic communications operators in connection with, inter alia, the general authorisation or the grant of a right to use radio frequencies or numbers and, second, they must cover the administrative costs incurred in providing those services.

198 EECC art.16(1a). These charges can only cover the administrative costs mentioned in the EECC and not all the other administrative costs incurred by the NRA: *Vodafone Omnitel e.a.* (C-228/12 to C-232/12 and C-254/12 to C-258/12) EU:C:2013:495, para.40.

199 EECC art.16(1) in fine and recital 54. For example, in case of the providers of community-based networks or with a business model which generates very limited revenues even in the case of significant market penetration, Member States may establish an appropriate *de minimis* threshold for the imposition of administrative charges.

200 EECC art.16(1b) and recital 54. In *Telefónica v Administración del Estado* (C-284/10) EU:C:2011:513, para.28, the Court of Justice decided that there must not be an exact correlation between the amount of the fee imposed on a chargeable operator and the costs actually incurred by the competent national authority and relating to that operator for a specific period.

201 EECC recital 54 and *Telefónica v Administración del Estado* (C-284/10) EU:C:2011:513, para.31.

202 EECC art.16(2).

for instance, the use of mobile telephony services provided by operators and which is ultimately borne by the user of such services.[203]

2-074 **Minimum list of rights derived from the general authorisations** To ensure the development of the electronic communications sector and the Digital Single Market, the EECC not only sets a maximum list of obligations attached to the general authorisation but also a minimum list of rights. All the undertakings subject to the general authorisation have the right to (i) start their activities covered by the authorisation; and (ii) access the scarce resources necessary for those activities such as land, radio spectrum or numbers.[204] In addition, the undertaking providing the electronic communications networks or services to the public have also the right to (i) negotiate interconnection with and, where applicable, obtain access to—or interconnection from—other providers of publicly available communications networks and services; and (ii) potentially be designated as a universal service provider.[205] The rights granted under the national general authorisation do not affect the determination of applicable civil or contract law in situations involving a conflict of laws.[206]

2-075 *Official declaration* To facilitate the exercise of those rights, competent authorities should, at the request of an undertaking which has submitted a notification for a general authorisation, issue within a week of the request a standardised declaration confirming the notification and detailing the rights to install facilities on public or private land as well as negotiate and/or obtain access or interconnection.[207]

2-076 **Amendments of rights and obligations** According to the good regulatory principles, the procedures, conditions and rights concerning general authorisations and rights of use (for land, radio spectrum or numbering resources) can only be amended in objectively justified cases and in a proportionate manner.[208] Before the amendments, a prior notice should be given to the holder of the general authorisation or the rights of use unless proposed amendments are minor and have been agreed with the holder. A public consultation, where the interested parties have a sufficient period of time to express their views, should also be run. Afterwards, the amendments should be published together with the reasons therefor.[209]

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[203] *Vodafone Malta et al. v Avukat Generali et al.* (C-71/12) EU:C:2013:431, paras 24 to 25, where the Court of Justice decided that an "excise duty" that was not levied on all electronic telecommunications operators holding a general authorisation but only on operators proving mobile telephony services and that it was calculated as a percentage of the charges paid to those operators by the users of those services was not an administrative charge but akin to a tax on consumption. Similarly, see *Telefónica Móviles, Orange España, Vodafone España v Tribunal Económico-Administrativo Central* (C-119/18 to C-121/18) EU:C:2019:231 and *Proximus v Commune d'Etterbeek* (C-454/13) EU:C:2015:819, para.22.

[204] EECC art.15(1).

[205] EECC art.15(2).

[206] EECC recital 46, which refers explicitly to Regulation 593/2008 of 17 June 2008 on the law applicable to contractual obligations [2008] OJ L177/6 (Rome I).

[207] EECC art.14. Where appropriate, such declaration may also be issued as an automatic reply following the notification by the applicant. Such declaration does not by itself constitute entitlements to rights, nor should any rights under the general authorisation or rights of use depend upon a declaration: EECC recital 52.

[208] EECC art.18(1).

[209] EECC art.18(2).

2. Access to land

Rights of way Providers of electronic communications networks may need access to public or private property to install equipment and cables to build their networks. With the general authorisation, the providers have the right to make an application for the necessary permits to install those facilities.[210] However, obtaining permits for carrying out civil works and/or installing the network facilities may be difficult due to the numerous authorities possibly in charge.[211] To reduce those difficulties, the EECC in addition to the BCRD, which benefits the operators deploying high-speed electronic communications networks,[212] provide for more transparency, more efficient granting procedures and, in some cases, possibilities of colocation and infrastructure sharing. **2-077**

Transparency The EECC requires that all relevant information on procedures, conditions including fees and rights and decisions concerning rights to install facilities are published and kept up to date, providing transparency for all interested parties. When such information referred is held at different levels of government, the authorities should make all reasonable efforts to create a user-friendly overview of all such information.[213] The BCRD goes even further in requiring that all relevant information concerning the conditions and procedures applicable for granting permits for civil works needed with a view to deploying elements of high-speed electronic communications networks is available via a single information point.[214] **2-078**

Granting procedures and conditions The EECC requires that the procedures for granting rights to install facilities on, over or under public or private property are simple, efficient, transparent, non-discriminatory and rapid (maximum six months except in case of expropriation). Also those procedures should apply the principles of transparency and non-discrimination in attaching conditions to any such rights.[215] The BCRD complements those requirements by providing that that the applicant **2-079**

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[210] EECC art.15(b).

[211] For example in the case of installation of antennas, permits can be required from both the local authority enforcing town planning rules and the authority responsible for monitoring compliance with emission norms. In addition, the rules as regards access to rights of way vary substantially between Member States in the time period between application and granting of the individual authorisation, the duration for which authorisations are granted; and the fees and charges associated with these authorisations.

[212] In the context of this Directive, a high-speed electronic communications network is defined as a network capable of delivering broadband access services at speeds of at least 30 Mbps: BCRD art.2(3).

[213] EECC art.102(3) and (4).

[214] BCRD art.7(1).

[215] EECC art.43(1). The procedures may differ depending on whether or not the applicant is providing a public communications network. Before the adoption of the EECC, Member States had to ensure that permits were granted "without delay' (art.11(1) Framework Directive). Most of the Member States had set instructive deadlines in their legislation to ensure that deadlines concerning permits are properly respected. In the event of a failure by the competent authorities to meet the deadlines, the administrative law generally provides safeguards whereby lengthy procedures could be challenged through the Courts. Member States such as Cyprus, Italy and Greece used a system of tacit approval for permits for the deployment of fixed networks, while Portugal and Romania use tacit approval for rights of way. In practice, however, the outcomes of complex administrative procedures varied greatly among the Member States, depending on whether requests for access rights relate to public or private property, roads, highways, railways or ports. For example, in Ireland and the United Kingdom, providers faced burdensome negotiations with private landlords, while in Poland, the time it took to grant permits was being drawn out by an increasing number of court cases. See Commis-

should be able to submit their application by electronic means via a single information point and that a decision on the application should be taken, in principle, within four months and compensation should be given otherwise.[216]

2-080 **Fees for rights to install facilities** In addition to administrative charges,[217] fees may be imposed for getting rights of way. They should ensure the optimal use of the land resources and be objectively justified, transparent, non-discriminatory and proportionate and take into account the four main EECC objectives.[218] As this rule has direct effect, operators which have paid a fee that they consider too high and not meeting those principles may contest the public authority decision imposing such fees before a national court relying on the EU provision.[219]

2-081 *Fees for rights to install facilities and other taxes* The rules and limits set by the EECC only apply to the fees the trigger for which is linked to—and imposed in return for—rights to install facilities. In a series of cases opposing the Belgian operators against the Belgian local authorities, which had imposed different types of general taxes related to mobile network infrastructures,[220] the Court of Justice clarified that the electronic communications rules and limits do not apply to taxes the trigger for which is not linked to rights to install facilities.

2-082 **Coordination of civil works** The BCRD provides that the network operator performing directly or indirectly civil works, either fully or partially financed by public means, should meet the reasonable request to coordinate civil works on transparent and non-discriminatory terms, made by undertakings providing or authorised to provide public communications networks with a view to deploying elements of high-speed electronic communications networks. To be acceptable the request should not entail any additional costs or impede control over the coordination of the works and be ready to cover part of costs associated with the coordination of civil works.[221] To make this obligation effective and ensure that the providers of high-speed networks are aware of future civil works, the network operators

sion Staff Working Document, Implementation of the EU regulatory framework for electronic communications SWD(2015) 126, p.19.

216 BCRD art.7(2) to (4).

217 EECC art.16 analysed above at para.2-072.

218 EECC art.42(1).

219 *Vodafone España v Ayuntamiento de Santa Amalia and Ayuntamiento de Tudela* (C-55/11, C-57/11 and C-58/11) EU:C:2012:446, para.38.

220 Such a general tax on establishments, on account of the presence on public or private property of cellular telephone communication masts, pylons or antennae which are necessary for their activity, which applies regardless of the nature of the establishment and the activity: *Provincie Antwerpen v Belgacom and Mobistar* (C-256/13 and C-264/13) EU:C:2014:2149, paras 36 to 37; a general tax imposed on the owner of free-standing structures, such as transmission pylons or masts intended to support the antennas required for the functioning of the mobile telecommunication network: *Ville de Mons v Base Company* (C-346/13) EU:C:2015:649, para.24; a general tax imposed on any natural or legal persons who are proprietors of a right in rem over, or of a right to operate, a mobile telephony antenna: *Proximus v Commune d'Etterbeek* (C-454/13) EU:C:2015:819, para.29; a general tax imposed on any natural or legal persons operating mobile telephony network transmission and reception pylons and/or units: *Proximus v Province de Namur* (C-517/13) EU:C:2015:820, para.35.

221 BCRD art.5(2). According to the principle of proportionality, exemptions are possible for civil works of insignificant importance: BCRD art.5(5). Also, EECC art.44(1).

should give information on ongoing and planned civil works related to physical infrastructure for which a permit has been granted or requested.[222]

Co-location and sharing of infrastructures The EECC provides that the operators benefiting from rights of way may have to share elements of their networks[223] in order to protect the environment, public health, public security or to meet town and country-planning objectives. As this obligation is far reaching, it may only be imposed, after a public consultation, in specific areas where such sharing is necessary[224] and, when justified, against compensation. Moreover, the obligations should be objective, transparent, non-discriminatory and proportionate.[225] **2-083**

Deployment and operation of small-area wireless access points The deployment of small-area wireless access points, which support the deployment of 5G networks, should not be unduly restricted. In particular, such deployment cannot be subject to any fee in addition to the administrative charge. Also, the deployment of the small area wireless access points which comply with the EU harmonised characteristics cannot, in principle, be subject to individual town planning permits or other individual prior permits.[226] **2-084**

3. Access to radio spectrum

Introduction With the development of mobile technologies and services, radio spectrum has become a key asset of the electronic communications sector and, more broadly, the digital economy.[227] However, radio spectrum is scarce and should be managed in the most effective and efficient manner. There are two main steps in spectrum management: (i) the first is the *allocation* of spectrum which consists in designating a given radio spectrum band for use by one or more types of radio communications *services* under specified conditions[228]; and (ii) the second is the *assignment* of spectrum which consists in designating the *operators* that have the rights to use specific spectrum bands to offer their services. As the allocation of spectrum raises risks of cross-border harmful interference, international and EU coordination and harmonisation is necessary. The assignment of spectrum raises fewer risks of cross-border externalities but shows possibilities of economies of scale which may also justify EU coordination or harmonisation. **2-085**

222 BCRD art.6(1). Again, exemptions are possible for civil works of insignificant importance: BCRD art.6(5).

223 Such as ducts, conduits, masts, manholes, cabinets, antennae, towers and other supporting constructions, buildings or entries into buildings.

224 EECC recital 105, giving the examples of highly congested subsoil or natural barrier needed to be crossed.

225 EECC art.44.

226 EECC art.57. Small-area wireless access point is defined as low-power wireless network access equipment of a small size operating within a small range, using licenced radio spectrum or licence-exempt radio spectrum or a combination thereof, which may be used as part of a public electronic communications network, which may be equipped with one or more low visual impact antennae, and which allows wireless access by users to electronic communications networks regardless of the underlying network topology, be it mobile or fixed: EECC art.2(20).

227 For a very good analysis of the role of radio spectrum and the welfare implications of its management, see Cave and Webb, *Spectrum Management: Using the Airwaves for Maximum Social and Economic Benefit* (Cambridge, Cambridge University Press, 2015).

228 EECC art.2(19)

(a) Allocation of radio spectrum

2-086 **Allocation of spectrum at the international level** At the international level, the allocation of radio frequencies is coordinated within the International Telecommunication Union ("ITU").[229] In that context, an international treaty, the ITU Radio Regulations, provides for a Table of Frequency Allocations that governs the use of radio frequency bands and sets rules for the coordination, notification and registration of frequencies.[230] In Europe, the coordination of frequencies is further undertaken within the European Conference of Postal and Telecommunications Administrations ("CEPT").[231] Member States participate and contribute to the work of these international organisations. They may not enter into international commitments which would not be compatible with EU law[232] and should closely cooperate during the whole negotiation process to safeguard the unity of the international representation of the EU.

2-087 **EU coordination and harmonisation of radio spectrum policy** Member States should cooperate with each other and with the Commission in the strategic planning, coordination and harmonisation of the use of radio spectrum in the EU. To that end, they should take into consideration, inter alia, the economic, safety, health, public interest, freedom of expression, cultural, scientific, social and technical aspects of EU policies, as well as the various interests of radio spectrum user communities, with the aim of optimising the use of radio spectrum and avoiding harmful interference.[233] In particular, the Member States promote: (i) the coordination of radio spectrum policy approaches; (ii) where appropriate, the harmonisation of the conditions regarding the availability and efficient use of radio spectrum; and (iii) where appropriate, the harmonisation or coordination of spectrum assignment procedures.[234] Such coordination may take place through the Radio Spectrum Policy Group ("RSPG").[235]

2-088 *The Multiannual Radio Spectrum Policy Programme* Member States' coordination is based on the multiannual Radio Spectrum Policy Programmes, adopted by the European Parliament and the Council, which set out the policy orientations and objectives for the strategic planning and harmonisation of the use of radio spectrum

[229] One of the three sectors of the ITU is dedicated to radio spectrum management (ITU-R): see *http://www.itu.int/ITU-R* [Accessed 10 September 2019].

[230] The ITU Radio Regulations are reviewed at the World Radiocommunications Conferences ("WRC") and at the Regional Radiocommunication Conference ("RRC"), under the auspices of the ITU. The WRC is an international forum in which member countries meet to revise the ITU Radio Regulations setting the allocation of frequencies for over 40 radio communications services and specifying the technical, operational and regulatory conditions for the use of the radio frequency spectrum and satellite orbits. The WRC is held every two to three years, with the purpose of reaching consensus on changes to the Radio Regulations.

[231] CEPT comprises 46 European countries, including all Member States. Within CEPT, the Electronic Communications Committee develop policies on electronic communications activities in a European context, sets plans to harmonise the efficient use of the radio spectrum, satellite orbits and numbering resources within Europe and develops European positions in the WRC process. A European Radiocommunications Office (ERO) was created to support the work of the ECC: see *http://www.cept.org* [Accessed 10 September 2019] and *http://www.ero.dk* [Accessed 10 September 2019].

[232] Art.219(4) TFEU and Radio Spectrum Decision recital 19.

[233] EECC art.4(1).

[234] EECC art.4(2).

[235] EECC art.4(3). On the RSPG, see para.2-052.

as well as for the purpose of releasing harmonised radio spectrum for shared use or for use not subject to individual rights.[236]

2-089 *Radio Spectrum Decision* The Radio Spectrum Decision establishes the framework for the coordination of Member States' policy with regard to radio spectrum required for electronic communications, but also in other areas such as transport and R&D.[237] Under this Decision, the Commission may, under the control of the Radio Spectrum Committee, adopt appropriate technical implementing measures on the harmonisation and allocation of radio spectrum.[238] For the development of technical implementing measures that fall within the remit of CEPT, the Commission must issue mandates to CEPT, setting out the tasks to be performed and the related timetable.[239] The Commission may directly require the Member States to apply the results of CEPT's work and set deadlines for their implementation by the Member States.[240]

2-090 *Harmonised frequency bands* On the basis of the Radio Spectrum Decision, the Commission has adopted several decisions related to the harmonisation of the frequency bands in the EU.[241] Such harmonisation minimises interference, limits cross-border conflicts, facilitates roaming so that citizens can take equipment across borders, and provides economies of scale for equipment manufacturers, who can build equipment knowing that it works throughout the EU.

2-091 *Spectrum allocated for broadcasting purposes* The existing international arrangements reserving the UHF band (470–862 MHz) for broadcasting use were revised during the Regional Radio-communication Conference in 2006 ("RRC-06") and the World Radio Conference in 2007 ("WRC-07"). These instruments have allocated the use in Europe of part of the UHF band (the 790–862 MHz sub-band) to mobile services, in addition to broadcasting and fixed services.[242] In the Radio Spectrum Policy Programme, the European Parliament and the Council decided to

[236] EECC art.4(4). The first programme was established by the Decision 243/2012 of the European Parliament and of the Council of 14 March 2012 establishing a multiannual radio spectrum policy programme [2012] OJ L81/7. See also Commission Implementing Decision 2013/195 of 23 April 2013 defining the practical arrangements, uniform formats and a methodology in relation to the radio spectrum inventory established by the multiannual radio spectrum policy programme [2013] OJ L113/18. See Commission Report of 22 April 2014 on the implementation of the RSPP, COM(2014)228.

[237] Radio Spectrum Decision art.1(1). The Radio Spectrum Decision also deals with the allocation of frequencies for purposes other than electronic communications and therefore has a broader scope than the EECC. For the purpose of this Decision, radio spectrum includes radio waves in frequencies between 9 kHz and 3000 GHz: Radio Spectrum Decision art.2.

[238] Radio Spectrum Decision art.4(1).

[239] Radio Spectrum Decision art.4(2).

[240] Radio Spectrum Decision art.4(3). If the Commission, or any of the Member States, considers CEPT's work to be unsatisfactory, the Commission can itself adopt particular decisions to be applied by Member States into national law: Radio Spectrum Decision art.4(4).

[241] For example, the Commission Decision amending Decision 2009/766/EC on the harmonisation of the 900 MHz and 1800 MHz frequency bands for terrestrial systems capable of providing pan-European electronic communications services in the Community as regards relevant technical conditions for the Internet of Things [2018] OJ L105/27 and the Commission Decision on the harmonisation of radio spectrum for use by short-range devices within the 874–876 and 915–921 MHz frequency bands [2018] OJ L257/57. The list of decisions is available at *https://ec.europa.eu/digital-single-market/en/news/radio-spectrum-decisions* [Accessed 10 September 2019].

[242] The ITU Radio Regulations and, at the European regional level, the GE06 agreement enable mobile services to operate anywhere in the 470–862 MHz frequency range, subject to bilateral agreement

mandate the opening up of the 800 MHz band throughout the EU.[243] The Commission advocated also for a coordinated release of 694–790 MHz (700 MHz) frequency band while accommodating the specific needs of broadcasting services distribution.[244] The International Telecommunication Union's Radio Regulations, adopted subsequently by the World Radio-communication Conference in 2015, provided for the allocation of the 700 MHz frequency band to both broadcasting and mobile services on a co-primary basis.[245] Accordingly, the European Parliament and Council adopted a decision[246] requiring Member States to facilitate the use of the 700 MHz frequency band for terrestrial wireless broadband electronic communications services. Member States had to adopt coherent national roadmaps covering activities and timescales for frequency re-planning, technical developments for network and end-user equipment, coexistence between radio and non-radio equipment, existing and new authorisation regimes, mechanisms to avoid harmful interference with spectrum users in adjacent bands and information on the possibility of compensation for migration costs, where such costs would arise, in order to avoid, inter alia, costs for end users or broadcasters.

2-092 **Allocation of spectrum at the National level** At national level, Member States establish, in coordination with neighbouring countries, a National Frequency Allocation Plan which sets out what radio services can use which frequency bands and under which conditions. This national plan should follow the harmonisation measures decided at the EU level. However, in the case of a national or regional lack of market demand for the use of a band in the harmonised radio spectrum, at national or regional level, Member States may allow an alternative use of all or part of that band, provided that it takes due account of the long-term availability or use of such a band in the EU and the economies of scale for equipment resulting from using the harmonised radio spectrum in the EU. Moreover, such alternative use cannot prevent or hinder the availability or the use of such a band in other Member States.[247]

2-093 **Cross-border coordination** Member States should cooperate with each other, and where appropriate with the good offices of the RSPG, to alleviate any negative effects of their national spectrum management to the other Member States and resolve any cross-border harmful interference.[248] When cross-border harmful interference remains unresolved, the Commission may, taking the utmost account of the RSPG opinion and after the positive opinion of the Communications Committee, adopt a decision preventing the Member States involved from using the harmonised radio spectrum in their territories in order to resolve the issue.[249]

between the countries that might be affected in order to avoid harmful interference.

243 Commission Decision 2010/267 on harmonised technical conditions of use in the 790–862 MHz frequency band for terrestrial systems capable of providing electronic communications services in the European Union [2010] OJ L117/95.

244 Commission Communication "*A Digital Single Market Strategy for Europe*" [2015], p.10.

245 Only the 470–694 MHz ("sub-700 MHz") frequency band remains exclusively allocated to the broadcasting services on a primary basis and to wireless audio PMSE use on a secondary basis.

246 Decision 2017/899 of the European Parliament and of the Council of 17 May 2017 on the use of the 470–790 MHz frequency band in the Union [2017] OJ L138/131.

247 EECC art.45(3).

248 EECC art.28(1) and (2). Harmful interference is defined as interference which endangers the functioning of a radio navigation service or of other safety services or which otherwise seriously degrades, obstructs or repeatedly interrupts a radio communications service operating in accordance with the applicable international, Union or national regulations: EECC art.2(20).

Link with standardisation Radio spectrum coordination and harmonisation are complementary to equipment regulation supported by standardisation, hence they need to be coordinated closely together to meet their joint objectives effectively. Coordination between the content and timing of mandates to CEPT under Radio Spectrum Decision and requests to standardisation bodies, such as the European Telecommunications Standards Institute, facilitates the introduction of future systems and support radio spectrum sharing opportunities.[250] **2-094**

(b) Principles of radio spectrum management

Effective management Member States should ensure the effective management of radio spectrum for electronic communications networks and services in their territories taking into account that radio spectrum is a public good that has an important social, cultural and economic value. Thus, national competent authorities should issue general authorisations and grant rights of use on the basis of objective, transparent, pro-competitive, non-discriminatory and proportionate[251] criteria. In particular, Member States should implement the principles of technology and service neutrality.[252] **2-095**

Technology neutrality The principle of technology neutrality means that all types of technology used for the provision of electronic communications networks or services should be allowed to be used in the radio spectrum declared available for electronic communications services in the National Frequency Allocation Plan. However, some exceptions are possible to avoid harmful interference,[253] protect public health against electromagnetic fields, ensure technical quality of service, ensure maximisation of radio spectrum sharing, safeguard efficient use of radio spectrum, or ensure the fulfilment of general interest objectives. In those cases, the restriction to the technology neutrality should be necessary, proportionate and non-discriminatory.[254] **2-096**

Service neutrality The principle of service neutrality means that all types of electronic communications services should be allowed to be provided in all the radio spectrum bands available for electronic communications services in the National Frequency Allocation Plan. Again, restrictions are possible to protect general interest objectives such as safety of life, the promotion of social, regional or territorial cohesion, the avoidance of inefficient use of radio spectrum or the promotion of cultural and linguistic diversity and media pluralism (for example, the **2-097**

249 EECC art.28(4).

250 EECC recital 111.

251 For example, a measure which would lead to operators already present on the market being assigned a number of digital radio frequencies which is greater than the number that is sufficient to ensure the continuity of their television output goes beyond what is necessary to achieve that objective and, thus, is disproportionate: *Persidera v Autorità per le Garanzie nelle Comunicazioni and Ministero dello Sviluppo Economico delle Infrastrutture e dei Trasporti* (C-112/16) EU:C:2017:597, para.53.

252 EECC art.45(1).

253 For example by imposing emission masks and power levels.

254 EECC art.45(4) and more generally, art.3(4c).

provision of radio and television broadcasting services).[255] Member States must regularly review the necessity of the restrictions and make the outcome public. Exceptions to the principle of service neutrality should not result in certain services having exclusive use of particular frequencies, but should rather grant them priority, so that other services may coexist in the same frequency band.[256]

2-098 **Availability of information regarding spectrum use** Member States must ensure that their national radio frequency allocation plans and information on procedures, conditions including the fees and the rights concerning the use of radio spectrum are published in order to ensure the coordination and/or harmonisation of spectrum policy approaches in the EU.[257] A single information database, presented in a harmonised format, has therefore been developed to allow easy access to spectrum information throughout the EU.[258]

(c) Assignment of radio spectrum: national procedures

2-099 **Least restrictive regime for authorisation to use radio spectrum** Member States should choose the most appropriate regime for authorising the use of radio spectrum, taking account of (i) the specific characteristics of the radio spectrum concerned and the need to safeguard its efficient use; (ii) the needs to ensure the technical quality of communications or service and the protection against harmful interference;[259] (iii) the objectives of general interest; and (iv) where appropriate, the development of reliable conditions for radio spectrum sharing. On that basis, Member States should facilitate the use of radio spectrum under general authorisations and limit the granting of individual rights of use to situations where such rights are necessary to maximise efficient use in light of demand.[260] Member States may even limit the number of rights of use to be granted if this is necessary to ensure an efficient use of the spectrum, maximise users' benefits and facilitate competition.[261] Where appropriate, general authorisations and individual rights of use may be combined. Member States should also facilitate the shared use of radio spectrum on conditions which facilitate efficient use, competition and innovation.[262]

2-100 **Granting procedures for the rights of use** If a Member State decides that rights of use for radio spectrum are necessary to ensure an efficient use of such scarce resources and justified on the basis of the other criteria set by the EECC, the

255 EECC art.45(5).
256 EECC recital 115.
257 Radio Spectrum Decision art.5.
258 Commission Decision 2007/344 on harmonised availability of information regarding spectrum use within the Community [2007] OJ L129/67. The ERO Frequency Information System ("EFIS") has been established as the single information point and national authorities are required to upload all relevant information regarding spectrum use to this database, which is publicly available: see *http://www.efis.dk* [Accessed 10 September 2019].
259 In that regard, Member States should take account of technological solutions for managing harmful interference in order to impose the least onerous authorisation regime possible.
260 EECC arts 46(1) and 48(1). See RSPG Report on Efficient Awards and Efficient Use of Spectrum, RSPG16–004 with a comprehensive analysis of different types of awards, discusses trends and best practices, as well as BEREC Report on practices on spectrum authorization and award procedures and on coverage obligations with a view to considering their suitability to 5G, BoR(18) 235.
261 EECC art.55(1).
262 EECC art.46(2).

individual rights of use procedure applies.[263] In particular, the eligibility criteria should meet those conditions, reflect the obligations to be attached to such rights of use and be set out in advance. The competent authority should then assess those criteria on the basis of all the necessary information and provide a duly reasoned decision if it concludes that an applicant does not possess the required ability.[264] The authority should take the decision, which should be public, as soon as possible after the receipt of the complete application (and within six weeks in the case of radio spectrum declared available for electronic communications services in the National Frequency Allocation Plan).[265]

2-101 **Procedures in case of limited number of rights of use** If a Member State decides that the number of rights of use for radio spectrum needs to be limited to ensure an efficient use of such scarce resources and justified on the basis of the other criteria set by the EECC, those limited rights should be granted through competitive (such as auction) or comparative (such as beauty contest) selection procedures. Those procedures may only aim at promoting efficient use of the frequencies, competition and innovation and network coverage and quality of service.[266] The procedures should use selection criteria which are objective, transparent, non-discriminatory and proportionate.[267] In those cases, the selection procedure should be published with its reasons and applications for rights of use should be invited.[268] The deadline for the authority to take its decision may be extended beyond the normal deadline of six weeks for as long as necessary to make the procedures fair, reasonable, open and transparent but could not be longer than eight months.[269] If all those conditions are met and the rights of use are granted on an objective and non-discriminatory basis, the rightholder cannot be considered as enjoying special rights prohibited by the Competition Directive.[270]

2-102 **Procedures and competition** The procedures to grant (and also to amend or renew) the rights of use for radio spectrum should promote effective competition and avoid distortions of competition in the internal market.[271] For instance, the NRAs—or the other competent authorities upon the NRAs' advice—may introduce spectrum floors or caps and limit the amount of spectrum bands available to a single undertaking or reserve certain bands to new entrants attaching access conditions.[272] Those powerful market design decisions should be based on objective and forward-looking assessment of the market competitive conditions and on their likely ef-

263 EECC art.48(2).
264 EECC art.48(4).
265 EECC art.48(6). Extension is possible in case of unresolved cross-border coordination issues or the complexity of the technical migration of existing users in the spectrum band concerned: EECC art.53(4).
266 EECC art.55(2). In *Europa Way and Persidera v Autorità per le Garanzie nelle Comunicazioni et al.* (C-560/15) EU:C:2017:593, para.74, the Court of Justice considered that the number of available radio frequencies resulting from the digital dividend may be limited due to the risk of interference.
267 EECC art.55(6).
268 EECC art.55(3) and (4).
269 EECC art.55(7).
270 Competition Directive art.4. *Commission v Bulgaria* (C-376/13) EU:C:2015:266, para.120.
271 EECC art.52(1). The Competition Directive art.4(2) also requires that the selection procedure is designed in a way that allows effective competition between operators.
272 EECC art.52(2).

fects on private investment, in particular for network roll-out.[273] Moreover, they should be justified and not go beyond what is necessary.[274]

2-101a *Derogation regime in favour of broadcasters* An exception to the requirement of those open procedures apply in favour of the providers of radio or television broadcast content services, when this is necessary to achieve a general interest objective. However, the granting procedure should remain objective, transparent, non-discriminatory and proportionate.[275] Once granted, the concerned rights of use may be considered as being granted intuitu personae and Member States may prohibit the transfer or lease to other undertakings of individual rights of use for radio spectrum.[276] An obligation to use the assigned frequency band for the provision of specific audiovisual services may also be attached.[277]

2-102a **Maximum conditions attached to individual rights of use for radio spectrum** The EECC provides for a list of maximum 10 conditions that may be attached to rights of use for radio spectrum which apply in addition to the general authorisation conditions.[278] Those conditions should ensure optimal and the most effective and efficient use of radio spectrum. They should be non-discriminatory, proportionate and transparent.[279] In that regard, authorities may impose a level of use to alleviate spectrum hoarding. Moreover, the national competent authorities should specify in advance the criteria for the assessment of the fulfilment of those conditions and the parameters which, if they are not met, would justify the withdrawal of the rights of use or other sanctions.[280]

2-103 *Spectrum and infrastructure sharing* To promote network coverage and in compliance with competition law, the conditions of spectrum use should not prevent spectrum sharing and may provide for infrastructure sharing, national roaming access agreement and joint roll-out of infrastructures.[281]

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[273] EECC art.52(2) in fine.

[274] In *Commission v Bulgaria* (C-376/13) EU:C:2015:266, para.73, the Court of Justice condemned Bulgaria for having excluded all the broadcasters for the assignment of some radio spectrum as such exclusion was not proportionate.

[275] EECC recital 125.

[276] EECC art.51(1), second subparagraph.

[277] EECC art.45(5d) and Annex I Pt D point 1. At the stage of frequency allocation, Member States may restrict the application of the principles of technology and service neutrality, by reserving some frequency bands for certain technologies uses, e.g. to promote cultural and linguistic diversity and media pluralism.

[278] EECC arts 13(1) and 47(1) and Annex I Pt D listing conditions related to: (1) obligation to provide a service or to use a type of technology, including coverage and quality requirements; (2) effective and efficient use of radio spectrum; (3) technical and operational conditions that are necessary for the avoidance of harmful interference and for the limitation of exposure of the general public to electromagnetic fields where they are different from those contained in a general authorisation; (4) maximum duration; (5) transfer of rights; (6) usage fees; (7) commitments made during the selection procedure; (8) obligations to pool or share radio spectrum or allow access to radio spectrum for other users; (9) obligations under international agreements; and (10) obligations specific to an experimental use of radio spectrum bands. In particular, Member States may impose conditions relating to the effective and efficient use of frequencies with the aim to preclude spectrum hoarding and set out strict deadlines for the effective exploitation of rights of use by the holder.

[279] EECC arts 13(1) and 47(1).

[280] EECC art.47(1) and, more generally, EECC art.30.

[281] EECC art.47(2). For an overview of mobile infrastructure sharing arrangements, see *BEREC Report of 14 June 2018 on infrastructure sharing*, BoR(18)116.

Fees for rights of use of radio spectrum In addition to administrative charges,[282] fees may be imposed for the rights to use frequencies because, as observed by the Court of Justice, those rights give their holders an advantage by enabling them to make significant economic gains.[283] The EECC sets principles and criteria with which Member States must comply with in determining the amount of the fees but does not provide a specific method for determining the amount of such fees.[284] The fees should ensure the optimal and efficient assignment and use of the frequencies, including by: (i) setting reserve prices as minimum fees by having regard to the value of those rights in their possible alternative uses; (ii) taking into account costs entailed by conditions attached to those rights; and (iii) linking payment arrangements to the actual availability for use of the frequencies.[285] Those fees should also be objectively justified, transparent, non-discriminatory,[286] proportionate in relation to their intended purpose[287] and take into account the four main EECC objectives, including the promotion of very high capacity network.[288] According to the Court of Justice, the fees must be set at an appropriate level to reflect inter alia the value of the use of the radio spectrum, which requires taking into account the economic and technical situation of the market concerned.[289] Those principles and criteria are met if the fees result from an auction process.[290] Contrary to administra- **2-104**

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[282] EECC art.16, analysed at para.2-072.

[283] *Telefónica Móviles España v Administración del Estado* (C-85/10) EU:C:2011:141, para.27; *Belgacom, Mobistar, KPN Group Belgium v État belge* (C-375/11) EU:C:2013:185, para.50.

[284] *Telefónica Móviles España v Administración del Estado* (C-85/10) EU:C:2011:141, para.25; *Belgacom, Mobistar, KPN Group Belgium v État belge* (C-375/11) EU:C:2013:185, para.49.

[285] EECC art.42(2). The Court of Justice decided that the analogous provision under the previous regulatory framework had direct effect: *Vodafone España v Ayuntamiento de Santa Amalia and Ayuntamiento de Tudela* (C-55/11, C-57/11 and C-58/11) EU:C:2012:446, para.38. In *Europa Way and Persidera v Autorità per le Garanzie nelle Comunicazioni et al.* (C-560/15) EU:C:2017:593, para.68, the Court of Justice cautioned against a reserve fee set at a level which impedes the access of new operators to the market.

[286] In *Telefónica Móviles España v Administración del Estado* (C-85/10) EU:C:2011:141, para.31, the Court of Justice decided that Member States could not, in principle, apply different charges to competing operators for the use of scarce resources whose values appear to be equivalent in economic terms. However, in the same case (see para.34), the Court also allowed distinction between, on the one hand, the digital or analogue technology used and, on the other hand, within each technology, the different uses which are made of it, so that equality of opportunity is secured as between the various economic operators. Such differentiation was also accepted in *Europa Way and Persidera v Autorità per le Garanzie nelle Comunicazioni et al.* (C-560/15) EU:C:2017:593, para.71.

[287] Where the fees for rights of use for radio frequencies consist entirely or partly of a one-off amount, payment arrangements should ensure that such fees do not in practice lead to selection on the basis of criteria unrelated to the objective of ensuring optimal use of radio frequencies: EECC recital 100.

[288] EECC art.42(1) and recital 102: arrangements for the payment of the fees for rights of use for radio spectrum should be linked with the actual availability of the resource in a manner that supports the investments necessary to promote infrastructure development and the provision of related services.

[289] *Telefónica Móviles España v Administración del Estado* (C-85/10) EU:C:2011:141, para.28. In that case, the Court of Justice noted that an excessive fee is likely to discourage the use of spectrum thereby resulting in its underutilisation, while a too low charge risks undermining the efficiency of the spectrum use (see para.29). In the same case, the Court also decided that Member States can increase, even significantly, the fee payable for a particular technology in response to both technical and economic developments on the market for telecommunications services, but leaving unchanged the charge for another technology, provided that the different amounts imposed reflect the respective economic values of the uses made of the scarce resource at issue (see para.35).

[290] *Belgacom, Mobistar, KPN Group Belgium v État belge* (C-375/11) EU:C:2013:185, para.52; *Europa Way and Persidera v Autorità per le Garanzie nelle Comunicazioni et al.* (C-560/15) EU:C:2017:593, para.68.

tive charges, Member States remain free to use these fees for any purpose whatsoever.[291]

2-105 **Duration of rights of use** To ensure sufficient legal stability for investors which often have to carry out important and long-term investments, the rights of use for radio spectrum should be unlimited or for a period which is appropriate for efficient use of the frequencies, competition and innovation as well as network coverage and quality of service, including allowing for investment amortisation.[292] Regarding spectrum bands used for wireless broadband services for which harmonised conditions have been set at EU level, the duration of the rights should, in principle, be at least 20 years, with a first period of at least 15 years and a quasi-automatic extension for the remaining of the period.[293]

2-106 **Renewal of rights of use** In a timely manner, before the expiration of the rights of use, the national competent authority should, on its own initiative or at the request of the rightholder, decide on the renewal of the individual rights of use and its terms and conditions.[294] In taking such a decision, the authorities should consider the four main general EECC objectives as well as the specific objectives of the radio spectrum management (in particular, the efficient use of spectrum, the competition developments or the need to avoid severe service disruption) as well as the EU harmonisation measures.[295] If the renewal is about rights of use whose number is limited, the competent authorities should run a public consultation before taking a decision.[296]

2-107 **Spectrum trading** Allowing trading or leasing of frequencies, combined with flexibility in the use of spectrum, contribute to spectrum efficiency. This approach gives market participants freedom to decide how spectrum should be used and, therefore, creates incentives for rightholders to use their spectrum for the highest valued uses demanded by the market. Furthermore, it lowers entry barriers by making it possible for new entrants to acquire rights to use spectrum from other undertakings. Finally, new technologies could be deployed in pace with technological developments and thereby stimulate innovation. For all those reasons, the Radio Spectrum Policy Programme had already obliged Member States to allow spectrum trading in several bands.[297] The EECC generalises this obligation and allows undertakings to transfer or lease to other undertakings individual rights of use for

[291] *Telefónica Móviles España v Administración del Estado* (C-85/10) EU:C:2011:141, para.32; *Belgacom, Mobistar, KPN Group Belgium v État belge* (C-375/11) EU:C:2013:185, para.45. The EECC suggests that it should be possible, for example, to use such fees to finance activities of national regulatory and other competent authorities that cannot be covered by administrative charges: EECC recital 100.

[292] EECC art.49(1).

[293] EECC art.49(2). Exceptions to the 20 years minimum rule are possible inter alia for limited geographical areas, where access to high-speed networks is severely deficient or absent, specific short-term projects or experimental use: EECC art.49(3). Adjustments are also possible to ensure the simultaneous expiry of the duration of rights in one or several bands: EECC art.49(4).

[294] EECC art.50(1) and (4). A renewal assessment done at the request of the rightholder cannot be done earlier than five years prior to expiry of the duration of the rights concerned. The conditions attached to the renewals cannot give undue advantages to existing holders: EECC art.47(1).

[295] EECC art.50(2).

[296] EECC art.50(3).

[297] Decision 243/2012 establishing a multiannual radio spectrum policy programme, art.6(8). The bands were the 800 MHz, 900 MHz, 1800 MHz, 2 GHz, 2.6 GHz and 3.4–3.8 GHz.

radio spectrum unless they were granted free of charge or assigned for broadcasting.[298] This transfer or lease should be authorised if the original conditions attached to the rights of use are maintained[299] and may only be prohibited when there is a clear risk that the new holder is unable to meet the original conditions or when the transfer is likely to result in significant harm to competition.[300] To facilitate spectrum trading, the transfer procedure should be the least onerous possible and the competent authorities should consider any request to adapt the conditions attached to the original individual authorisation, for example to partition or disaggregate the spectrum concerned.[301]

2-108 **Restriction or withdrawal of rights** To ensure regulatory predictability and protect rightholders against regulatory hold-up, the EECC sets strict conditions to restrict or withdraw the rights of use for radio spectrum before the expiry of the period for which they were granted: (i) those rights of use may be restricted or withdrawn if the attached obligations are not respected by the rightholder;[302] and (ii) they may also be restricted or withdrawn when justified by the need to ensure effective and efficient use of radio spectrum or to implement technical EU harmonisation measures adopted under the Radio Spectrum Decision.[303] To do so, the procedures should be clearly defined, established in advance and based on the principles of proportionality and non-discrimination. A public consultation should be run[304] and, when appropriate, the rightholders should be compensated.

(d) Assignment of radio spectrum: internal market procedures

2-109 **Harmonised assignment of radio spectrum** If several Member States agree on a common selection procedure with the same attached conditions, they cannot impose any additional conditions on the undertakings that have been selected on the basis of the common procedure.[305] However, this new provision of the EECC has limited practical impact because there is no effective procedure to agree at EU level on such common selection and assignment procedures.[306]

2-110 *Harmonised assignment through legislation* The establishment of an EU-wide assignment procedure may require a specific law adopted by the European Parliament and the Council under the internal marker rules. Until now, this heavy procedure has only been used in one case: the selection and authorisation of systems providing Mobile Satellite Services ("MSS").[307] This MSS Decision provides for a single comparative selection process, organised by the Commission in coopera-

[298] EECC art.51(1).

[299] EECC art.51(3). If the use of the spectrum band concerned has been harmonised at the EU level under the Radio Spectrum Decision, a transfer or lease must not result in a change of use of that radio frequency: EECC art.51(2) in fine.

[300] EECC arts 51(3) and 52(2d).

[301] EECC art.51(3).

[302] EECC arts 19(1) and 30.

[303] EECC art.19(2).

[304] EECC art.19(4).

[305] EECC art.36.

[306] The Radio Spectrum Decision does not cover authorisation procedures: see recital 11.

[307] Decision 626/2008 of the European Parliament and of the Council of 30 June 2008 on the selection and authorisation of systems providing mobile satellite services (MSS) [2008] OJ L172/19. As a result of the comparative selection procedure provided for in this Decision, two providers (Inmarsat Ventures Limited and Solaris Mobile Limited) were selected: see Commission Decision 2009/449

tion with the Member States, to select the operators of mobile satellite systems authorised to use these bands. However, even in that case, individual authorisations had to be sought by the two selected operators for the satellite component of their service[308] and for the ground-based stations[309] in order to improve the availability of MSS in geographical areas within the footprint of the system's satellite(s) where communications with one or more space stations cannot be ensured with the required quality. Moreover, in order to avoid inconsistent enforcement of these national authorisations, the Commission adopted a Decision on modalities for coordinated application of the rules on enforcement.[310] This Decision sets up a coordinated approach to decide on potential breaches of the common MSS authorisations conditions as well as to ensure consistent remedies and sanctions if one authorising Member State notifies such alleged breaches to the Commission.

2-111 *Harmonised assignment through soft-law* A less ambitious approach was followed for the assignment of right of use for Mobile Communications on board of Aircrafts ("MCA")[311] and on board of sea Vessels ("MCV").[312] In those cases, the Commission adopted Recommendations promoting the use of general authorisations and the mutual recognition of authorisations granted in other Member States, i.e. not making the use of the relevant spectrum in their territory subject to any additional authorisation. These Recommendations were issued in parallel with the adoption of Implementing Decisions to harmonise the relevant spectrum bands and their usage conditions.[313] Similarly, regarding the deployment of 5G mobile networks, the Commission can request the RSPG to issue an opinion recommending the most appropriate authorisation regimes for the use of radio spectrum in the bands concerned. On that basis, the Commission may address a recommendation with a view to promoting a consistent approach in the Union with regard to the authorisation regimes for the use of that band.[314]

2-112 **Joint authorisation process** Member States may also establish jointly the common aspects of an authorisation process or, going further, conduct jointly the selection process to grant individual rights of use for radio spectrum. For instance, they could agree on a common schedule, common conditions and procedures for the selection and the granting of right of use, or common or comparable conditions to be attached to the individual rights of use, inter alia allowing users to be assigned similar radio spectrum blocks.[315]

on the selection of operators of pan-European systems providing mobile satellite services (MSS) [2009] OJ L149/65.

308 MSS Decision art.7.2 lists certain common conditions that Member States must attach to the right to use the specific radio frequency and the right to operate a mobile satellite system, including the launch of continuous commercial MSS within 24 months of the selection.

309 MSS Decision art.8 provides that Member States shall ensure that their competent authorities grant to the selected operators the authorisations necessary for the provision of complementary ground components. It also lists several common conditions that must be attached to such national CGC authorisations, including certain operational requirements and the duration of authorisations.

310 Commission Decision 2011/667 on modalities for coordinated application of the rules on enforcement with regard to mobile satellite services [2011] OJ L265/25.

311 Commission Recommendation 2008/295 of 7 April 2008 on authorisation of mobile communication services on aircraft (MCA services) in the European Community [2008] OJ L98/19.

312 Commission Recommendation 2010/167 of 19 March 2010 on the authorisation of systems for mobile communication services on board vessels (MCV services) [2010] OJ L72/42. See in particular points 7 and 8.

313 The initial decisions were subsequently amended. The decisions currently in force are the Commission Decision 2016/2317 amending Decision 2008/294 and Implementing Decision 2013/654, in order to simplify the operation of mobile communications on board aircraft (MCA services) in the Union [2016] OJ L345/67 and the Commission Decision 2017/191 amending Decision 2010/166, in order to introduce new technologies and frequency bands for mobile communication services on board vessels (MCV services) in the European Union [2017] OJ L29/63.

314 EECC art.45(2).

Coordinated timing of assignments In particular, Member States may agree on common dates by which the use of specific harmonised radio spectrum has to be authorised.[316] If the spectrum bands have been harmonised at the EU level, Member States have to allow the use of that radio spectrum, as soon as possible and at the latest 30 months after the adoption of that harmonisation measure unless a delay is justified by general interest reasons, unresolved cross-border coordination issues resulting in harmful interference or force majeure.[317] **2-113**

The specific case of 5G frequency bands Given the particular importance for the EU economy and society of the rapid roll-out of 5G technology, Member States should by 31 December 2020 (i) reorganise and allow the use of sufficiently large blocks of the 3.4–3.8 GHz band; and (ii) allow the use of at least 1 GHz of the 24.25–27.5 GHz band, provided that there is clear evidence of market demand and of the absence of significant constraints for migration of existing users or band clearance.[318] **2-114**

Peer review on the national assignment procedure and conditions Where the competitive or comparative selection procedure concerns harmonised radio spectrum, a national competent authority must inform the RSPG and may ask for a peer review to be done by the authorities of the other Member States.[319] In exceptional circumstances and on the basis of criteria which are objective and defined in advance, the RSPG may decide on its own initiative to launch a peer review.[320] In those cases, the RSPG convenes a Peer Review Forum in order to discuss and exchange views on the Member State's draft measures. The national authority explains how its draft measure ensures effective and efficient use of radio spectrum and stable and predictable investment conditions in electronic communications networks as well as promotes the development of the internal market, the cross-border provision of services, as well as competition, and maximises the benefits for the consumer.[321] At the request of the national authority concerned, the RSPG may adopt a report or even a non-binding opinion on the draft measure.[322] **2-115**

(e) Unlicensed spectrum

Promotion of radio local area networks and wi-fi The EU may designate specific frequencies as being licence exempt to promote their use.[323] This is the case for radio local area networks ("RLAN") which are low-power wireless access **2-116**

315 EECC art.37.

316 EECC art.53(1).

317 EECC art.53(2) to (5).

318 EECC art.54.

319 EECC art.35(1).

320 EECC art.35(2) and (3).

321 EECC art.35(4).

322 EECC art.35(7) and (9).

323 RLAN/WLAN systems may use the 2.4 GHz and 5 GHz bands, without requiring individual

systems operating within a small range with a low risk of interference with other such systems deployed in close proximity by other users.[324] RLANs encompass data communications systems, such as wi-fi networks, that have been implemented as an extension (or an alternative) to a wired local area network within a building or a wider area, such as an airport. RLANs not only increase access to the internet for end-users but also allow for mobile traffic off-loading by mobile operators[325] and is complementary to 5G technology.[326] To promote those RLAN, the provision of access through RLANs to a public electronic communications network and the use of the harmonised radio spectrum for that provision could only be subject to general authorisation and could not be subject to specific rights of use.[327] The provider of the RLAN is not liable for the information transmitted if it does not (i) initiate the transmission; (ii) select the receiver of the transmission; and (iii) select or modify the information contained in the transmission.[328] Competent authorities may not prevent providers of public electronic communications networks and services to allow access to their networks through RLANs located at an end-user's premises if those end-users agree.[329] Those authorities may neither prevent the end-users from allowing access, reciprocally or otherwise, to their RLANs by other end-users.[330] Finally, those authorities may not unduly restrict the provision of access to RLANs to the public by public sector bodies or in public spaces close to premises occupied by such public sector bodies, when that provision is ancillary to the public services provided on those premises.[331]

4. Access to numbering resources

(a) Numbers management

2-117 **National numbering plan: availability of numbering resources** The availability of sufficient individual phone numbers is essential for the functioning of the

authorisations: Commission Decision 2005/513 of 11 July 2005 on the harmonised use of radio spectrum in the 5 GHz frequency band for the implementation of wireless access systems including radio local area networks (WAS/RLANs) [2005] OJ L187/22 art.1.

[324] EECC art.2(24).

[325] A study from 2013 estimated that delivering all the RLAN data traffic in the EU via mobile networks would have required additional infrastructure investments of € 200bn to cope with the projected demand: Study on the "Impact of traffic off-loading and related technological trends on the demand for wireless broadband spectrum", WIK/Aegis, Impact of traffic offloading and related technological trends on the demand for wireless broadband spectrum, Study for the European Commission, 2013.

[326] Commission Decision 2007/90 amending Decision 2005/513 on the harmonised use of radio spectrum in the 5 GHz frequency band for the implementation of Wireless Access Systems including Radio Local Area Networks (WAS/RLANs) [2007] OJ L41/10.

[327] EECC art.56(1). This is complemented by Regulation 2017/1953 of the European Parliament and of the Council of 25 October 2017 amending Regulations 1316/2013 and 283/2014 as regards the promotion of internet connectivity in local communities [2017] OJ L286/1 provides financial support for local communities to deploy public wi-fi networks.

[328] EECC art.56(2) refers to art.12 of the E-Commerce Directive, which covers only services normally provided for remuneration—in contrast, the EECC extends its liability regime to all provision of WLANs. See also *Tobias Mc Fadden v Sony Music Entertainment Germany* (C-484/14) EU:C:2016:689.

[329] EECC art.56(3). The net neutrality rules of the Open Internal Regulation are also applicable to RLAN: EECC art.56(4).

[330] EECC art.56(5).

[331] EECC art.56(6).

electronic communications sector. Member States must, therefore, ensure the provision of adequate numbers and numbering ranges for all publicly available electronic communications services.[332] Moreover, in light of the increasing relevance of numbers for various Internet of Things ("IoT") services, competent authorities may also assign numbers to undertakings other than providers of electronic communications networks or services which can manage the numbering resources, as long as adequate numbering resources are made available to satisfy current and foreseeable future demand for communications services.[333] Member States must ensure that the national numbering plans are published, subject only to limitations imposed on the grounds of national security.[334]

2-118 **Managing numbering resources** The competent authorities should manage the national numbering plans in a manner that gives equal treatment to all providers of publicly available electronic communications services and other undertakings eligible to get numbers. In particular, the undertakings which have received numbers cannot discriminate against other providers of electronic communications services as regards the numbering resources used to give access to their services.[335] Also, Member States should ensure that the "00" code is the standard international access code. They may also agree to share a common numbering plan for all or specific categories of numbers.[336]

2-119 **Numbering resources with extraterritorial use in the EU** Member States must ensure the availability of a range of non-geographic numbers which may be used for the provision of electronic communications services other than interpersonal communications services throughout the EU in order to effectively support the free movement of goods, services and persons within the Union.[337] Undertakings benefitting from such rights of extraterritorial use of numbers have to comply with the relevant consumer protection rules and other number-related rules applicable in any Member State where those numbers are used. The national competent authorities of the Member State assigning the numbers ensure such compliance, including by means of conditions attached to rights of use, and act on the request of the NRA of the country where the number is actually used. However, this is without prejudice to the enforcement powers of the national authorities of the country of use. In that regard, BEREC assists the national authorities in coordinating their activities to ensure the efficient management of those numbering resources with a right of extraterritorial use within the EU and establishes a database with those numbers.

2-120 **EU harmonisation of specific numbers** Member States must also support the harmonisation of specific numbers or numbering ranges within the EU to promote

[332] EECC art.93(1).

[333] EECC art.93(2). Also BEREC Guidelines of 14 June 2019 on common criteria for the assessment of the ability to manage numbering resources by undertakings other than providers of electronic communications networks or services and of the risk of exhaustion of numbering resources if numbers are assigned to such undertakings, BoR(19)114. The granting of rights of use for numbering resources to such undertakings may be suspended if it is demonstrated that there is a risk of exhaustion of numbering resources.

[334] EECC art.93(7).

[335] EECC art.93(3). This does not confer any responsibility on NRAs and other competent authorities in the field of internet naming and addressing.

[336] EECC art.93(5).

[337] EECC art.93(4) and recital 246.

the functioning of the internal market and support the development of pan-European services. The Commission, taking utmost account of the opinion of BEREC and with the prior agreement of the Communications Committee, may adopt implementing measures harmonising specific numbers or numbering ranges if necessary to address unmet cross-border or pan-European demand for numbering resources.[338] This has been done once for the numbering range beginning with 116.[339]

(b) *Individual rights of use for numbering resources*

2-121 **Granting procedure** When necessary to ensure the efficient use of numbering resources, individual rights of use may be granted.[340] However, the availability of rights of use to be granted should not be limited unless this is justified for efficient use of numbers.[341] In this case, the rights of use should be granted through open, objective, transparent, non-discriminatory and proportionate procedures.[342] The procedures should also be quick and the competent authorities have to take decisions on the granting of rights of use as soon as possible after the application.[343] The procedures should also be published in an appropriate manner.[344] When the rights are granted for a limited period, the duration of that period should be appropriate for the service concerned with a view to the objective pursued, taking due account of the need to allow for an appropriate period for investment amortisation.[345]

2-122 **Maximum conditions to be attached to rights of use for numbers** The EECC provides for a list of a maximum of 10 conditions that may be attached to rights of use for numbering resources, which apply in addition to the general authorisation conditions.[346] Those conditions should be non-discriminatory, proportionate and transparent. In particular, they should not discriminate between the numbering

[338] EECC art.93(8).

[339] Commission Decision 2007/116 of 15 February 2007 on reserving the national numbering range beginning with 116 for harmonised numbers for harmonised services of social value [2007] OJ L49/30, as amended by Decision 2007/698 and Decision 2009/884. The Decision laid down the rules on the scope and reservation of 116 numbers and their assignment to operators. An Annex to the Decision lists the numbers themselves. This annex was subsequently replaced by two successive 2009 decisions.

[340] EECC art.94(1).

[341] EECC art.94(5). While frequencies may be considered as a scarce resource, this is, in principle, no longer the case for numbers, since Member States are required by art.93(1) EECC to ensure adequate numbering resources for the provision of publicly available electronic communications services.

[342] EECC art.94(2). The assignment of the national numbering resources and the management of national numbering plans must be regarded as regulatory functions within the meaning of art.5(1). As a consequence, where Member States retain ownership or control of undertakings providing electronic communications networks or services, they must ensure effective structural separation of the function of managing the numbering plan from activities associated with ownership or control in compliance with art.6(1) EECC: *Comisión del Mercado de las Telecomunicaciones v Administración del Estado* (C-82/07) EU:C:2008:143.

[343] EECC art.94(3). The decision should be taken within three weeks in case of numbering resources that have been allocated for specific purposes within the National Numbering Plan. National authorities may only extend the time limit to six weeks for the assignment of numbers after consultation with the interested parties and only in the case of numbers of exceptional economic value (so-called "golden numbers"), which must be granted through either competitive or comparative selection procedures: EECC art.94(4).

[344] Competition Directive art.4(2).

[345] EECC art.94(2).

[346] EECC art.13(1) and Annex I Pt E listing conditions related to: (1) the designation of the service for

resources used within a Member State and the numbering resources with extraterritorial use in the EU.[347]

2-123 **Fees** As for the other scarce resources, in addition to administrative charges,[348] fees for rights of use for numbering resources may be imposed but under very strict conditions to alleviate unjustified entry barriers and competitive distortions. First, the fees should ensure the optimal use of the numbering resources. Second, they should be objectively justified, transparent, non-discriminatory,[349] proportionate in relation to their intended purpose and take into account the four main EECC objectives.[350]

2-124 **Obligation to provide information for directory enquiry services** In order to ensure that end-users have access to comprehensive publicly available directory enquiry services and directories, providers of number-based interpersonal communications services, which attribute numbers from a numbering plan should meet all reasonable requests to give the relevant information for the purposes of the provision of those directory enquiry services and directories.[351] The providers cannot discriminate according to the place of establishment of the information seeker and should give the information also to undertakings which are established in a different Member State.[352] The information must be given in an agreed format and on terms fair, objective, cost oriented and non-discriminatory.[353] NRAs should also be empowered to impose such obligations to all the undertakings that control access to end-users.[354]

which the numbers are used; (2) effective and efficient use of numbers; (3) number portability; (4) provide public directory end-user information; (5) maximum duration for the right of use; (6) transfer of rights; (7) usage fee; (8) commitments made during the selection procedure; (9) obligations under relevant international agreements; and (10) in the particular case of numbering resources with extraterritorial use in the EU, obligations to ensure compliance with all the relevant national consumer protection rules and national law related to the use of numbering resources applicable in the Member States where the numbering resources are used.

[347] EECC art.93(4).

[348] EECC art.16 analysed above—see para.2-079.

[349] At the beginning of liberalisation, a clear example of discrimination was to allow the previous monopolist, in this case Deutsche Telekom, to have the numbers they were using for free while the new entrants had to pay to get numbers: *Bundesrepublik Deutschland v ISIS Multimedia Net and Firma O2* (C-327/03 et C-328/03) EU:C:2005:622, para.31.

[350] EECC art.95. The Court of Justice decided that the analogous provision under the previous regulatory framework had direct effect: *Vodafone España v Ayuntamiento de Santa Amalia and Ayuntamiento de Tudela* (C-55/11, C-57/11 and C-58/11) EU:C:2012:446, para.38.

[351] EECC art.112(1). The relevant information concerns solely the data relating to the subscribers of the undertakings concerned and not the subscribers of other operators: *KPN Telecom v Onafhankelijke Post en Telecommunicatie Autoriteit (OPTA)* (C-109/03) EU:C:2004:749; *Deutsche Telekom v Bundesrepublik Deutschland* (C-543/09) EU:C:2011:279, para.37.

[352] *Tele2 Netherlands, Ziggo, Vodafone Libertel v Autoriteit Consument en Markt (ACM)* (C-536/15) EU:C:2017:214, para.30.

[353] EECC art.112(1). In *KPN Telecom v Onafhankelijke Post en Telecommunicatie Autoriteit (OPTA)* (C-109/03) EU:C:2004:749, paras 39 and 40, the Court of Justice decided that the data owner can only charge the costs associated with the transmission of the information to the provider of directories. It may not charge the costs of obtaining such information which must in any event be borne by the provider of number-based interpersonal communications services and is already included in the costs and revenue of such services.

[354] EECC art.112(2).

D. RULES TO PROMOTE COMPETITION: MAKING MARKETS WORK BETTER

2-125 **Introduction** To reduce economic entry barriers and ensure sustainable effective competition,[355] NRAs and other competent authorities may impose obligations on all providers of electronic communications networks and services meeting some conditions defined in the EECC (symmetric regulation) or on the providers designated by the NRAs as having significant market power (asymmetric regulation). Those obligations may be behavioural, such as compulsory access or price control or, more exceptionally structural such as vertical separation. To ensure regulatory consistency, the national authorities must, under certain conditions, cooperate with their counterparts in the other Member States and the Commission before imposing most of those obligations. Competent authorities can also impose obligations on undertakings in order to comply with international commitments.[356]

1. Symmetric regulation

2-126 **Types of obligations** Symmetric obligations are imposed on all undertakings meeting some conditions set in the law, independently of a specific market power determination by the NRA. However, the legal conditions justifying those obligations are related to some form of market power and the obligations aim to ensure that such power cannot be abused. The EECC and related legal instruments provide for three main types of symmetric obligations: (i) interconnection and interoperability; (ii) access to network elements which are not easily duplicable; and (iii) access to application programme interfaces ("API"), electronic programme guides ("EPG") and conditional access system ("CAS") to guarantee the accessibility of digital radio and television broadcasting services.

2-127 **Institutional safeguards** As those symmetric obligations can be burdensome for the undertakings and different approaches across Member States may undermine the Digital Single Market, institutional safeguards are set to alleviate over-regulation and regulatory inconsistency in the EU. The imposition of those obligations should be objective, transparent, proportionate and non-discriminatory. Moreover, before imposing the obligations, the national authorities must publish the draft measure for public consultation and must communicate it to the Commission, BEREC and the authorities in other Member States which may comment and, in the case of access beyond the first concentration point, stop the imposition of envisaged measure.[357] After the obligations have been imposed, they should be assessed every five years and lifted or amended in light of the evolving market conditions.[358]

[355] On the economics of the telecommunications sector, see: Cave, Majumdar and Vogelsang (eds) *Handbook of Telecommunications Economics, Vol.1: (Structure Regulation and Competition)* (Amsterdam, Elsevier, 2002)and Majumdar, Vogelsang and Cave (eds) *Handbook of Telecommunications Economics, Vol.2: (Technology Evolution and the Internet)*(Amsterdam, Elsevier, 2005).

[356] EECC art.68(3c). This would cover, for example, interconnection obligations imposed to respect the commitments accepted by the EU and its Member States in the context of the WTO Agreement on Basic Telecommunications.

[357] See para. 2-175.

[358] EECC art.61(5).

(a) Interconnection and interoperability

2-128 **Obligation to negotiate interconnection** Providers of public electronic communications networks[359] have the right and, when requested by others, the obligation to negotiate with each other interconnection[360] for the purpose of providing publicly available electronic communications services, in order to ensure provision and interoperability of services throughout the EU.[361] Those negotiations should be conducted in good faith and on the basis of reasonable terms but should not necessarily be successful.[362] Moreover, the confidentiality of the information exchanged during the interconnection negotiation, which can be very sensitive commercially, should be respected.[363] This means that vertically integrated operators cannot use interconnection information for the benefit of their other businesses.

2-129 **Regulation of interconnection and interoperability** Competent authorities should encourage and, where appropriate, ensure adequate access and interconnection and the interoperability of services. Those powers are very broad[364] but can only be exercised to promote efficiency, sustainable competition, the deployment of very high capacity networks, efficient investment and innovation and, ultimately, give the maximum benefit to end-users. Although the powers of the competent authorities are open-ended, the EECC gives particular examples of possible intervention when the interconnection negotiations have not been successful.

2-130 *Providers subject to general authorisation* The NRAs may impose on the undertakings that are subject to general authorisation (i.e., the providers of electronic communications networks and services which are not number independ-

[359] As this obligation to negotiation interconnection constitutes an exception to the freedom to conduct business, it can only benefit the providers of public electronic communications networks as foreseen in the EECC and a national law may not enlarge this benefit to other categories of undertakings: *TeliaSonera Finland* (C-192/08) EU:C:2009:696, paras 38 to 46.

[360] Interconnection is defined as "a specific type of access implemented between public network operators by means of the physical and logical linking of public electronic communications networks used by the same or a different undertaking in order to allow the users of one undertaking to communicate with users of the same or another undertaking, or to access services provided by another undertaking where such services are provided by the parties involved or other parties who have access to the network": EECC art.2(28). The Court of Justice clarified that the negotiation obligation only applies to interconnection and not to other forms of network access: *Commission v Poland* (C-227/07) EU:C:2008:620, para.36.

[361] EECC art.60(1). An access obligation is also imposed on providers of international roaming service: Roaming Regulation art.3(1).

[362] *TeliaSonera Finland* (C-192/08) EU:C:2009:696, paras 36 and 51 to 55, in which the Court of Justice decided that an NRA may consider that the negotiation obligation has been breached where the facility owner proposes to the interconnection seeker unilateral conditions likely to hinder the emergence of a competitive market at the retail level, where those conditions prevent the customers of the interconnection seeker from benefitting from its services.

[363] EECC art.60(2).

[364] EECC art.61(1). In *TeliaSonera Finland* (C-192/08) EU:C:2009:696, the Court of Justice clarified that the means for the NRAs to ensure adequate access, interconnection and interoperability of services are not exhaustively listed in EU law (see para.58) and, therefore, an NRA may require an undertaking which does not have significant market power but which controls access to end-users to negotiate in good faith with another undertaking for (i) either interconnection of the two networks concerned if the undertaking which requests such access must be classified as an operator of public communications networks; or (ii) interoperability of SMS and MMS message services if that undertaking is not covered by that classification (see para.62). See also *KPN v Autoriteit Consument en Markt (ACM)* (C-85/14) EU:C:2015:610, para.36.

ent interpersonal communications services) obligations, including interconnection, if (i) those providers control access to end-users and (ii) the obligations are necessary and proportionate to ensure end-to-end connectivity.[365] The national competent authorities may also impose the obligations which are necessary to make their services interoperable.[366]

2-131 *Providers of number-independent interpersonal communications services* The national competent authorities may also impose on the providers of number-independent interpersonal communications services obligations to make their services interoperable, including by relying on standards, if (i) those providers reach a significant level of coverage and user uptake; (ii) the Commission has found an appreciable threat to end-to-end connectivity between end-users and has adopted implementing measures specifying the nature and scope of any obligations that may be imposed by the national authorities; and (iii) the obligations imposed are necessary and proportionate to ensure interoperability of interpersonal communications services.[367]

2-132 **Price regulation of termination rates** The NRAs may also regulate the price of the interconnection.[368] Indeed, the termination rates for fixed voice and for mobile voice of any, small and large, fixed and mobile operator[369] are subject to a maximum price determined at the EU level by the Commission every five years.[370] To set this EU-wide voice termination rate, the Commission follows a bottom-up pure long-run incremental costs ("BU-LRIC") methodology which includes a bottom-up modelling approach using LRIC as the cost model and without any addition of a

[365] EECC art.61(2a). Also art.112(2) regarding access to information necessary for the provision of directory enquiry services. The providers subject to general authorisations are determined in art.12(2) EECC. This obligation also applies in the case of cross-border services: *KPN v Autoriteit Consument en Markt (ACM)* (C-85/14) EU:C:2015:610, para.49 and *Polkomtel v Prezes Urzędu Komunikacji Elektronicznej (PUKE)* (C-397/14) EU:C:2016:256, para.52.

[366] EECC art.61(2b).

[367] EECC art.61(2c). As noted by the Commission, this need could arise from a significant decline in usage of the numbers-based communications system, so that the public interest in end-to-end connectivity can no longer be assured through that system—either because a single number-independent ICS becomes the predominant mode of interpersonal communication; or because of a market fragmentation with a large number of different, non-interoperable communications applications: Executive summary of the Commission proposal: 2. Electronic communications services and end-user rights, p.3 available at: *http://ec.europa.eu/information_society/newsroom/image/document/2016-52/executive_summary_2_-_services_40995.pdf* [Accessed 10 September 2019].

[368] EECC art.75. Another form of symmetric price control applies to wholesale charges for international roaming services: Roaming Regulation arts 7 to 12, analysed at para.2-244.

[369] Under the previous regulatory framework, the regulation of termination rates was done under the general asymmetric price control obligations, hence conditioned by an SMP designation. However, each provider of termination services was considered as a separate relevant market (see the markets 1 and 2 of the 2014 Markets Recommendation and Explanatory Memorandum, pp.28–34, for the justification of such a definition). As each provider had thus 100% market share on those narrowly defined markets, each of them were found to have SMP. Therefore, what was formally an asymmetric obligation ended up being a symmetric obligation.

[370] To reconcile the "ones size fits-all approach" with possible national specificities, the Commission must take into account national circumstances which result in significant differences between Member States, as well as the total number of end-users in each Member State, in order to ensure a proper weighting of the maximum termination rates in the EU. Indeed, under the previous regulatory regime, regulated termination rates varied between countries, sometimes quite significantly: BEREC Report of 13 June 2019 on termination rates at European level, BoR(19)91.

mark up for the recovery of common costs.[371] Moreover, the fixed termination price cap should be the same for all fixed operators independently of their size and, similarly, the mobile termination price cap should be the same for all the mobile operators provided they have achieved the minimum efficient scale (at least 20% market shares).

(b) Access to network elements not easily duplicable

2-133 **Access to existing physical infrastructure** Already before the enactment of the EECC, the Broadband Cost Reduction Directive (Directive 2014/61/EU) ("BCRD") imposed on network operators the obligation to meet reasonable requests for access to their physical infrastructures under fair and reasonable terms with a view to deploying high-speed electronic communications networks.[372] Refusal to give access can only be based on objective, transparent and proportionate criteria, such as technical suitability, lack of available space, risks for safety or network or availability of viable alternative.[373]

2-134 **Access to in-building physical infrastructure** In addition, public communications network providers have the right to access any existing in-building physical infrastructures at end-user's location with a view to deploying a high-speed network if duplication is technically impossible or economically inefficient. Conversely, the holders of a right to use the access point and the in-building physical infrastructure should meet reasonable requests for access from public communications network providers under fair and non-discriminatory terms and conditions.[374]

2-135 **Access to facilities up to the first concentration point** The EECC complements the BCRD in ensuring that NRAs may force the network providers to give access to wiring, cables and associated facilities inside buildings or up to the first concentration or distribution point (typically inside or in front of a building) when the replication of such network elements is economically inefficient or physically

[371] EECC Annex III which carries over the costing methodology recommended by the Commission and used by the NRAs under the previous regulatory framework: Commission Recommendation 2009/396 of 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU [2002] OJ L124/67. The BU pure LRIC methodology used for termination rates leads to lower prices than the BU-LRIC + methodology which is recommended by the Commission for the general price control imposed on SMP operators: Commission Recommendation of 11 September 2013 on consistent non-discrimination obligations and costing methodologies [2013] OJ L251/24, para.30, see para.2-159.

[372] BCRD art.3. Physical infrastructure is defined as: "any element of a network which is intended to host other elements of a network without becoming itself an active element of the network, such as pipes, masts, ducts, inspection chambers, manholes, cabinets, buildings or entries to buildings, antenna installations, towers and poles; cables, including dark fibre": BCRD art.2(6). On the effects of this Directive so far, see Report of the Commission of 27 June 2018 on the implementation of the Directive 2014/61 on measures to reduce the cost of deploying high-speed electronic communications networks, COM(2018)492.

[373] BEREC Report of 7 March 2019 on pricing for access to infrastructure and civil works according to the BCRD, BoR(19)23.

[374] BCRD art.9(2) and (3). In-building physical infrastructure is defined as "physical infrastructure or installations at the end-user's location, including elements under joint ownership, intended to host wired and/or wireless access networks, where such access networks are capable of delivering electronic communications services and connecting the building access point with the network termination point": BCRD art.2(7).

impracticable.[375] The access conditions imposed may include specific rules on transparency and non-discrimination and on apportioning the (risks-adjusted) costs of access.

2-136 **Access beyond the first concentration point** However, such access obligations to facilities up to the first concentration point may not be sufficient to address barriers to network replication. This may be the case in geographical areas where the business case for alternative infrastructure rollout is less profitable because of low population density or limited number of multi-dwelling buildings. In those circumstances, the NRA may impose access obligations to the point of the network which is the closest to end-users, capable of hosting a sufficient number of connections to be commercially viable for efficient access seekers. The NRA may even impose active or virtual access obligations if access to passive elements is economically inefficient or physically impracticable and if the authority considers that, absent such an intervention, the purpose of the access obligation would be circumvented. However, the NRA may not impose access obligations beyond the first concentration or distribution point (i) on wholesale-only operators[376] which provide viable and similar alternative means to reach end-users by giving access to very high capacity network on FRAND (fair, reasonable and non-discriminatory) terms; or (ii) on any other undertaking if such obligation would compromise the economic or financial viability of a new network deployment, in particular by small local projects.[377]

2-137 *BEREC Guidelines* To ensure a consistent application of those symmetric access obligations, BEREC has to adopt guidelines setting out the relevant criteria, inter alia, for determining the first concentration point, the extension beyond the first concentration point to overcome replicability barriers or the type of economic or physical entry barriers which are high and non-transitory.[378]

2-138 **Sharing of mobile infrastructures** The competent authorities may also impose network sharing and roaming obligations on mobile operators under strict conditions.[379] Obligations may be imposed if (i) this is directly necessary for the local provision of mobile services; (ii) no viable and similar alternative means of access to end-users is available on fair and reasonable terms; (iii) this possibility is provided in the conditions attached to the rights of use of radio spectrum; and (iv) market-driven deployment of mobile infrastructure is subject to insurmountable economic or physical obstacles (hence, access to networks or services by end-users is severely deficient or absent). Under those conditions, the national competent authorities may impose the sharing of passive, or if non-sufficient, active

[375] EECC art.61(3) and recital 152. The mere fact that more than one such infrastructure already exists should not necessarily be interpreted as showing that its assets are replicable. See also BEREC Report of 6 December 2018 on technical and economic replicability assessment in the context of symmetric access, BoR(18)214. For an analysis of the welfare effects of symmetric access, see Shortall and Cave "Is Symmetric Access Regulation a Policy Choice? Evidence from the Deployment of NGA in Europe" (2015) 98 *Communications & Strategies* 17.

[376] As an exception to the exception, the NRA may nonetheless imposes symmetric access obligations if the wholesale-only network is publicly funded.

[377] EECC art.61(3) and recitals 154 and 155.

[378] BEREC Guidelines of 14 June 2019 on the Criteria for a Consistent Application of EECC art.61(3), BoR(19)103.

[379] EECC art.61(4).

infrastructure or obligations to conclude localised roaming access agreements. In doing so, the authorities should have regard to the need to maximise connectivity and stimulate investment, efficient use of radio spectrum, technical feasibility of sharing, the state of competition, technological innovation, etc.

(c) Access to digital radio and television broadcasting services

2-139 **Access to API, EPG and CAS** NRAs may impose access to APIs and EPGs used to receive digital radio and television broadcasting services on FRAND terms to the extent necessary to ensure accessibility for end-users to such digital radio and television broadcasting services.[380] Moreover, all providers of CAS giving access to digital television and radio services and the access services of which broadcasters depend on to reach any group of potential viewers should offer to all broadcasters on FRAND terms technical services enabling the broadcasters' digitally transmitted services to be received by viewers or listeners and keep separate financial accounts regarding their activity as CAS providers.[381]

2. Asymmetric regulation

2-140 **Introduction** In addition to the symmetric obligations applicable to all undertakings meeting certain legal conditions, the asymmetric obligations apply to the undertakings for which NRAs have determined, after a market analysis, that they enjoy significant market power ("SMP"). The SMP designation is very much inspired by the dominance determination in competition law. First, the NRA, on the basis of a Commission Recommendation and under the control of the Commission, defines the markets justifying the application of ex-ante regulation and, then, determines the undertakings enjoying an SMP position on those markets. Second, the NRA imposes proportionate behavioural or structural remedies on those SMP undertakings to prevent any abuse of such positions and to promote competition in the provision of electronic communications networks and services. Those SMP obligations apply in addition to the prohibition of abuse of dominant position under competition law.[382]

(a) Market analysis and the designation of the SMP operators

2-141 **Market analysis** The SMP designation is done after a market analysis procedure whose characteristics are organised by the EECC and is run according to its four main objectives.[383] The analysis is subject to public consultation[384] and with the comments or, possibly, the veto of the Commission. NRAs must launch new market

[380] EECC art.61 (2d) and Annex II Pt II.

[381] EECC art.62(1) and Annex II Pt I.

[382] On the interaction between competition and sector-specific regulation, see SMP Guidelines, paras 8 to 12. Also Chapter VIII of the third edition of this book.

[383] As explained above in paras 2-014 to 2-020, the four main objectives of the EECC may in some cases conflict with each other and the balancing should be done by the NRAs and not the national legislator: *Commission v Germany—New Generation Networks* (C-424/04) EU:C:2009:749, para.91.

[384] In *Tele2 Telecommunications v Telekom-Control-Kommission* (C-426/05) EU:C:2008:103, para.52, the Court of Justice decided that EU law does not, a priori, require the Member States to permit all users and undertakings in competition with an undertaking (formerly) having SMP to participate with extensive procedural rights in a market analysis procedure.

analysis procedures every five years or within three years from the adoption by the Commission of a revised Recommendation on relevant markets.[385]

2-142 **Markets susceptible to ex ante regulation: identification and definition by the Commission** The first step of the market analysis is the adoption by the Commission, taking the utmost account of the BEREC opinion, of a Recommendation which identifies at the EU level the relevant markets in the electronic communications sector which justify the imposition of ex-ante regulatory obligations ("Markets Recommendation").[386] The Commission identifies those markets on the basis of three criteria which justify the imposition of regulatory obligations in addition to the ex-post prohibitions under competition law ("three-criteria test"): (i) the presence of high and non-transitory barriers to entry; (ii) a market structure which, taking account of the barriers to entry, do not tend towards effective competition within the time horizon of the market analysis; and (iii) the insufficiency of competition law alone to adequately address the market failure(s) identified with the first two criteria.[387] Then the Commission defines the product boundaries of those markets in accordance with the principles of competition law.[388]

2-143 *Identification of transnational markets or demand* With the development of the internal market, which is one of the four general objectives of the regulatory framework, the identified markets may have a geographical dimension covering more than one Member State. At the request of the Commission or at least two NRAs, BEREC should analyse potential transnational markets. On that basis, the Commission may adopt a decision identifying transnational markets which should then be analysed jointly by the concerned NRAs.[389] Similarly, some transnational demand may develop even where markets remain national or sub-national, particularly because of national or sub-national patterns of supply (i.e., different SMP operators in different countries or regions). At the request of the Commission or at least two NRAs, BEREC should also analyse potential transnational demand. If BEREC concludes that a transnational end-user demand exists, is significant and is not sufficiently met by supply provided on a commercial or regulated basis, it should issue guidelines on common approaches for NRAs to meet the identified transnational demand, including with remedies on SMP operators or interoperability obligations for wholesale access product across the EU.[390]

2-144 *Identification and definition by NRAs* After this European screening, each NRA then identifies and defines the markets justifying regulation according to the national

[385] EECC art.67(5). However, the five-year period may, on an exceptional basis, be extended for up to one year.

[386] EECC art.64(1). Commission Recommendation of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to ex-ante regulation [2014] OJ L295/79.

[387] EECC art.67(1). Those criteria are taken over for the art.2 of the 2014 Markets Recommendation and are developed and explained in the recitals 11 to 16 of this Recommendation.

[388] Those principles are outlined in the Commission Notice on the definition of the relevant market for the purposes of Community competition law [1997] OJ C 372/5. See also the Pt II of this Book.

[389] EECC art.65. "Transnational market" is defined as a market which covers the EU or a substantial part thereof located in more than one Member State: EECC art.2(3). However, as electronic communications networks are mainly locally or national built, no such transnational market have been identified so far.

[390] EECC art.66 and recital 167 giving as possible example the demand from business end-users with multisite facility operations in different Member States.

circumstances.[391] First, the NRA, in collaboration with the national competition authority, identifies, on the basis of the Commission's Markets Recommendation, the markets which meet the three-criteria test. As the three criteria are presumed to be met for the markets identified in the Commission Markets Recommendation, the NRA should only prove the three-criteria test to regulate a market that is not included in the Market Recommendation. Then, the NRAs define the boundaries of those identified markets following the competition law methodologies explained in the Commission Guidelines on market analysis and the assessment of significant market power ("SMP Guidelines").[392] The definition of the product dimension is based on the product markets of the Commission Markets Recommendation and the starting point for the definition of wholesale markets is the analysis of corresponding retail markets. The definition of the geographic dimension should take into account the geographic differences in infrastructure competition and make use of the geographic broadband survey done by the competent authorities.[393]

Determination of SMP undertakings: designation by the NRAs After having identified and defined the relevant markets susceptible to ex-ante regulation, the NRA, in collaboration with the national competition authority, determines whether one or several undertakings enjoy an SMP position on those markets.The SMP position is equivalent to the single or joint dominance position under competition law and, therefore, the NRA again follows the competition methodologies explained in the SMP Guidelines.[394] The analysis of the NRA is prospective and considers future technology and market developments absent of the regulatory obligations imposed on the markets which are analysed ("modified greenfield approach"). Thus if the potential significant market power of an undertaking is curbed by regulatory obligations, those obligations should not be taken into account in the SMP determination.[395] **2-145**

Relationship between market identification and SMP determination There is an overlap between the identification of markets on the basis of the three-criteria test and the determination of SMP on the basis of the dominant position competition law criteria. Indeed, the three-criteria test is mostly based on the existence of high and non-transitory entry barriers which is also one of the key factors for dominance.[396] In fact, the three-criteria test is stricter than the dominance test and may be seen as a super dominance test. Despite this overlap, the two tests have different objectives and focus: the three-criteria test aims to identify the *markets* **2-146**

[391] EECC art.67(1).

[392] Commission Guidelines on market analysis and the assessment of significant market power under the EU regulatory framework for electronic communications networks and services [2018] OJ C159/1, Chapter 2.

[393] EECC art.64(3). Also, BEREC Report of 6 December 2018 on the application of the Common Position on geographic aspects of market analysis, BoR(18)213.

[394] EECC art.63 and SMP Guidelines, Chapter 3. Also, Guidance of 3 December 2008 on the Commission's Enforcement Priorities in Applying Article [102 TFEU] to Abusive Exclusionary Conduct by Dominant Undertakings [2009] OJ C45/7, paras 9 to 18.

[395] EECC art.67(2). Doing otherwise runs the risk of lifting regulation just because regulatory obligations were appropriately imposed.

[396] See resp. EECC art.67(1) and Commission Guidance Enforcement Priorities in Applying Article [102 TFEU] paras 16 to 17. See also Never and Preissl "The three criteria test and SMP: how to get it right" (2008) 1 *Int. J. Management and Network Economics* 100.

susceptible to regulation while the SMP assessment aims to determine the *undertakings* that should be subject to regulation.

(b) Imposition of regulatory obligations

2-147 **Unilateral imposition of regulatory obligations** If the NRA designates one or several SMP operators, it should then impose appropriate regulatory obligations to address the problem identified in the market analysis.[397] Conversely, if the NRA does not designate any SMP operator, the NRA cannot impose regulatory obligations and has to withdraw any existing one after an appropriate notice period.[398] In principle, the NRA should only revise the regulatory obligations after a complete market analysis to be done every five years. However, if new market developments take place in the meantime, the NRA may adapt the regulatory obligations of the SMP operators without embarking in a new market analysis.[399] Also, a new market analysis is not necessary when the NRA imposes a specific obligation which merely implements a more general obligation already imposed on the SMP operator.[400]

2-148 *Choice of obligations* In principle, the NRA should choose the regulatory obligations among the closed list of behavioural and structural remedies provided by the EECC and described in the following paragraphs of this section. However, in exceptional circumstances when those remedies are not able to address effectively the problem identified in the market analysis, the NRA may impose other remedies with the prior authorisation of the Commission which, in turn, should take utmost account of the BEREC opinion on the matter.[401] The choice between the possible obligations should be based on the nature of the problem identified in the market analysis and justified in light of the four main EECC objectives. However, the NRAs do not have to demonstrate that the regulatory obligations they impose will actually attain those objectives because such proof would be impossible or excessively difficult to adduce as it relates to measures based on a prospective analysis of market developments.[402] The choice of remedies should also be proportionate having regard, where possible, to the costs and benefits.[403] Thus, the NRA should choose the least intrusive obligations which are able to address the identified market problems. In particular, the NRA should favour behavioural obligations over

397 EECC art.67(4) and art.68(2).

398 EECC art.67(3).

399 EECC art.68(6). In this case and as for the complete market analysis, the NRA should run a public consultation and notify its draft decision to the Commission, BEREC and the NRAs of other Member States for review.

400 *Polkomtel v Prezes Urzędu Komunikacji Elektronicznej PUKE* (C-277/16) EU:C:2016:256, para.49. In this case, the Polish regulator wanted to impose specific modalities to implement the general cost orientation obligation imposed on the SMP operator Polkomtel. However, the imposition of such specific obligations may have to be notified to the Commission, BEREC and the other NRAs according to the internal market consolidating procedures foreseen by art.33 EECC, as the Court of Justice decided that neither the wording of the legal provisions, nor the general scheme of the regulatory framework or the aims which they pursue lead to a distinction between measures referred to as "basic', "fundamental' or "regulatory', which must be subject to the consolidating procedure and measures referred to as "implementing' the former which may avoid that procedure: *Vodafone v Bundesrepublik Deutschland* (C-395/14) EU:C:2016:9, para.51.

401 EECC art.68(3).

402 *KPN v Autoriteit Consument en Markt (ACM)* (C-28/15) EU:C:2015:610, paras 58 to 59.

403 EECC art.68(4).

structural ones. They should also concentrate their intervention on the wholesale markets (i.e., access to the networks) over the retail markets and, within the wholesale markets, focus on the least replicable parts of the networks (i.e., the networks elements which are passive and closer to end-users).[404]

2-149 **Obligations imposed through voluntary commitments** To encourage more flexible and better owned obligations, the NRAs can, next to unilaterally imposed obligations, rely on voluntary commitments proposed by the SMP operators and make them binding. Such a possibility is available in three cases: when an SMP operator (i) enters in cooperative arrangements; (ii) makes a co-investment offer to deploy very high capacity networks; or (iii) decides to vertically separate its wholesale and retail activities and proposes effective and non-discriminatory access to its wholesale products. The procedure, which is inspired by competition law,[405] follows several steps:

- first, the SMP operator may *propose* commitments provided they are sufficiently detailed, in particular with regard to the timing and scope of their implementation and their duration; [406]
- second, the NRA *assesses* those commitments, in particular whether they are fair and reasonable as well as whether they are open to all market participants, whether they ensure the timely availability of wholesale access under FRAND terms before the launch of related retail services and, more generally, whether they enable sustainable competition on downstream markets and facilitate cooperative deployment of very high capacity networks, which are two of the main objectives of the regulation. For this assessment, the NRA performs a market test by conducting a public consultation of interested parties, in particular those which are directly affected; [407]
- third, the NRA communicates to the SMP operator its *preliminary conclusion* and the operator may revise the commitments accordingly; [408]
- fourth, when the NRA is satisfied that the commitments comply with the objectives and the criteria assessed, it may issue a *decision* to make the commitments binding, wholly or in part, for a specific period which may be the entire period for which they are offered and which may be longer than the five years market review timeframe. In this case, the NRA also reviews the regulatory obligations that were previously imposed and adapts them accordingly;[409] and
- fifth, the NRA *monitors* compliance with the commitments that it has made binding and, in case of failure to comply, imposes penalties.[410]

404 EECC recital 173.

405 Council Regulation 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles [101] and [102 TFEU] [2003] OJ L1/1, art.9.

406 EECC art.79(1).

407 EECC art.79(2).

408 EECC art.79(2) in fine.

409 EECC art.79(3). In case of commitments given for co-investment schemes for the deployment of very high capacity networks, the minimum period should be seven years.

410 EECC art.79(4).

(c) *Wholesale behavioural obligations*

2-150 **Transparency and reference offer** The NRA may require a SMP undertaking to make public specific information in relation to interconnection or access, and specify the level of detail required and the manner of publication.[411] The transparency obligation may cover accounting information, prices, technical specifications, network characteristics and expected developments as well as terms and conditions for supply and use. In particular, the NRA may impose the publication of a reference offer which contains a description of the relevant offerings broken down into components according to market needs and the associated terms and conditions.[412] The offer must be sufficiently unbundled to ensure that other undertakings pay only for the services that they require. Where relevant, the offer must also specify key performance indicators as well as corresponding service levels. To foster a common approach throughout the EU, BEREC has to issue guidelines on the minimum criteria for a reference offer.[413] In most situations, a transparency obligation is not an effective remedy in itself, but is used to facilitate the implementation of other remedies, such as access and pricing obligations and, where necessary, impose changes to reference offers.

2-151 **Non-discrimination** The NRA may impose on a SMP undertaking external and internal non-discrimination obligations.[414] External non-discrimination ensures that the SMP operator applies equivalent conditions in equivalent circumstances to other undertakings providing equivalent services. Internal non-discrimination ensures that the SMP operator provides services and information to others under the same conditions and of the same quality as it provides for its own services or those of its subsidiaries or partners.[415]

2-152 *Equivalence of access* Non-discrimination may entail an obligation to ensure equivalence of access which can be of two types: (i) the Equivalence of Inputs ("EoI") which means the provision of services and information to internal and third-party access seekers on the same terms and conditions, including price and quality of service levels, within the same time scales using the same systems and processes, and with the same degree of reliability and performance; or (ii) the Equivalence of Output ("EoO") which means the provision to access seekers of wholesale inputs comparable, in terms of functionality and price, to those the SMP operator provides internally to its own downstream businesses albeit using potentially different systems and processes.[416] The equivalence of inputs is the most effective way to achieve non-discrimination but it is also the most intrusive one, hence it should only be imposed when proportionate and taking into account the compliance costs, for

[411] EECC art.69(1).
[412] EECC art.69(2) and (3). Reference offer is also imposed on providers of international roaming services: Roaming Regulation art.3(5).
[413] EECC art.69(4).
[414] EECC art.70. See also the general non-discrimination principle in EECC art.3(4b).
[415] Such prohibition of internal discrimination is also imposed on dominant, vertically integrated operators by Competition Directive art.3.
[416] Commission Recommendation of 11 September 2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment, para.6.

example due to the redesign of existing systems.[417] If EoI is not proportionate, the NRA may impose the equivalence of outputs.[418]

2-153 *Monitoring compliance* In order to monitor effectively compliance with the non-discrimination obligation, the NRA may impose on the SMP operator the use of key performance indicators ("KPIs") in relation to the ordering process, the provision of service, the quality of service, or the fault repair times. The NRA may also impose on the SMP operator an obligation to implement corresponding service level agreements ("SLAs") alongside the KPIs.[419]

2-154 **Accounting separation** The NRAs may impose on a SMP operator obligations for accounting separation in relation to specified activities related to interconnection or access.[420] NRAs may also specify the format and accounting methodology to be used. In particular, the NRA may require a vertically integrated SMP undertaking to make transparent its wholesale prices and its internal transfer prices. When accounting separation is imposed on an operator that has SMP on one or more markets, this obligation may also cover markets on which the operator does not have SMP.[421] Accounting separation obligations assist the NRA in monitoring compliance with non-discrimination obligations and in setting cost-based tariffs for access and interconnection. The NRA may publish, within the limits of commercial confidentiality, such accounting information if this contributes to an open and competitive market.

2-155 **Compulsory access: civil engineering** The NRA may impose on a SMP undertaking obligations to meet reasonable requests for access to, and use of, civil engineering when denial of access hinders the emergence of a sustainable competitive market.[422] This includes access to buildings or entries to buildings, building cables, including wiring, antennae, towers and other supporting constructions, poles, masts, ducts, conduits, inspection chambers, manholes and cabinets.[423]

2-156 *Access to specific physical network elements* The NRA may also impose access to network elements and associated facilities. The concept of access is open-

[417] EECC recital 185 and Commission Recommendation of 11 September 2013 on consistent non-discrimination obligations and costing methodologies, para.7.
[418] Commission Recommendation of 11 September 2013 on consistent non-discrimination obligations and costing methodologies, para.10. Moreover, where the EoI is not fully implemented, the NRAs should require SMP operators subject to a non-discrimination obligation to provide access seekers with regulated wholesale inputs that allow the access seeker to effectively replicate technically new retail offers of the downstream retail arm of the SMP operator (technical replicability): see para.11.
[419] Commission Recommendation of 11 September 2013 on consistent non-discrimination obligations and costing methodologies, paras 19 to 29.
[420] EECC art.71. Under art.17(1) EECC, accounting separation is also required for organisations which operate public communications networks and/or publicly available electronic communications services and have special or exclusive rights in other sectors, such as energy or transport networks.
[421] Commission Recommendation 2005/698 of 19 September 2005 on accounting separation and cost accounting systems under the regulatory framework for electronic communications [2005] OJ L266/64.
[422] EECC art.72. Such requests should be refused only on the basis of objective criteria, such as technical feasibility or the need to maintain network integrity: EECC recital 191.
[423] This asymmetric obligation goes further and complement the symmetric access obligation foreseen by EECC art.61(3) and BCRD art.3: see para.2-135.

ended[424] and the scope of access obligation is extremely broad.[425] Access obligations may be imposed in relation to specific physical network elements and associated facilities (such as unbundled access to the local loop and sub-loop), active or virtual network elements and services, and services on a wholesale basis for resale by third parties. They may also cover open access to technical interfaces, protocols or other key technologies indispensable for the interoperability or specific services needed to ensure interoperability of end-to-end services to users. They may additionally cover access to operational support systems or similar software systems necessary to ensure fair competition in the provision of services or access to associated services such as identity, location and presence service.[426] When necessary to ensure normal operation of the network, the NRA may impose technical or operational conditions to be met by the access provider or the access seeker.[427]

2-157 *Proportional compulsory access* Compulsory access has important effects on the incentives of the facility owner (which may be less keen to invest in facilities that have to be shared) and the access seekers (which may be less keen to invest in developing new facilities when they can rely on existing ones) and may carry important compliance costs.[428] Hence, they should only be imposed with great care. In particular, the NRA should take into account the feasibility of providing the access required, the investment and risks taken by the facility owner and the technical and economic viability for the access seeker of using or installing competing facilities. Moreover, the NRA may design an access obligation to stimulate investment and infrastructure competition, setting in place a so-called ladder of investment for the new entrants.[429] In particular, the NRA should favour the most upstream remedy first, such as access to civil engineering elements.[430]

2-158 **Price control** The NRA may impose on a SMP operator obligations relating to

[424] Access covers, inter alia: (i) 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); (ii) access to *physical infrastructure* including buildings, ducts and masts; (iii) access to relevant *software systems* including operational support systems; (iv) access to *information systems* or databases for pre-ordering, provisioning, ordering, maintaining and repair requests, and billing; (v) access to *number translation* or systems offering equivalent functionality; (vi) access to *fixed and mobile networks*, in particular for roaming; and (vii) access to *conditional access systems* for digital television services and access to virtual network services: EECC art.2(27).

[425] In *TDC v Teleklagenævnet* (C-556/12) EU:C:2014:2009, the Court of Justice decided that the access obligations which may be imposed on SMP operators are not exhaustively defined but fall to be prescribed by the NRAs, on a case-by-case basis, in the light of the objectives of the regulation (see para.42) and may include an obligation to install, at the request of competing operators, a drop cable connecting the distribution frame of an access network to the network termination point at the end-user's premises, as long as that obligation is based on the nature of the problem identified and is proportionate and justified in the light of the objectives of the regulation (see para.45).

[426] EECC art.73(1).

[427] EECC art.73(3).

[428] EECC recital 191: The imposition by NRAs of mandated access that increases competition in the short term should not reduce incentives for competitors to invest in alternative facilities that will secure more sustainable competition or higher performance and end-user benefits in the long term.

[429] The concept of ladder of investment was developed in Cave and Vogelsang "How access pricing and entry interact" (2003) 27 *Telecommunications Policy* 717 and Cave "Encouraging infrastructure competition via the ladder of investment" (2006) 30 *Telecommunications Policy* 223. For a critical analysis of this approach, see Bourreau, Doğan and Manant "A Critical Review of the 'Ladder Investment' Approach" (2010) 34 *Telecommunications Policy* 683.

[430] EECC art.73(2).

price control and cost orientation for the provision of specific types of interconnection or access when the lack of effective competition may lead to excessive prices or a price squeeze to the detriment of end-users.[431] In this case, the NRA has a broad margin of discretion[432] and should choose a cost recovery mechanism and pricing methodology that ensures efficient market entry and sufficient incentives for all undertakings to deploy new and enhanced networks, thereby maximising sustainable end-user benefits.[433] In particular, price control mechanisms should allow the undertaking a reasonable rate of return on adequate capital employed, taking into account any risks specific to a particular new investment network project.[434] However, if the costs of the SMP operator are higher than the costs of an efficient operator, the NRA may, in order to promote efficiency and sustainable competition, set the prices below the level of the costs incurred by that SMP operator.[435] When cost orientation is imposed, the SMP operator has the burden to prove that the prices they charged are indeed derived from their costs and the NRA may use different cost accounting methods than those used by the regulated operator.[436]

Costing methodology Although the EECC does not impose a specific costing methodology, the Commission recommends the use of a bottom-up long-run incremental costs-plus ("BU-LRIC +") methodology which includes a bottom up modelling approach using LRIC as the cost model and with the addition of a mark-up for the recovery of common costs.[437] The NRA could also rely on benchmarking and takes account of prices available in comparable competitive markets.[438] **2-159**

Cost accounting To support price control, the NRA may also impose obligations concerning cost-accounting systems. In this case, a description of the system showing at least the main categories under which costs are grouped and the rules used **2-160**

[431] EECC art.74(1). The Court of Justice considers that the implementation of this provision does not violate art.16 of the Charter of Fundamental Right in the EU on the freedom to conduct a business: *Polkomtel v Prezes Urzędu Komunikacji Elektronicznej PUKE* (C-277/16) EU:C:2017:989, para.51.

[432] *Arcor v Bundesrepublik Deutschland* (C-55/06) EU:C:2008:244, paras 116, 132, 153 to 158; *Polkomtel v Prezes Urzędu Komunikacji Elektronicznej PUKE* (C-277/16) EU:C:2016:256, para.32.

[433] Even if the pricing obligation is imposed on the wholesale market (hence impacts directly the access seeker and facility owner), the interest of the end-users which are active on the (non-regulated) retail markets and are only impacted indirectly should also be taken into account: *KPN v Autoriteit Consument en Markt (ACM)* (C-28/15) EU:C:2015:610, para.54.

[434] EECC art.74(2). Also *TDC v Teleklagenævnet* (C-556/12) EU:C:2014:2009, para.53.

[435] *Polkomtel v Prezes Urzędu Komunikacji Elektronicznej PUKE* (C-277/16) EU:C:2017:989, para.40.

[436] EECC art.74(3). The Court of Justice clarified that the NRA may require the SMP operator to set its prices annually on the basis of the most up-to-date data and to submit those prices to it for verification together with justification before they become applicable: *Polkomtel v Prezes Urzędu Komunikacji Elektronicznej PUKE* (C-277/16) EU:C:2016:256, para.55.

[437] Commission Recommendation of 11 September 2013 on consistent non-discrimination obligations and costing methodologies, para.30. With such methodology, the Commission anticipated an EU average monthly rental access price for the full unbundled copper local loop within a band between €8 and €10 (net of all taxes) expressed in 2012 prices (see para.41). As recalled by the Court of Justice, the NRAs should follow, as a rule, the guidance contained in costing Recommendation of the Commission and it is only where it appears to the NRA, in its assessment of a given situation, that the model advocated by that Recommendation is not appropriate to the circumstances that it may depart from it, giving reasons for its position: *Polkomtel v Prezes Urzędu Komunikacji Elektronicznej PUKE* (C-277/16) EU:C:2016:256, para.37. On the effect of Commission recommendations on the national authorities and the Courts, see para.2-063.

[438] EECC art.74(2) in fine. Also Commission Recommendation of 11 September 2013 on consistent non-discrimination obligations and costing methodologies, para.45.

for the allocation of costs should be made publicly available and the compliance should be verified by a qualified independent body.[439]

2-161 *No price control in some cases* According to the proportionality principle, the NRA should consider not imposing or maintaining price control obligations where they establish, on the one hand, that a demonstrable retail price constraint is present and, on the other hand, that the imposition of other obligations, in particular an economic replicability test imposed under a non-discrimination obligation, guarantee an effective and non-discriminatory access on the wholesale markets.[440] In those circumstances, the retail and wholesale behaviours should be enough to police the pricing behaviour of the SMP operator.

2-162 **Possible lighter regulation for co-investment schemes to deploy very high capacity network** One of the objectives of the EECC is the promotion of connectivity and access to, and take up of, very high capacity networks.[441] One effective means to achieve such a goal is by encouraging co-investment schemes between different providers of electronic communications networks and services because it pools the high risks in terms of customer demand for very high capacity network as well as the important costs in deploying such new networks. It also enables smaller-scale undertakings to invest in economically rational terms and thus promote competition (including in areas where infrastructure-based competition might not be efficient) which is another objective of the regulation. To encourage such co-investment, the EECC foresees lighter regulation for very high capacity network co-investment schemes that meet strict conditions aiming at ensuring sustainable and long-term competition on those new networks and alleviating the re-monopolisation of the telecommunications networks.

2-163 *Conditions for lighter regulation* A SMP operator which offers co-investment schemes[442] in order to deploy new fibre to the premises (for fixed networks) or base station (for mobile networks) should not be subject to behavioural remedies if it takes extensive commitments in favour of potential co-investors as well as in favour of access seekers which do not co-invest. First, the offer to co-invest should (i) be open to all at any moment; (ii) be made public in a timely manner (in principle, six months before the start of the deployment); (iii) be made in good faith; and (iv) allow other co-investors to compete with the SMP operators in downstream markets, which implies access on FRAND terms to the full capacity of the network, flexibility in participation and reciprocal rights between co-investors. Second, the offer should grant transparent and non-discriminatory access to operators not

[439] EECC art.74(4).

[440] EECC art.74(1) and recital 193 carrying over the Commission Recommendation of 11 September 2013 on consistent non-discrimination obligations and costing methodologies, paras 48 to 58.

[441] EECC art.3(2a); see para.2-015. For a critical analysis of the complexity of the provisions of the EECC to achieve this objective, see Briglauer, Cambini, Fetzer and Huschelrath, "The European Electronic Communications Code: A critical appraisal with a focus on incentivising investment in next generation broadband networks" (2017) 41 *Telecommunications Policy* 648.

[442] Such co-investments can take different forms, including co-ownership of network assets or long-term risk sharing through co-financing or through purchase agreements: EECC recital 198. Purchase agreements constitute co-investments when they "entail the acquisition of specific rights to capacity of a structural character, involving a degree of co-determination and enabling co-investors to compete effectively and sustainably in the long term in downstream markets".

participating in the co-investment.[443] If the SMP operator proposes those commitments, the NRA should make them binding for a period of minimum seven years and not impose additional obligations as regards the elements of the new very high capacity networks that are subject to the commitments when at least one potential co-investor has entered into a co-investment agreement.[444] Then the NRA should, on an ongoing basis, monitor compliance with the commitments.[445] However, a safeguard clause provides that the NRA may impose additional behavioural obligations when, given the specific characteristics of the markets, significant competitive problems cannot be addressed otherwise.[446]

2-164 **Migration from legacy infrastructure** As network technologies are evolving constantly, it is important, on the one hand, that the regulated operators may adapt their network to those technology improvements and, on the other hand, that the beneficiaries of the regulation do not lose their benefits with such adaptations. Therefore, when an SMP operator wants to decommission or replace with a new infrastructure parts of the network, in particular to switch off its copper network, the operator should notify those plans to the NRA. Then, the NRA should ensure that the decommissioning or replacement process includes a transparent timetable and conditions (including an appropriate notice period for transition). The NRA should also establish the availability of alternative products of at least comparable quality providing access to the upgraded network infrastructure substituting the replaced elements if necessary to safeguard competition and the rights of end-users.[447]

(d) Wholesale structural obligations

2-165 **Imposed functional separation** In the exceptional circumstances where the behavioural wholesale obligations failed to achieve effective competition and important market failures persist in relation to the provision of certain wholesale access product, the NRA may impose on a vertically integrated SMP undertaking an obligation to place its wholesale activities in an independent business entity.[448] This wholesale unit should supply access products and services to all undertakings, including to other business entities within the parent company, on the same timescales, terms and conditions and by means of the same systems and processes i.e., an equivalence of inputs.[449] As the imposition of functional separation is very intrusive, the NRA can only impose it after having done a thorough analysis of market prospects (in particular regarding the possibilities of infrastructure-based

[443] EECC art.76(1) and Annex IV aim to foster a consistent application across the EU of this new and complex provision. In addition, BEREC has to adopt guidelines on the respective conditions: EECC art.76(4).

[444] EECC arts 76(2) and 79(3).

[445] EECC art.76(3).

[446] EECC art.76(2) in fine.

[447] EECC art.81.

[448] On the different types of vertical separation, see Cave "Six Degrees of Separation" (2006) 64 *Communications & Strategies* 1.

[449] EECC art.77(1). In addition, art.8 of the Competition Directive imposes the legal separation between cable TV networks and other public electronic communications networks when the undertaking (i) is controlled by that Member State or benefits from special rights; (ii) is dominant in a substantial part of the common market in the provision of public electronic communications networks and publicly available telephone services; and (iii) operates a cable television network which has been established under special or exclusive right in the same geographic area.

competition) and impact assessment as well as having obtained the prior approval by the Commission.[450] Also, the NRA decision has to be very comprehensive and must include the precise nature and level of separation, an identification of the assets of the wholesale entity and the products or services to be supplied by that entity, a governance structure ensuring the independence of the wholesale entity, rules for ensuring transparency of operational procedures as well as rules and a monitoring programme to ensure compliance.[451] As such a functional separation modifies substantially the market conditions, the NRA also needs to review and possibly adapt the behavioural remedies that were imposed before the separation was imposed.

2-166 **Voluntarily structural or functional separation** A vertically integrated SMP operator may voluntary decide to separate its wholesale and retail activities for financial reasons to attract investors willing to trade high margin for long-term security or regulatory reasons to reduce the obligations imposed by the NRA. In this case, the operator may transfer its local access network assets or a substantial part thereof to a separate legal entity under different ownership (vertical separation) or establish a separate business entity in order to provide all retail providers, including its own retail divisions, with fully equivalent access products (functional separation). In those circumstances, the SMP operator should notify the NRA at least three months in advance of its separation plan and possible commitments regarding the access conditions applicable after the separation.[452] As such separation affects substantially the market conditions, in particular by reducing the incentives of the wholesale company or entity to favour the retail arm of the SMP operator, the NRA should review the regulatory obligations that were imposed before the separation and amend or withdraw them if appropriate.[453] The NRA may also make binding, wholly or in part, the commitments of the operator for the entire period for which they are offered (even if these commitments extend beyond the five-year period for market reviews) and, then, monitor the implementation of those commitments.[454]

2-167 **Wholesale-only undertakings** A wholesale-only operator is, as indicated by the name, only active on the wholesale markets and is not controlling or in exclusive contracts with undertakings or entities active on the retail markets. Such models may be particularly appropriate for local, very high capacity networks. In those circumstance the operator does not have incentives to favour a particular retail operator.[455] As the competitive risks are reduced, the regulatory obligations could also be more limited. In this case, the NRA can only impose on SMP wholesale-only operator obligations related to non-discrimination and access (hence not related to transparency or accounting separation) and, when justified, relative to FRAND

[450] EECC arts 77(2) and 68(3).
[451] EECC art.77(3).
[452] EECC art.78(1). Moreover, if the operator deciding the vertical separation has been designated as a universal service provider, it should also notify, in advance and in a timely manner, the separation plans to the competent authority. The authority then assesses the effects of the separation on the availability of universal service and adapt regulatory obligations accordingly: EECC art.86(5).
[453] EECC art.78(2).
[454] EECC art.78(2) and (4) and recital 206.
[455] EECC art.80(1) and recital 208.

price control without going to stricter cost-orientation.[456] Thus, after a voluntary separation, the NRA has to lift, for the newly created wholesale-only undertaking, the possible transparency or accounting separation that were previously imposed. However, a safeguard clause provides that if the NRA concludes that competition problems have arisen or are likely to arise to the detriment of end-users, it may impose part or all the behavioural obligations foreseen by the EECC.[457] Therefore, the practical impact of this new provision of the EECC seems rather limited.

(e) Retail obligations

Retail obligation as last resort According to the proportionality principle, the NRAs favour the imposition of obligations on the wholesale markets and impose obligations on a retail market only when (i) such market is not effectively competitive; and (ii) the imposition of wholesale obligations could not solve the identified retail competition problem.[458] Nevertheless, those two limiting conditions only apply for the imposition of obligations aiming at solving competition problems and do not apply to obligations aiming at solving other issues, such as ensuring the universal service, protecting end-users against unfair practices or against excessive retail international roaming charges.[459] 2-168

Types of retail obligations When those limiting conditions are met, the NRA enjoys a large discretion in deciding which obligations to impose among the open list provided in the EECC. The NRA may impose retail tariff obligations such as the prohibition of excessive or predatory prices as well as the imposition of a price cap or cost-based prices. In those cases, necessary and appropriate cost-accounting systems should be implemented. The NRA could also prohibit undue preference to specific end-users and unreasonable bundles of services.[460] As always, obligations should be based on the nature of the problem identified, justified in light of the four main objectives of the EECC and proportionate. 2-169

3. Mechanisms to consolidate the internal market

Need for coordination mechanisms The imposition of the symmetric and asymmetric obligations derives from EU law and often affects the trade between the Member States, hence the costs of regulatory divergences between Member States may be high. Moreover, the NRAs enjoy significant discretion in choosing the obligations on the basis of a very complex technical, economic and legal assessment, hence the risks of regulatory divergences are high. To reduce those costly risks, coordination mechanisms among the NRAs and with the Commission have been set up to ensure regulatory consistency. Those mechanisms can be general with the adoption of recommendations by the Commission[461] or guidelines and best practices by BEREC.[462] They can also be specific to a NRA draft decision going from mere consultation by the NRA to a recommendation by the Commission or 2-170

[456] EECC art.80(2).
[457] EECC art.80(3).
[458] EECC art.83(1).
[459] EECC art.83(4). Those other retail obligations are described in the following sections of this chapter.
[460] EECC art.83(2) and (3).
[461] EECC art.38(1).
[462] BEREC Regulation art.4(1a). For example BEREC, Revised common position on best practice in

even a fully fledged veto against a NRA draft decision.[463] As the general mechanisms have been reviewed previously in this chapter,[464] the following paragraphs deal with the specific mechanisms.

2-171 **Consultation of the European partners** Each NRA notifies the Commission, BEREC and the NRAs of the other Member States of all draft decisions which (i) impose a symmetric obligation, designate an SMP operator or impose an asymmetric obligation; and (ii) affect the trade between Member States i.e., have an influence, direct or indirect, actual or potential, on the pattern of trade between Member States in a manner which might create a barrier to the internal market.[465] Then, the NRA takes the utmost account of the comments received by the Commission, BEREC and the other NRAs. Finally, the NRA communicates to the Commission and BEREC the decision finally adopted.[466]

2-172 **Possible veto of the Commission against market definition and SMP designation** The Commission has the right to veto the draft decision relating to market definition and SMP designation because, on the one hand, those measures are based on competition law methodologies whose integrity should be protected by the Commission and, on the other hand, the SMP designation is complex (hence has high risks of errors) and is the door to impose the majority of regulatory obligations (hence has high risks of type I errors). In practice, the procedure runs as follows[467]:

- first, the; *NRA* notifies its draft decision with justification to the Commission, BEREC and the other NRAs
- second, in a one-month phase I investigation, the *Commission* can either (i) not raise any comment, in which case the NRA may adopt the decision; (ii) raise comments,[468] in which case the NRA may adopt the decision taking the utmost account of those comments; or (iii) open a phase II investigation if

remedies on the market for wholesale (physical) network infrastructure access (including shared or fully unbundled access) at a fixed location imposed as a consequence of a position of significant market power in the relevant market, BoR(12)127, or BEREC Common position on best practice in remedies on the market for wholesale broadband access (including bitstream access) imposed as a consequence of a position of significant market power in the relevant market, BoR (12)128.

463 All Commission letters, recommendations and decisions adopted under arts 7 and 7a of the previous Framework Directive 2002/21, which have now be replaced by arts 32 and 33 EECC, are available at: *https://ec.europa.eu/digital-single-market/en/consultation-procedures-telecom* [Accessed 10 September 2019].

464 See paras 2-063 to 2-064.

465 EECC art.32(3) and recital 87. In *Prezes Urzędu Komunikacji Elektronicznej (PUKE) and Telefonia Dialog v T-Mobile Polska* (C-3/14) EU:C:2015:232, paras 50 to 54, the Court of Justice observed that the notion of affecting trade between Member States used in electronic communications is analogous to the same notion used in EU competition law and must, therefore, have the same scope. On that scope, see Guidelines of the Commission of 30 March 2004 on the effect on trade concept contained in Articles [101] and [102 TFEU] [2004] OJ C101/81. Also *Vodafone v Bundesrepublik Deutschland* (C-395/14) EU:C:2008:244, paras 52 to 57.

466 EECC art.32(8) and (9) and art.121 (2).

467 EECC art.32 and Commission Recommendation of 15 October 2008 on notifications, time limits and consultations provided for in Article 7 of Directive 2002/21 of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services [2008] OJ L301/23.

468 Such Commission's comments letters on NRAs' notified measures do not constitute an act producing binding legal effects and are, therefore, not acts which are amenable to judicial review under art.263 TFEU: *Vodafone v Commission* (T-109/06) EU:T:2007:384, para.150 *BASE v Commission* (T-295/06) EU:T:2008:48, para.109 and *VodafoneZiggo v Commission* (T-660/18) EU:T:2019:546, para.120.

469 EECC art.32(3) and (4).

470 EECC art.32(5). A draft opinion should be prepared by a BEREC Working Group within 15 working days and be adopted by the Board of Regulators with a two third majority: BEREC Regulation, art.12(1) and BEREC Rules of Procedure of 19 April 2019 for the Board of Regulators, BoR (19)58 art.13.

471 EECC art.32(6) and (7).

472 EECC art.38(3a). See para.2-063.

473 EECC art.33(1).

474 EECC art.33(2).

it has serious doubts as to its compatibility with EU law (in particular the objectives of the EECC) or if it considers that the draft measure would create a barrier to the internal market, in which case the NRA should stand before adopting the decision; [469] and

- third, in a two-month phase II investigation, BEREC adopts an opinion indicating whether it considers that the NRA draft decision should be maintained, amended or withdrawn and may provide specific proposals to that end; [470]Then taking the utmost account of BEREC opinion, the *Commission* may either (i) veto the draft decision, in which case the NRA cannot adopt it or (ii) lift its reservation, in which case the NRA can adopt the draft decision.[471]

2-173 In addition, if the Commission observes persisting inconsistent implementation by the NRAs of the rules related to market definition and SMP designation which creates barriers to the internal market, the Commission may adopt binding decisions identifying a harmonised or coordinated approach.[472]

2-174 **Possible recommendations by the Commission on the imposition of the regulatory obligations** Except in two specific cases (explained below), the Commission does not have the right to veto the choice of remedies because this choice is not based on competition law methodologies whose integrity needs to be protected by the Commission but is based on a complex assessment for which the NRA is better placed given its information and knowledge of the local market conditions. However, the Commission and BEREC have a power of influence. In practice, the procedure runs as follows:

- first, the NRA notifies its draft measure with justification to the Commission, BEREC and the other NRAs;
- second, in a one-month phase I investigation, the Commission can either (i) not raise any comment, in which case the NRA may adopt the measure; (ii) raise comments, in which case the NRA may adopt the measure taking the utmost account of those comments; or (iii) open a phase II investigation if it has serious doubts as to its compatibility with EU law (in particular the objectives of the EECC) or if it considers that the draft measure would create a barrier to the internal market, in which case the NRA should stand before adopting the decision;[473]
- third, in a three-month phase II investigation, the Commission, BEREC and the NRA cooperate closely to identify the most appropriate and effective decision in light of the EECC objectives, the views of market participants and the need to ensure consistent regulatory practice.[474] Within six weeks, BEREC adopts an opinion indicating whether it considers that the NRA draft measure should be maintained, amended or withdrawn and may

provide specific proposals to that end.[475] If BEREC shares the Commission's serious doubts, it cooperates closely with the NRA to find an appropriate solution and the NRA adopts its measure taking the utmost account of the Commission and BEREC views;[476] and

- fourth, in a further one-month period, taking the utmost account of the BEREC opinion, the Commission may either (i) recommend the NRA to amend or withdraw the draft measure, in which case the NRA should take this recommendation into account but is not bound by it, or (ii) lift its reservation, in which case the NRA can adopt the draft measure.[477]

2-175 *Possible double lock veto of the Commission and BEREC against the imposition of some regulatory obligations* The EECC has introduced two new regulatory obligations which are particularly complex and may have substantial impact on the functioning of the market. Those are the possibility to impose symmetric access to facilities up to the first concentration point or even beyond and the possibility to make binding commitments in co-investment deals for the deployment of very high capacity networks and lift the other regulatory obligations.[478] Given their complexity and impact, the EECC gives to the Commission, if supported by BEREC, a veto power ("double lock veto") against those two types of NRA draft measure. In practice, in the last one-month period mentioned above, if BEREC shares the Commission's serious doubts, the Commission may veto the draft measure of the NRA, which then cannot be adopted.[479]

E. UNIVERSAL SERVICE AND OTHER SERVICES OF GENERAL ECONOMIC INTEREST

2-176 **Introduction** A major principle underlying the liberalisation of the electronic communications sector was that a minimum level of "universal" services should remain available to all EU citizens at an affordable price. In a monopoly environment, public communications operators cross-subsidised loss-making areas or customers with the revenues from more profitable ones. Concerns were expressed that, in a liberalised and competitive market, those operators would either pass the full costs of service provision to these areas or customers or cease to provide them at all. As a result, it was feared that those customers with special social needs (who generally have limited incomes) and/or living in rural areas (who are expensive to serve) might have been unable to afford those services or that operators would not be able to afford to continue serving them. The necessity of imposing universal service obligations defined at the EU level that could be financed from the telecommunication sector was therefore widely accepted as part of the liberalisation programme.[480] On top of this EU minimum, Member States were able to impose, according to their national preferences, additional services that should be afford-

[475] EECC art.33(3).
[476] EECC art.33(4).
[477] EECC art.33(5) and (6). According to the EECC art.38(2), an NRA should take the utmost account of the Commission recommendations and, where it chooses not to follow the recommendation, it should inform the Commission giving the reasons for its position, see para.2-062.
[478] EECC arts 61(3) and 76(2), reviewed respectively at paras 2-136 and 2-163.
[479] EECC art.33(5c).
[480] See Council Resolution of 7 February 1994 on universal service principles in the telecommunications sector, OJ [1994] C 48/1.

able and available on their territories. However, those additional mandatory services should be financed with public funds and not from the telecommunications sector.

1. European universal service

(a) *The scope of universal service*

2-177 **Scope of universal service** The universal service comprises two basic services that should be affordable at the quality specified: an adequate broadband internet access service and voice communications services, including the underlying connection, at a fixed location.[481] In addition, Member States may also ensure the affordability of mobile communications and internet access where they consider this to be necessary to ensure consumers' full social and economic participation in society.[482] In principle, only the consumers are entitled to the universal service but Member States may extend the beneficiaries to microenterprises, small and medium-sized enterprises and not-for-profit organisations.[483]

2-178 *Broadband internet access* The EECC does not define a precise bandwidth that should be applicable for the whole EU, but provides criteria on the basis of which each Member State should define a bandwidth adapted to its territory that should be available to all. The bandwidth should allow social and economic participation in the society and be capable of supporting a dynamic list of minimum online services considered as essential (i.e., email, search engines, basic training and education online tools, online news, e-commerce, job searching, professional networking, internet banking, e-government service use, social media, and instant messaging and calls and video calls of standard quality).[484] On that basis and taking into account BEREC's reports, each Member State should define the adequate level of broadband internet access applicable to its territory in light of national conditions and the minimum bandwidth enjoyed by the majority of consumers in the country. In order to foster the harmonisation of the national approaches, BEREC must publish regular reports on Member States' best practices taking into account available Commission (Eurostat) data and after consulting the stakeholders. However, the customer who requests a lower bandwidth only capable of supporting voice services should also be satisfied.[485] Moreover, there should be no limitations on the technical means by which the connection is provided, allowing for wired or wireless technologies, nor any limitations on the category of providers which provide part or all of universal service obligations.[486]

2-179 *Voice communications* A voice communications service is defined as a service for

[481] EECC art.84(1).
[482] EECC art.84(2).
[483] EECC arts 84(5), 85(6), and 88(2). The Annex to the Commission Recommendation 2003/361 of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises [2003] OJ L124/36, art.2 provides that (i) the category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding €50 million, and/or an annual balance sheet total not exceeding €43 million; and (ii) within the SME category, a microenterprise is defined as an enterprise which employs fewer than 10 persons and whose annual turnover and/or annual balance sheet total does not exceed €2 million.
[484] EECC art.84(3) and Annex V. This list is dynamic and can be amended by the Commission with a delegated act: EECC art.116.
[485] EECC art.84 (4) and recital 216.
[486] EECC recital 214.

originating and receiving, directly or indirectly, national and international calls through numbers in a national or international numbering plan.[487] The service is bi-directional, enabling both parties to communicate independently of the technology used, such as circuit switching or packet switching.

2-180 **Affordability of universal services** The main characteristic of a universal service is that it should be affordable to all its beneficiaries. To ensure this, the NRAs should monitor the evolution and level of retail prices of the two components of the universal service (i.e., adequate broadband internet access service and voice communications services at least at a fixed location), in particular in relation to national prices and national consumer income.[488] On that basis, if a Member State establishes that retail prices for those services are not affordable because consumers with a low income or special social needs are prevented from accessing such services, it should take measures to ensure the affordability of those services across its territory.

2-181 *Options to ensure affordability* To do that, the Member State has different options: (i) it may provide direct support to consumers with a low income or special social needs, which could be part of social allowances or vouchers; and/or (ii) it may require all providers of broadband access and voice communication services to offer to those consumers tariff options or packages different from those provided under normal commercial conditions, for instance social tariffs or averaged tariffs for the whole the national territory.[489] The conditions under which undertakings provide these tariff options or packages should be fully transparent and applied in accordance with the principle of non-discrimination.[490] Among those options, the Member State should choose the ones that minimise the market distortion.[491] In the exceptional circumstances under which those options would lead to excessive administrative or financial burden for providers or for the State, the Member State may limit the imposition of special (and cheaper) tariff options or packages to specific undertakings designated on the basis of an efficient, objective, transparent and non-discriminatory procedure.[492]

2-182 *Affordability: disabled users* When appropriate in light of national conditions, disabled users should get state support and other measures may be taken in order to ensure that terminal equipment, and specific services that enhance equivalent access, including where necessary total conversation services and relay services, are available and affordable.[493]

2-183 *Control of expenditure* Empirical evidence has shown that affordability is not only

[487] EECC art.2(32) and recital 14.
[488] EECC art.85(1).
[489] EECC art.85(2).
[490] EECC art.85(3).
[491] EECC art.85(5). For instance, it has been shown that self-selected tariffs (where the universal service provider proposes a suite of tariff plans that consumers can choose, depending on their consumption pattern) may be efficient, as it gives consumers an incentive to reveal their preferences and limits the subsidy to those subscribers that are really in need. Riordan, "*Universal Residential Telephone Service*", in Cave et al. (ed), Handbook of Telecommunications Economics, 424-477. Moreover, subsidies that are targeted to a specific group of citizens or specific area are more efficient than a general geographical averaging of tariffs.
[492] EECC art.85(2).
[493] EECC art.85(4) and recital 226. Moreover, if the market is not delivering affordable products and services incorporating facilities for consumers with disabilities under normal economic conditions, the support and other specific measures taken by Member States may address also the cost of the

linked to the level of expenditure, but also to the way customers can control it. Therefore, the providers which offer special tariff packages and options should also offer specific facilities allowing the consumers to control expenditure.[494] In addition, they should put in place a system to avoid unwarranted disconnection, including an appropriate mechanism to check continued interest in using the service.[495]

2-184 **Availability of universal service** With the EECC, the EU universal service has mainly become a social policy to ensure that the basic electronic communications services offered on the market remain affordable. However, in some areas, mainly the rural ones where the economies of scale and scope are lower than in more densely populated areas, the market may not even offer such basic communications services. To deal with those cases, the EECC aims to increase the private incentives to deploy networks and Member States may finance the deployment of infrastructures in the so-called white areas where there is no commercial case for such deployment.[496] Although a universal service is not the primary means to ensure network deployment and coverage, it serves as a backstop when private and public investment are not sufficient to ensure the availability everywhere of basic communications services. If, taking into account the geographical survey of networks deployment, a Member State concludes that neither the market nor public intervention mechanisms are likely to provide consumers in certain geographical areas with a connection capable of delivering adequate broadband internet access service and voice communications services at a fixed location, that Member State should determine the most efficient and appropriate approach for ensuring such availability. In doing so, the Member State should respect the principles of objectivity, transparency, non-discrimination and proportionality and minimisation of market distortions.[497]

2-185 *Designation of the universal service provider* One means to ensure the availability of the universal service is to designate one or more electronic communications providers which have to offer those services on the national territory.[498] In this case, to ensure that the universal service is provided in the cost–effective manner—hence, that its cost is minimised—the Member State should use a designation mechanism which is efficient, objective, transparent, non-discriminatory and

related terminal and specific equipment that enhance equivalent access, beyond the affordability of the access and voice communications services as such.
[494] EECC art.88(2) and Annex VI Pt A mention the facilities to control expenditure: itemised billing, selective barring for some outgoing calls, pre-payment systems, phased payment of connection fees, special measure in case of non-payment of bills, tariffs advice, cost control and facility to deactivate third party billing.
[495] EECC art.85(2) in fine and art.88(2).
[496] EU Guidelines of 19 December 2012 for the application of state aid rules in relation to the rapid deployment of broadband networks [2013] OJ C25/1. On the state aids for broadband deployment, see the Chapter XII of this book. The EU contributes to the financing of the availability of wireless broadband hotspots through its "WIFI4EU" initiative: Regulation 2017/1953 amending Regulations 1316/2013 and 283/2014 as regards the promotion of internet connectivity in local communities [2017] OJ L286/1. At its launch, a financial envelope of €95 million was provided for, for the initial three years of operation.
[497] EECC art.15(2b) and art.86(1) and (2).
[498] EECC art.86(3) and (4). The list of the universal service providers should be notified to the Commission: EECC art.121(2).

whereby no undertaking is a priori excluded.[499] They may for instance auction the provision of universal service.[500] Also for efficiency reasons, the Member State may designate different providers for different components of the universal service (broadband access and voice communication) and/or different parts of the national territory.[501]

2-186 **Past universal service** Under the previous Universal Service Directive, which is now replaced by the EECC, the scope of universal service was different and included some services which have not been taken over, such as directories and directory enquiry services or public pay phones or other voice telephony access points.[502] Member States may decide to ensure the affordability or the availability of the previous universal services provided that they were applicable in December 2018 when the EECC entered into force, that they continue to be justified in light of the national circumstances and that their necessity is regularly assessed.[503]

2-187 **Future universal service—review of the scope** The harmonised European universal service is an evolving concept. The Commission may, with a delegated act, amend Annex V containing the minimum list of online services that should be supported by the broadband internet connection.[504] In addition, the Commission must review its scope every five years in the light of social, economic and technological developments taking into account, inter alia, mobility and data rates.

(b) The financing of universal services

2-188 **Cost of universal service: unfair burden** When the NRA considers that the provision of a universal service may represent an unfair burden on its providers that request financial compensation, the NRA calculates the net of cost of such a

[499] In *Telaustria Verlags and Telefonadress v Telekom Austria* (C-324/9) EU:C:2000:669, paras 60 to 62, the Court of Justice held that even if public service concession contracts fall outside the scope of the EU's public procurement Directives, the public bodies responsible for ensuring the provision of the universal service are bound to comply with the fundamental principles of EU law, thereby ensuring transparency and sufficient advertising for any potential tenderers, to enable the markets for electronic communications services to be opened up to competition and to enable a review of the impartiality of the procurement procedures to be undertaken.

[500] For a typology of auctions and the criteria to be taken into account when designing an auction for universal service obligations, see Sorana, "Auctions for universal service subsidies" (1998) 18 *Journal of Regulatory Economics* 33; Nett, "Auctions: an alternative approach to allocate universal service obligations" (1998) 22 *Telecommunications Policy*, 661. See also Weller, "Auctions for universal service obligations" (1999) 23 *Telecommunications Policy* 645, who details the scheme proposed by GTE in the United States for an auction leading to in-market competition, which was criticised by Laffont and Tirole, *Competition in Telecommunications* (MIT Press, 2000), 244–260.

[501] To guarantee the principles of non-discrimination and the minimising of market distortions, national law cannot require that the provider of the universal service should be able to cover the entire national territory: *Commission v France* (C-220/07) EU:C:2013:427, para.34. See also *Commission v Portugal* (C-154/09) EU:C:2010:591, where the Court of Justice that the designation by law of the incumbent operator, Portugal Telecom as the universal service provider until 2025 was in breach of the obligation under the Directive to rely on an efficient, objective and non-discriminatory designation procedure (see para.36).

[502] Universal Service Directive 2002/22, arts 4 to 7. See paras 1-294 to 1-298 of the third edition of this book.

[503] EECC art.87.

[504] EECC art.116.

universal service.[505] The EECC does not define when the burden is unfair but, under the previous regulatory framework, the Court of Justice considered that a burden is unfair when it is excessive in view of the universal service provider's ability to bear it taking into account all the specific characteristics of such an undertaking, in particular the quality of its equipment, its economic and financial situation and its market share.[506] The assessment of the unfairness is thus relative to each universal service provider.[507]

Cost of universal service: determination When the burden is unfair, the NRA calculates the net cost for the provision of the universal service on the basis of one of the following two methods: (i) the easy method can be used when the costs have been *revealed during the designation procedure* of the universal service provider. Indeed, if the State auctioned the designation and has chosen the least expensive bid, the amount of this bid could be considered as the net cost of the universal service; (ii) however, when auctions have not been used or were not successful, the NRA relies on the difficult method of *calculating the net cost*.[508] The NRA calculates the difference between the net cost, including the cost of capital,[509] borne by a designated undertaking when providing a universal service[510] and when not providing such a service (i.e. the net avoidable cost). The net cost is thus not merely the difference between all the revenues and all the costs connected with that provision of a universal service.[511] Such calculations should be based on an objective and transparent methodology and take account of the rules relating to the assessment of state aid granted for the provision of services of general economic interest on the basis of art.107 TFEU.[512] **2-189**

Compensating universal service providers If the universal service provider requests financial compensation[513] and if the NRA calculates the net cost of the universal service and considers that such cost represents an unfair burden for the **2-190**

[505] EECC art.89.

[506] *Commission v Belgium* (C-222/08) EU:C:2010:583, para.49.

[507] *Commission v Belgium* (C-222/08) EU:C:2010:583, para.50. The Court of Justice also decided that: "although a loss-making situation is a burden, it is not necessarily an unfair burden for every operator."

[508] Following the methodology foreseen in Annex VII of the EECC. This Annex supersedes in practice the methodology for determining costs that was published at the time of the liberalisation of the sector and remains in force: Communication from the Commission on the Assessment Criteria for National Schemes for the Costing and Financing of Universal Service in Telecommunications and Guidelines for Member States on Operation of such Schemes, COM(96) 608.

[509] *Český telekomunikační v T-Mobile and Vodafone Czech Republic* (C-518/14) EU:C:2015:657, paras 35 to 43.

[510] The NRAs should thus estimate, in monetary terms, the indirect benefits that the undertaking concerned derives by virtue of its position as a universal service provider (such as brand image or ubiquity) and deduce the amount estimated from the cost avoided in the absence of universal service obligations, in order to determine the overall cost burden: EECC recital 241.

[511] *TDC v Teleklagenævnet and Erhvervs—og Vækstministeriet* (C-327/15) EU:C:2016:974, para.71.

[512] *Český telekomunikační v T-Mobile and Vodafone Czech Republic* (C-518/14) EU:C:2015:657, para 39. Those rules are explained in the Communication from the Commission of 20 December 2011 on the application of the European Union state aid rules to compensation granted for the provision of services of general economic interest [2012] OJ C8/4. See Chapter XII of this book.

[513] The EECC puts the burden of proof on the undertaking requesting compensation. They should provide NRAs with a sufficient level of detail of the specific elements requiring such funding in order to justify their request. Member States are entitled to set a deadline for the submission of applications for compensation provided that that time limit is no less favourable than that provided for in national law for an analogous application and that it is not such as to render impossible in practice

providers, the provider is entitled to be compensated.[514] However, the compensation mechanism may not result in the distortion of competition, should be notified to the Commission[515] and should comply with the state aid rules.[516] In particular, the universal service provider must be compensated only for the specific net cost involved and the net cost burden should be recovered in a competitively neutral way.[517]

2-191 *Sources of compensation* The compensation mechanism may be financed from public funds and/or funds raised from within the electronic communications sector.[518] Member States may decide to finance the net costs of different elements of universal service through different mechanisms.

2-192 *Universal service fund* If a Member State decides to establish a sectoral fund, it should be financed by all electronic communications networks and services operators which provide services in the territory of the Member State, and therefore include providers of fixed, mobile and cable TV networks and electronic communications services, including internet service. The funding mechanism must meet the good governance principles of avoiding or minimising market distortions, proportionality, non-discrimination and transparency.[519] To ensure that market distortions are minimised, contributions should be recovered in a way that minimises as far as possible the impact of the financial burden falling on end-users, for example by spreading contributions as widely as possible among electronic communications operators.[520] To ensure proportionality, Member States may choose not to require contributions from undertakings whose national turnover is less than a set limit established under national law.[521] To guarantee non-discrimination with regard to vertical structures, the contribution method should avoid any double imposition falling on both inputs and outputs, or any accumulated impositions (e.g. service providers should not be required to contribute on the basis of their own activities and in relation to wholesale inputs purchased

or excessively difficult the exercise of the right to compensation: *TDC v Teleklagenævnet and Erhvervs—og Vækstministeriet* (C-327/15) EU:C:2014:2009, para.107.

514 This right of compensation has direct effect and may thus be invoked by the universal service providers before a national Court if the EECC is not correctly transposed in the Member State: *Český telekomunikační v T-Mobile and Vodafone Czech Republic* (C-518/14) EU:C:2015:65, para.53.

515 Competition Directive art.6(2).

516 EECC recital 244.

517 EECC recital 224.

518 EECC art.90(1). Most European countries have planned a sectoral funding approach to compensate for the cost of the universal service obligations. However, funds permitted by national legislation have not always been established. For example, Germany did not designate a US provider while in Ireland, the NRA has never considered the cost of provision as an unfair burden. In six countries (Czech Republic, Malta, Hungary, Sweden, Latvia and Finland) a public funding mechanism is in place, whereas Denmark has a mixed funding mechanism. See BEREC Update Survey of 24 February 2017 on the implementation and application of the universal service provisions—a synthesis of the results, BoR (17)41.

519 EECC art.90(2) and Competition Directive art.6(1). The Commission challenged the decision of the Portuguese authorities to ask operators to make an extraordinary contribution in three consecutive years for the financing of the net cost of the universal service incurred in the past, considering such obligation in breach of the requirements of transparency, non-discrimination and least market distortion. The Commission is now calling on the Court of Justice of the EU to confirm that the extraordinary compensation infringes this Directive: see Commission Press Release, *Universal Service Directive: Commission refers Portugal to the Court*, IP/18/6248 (8 November 2018).

520 EECC recital 243.

521 EECC art.90(2).

from other operators).[522] Finally, to ensure objectivity and transparency, the fund should be administrated by the NRA or an independent body under its supervision and a report should be published annually providing the details of calculated cost of the universal service and identifying the contributions made by all undertakings involved, including any market benefits that may have accrued to the undertakings pursuant to universal service obligations.[523] EU law does not specify what should happen when contributions to financing mechanisms exceed the net costs of universal service provision. It seems that, in such a case, the amount exceeding the net costs should be refunded pro rata to those operators that have contributed to the funding as any amount in excess of the net costs constitutes an unlawful state aid under art.107 TFEU.[524]

2. Additional mandatory services at the national level

Additional national mandatory services: scope The harmonised universal service is a safety net which comprises a cornerstone set of minimum services that should be affordable and available across the whole EU while the net costs can be financed from the general budget and/or a fund levied from within the electronic communications sector. However, an individual Member State may decide to go beyond this minimum set of services and make additional services affordable and available on its territory when markets do not fulfil the perceived needs of the citizens.[525] **2-193**

Financing In such cases, the designated providers of additional mandatory services have the right to be compensated for the net cost caused by the provision of those additional services.[526] This financing follows the general rules on the compensation for services of general interest and not the specific rules on the universal service. On the one hand, this implies that the financing is not limited to the unfair part of a possible net cost.[527] This should cover all the net costs caused by the provision of additional mandatory services independently of the revenues generated by the provision of other services.[528] On the other hand, this implies that the financing should come from the general state budget and not from a sector **2-194**

522 EECC Annex VII Pt A.

523 EECC art.91(2).

524 There is no Commission State aid decision relating to universal service funds in the telecommunications sector but decisions adopted regarding the universal service funds in the postal sector are by analogy providing insights on the review of such funding mechanisms under the State aid rules. See e.g. *Greece Hellenic Post (ELTA)—Compensation for the financing of the universal postal service* (Case SA.35608, 1 August 2014).

525 EECC art.92.

526 In *TDC v Teleklagenævnet and Erhvervs—og Vækstministeriet* (C-327/15) EU:C:2014:2009, para.87, the Court of Justice decided that the equivalent of art.92 EECC under the previous regulatory framework has direct effect, inasmuch as it prohibits the Member States from making the undertaking which is responsible for providing an additional mandatory service, bear all or part of the costs connection with the provision of that service.

527 *TDC v Teleklagenævnet and Erhvervs—og Vækstministeriet* (C-327/15) EU:C:2014:2009, paras 62 to 64.

528 Therefore, the possible revenues earned from the provision of the universal service should not be taken into account in the determination of the net costs of the additional mandatory services: *TDC v Teleklagenævnet and Erhvervs—og Vækstministeriet* (C-327/15) EU:C:2014:2009, para.55.

fund.[529] Indeed, the use of sectoral funding should be alleviated, as concentrating the financing of services of general interest obligations on the undertakings of a particular economic sector creates significant market distortions and risks slowing down the development of such fundamental sector of the economy.

3. Access to specified radio and television broadcast channels and services—"must carry" obligations

2-195 **Scope: channels and services to be transmitted** Next to the affordability and the availability of infrastructure services such as internet access and voice communications, Member States may also want to ensure the accessibility of key content. To do that, they may impose reasonable "must carry" obligations[530] for the transmission of specified radio and television broadcast channels[531] and related complementary services.[532] Such obligations can be imposed on the providers of electronic communications networks and services used for the distribution of radio or television broadcasts to the public,[533] such as cable, IPTV, satellite and terrestrial broadcasting networks if a significant number of end-users of such networks and services use them as their principal means to receive radio and television broadcast channels.[534] As must carry obligations limit the freedom movement of services and entail costs, art.56 TFEU,[535] as well as the EECC, set strict conditions on the imposition of such obligations. They should (i) meet clearly defined general interest objectives such as the media pluralism which is linked to the fundamental freedom of expression;[536] (ii) be able to fulfil this objective;[537] (iii) be proportionate, which implies that the procedure to designate the programmes benefitting from must carry rights should be transparent and based on well-defined criteria;[538] and (iv) be non-discriminatory, in particular the award of must carry right must not, either in law or in fact, be subject to a requirement of establishment on the national territory.[539] Moreover, must carry obligations are 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.[540]

[529] EECC art.92 and recital 245.

[530] EECC art.114(1).

[531] "Television broadcast" is defined by the Audiovisual Media Service Directive (art.1.e) as: "an audiovisual media service provided by a media service provider for simultaneous viewing of programmes on the basis of a programme schedule'. In *Kabel Deutschland v Niedersächsische Landesmedienanstalt für privaten Rundfunk* (C-336/07) EU:C:2008:765, paras 64 to 65, the Court of Justice decided that a determinative criterion for the concept is that broadcast of television programmes is intended for reception by the public and that the concept may cover telemedia services such as teleshopping, while the manner in which the images are transmitted is not a determinative factor. See also Chapter IV of this book.

[532] In particular, accessibility services to enable appropriate access for end-users with disabilities and data supporting connected television services and Electronic Programme Guides.

[533] In *France Télévisions v Playmédia and Conseil supérieur de l'audiovisuel (CSA)* (C-298/17) EU:C:2018:1017, the Court of Justice held that Member States can also impose must-carry obligations on undertakings which are not providing electronic communications networks and services, such as an undertaking which offers the live streaming of television programmes online (see para.22). In this case, the specific conditions of art.56 TFEU should take precedence over the conditions of the EECC (para.38).

[534] This condition should be proven by the authorities imposing the must carry obligations and not by the electronic communications providers wanting to alleviate such an obligation: *Commission v Belgium* (C-134/10) EU:C:2011:117, para.74.

[535] *UPC v Belgium* (C-250/06) EU:C:2007:783, para.38.

[536] *UPC v Belgium* (C-250/06) EU:C:2007:783, paras 40 to 42; *Kabel Deutschland v Niedersächsische Landesmedienanstalt für privaten Rundfunk* (C-336/07) EU:C:2008:765, paras 33 to 38.

[537] *UPC v Belgium* (C-250/06) EU:C:2007:783, para.43.

[538] *UPC v Belgium* (C-250/06) EU:C:2007:783, paras 44 to 47 and *Commission v Belgium* (C-134/10) EU:C:2011:117, paras 59 to 65 noting in particular that the designation should apply to specific programmes and not to broadcasters which may have some programmes justifying must-carry rights and others not. In *Kabel Deutschland v Niedersächsische Landesmedienanstalt für privaten Rundfunk* (C-336/07), the Court of Justice clarified that there is no quantitative limit on the numbers of programmes which may benefit from must carry rights (see para.26) but that the national judge must determine whether the obligations imposed on the operator are economically reasonable (see paras 46 to 54).

[539] *UPC v Belgium* (C-250/06) EU:C:2007:783, paras 48 to 49 and *Commission v Belgium* (C-134/10) EU:C:2011:117, paras 66 to 67.

[540] EECC art.114(2).

[541] EECC art.114(3) and recital 309.

[542] Those rules are explained in Chapter VII of this book. EECC art.2(15) gives the definition of a consumer.

[543] As mentioned by the Court of Justice in *Autorità Garante della Concorrenza e del Mercato (AGCM) v Wind Tre and Vodafone Italia* (C-54/17 and C-55/17) EU:C:2018:710, para.54.

[544] The Court of Justice clarifies that the specific electronic communications protection rules are complementary, and not substitutes, to the general consumer protections rules. Therefore, those general consumer protection rules apply fully to the electronic communications sectors and should be enforced by the consumer protection authority: *Autorità Garante della Concorrenza e del Mercato (AGCM) v Wind Tre and Vodafone Italia* (C-54/17 and C-55/17) EU:C:2018:710, para.70.

[545] EECC art.2(13) and art.14.

2-196 **Financing** As carrying programmes is costly, Member States may determine appropriate remuneration for the electronic communications providers subject to the must carry obligations. In this case, the remuneration should be non-discriminatory, determined on the basis of clear criteria and methodologies, proportionate and transparent.[541] In the absence of a national provision on remuneration, providers of radio or television broadcast channels and providers of electronic communications networks must agree contractually on the remuneration.

F. END-USERS RIGHTS, CONSUMER PROTECTION AND SECURITY

2-197 **Introduction** The authorities should not only ensure that the market works well but should also protect the end-users to ensure they can make informed choices, they are free to choose and can easily switch between providers, they can control their bills, they are protected in emergency situations and against security incidents and that they benefit from alternative dispute resolution mechanisms which are easy to use.

(a) Scope

2-198 **Beneficiaries of the protection rules** In addition to the general rules which protect consumers (i.e., natural person acting for purposes which are outside his or her trade, business, craft or profession),[542] the EECC provides a new layer of protection justified by the particular importance, the specific characteristics and the complexities[543] of the electronic communications networks and services.[544] The scope of the protection is also broader as it covers all end-users (i.e., a natural or legal person using or requesting—but not providing—a publicly available electronic communications service).[545] Thus, the consumers but also the undertakings which

are not providers of electronic communications networks and services benefit from this enhanced protection unless the EECC provides otherwise.

2-199 **Debtors of the protection rules** Most of the obligations apply only to the providers of internet access and number-based interpersonal communications services although some obligations also apply to the providers of all electronic communications networks and services, thereby also including number-independent interpersonal communications services.[546] However, providers which are microenterprises providing only number-independent interpersonal communications services are exempted from those obligations.[547]

2-200 **Full harmonisation** Most of the end-users protection rules are maximum harmonisation. This implies that, for the issues covered by the EECC, the Member States cannot maintain or introduce stricter or weaker rules on their territories.[548] As a consequence, all providers should comply with the same rule and all end-users benefit from the same level of protection in the internal market.

2-201 **Periodic review** As those protection rules are important for end-users but can be costly for electronic communications providers, they should be regularly assessed and adapted if necessary. Every three years, BEREC should assess the impact of the end-users rights, in particular on (i) the information and the ability of switching of the end-users and their possible related harm; (ii) the effective access to emergency services, in particular against the increased use of number-independent interpersonal communications services; and (iii) the likely costs or impact on innovation of possible adaptation of those end-users rights. On that basis, the Commission may then propose adaptation to end-users rights.[549]

(b) Internal market and fundamental rights

2-202 **Sector-specific non-discrimination obligation** The Services Directive ensures that the recipient of services is not made subject to discrimination based on nationality or place of residence requirements by providers established in their territory while allowing differences in the conditions of access to services when those differences are directly justified by objective criteria.[550] However, electronic communications services are excluded from the scope of the Services Directive.[551] Therefore, the EECC introduces an obligation similar to the one of the Services Directive specifically for providers of electronic communications networks or services: they should not apply different requirements or general conditions of access to, or use of, networks or services to end-users, for reasons related to the end-user's nationality, place of residence or place of establishment, unless such different treatment is objectively justified, for example due to differences in costs and risks.[552]

2-203 **Access to numbers and services** Where economically feasible, end-users should be able to: (i) access and use services using non-geographic numbers within the EU;[553] and (ii) access all numbers provided in the EU, regardless of the technology and devices used by the operator. The Court of Justice decided that the national authorities may impose a price control obligation without carrying out a market analysis and SMP designation, if such an obligation constitutes a necessary and proportionate step to ensure that end-users are able to access services using non-geographic numbers within the EU.[554] However, there is an exception when the end-user has chosen for commercial reasons to limit access by calling parties located in specific geographical areas.[555]

2-204 **Access to directory enquiry services** Member States cannot 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.[556]

2-205 **Protection of fundamental rights** National measures regarding end-users' access to, or use of, services and applications through electronic communications networks should respect the Charter of Fundamental Rights of the EU and general principles of Union law. Thus, any measure that could limit the exercise of the rights or freedoms recognised by the Charter may only be imposed if it is provided for by law, proportionate, necessary, and genuinely meets general interest objectives recognised by EU law or the need to protect the rights and freedoms of others.[557]

(c) Empowering consumers: informed choices

2-206 **The role of information and transparency** The first and most fundamental way to empower EU end-users is to give them complete and accurate information to

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546 For the definitions of the different categories of electronic communications services, see EECC art.2(4) to (7), reviewed in paras 2-008 to 2-012.

547 EECC art.98. "Microenterprise" is defined as an enterprise which employs fewer than 10 persons and whose annual turnover and/or annual balance sheet total does not exceed €2 million: Annex to the Commission Recommendation 2003/361 concerning the definition of micro, small and medium-sized enterprises [2003] OJ L124/36, art.2. Member States should ensure that the definition of microenterprise is not circumvented by purely formal means and examine the structure of microenterprises which form an economic group, the power of which exceeds the power of a microenterprise: EECC recital 255.

548 EECC art.101. The EECC provides exceptions for contract duration (art.105(1); information on consumption level (art.102(6)); bundled offers (art.107(5)); and the provision of facilities to control expenses (art.115). Moreover, the EECC is a Directive that should be transposed in the Member States, hence the national transposition rules may have some variation. Moreover, they should be enforced by national authorities, hence the national enforcement may also have some variations. In *Telekomunikacja Polska v Prezes Urzędu Komunikacji Elektronicznej (PUKE)* (C-522/08) EU:C:2010:135, para.29, the Court of Justice decided that the previous regulatory framework does not provide for full harmonisation of consumer-protection aspects.

549 EECC art.123.

550 Directive 2006/123 of the European Parliament and of the Council of 12 December 2006 on services in the internal market [2006] OJ L376/36 ("Services Directive") art.20.

551 Services Directive art.2(2c).

552 EECC art.99 and recital 256.

553 *Polkomtel v Prezes Urzędu Komunikacji Elektronicznej (PUKE)* (C-397/14) EU:C:2015:232, para.35, the Court of Justice decided that a Member State may provide that an operator of a public electronic communications network must ensure that all end-users are able to access non-geographic numbers on its network in that State and not only those of other Member States.

554 *KPN v Autoriteit Consument en Markt (ACM)* (C-85/14) EU:C:2015:610, para.49. See also *Polkomtel v Prezes Urzędu Komunikacji Elektronicznej (PUKE)* (C-397/14) EU:C:2015:232, para.52, where the Court of Justice observed that such a measure does not violate art.16 of the Charter of Fundamental Rights of the EU on the freedom to conduct business.

555 EECC art.97.

556 EECC art.112(3).

557 EECC art.100.

ensure that they make the best purchasing decisions according to their preferences and interests.[558] Transparency and information has been at the core of general EU consumer protection law since its inception in the 1970s and is also one of the main components of the sector-specific end-users' protection in the EECC.[559]

2-207 **Mandatory contract information** In addition to the information obligation imposed by the general consumer protection law,[560] the EECC obliges most providers of publicly available electronic communications services[561] to give end-users the main relevant information to allow them to make their purchasing decisions i.e., the main characteristics of the services, the price, the duration of the contract, the compensation arrangements and the action to be taken in case of security incidents. That information should be given in a clear and comprehensible manner on a durable medium or in an easily downloadable document.[562] They should also become an integral part of the contract unless the parties expressly agree otherwise.[563] To take into account the limited attention of the consumers which is now well documented by numerous behavioural studies, a concise and easily readable contract summary with the main information should also be provided free of charge to consumers, prior to the conclusion of the contract.[564] The full harmonisation of the information publication obligations increases legal certainty for both end-users and providers of electronic communications services and lowers the entry barriers and unnecessary compliance burdens stemming from fragmented information rules. This harmonisation does not nevertheless prevent Member States from regulating situations not contemplated by the EECC, in particular in order to address emerging issues.[565]

2-208 **Transparency towards the public in general** Next to this pre-contractual information, the providers of internet access services or publicly available

[558] On the role of information and data in regulation, see also Autorité de la concurrence, AMF, Arafer, Arcep, Arjel, CNIL, CRE, CSA, *Data-driven regulation*, July 2019, available at: *https://en.arcep.fr/news/press-releases/p/n/cooperation-between-regulators.html* [Accessed 10 September 2019].

[559] In addition to the EECC art.4 of the Open Internet Regulation imposes several transparency requirements on the providers of internet access services (see para.2-231) and arts 14 and 15 of the Roaming Regulation impose transparency requirements on the providers of international roaming services (see para.2-242).

[560] In particular by arts 5 and 6 of the Consumer Rights Directive 2011/83, analysed in Chapter VII of this book and by arts 5 and 10 of the Directive on electronic commerce 2000/31, analysed in Chapter III.

[561] Only providers that do not receive any remuneration directly or indirectly linked to the provision of the electronic communications services at hand (such as an university giving visitors free access to its wi-fi network on campus) whether through payment from the users or through advertising revenues, are exempted from these information requirements for contracts: EECC recital 250. There is also an exception for the providers of transmission services used for the provision of machine-to-machine services.

[562] EECC art.102(1) and Annex VIII Pt A. The Pt B of such Annex specifies in more details which type of information should be given by the providers of internet access services and publicly available interpersonal communications services.

[563] EECC art.102(4).

[564] EECC art.102(3). Where, for objective technical reasons, it is impossible to provide the contract summary prior to the conclusion of the contract, the summary must be provided without undue delay thereafter. However, the contract shall not become effective before the consumer has confirmed his or her agreement, after reception of the contract summary. To harmonise those contract summaries across the EU, the Commission has to adopt an implementing act specifying a contract summary template. See also BEREC Report of 6 December 2018 on contractual simplification, BoR(18)172.

[565] EECC art.102(7) and recital 257.

interpersonal communication services should give to the general public three types of information to help end-users to make their purchasing decisions: their contact details, a description of their services (including the main characteristics, price, customer assistance, standard contract conditions), and the dispute resolution mechanisms. This information should be published in a clear, comprehensive, machine-readable manner and in accessible format for end-users with disabilities. It should be updated regularly.[566]

Independent comparison tools Again, to take into account end-users' limited attention, at least one comparison tool enabling them to compare and evaluate different offers should be available free of charge. Given the importance of comparison tools in steering customers' choices, they should be operationally independent from the providers they compare and disclose their owners, provide accurate and up-to-date comparison, set out clear and objective criteria on which the comparison is based and use plain and unambiguous language.[567] They may be certified by competent authorities. In addition, information on the most common means to engage in unlawful activities or to disseminate harmful content online as well as means of protection against risks to personal security, privacy and personal data online should also be provided free of charge.[568] **2-209**

Information on the quality of the service Given the importance of the quality of the digital services, providers of internet access services and of publicly available interpersonal communications services should also publish comprehensive, comparable, reliable, user-friendly and up-to-date information on the quality of their services.[569] **2-210**

(d) Empowering consumers: free choice and switching

Contract duration and termination To be empowered, end-users need to be informed but also able to act upon this information and change providers if they deem it appropriate. This is the reason why the EECC contains a series of provisions to facilitate the change of providers and to reduce users' switching costs.[570] For instance, conditions and procedures for contract termination should not act as **2-211**

[566] EECC art.103(1) and Annex IX.

[567] EECC art.103(2) and (3). Those conditions are similar to the ones imposed for comparison tools used in financial services: Directive 2014/92 of the European Parliament and of the Council of 23 July 2014 on the comparability of fees related to payment accounts, payment account switching and access to payment accounts with basic features [2015] OJ L257/214, art.7.

[568] EECC art.103(4).

[569] EECC art.104 and Annex X. To ensure a certain harmonisation of the quality of service measurement and information, BEREC has to adopt guidelines detailing the relevant quality of service parameters, the applicable measurement methods, the content and format of publication of the information, and quality certification mechanisms. As already explained (see para.2-043), national authorities may also promote self and co-regulation to improve the general quality of service provision: EECC art.24(2).

[570] According to an EU Survey done by the Commission in 2016, consumers consider it important to be able to keep phone numbers, emails and online content when switching providers: 89% say it would be important to keep their mobile number, 82% say this about their fixed line number, and 78% about their emails or other online content stored by their provider: *Special Eurobarometer 438: E-Communications and the Digital Single Market*, May 2016.

a disincentive to changing service provider.[571] In the particular case of contracts concluded between consumers and most of the providers of publicly available electronic communications services,[572] the duration cannot be longer than 24 months.[573] In case of automatic prolongation, the provider should inform about the prolongation before it takes effect and gives best tariff advice on their services.[574] Moreover, end-users should be able to terminate the contract at any time with a maximum one-month notice period.[575] They are also entitled to terminate the contract without any costs in case of changes of contractual conditions which are not in their interest or imposed by law[576] or in case of significant continued or frequently recurring discrepancy between the actual performance and the performance indicated in the contract.[577] A specific difficulty arises when an end-user has acquired subsidised terminal equipment in combination with its subscription to the electronic communications service. In this case, if the end-user chooses to retain the terminal equipment, the compensation due should not exceed its pro rata temporis value as agreed at the moment of the conclusion of the contract or the remaining part of the service fee until the end of the contract, whichever is smaller and the provider should lift free of charge any condition on the use of that terminal equipment on other networks (including "SIM-locking").[578]

2-212 **Switching between internet services providers (ISPs)** In the specific case of switching between ISPs, ISPs should give the end-user adequate information before and during the switching process. They also should ensure continuity of the internet access service, unless this is technically not feasible, and limit the possible loss of services to a maximum of one working day.[579] Subject to technical feasibility, the ISPs should also provide, on request and free of charge, for email forwarding or access to emails after termination of the contract.[580] The NRAs should also ensure the efficiency and simplicity of the switching process for the end-user.[581]

2-213 **Switching with numbers: the number portability** In the specific case of switching between providers of number-based services, the end-users have the right to retain their numbers and having them ported to the new providers.[582] This applies both to switching between fixed operators or switching between mobile operators, but portability is not mandated between a fixed network and a mobile operator.[583] The transferring and the receiving providers should cooperate in good faith and the receiving provider should lead the switching and porting processes as it has the most interest in its success.[584] For the rest, NRAs should establish the details of the switching and porting processes by taking into account national provisions on contracts, technical feasibility and the need to maintain the continuity of service for end-users.[585] The switching should be carried out within the shortest possible time and the numbers should be ported within one working day.[586] The transferring provider should continue to provide the services until the services of the receiving provider are activated and the loss of service cannot exceed one working day. The pricing for porting numbers should be cost-oriented and no direct charges can be applied to end-users.[587]

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571 In 2018, there were rules in 22 Member States regarding early termination charges applicable to consumers terminating their contract before its minimum duration had expired. For example, in France national legislation provides that when a contract imposes a term of more than 12 months, and if the consumer terminates their contract after the initial period of 12 months but is still within the overall contract period, then they should not have to pay more than a quarter of the remainder periodic charges for the duration of the contract period. See BEREC Report of 7 March 2019 on Terminating Contracts and Switching Provider, BoR(19)27.

572 This provision does not apply to the providers of number-independent interpersonal communications services and transmission services used for the provision of machine-to-machine services. There is also an exception for the instalment contract where the consumer has agreed in a separate contract to instalment payments exclusively for deployment of a physical connection, in particular to very high capacity networks. This aims to facilitate the deployment of very high capacity networks up to or very close to end-user premises, including through demand aggregation schemes which enable network investors to reduce initial take-up risks.

573 EECC art.105(1) although Member States may, as an exception to the maximum harmonisation clause, mandate shorter maximum contractual commitments periods.

574 When the EECC was adopted, certain Member States regulated such rollover contracts. For example, in Germany, the maximum duration for rollover contracts was limited to 12 months. Under art.105(1), these diverging national restrictions can be maintained, in derogation to the full harmonisation objective under art.101.

575 EECC art.105(3).

576 EECC art.105(4). The Court of Justice decided that an increase of tariff in accordance with the Consumer Price Index compiled by a public institution and foreseen in the contract does not grant the subscriber the right to withdraw from the contract without penalty: *Verein für Konsumenteninformation v A1 Telekom Austria* (C-326/14) EU:C:2015:782, paras 27 to 29.

577 EECC art.105(5).

578 EECC art.105(6). Member States may determine other methods to calculate the compensation rate, provided that such methods do not result in a higher amount.

579 EECC art.106(1). In 2018, only eight NRAs had rules in place for fixed internet access service switching where the time can vary depending on the platform technology, 10 NRAs have rules in place for mobile internet access service switching and seven NRAs have rules in place for M2M: BEREC Report of 7 March 2019 on Terminating Contracts and Switching Provider, BoR(19)27.

580 EECC art.115(1) and Annex VI (B). This obligation should be combined with other EU laws. Under GDPR art.20, end-users may request their personal data from the provider they are leaving in a structured, commonly used and machine-readable format, for instance to retrieve their contact list from a webmail application. Under art.16(4) of Directive 2019/770 on certain aspects concerning contracts for the supply of digital content and digital services [2019] OJ L 136/1 ("Digital Content Directive"), at the termination of a contract for the digital content or digital service, the consumer should be able to retrieve any content other than personal data, which was provided or created by the consumer. Such retrieval should be free of charge, without hindrance from the trader, within a reasonable time and in a commonly used and machine-readable format.

581 EECC art.106(1).

582 EECC art.106(2).

583 EECC Annex VI Pt C. Nevertheless, Member States are not prevented from adopting national rules for porting numbers between fixed operators and mobile operators: recital 278. Number portability is required at a specific location for geographic numbers (i.e. a number from the national numbering plan where part of its digit structure contains geographic significance used for routing calls to the physical location of the network termination point of the subscriber to whom the number has been assigned) and at any location for non-geographic numbers (i.e., number ranges that do not identify a specific geographic location; that includes mobile numbers, and freephone, local rate, national rate and premium rate services).

584 EECC art.106(6).

585 In practice, the solutions used for managing the national number portability system have so far varied among Member States, including bilateral agreements, a central database managed by the NRAs, or a central database managed by one of the major operators.

586 EECC art.106(5). Although numbers had also to be ported within one working day under in the previous art.30(4) of the Universal Service Directive, several Member States had not yet achieved this objective in 2014: CEPT, Number Portability Implementation in Europe, March 2014. Moreover, some national laws contain exceptions to the one working day deadline: BEREC Report of 7 March 2019 on Terminating Contracts and Switching Provider, BoR(19)27.

587 EECC art.106(4). The Court of Justice clarified that the cost-based pricing limit applies not only to the traffic costs of the ported number but also the set-up costs incurred by operators to implement requests for number portability: *Mobistar v IBPT* (C-438/04) EU:C:2006:463, paras 27 to 30. In the same case, the Court of Justice also decided (see para.35) that national authorities can set ex-ante

2-214 *Over-the-air provisioning* In order to ease the switching of mobile network operator, Member States should promote, where technically feasible, over-the-air ("OTA") provisioning of numbers directly into the SIM card or its software equivalent ("eSIM") for non-consumer uses such as machine-to-machine.[588] This facilitates the change of mobile network operator without having to gain physical access to the devices concerned. This is particularly relevant for M2M services, where devices might be located in remote places, embedded inside a product with little accessibility, or deployed on a very large scale and hence impossible to change overnight.

2-215 **Switching pay-TV provider** Another obstacle to users switching may be the lack of interoperability between equipment or services. Therefore, consumer digital television equipment should be interoperable.[589] Digital television sets must, on the one hand, be capable of descrambling of digital television signals (namely, broadcasting via terrestrial, cable or satellite transmission) in accordance with a common European scrambling algorithm and, on the other hand, 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. In order to ensure that digital television sets with an integral screen of visible diagonal larger than 30cm is usable with different providers of digital television services, these television sets must also be fitted with at least one open interface socket permitting simple connection of peripherals, and able to pass all relevant elements of a digital television signal, including the audio and video streams, conditional access information, service information, API information and copy protection information.

2-216 **Bundled offers** As end-users are increasingly purchasing bundles of different electronic communications services and because each service may be subject to different protection rules, there is a risk that the bundle offers and contracts weaken the end-users protection or, at least, reduce the certainty of such protection. To alleviate those risks, the protection rules foreseen by the EECC applicable to one service in the bundle[590] expands to all the services in the bundle, so long as the bundle comprises at least an internet access service or a publicly available number-based interpersonal communications service.[591] Thus for instance, when an end-user has the right to terminate the contract without costs for one component of the bundle, he has the right, in principle, to terminate the contract for all components of the bundle. The same applies to the switching rights.

maximum porting tariffs for all operators on the basis of an abstract model of the costs provided that those maximum prices can be contested by receiving providers by showing that those prices are higher than the costs. See also *Polska Telefonia Cyfrowa v Prezes Urzędu Komunikacji Elektronicznej (PUKE)* (C-99/09) EU:C:2010:395. Under Competition law, the retail fees for porting a number charged by a dominant operator cannot be excessive: Commission Press Release of 13 May 1998 involving Deutsche Telekom, IP/98/430.

588 EECC art.93(6) and recital 281.

589 EECC art.113 and Annex XI.

590 A bundle exists in situations where the elements of the bundle are provided or sold by the same provider under the same or a closely related or linked contract: EECC recital 283.

591 EECC art.107. This expansion effect only applies to the EECC protection rules. The other contractual issues, such as the remedies applicable in the event of non-conformity with the contract, remain governed by the rules applicable to the respective component of the bundle, for instance by the rules of contracts for the sales of goods or for the supply of digital content.

(e) Helping end-users to control their bills

Information Where internet access services or publicly available interpersonal communications services are billed on the basis of either time or volume consumption, providers should offer consumers the facilities to monitor and control the usage of each of those services. Those facilities should include access to timely information on the level of consumption of services included in a tariff plan. In particular, providers should notify consumers before any consumption limit included in their tariff plan is reached and when a service included in their tariff plan is fully consumed.[592] 2-217

Tariff control and payment facilities Moreover, national competent authorities may require that the providers of internet access services or publicly available number-based interpersonal communications services make available free of charge specific facilities allowing the consumers to control expenditure such as itemised billing, selective barring for some outgoing calls, pre-payment systems, phased payment of connection fees, special measure in case of non-payment of bills, tariffs advice, cost control and facilities to deactivate third party billing.[593] 2-218

(f) Protecting end-user rights in emergency situations

Services resilience Given the importance of communications in emergency situations, the EECC guarantees minimum rights for the end-users facing those difficult situations. First, voice communications services and internet access services provided over public electronic communications networks should remain available to the fullest possible in case of catastrophic network breakdown or force majeure. Providers of voice communications services must take all necessary measures to ensure uninterrupted access to emergency services and transmission of public warnings.[594] 2-219

Emergency communications End-users of number-based interpersonal communications services should be able to access the emergency services through emergency communications[595] free of charge by using an emergency number, the European "112" and any national number.[596] These providers should give access to emergency services through emergency communications to the most appropriate 2-220

592 EECC art.102(5). As an exception to the full harmonisation principle, Member States may maintain or introduce provisions requiring providers to give additional information on the consumption level and temporarily prevent further use of the service in excess of a financial or volume limit determined by the national authority: EECC art.102(6).

593 EECC art.115 and Annex VI Pt A.

594 EECC art.108.

595 "Emergency service" is defined as "a service, recognised as such by the Member State, that provides immediate and rapid assistance in situations where there is, in particular, a direct risk to life or limb, to individual or public health or safety, to private or public property, or to the environment, in accordance with national law": EECC art.2(39). Emergency communication is defined as "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": EECC art.2(38). It includes not only voice communications service, but also SMS, messaging, video or other types of communications, for example real-time text, total conversation and relay services. It can be also triggered on behalf of a person by an in-vehicle emergency call or an eCall as defined in Regulation 2015/758: EECC recital 285.

596 EECC art.109(1). Article 109(3) adds that all emergency communications to the single European

Public Safety Answering Point ("PSAP").[597] The providers of electronic communications networks and services and the handset manufacturers should ensure that the caller location information—being network-based and where available, handset-derived—are made available[598] to the most appropriate PSAP without delay, free of charge and according to the accuracy and reliability criteria set by the national authorities.[599]

2-221 **Public warning system** Providers of mobile number-based interpersonal communications services are subject to an additional obligation, namely to transmit to their end-users public warnings regarding imminent or developing major emergencies and disasters.[600] However, Member States may determine that public warnings are transmitted through alternative publicly available electronic communications services, other than broadcasting services, or through a mobile application relying on an internet access service, provided that the effectiveness of the public warning system is equivalent in terms of coverage and capacity to reach end-users.[601]

2-222 **Missing children and child helpline hotlines** End-users should have access free of charge to a service operating a hotline to report cases of missing children available on the number "116000". For this right to be effective, Member States must

emergency number "112" should be appropriately answered and handled and at least as expeditiously and effectively as emergency communications to the national emergency number.

597 EECC art.109(2). The "PSAP" is defined as "a physical location where an emergency communication is first received under the responsibility of a public authority or a private organization recognised by the Member State': EECC art.2(36). The same definition is used in art.3(3) of Regulation 2015/758 of the European Parliament and of the Council of 29 April 2015 concerning type-approval requirements for the deployment of the eCall in-vehicle system based on the 112 service [2015] OJ L123/77.

598 EECC art.109(6). Caller location information is defined as "in a public mobile network, the data processed, derived from network infrastructure or handsets, indicating the geographic position of an end-user's mobile terminal equipment, and, in a public fixed network, the data about the physical address of the network termination point": EECC art.2(40). Member States have a margin of discretion to lay down criteria ensuring that the caller's position is located as reliably and accurately as is necessary, in order to enable the emergency service to come to the caller's assistance. However, subject to technical feasibility, caller location information should also be made available in cases where the call is made from a mobile telephone which is not fitted with a SIM card : *Lietuvos valstybė* (C-417/18) EU:C:2019:671. For Over-the-Top providers of number based communications services, 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. Where such standards have not been implemented, network-independent number-based interpersonal communications services should not be required to provide access to emergency services except in a manner that is technically feasible or economically viable: EECC recital 286.

599 In order to respond to technological developments while ensuring harmonisation, the Commission has to adopt the measures necessary to ensure the compatibility, interoperability, quality, reliability and continuity of emergency communications with regard to caller location information solutions, access for end-users with disabilities and routing to the most appropriate PSAP: EECC art.109(8) and recital 291.

600 EECC art.110(1). To be informed, end-users entering a Member State should receive, automatically by means of SMS, without undue delay and free of charge, easily understandable information on how to receive public warnings. Where a public warning system relies on an application, it should not require end-users to log in or register with the authorities or the application provider: recital 294.

601 EECC art.110(2).

ensure that the authority or undertaking to which the number "116000" has been assigned allocates the necessary resources to operate the hotline.[602]

(g) Protection of end-users from security incidents

Managing security risks In addition to the general rules on network and services security,[603] the EECC imposes specific obligations on providers of public electronic communications networks or services, including those providing number independent interpersonal communications services. Those providers must take appropriate and proportionate technical and organisational measures to manage the risks posed to the security of networks and services.[604] In particular, they should focus on measures, such as encryption, that prevent and minimise the impact of security incidents on users and on other networks and services.[605] 2-223

Information In case of security incidents with a significant impact on the operation of their networks or services, providers must notify it to the competent authority which may, in turn, inform the public, authorities in other Member States or ENISA.[606] Providers must also specify in their contracts with end-users the type of action taken in case of security or integrity incidents, threats or vulnerabilities.[607] In the case of a particular and significant threat of a security incident, providers must also inform their users potentially affected by such a threat of any possible protective measures or remedies which can be taken by the users.[608] 2-224

Enforcement Competent authorities can issue binding instructions to operators detailing measures required to remedy a security incident or prevent one from oc- 2-225

602 EECC art.96. Member States may use, in parallel, the number "116111" for child-friendly services operating a helpline that helps children in need of care and protection: EECC recital 253.

603 In particular, the Directive 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 [2016] OJ L194/1 and Regulation 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 (General Data Protection Regulation) [2016] OJ L199/1, analysed in Chapter VI of this book.

604 EECC art.40(1). Security of networks and services is defined as: "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" and security incident is defined as "an event having an actual adverse effect on the security of electronic communications networks or services": EECC art.2 (21) and (42) respectively.

605 Each Member State determines the required measures. However, the Commission may harmonise national requirements as well as the circumstances, format and procedures applicable to notification requirements in case of security breaches: EECC art.40(5).

606 EECC art.40(2). The significance of the incident impact justifying the notification depends in particular on the number of users affected, the duration of the incident, its geographical spread, the extent to which the functioning of the network or service is affected and the impact on economic and social activities. This notification obligation can duplicate in certain cases the notification obligations under art.33 GDPR or art.16(3) NIS Directive, discussed in Chapter VI of this book.

607 EECC art.102 and Annex VIII A(5). In addition, the contract should also specify any compensation and refund arrangements available if a provider responds inadequately to a security incident, including if a security incident, notified to the provider, takes place due to known software or hardware vulnerabilities, for which patches have been issued by the manufacturer or developer and the service provider has not applied those patches or taken any other appropriate counter-measure (recital 264).

608 EECC art.40(3).

curring when a significant threat has been identified, and time limits for implementation.[609] When necessary, they may also obtain the assistance of the Computer Security Incident Response Team ("CSIRT").

(h) Protecting end-users with disabilities

2-226 **Level playing field for end-users** To ensure a level playing field between users and in accordance with EU law harmonising accessibility requirements for products and services,[610] end-users with disabilities should have access to electronic communications services which are equivalent to that enjoyed by the majority of end-users, thereby benefitting from the choice of undertakings and services available to the majority of end-users.[611] In particular, this equivalent access relates to contractual information, general information to be given by electronic communications providers, quality of service, emergency communications services, and missing children and child helpline hotlines.[612] In the context of universal services, end-users with disabilities may receive support to ensure the affordability of the internet access and voice communication services and access to specific equipment (such as total conversation services and relay services).[613] In the context of must-carry, they should get access supporting connected TV services and EPGs.[614] In addition, the public consultations that have to be done by national competent authorities should be accessible for end-users with disabilities.[615]

(i) Alternative dispute resolution

2-227 **Out-of-court dispute resolution** Under the Alternative Dispute Resolution Directive,[616] all contractual disputes that arise from the sale of goods or provision of services between consumers residing in the EU and traders established in the EU may be submitted to an alternative dispute resolution entity to be designated by the Member States.[617] For disputes arising under the EECC, Member States should designate as an alternative dispute resolution body the NRA or another competent authority responsible, or at least one independent body with proven expertise in the end-users rights.[618] Although the Alternative Dispute Resolution Directive covers disputes involving consumers, Member States may extend its application to dispute involving other end-users, in particular microenterprises and small enterprises, whose bargaining position is comparable to that of consumers and should therefore

609 EECC art.41.

610 Directive 2019/882 of the European Parliament and of the Council of 17 April 2019 on the accessibility requirements for products and services [2019] OJ L151/70.

611 EECC art.111. See also BEREC Report of 8 March 2018 on NRAs' practices for ensuring equivalence of access and choice for disabled end-users BoR(18)30.

612 Respectively EECC art.102(1) in fine, art.103(1), art.104(1), art.109(5) and art.96(2).

613 EECC art.85(4).

614 EECC art.114(1) and recitals 153 and 310. This could include access to services such as videotext, subtitling for end-users who are deaf or hard of hearing, audio description, spoken subtitles and sign language interpretation.

615 EECC art.24(1).

616 Directive 2013/11 on alternative dispute resolution for consumer disputes ("Alternative Dispute Resolution Directive") [2013] OJ L165/63.

617 The availability of such procedures does not deprive consumers from exercising their right of access to the judicial system: Alternative Dispute Resolution Directive art.1.

618 EECC art.5(1). The means of initiating such procedures should be clearly contained in the contract of the end-user: EECC, Annex VIII, B (I.6).

benefit from the same level of protection regarding connectivity inputs that are vital to their businesses. Where such disputes involve parties in different Member States, the relevant national authorities should coordinate their efforts in order to resolve the dispute.[619]

G. SPECIFIC REGULATION OF NET NEUTRALITY

2-228 **Net neutrality: principles** Given the key economic and societal importance of internet access in the 21st century as well as, in some cases, the weak competition between internet access providers and market failures in internet access delivery, some specific rules have been adopted for the provision of internet access service.[620] Under the Open Internet Regulation and the associated BEREC Guidelines,[621] end-users have the right to access and distribute information and content, use and provide applications and services and use terminal equipment of their choice, irrespective of the end-user's or provider's location or the location, origin or destination of the information, content, application or service, via their internet access service.[622] In the same vein, providers of internet access services must treat all traffic equally irrespective of the sender and receiver, the content accessed or distributed, the applications or services used or provided, or the terminal equipment used. They may not block, slow down, alter, restrict, interfere with, degrade or discriminate between specific content, applications or services, or specific categories thereof. Traffic management measures are only allowed when they are reasonable i.e., transparent, non-discriminatory, proportionate and based on objectively different technical quality of service requirements of specific categories of traffic and not on commercial considerations.[623]

2-229 *Zero-rating* Zero rating is a commercial practice used by certain operators not to count the data volume of particular content, applications or services against the user's limited monthly data volume. The Open Internet Regulation does not prohibit all zero-rating practices and NRAs should assess on a case-by-case basis whether the practices harm end-users by significantly reducing choice. Zero-rating practices are prohibited when, for instance, all applications except for the zero-rated one are blocked or throttled once the data cap is reached. Conversely, if all applications (including the zero-rated application) are blocked or throttled after the end user uses up his data allowance, a case-by-case analysis of the practice is warranted. Moreover, if zero rating applies to a specific application (e.g. the ISP's own service

619 EECC art.25(2).

620 The term "net neutrality" was coined by Wu in "Network Neutrality, Broadband Discrimination" (2003) 2 *Journal of Telecommunications and High Technology Law* 141. In general, for a legal analysis: Mardsen, *Net Neutrality* (Bloomsbury Academic, 2010) and for an economic analysis: Greenstein, Peitz and Valletti "Net neutrality: A fast lane to understanding the trade-offs" (2016) 30 *The Journal of Economic Perspectives* 127.

621 BEREC Guidelines of 30 August 2016 on the Implementation by National Regulators of European Net Neutrality Rules, BoR(16)127. For a first evaluation of those rules, see BEREC Report of 6 December 2018 on the outcome of the consultation on the evaluation of the application of Regulation 2015/2120 and the BEREC Net Neutrality Guidelines, BoR(18)245 and Commission Report of 30 April 2019 on the implementation of the open internet access provisions of Regulation 2015/2120, COM(2019)203.

622 Open Internet Regulation art.3(1). Those rights cannot be waived by contract: Open Internet Regulation art.3(2). See also EECC art.56(4) in case of RLANs.

623 Open Internet Regulation art.3(3). These traffic management measures may not monitor the specific content, practices such as deep packet inspection are thus prohibited.

or a specific video streaming service), it is more likely to reduce end users' choice materially than if it applies to an entire category of applications (e.g. to all video streaming applications).

2-230 **Net neutrality: exceptions** Providers of internet access services may apply necessary measures in order to: (i) comply with EU or national law or orders by courts or public authorities (e.g., block illegal content); (ii) preserve the integrity and security of the network, services and end-users' terminal equipment (e.g., prevent misuse of a network and combat viruses, malware and denial of service attacks); or (iii) prevent or minimise network congestion that is temporary or exceptional. In addition, the Open Internet Regulation distinguishes between "best efforts" and "specialised services", defined as:

> "...services other than internet access services which are optimised for specific content, applications or services, or a combination thereof, where the optimisation is necessary in order to meet requirements of the content, applications or services for a specific level of quality."[624]

Providers may offer both in parallel if (i) the network capacity is sufficient to provide such specialised services in addition to any internet access services provided; (ii) specialised services are not usable or offered as a replacement for internet access services; and (iii) there is no detrimental effect on the availability or general quality of internet access for end-users.

2-231 **Enhanced transparency obligations** Given the importance of the net neutrality principle and rules, specific transparency obligations are imposed on providers of internet access services.[625] They apply in addition to the transparency obligations of the EECC[626] and the general consumer protection laws.[627] Contracts for internet access services must include: (i) information on how applied traffic management measures could impact the quality of internet access, end-users' privacy and the protection of personal data; (ii) an explanation on how any volume limitation, speed and other quality of service parameters may in practice impact internet access; (iii) an explanation on how any specialised service, to which the end-user subscribes, might in practice have an impact on the same end-user's internet access services; (iv) for fixed networks, an explanation on the minimum, normally available, maximum and advertised download and upload speed of internet access services and, for mobile networks, on the estimated maximum and advertised download and upload speed of internet access services; and (v) an explanation of the remedies available to the consumer in case of any continuous or regularly occurring discrepancy between the actual and contractually agreed on performance of the internet access service.

2-232 **Enforcement** The non-discrimination and transparency obligations imposed by

[624] Open Internet Regulation art.3(5). Examples of specialised services optimised for specific content are managed IPTV and high-definition video conferencing. See also BEREC Report of 8 March 2018 on the impact of premium content on ECS markets and the effect of devices on the open use of the internet, BoR (18)35.

[625] Open Internet Regulation art.4.

[626] In particular, EECC arts 102 to 104 reviewed in paras 2-207–2-210.

[627] In particular Directive 2011/83 of the European Parliament and of the Council of 25 October 2011 on consumer rights [2011] OJ L304/64, analysed in Chapter VII of this book.

the Open Internet Regulation are enforced by the NRAs.[628] In that context, NRAs may impose minimum quality of service requirements and other necessary measures, on the basis of guidelines issued by BEREC. Sanctions for breaches of net neutrality obligations are set by each Member State and differ widely across the EU.[629]

H. SPECIFIC REGULATION OF INTRA-EU INTERNATIONAL ROAMING SERVICES AND COMMUNICATIONS

2-233 **Introduction** To contribute to the internal market and ensure that customers do not pay excessive prices when travelling or calling abroad, specific regulation, including price caps, applies to two categories of intra-EU communications services. The first category consists of international roaming services for calls, SMS and data. Roaming charges apply when a customer uses a SIM card in a different country than the one where the SIM card was bought and subscribed to. The main advantage of roaming services is that they allow end-users, when in another country, to be called on the number of their domestic provider. In the past, the prices for those services were very high, thereby limiting their use. This is why roaming charges have been capped since 2007 by a specific Roaming Regulation,[630] which has been amended several times since then.[631] This Regulation aims, on the one hand, to create more competition on the roaming market and, on the other hand, reduce roaming prices and since 2017, abolish retail roaming surcharges. The second category is the international calls and SMS used when a customer makes a communication to another country. Such services can also be very expensive. This is why those prices are capped since 2019 by the amended Open Internet Regulation.[632] As such price regulation is very far reaching and limits the fundamental freedom of conducting business, it is only temporary.[633] The regulation of intra-EU roaming is due to expire in June 2022[634] while the regulation of intra-EU communications is due to expire in May 2024.[635]

[628] Open Internet Regulation art.5.

[629] Commission Report of 30 April 2019 on the implementation of the open internet access provisions of Regulation 2015/2120, COM(2019)203.

[630] Regulation 717/2007. The legality of this Regulation with regard to the EU principles of subsidiarity and proportionality has been confirmed by the Court of Justice in *Vodafone, Telefónica O2 Europe, T-Mobile International, Orange Personal Communications Services v Secretary of State for Business, Enterprise and Regulatory Reform* (C-58/08) EU:C:2010:321, paras 71 and 79.

[631] Roaming Regulation 513/2012 as amended by Regulation 2015/2120 and Regulation 2017/920. This Regulation is complemented by several Guidelines adopted by BEREC: BEREC Guidelines of 5 July 2013 on Roaming Regulation (arts 4 and 5 on Separate Sale of Roaming Services), BoR(13)82; BEREC Guidelines of 27 March 2017 on retail roaming, BoR(17)56; BEREC Guidelines of 9 June 2017 on wholesale roaming, BoR(17)114. The effects of the Roaming Regulation have been assessed in the Commission Report of 12 December 2018 on the implementation of Regulation on roaming on public mobile communications networks within the Union, COM(2018) 822.

[632] Regulation 2015/2120 as amended by Regulation 2018/1971.

[633] The fact that the retail roaming price control was only temporary was one of the reasons for which the Court of Justice validated the proportionality of the first Roaming Regulation: *Vodafone, Telefónica O2 Europe, T-Mobile International, Orange Personal Communications Services v Secretary of State for Business, Enterprise and Regulatory Reform* (C-58/08) EU:C:2010:321, para.69.

[634] Roaming Regulation art.22.

[635] Open Internet Regulation art.10(5).

1. Regulation of intra-EU international roaming services

(a) *Measures to increase competition*

2-234 **Wholesale competition: access for roaming** Roaming services are based on wholesale agreements between operators of different Member States. To encourage such agreements, mobile network operators (MNOs) authorised in Member States must meet reasonable requests for direct or resale access from MNOs, mobile virtual network operators ("MVNOs") or reseller from any other Member State.[636] Such access covers all network elements and associated facilities, relevant services, software and information systems necessary for the provision of roaming services to customers.[637] Access should be negotiated in good faith and can only be refused on the basis of objective criteria.[638]

2-235 *Reference offer* MNOs must publish a reference offer taking into account the BEREC Guidelines.[639] Such a reference offer should be sufficiently detailed and include all necessary components to offer roaming services. It may include conditions to prevent permanent roaming or anomalous or abusive use of wholesale roaming access.[640] When necessary, the NRA may impose changes to the reference offer.[641]

2-236 *Termination* In case of anomalous or abusive use of wholesale roaming access, the visited network operator may terminate the wholesale roaming agreement unilaterally with the prior authorisation of its NRA. The NRAs of both the visited network operator and the roaming provider can ask for BEREC's (non-binding) opinion, which should be delivered within one month upon receipt of the request. In such cases, the NRA of the visited network operator must take the utmost account of BEREC's opinion before authorising unilateral termination of the wholesale roaming agreement. The authorisation procedure by the NRA of the visited operator must not take longer than three months from the receipt of the request of the visited operator.[642]

2-237 **Retail competition: Separate sale of retail data roaming services** Roaming customers should have the possibility to buy mobile data in the visited country from a service provider in that country and be billed directly by that provider. This "Local Break-Out" implies that the domestic mobile tariff of the visited country is

[636] Roaming Regulation art.3(1). See also BEREC Guidelines on wholesale roaming, BoR(17)114. Direct wholesale roaming access is defined as "the making available of facilities and/or services by a mobile network operator to another undertaking, under defined conditions, for the purpose of that other undertaking providing regulated roaming services to roaming customers": Roaming Regulation art.2(p). Wholesale roaming resale access is defined as "the provision of roaming services on a wholesale basis by a mobile network operator different from the visited network operator to another undertaking for the purpose of that other undertaking providing regulated roaming services to roaming customers": Roaming Regulation art.2(q).

[637] Roaming Regulation art.3(3).

[638] Roaming Regulation art.3(2) and (5).

[639] Roaming Regulation art.3(5) and BEREC Guidelines on wholesale roaming, BoR(17)114 s.4.

[640] Roaming Regulation art.3(6).

[641] Roaming Regulation art.3(6) in fine.

[642] Roaming Regulation art.3(6).

charged and the roaming service with its associated tariff is avoided.[643] The Roaming Regulation does not oblige operators to provide Local Break-Out but prohibits home and domestic providers from preventing customers from using it when it is offered.[644] To facilitate such a possibility, the Commission may even give a mandate to a European standardisation body for the adaptation of the relevant EU harmonised standards.[645]

(b) *Price Regulation*

2-238 **"Roam like at home": abolition of intra-EU retail roaming surcharges** At the retail level, roaming services are usually automatically included in mobile service packages. Where this is the case, the operators concerned are prohibited to levy any surcharge in addition to the domestic retail price when their customers make or receive roaming calls, send roaming SMS messages and use data roaming services nor levy any general charge to enable the terminal equipment or service to be used in other EU Member States. In other words, the user should pay the same price at home and when roaming abroad ("roam like at home", "RLAH").[646] However, there are two limits to this principle: first, the users could not game the system and take subscriptions in a Member State where domestic prices are cheap but where they do not live (fair use); second, operators should remain profitable. Moreover, customers may expressly choose roaming tariff plans which are different. In this case, they should be duly informed about lost advantages and always have the possibility to choose the RLAH option.[647]

2-239 **First limit: fair use policy** Roaming providers may apply fair use policy to prevent abusive or anomalous usage of intra -EU roaming.[648] They may limit the benefit of the RLAH tariffs to roaming customers who are normally resident or have stable links entailing a frequent and substantial presence in the Member State where they take their subscriptions.[649] The fair use policy should allow customers to consume volumes of regulated retail roaming services at the applicable domestic

[643] Roaming Regulation art.4.

[644] Roaming Regulation art.5 and Commission Implementing Regulation 1203/2012 of 14 December 2012 on the separate sale of regulated retail roaming services within the Union [2012] OJ L347/1. Also BEREC Guidelines of 5 July 2013 on Roaming Regulation (Articles 4 and 5 on Separate Sale of Roaming Services), BoR(13)82.

[645] Roaming Regulation art.5(5).

[646] Roaming Regulation art.6a. Mobile operators still have the commercial freedom to commercialise domestic tariff plans which do not include roaming. However, providers could not offer roaming options against a general charge separately in addition to subscriptions without roaming: BEREC Guidelines on retail roaming, BoR(17)56, para.188. All those obligations only apply to terrestrial (land-based) mobile networks and not to mobile services provided via satellite systems, used for example when travelling by ship or plane in the EU: BEREC Guidelines on retail roaming para.190

[647] Roaming Regulation art. 6e(3).

[648] Roaming Regulation art.6b. The vast majority of operators apply fair use policy: Commission Report on the implementation of Regulation on roaming on public mobile communications networks within the Union, COM(2018) 822.

[649] Commission Implementing Regulation 2016/2286 of 25 December 2016 laying down detailed rules on the application of fair use policy and on the methodology for assessing the sustainability of the abolition of retail roaming surcharges and on the application to be submitted by a roaming provider for the purposes of that assessment [2016] OJ L344/46 ("CIR") art.3. Such stable links can be deduced from: (i) full-time and durable employment relationships, including that of frontier workers; (ii) durable contractual relations entailing a similar degree of physical presence of a self-employed person; (iii) participation in full-time recurring courses of study; or (iv) from other situ-

retail price that are consistent with their respective tariff plans.[650] For the roaming consumption which goes beyond the fair use policy limits, the roaming provider may apply a surcharge to the domestic tariff. This surcharge and the total roaming tariff to be paid by the roaming users are also regulated. The surcharge cannot exceed (excluding VAT) the wholesale price caps or, for incoming voice calls, the weighted average of maximum mobile termination rates in the EU as annually determined by the Commission.[651] Moreover, the sum of the domestic retail price and any surcharge applied cannot exceed (excluding VAT) €0.19 per minute for outgoing calls, €0.06 for an outgoing SMS message and €20 per gigabyte used.[652] However, the providers may never apply surcharges to an incoming voice or SMS message.

2-240 *Supervision of fair use policy* Roaming providers may apply fair, reasonable and proportionate control mechanisms based on objective indicators related to the risk of abusive or anomalous use beyond periodic travelling in the Union.[653] Such objective indicators may include measures to establish whether customers have prevailing domestic consumption over roaming consumption or prevailing domestic presence of the customer over presence in other Member States of the EU.[654] In case roaming patterns are observed that are not compliant with the fair use policy, the operator must alert the customer and give them at least two weeks to demonstrate actual domestic consumption or presence.[655] If the customer fails to do so, operators may apply surcharges. Operators may also apply surcharges if they have substantiated evidence that a number of SIM cards have been the object of

ations, such as those of posted workers or retired persons, whenever they involve an analogous level of territorial presence: CIR, art.2(2a).

650 However, under certain domestic tariff plans, the data consumption may be unlimited or may provide data volumes at a low implicit domestic unit price relative to the regulated maximum wholesale roaming charges. Such tariff plans are more likely than other tariff plans to be subject to organised resale to persons not residing in or having stable links entailing frequent and substantial presence in the Member State of the roaming provider. Moreover, such anomalous or abusive use of open data bundles while roaming may lead to the disappearance of such tariff plans in domestic markets, or to the restriction of roaming with such tariff plans, to the detriment of domestic users. In those cases, roaming providers are allowed to set a limit on the consumption of data by roaming end users equal to: the retail revenue (ex VAT) divided by the regulated wholesale price per GB times two for unlimited bundles; or the remaining credit (ex VAT) divided by the regulated wholesale price per GB for prepaid: CIR, art.4(3).

651 Roaming Regulation art.6e(1a) and (1c) and Commission Implementing Regulation 2018/1979 of 13 December 2018 setting the weighted average of maximum mobile termination rates across the Union [2018] OJ L317/10. In 2019, the maximum roaming surcharges were: €0.032 per minute for outgoing calls, €0.0085 per minute for incoming calls, €0.01 per outgoing SMS and €4.50 per gigabyte.

652 Roaming Regulation art.6e(1b).

653 CIR art.5(1). Under CIR art.5(2), the provider should notify any fair use policy to the NRA and allow the latter to examine whether the notified policy is in compliance with the rules set out in the CIR. However, the provider must not wait for a formal approval by the NRA before implementing its policy: BEREC Guidelines on retail roaming, BoR(17)56, para.149.

654 Prevailing domestic consumption over roaming usage during the observation period (at least four months) should be considered as a proof of non-abusive usage. Any day when a roaming customer has logged on to the domestic network shall be counted as a day of domestic presence of that customer: CIR art.4(4). This rule aims to allow cross-border workers to choose a mobile operator in either the country where they live or from the country where they work and "roam like at home" with a SIM from one country in the other.

655 CIR art.5(3) and (4).

organised resale to persons not effectively residing in or having stable links in the Member State of that provider.[656]

Second limit: economic sustainability In specific and exceptional circumstances where a roaming provider is unable to recover its costs of providing regulated roaming services when the domestic tariffs are applied, that roaming provider may apply to the NRA for authorisation to apply a surcharge.[657] In this case, the NRA assesses the costs and the revenues linked to the provision of the roaming services according to a common methodology defined by the European Commission.[658] The NRA authorises the surcharge within one month of receipt of an application unless the application is manifestly unfounded or provides insufficient information. In such cases, the NRA takes a final decision within a further period of two months, after having given the roaming provider the opportunity to be heard.[659] **2-241**

Transparency Roaming providers should give information on the applicable roaming charges when the contract is concluded and regularly afterwards.[660] Moreover, when the customer crosses a national border and is about to use roaming services, providers should give basic personalised information on the applicable roaming charges, including fair use policy and surcharges, unless the customer has indicated that they do not want to receive such information.[661] The information should be given in an appropriate manner, for instance with an SMS, and be free of charge. When the fair use policy volume is fully consumed and surcharges are about to be applicable, roaming providers should also send a notification indicating the amount of the surcharge, unless the customer has indicated that they do not want to receive such notifications.[662] Finally, in the particular case of border regions with risks of inadvertent roaming, the providers should inform their customers on how to avoid such inadvertent roaming and take reasonable steps to alleviate those unwanted roaming services.[663] **2-242**

Cut-off limit in case of data roaming As the costs of data roaming can be unexpectedly high and to alleviate bill shocks, roaming providers should help the consumer to manage their use of data roaming services. Providers must make available to their customers one or more maximum financial or volume limits on data **2-243**

656 CIR art.5(6). In such circumstances, the roaming provider notifies to the NRA the evidence characterising the systematic abuse in question and the measure taken to ensure compliance with all conditions of the underlying contract at the latest at the same time as such measures are taken: BEREC Guidelines on retail roaming, BoR(17)56, para.79.

657 Roaming Regulation art.6c(1) and (2).

658 Roaming Regulation art.6c(3) and CIR arts 6 to 10. The threshold to apply a retail roaming surcharge is when the loss generated by the provision of roaming is at least 3% of the total revenues generated from mobile services.

659 Roaming Regulation art.6c(4). Retail surcharges have been authorised by, amongst others, the Finnish and Lithuanian regulators.

660 Roaming Regulation art.6e(4) as well as art.14(3) for roaming calls and SMS and art.15(1) for data roaming.

661 Roaming Regulation art.14(1) for roaming calls and SMS and art.15(2) for data roaming except in case of machine-to-machine devices. This obligation also applies when the roaming customer is travelling outside the EU: Roaming Regulation art.14(1) in fine for roaming calls and SMS and art.15(6) for data roaming.

662 Roaming Regulation art.14(2a) for roaming calls and SMS and art.15(2a) for data roaming.

663 Roaming Regulation art.14(4) for roaming calls and SMS and art.15(5) for data roaming.

roaming use during an agreed specified period.[664] The default financial limit must be close to, but not exceed (excluding VAT) €50 of outstanding charges per monthly billing period, which should automatically refresh every billing period.[665] Roaming providers should send roaming customers a first notification when the data roaming service has reached 80% of the agreed limit. When the financial or volume limit is exceeded, a second notification should be sent with information on the procedure to continue the provision of the service and the associated cost. In the absence of a prompt response from the customer, it is to be assumed that the customer wishes to cease receiving the service(s) concerned.

2-244 **Price caps on wholesale intra-EU roaming** The abolition of retail surcharges is accompanied by wholesale price caps to ensure the economic sustainability of the rules. The average wholesale charge that the visited network operator levies on the roaming provider cannot exceed (excluding VAT) €0.032 per minute for outgoing voice calls, €0.01 for SMS messages and a sliding scale set up from the period 2017–2022 (from €7.70 to 2.50 per gigabyte) for data.[666]

(c) Enforcement

2-245 **Supervision and sanctions** The NRAs are in charge of the enforcement of the obligations provided in the Roaming Regulation.[667] In order to do that, they have the right to collect all the relevant information as well as exchange such information with the Commission, BEREC or NRAs from other Member States.[668] They may intervene on their own initiative and they may solve disputes between operators.[669] They should also be entrusted to impose effective, proportionate and dissuasive penalties when the obligations are breached.[670]

2. Regulation of intra-EU communications

2-246 **Price caps of retail charges for intra-EU communications** The intra-EU numbered-based interpersonal communications services cannot exceed (excluding VAT) €0.19 per minute for calls and €0.06 per SMS message.[671] However, customers may expressly choose a tariff plan for international communications

664 Roaming Regulation art.15(3). The concept of "customer" is not defined in the Regulation. According to BEREC, the term can refer to either the contracting party or an individual SIM holder (who may not be the same person in the case of corporate or family contracts, for example). Providers must make clear (e.g. in the contract, on the website and in other appropriate ways) who the cut-off limit applies to, i.e. the contracting party or individual SIM card holders: BEREC Guidelines on retail roaming, para.130.

665 BEREC, Retail Roaming Guidelines, para.135.

666 Roaming Regulation art.7 for roaming calls, art.9 for SMS and art.12 for data roaming. The wholesale price caps are fixed until 30 June 2022, the date of expiry of the Roaming Regulation. The average wholesale charge applies between any pair of operators and is calculated over a 12-month period.

667 Roaming Regulation art.16(1).

668 Roaming Regulation art.16(4) and (4a).

669 Roaming Regulation art.16(5) and art.17.

670 Roaming Regulation art.18.

671 Open Internet Regulation art.5a(1). Regulated intra-EU communications are defined as "any number-based interpersonal communications service originating in the Member State of the consumer's domestic provider and terminating at any fixed or mobile number of the national numbering plan of another Member State, and which is charged wholly or partly based on actual consumption": Open Internet Regulation art.2(3). Calls and SMS from roaming customers originating in a visited country,

(including intra-EU communications) which are different. In this case, they should be duly informed about lost advantages and always have the possibility to choose the capped tariffs.[672]

2-247 **One limit: economic sustainability** As in the case of roaming, providers can request to the NRA a derogation for a renewable period of one year, if, due to specific and exceptional circumstances distinguishing it from most other European providers, the application of the caps would have significant impact on that provider's capacity to sustain its existing prices for domestic communications.[673]

2-248 **Enforcement** The NRA should enforce those obligations and Member States must provide in national law for effective, proportionate and dissuasive penalties and enforce the caps.[674]

including to non-EU countries, are not considered to be intra-EU calls or SMS, but international roaming services.

672 Open Internet Regulation art.5a(2)–(3).

673 Open Internet Regulation art.5a(6). Parameters to be taken into account by national regulatory authorities in their assessments have been detailed in BEREC Guidelines of 7 March 2019 on intra-EU communications, BoR(19)35.

674 Open Internet Regulation arts 5(6) and 6 in fine.