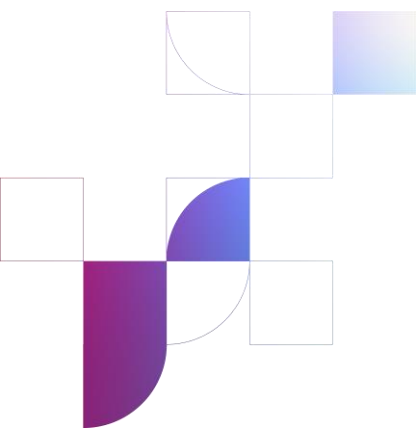


BEREC Opinion for the evaluation of the application of the Open Internet Regulation



December, 2022

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1. Background

The objective of this BEREC Opinion is to provide input to the European Commission (EC) for its second report to the European Parliament and the Council on the review of Regulation (EU) 2015/2120¹, due by 30 April 2023. A first report² on this matter was issued by the EC on 30 April 2019. To feed into that review, BEREC provided an Opinion³ to the EC in December 2018.

This Opinion is based on BEREC's experience with the application of the OIR and the associated BEREC Open Internet Guidelines⁴ (OI Guidelines). Additionally, BEREC has considered stakeholders' contributions to the public consultations on the draft updated OI Guidelines⁵ and on the draft Report on the Internet Ecosystem⁶.

The expertise in the field of enforcing and supervising the provisions of the OIR within BEREC is built on the continuous collaboration between national regulatory authorities (NRAs). This collaboration consists of exchanging information and sharing best practices with the aim of ensuring a harmonised and consistent application of the OIR at European level (Chapter 3).

Based on the experiences gathered over the past four years of applying the OIR, BEREC discusses articles 3 to 6 of the OIR, that are subject to a review by the EC, and to what extent the OIR is fit for purpose. These provisions are related to safeguarding open internet access, transparency requirements, supervision and enforcement as well as penalties that could be imposed in cases of infringement (Chapter 4).

With its four judgments issued in 2020 and 2021, the European Court of Justice (ECJ) provided further clarity on the application of the OIR. Following the three judgments of

¹ This report refers as "the OIR" to the open internet rules contained in Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union.

² Commission report on open internet, <https://digital-strategy.ec.europa.eu/en/library/commission-report-open-internet>

³ BEREC Opinion for the evaluation of the application of Regulation (EU) 2015/2120 and the BEREC Net Neutrality Guidelines (BoR (18) 244), https://www.berec.europa.eu/sites/default/files/files/document_register_store/2018/12/BoR%20%2818%29%20244_BEREC_Opinion_NN_evaluation_.pdf

⁴ BEREC Guidelines on the Implementation of the Open Internet Regulation (BoR (22) 81), <https://www.berec.europa.eu/en/document-categories/berec/regulatory-best-practices/guidelines/berec-guidelines-on-the-implementation-of-the-open-internet-regulation-0>

⁵ Draft Update to the BEREC Guidelines on the Implementation of the Open Internet Regulation (BoR (22) 30), <https://www.berec.europa.eu/en/document-categories/berec/regulatory-best-practices/guidelines/draft-update-to-the-berec-guidelines-on-the-implementation-of-the-open-internet-regulation>; <https://www.berec.europa.eu/en/news-publications/news-and-newsletters/berec-publishes-the-received-stakeholders-input-to-the-public-consultation-on-the-draft-berec-guidelines-on-the-implementation-of-the-open-internet-regulation>

⁶ Draft BEREC Report on the Internet Ecosystem (BoR (22) 87), <https://www.berec.europa.eu/en/document-categories/berec/public-consultations/draft-berec-report-on-the-internet-ecosystem>

September 2021, BEREC published an update of its OI Guidelines in June 2022 and NRAs are continuously monitoring the implementation of the rulings by internet service providers (ISPs). Based on information gathered from NRAs, BEREC has assessed the effects of the discontinuation of zero-rating products on the market and on end-users (Chapter 5).

Considering the technological evolution and the developments in the market, BEREC has re-evaluated its conclusions of 2018⁷ related to the emergence of new technologies. In particular, BEREC has evaluated whether the OIR is leaving considerable room for the implementation of 5G technologies and the possibility of differentiating quality of service (QoS) (Chapter 6).

Beyond its activities in the context of the OIR as described in the following chapters, BEREC has explored in several of its recent work streams the opportunity to draw from the experience of enforcing the OIR in order to work towards more openness in other elements of the internet ecosystem. This would ensure that the end-user can exert his/her right to an open internet more extensively. This topic is treated in the Report on ex-ante regulation of digital gatekeepers⁸ and, very recently, in the Report on the Internet Ecosystem⁹. In the latter Report, BEREC assesses how each element in the internet ecosystem impacts both the ability of users to access and distribute information and content, without unlawful interference or discrimination, as well as the ability to innovate. BEREC also sets out areas where further analysis and/or monitoring could be carried out, without calling for opening the OIR to those areas.

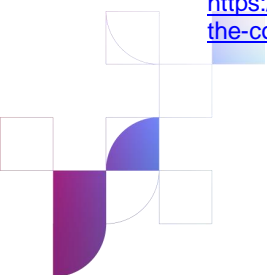
At the time of its adoption, the OIR was the result of prolonged negotiations and constituted a working compromise between the many stakeholders involved in the process. In BEREC's view, in the time since, the OIR has significantly contributed to the preservation of the open internet ecosystem and to the enforcement of the rights of end-users. It has been interpreted several times by the ECJ providing additional clarity and legal certainty. The BEREC OI Guidelines, as well as relevant work by ENISA¹⁰ have given useful guidance to all stakeholders. In summary, BEREC considers that the OIR continues to be fit for purpose. Therefore, BEREC sees no merit in changing the text of the OIR.

⁷ BEREC Opinion for the evaluation of the application of Regulation (EU) 2015/2120 and the BEREC Net Neutrality Guidelines (BoR (18) 244), Chapter 7

⁸ Report on ex-ante regulation of digital gatekeepers (BoR (21) 131), <https://www.berec.europa.eu/en/document-categories/berec/reports/berec-report-on-the-ex-ante-regulation-of-digital-gatekeepers>

⁹ BEREC Report on the Internet Ecosystem (BoR (22) 167), <https://www.berec.europa.eu/en/document-categories/berec/reports/berec-report-on-the-internet-ecosystem>

¹⁰ ENISA Guideline on assessing security measures in the context of Article 3(3) of the Open Internet regulation, <https://www.enisa.europa.eu/news/enisa-news/enisa-produces-guidelines-for-assessing-security-measures-in-the-context-of-net-neutrality>



2. General overview

The OIR went into effect on 30 April 2016, harmonising the concept of an “open internet” in the context of providing internet access services (IAS) to end-users at European level. Before the entry into force of the OIR, some Member States already had similar legislation in place, while others had not regulated the relevant areas. The OIR regulates topics such as end-user rights to access and provide information and services as well as to use terminal equipment of their choice and the obligation on ISPs to treat all traffic equally. Furthermore, it sets requirements on transparency as well as for the introduction of prioritised services (“specialised services”), solving some pre-existing issues¹¹.

Complementary guidance for the interpretation of the OIR was provided by BEREC in the form of guidelines published in 2016, and subsequently updated in 2020 and 2022. These OI Guidelines are taken into utmost account by all NRAs as required by recital 19 of the OIR. Besides the BEREC OI Guidelines, the ECJ also provided further clarity on the application of the OIR with its four judgments.

3. Collaboration among NRAs and expertise within BEREC

NRAs are participating in the BEREC Open Internet Working Group (OI WG), which regularly meets to discuss national cases and to actively work on a common interpretation and enforcement of the OIR. This continuous collaboration contributes to exchanging and sharing information, best practices, and experience with the aim of developing a harmonised and consistent application of the OIR at European level. It also gives NRAs the opportunity to consult in a confidential environment with other NRAs and their respective experts on new national developments both from a markets perspective and a technological perspective, further increasing the harmonisation level, speed and effectiveness of NRA supervision. Given the relevance of these informal exchanges, BEREC notes that the lack of full harmonisation of the NRAs’ competences for the enforcement of the OIR in practice¹² limits the consistent implementation of the OIR across the EU.

This exchange is complemented by drafting various reports, guidelines and other publications that the OI WG produces, e.g. the annual BEREC report on the implementation of the OIR (BEREC Implementation Report).

Additionally, the harmonised application of the OIR is further ensured by the continuous interaction between BEREC and the EC as well as with other stakeholders. Indeed, BEREC

¹¹ E.g., at least 21 % of fixed and at least 36 % of mobile broadband users were affected by Peer-to-Peer (P2P) limitations, at least 21 % were affected by VoIP traffic restrictions. Some ISPs blocked tethering in devices, information about traffic management was not transparent, see *Commission report on open internet* (2019), <https://ec.europa.eu/newsroom/dae/items/649700/en>

¹² Namely, the EECC is transposed in at least one Member State in a way that the actual enforcement of the OIR is not the responsibility of the NRA.

organises stakeholders' workshops on dedicated topics as well as inviting stakeholders to contribute to calls for inputs and/or public consultations where appropriate. BEREC has also published the OI Guidelines document, which is a useful tool both for NRAs and other stakeholders and which contributes to the consistent application of the OIR. BEREC reviews and updates the OI Guidelines when appropriate.

Finally, BEREC provides a forum for NRAs to share information and exchange experiences and best practices related to national measurement tools' development and deployment. In this context, BEREC considers best practices on collaboration to maximise the benefits of existing NRA cooperation on development and deployment of measurement tools. These activities support NRAs in the performance of their duties¹³ related to monitoring and enforcement of the provisions protecting end-user rights, including transparency requirements, and the promotion of the continued availability of non-discriminatory IAS at levels of quality that reflect the advances in technology.

- BEREC provides a platform to ensure collaboration between NRAs, leading to consistent enforcement of the OIR.
- The OI Guidelines are a useful tool both for NRAs and other stakeholders and contribute to the consistent application of the OIR.

4. The OIR is fit for purpose

Considering the ongoing information exchange as well as the maturity of both the OIR and its enforcement, BEREC is of the view that the application of the OIR in its sixth year is working well¹⁴. This viewpoint is also supported by, and based on, the yearly publication of NRAs' OI reports and the BEREC Implementation Reports.

In the following sections, BEREC assesses the articles of the OIR that are subject to a review by the EC and why it considers that the OIR is fit for purpose.

4.1. Safeguarding of open internet access

Both NRAs' monitoring activities and dialogue with stakeholders reveal that the provisions of Article 3 of the OIR regarding the measures to safeguard open internet access as well as the implementation of these measures are working.

Regarding commercial practices and technical conditions, the OIR provides enough flexibility for ISPs to innovate and offer new and differentiated products. This holds true even in light of

¹³ See OIR, Article 5(1).

¹⁴ BEREC Report on the implementation of the Open Internet Regulation 2022 (BoR (22) 128), <https://www.berec.europa.eu/en/document-categories/berec/reports/berec-report-on-the-implementation-of-the-open-internet-regulation-2022>

the ECJ rulings which deemed zero-rating offers as being incompatible with the OIR. BEREC considers that there is still room for price differentiation when traffic is treated equally, and the 2022 OI Guidelines provide further clarifications in this regard (see Chapter 5 for further details).

Regarding 5G and the use of innovative technologies to enable differentiated QoS offers, BEREC considers that the OIR seems to leave considerable room for the implementation of these technologies. BEREC is not aware of any concrete example where the implementation of 5G technology would be impeded by the OIR¹⁵ (see Chapter 6 for further information).

BEREC also believes that it should look at the IP interconnection ecosystem in more detail. Indeed, “NRAs may take into account the interconnection policies and practices of ISPs in so far as they have the effect of limiting the exercise of end-user rights under Article 3(1)” as provided by paragraph 6 of the OI Guidelines.

Regarding the use of exception a) of Article 3(3) of the OIR, BEREC noted that the Covid-19 crisis and the media sanctions against Russia¹⁶ have additionally proved that the applicability and functionality of the OIR is maintained even in exceptional events and situations. In particular:

- In the case of the Covid-19 pandemic, some Member States used the flexibility to take national legislations to zero-rate specific applications (e.g. Covid-19 tracing applications). BEREC notes that while traffic on fixed and mobile networks increased during the first (approximate) twenty months of the Covid-19 crisis, no major congestion issues have ever been reported¹⁷.
- Regarding the media sanctions imposed at European level, BEREC clarified that the decision in which the sanctions are imposed is a legal Act that falls within the scope of the exceptions in Article 3(3) of the OIR. BEREC also informed ISPs on the domains related to the entities mentioned in the Annex XV of the Regulation (EU) 2022/350 to fall under the scope of the exceptions in Article 3(3) of the OIR.

¹⁵ Report on the outcome of public consultation on the Update to the BEREC Guidelines on the Implementation of the Open Internet Regulation (BoR (22) 80), <https://www.berec.europa.eu/en/document-categories/berec/reports/report-on-the-outcome-of-public-consultation-on-the-update-to-the-berec-guidelines-on-the-implementation-of-the-open-internet-regulation>

¹⁶ Council Regulation (EU) 2022/350 of 1 March 2022 amending Regulation (EU) No 833/2014 concerning restrictive measures in view of Russia's actions destabilising the situation in Ukraine, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2022.065.01.0001.01.ENG

¹⁷ BEREC Summary Report on the status of internet capacity, regulatory and other measures in light of the Covid-19 crisis (BoR (21) 184), https://www.berec.europa.eu/sites/default/files/files/document_register_store/2021/11/BoR-21-184_20211123_Covid-19_Summary-report.pdf

In regard to the security exception of exception b) of Article 3(3) of the OIR, further guidance is provided by ENISA, allowing an easier assessment for ISPs¹⁸.

4.2. Transparency requirements, enforcement and supervision

The monitoring reports made by NRAs show that the transparency requirements, as provided by Article 4 of the OIR, were beneficial and generally fulfilled by ISPs and that there were no specific transparency monitoring issues. In particular, ISPs are required to specify the QoS in their offers thereby allowing end-users to compare different offers and to ensure end-user rights are upheld.

Furthermore, additional guidance regarding the transparency requirements provided at national level supports the implementation of the OIR in a consistent and harmonised way. In 19 Member States¹⁹, NRAs provide a measurement tool so that end-users can test the quality of their IAS.

The effectiveness of enforcement is guaranteed as all NRAs currently have the option to impose proportionate and effective penalties in cases of infringements of the OIR. The base for penalties differs between Member States and may, in some cases, amount to up to 10%²⁰ of the most recent annual turnover of an undertaking.

The OIR gave NRAs powers to ensure the fulfilment of the OIR's objectives (Articles 5 and 6 of the OIR). Since the OIR entered into force, NRAs' decisions taken against ISPs were challenged in the Courts in eight Member States²¹. In the vast majority of cases, Courts' decisions (intermediary or final) have endorsed NRAs' decisions. Only in one Member State, the Court's preliminary ruling contradicted the NRA's decision, however an appeal at the higher Court is currently pending.

- Given the overall experiences of monitoring the implementation of the commercial practices and/or technical conditions, BEREC is of the view that **no changes regarding Article 3 of the OIR are necessary**.
- Considering the progress made in implementing the transparency requirements, BEREC is of the view that **no changes regarding Article 4 of the OIR are required**.

¹⁸ ENISA Guideline on assessing security measures in the context of Article 3(3) of the Open Internet regulation, <https://www.enisa.europa.eu/publications/guideline-on-assessing-security-measures-in-the-context-of-article-3-3-of-the-open-internet-regulation>

¹⁹ BEREC Report on the implementation of the Open Internet Regulation 2022 (BoR (22) 128), Annex I

²⁰ BEREC Report on the implementation of Regulation (EU) 2015/2120 and BEREC Open Internet Guidelines 2021 BoR (21) 119, <https://www.berec.europa.eu/en/document-categories/berec/reports/berec-report-on-the-implementation-of-regulation-eu-20152120-and-berec-open-internet-guidelines-2021>;

BEREC Report on the implementation of the Open Internet Regulation 2022 (BoR (22) 128), <https://www.berec.europa.eu/en/document-categories/berec/reports/berec-report-on-the-implementation-of-the-open-internet-regulation-2022>

²¹ BEREC Report on the implementation of the Open Internet Regulation 2022 (BoR (22) 128), Chapter 9 and Annex I

- The OIR gave NRAs powers, which NRAs are using to protect end-users and simultaneously to guarantee the continued functioning of the internet ecosystem as an engine of innovation. Thus, in BEREC's opinion **there is no need to change Articles 5 and 6 of the OIR.**

5. Impact of the ECJ rulings on market and end-users

In the following sections, further information is provided on the ECJ rulings (Section 5.1) and on the update of the OI Guidelines on the topic of differentiated pricing, including zero tariff options (Section 5.2). Moreover, BEREC has evaluated how the ECJ rulings affected the national markets and end-users. Hence, a description of the current situation in relation to zero tariff options and other forms of differentiated pricing practices is provided (Section 5.3). In the final section (Section 5.4), BEREC explains why it considers that the OIR is fit for purpose.

5.1. ECJ rulings in relation to zero tariff options

In three rulings of 2 September 2021, the ECJ concluded, in reference to questions raised by the German national courts, that a zero tariff option as such violates the general obligation to treat all traffic equally laid down in Article 3(3) first subparagraph OIR.

'Zero tariff' options (commonly also referred to as 'zero-rating' options) are practices included in or attached to an IAS offer. They mean that the traffic generated by specific (categories of) applications is not counted towards the data volume of the basic package of the IAS offer²².

Conditions of use attached to such practices were assessed by the ECJ for the first time in 2020. In its *Telenor Magyarország* ruling of 15 September 2020²³, the ECJ emphasised the principle of the "*general obligation to treat all traffic equally*" in Article 3(3), subparagraph 1 of the OIR, to be applicable to applications and services covered by 'a zero tariff', but ultimately only answered the questions referred by the Hungarian court.²⁴

²² The ECJ defines a 'zero tariff' option in its rulings of 2 September 2021 as "*a commercial practice whereby an internet access provider applies a 'zero tariff', or a tariff that is more advantageous, to all or part of the data traffic associated with an application or category of specific applications, offered by partners of that access provider. Those data are therefore not counted towards the data volume purchased as part of the basic package. Such an option, offered in the context of limited packages, thus allows internet access providers to increase the attractiveness of their offer.*", see ECJ, C-854/19 Vodafone (Roaming), paragraph 15; C-5/20 Vodafone (Tethering), paragraph 14; C-34/20 Telekom Deutschland, paragraph 17.

²³ <https://curia.europa.eu/juris/document/document.jsf?text=&docid=231042&pageIndex=0&doclang=EN&mode=I&dir=&occ=first&part=1&cid=848352>

²⁴ The questions referred to the ECJ were as follows (see ECJ, C-807/18 *Telenor Magyarország*):

- If there is a commercial agreement between the IAS provider and the subscriber concerning the differentiated treatment of traffic, should such an agreement be evaluated in the light of Article 3(2)?

However, in 2021, the ECJ decided not only to answer the questions referred to it by the German courts but also to clarify its 2020 ruling on the underlying admissibility of zero tariff options as such.

The main finding from the reasoning in the rulings is that zero tariff options are incompatible with the equal treatment obligation as set out in Article 3(3) of the OIR since traffic is not treated equally. The reason for this is that the zero tariff option “*draws a distinction within internet traffic, on the basis of commercial considerations, by not counting towards the basic package traffic to partner applications*”²⁵.

Consequently, since the zero tariff option as such is not in line with Article 3(3) first subparagraph 1 of the OIR, the ECJ decided not to assess the individual limitations of use of zero tariff options referred to it by the German national courts. The ECJ regards the individual limitations of use as also being incompatible with the equal treatment obligation as set out in Article 3(3) of the OIR, by the mere activation of the zero tariff option, and the “*incompatibility remains, irrespective of the form or nature of the terms of use*”²⁶.

BEREC concludes, in particular from the two 2021 ECJ rulings concerning the zero tariff options of Vodafone, that the ECJ did not limit its interpretation of Article 3(3) of the OIR to zero tariff options associated with traffic management measures. Contrary to Deutsche Telekom’s zero-rating offer “StreamOn” (which in its original version contained a video throttle in certain tariffs), Vodafone’s zero-rating offer “Vodafone Pass” did not contain any technical discrimination. The ECJ did not base its reasoning on technical traffic management measures. Rather, the ECJ states that the violation of the general obligation to treat all traffic equally “*results from the very nature of such a tariff option*”²⁷. Therefore, the equal treatment obligation also applies to zero tariff options without technical discrimination.

Because BEREC considered that the reasoning of the ECJ was also applicable to other offers not directly addressed by the ECJ rulings issued on 2 September 2021, it commenced the process²⁸ of updating the topic of differentiated pricing in the OI Guidelines.

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- If the answer to the first question is negative, is there – based on Article 3(3) – a need to conduct an impact- and market-based evaluation to establish an infringement of the end-user rights contained in Article 3(1)?
 - Should Article 3(3) be interpreted as an objective prohibition against any traffic management practice that distinguishes between various forms of traffic, no matter what is the basis of this practice?
 - If the third question is answered positively, can an infringement of Article 3(3) be established on its own, without the need for an impact- and market-based evaluation in the light of Article 3(1) and 3(2)?

²⁵ ECJ, C-854/19 *Vodafone (Roaming)*, paragraph 28; C-5/20 *Vodafone (Tethering)*, paragraph 27; C-34/20 *Telekom Deutschland*, paragraph 30.

²⁶ ECJ, C-854/19 *Vodafone (Roaming)*, paragraph 33; C-5/20 *Vodafone (Tethering)*, paragraph 32; C-34/20 *Telekom Deutschland*, paragraph 35.

²⁷ ECJ, C-854/19 *Vodafone Pass (Roaming)*, paragraph 29; C-5/20 *Vodafone Pass (Tethering)*, paragraph 28; C-34/20 *Telekom Deutschland GmbH (StreamOn)*, paragraph 31.

²⁸ This process involves a public consultation and consideration of comments made before issuing the final Guidelines.

5.2. 2022 update of the OI Guidelines in relation to differentiated pricing practices

In light of the ECJ rulings, BEREC decided to update the OI Guidelines. In addition to a few technical modifications due to the adoption and national implementation of the European Electronic Communications Code (EECC), the main focus of this limited update was a reassessment of the BEREC guidance concerning zero-rating, and its extension to other commercial practices of ISPs that result in the unequal treatment of traffic. In keeping with the major findings of the ECJ decisions, BEREC continues to emphasise the general obligation of ISPs to treat all traffic equally²⁹. However, the updated OI Guidelines make it clear that, in BEREC's reading, this is not limited to technical traffic management, but also includes both unilateral commercial practices and contract terms of the ISP. Deviation from this principle is only possible where it is allowed by the OIR³⁰. Technical and commercial measures and practices that are application-agnostic in nature remain admissible and still provide ISPs with options to differentiate their offerings in the market. The OI Guidelines have been updated to include several examples of such practices. The guidance on regulatory assessment of ISPs' commercial practices has been changed accordingly, as well.

The second major change in this Guidelines' update is the introduction of the term "differentiated pricing practices". These – in accordance with the ECJ rulings and BEREC's reading of them, as indicated in Section 5.1 – include not just zero-rating (now called zero tariff options) but also all other pricing practices where the price per amount of data (e.g. GB) is not the same for all traffic across a particular IAS tariff. Differentiated pricing practices include both practices that are legally admissible and others that are not. The OI Guidelines note that in addition to zero tariff options, inadmissible pricing practices include all other differentiated pricing practices that are not application-agnostic. In BEREC's opinion, this includes examples such as applying zero price to traffic generated by the ISPs' own applications, or content and service providers subsidising the price of traffic generated by their own applications.

BEREC's updated Guidelines also uphold the inadmissibility of a previously mentioned example where all applications are blocked or slowed down after the general data cap of the end-user is exhausted, except for the applications for which differentiated pricing is in effect. This was the main finding of the Telenor Magyarország decision.

In accordance with the ECJ rulings, the parts presenting some forms of zero-rating as potentially admissible have been deleted from the OI Guidelines, along with the detailed steps of the case-by-case assessment to be undertaken by NRAs when evaluating such offers.

BEREC also amended the part of the OI Guidelines dealing with the exception a) of Article 3(3), subparagraph 3 of the OIR from the obligation of treating all traffic equally based on Union and national legislation³¹. Here the Guidelines now also recommend NRAs to examine

²⁹ See, inter alia, 2022 OI Guidelines, paragraphs 37 and 49.

³⁰ See 2022 OI Guidelines, paragraph 49.

³¹ See 2022 OI Guidelines, paragraph 81.

the admissibility of non-application-agnostic differentiated pricing practices if an obligation to do so based on legislation is present. BEREC included this update as in its reading this obligation also applies to pricing practices in addition to technical traffic management.

It is BEREC's view that the 2022 OI Guidelines now form a coherent basis in assisting both NRAs and ISPs in applying the OIR. Article 3 of the OIR works well in safeguarding the rights of the end-users regarding open internet access. At the same time, ISPs have sufficient room to introduce offers containing application-agnostic differentiated pricing and traffic management practices to cover divergent end-user needs and to stand out in the market³² (for example "free of charge" traffic during the weekend or during special events). BEREC believes that the OIR and its interpretation by the ECJ will contribute to the development of the market and an increased competition among ISPs benefiting consumers.

5.3. Status regarding zero tariff options and other differentiated pricing practices

This section is to a large extent based on the answers provided by NRAs to an internal BEREC questionnaire. The Questionnaire contained questions grouped in several thematic areas. In the first place, NRAs were asked to describe the current market situation regarding zero-rating products in their countries (Section 5.3.1). The questionnaire also contained questions regarding the actions undertaken by NRAs after the updated OI Guidelines were published and the planned timetable for the termination of zero-rating products (Section 5.3.2). Additionally, the questionnaire touched upon the changes in offers on the market after the termination of the zero-rating products (Section 5.3.3). Another area of the questionnaire was the zero-rating of traffic based on Union or national legislation (Article 3(3), subparagraph 3, a) of the OIR) (Section 5.3.4).

The deadline for answering the original questionnaire was the end of September 2022, resulting in data being received close to that deadline³³. Updates to the transmitted data were collected mid-November 2022 and have been processed as well.

The questionnaire was sent to all BEREC members and participants without voting rights. 32 NRAs provided a response to the questionnaire. However, as the OIR has relevance for the Member States of the European Economic Area (EEA), the following sections are only based on data gathered from EEA countries (30 NRAs responded).

³² Examples of such practices that are likely to be admissible according to the OIR are included in the 2022 OI Guidelines, paragraph 35.

³³ Data (especially statistical data) included in the answers may pertain to different points in time. This is due to national circumstances and proportionality reasons.

5.3.1. Market overview

Data gathered from NRAs show that the current market situation of zero-rating offers is evolving as, after the ECJ rulings and the publication of the updated OI Guidelines, ISPs are updating their offers to remove tariff add-ons and plans not compliant with the OIR.

Nevertheless, 19 out of 30 EEA Member States responding to the questionnaire reported that at least one ISP in their country currently performs zero-rating practices in active contracts, with an equal distribution of tariff add-ons and plans³⁴ and a minimal change compared with the latest BEREC Implementation Report. Zero-rating practices are present only on mobile networks and are provided almost entirely by MNOs. More details about the foreseen evolution of the existing offers are presented in Section 5.3.2.

Based on data received from the subset of Member States where zero-rating is still available in the market, there is an indication that the current number of users with zero-rating plans compared with the total number of subscriptions is very low.

In nine Member States, the operators still offer to conclude new contracts with zero-rating plans or add-ons. In four Member States, NRAs reported that ISPs apply application-agnostic differentiated pricing.

5.3.2. NRA supervision and enforcement actions

The results of the questionnaire show that in the time following the publication of the updated OI Guidelines most NRAs initiated or continued monitoring activities concerning zero-rating products available on the national markets. They have also engaged in formal and/or informal exchanges with operators and other stakeholders in order to ensure an orderly withdrawal of these products from the market. In one Member State, the NRA also initiated an update of national legislation in response to the ECJ rulings. Formal legal proceedings have been launched by five NRAs, two of these legal proceedings have been completed in the meantime.

Deadlines for the discontinuation of existing zero-rating products (including terminating and/or changing existing contracts) have been set, accepted or proposed by NRAs in 15 Member States, while deadlines for the end of selling such products to subscribers exist or are foreseen in 15 Member States. The deadlines to end the sale of zero-rating products were typically set to either the end of Q2 or to Q4 2022, while those for the discontinuation of offers are set mostly around the end of 2022 or the end of Q1 2023. **This indicates that most zero-rating products will likely disappear from the market by the end of March 2023.** BEREC will continue to track this process, including by way of its annual Implementation Reports.

Moreover, some NRAs have started or continued tracking the effects of the termination of zero-rating products on the market by analysing regular data from general market monitoring

³⁴ 16 Member States have zero-rating tariff add-ons with active contracts provided by 27 mobile network operators (MNOs); 14 Member States have zero-rating tariff plans with active contracts provided by 25 MNOs and 2 mobile virtual network operators (MVNOs).

(e.g. number of SIM cards, evolution of prices and data volumes used) or by evaluating data specifically related to zero-rating products requested from the ISPs. These monitoring activities will also help to answer the question of what effects the discontinuation of zero-rating products had on consumer end-users and on other economic operators present in the internet ecosystem.

5.3.3. Practices in relation to ceased and altered contracts

As a result of the ECJ rulings, many ISPs ceased the marketing and sale of products with zero-rating (see Section 5.3.2). Furthermore, the rulings require ISPs to cease or alter existing products with zero-rating, that are not offered for sale. ISPs applied various strategies to migrate existing contracts with zero-rating. These strategies include removing the zero-rating component in contracts or replacing it with admissible, application-agnostic offers, offering users new tariffs with additional or unlimited data volume or lower prices or phasing out contracts which are limited in time.

5.3.4. Zero-rating based on Article 3(3) (a) of the OIR

As outlined in Sections 5.1 and 5.2, Article 3(3) subparagraph 1 of the OIR, as interpreted in the 2021 ECJ rulings, contains a general obligation of equal treatment of traffic which forbids any practice (either by pricing or by a technical traffic management measure) adopted by an ISP, that is not application-agnostic. This general prohibition has exceptions stated by the OIR in subparagraph 3 of the same Article. Article 3(3) (a) of the OIR allows ISPs to adopt measures otherwise forbidden by the OIR when that is necessary (and only for as long as that is necessary) in order to “*comply with Union legislative acts, or national legislation that complies with Union law, to which the provider of internet access services is subject, or with measures that comply with Union law giving effect to such Union legislative acts or national legislation, including with orders by courts or public authorities vested with relevant power*”.

Applications or services which are currently reported by NRAs to be zero-rated based on national and/or Union legislation are

- Emergency communications,
- Volume and time consumption monitoring apps in a national context,
- Volume and time consumption monitoring apps in a roaming context,
- Speed measurement apps,
- Electronic communications services (ECS) provider customer care apps.

Based on the data gathered, **BEREC observes that zero-rating based on legislation is currently not common.** Depending on public policy decisions identifying a need to require



zero-rating for public interest purposes (consistent with the general requirements for adopting (measures based on the) exceptions³⁵), this situation could evolve.³⁶

BEREC will continue monitoring developments concerning the application of Article 3(3) (a) of the OIR, but has no specific comments on the functioning of this part of the OIR. In BEREC's opinion, **Article 3(3) (a) of the OIR does not require adaptation.**

5.4. Assessment of the OIR in light of the ECJ rulings

As written above, with its judgments, the ECJ further clarified the interpretation of the OIR. This clarification, in many Member States, led to a need to discontinue existing offers that contained a zero-rating component. In all affected Member States, NRAs are taking either formal or informal steps to enforce the discontinuation of such offers and are actively monitoring the implementation of the ECJ rulings. BEREC is also tracking the implementation by NRAs in the form of internal surveys and regular NRA updates. According to this information, current zero-rating offers will be discontinued at the latest by March 2023 in most Member States.

While the commercial offering of zero-rating is banned as a result of the ECJ clarification, Union and national legislators might make exceptions³⁷ for zero-rating applications for public interest. For instance, this could include allowing consumers to monitor their consumption.

As stated above, BEREC therefore deems that the clarifications in its OI Guidelines, together with the other measures stated in Chapter 4, are sufficient and sees no need to adjust the OIR.

- The ECJ judgments provided additional clarity in applying the OIR, BEREC updated its OI Guidelines accordingly.
- In all affected Member States, NRAs are enforcing the ECJ judgments.
- In eleven Member States, there is no zero-rating in the market anymore.
- ISPs have either already implemented or are in the process of implementing the judgments. It is expected that zero-rating will be discontinued in most Member States by the end of March 2023.
- While commercial zero-rating is banned, Article 3(3) (a) of the OIR provides adequate room for zero-rating in specific use-cases.
- BEREC does not see a need to update the OIR in relation to differentiated pricing practices.

³⁵ See also OIR, recitals 11 until 13, and OI Guidelines, paragraphs 79 until 82.

³⁶ Please note public policy developments and/or draft legislation initiated by governments or legislators were not covered by the questions answered by NRAs.

³⁷ Based on Article 3(3) (a) of the OIR.

6. 5G and possibility to differentiate QoS

As expressed already in the 2018 BEREC Opinion on OIR³⁸, the OIR seems to be leaving considerable room for the implementation of 5G technologies, such as network slicing, 5G QoS Identifier (5QI) and Mobile Edge Computing (MEC). To date, BEREC is not aware of any concrete example given by stakeholders where the implementation of 5G technology would be impeded by the Regulation. This statement still holds true and the OIR together with the OI Guidelines grant the necessary flexibility for implementing emerging technologies like 5G.

After the public consultation of the 2018 BEREC Opinion on the OIR³⁹, considerable clarifications relevant for 5G technologies were included in the 2020 revision of the OI Guidelines⁴⁰, elaborating on the compatibility between the OIR and 5G. Notably, the revision of the OI Guidelines did not constitute any material changes to the rules.

Regarding IAS, the provision of enhanced mobile IAS services in 5G is facilitated by the clarifications in the OI Guidelines. The Guidelines explain how ISPs, such as 5G providers, may differentiate the QoS level of IAS subscriptions, as long as the QoS levels are application-agnostic and the end-users have full control over which applications are transmitted over which QoS level.⁴¹

Regarding specialised services (SpS), the provision of services with QoS requirements that cannot be met via IAS, is also facilitated by the clarifications in the OI Guidelines. As the Guidelines explain, different applications (in the form of SpS) can be treated differently when it is objectively necessary to meet an application's requirement for a specific level of quality that cannot be met via IAS.

6.1. No ex-ante permission required for specialised services

Regarding whether ISPs need to ask NRAs for permission to implement SpS, a clarification which stakeholders frequently request, it is clearly explained in paragraph 21 of the OI Guidelines that this is not required. In short, the regulatory framework set out by the OIR and the OI Guidelines requires ISPs to self-assess when introducing new types of services and

³⁸ BEREC Opinion for the evaluation of the application of Regulation (EU) 2015/2120 and the BEREC Net Neutrality Guidelines (BoR (18) 244), <https://www.berec.europa.eu/en/document-categories/berec/opinions/berec-opinion-for-the-evaluation-of-the-application-of-regulation-eu-20152120-and-the-berec-net-neutrality-guidelines>

³⁹ BEREC Report on the outcome of the consultation on the evaluation of the application of Regulation (EU) 2015/2120 and the BEREC Net Neutrality Guidelines (BoR (18) 245), <https://www.berec.europa.eu/en/document-categories/berec/reports/berec-report-on-the-outcome-of-the-consultation-on-the-evaluation-of-the-application-of-regulation-eu-20152120-and-the-berec-net-neutrality-guidelines>

⁴⁰ BEREC Guidelines on the Implementation of the Open Internet Regulation (BoR (20) 112), <https://www.berec.europa.eu/en/document-categories/berec/regulatory-best-practices/guidelines/berec-guidelines-on-the-implementation-of-the-open-internet-regulation>

⁴¹ OI Guidelines, paragraphs 34-34d



does not require a pre-authorisation mechanism by NRAs, notwithstanding the possibility for ISPs to liaise with NRAs regarding novelties and potential uncertainties.⁴²

In its response to the draft BEREC Report on the Internet Ecosystem⁴³, GSMA claims that the OIR makes it hard to identify which content can be treated as a specialised service, referring to “innovation without permission”. BEREC notes, it is usual that rules regulating the provision of services and goods are necessary where public interest requires it. The OI Guidelines aim to clarify how the rules in the OIR should be understood. However, there is no requirement for an ex ante permission, as explained above.

Furthermore, the expression “innovation without permission” usually refers to the possibility to innovate on the internet based on the IAS⁴⁴, whereby anyone can publish applications without asking the ISP for permission. On the other hand, in the case of specialised services, anyone that wants to implement such a service has to have an agreement with the network provider in order to grant permission to deploy its service.

6.2. The OIR does not prevent differentiated QoS offers

Regarding the relationship between IAS and these SpS, some questions were raised about the impact of SpS on the general quality of IAS which have now been clarified⁴⁵. This has been further clarified in the 2022 BEREC Regulatory Assessment Methodology.⁴⁶

⁴² OI Guidelines, paragraphs 21;

BEREC Report on the outcome of the public consultation on draft BEREC Guidelines on the Implementation of the Open Internet Regulation (BoR (20) 111), <https://www.berec.europa.eu/en/document-categories/berec/reports/berec-report-on-the-outcome-of-the-public-consultation-on-draft-berec-guidelines-on-the-implementation-of-the-open-internet-regulation>;

BEREC Report on the outcome of the public consultation on draft BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality rules (BoR (16) 128), <https://www.berec.europa.eu/en/document-categories/berec/reports/berec-report-on-the-outcome-of-the-public-consultation-on-draft-berec-guidelines-on-the-implementation-by-national-regulators-of-european-net-neutrality-rules>;

BEREC Report on the outcome of the consultation on the evaluation of the application of Regulation (EU) 2015/2120 and the BEREC Net Neutrality Guidelines (BoR (18) 245), <https://www.berec.europa.eu/en/document-categories/berec/reports/berec-report-on-the-outcome-of-the-consultation-on-the-evaluation-of-the-application-of-regulation-eu-20152120-and-the-berec-net-neutrality-guidelines>

⁴³ contributions/report on the outcome of the public consultation, <https://www.berec.europa.eu/en/document-categories/berec/reports/berec-report-on-the-outcome-of-the-public-consultation-on-the-berec-report-on-the-internet-ecosystem>

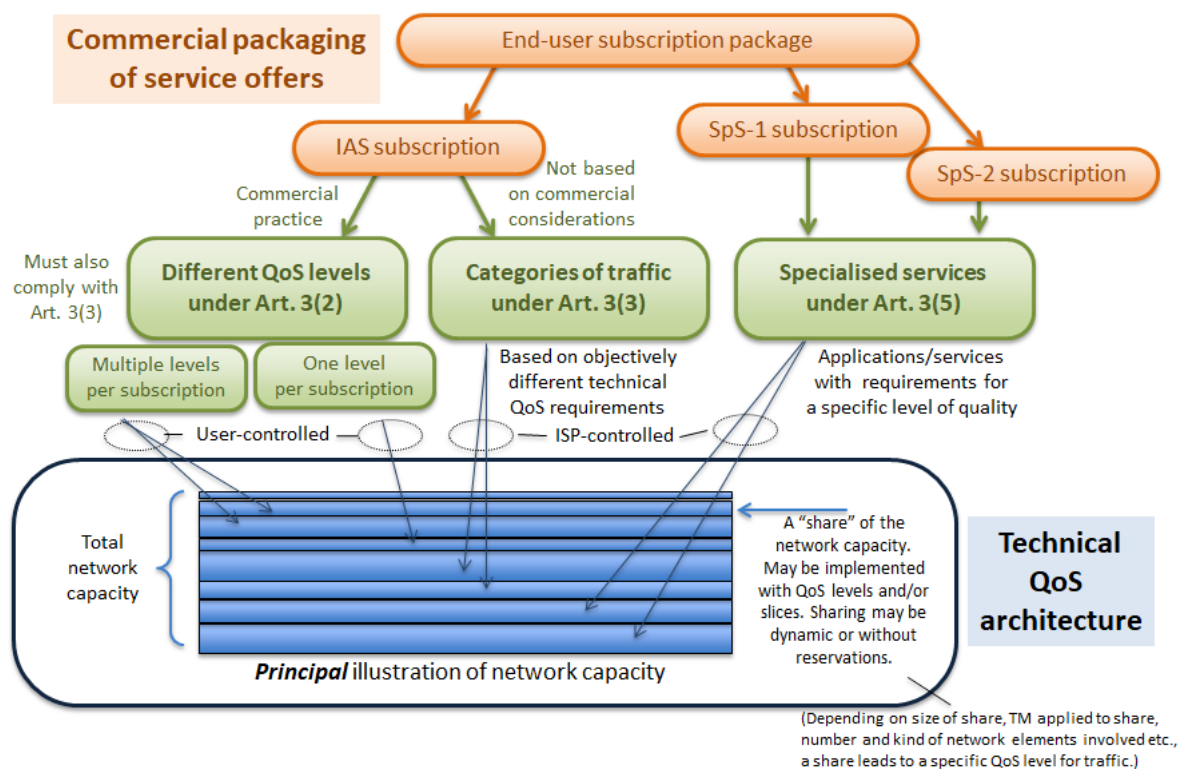
Draft BEREC Report on the Internet Ecosystem (BoR (22) 87), <https://www.berec.europa.eu/en/document-categories/berec/public-consultations/draft-berec-report-on-the-internet-ecosystem>

⁴⁴ “Permissionless Innovation”, IETF Chair 2013, Jari Arkko, <https://www.ietf.org/blog/permissionless-innovation/>

⁴⁵ BEREC Open Internet Guidelines, paragraphs 121-121a

⁴⁶ BEREC Net Neutrality Regulatory Assessment Methodology (BoR (22) 72), <https://www.berec.europa.eu/en/document-categories/berec/regulatory-best-practices/methodologies/berec-net-neutrality-regulatory-assessment-methodology-0>

In summary, the OI Guidelines contain a kind of “QoS toolbox” for network providers, such as 5G providers. As explained in the figure below (see also page 13 of the 2020 BEREC OI Guidelines Consultation Report⁴⁷), the network capacity of a network may be divided into “shares” which may, for example, be implemented based on network slices. There is no difference in regard to the Regulation between 5G and any other existing or emerging network technology.



The figure illustrates how the OIR provides ample solutions for facilitating compatibility between Open Internet and 5G. The figure does not prescribe how ISPs should commercialise and manage their service offers, it is only intended to give an overview of options that are available.

The figure illustrates that the commercial packaging of service offers can consist of subscriptions of an IAS supplemented with one or more SpS. Regarding the IAS subscription, this may be provided in different ways based on QoS levels under Article 3(2) of the OIR or

⁴⁷ BEREC Report on the outcome of the public consultation on draft BEREC Guidelines on the Implementation of the Open Internet Regulation (BoR (20) 111), <https://www.berec.europa.eu/en/document-categories/berec/reports/berec-report-on-the-outcome-of-the-public-consultation-on-draft-berec-guidelines-on-the-implementation-of-the-open-internet-regulation>

categories of traffic under Article 3(3) of the OIR, or possibly a combination of the two. Regarding the QoS levels, there may be one or multiple levels per IAS subscription.

Provision of QoS levels under Article 3(2) of the OIR is a commercial practice, and this also has to comply with Article 3(3) of the OIR. In particular, the QoS levels have to be application-agnostic. As the OIR outlines, the provision of categories of traffic under Article 3(3) cannot be based on commercial considerations.

As illustrated in the figure above, the QoS levels under Article 3(2) of the OIR are user-controlled, and this is further explained in the OI Guidelines paragraphs 34a-c. In case an ISP implements such QoS levels, they are provided according to the QoS parameters agreed in the contract with the end-user, but the end-user is in full control of selecting which application uses which QoS level.

On the other hand, the provision of categories of traffic under Article 3(3) of the OIR and the provision of SpS under Article 3(5) of the OIR, are both ISP-controlled. Regarding categories of traffic, as Article 3(2) of the OIR states, where an ISP implements these, they must be based on objectively different technical QoS requirements. Regarding SpS, as Article 3(5) of the OIR explains, they are provided if this is objectively necessary in order to meet requirements for a specific level of quality.

Regarding how the different QoS options in Articles 3(2), 3(3) and 3(5) of the OIR are implemented in the technical QoS architecture of the ISP's network, this is for the ISP to decide, as long as it complies with the requirements of the Regulation. For illustrative purposes, the figure shows a depiction of how the total network capacity is shared between the different traffic flows.

The figure is intentionally oversimplified, leaving it to ISPs to decide on the technical implementation. The network capacity is typically dynamically shared between traffic flows and varies depending on their need. Different technologies exist to implement this, and new technologies will likely come to the market in the future. QoS levels, virtualisation and network slices could be examples of QoS architectural methods for this purpose.

The OIR also allows exceptional traffic management under limited circumstances. Practices may only be used by ISPs when they fit into the three specific exceptions:

- a) compliance with other laws,
- b) preservation of integrity and security of the network, services or end-user terminal equipment,
- c) preventing exceptional network congestion.

Under all these exceptions, the traffic management measure has to be necessary for the achievement of the exception in question and applied "only for as long as necessary".



- BEREC is not aware of any concrete example given by stakeholders where the implementation of 5G technology as such would be impeded by the OIR.
- As already expressed in 2018, the OIR seems to be leaving considerable room for the implementation of 5G technologies and thus BEREC considers that there is no need to change the OIR.
- The OIR allows ISPs to differentiate the QoS level of IAS subscriptions, as long as the QoS levels are application-agnostic and the end-users have full control over which applications are transmitted over which QoS level.
- The OIR allows the provision of SpS, i.e. services with QoS requirements that cannot be met via IAS.
- There is no ex ante permission required for QoS differentiated IAS offers or SpS.

7. Conclusions

In BEREC's opinion, the OIR works in providing an open internet to stakeholders, safeguarding end-users' rights and guaranteeing the continued functioning of the internet ecosystem as an engine of innovation⁴⁸.

To summarise, BEREC considers that the OIR works and continues to be fit for purpose⁴⁹. Therefore, BEREC sees no merit in changing the text of the OIR, as also outlined below:

- 1) BEREC provides a platform to ensure collaboration between NRAs, leading to a consistent enforcement of the OIR.
- 2) The OI Guidelines are a useful tool both for NRAs and all other stakeholders and contribute to the consistent application of the OIR.
- 3) Given the overall experiences in monitoring the implementation of the commercial practices and/or technical conditions, BEREC is of the view that no changes regarding Article 3 of the OIR are necessary.
- 4) Considering the progress made to implement the transparency requirements, BEREC is of the view that no changes regarding Article 4 of the OIR are required.
- 5) The OIR gave NRAs powers, which NRAs are using to protect end-users and simultaneously to guarantee the continued functioning of the internet ecosystem as an engine of innovation. Thus, in BEREC's opinion there is no need to change Articles 5 and 6 of the OIR.

⁴⁸ See OIR, recital 1.

⁴⁹ BEREC points out that it is currently contributing to the ongoing debate about a financial contribution from CAPs to network investment. BEREC underlines the importance of the net neutrality principles in this debate.

- 6) The ECJ judgments provided additional clarity in applying the OIR and BEREC updated its OI Guidelines accordingly.
- 7) In all affected Member States, NRAs are enforcing the ECJ judgments.
- 8) In eleven Member States, there is no zero-rating in the market anymore.
- 9) ISPs either already implemented or are in the process of implementing the judgments. It is foreseen that zero-rating will be discontinued in most Member States by the end of March 2023.
- 10) While commercial zero-rating is banned, Article 3(3) (a) of the OIR provides adequate room for zero-rating in specific use-cases.
- 11) BEREC does not see a need to update the OIR in relation to differentiated pricing practices.
- 12) BEREC is not aware of any concrete example given by stakeholders where the implementation of 5G technology would be impeded by the OIR.
- 13) As already expressed in 2018, the OIR leaves considerable room for the implementation of 5G technologies and thus BEREC considers that there is no need to change the OIR.
- 14) The OIR allows ISPs to differentiate the QoS level of IAS subscriptions, as long as the QoS levels are application-agnostic and the end-users have full control over which applications are transmitted over which QoS level.
- 15) The OIR allows the provision of SpS, i.e. services with QoS requirements that cannot be met via IAS.
- 16) There is no ex ante permission required for QoS differentiated IAS offers or SpS.

