# ecta RESPONSE

## TO THE PUBLIC CONSULTATION BY BEREC ON THE

# BEREC GUIDELINES ON COMMON APPROACHES TO THE IDENTIFICATION OF THE NETWORK TERMINATION POINT IN DIFFERENT NETWORK TOPOLOGIES

**BoR (19) 181**

**21 NOVEMBER 2019**

## Introduction

1. ecta, the european competitive telecommunications association,[1] welcomes the opportunity to comment on the draft of the BEREC Guidelines on the Identification of the network termination point (hereinafter: 'NTP') in different network topologies.
2. The consultation on guidelines for the identification of the network termination point constitutes a key element for the application of the European Electronic Communications Code (hereinafter: 'EECC' or 'Code').
3. ecta and its members have noticed important issues in the draft guidelines that could have been avoided by engaging in timely dialogue with stakeholders. Operators should be a natural and particularly well placed counterpart for BEREC to exchange with on this matter, especially considering its complexity and technicality.
4. Therefore, ecta calls upon BEREC to meet with industry and its representatives for a dialogue based on the outcome of the present consultation before entering into the finalisation of the guidelines.
5. Overall, ecta considers that the draft guidelines as consulted upon, while touching on several important points, do not effectively outline common approaches to the identification of the NTP in different network topologies, as stipulated by article 61(7) EECC.
6. In its contribution, ecta first sets out its understanding of the mandate that the provision contains and assesses the approach BEREC proposes to determining the NTP (chapter 1). On the basis of the issues identified, ecta then proceeds to set out a number of suggestions on how to develop the guidelines further (chapter 2).

## 1. The mandate of art. 61(7) EECC and the proposed approach to NTP identification

### 1.1. The (unfulfilled) mandate: Consideration of approaches and topologies

7. According to Article 61(7) EECC, BEREC is to 'adopt guidelines on common approaches to the identification of the network termination point in different network topologies.'
8. While BEREC does acknowledge the legal basis in the introduction of the draft guidelines,[2] there is no elaboration on what this mandate entails.
9. Accordingly, the draft neither discusses the significance of common approaches, nor the relevance or selection of network topologies to be analysed.
10. Instead, BEREC introduces, as part of its discussion of 'general aspects',[3] an illustration of technically possible variations of the boundary line between telecommunications

[1] https://www.ectaportal.com/about-ecta

[2] BoR (19) 181, para. 1, at 3.

[3] BoR (19) 181, ch. 2, at 3ff.

terminal equipment (hereinafter 'TTE') and the public communications network in the case of wireline Internet access services (hereinafter 'IAS').[4]

11. This service delivery configuration, which is introduced only as an example,[5] remains, for the preponderant part of the draft guidelines, the sole topological point of reference.

12. Although an annex[6] does include illustrations of additional possible configurations of network termination, the guidelines neither discuss these, nor consider why the IAS would constitute the best possible illustration and to what extent it appropriately may be deemed to represent issues applicable to all NTP scenarios across the range of possible topologies.

13. Indeed, also at a strictly technical level, BEREC provides no discussion of the extent to which the qualitative descriptions of different locations of the network termination point, as marked in that illustration and spelled out in paragraph 53[7], can meaningfully be transposed to other configurations.

14. Moreover, systematic consideration of the basic topological difference between point-to-point and point-to-multipoint networks is absent from the consultation document, as is the case for the difference between active and passive equipment and its impact.

15. Absence of these considerations also surprises in view of the comprehensive work BEREC previously has carried out to compare the location of the network termination point in the Member States,[8] and which it explicitly had identified as a basis for elaborating guidelines pursuant to Article 61(7).[9] The differences identified in that report among Member States where the network termination point has been explicitly defined should have clearly and transparently informed the work now presented for public consultation.

16. Taking account of the above, ecta finds the draft guidelines neither to present common approaches, nor to effectively address different network topologies. Instead, the current text appears to propose a single approach based on a particular service without full and appropriate consideration of underlying network topologies and of its transposability to other services.

17. **ecta therefore cannot consider the current draft as an effective response to the legislative mandate established by Article 61(7) EECC. The dispersed and somewhat unsystematic treatment of the subject matter renders the document inaccessible even in parts that are of foundational importance for it to achieve appropriate guidance value. This is evident both in the overall conceptual**

[4] BoR (19) 181, para. 7, at 4.

[5] Ibid.

[6] BoR (19) 181, Annex, at 26f.

[7] BoR (19) 181, at 11.

[8] BoR (18) 159, 4.10.2018.

[9] BoR (18) 159, at 6, 8.

**discussion of what the NTP amounts to; the presentation of different NTP locations; and the treatment of fixed and mobile NTPs in the consultation draft.**

18. **It is in ecta's view essential for these underlying elements to be addressed before the guidelines can be adopted. The following sections explain why the approach to identifying the fixed NTP that BEREC has proposed does not appear appropriate to this end.**

## 1.2. The proposed approach to identifying the fixed network termination point

### *1.2.1. Criteria for identifying the NTP: Inappropriate restriction to fixed NTPs and unjustified dimensions*

19. At paragraph 14 of the consultation document,[10] BEREC proposes three main criteria that, if adopted, national regulatory authorities (hereinafter: 'NRAs') are obliged to consider when 'defining' the location of the fixed NTP, namely (i) conformity with applicable law; (ii) the impact on competition in the telecommunications terminal equipment (hereinafter: 'TTE') market; and (iii) existence of an objective technological necessity for equipment to be included in the public communications network.

20. ecta understands that BEREC by this formulation neither intends to cast into doubt or extend the definition of the network termination point, nor to introduce a new legal definition. ecta would nevertheless suggest, for reasons of clarity, to rephrase the wording to refer to 'identifying' the NTP, in accordance with the actual wording of art. 61(7) EECC.[11]

21. Substantively, ecta notes that it remains unclear both how these criteria have been derived and why their applicability would be limited to the identification of the *fixed* network termination point.

22. On the first of these points, ecta observes that the three criteria as well as certain sub-criteria to the third criterion obviously overlap with the 'relevant criteria' that BEREC considered in its 2018 report.[12]

23. However, at that moment, BEREC had yet appropriately qualified these criteria when clearly stating that they '*might* be relevant when a national authority defines the fixed NTP location.'[13]

24. It is unclear on what grounds BEREC now proposes to conclude to their relevance. Furthermore, ecta also notes that their inclusion in the report had no explicit basis, so that justified doubts about their relevance remain.

[10] BoR (19) 181, at 5.

[11] The same consideration applies to para. 141 in respect of the mobile NTP (see immediately below).

[12] BoR (18) 159, at 17ff.

[13] BoR (18) 159, at 17.

25. Secondly, as regards the question of their applicability to the *mobile* NTP, it is worthwhile noting that in deriving its suggested approach to identifying the location of that termination point,[14] BEREC does indeed appear to rely on those criteria, even if in a somewhat selective manner: it thus infers from the fact that users in all Member States 'have the possibility to use their own mobile equipment'[15] that there is no objective technological necessity for this equipment to be considered as part of the public network.[16]

26. BEREC thus disregards the first and, as ecta believes, solely relevant criterion for identifying the NTP, whether fixed or mobile, by referring to other non-essential criteria.

27. In the following subsections, ecta addresses each criterion, including, where applicable, its legal basis, to explain why the tripartite approach proposed by BEREC should be abandoned in favour of guidance based on the legal definition of the NTP and relevant technical criteria, as suggested above (see paragraphs 12 to 14).

### *1.2.2. The criterion of conformity of the NTP location with applicable law*

28. As the first criterion for identifying the location of the network termination point, BEREC refers to its 'conformity … with the legal provisions.'[17]

29. In ecta's view, this wording and the associated arguments[18] lead the guidance in an unhelpful direction by introducing a series of considerations that are not intrinsic to the mandate of art. 61(7) EECC and, indeed, unduly extend beyond it.

30. The following comments discuss in turn the conformity requirements BEREC derives from the Equipment Directive[19] (see paragraphs 31 to 36); the Open Internet Regulation[20] (see paragraphs 36 to 47); and the European Electronic Communications Code (see paragraphs 48 to 51).

31. Most problematic in this respect are the arguments associated with the Equipment Directive. As these also form the basis of the second criterion 'Impact on TTE market', ecta further discusses them in a separate section below.

32. At this point, it suffices for ecta to underline that the analysis set out at paragraphs 26 to 28 of the consultation document provides no indication of what requirement in that directive the practical determination of the location of the NTP would have to comply with.

[14] Ibid.

[15] BoR (19) 181, para. 139, at 24.

[16] BoR (19) 181, para. 140, at 24.

[17] BoR (19) 181, para. 14, at 5.

[18] BoR (19) 181, paras 15-28, at 6ff.

[19] Directive 2008/63/EC, (2008) OJ L162/21.

[20] Regulation (EU) 2015/2120, (2015) OJ L310/1.

33. The reference to an obligation for network operators to publish 'the characteristics of the NTP'[21] has no immediately discernible relevance in this respect.

34. Indeed, this obligation, derivative of the revocation of operators' special and exclusive rights regarding the TTE connected to their networks,[22] requires operators to perform a certain activity, which has no legal link to or incidence on BEREC's mandate under art. 61(7) EECC. Institutionally, this is further underlined by the fact that competence for assessing compliance with that obligation has explicitly not been attributed to BEREC or the constituent NRAs.

35. ecta thus considers that the reliance on the Equipment Directive provides no tangible criterion with which the location of the NTP would have to comply as a matter of law and thus guide the identification process.

**36. On those grounds, ecta believes that section 3.1.4 should be removed from the guidelines as well as, by implication, section 3.2.**

37. BEREC further relies on the Open Internet Regulation, and specifically on its article 3(1), to derive conformity requirements for NTP identification.

38. According to BEREC, end-users' right to 'use terminal equipment of their choice' as stipulated by that provision should lead NRAs to assess whether an objective technological necessity exists for equipment to be considered part of the public network when identifying the NTP location.

39. ecta notes that such a requirement cannot be derived from the Regulation itself.

40. While the Regulation does grant a right to choose terminal equipment, the test of whether an objective technological necessity exists for equipment that end-users receive from an IAS provider to form part of the latter's network is specified only in BEREC's own Open Internet Guidelines.[23]

41. ecta remarks that this test is limited to 'obligatory equipment', that is equipment for which the provider limits end-users' ability to replace it. [24]

42. Within the material limits thus outlined, the test essentially asks whether there might be a justification for terminal equipment to be integrated into the provider's network. In doing so, BEREC thus fittingly acknowledges that there may be circumstances in which limitations to end-user choice are appropriate.

43. According to art. 2(2) OIR, IAS are electronic communications services that provide access to the Internet irrespective of the terminal equipment used.

[21] BoR (19) 181, para. 27, at 8,

[22] Art. 1(3) Directive 2008/63/EC.

[23] BoR (16) 127, August 2016, para. 27, at 9.

[24] BoR (16) 127, para. 26, at 9.

44. This definition does not, however, imply a requirement of unlimited end-user choice. The critical element, as BEREC recognises,[25] is rather for IAS providers not to limit the choice of terminal equipment *beyond* restrictions imposed by manufacturers and distributors in accordance with EU law.[26]

45. In itself, this does not imply any necessary outcome to the process of NTP identification. Indeed, a public electronic communications service could provide access to the Internet with terminal equipment being placed at any of the locations that BEREC suggests.

46. Overall, ecta therefore neither sees the basis for the criterion of 'objective technological necessity' in the Open Internet Regulation, nor how this criterion materially aids identification of the NTP.

**47. For these reasons, ecta proposes to also delete section 3.1.3 from the guidelines as well as, by implication, section 3.3. To the extent relevant, genuinely topological points raised in that section should be addressed on their own terms.**

48. Finally, BEREC refers to the definition of the NTP itself and to that of the local loop in the EECC as introducing conformity requirements to which the identification of the NTP should respond.

49. As regards its analysis regarding the local loop, ecta notes, first, that BEREC unfortunately has not adopted a systematic approach to its analysis of the impact of the identification of the network termination point on other legal concepts under the Code, such as very high capacity network, public communications network, geographic number and caller location information.[27]

50. Secondly, ecta further notes that BEREC leaves unused the opportunity to clearly spell out the implications of a shift in the location of the network termination point for access regulation, as it manifests itself through the local loop definition, which it would have been relevant to include to illustrate the potentially significant implications deriving from this determination.

51. Thirdly, ecta notes that the local loop definition as such does not appear to provide any additional criteria to guide the identification of the NTP.

**52. Overall, ecta concludes that the only legally relevant criteria to be taken into account in identifying the NTP derive from the legal definition in art. 2(9) EECC. Given the legal basis of its mandate as well as the wider knock-on effects on access regulation, ecta supports maintaining mention of the NTP's location in relation to the local loop. This would be most appropriately integrated into the introduction, which could be extended to cover other relevant conceptual intersections (see paragraph 49 above).**

[25] Cf. note 23 above.

[26] Recital 5 Regulation (EU) 2015/2120.

[27] Art. 2(2), (8), (33), (40) EECC.s

### *1.2.3. The criterion of impact on the telecommunications terminal equipment market*

53. ecta has already pointed out above (see paragraphs 31 to 36) that the criterion of impact on the telecommunications terminal equipment market does not provide any guidance value for how to identify the location of the NTP, and should therefore be removed from the guidelines.

54. In this section, ecta comments on BEREC's arguments regarding competition in the telecommunications terminal equipment market, as they are first developed in section 3.2 of the consultation document, and subsequently repeated in section 3.3.

55. The legal and economic issues afflicting these arguments, as set out below, reinforce the above conclusion and thus ecta's call to remove this criterion as immaterial to identifying the location of the NTP.

56. In legal terms, BEREC misinterprets the objective of the Equipment Directive by portraying the objective of establishing competition in the markets for telecommunications terminal equipment out of context and in an unduly restricted manner,[28] and subsequently further narrowing this to an end-user centric view of competition[29].

57. The key norm of the directive is article 2, which BEREC's analysis fails to mention. That provision requires Member States to withdraw exclusive and certain special rights affecting the supply of terminal equipment for connection to the network, on the basis of a Member State review of such rights.[30]

58. BEREC's analysis further ignores that such rights, in a cross-border context, amount to measures having an effect equivalent to quantitative restrictions,[31] thus impairing free movement of equipment within the Union, and thus distort competition[32]. It is this problem, deriving from the historically established monopolies of PTT administrations, that the directive addresses.[33]

59. It is against this background that article 3 requires Member States to guarantee the right for economic operators to import, market, connect, bring into service and maintain terminal equipment.

60. Importantly, article 3 also explicitly enables Member States to derogate from this right by refusing the connection of terminal equipment to the public telecommunications network, where such network fails to comply with relevant technical regulations or essential technical requirements, as applicable.[34]

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[28] BoR (19) 181, paras 26 and 29, at 8.

[29] BoR (19) 181, para. 35, at 8 and para. 46, at 10.

[30] Recitals 2 and 3 of Directive 2008/63/EC.

[31] Recitals 4 and 5 of Directive 2008/63/EC.

[32] Recitals 9 of Directive 2008/63/EC.

[33] Cf. also JE Darnton & DA Wuersch, 'The European Commission's Progress Toward a New Approach for Competition in Telecommunications', (1992) 26 *The Int'l Lawyer* 111(119).

[34] Article 3(2)(b) of Directive 2008/63/EC.

61. Moreover, the directive assigned the right to economic operators, thus clearly indicating that the expected drivers of competition were at the supply side of the terminal equipment market.

62. It follows from what precedes that the directive sought to remove impediments to competition in the internal market by facilitating access to terminal equipment across borders.

63. ecta therefore cannot follow BEREC's shorthand assertion that the directive 'aims to enable end-users to use the TTE of their choice',[35] suggesting that the instrument aimed to promote competition at retail level, when, in reality, this was a derivative consideration of the regulatory intervention to remove exclusive and special rights and thereby introduce competitive dynamism on the supply side of the equipment market.

64. Had the directive really sought to promote demand side choice beyond those historical circumstances, it should have remained relevant to the development of competition in equipment markets. However, there is no evidence to suggest this.

65. There is thus also no room for suggesting, as BEREC does, [36] that the directive and the OIR would both seek to one-dimensionally promote end-user choice.

66. Even to the extent that the classification of equipment as TTE or NTP might have an impact on the market for either, such considerations are clearly outside the scope of the mandate of art. 61(7) EECC. In particular, NRAs have no mandate under that provision or the Code more generally to promote competition in any specific equipment market.

67. Where competition problems exist in those markets that are not due to exclusive or special rights, these should be addressed by competition law. Incidentally, ecta observes that BEREC's own reasoning suggests that the relevant market may be wider than TTE.[37]

68. Moreover, ecta also finds BEREC's analysis of the link between the location of the NTP and its impact on the TTE market[38] not compelling insofar as it posits a link between differentiation in end-user needs and diversity of equipment supply. Clearly, most end-user needs are addressed at the services rather than at the equipment level. Data on consumer choice of equipment suggest that there is limited customer interest in active selection.[39]

69. Similarly, it is questionable whether an NTP location can be directly translated into a decrease or increase in the number of customers for equipment vendors.[40] Thus, even if the network termination point was located at point A, this would not automatically imply

[35] BoR (19) 181, para. 45, at 10.

[36] BoR (19) 181, para. 45, at 10.

[37] BoR (19) 181, para. 32, at 8 (referring to a CPE market 'including the TTE').

[38] BoR (19) 181, paras 34 to 42, at 8f.

[39] E.g. <https://welcher-kabelanbieter.de/vodafone/routerfreiheit-nur-ein-prozent-der-kabelkunden-nutzt-die-neuen-moeglichkeiten/>, 21.8.2017.

[40] BoR (19) 181, paras 35, 38f and 41, at 8f.

that providers would no longer offer equipment to end-users or indeed that end-users would decide to use their own equipment.

70. Finally, the aforementioned issues also translate into uncertainty about the economics of buying power and innovation, so that no immediate conclusions about the beneficial impact on innovation from the location of the NTP appear appropriate, contrary to BEREC's suggestions.[41]

**71. Overall, the above examination of legal and economic issues regarding the criterion 'impact on TTE market' has shown that in each of these dimensions significant concerns exist. These concerns reinforce ecta's conviction that this criterion, which of itself offers no guidance for identifying the NTP location, should be removed from the guidelines (see paragraph 36). This applies in equal measure to section 3.3 to the extent that the argument therein draws on this criterion.[42] Also in this respect, the above analysis thus reinforces ecta's plea to remove the criterion of 'objective technological necessity' (see paragraph 47).**

## 2. The way forward

72. In the introduction to this contribution, ecta and its members have already indicated their belief that to address the multiple issues outlined above, BEREC should actively engage with industry representatives (see paragraph 4). Member companies, associations and the ecta secretariat would welcome the opportunity to participate in such exchange.

73. In addition to the specific indications regarding the technical parameters along which to refine its analysis (see paragraphs 12 to 14), ecta wishes to further provide BEREC with a set of considerations that should provide a framework for reframing the guidance within the perimeter of the legislative mandate set by art. 61(7) EECC.

74. It has been argued above that the identification of the NTP location should always start from the legal definition of the network termination point. This, by necessity, entails a series of technical considerations.

75. Beyond those technical considerations is also missing from BEREC's consultation draft a more precise conceptualisation of the NTP from within the Code. Only an appropriate conceptualisation on those grounds, however, can lead to an application of the concept, including for purposes of art. 61(7) EECC, that not only complies with the definitional elements, but also captures the function of the NTP in a manner that contributes to the fulfilment of the objectives of the Code.

[41] BoR (19) 181, para. 46, at 10.

[42] BoR (19) 181, paras 45 to 49, at 10.

76. In this regard, ecta considers recurring reference to the NTP as a boundary between the regulation of electronic communications networks and services and the regulation of TTE,[43] even if rooted in the Code,[44] as unnecessarily vague and of no immediate use. It is this obfuscating effect that leads to a juxtaposition of the network operator's domain to that of the end-user in a manner suggesting that the two should be placed on an equal footing[45] or even that the identification of the NTP should lead to the greatest possible reduction of the network operator's domain in the interest of competition and innovation, or because legislation allegedly seeks to promote end-user choice.

77. In the preceding sections, ecta has shown that none of the extrinsic sources relied upon convincingly support such an approach. It is therefore necessary to positively define an appropriate conceptual approach to the NTP and its identification, which represents a durable basis for future regulatory practice and sound market development.

78. The starting point for such conceptualization must in ecta's and its members' view be the observation that the network termination point clearly and unequivocally forms part of the operator's domain. Historically, it has been along this understanding that sectoral liberalisation occurred.[46]

79. Also today, such a network-centric understanding of the NTP remains valid and appropriate. Indeed, an increased focus on infrastructure competition means that the notion of the network termination point as the point controlling end-user access to the network will receive renewed attention, too.

80. It is critical that under these circumstances, and notably as end-user expectations to network performance and stability are increasing, network providers and their wholesale customers are able to ensure network integrity that underpins seamless functioning with a minimum of disruption. It is precisely in this context that obligations for providers of public electronic communications networks to maintain the integrity of their networks feature among general authorisations conditions under the Code.[47]

81. This dimension, in turn, is also centrally tied to the security of network that providers must protect through appropriate risk management,[48] which is defined as the ability to resist at a given level of confidence any action that compromises network integrity, availability, authenticity or confidentiality.[49] Also this dimension demands heightened attention and investment today, especially given cybersecurity threats to 5G networks and the earlier generation infrastructures on which they operate, as recognised by the

[43] BoR (19) 181, para. 6, at 4.

[44] Recital 19 EECC.

[45] BoR (19) 181, Figure 1, at 4.

[46] Darnton & Wuersch 114f.

[47] Annex I, point B.4 EECC.

[48] Art. 40(1) EECC.

[49] Art. 2(21) EECC.

European Commission[50] and Member States[51] alike. Also BEREC itself has recently prominently recognised this dimension in the context of the 2019 Stakeholder Forum and as part of its draft Work Programme for 2020[52].

82. Network operators and their wholesale customers therefore dedicate significant planning and financial resources to ensuring that the services and products they deliver at retail level meet applicable standards and respond to evolving user needs and expectations as well as to an evolving threat landscape.

83. More generally speaking, the compliance duties relating to network provisioning are incumbent on network operators, as are the statutory and contractual performance obligations.

84. In order to enable providers to meaningfully and realistically meet these targets, their autonomy to decide on the parameters of network provisioning has to be recognised and acknowledged as such.

85. ecta notes that while BEREC in its consultation draft does recognise network operators' freedom to specify the technical characteristics of the NTP *in abstracto*,[53] this freedom and its link to the preceding considerations are not reflected in subsequent discussion of approaches to identifying the NTP.

86. Instead, BEREC focuses much of its analysis one-dimensionally on the freedom of choice of end-users. This is most clearly expressed in its discussion of the simplicity of public network operations – that are under the responsibility of providers – when BEREC suggests that 'the degree to which the use of end-user owned equipment impairs the simplicity of network operations has to be substantial and the negative results have to outweigh evidently the potential benefits for end-users and competition on the TTE market'[54].

87. ecta sees two principal problems with this statement. First, it appears to suggest that end-users' ability to choose equipment should determine the location of the NTP, even though the Code provides no basis for this. Secondly, BEREC here implies that the onus is on providers to demonstrate substantial negative consequences that must significantly exceed *potential* end-user benefits.

88. This line of reasoning appears to reverse the relationship between the end-user and the provider of network access, contrary to the principle of operator autonomy in specifying the network, including its termination point. Together with the materially unspecified approach to identifying the location of the NTP in accordance with art. 2(9) EECC, BEREC

[50] Commission Recommendation (EU) 2019/534, (2019) OJ L88/42, point 2(a); cf. also point 5 and recital 11.

[51] NIS Cooperation Group, *EU Coordinated Risk Assessment of the Cybersecurity of 5G Networks*, 9.10.2019.

[52] BoR (19) 183, at 3, 5, 6, 20, 22f, 46f.

[53] BoR (19) 181, paras 10 to 12, at 4fs and para. 58, at 11.

[54] BoR (19) 181, para. 85, at 15.

herewith effectively seems to set the default position at point A for as long as end-user benefits are potentially discernible.

89. The fact that the implications of this upended perspective are anything but trivial is readily apparent when the abstract dimension of more or fewer pieces of equipment connected to the NTP is coupled with the considerations of network integrity and security outlined above. This combination goes to show that there may not only be increases in administrative overhead and operational expenditure, but also novel threat scenarios and potential impediments to network functioning.

90. ecta is here also especially concerned about the one-sided portrayal that BEREC gives of the issue of fault management. Stating that '[f]ault repair is in the interest of the end-user and, therefore, the end-user *may* allow the network operator to access the mode, router, media box etc. in order to enable fault analysis and repair',[55] BEREC dismisses the fact that faults at the level of the individual user can, depending on the technical circumstances, have network-wide repercussions. This reinforces an overall unbalanced portrayal of the complexities of network management for operators who will generally be responsible for ensuring the smooth functioning of networks in terms of service delivery for more than one user at a time.

91. This also does not appropriately consider the need for operators to be able to protect the public communications network against harm from end-users' TTE, which BEREC rightly recognises[56] as being inherent to operator autonomy in specifying network requirements (see paragraph 84 above). Yet in its discussion of TTE harm to the network, BEREC only refers to the need for 'measures … to handle such situations properly'.[57] Specifically from the angle of network security assurance in situations where the NTP is chosen to maximise end-user choice, BEREC complements this merely with the assertion that operators can 'take appropriate measures in their networks (e.g. at the edge of the core network)'[58] against the incidents caused.

92. Overall, ecta thus considers the discussion of the key operational dimensions of network integrity, security and management to be suffering from two major weaknesses.

93. First, the discussion appears to conceptually reverse the relation between end-user and network operator, putting a premium on widening the end-user's domain, when the point of departure needs to be the network termination point as the last element of the operator's domain.

94. Secondly, the draft suggests that these dimensions, each upon its own, can support a finding of 'objective technological necessity' that would justify the in- or exclusion of a piece of equipment from the public communications network.

[55] BoR (19) 181, para. 74, at 14; ecta's emphasis.

[56] BoR (19) 181, para. 58, at 11.

[57] BoR (19) 181, para. 59, at 12.

[58] BoR (19) 181, para. 92, at 16.

95. To address these concerns, which make the guidance document overall seem unbalanced, ecta believes that the presentation needs, to a much larger extent, appropriately integrate the autonomy of the network operator and, where relevant, of wholesale customers in specifying the network.

96. Moreover, ecta also believes that the above dimensions need to be decoupled from the criterion of 'objective technological necessity', for reasons outlined elsewhere (see paragraphs 37 to 47 and 71 above), and introduced as self-standing sections without any direct bearing on the identification of the network termination point. It should thus become clear that these dimensions are integral to, and may indeed have shaped the operator's decision in favour of, a particular topology, but that they do not represent selection criteria that authorities can freely apply to determine the location of the NTP; instead, identification needs to occur on the basis of the definition in art. 2(9) EECC in view of the chosen topology.

97. To illustrate the problems associated with identifying point A as the default location of the NTP, ecta refers to a problem that several of its members who are actively engaged in deploying fibre networks have encountered. In multipoint architectures, freedom of choice at the ONT (modem) level will lead to errors in that equipment (and thus in the TTE) being passed on to the OLT and thus impact all other parties connected there. Scenarios of several hundred affected parties have been reported.

98. This example illustrates a case in which an emphasis on choice alone leads to harm, in the sense of the consultation draft, being caused to other network participants along topological lines.

99. Importantly, the likelihood of such harm arising is also linked to the stage of technological development at which the different technical components in the network have arrived. In the early development stages, equipment manufacturers will focus exclusively on ensuring interworking within their own product range. At this point, the introduction of third party equipment as in the above example is guaranteed to cause harm because of the lack of alignment between equipment vendors. While in a subsequent stage, major manufacturers will ensure compatibility between their products, it is generally only in a third step that formal standardisation takes place, which can limit these network incidents based on incompatibility as far as possible.

100. In ecta's view, this element of technological maturity is a relevant consideration that may have a material direct impact on the identification of the NTP to the extent that it shapes deployment decision-making and objectively limits the options available for independent selection at end-user level. ecta would therefore welcome inclusion thereof in the final guidelines.

101. Additionally, the example also draws attention to an aspect that should form part of a differentiated technical assessment for purposes of NTP identification on the basis of art. 2(9) EECC, namely the issue of whether an equipment is critical to managing signal transport to the customer or simply concerns distribution at local level. Notably where emphasis on device choice significantly impedes the possibility for the network operator

to provide the service contracted for because it interferes with signal transport at network level, ecta would suggest that equipment at the corresponding location be classed as belonging to the network. The impossibility for network operators to include customers into a Wi-Fi sharing arrangement that the latter have opted into when these choose a router that is not supplied by the operator, provides an illustrative example.

102. Finally, ecta wants to draw attention to a further element that is of particular relevance for providers of business connectivity services. Such providers will often offer their customers connection of novel equipment and versions of equipment that may not yet have been fully standardised or certified, or be requested to facilitate such connection. Where certification is necessary in order to operate such equipment within the network or to allow its connection to the network, it is critically important to ensure that the necessary certification processes operate quickly and resource efficiently in order to ensure that service solutions can be brought on-stream as quickly as possible. In these cases, competent authorities should be particularly attentive to any possible involvement of undertakings with significant market power in such processes that might frustrate competitive provisioning of business connectivity.

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In case of questions or requests for clarification regarding this contribution, BEREC and its members are welcome to contact [redacted], Director of Competition & Regulation at ecta, at [redacted]