

BEREC Report on the implementation of the Open Internet Regulation

1 October 2026

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Executive Summary

This report gives an overview of the activities of the NRAs¹ in the course of implementing the Open Internet Regulation (OIR) (Regulation (EU) 2015/2120)² and associated BEREC Open Internet Guidelines³. This report reflects the 10th year of the application of the OIR, covering the period from 01 May 2015 to 30 April 2026. BEREC has gathered information from 28 NRAs⁴ via an internal questionnaire. Descriptions of publicly known open internet cases or investigations that arose throughout the 12-month reporting period have been added to this information. However, this report does not constitute an exhaustive description of the current national actions in the field of open internet, which are described in further details in the NRAs' annual reports on implementing the OIR.

The information in this report is organised according to the provisions of the OIR. In preparation for this year's iteration, the internal questionnaire had 27 questions covering all the relevant aspects of the OIR.

Overall, monitoring and enforcement activities carried out by the NRAs over the last 10 years have led to a consistent and harmonised application of the OIR, guaranteeing the freedom to innovate and protecting the end-users' rights.

NRAs take the following recurring actions, concerning **Article 3** of the OIR relating to end-users' rights to open internet access:

- information requests to ISPs,
- analysis of complaints or end-user reports,
- market surveys which do not involve requesting information from ISPs (e.g., checking ISPs' offers on their web pages).

These three actions continue to be used on an equal basis by most NRAs. Moreover, the majority of NRAs indicated that they combined all three of the above sources of information *to monitor the commercial and technical conditions* related to the provision of internet access services (IAS).

Four years since the European Court of Justice (ECJ) issued three important rulings (C-34/20 – Telekom Deutschland, C-854/19 – Vodafone and C-5/20 – Vodafone) regarding violations of

¹ NRA is used in this report as reference to the National Regulatory Authority in the meaning of Article 5(1) of Regulation (EU) 2015/2120 as they have been designated by the national legislator. These do not fully correspond to the NRAs that are BEREC members and observers.

² 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.

³ The 2016 BEREC Guidelines on Net Neutrality were applicable until 11 June 2020 when they were replaced by the 2020 BEREC Guidelines on Open Internet published on 11 June 2020 which were updated and published on 09 June 2022 ([BoR \(22\) 81](#)). This report refers to "BEREC OI Guidelines".

⁴ AT, BE, BG, CY, CZ, DE, DK, EE, EL, ES, FI, FR, HR, HU, IE, IT, LT, LU, LV, MT, NL, NO, PL, PT, RO, SE, SI, SK

the European Union (EU) OI rules, *zero-rating services* were reported by six NRAs. Nevertheless, in almost all of these countries, the services are provided based on the exceptions from Article 3(3), except in one country, where the NRA reported possible commercial zero-rating offers as part of legacy offers.

Regarding *traffic management practices*, almost all NRAs monitored these practices in one way or another, with analysis of end-user complaints (21) and information requests from ISPs (21) being the most common mentioned. Market surveys, without requesting information from ISPs (15), follow in third place.

Concerning **Article 4** of the OIR on *monitoring ISPs' compliance with transparency and contractual terms*, most NRAs applied multiple approaches and often more than two. The top three activities used by NRAs to assess the ISPs' compliance with Article 4 were formal and informal requests for information from the ISPs (21), market surveys without requesting information from ISPs (19) and analysis of end-user reports and complaints (19). Also in the reporting period, 15 NRAs reviewed contracts for fixed network and 16 NRAs for mobile networks, and they generally found that ISPs provide a definition of speeds in their contracts. Moreover, three NRAs reported that ISPs offered new contracts for hybrid services⁵ in their countries. A large majority of NRAs (23 out of 28) monitor end-users' complaints regarding the performance of the IAS, while two thirds of the NRAs (20 out of 28) offer an IAS quality monitoring mechanism to consumers.

Concerning **Article 5** of the OIR on *supervision and enforcement*, the answers to the questionnaire indicated that most NRAs (22 out of 28) are monitoring the availability of high-speed IAS, with the most popular approaches are through analysis of complaints and end-user reporting (17) or through information requests from ISPs (13). Technical network monitoring (12) follows in third place.

Finally, while the body of the Implementation Report reflects the actions of the last 12 months (thus the most recent reporting period), Annex I describes the relevant national rules, regulations and specifications which are in force, internet access quality monitoring tools provided and OIR-related court proceedings.

⁵ Hybrid IAS use a combination of technologies.

1. Article 3(1) to (3) – End-users’ rights, agreements, traffic management

Question 1.a. Is there any change compared to the previous reporting period regarding to the **approach** you have taken **to monitor the commercial and technical conditions** related to the provision of internet access services (IAS)?

If yes, please provide details.

Question 1.b. Please specify what **approach** you have taken **to monitor the commercial and technical conditions** related to the provision of internet access services (IAS), in the reporting period:

- i. market survey without requesting information from ISPs (e.g., checking the relevant information on the ISP’s web pages, such as the general terms and conditions);
- ii. information request from ISPs;
- iii. analysis of complaints and end-user reporting;
- iv. technical network monitoring;
- v. other, please specify.

Regarding the approach taken by NRAs to monitor the commercial and technical conditions of IAS provisions, all but one of the responding NRAs (27) reported that there is no change compared to the previous reporting period.

IE, instead, reported a change, indicating that several investigations were undertaken during the reporting period.

In order to monitor the commercial and technical conditions of IAS provisions, there are three main approaches adopted, at least one of which is used by every NRA: market survey without requesting information from ISPs (24 NRAs), information request from ISPs (25 NRAs) as well as analysis of complaints and end-user reporting (24 NRAs). Technical network monitoring (nine NRAs) is an approach which is used less than others. Further details are shown in the figure below:



Figure 1. Approaches to monitor the commercial and technical conditions

In addition, seven NRAs (AT, DE, DK, EL, FR, HR, PT) also applied other approaches to monitor such commercial and technical conditions, as described in the following table:

NRA	Other approaches
AT	ISPs are obliged under the Austrian Telecommunications Act to notify their terms and conditions (T&Cs) to RTR at the start of a new communication service. Changes of T&Cs have to be notified as well. This is an on-going measure. Within this framework, the transparency obligations of the OIR are also checked and this enables RTR to monitor the commercial and technical conditions related to the provision of the IAS as well.
DE	Reacting to media reports on net neutrality.
DK	Monitoring is primarily based on answers from the ISP's collected for the annual report on the Danish supervision of the OIR as forwarded to BEREC each year.
EL	EETT continued its supervision of the implementation of the national Open Internet Regulation (Government Gazette, OJ 1282/B/26-2-2024) by conducting a large number of audits at operators' points of sale nationwide. These on-site audits included surveys on whether consumers receive proper information regarding: the realistic speeds of their internet connections (fixed and mobile); their right to submit complaints and receive due compensation; their right to free choice of terminal equipment; and the existence of a fair usage policy, particularly for unlimited mobile plans.
FR	End users can report issues on the online alert platform "J'alerte l'Arcep" and they can use the latest version of the traffic management application "Wehe" to help them detect potential traffic differentiations or port blockings implemented by their ISP.
HR	An end-user survey and on-site audits at points of sale were undertaken.
PT	Inspection actions were undertaken.

Table 1. Other approaches used to monitor commercial and technical conditions

Question 2. Pursuant to article 3(1), have you completed any **formal assessment of ISP restrictions on the use of technically compliant terminal equipment**, in the reporting period?

If yes, briefly describe the practice and the conclusions of the assessment (and enforcement action taken where applicable).

In the reporting period, four NRAs (BG, CY, LU, SK) conducted formal assessments of ISP restrictions on the use of technically compliant terminal equipment, as described in the table below:

NRA	Formal assessment of ISP restrictions
BG	CRC collects information on ISP restrictions on the use of technically compliant terminal equipment through an annual questionnaire. The outcome is that no restrictions are applied by ISPs regarding the use of technically compliant terminal equipment.
CY	According to the provisions of the OIR (as interpreted in the BEREC OI Guidelines) as adopted in national secondary legislation (Decree 72/2017 ⁶), ISPs are required to report restrictions on the use of technically compliant terminal equipment. Following the collection of ISPs' reports, OCECPR's main findings were that most of ISPs offer their services accompanied with their own terminal equipment to be able to provide support and bundled services (telephony, internet, TV), or to avoid any modification that affects the speed provided. Based on ISPs' explanation, the provision of obligatory equipment by the ISPs is justified and compliant with the provisions of the OIR and the Decree. End-users have the right under Law 24(I)/2022 and OIR to use their own terminal equipment, but at the same time the provision of Article 6(2) of Decree 72/2017 allows providers to inform subscribers about technical parameters, including terminal equipment, that may affect service quality.
LU	Following various complaints and queries from end-users, ILR sent a request for information (RFI) to 10 ISPs to establish whether, and under what conditions, they allow the use of third-party terminal equipment on their networks. All the ISPs concerned allow end-users to choose their own terminal equipment for the IAS, although this may be subject to restrictions for security reasons. For VoIP telephony, some ISPs reported that their own terminal equipment is essential for the provision of the service.
SK	ISPs offer their terminal equipment for rent or sale, with the possibility of using end-users' own devices based on ISP recommendations to ensure compatibility with the IAS provided. Set-top boxes for IPTV are usually part of the TV service provided, while, for some types of technology, it is necessary to use the ISPs' equipment (e.g. ONT for GPON).

⁶ Available at https://ocecpr.ee.cy/sites/default/files/ec_decree_networkneutrality_gr_kdp-72-2017_03-03-2017_ac.pdf

Table 2. Information on formal assessments of ISP restrictions on the use of technically compliant terminal equipment

Question 3. Has the **location of the Network Termination Point (NTP)** been formally determined in your country or has there been a legislative process to impose the access of free modems?

If *yes*, please provide details (e.g., when has the location of the NTP been determined or the access of free modems been imposed? Were BEREC's NTP Guidelines taken into consideration (both in case of determination of the location of the NTP or legislative process)? Is it location A, B or C (if necessary, depending on the type of network)? Links to relevant documents).

If *no*, please provide information if there are discussions or plans to specify the location of the NTP in your country and the reasons for this.

During the reporting period, none of the countries determined a new location for the NTP. For the previous definitions, please refer to Annex I.

Regarding the discussions or plans to specify the location of the NTP, in IT, AGCOM has initiated a procedure and a public consultation aimed at defining the NTP for IAS in fixed networks. This effort aims at reassessing the current restrictions on FTTH and FWA networks, particularly concerning the ONT (Optical Network Termination) device for FTTH technologies and the transceiver device for FWA technologies, while considering technological and market developments. The procedure remained open at the end of the reporting period.

By contrast, 10 Member States (BG, EE, FR, HU, LT, LU, LV, MT, PT, RO) clearly indicated that there are no plans to formally determine the location of the NTP.

Question 4.a. Are there still any types of **zero-rating services** available in your country on 30.04.2026?

If *yes*, please provide details. (e.g., What types of zero-rating? Does any ISP still offer to conclude new contracts with zero-rating based on article 3(2)? Are there any plans to stop selling/marketing and/or to terminate existing contracts? If yes, until when?)

Question 4.b. Is there any change compared to the previous reporting period?

If *yes*, please provide details. (e.g., offers voluntarily stopped by ISPs or as imposed by the NRA, type of services added to or removed from the offers).

Question 4.c. Are any of the before-mentioned zero-rating services based on article 3(2)?

If *yes*, please provide details.

Question 4.d. Are any of the before-mentioned zero-rating services based on the exemptions from article 3(3)?

If yes, please provide details.

Seven NRAs (BE, CZ, EL, FR, IT, PL, RO) reported that, at the end of the current reporting period, there were some types of zero-rating services available in the respective national markets (see details in the table below):

NRA	Details on zero-rating services
BE	Emergency communications and public warning systems, volume and/or time consumption monitoring and communication of information based on the Roaming Regulation.
CZ	Emergency communications
EL	Zero-rating offers can be permitted only based on the exceptions explicitly defined in the OIR. These exceptions are tele-education sites of the Ministry of Education, account balance information and data renewal pages of the mobile operators, internet-based speed metering applications (upload and download) and emergency communications services.
FR	Discussions are ongoing between Arcep and an ISP concerning the offer of a zero-rated live TV streaming service for mobile.
IT	No commercial zero-rating offers are present on the market. Some providers zero-rate the data traffic of customer care apps.
PL	On 20 May 2024, UKE issued post-audit recommendations for telecommunications companies to address irregularities related to Article 3 of the OIR. First, the recommendations required companies to discontinue the conclusion of agreements and the use of standard contracts covering services billed in the zero-rating model within 30 days. Second, they must amend the zero-rating clauses in contracts already in force so that, no later than 24 months after the recommendations' delivery date (i.e. end of May 2026), the operators will no longer provide any zero-rated services under internet access agreements concluded before the end of the initial 30-day period. The 24-month window was set to ensure that contracts with zero-rated services expire naturally, as these agreements cannot exceed a duration of 24 months, thereby aligning with Article 3(3) of the OIR.
RO	No more commercial zero-rating offers. Netograf (Romanian certified measurement tool) and some cost control emergency applications are zero-rated.

Table 3. Details on zero-rating services

Four NRAs (CZ, HU, PL, PT) responded that there are changes compared to the previous reporting period, as detailed in the table below:

NRA	Changes compared to the previous reporting period
CZ	In July 2025, the amendment to the Electronic Communications Act (Act N. 23/2025 Coll., approved in February 2025) came into effect. It introduces an exemption under Article 3(3)(a) of the OIR for emergency communications made via an IAS, so that the data traffic used to access or related to the use of emergency services is not counted towards the data limit of the IAS. The amendment also introduced a list of other means of emergency communication (in addition to calls and SMS), whose management is entrusted to the Ministry of the Interior and which is published in a manner allowing remote access.
HU	The MNOs have stopped providing the zero-rating services (access to their customer care facilities and certain speed testing services).
PL	The operators are amending the in-force agreements with customers that include services billed under the zero-rating model.
PT	According to ANACOM's decision of 1 March 2023, ISPs had to cease all zero-rating and similar offers in order to comply with Article 3(3) of the OIR. Considering the loyalty periods (which can last up to two years) and the end of the reporting period on 30 April 2026, ANACOM considers that there are no longer any zero-rating offers pending.

Table 4. Changes compared to the previous reporting period on zero-rating services

One NRAs (FR) reported that at least some of the above-mentioned zero-rating services are assessed on the basis of **Article 3(2)** of the OIR.

Three NRAs (CZ, EL, RO) reported that there are zero-rating services based on the exemptions from **Article 3(3)** of the OIR (see the table below for more details):

NRA	Services based on the exemptions from Article 3(3)
CZ	See the response above (in Table 4) on legislative amendment regarding the emergency communication using the data traffic.
EL	The zero-rating exceptions are explicitly allowed by the national OI Regulation, in accordance with the exception under Article 3(3)(a) of the OIR.
RO	The national quality of service (QoS) measurement tool (Netograf) is zero-rated by means of an ANCOM Decision.

Table 5. Details regarding services based on the exemptions from Article 3(3)

Question 5. Pursuant to article 3(2), have you performed any **formal assessment of agreements on commercial and technical conditions as well as commercial practices** such as application-agnostic differentiated pricing, in the reporting period?

If yes, please briefly describe the practice and the conclusions of the assessment (and enforcement action taken where applicable).

In the reporting period, five NRAs (AT, CY, CZ, IE, NO) performed formal assessments of agreements on commercial and technical conditions as well as commercial practices such as application-agnostic differentiated pricing (see the table below):

NRA	Conclusions of the assessments
AT	ISPs are obliged under the Austrian Telecommunications Act to notify their T&Cs to RTR at the start of a new communication service. Changes of T&Cs have to be notified as well. This is an on-going measure. Within this framework also the transparency obligations of the OIR are checked and this enables RTR to monitor agreements on commercial and technical conditions as well as commercial practices on an ongoing basis.
CY	According to the provisions of the OIR (as interpreted in BEREC OI Guidelines), ISPs reported to OCECPR regarding their agreements on commercial and technical conditions, as well as their commercial practices. Following the assessment of ISPs' reports, OCECPR concluded that the agreements on commercial and technical conditions and on commercial practices performed by ISPs do not constitute an infringement of the OIR.
CZ	CTU continued to monitor and assess selected business practices of ISPs including zero-rating practices, among others, by monitoring the published contractual ISPs' T&Cs.
IE	Several investigations were undertaken in the reporting period.
NO	Assessments were made in connection with the work on the annual OI report, resulting in high-level conclusions and no concrete enforcement actions.

Table 6. Conclusions of the assessments on commercial practices

Question 6.a. Is there any change compared to the previous reporting period regarding to the **approach** you have taken **to monitor the traffic management practices** of ISPs?

If yes, please provide details.

Question 6.b. Please specify what **approach** you have taken **to monitor the traffic management practices** of ISPs, in the reporting period:

- i. market survey without requesting information from ISPs;
- ii. information request from ISPs;
- iii. analysis of complaints and end-user reporting;
- iv. technical monitoring;
- v. other, please specify.

One NRA reported a change in the approach taken to monitor the traffic management practices of ISPs compared to the previous reporting period. The most widely used approach was the analysis of complaints and end-user reporting (21 NRAs) followed by information requests (21 NRAs) and market surveys (15 NRAs).

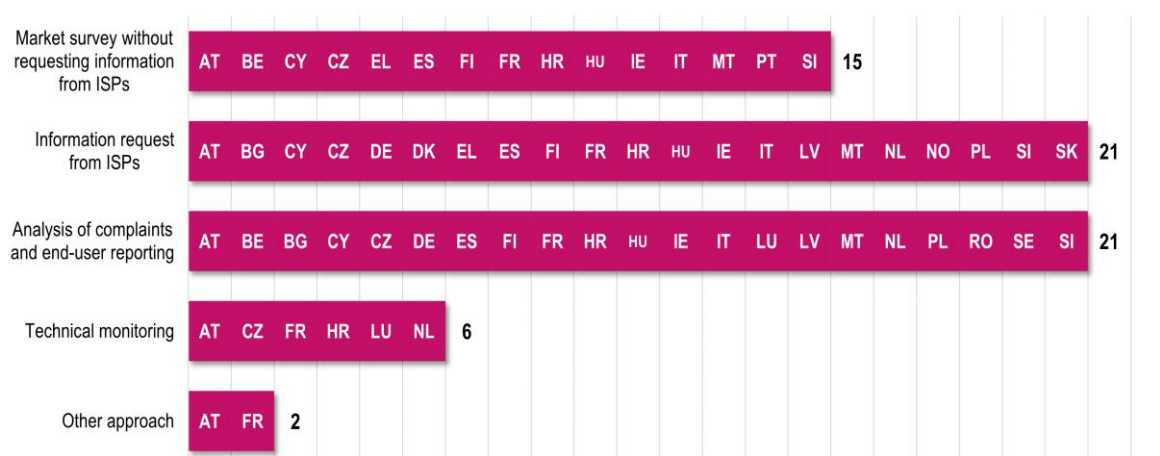


Figure 2. Approaches to monitor traffic management practices

Two NRAs (AT, FR) specified which additional approaches they have undertaken during the reporting period.

NRA	Additional approaches
AT	ISPs are obliged under the Austrian Telecommunications Act to notify their T&Cs to RTR at the start of a new communication service. Changes of T&Cs have to be notified as well. This is an on-going measure. Within this framework also the transparency obligations of the OIR are checked and this enables RTR to monitor the traffic management practices of ISPs as well.
FR	End users can report issues on the online alert platform “J’alerte l’Arcep” and they can use the traffic management application “Wehe” to help them detect potential traffic differentiations or port blockings implemented by their ISP.

Table 7. Additional approaches used by NRAs

Question 7. Pursuant to article 3(3) subs. 1 to 3, have you completed any **formal assessment** of an ISP’s **traffic management practices**, in the reporting period?

If yes, briefly describe the practice and main conclusions of the assessment (and enforcement action taken where applicable).

Eight NRAs (AT, BG, CY, CZ, EL, IE, NL, SK) provided details regarding formal assessments of ISPs' traffic management practices. While no formal assessment was done, DE highlighted some activities which were undertaken.

NRA	Formal assessments of traffic management practices
AT	RTR had a number of proceedings in regard to the website blocking of the domain "standardingold.com". Five ISPs notified the Austrian NRA, that they had implemented the blocking of this domain, because they have been obligated by means of administrative orders of the Austrian Financial Market Authority (FMA). On this website, the FMA found some infringements of the Markets in Crypto-Assets (MiCa) Regulation. According to the legal opinion of the competent national regulatory authorities the MiCa-Regulation and the administrative orders fall within the exemption in Article 3(3) exception a) of the OIR. Furthermore, the website blocking was implemented in the less invasive way of Domain Blocking, so that no infringements of the provisions of the OIR could be found. In other proceedings the Austrian Federal Office of Metrology and Surveying addressed the competent Telekom-Control-Commission (TKK) in concerns of market supervision (Regulation on market surveillance). The applicant wanted the TKK to issue administrative orders, to restrict the availability of a website, where a dangerous product has been offered. Due to the withdrawal of the approval, the TKK decided to terminate the proceedings.
BG	CRC collects such information with a dedicated questionnaire on annual basis. The conclusion is that the traffic management applied from ISPs is in line with Article 3(3) subs. 1-3 of the OIR.
CY	According to the provisions of the OIR (as interpreted in BEREC Guidelines), ISPs reported to OCECPR on traffic management practices. Following an assessment of the report, OCECPR concluded that any traffic management practices used by ISPs do not constitute an infringement of the OIR.
CZ	In the reporting period, CTU received a total of 4 complaints concerning compliance with Article 3(3) of the OIR. In two cases, there were submissions related to the suspicion that the speed of the provided IAS was being reduced, and data traffic was being filtered. In both cases, no breach of obligations was found following an investigation by CTU. In two other cases, inspections were conducted to verify compliance with Article 3(3) of the OIR in connection with unequal treatment of data traffic and disproportionate traffic management. As part of the inspection focused on unequal treatment of data traffic, it was found that the quality of the IAS varied depending on whether the connection was established via VPN technology or not. Specifically, it was found that when using a VPN, there were different speeds in the download and upload directions. Based on this finding, CTU initiated administrative proceedings, which were concluded during the period under review with the imposition of a fine. In the case of the second inspection concerning the disproportionate traffic management of the IAS at a fixed location, the service repeatedly showed variations in transmission speed according to the number of

	parallel TCP/UDP connections used during data transmission. This inspection has not yet been completed during the period under review.
DE	While there was no formal assessment on traffic management, BNetzA has received a few isolated consumer requests which asked them to block domains during this reporting period. BNetzA pointed out the lack of jurisdiction for DNS blocking. Some consumers complained about the blocking of Russia Today's website. BNetzA pointed out that these blockings are based on the EU Sanctions Regulation, for which BNetzA is not responsible. Furthermore, the consumers were informed how depending on the case they could proceed (e.g. via civil proceedings or – if criminal charges apply – filing a report with the police). BNetzA also provides general information on its homepage ⁷ . Moreover, BNetzA discontinued the Netneutrality Testing procedure with the "Clearingstelle Urheberrecht im Internet (CUII)". Since 01 July 2026, a court order is obtained for every application. BNetzA no longer reviews applications related to net neutrality.
EL	In the previous reporting period, a formal RFI was sent to the major Greek ISPs (fixed and mobile) asking for detailed justification of their possible implementation of DNS blocking as a security measure to counter cyber-attacks (spam, phishing, spyware, botnets, keyloggers, ransomware, hacking) against networks and devices, pursuant to Article 3(3), exception b) of the OIR. Some of the outcomes drawn in the current period based on the answers received, are: a) the majority of the questioned ISPs make use of local recursive DNS resolvers to block the access to malicious domain names/websites/URLs; b) the blocking can be either manual or automated; c) the majority of the operators make use of updated blocking lists (provided by known sources specialised in security) and in some cases user complaints to identify the malicious domain names; d) the operators that implement DNS blocking do not inform the end-users during navigation that block of access has been performed for security/protection reasons, with a single exception of an ISP that forwards to a blocking page (informative) in the case of manual blocking applied to a single web page known to be a phishing page.
IE	Several investigations were undertaken in the reporting period.
NL	An investigation of commercial traffic shaping in the context of in-flight Wi-Fi ended in October 2025. Main conclusions: following concerns regarding compliance with Articles 3 and 4 of the OIR, the airlines concerned agreed to adapt their onboard Wi-Fi services by offering separate free and paid IAS and by improving transparency in their T&Cs. ACM also noted that the use of deep packet inspection is limited to network security purposes. After reviewing additional technical information provided by the airlines, ACM concluded that further investigation was not warranted and therefore closed the case.

⁷ Available at <https://www.bundesnetzagentur.de/DE/Fachthemen/Digitalisierung/Internet/Netzneutralitaet/DNSSperren/start.html>

SK	ISPs use practices imposed by European or national legislation. In exceptional cases and at the decision of the authority of the authorised by the State, traffic can be blocked based on such decision.
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Table 8. Formal assessments of ISP's traffic management practices

Question 8. In the reporting period, have you conducted any **research or survey on port blocking practices** by ISPs?

If yes, please briefly describe the main findings.

Seven NRAs (AT, EL, HR, MT, NL, PL, SK) primarily monitor activities through annual surveys. Most results indicate that port blocking is only performed for reasons of network security and integrity.

NRA	Port blocking practices
AT	ISPs are obliged under the Telecommunications Act to notify their T&Cs to RTR at the start of a new communication service. Changes of T&Cs have to be notified as well. Thus, RTR may come across issues of port blocking when checking the T&Cs. Occasionally, ISPs or end-users contact the NRA and enquire if the blocking of a certain port is in line with the OIR.
EL	Use of port blocking in fixed and mobile networks has been reported by all major ISPs' in the annual questionnaire which EETT circulated regarding year 2025. Both automatic and manual port blocking have been reported. There does not seem to be a set of ports uniformly blocked by all ISPs. Main purposes: for preventing DDoS attacks, preventing spam and phishing messages that target private data and passwords, preventing port scans, botnet/amplification attacks and unauthorized access to networks and services.
HR	HAKOM monitors port-blocking practices of major ISPs. Gathered response from conducted survey among ISPs and according to the HAKOMetar Plus measurement results on port blocking practices showed that ISPs do not use permanent port-blocking measures, just temporarily justify it with the security exception (malware, phishing, spoofing, preventing DDoS attacks, etc.). No new ports were reported to be blocked in comparison to previous years.
MT	Providers were asked to declare any active port blocking which applied in the network along with reason for doing so. All active port blocking is justified for network security reasons.
NL	An investigation of commercial traffic shaping in the context of in-flight Wi-Fi ended in October 2025. Following concerns regarding compliance with Articles 3 and 4 of the OIR, the airlines concerned agreed to adapt their onboard Wi-Fi services by offering separate free and paid IAS and by improving transparency in their T&Cs. ACM also noted that the use of deep packet inspection is limited to network security purposes. After reviewing additional technical information provided by the airlines,

	ACM concluded that further investigation was not warranted and therefore closed the case.
PL	A survey conducted by UKE shows that some ISPs block ports. Ports are blocked mainly in order to ensure integrity and security of the network as well as services provided by means of the network and end-users' terminal devices.
SK	ISPs block port 25, which is traditionally used to transport emails in unencrypted form. Blocking selected communication ports for residential customers in order to protect their communication devices; blocking does not affect service provision. Blocking the management of dynamic IP address ports can be exploited to take control of customer premises equipment for remote access in broadband networks.

Table 9. Port blocking practices

2. Article 3(5) – Specialised services

Question 9.a. Is there any change compared to the previous reporting period regarding to the **approach** you have taken **to monitor services other than IAS (called “specialised services”** below)?

If yes, please provide details.

Question 9.b. Please specify what **approach** you have taken **to monitor the specialised services**:

- i. market survey without requesting information from ISPs (e.g. checking ISP's offers on their web pages);
- ii. information request from ISPs;
- iii. analysis of complaints and end-user reporting;
- iv. technical network monitoring;
- v. other, please specify.

In the reporting period, in general, there was no change to the previous reporting period regarding the approach of the NRAs to monitor the specialised services. However, one NRA (LU) pointed out that there was a change when compared to the previous reporting period. LU stated that they resume this activity in the reporting period (in May 2025).

Many NRAs applied at least one of the following approaches to monitoring specialised services: market survey without requesting information from ISPs (13 NRAs), information requests from ISPs (19 NRAs) and analysis of end-user complaints (17 NRAs). Additionally, two NRAs performed technical network monitoring.

Two NRAs indicated different approaches. BE held several meetings with MNOs where they presented use cases they planned to trial and launch commercially. During these meetings,

regulatory issues were discussed. Emphasis was put on keeping open channels between the NRA and the respective MNOs to ensure compliance with the rules.

DK monitors specialised services primarily based on answers from the ISP's collected for the annual report on the Danish supervision of the OIR.

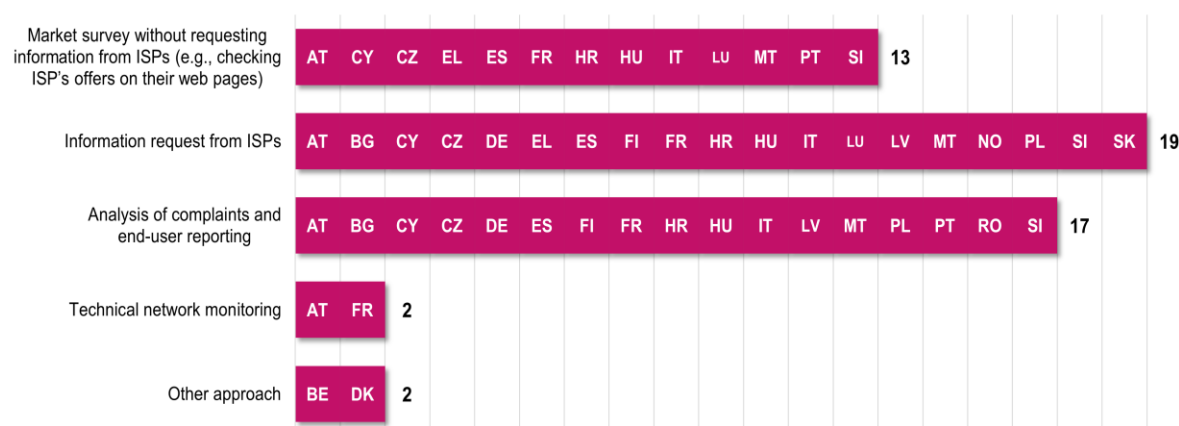


Figure 3. Approaches to monitor specialised services

Question 10. In the reporting period, have you completed any **formal assessment** of the **provision of specialised services** by ISPs?

If yes, briefly describe the practice and the conclusions of the assessment (and enforcement action where applicable).

Three NRAs (CY, DK, SK) have completed a formal assessment of the provision of specialised services by ISPs. The details can be found in the following table:

NRA	Assessment of specialised services
CY	According to the provisions of the OIR, as interpreted in the BEREC OI Guidelines and adopted in national secondary legislation through Decree 72/2017, ISPs reported to OCECPR on specialised services. Following the assessment of the ISPs' reports, OCECPR concluded that the provision of specialised services by ISPs did not constitute an infringement of the OIR.
DK	In the annual report on the Danish supervision of the OIR, ADG observed no issues related to the Danish ISPs' provision of specialised services.
SK	ISPs in Slovakia offered the IPTV, VoD, virtual PBX, services that could meet the criteria for the specialised services.

Table 10. Assessment of specialised services

3. Article 4(1) – Approaches to monitoring and enforcement compliance

Question 11.a. Is there any change compared to the previous reporting period regarding to the **approach** you have taken **to monitor and to enforce ISPs’ compliance with their transparency** obligations set out in article 4?

If yes, please provide details.

Question 11.b. Please specify what **approach** you have taken **to monitor and to enforce ISPs’ compliance with their transparency** obligations set out in article 4?

- i. market survey without requesting information from ISPs (e.g., checking the applicable “terms and conditions”);
- ii. (formal or informal) information request from ISPs;
- iii. analysis of complaints and end-user reporting;
- iv. other, please specify.

In the reporting period, in general, there was no change to the previous reporting period regarding the approach of the NRAs to monitor and enforce ISPs’ compliance with their transparency obligations. However, two NRAs (IE, LU) pointed out a change when compared to the previous reporting period. IE stated that several investigations were undertaken in the reporting period and LU stated that they resumed this activity as of May 2025 (see also Q9a).

As shown in the figure below, most NRAs used one or more approaches to monitor and to enforce ISPs’ compliance with their transparency obligations set out in Article 4 of the OIR: market surveys without requesting information from ISPs (19 NRAs), information requests to ISPs (21 NRAs) as well as analysis of complaints and end-users’ reports (19 NRAs).

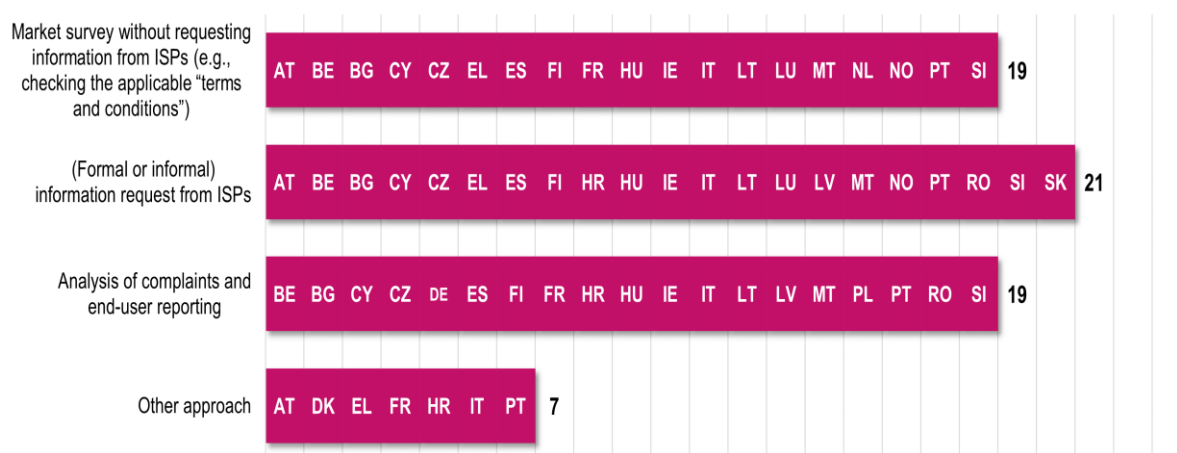


Figure 4. Approaches regarding monitoring and enforcing ISPs' compliance with their transparency obligations set out in Article 4 of the OIR

Furthermore, seven NRAs (AT, DK, EL, FR, HR, IT, PT) mentioned other approaches, as detailed in the table below:

NRA	Description of other approaches
AT	ISPs are obliged under the Telecommunications Act to notify their T&Cs to RTR at the start of a new communication service. Changes of T&Cs have to be notified as well. This is an on-going measure. Within this framework also the transparency obligations of the OIR are checked. RTR is entitled to object specific clauses within 6 weeks if they do not meet particular legal standards.
DK	In 2025 ADG has requested 42 ISPs to indicate how they comply with Article 4 of the OIR.
EL	Audits at points of sale of ISPs' commercial products/offers.
FR	Article 45 of the Executive Order N. 2021-650 published the 26 May 2021 adds Article L224-27-1 to the French Consumer Code, which mentions that operators must comply with the transparency measures of Article 4(1) of the OIR
HR	On site audits at points of sale
IT	Publishing statistical comparative values of ISPs' QoS results. Also, AGCOM runs a surveillance activity on service and general conditions contents.
PT	ANACOM has continued to analyse the main ISP's contractual terms, as well as the information published on their websites, requesting when needed further clarifications from providers.

Table 11. Description of other approaches to monitor ISPs' compliance with the transparency obligations

Question 12. In the reporting period, have you completed any **formal assessment** of the **ISPs' contract conditions and their compliance with requirements** set out in article 4(1), subs. a-e?

If yes, please describe the main findings.

In 12 Member States (AT, BG, CY, CZ, DK, EL, HR, IE, IT, NL, RO, SK), a formal assessment of the ISPs' contract conditions and their compliance with requirements set out in Article 4(1) of the OIR was completed by the respective NRAs in the reporting period (see the table below).

NRA	ISPs' contract conditions
AT	ISPs are obliged under the Telecommunications Act to notify their T&Cs to RTR at the start of a new communication service. Changes of T&Cs have to be notified as well. This is an on-going measure. Within this framework also the transparency obligations of the OIR are checked. RTR is entitled to object specific clauses within 6 weeks if they do not meet particular legal standards.
BG	CRC collects such information with a dedicated questionnaire on annual basis. ISPs declare that speeds and traffic management rules are described along with a short explanation in contracts. Some of the ISPs declare that information for speeds is also part of contract summaries.
CY	ISPs have submitted their contracts to OCECPR, according to the provisions of the OIR and the Decree. Further to OCECPR's assessment of the contracts, ISPs comply with the requirements set out in Article 4(1) of the OIR.
CZ	As part of its supervisory activities, CTU monitors and evaluates on a long-term basis whether the contractual conditions of providers comply with the requirements regarding transparency and disclosure of information under national law, as well as the mandatory information pursuant to Article 4(1) of the OIR. In February 2026, an inspection was launched involving 140 selected providers. It focuses on compliance with the obligation to specify contractually particular speeds and to describe the impact of deviations on the exercise of consumer rights under General Authorisation VO-S/1/08.2020-9, which specifies the method for determining individual speeds and their deviations, and Article 4(1)(d) of the OIR, including compliance with the requirements regarding the content, form, and method of publishing information set forth in the Electronic Communications Act. The inspection is targeted at providers that have notified an electronic communications undertaking between 1 January 2021 and 31 December 2025 and who have not yet been inspected. This inspection is still ongoing.
DK	In 2024 an assessment revealed that some ISPs in Denmark did not fully comply with the information requirements specified in Article 4 of the OIR. A review of the responses revealed that the low compliance rate was due to an inappropriate design of the questionnaire. In 2025, the questionnaire has been improved and the number of ISPs indicating that they do not comply with Article 4 has decreased significantly.

EL	Non-compliance regarding speed transparency and compensation for discrepancies was found for one ISP and a formal letter requesting compliance was sent.
HR	Since ISPs in Croatia are obliged under the Croatian Telecommunications Act (ZEK) to notify their T&Cs to HAKOM before they launch a communication service, HAKOM regularly checks whether they meet particular legal standards set out in the ZEK and compliance with the OIR. Changes of previously approved T&Cs must be notified as well. Transparency is generally at a satisfactory level.
IE	A number of fixed ISPs were found to not include one or more required speeds, but this has since been either fully remedied or the case is ongoing.
IT	AGCOM currently verifies contractual conditions and operators' terms of service, publishing them on its web site ⁸ .
NL	An investigation of commercial traffic shaping in the context of in-flight Wi-Fi ended in October 2025. Following concerns regarding compliance with Articles 3 and 4 of the OIR, the airlines concerned agreed to adapt their onboard Wi-Fi services by offering separate free and paid IAS and by improving transparency in their T&Cs. ACM also noted that the use of deep packet inspection is limited to network security purposes. After reviewing additional technical information provided by the airlines, ACM concluded that further investigation was not warranted and therefore closed the case.
RO	ANCOM analysed the contracts, from the perspective of compliance with the provisions of Article 4(1) of the OIR, which the main providers of electronic communications services from the Romanian market concluded with consumers. ANCOM found that they, with minor exceptions, comply with the information obligations provided for in Article 4(1) of the OIR. In the case of a contract for the provision of IAS via a 4G router, the provider did not include in the contract the information provided for in Article 4(1) subs. b), d) and e) of the OIR, and in the case of a contract for the provision of IAS at fixed networks, the supplier did not include in the contract the information provided for in Article 4(1) sub. d) of the OIR.
SK	ISPs contract conditions comply with requirements Article 4 of the OIR.

Table 12. Main findings of assessing the ISPs' contract conditions

Question 13.a. In the reporting period, have **any new national specifications** been set or changed in relation to the **different types of speeds** laid out in article 4(1), sub. d.?

If yes, please provide details.

Question 13.b. Were these requirements:

- i. imposed by the NRA or another competent Authority?
- ii. agreed upon by market players?
- iii. legally binding?

⁸ Available at <https://www.agcom.it/la-carta-dei-servizi>

In the reporting period, new national specifications of the different types of speeds were set by one Member State (FR) and were imposed by the respective NRA. In particular, Arcep started a working group in order to contribute to the harmonisation of the stakeholders' definition of the normally available speed.

For further details regarding the NRAs' existing national specifications in relation to the different types of speeds, please refer to Annex I of this report.

Question 14. In the reporting period, has your NRA reviewed **the terms and conditions in ISP contracts for IAS in the fixed networks**? Please also consider hybrid services (see also Q16).

If yes, did ISPs **define** minimum, maximum, advertised and normally available upload and download speeds?

Please briefly explain the main findings.

In the reporting period, the T&Cs in ISPs' contracts for **fixed** networks were reviewed in 15 Member States (AT, BG, CY, CZ, DK, HR, IE, IT, LU, MT, NO, PT, RO, SI, SK). An overview of the main findings of these revisions is shown in the table below. In general, the contracts contain information on normally available, minimum, maximum and advertised upload and download speeds in 13 Member States (AT, BG, CY, CZ, DK, HR, IE, IT, MT, PT, RO, SI, SK), while in one Member State (NO), the ISPs provided information about the speed parameters to varying degrees. In IE, in the case of three small ISPs, no minimum speeds, remedies, or equal treatment of traffic measures were published or provided to end users, but this was since remedied or the engagement is ongoing. This information is based on a review of the T&Cs of the ISPs, overall, the minimum, maximum, advertised and normally available upload and download speeds are defined and if there are definitions or recommendations of the NRAs, they are in line with these.

NRA	Definition of speeds in fixed contracts
AT	ISPs are obliged under the Telecommunications Act to notify their T&Cs to RTR at the start of a new communication service. Changes of T&Cs have to be notified as well. Within this framework also the transparency obligations of the OIR are checked. In this regard RTR checks if the providers stick to the terminology as used in the OIR. RTR is entitled to object specific clauses within 6 weeks if they do not meet particular legal standards. This is an on-going measure.
BG	Defined speeds are in line with the OIR and CRC's Position (Decision N. 170/18.04.2019).
CY	ISPs defined in their contracts minimum, maximum and normally available upload and download speeds of IAS in the fixed network as described in Q13a.

CZ	As part of its supervisory activities, CTU focused its attention on compliance with the requirements relating to transparency and disclosure of both pre-contractual information under national law and mandatory information pursuant to Article 4(1) of the OIR, both for the IAS at a fixed location and for the mobile IAS. See also Q12.
DK	The review assessed whether ISPs defined minimum, normally available, maximum, and advertised upload and download speeds in their contracts. The main findings indicate that there is a varying degree of compliance among ISPs regarding the inclusion of these speed definitions in their contracts. Specifically, 74% of ISPs provided a clear and understandable explanation of the minimum, normally available, maximum, and advertised upload and download speeds
HR	Based on the review conducted of the T&Cs in ISPs' contracts, HAKOM concluded that ISPs are in compliance with the OIR.
IT	Following the publication of the Guidelines for the application of resolution N. 156/23/CONS, operators have published, for all fixed network offers including FWA, marketed as of the date the resolution came into effect, the normally available speeds and maximum speeds in addition to the already published minimum speeds. With regard to speeds, the Guidelines establish the following definitions: • Minimum speeds: "95th percentiles" of the data transmission speeds in download/upload measured during the entire observation period, meaning the measured values for which 95% of the transfer speeds recorded during the observation period are greater than these values. • Normally available speeds: "75th percentiles" of the data transmission speeds in download/upload measured during the entire observation period, meaning the measured values for which 75% of the transfer speeds recorded during the observation period are greater than these values. • Maximum speeds: the maximum values of the data transmission speeds in download/upload measured during the entire observation period.
LU	Due to inconsistent and/or incomplete information, ILR requested 4 ISPs to align their T&Cs and any other information publicly available with the provisions of Article 4(1) and 4(2) of the OIR. Although 3 ISPs updated their T&Cs accordingly, ILR has still been in touch with the remaining ISP, by the end of this reporting period, to resolve the issue.
NO	Nkom has observed that the operators provide information about the speed parameters to varying degrees. While advertised and maximum speeds are generally presented clearly, Nkom has seen that for some operators the information on minimum and normally available speeds seems to be incomplete. As a result, Nkom has decided to follow up with certain providers that do not appear to meet the requirements for publishing such information.
PT	The main ISPs define, in their websites and contracts, the different speeds of the IAS in the fixed network. In general, ISPs provide information on minimum, normally available, maximum and advertised, download and upload, speed of the IAS, as well as an explanation for each type of speed.
RO	Following the verification of the contractual clauses from the contracts that the main providers of electronic communications services from the Romanian market

	concluded with consumers, ANCOM found that a provider did not comply with the provisions of Article 4(1) sub. d) of the OIR, more precisely, it did not include information in the contracts regarding the value of the advertised download and upload data speed for the IAS.
SI	Based on an NRA survey, all major ISPs. and a large majority of small ISPs, define in their contracts minimum, maximum, advertised and normally available upload and download speeds of the IAS.
SK	According to the outcome of an RFI sent to selected ISPs, all of them defined in their contracts minimum, maximum, advertised and normally available upload and download speeds.

Table 14. Main findings of assessing fixed ISPs' contracts regarding definition of speeds

Question 15. In the reporting period, has your NRA **reviewed the terms and conditions in ISP contracts for IAS in the mobile networks?** Please also consider hybrid services (see also Q16).

If yes, did they **define** advertised and estimated maximum upload and download speeds?

Please briefly explain the main findings.

If available, please provide information regarding contractual conditions, such as examples of "realistic usage conditions" under which the estimated maximum speed can be achieved (paragraph 153 of BEREC OI Guidelines).

In the reporting period, the T&Cs in ISPs' contracts for **mobile** networks were reviewed in 16 Member States (AT, BG, CY, CZ, DK, HR, IE, IT, LT, LU, MT, NO, PT, RO, SI, SK).

Of those who reviewed the T&Cs of the ISPs, in 14 Member States (AT, BG, CY, CZ, DK, HR, IE, IT, LT, LU, NO, PT, RO, SK), the advertised and estimated maximum upload and download speed have been defined in the T&Cs. In two Member States (MT, SI), the ISPs did not define these.

An overview of the main findings of these revisions is shown in the table below. Most contracts contain information on advertised and estimated maximum upload and download speeds. The revision of T&Cs by the NRAs focused on a wide variety of topics.

NRA	Definition of speeds in mobile contracts
AT	ISPs are obliged under the Telecommunications Act to notify their T&Cs to RTR at the start of a new communication service. Changes of T&Cs have to be notified as well. Within this framework also the transparency obligations of the OIR are checked. In this regard RTR checks if the providers stick to the terminology as used in the OIR. RTR is entitled to object specific clauses within 6 weeks if they do not meet particular legal standards. This is an on-going measure.

BG	Defined speeds are in line with the OIR and CRC's Position (Decision N. 170/18.04.2019).
CY	Where applicable, ISPs defined in their contracts the advertised speed, in percentage to the estimated maximum speed. Following an assessment of the reports, OCECPR's main findings were that ISPs contractual terms comply with the provisions of the OIR and Decree 72/2017.
CZ	As part of its supervisory activities, CTU focused its attention on compliance with the requirements relating to transparency and disclosure of both pre-contractual information under national law and mandatory information pursuant to Article 4(1) of the OIR, both for the IAS at a fixed location and for the mobile IAS. See also Q12.
DK	See answer to Q14.
HR	Mobile ISPs are in compliance with the OIR. ISPs defined in their contracts advertised and estimated maximum upload and download speeds of the IAS (estimated maximum speeds are made available in a geographical manner providing mobile IAS coverage maps with estimated speed values of network coverage in all locations for different network technologies).
IE	This case is still ongoing.
IT	With the resolution N. 23/23/CONS Agcom has introduced in Italian regulation the estimated maximum and advertised download and upload speeds of the IAS in the case of mobile networks. Estimated maximum speeds shall be indicated for each technology, together with coverage maps (with a resolution of at least 100 meters) for each network technology. Advertised speeds are the speeds that the operator uses in the commercial communications, including advertising and marketing, and are the speeds that the operator is realistically able to provide to its users, under conditions of normal use, in the national territory.
LT	All mobile ISPs provide estimated data speed maps for public as these values are very dependent on the geographic location of the end-user. These maps are mentioned in the contracts, together with maximum expected speed that each technology can deliver. Defined data speeds are not common in marketing messaging, more emphasis is given to the "unlimited monthly data" offers. For fixed IAS, maximum data speed is often the key parameter for monthly service plan marketing and all required speeds are mentioned in contracts.
LU	ILR requested that one ISP check the consistency of information provided and to adapt its T&Cs accordingly.
MT	ISPs indicate the speeds attainable through the network and the limitations available to the subscriber to achieve such speeds
NO	The ISPs have defined the required speed parameters.
PT	The main ISPs define, in their websites and contracts, the different speeds of the IAS in the mobile network. In general, ISPs provide information on estimated maximum and advertised, download and upload, speed of the IAS, as well as an explanation for each type of speed.
RO	Following the verification of the clauses in the contracts that the main ISPs concluded with consumers, ANCOM found that a provider did not comply with the provisions of Article 4(1) sub. d) of the OIR. More precisely, it did not include in the contracts a

	clear and understandable explanation regarding the maximum estimated download and upload speed of the IAS, given that: • it is not clear what methodology was used by the provider; • it is not clear how the speed measurement procedure provided for in the contract is applied in the case of using mobile terminals for speed measurement, given that the contracted service is only an IAS accessible via a 4G router; • there is no speed measurement procedure adapted to terminals other than mobile ones (given that the IAS involves the use of a router with a SIM card and can be used on any device).
SI	All major ISPs defined in their contracts the evaluated maximum and advertised upload and download speeds of the IAS. Speed is defined based on contractual package.
SK	According to the outcome of an RFI sent to selected ISPs, all of them defined in their contracts minimum, maximum, advertised and normally available upload and download speeds.

Table 15. Main findings of assessing mobile ISPs' contracts regarding definition of speeds

Information regarding contractual conditions, such as examples of “realistic usage conditions” under which the estimated maximum speed can be achieved (paragraph 153 of the BEREC OI Guidelines) were provided by six Member States (BG, FI, FR, MT, PT, SI) as described in the table below:

NRA	Main findings
BG	The estimated maximum speed is specified separately for different network technologies with a note that it is in ideal conditions. General T&Cs contain a text like this: <i>"The speed and quality of IAS depends on the type of technology, the type of device used, the coverage and the network load, the simultaneous use of the service by several devices, architectural and geographical features."</i>
FI	Please see Traficom's Opinion on speeds ⁹ .
FR	ISPs only define the theoretical maximum speed for their mobile access offers in their mobile contracts, that is the maximal reachable speed for a given access technology (2G, 3G, 4G and 5G).
MT	Realistic usage conditions are provided indicating typical types of activities, e.g. video streaming at different qualities.
PT	The main ISPs provide the definition of estimated maximum speed and identify the factors that might affect that speed, in accordance with paragraph 153 of the BEREC OI Guidelines.

⁹ Available at https://www.traficom.fi/sites/default/files/media/regulation/Verkkoneutraliteettikannanotto-mobiililaajakaistaliittymista_EN.pdf

SI	Estimated maximum speed is defined as a speed which is achievable based on contractual package, current radio signal quality, current available resources in the cell, terminal equipment, current used access mobile technology (2G, 3G, 4G, 5G).
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Table 16. Main findings of assessing mobile ISPs' contracts regarding examples of "realistic usage conditions"

Question 16. In the reporting period, have any ISPs offered **new hybrid services** in your country (as specified in paragraph 141.b. of BEREC OI Guidelines)?

If yes, please provide details.

In three Member States (DK, EL, PT), new hybrid services were offered in the reporting period (see the table below), while in the rest of the Member States (AT, BE, BG, CY, CZ, DE, EE, ES, FI, FR, HR, HU, IE, IT, LT, LU, LV, MT, NL, NO, PL, RO, SE, SI, SK), no new hybrid services are available.

NRA	Information on new hybrid services
DK	Fixed Wireless Broadband is still used in several rural areas.
EL	In the reporting period, one ISP launched free of charge an 'Always Online' service to keep the home devices connected via the mobile network in the case that the fixed internet connection drops. During the outage the home router is transferred to the ISP's mobile network via Wi-Fi hotspot with appropriate configuration in the customer's mobile application.
PT	The major ISPs in Portugal offer hybrid services namely in areas not covered by VHCN (Fiber or Docsis3.1). These offers include wireless (LTE) technologies for the provision of IAS at a fixed location.

Table 17. Main findings on information on hybrid services

Question 17. In the reporting period, have you completed any **formal assessment of the ISPs' obligation to publish**, according to article 4(1), sub. 2, the information referred to in article 4(1), subs. 1 a-e?

If yes, please provide details.

Formal assessments of the ISPs' obligation to publish information according to Article 4(1) of the OIR were carried out in nine Member States (AT, BG, CY, CZ, DK, IE, IT, NL, SK), while in rest the of 19 Member States no formal assessment was completed (BE, DE, EE, EL, ES, FI, FR, HR, HU, LT, LU, LV, MT, NO, PL, PT, RO, SE, SI), even though, in DE, in individual cases, ISPs were reviewed following consumer reports. A detailed overview is shown in the table below:

NRA	Transparency of information
AT	See Q15.
BG	With the annual questionnaire ISPs provide links to their web sites where information is published. CRC checks the links for availability of that information and its content.
CY	According to the provisions of the OIR, as adopted in national secondary legislation (Decree 72/2017), ISPs reported to OCECPR on their obligation to publish according to Article 4(1) of the OIR. Following an assessment of ISPs' reports, OCECPR found out that ISPs comply with the relevant legislation.
CZ	As part of its supervisory activities, CTU monitors and evaluates on a long-term basis whether the contractual conditions of providers comply with the requirements regarding transparency and disclosure of information under national law, as well as the mandatory information pursuant to Article 4(1) of the OIR. In February 2026, an inspection was launched involving 140 selected providers. For details see Q12.
DK	In the answers from the ISP's collected for the annual report on the Danish supervision of the OIR, 76% of the respondents indicated that they publish the information referred to in Article 4(1) of the OIR.
IE	A number of fixed ISPs were found to not include one or more required speeds, but this has since been either fully remedied or the case is ongoing.
IT	AGCOM monitors and publishes data on the contractually promised download speeds for fixed networks. These values are published on a webpage ¹⁰ where users can compare the offers.
NL	An investigation of commercial traffic shaping in the context of in-flight Wi-Fi ended in October 2025. Following concerns regarding compliance with Articles 3 and 4 of the OIR, the airlines concerned agreed to adapt their onboard Wi-Fi services by offering separate free and paid IAS and by improving transparency in their T&Cs. ACM also noted that the use of deep packet inspection is limited to network security purposes. After reviewing additional technical information provided by the airlines, ACM concluded that further investigation was not warranted and therefore closed the case.
SK	According to the outcome of an RFI sent to selected ISPs, 100% of them complied with contract conditions set out in Article 4(1) subs. 1 a-e of the OIR.

Table 18. Main findings regarding transparency of information

Question 18. In the reporting period, have you imposed **any new additional transparency requirements** or **changed the existing ones** regarding the publication of information referred to in article 4(1), subs. 1 a-e?

If yes, please provide details of the requirements.

¹⁰ Available at https://www.misurainternet.it/confronto_banda_minima/

In two Member States (AT, IT), additional transparency requirements were imposed, as outlined in the table below:

NRA	Additional transparency requirements
AT	On an informal level, transparency requirements are regularly discussed with ISPs: • RTR had/has bilateral meetings with ISPs, which also cover issues regarding the OIR and the accompanying guidelines. • Also, the regular exchange between ISPs and RTR concerning different matters of telecommunications including OI is on-going. Within this forum, RTR presents latest developments regarding OI to the ISPs and ISPs are welcome to present their views.
IT	Resolution N. 106/25/CONS, among other provisions, introduces a classification system for mobile offers using 5G technology, aimed at ensuring greater transparency for end-users. This system is designed to help users make informed choices intuitively and involves the use of labels that indicate the characteristics of the service offered, particularly any speed limitations. A green label indicates 5G offers provided without contractual speed limitations imposed by the operator. Yellow and red labels are used to signal the presence of speed limits, with yellow for download limits equal to or greater than 20 Mbps and red for limits below 20 Mbps. Within these labels, the value of the applied speed limit is clearly indicated, making the actual maximum achievable speed immediately understandable to the user.

Table 19. Additional transparency requirements imposed in the reporting period

4. Article 4(2) – Procedures for end-user complaints

Question 19. In the reporting period, have ISPs established new or adapted the existing “**transparent, simple and efficient procedures to address end-user complaints** of end-users relating to the rights and obligations laid down in Article 3 and paragraph 1” according to article 4(2)?

If yes, please provide details (e.g., hotlines, complaint templates, additional channels that can be used to report complaints etc.) specifying if there is an industry-wide approach in relation to these procedures and the basis on which they have been set (e.g., imposed or facilitated by the NRA, prescribed by national legislation etc.)

No NRAs reported that ISPs established new, or adapted the existing, “*transparent, simple and efficient procedures to address end-user complaints...*” according to Article 4(2) of the OIR.

Question 20. Do you **collect or monitor end-user complaints about the rights and obligations laid down in Article 3 and article 4(1)?** (Please see Q22 about complaints related to the quality of IAS).

If yes, what are the typical issues end-users complain about? (Please state the number or percentage, if available.)

23 responding NRAs (AT, BE, BG, CY, CZ, DE, EE, EL, ES, FR, HR, HU, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI) declared they collect or monitor end-user complaints about the rights and obligations laid down in Article 3 and Article 4(1) of the OIR. The following table reports a detailed description of the typical issues of end-users' complaints, collected by NRAs.

NRA	Details on the received end-users' complaints
AT	See Q22.
BE	BIPT is not a body that handles individual complaints. End-user complaints are in principle handled by the Ombudsman for Telecommunications. BIPT does receive reports, as a signal, on the basis of which (among other things) it decides to intervene in order to structurally solve shortcomings on the market with regard to the law and the interests the BIPT must defend. Complaints typically concerned the quality of IAS, including speeds and access to certain websites. One complaint alleged discrimination by an ISP of services provided by a video game streaming service.
BG	No complaints about the rights and obligation laid down in Articles 3 and 4(1) of the OIR.
CY	Mainly QoS, pricing, technical issues.
CZ	CTU received 64 complaints and inquiries from end-users, which represents a slight decrease compared to the previous period. This trend is due to the gradual improvement of service quality by providers, the more efficient handling of complaints about defects in IAS, the increasing awareness of end-users about QoS parameters, as well as the active use of available measuring tools to verify the quality of service, as well as the possibility of easy switching of ISPs. 92% of the total number of registered submissions by end-users were complaints about the insufficient quality of the IAS provided, which did not correspond to the speed parameters of the service agreed in the contract, as well as complaints about outages and non-functioning of the service. On the basis of the investigations carried out by CTU, no misconduct on the part of ISPs was found in most cases. During the reference period, CTU received 4 complaints concerning compliance with Article 3(3) of the OIR. For details see Q7.
DE	Consumers' complaints are recorded. They relate in particular to deviations between contractually promised and measured internet access speeds. Furthermore, more detailed investigations are conducted if there are evident violations of legal obligations. Companies are then required to correct deficiencies.
EE	ECSTRA has not received any complaints of this type from end-users.
EL	Consumers mainly complain about connection speeds and poor quality.

ES	153 claims received in Telecomm Users Agency (Ministry of Digital Transformation). (1.16% of total claims). Typical issues are blocking of websites due to copyright claims based on Article 3(3) of the OIR and speed.
FR	On “J'alerte l'Arcep”, 136 alerts were submitted over the period, relating to the obligations mentioned in Articles 3 and 4 of the OIR out of more than 66,500 alerts received over the period. These alerts do not constitute formal complaints, but only reports from end users.
HR	Complaints are related to bill accuracy, number portability, fault repair, QoS.
HU	Such cases are very rare, so clear trends cannot be established. Often, end-users complain about QoS in general, not directly about the infringement of OI rules. These cases are dealt with in the context of the legislation related to end-user rights.
IT	The number of those complaints, in relation to other issues like, for example billing, is quite low.
LT	Most common issues end-users complained about in the reporting period are: change of contract terms/conditions/extension (27%), termination of contract/consequences (21%), QoS (20%), fees for services/bills (12%). Other categories: equipment, fair use policies, contract obligations, transfer of services etc.
LU	Information on end-user complaints is provided in the annual report on mediation ¹¹ . See Q22 for further details.
LV	Complaints received in 2025 divided by categories: invoices (21%), service quality (22%), contracts (36%) and other different cases (20%).
MT	No complaints relate to Article 3 or 4(1) of the OIR.
NL	Discrepancies between advertised and delivered (actual) speeds.
PL	End users most frequently reported that their internet connections failed to achieve the minimum, normally available, maximum, or advertised download and upload speeds as specified in their contracts with ISPs. Additional issues raised included frequent connection drops, poor coverage, and low data throughput within the data transmission service. The majority of complaints concerned the QoS in mobile networks, representing approximately 55% of all submissions, while just over 22% of the reports referred to the quality of fixed-line network services.
PT	Approximately 720 complaints regarding IAS were directly submitted to ANACOM. This represents an increase of 99% compared to the previous reporting period, exceeding the overall growth of 46% observed in complaints related to all electronic communications services. Complaints concerning IAS accounted for 19% of the total number of complaints about electronic communications services. Based solely on the descriptions provided in the complaints, the main issues identified are as follows: • Service faults/malfunctions in fixed IAS: reported in 74% of IAS complaints; • Service faults/malfunctions in mobile IAS: reported in 14% of IAS complaints; • Internet speeds below advertised or contracted levels in fixed IAS: reported in 8% of IAS complaints;

¹¹ Available at <https://www.ilr.lu/publications/rapport-dactivite-annuel-du-service-de-mediation-2025/>

	Traffic management practices (traffic shaping): reported in 2% of IAS complaints.
RO	2 complaints, one regarding location of NTP and one concerning measures for managing internet traffic in exceptional and temporary situations of network congestion
SE	General quality of the IAS.
SI	End-users' complaints are monitored in a way that the need to start formal procedure would be detected. AKOS does not have specific statistics of each type of complaints, however there are only few complaints that regard to relevant articles of the OIR. Most of them are about connection not reaching contracted speed.

Table 20. Details on the received end-users' complaints

5. Article 4(4) – Monitoring mechanisms

Question 21. In the reporting period, is there any change regarding NRA's or national interpretation of "**significant discrepancy, continuous or regularly recurring**" as stipulated in article 4(4)?

If yes, how are these terms interpreted?

If yes, was the definition:

- i. imposed by the NRA (e.g. using article 5(1))?
- ii. voluntarily agreed upon by the market players?
- iii. other, please specify.

In the reporting period, no NRA changed the existing interpretation or adopted a new interpretation of "*significant discrepancy, continuous or regularly recurring*".

Question 22. Do you **collect or monitor the number of end-user complaints about the performance of the IAS**, relative to contracted parameters (speeds or other QoS parameters)?

If yes, what was the level of end-user complaints received during the reporting period?

24 NRAs (AT, BE, BG, CY, CZ, DE, EE, EL, ES, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK) have collected and monitored the number of end-user complaints related to the performance of the IAS in the reporting period. Additional information on this matter is summarised in the table below:

NRA	Information related to end-user complaints about the performance of the IAS
AT	Within the framework of the conciliation body of RTR, complaints from end-users are dealt with. Only to a very small extent are these complaints related to questions of net neutrality, in particular concerning the NTP or rather "router freedom". Proceedings in which inadequate service provision (quality issues) by an ISP is brought forward, make up the largest proportion. What is striking, however, is a decline in these complaints over the last four years, in particular in the fixed networks, although they went up slightly this year and mobile networks decreased further. Overall, however, these are only isolated cases in end-customer arbitration. It can be assumed that the Austrian providers comply with their obligations under the OIR towards their end-users. Numbers regarding OI-related complaints (usually on the contractual internet speed/quality): mobile networks: 68 complaints; fixed networks: 39 complaints.
BE	During the reporting period, BIPT received 6 complaints about the performance of the IAS relative to contracted parameters (5 concerning deficient connectivity; 1 concerning volumes ("unlimited" offers)).
BG	The number of complaints regarding fixed and mobile IAS has almost doubled compared to the previous period, which is mainly due to the significant increase in complaints about mobile service. <u>For fixed IAS:</u> the number of complaints concerning speeds has decreased compared to the previous period. Above 80% of complaints are due to interruption of service in relation with its migration to a new technology, access line failures and used routers. <u>For mobile IAS:</u> complaints regarding mobile IAS primarily concern maximum speeds that are significantly below the contractual levels and lack of or insufficient network coverage. The reason is that most of users who submit complaints expect to receive speeds close to the maximum at any time and in any location although the factors affecting speeds are described in the operator's general conditions. In many cases, subscribers use applications and services that need speed higher than contractual speed. Such complaints are generally not satisfied. Complaints about insufficient or complete lack of coverage are increased more than 10 times compared to the previous period. They are related to a request for quality corresponding to what was agreed when the IAS is used in hard-to-reach and sparsely populated areas. In addition, there are complaints about FWA. These complaints refer to low quality or inability to use apps and services on multiple devices, including smart TVs. In some cases, the low quality is due to the contracted speed, and in others, the positioning of the antenna or the connection to a base station.
CY	OCECPR did not receive any complaints relative to QoS parameters during the period from 01 May 2025 to 30 April 2026.
CZ	In the reporting period, 92% of the total number of registered submissions by end-users were complaints about the insufficient quality of the IAS provided, which did not correspond to the speed parameters agreed in the contract, as well as complaints about outages and non-functioning of the service.

DE	BNetzA received around 3,000 complaints per year. Statistical analysis of complaints is difficult because most consumers mix problems or report several at once (e.g., billing issues, technical malfunctions, problems with terminal devices). If the cases are sufficiently substantiated, BNetzA can forward them to the affected companies. In most cases, the providers have proposed a solution, thus finding a solution in the interests of both parties. Furthermore, it is still possible to use the dispute resolution procedure at BNetzA. Consumers' legal remedies are governed by general civil law. In addition, end-users' legal remedies can be found in the consumer protection provisions of the German Telecommunications Act.
EE	The number of QoS complaints is low, about 10 complaints per year. The majority of complaints are related to mobile data services.
EL	The total number of complaints regarding IAS performance as reported by the surveyed ISPs was 143,021 for fixed and 62,934 for mobile. Note that those numbers correspond to the period from 01 January 2025 until 31 December 2025 and mainly refer to internet speeds.
ES	44 claims received in Telecomm Users Agency (Ministry of Digital Transformation). (0.33% of total claims). Speed is the typical issue.
FR	ARCEP does not monitor formal end-user complaints concerning discrepancies of performances. End users can report such problems on the online alert platform "J'alerte l'Arcep".
HR	HAKOM acts as a 2nd level for the resolution of complaints (complaints are first addressed to the ISPs). During this reporting period, HAKOM received 46 complaints regarding internet QoS in fixed networks and 58 complaints regarding internet QoS in mobile network. In most complaints about mobile IAS related to service quality, the main reason is poor network coverage. Between 01 May 2025 and 30 April 2026, through HAKOMetar certified tool, there were submitted 81 end-user complaints regarding achieved minimum speed toward ISPs.
HU	Such cases are very rare, so clear trends cannot be established. Often, end users complain about QoS in general, not directly about the infringement of OI rules. These cases are dealt with in the context of the legislation related to end-user rights.
IE	Approx 3.5% of all complaints within the period relate to net neutrality issues.
IT	AGCOM monitors the end-user complaints sent through the NeMeSys certified measurement tool and those sent directly to AGCOM by end users. They mostly concern guaranteed speeds.
LT	77 complaints received on QoS (compared to 15 last reporting period).
LU	Few (4) end-users filed a complaint regarding the discrepancy of the provided speeds.
LV	QoS of fixed IAS (2% of total complaints), QoS of mobile IAS (14% of total complaints).
MT	MCA received one complaint related to internet speed.
NL	39 end-user complaints received.
PL	582 complaints – main issue is QoS (mobile and fixed-line networks).
PT	See Q20.
RO	100 end-user complaints received.

SE	22 end-user complaints received.
SI	AKOS dealt with 10 disputes concerning significant permanent or regularly recurring discrepancies between the contracted and actual speeds. These disputes represent around 1% of all disputes brought before.
SK	See Q20.

Table 21. Level of end-user complaints about the performance of IAS

Question 23. In the reporting period, have there been any updates regarding your **IAS quality monitoring tool** for consumers or any respective measurement tool projects?

If yes, please provide details.

Nine NRAs (AT, CZ, FI, IE, LV, PL, PT, SI, SK) reported updates regarding their IAS quality measurement tool as summarised in the table below. For further details regarding NRAs' existing measurement tools, please refer to Annex I of this report.

NRA	Information related to IAS quality monitoring tool
AT	RTR is regularly updating the monitoring tool and its website and collaborating with other NRAs who have similar tools (based on the source code of RTR-NetTest). RTR also provides a Desktop-App ¹² .
CZ	The functionalities of the Visualisation Portal ("VPortal"), which offers easier access to information on the quality and availability of services, have been further improved. Within the fixed services module, the option to distinguish between standard and certified measurements has been added for data collected using the CTU-NetTest certified measurement tool ("NetTest"), with certified measurements displayed at the measurement address location. Within the mobile service module, the possibility of displaying measured data via NetTest mobile applications for the Android and iOS operating systems has been newly added.
FI	New features added to the mobile apps such as new map view; continues measurement, where the app automatically starts a new measurement every 10 minutes; Measurement when moving, where the app automatically starts a new measurement based on the speed of movement. Additionally, several accessibility improvements and other minor fixes.
IE	ComReg's development of an IAS quality monitoring tool is ongoing
LV	SPRK have implemented a measurement tool and are currently conducting tests as well as revising the QoS Measurement Methodology. The tool is not accessible to end-users, as it is a closed system available exclusively to the regulator. At present, it is capable of monitoring only mobile services.

¹² Available at https://www.rtr.at/TKP/service/rtr-nettest/help/Desktop_App.en.html

PL	Since 25 July 2025, UKE has established the Internet Quality Monitoring System. The system constitutes a mechanism certified for monitoring, referred to in Article 4(4) of the OIR. It allows for the verification and presentation to end-users of fixed IAS of the measured quality parameters of the tested service in the form of a generated Report from certified measurements of IAS quality. The Report can be used by the user, among other things, in a complaint procedure to demonstrate consistent and recurring discrepancies between the actual performance of the internet access service and the values indicated in the contract with the provider. The system in the form of an e-service is made available and provided by UKE free of charge via the UKE Electronic Services Platform for users using fixed IAS in the territory of Poland.
PT	In 2025, the project to integrate the NET.mede service with the GEO.ANACOM platform was completed, enabling the geographical visualisation of tests carried out over the previous 90 days, by type of access and coverage. Through this functionality, users now have access to detailed, georeferenced information on the availability and technical conditions of Internet services in the areas of their interest.
SI	AKOS implemented several upgrades to its Test Net measurement system. AKOS continued the development of the AKOS Test Net measurement system with the objective of ensuring the highest possible level of compatibility with measurement tools used by other NRAs. Major software upgrades were implemented, following the ongoing development of the software used by the Austrian NRA, RTR. The source code of the AKOS Test Net measurement system was further modified, upgraded, and standardised, resulting in substantial alignment with the RTR code base. Updated mobile applications (Android and iOS) and desktop clients (Windows, Linux, and macOS) were released, providing additional functionality, improved reliability, and a more harmonised user experience across platforms. During 2025, the AKOS Test Net measurement system performed more than 1 million measurements across different types of broadband connections. AKOS also continued the development of AKOS Test Net as a comprehensive solution for monitoring and measuring all types of broadband IAS. In this context, it further developed end-user software clients that can be installed on personal computers to perform measurements. Clients are available for Windows, macOS, and Linux operating systems.
SK	The new monitoring system operated by the authority has been in operation since 2025 and is currently used to only measure fixed connections.

Table 22. Information related to IAS quality monitoring tool for consumers

6. Article 5(1) – Supervision and enforcement

Question 24.a. Is there any change compared to the previous reporting period regarding to the **approach** you have taken **to measure the availability of high-quality IAS** (see recital 19 of the OIR)?

If yes, please provide details.

Question 24.b. Please specify what **approach** you have taken **to measure the availability of high-quality IAS**:

- i. market survey without requesting information from ISPs;
- ii. information request from ISPs;
- iii. analysis of complaints and end-user reporting;
- iv. technical network monitoring;
- v. other, please specify.

There was one change among Member States in the reporting period regarding the measurement of high-quality IAS. MT stated that the QoS in relation to mobile IAS was measured during a national benchmark exercise carried out in December 2025. The results are being analysed and will be published in due course.

As shown in the figure below, the NRAs' responses suggest that the most popular approaches to monitoring the availability of high-quality IAS are still through analysis of end-user complaints (17 NRAs) and through information requests from ISPs (13 NRAs) and technical network monitoring (12 NRAs). Furthermore, nine NRAs conduct a market survey without requesting information from ISPs.



Figure 5. Approaches to monitor the availability of high-quality IAS

Three NRAs (EL, LU, NO) indicated a different approach as shown in the table below:

NRA	Other approaches
EL	In January 2026 a contract was signed between EETT and Ookla providing access to Ookla Intelligence platform regarding the performance of mobile connections. This

	data is not taken into account for the compliance check of mobile communications providers regarding the confirmation of the published broadband performance maps of their networks, in accordance with the Open Internet Regulation.
LU	Use of a crowdsourced tool measuring speed as well as QoS parameters.
NO	Nkom has applied BEREC's method for assessment of general quality of IAS to evaluate the general quality of IAS for 4G and 5G networks combined in Norway.

Table 23. Different approaches to monitor the availability of high-quality IAS

Question 25. If you performed measurements of IAS quality during the reporting period, please report the main findings in relation to the provisions of the OIR.

During the reporting period, 17 NRAs (AT, BE, BG, CZ, DE, EL, FI, FR, HR, HU, IT, LT, LU, NO, PL, PT, RO) presented results from these measurements. The results of MT will be published at a later date.

Based on the answers received, there seems to be an ongoing positive development of IAS speeds in both fixed and mobile networks in many countries.

NRA	Main findings of measurements of IAS quality
AT	RTR offers since 2012 the RTR-NetTest ¹³ , a crowd-sourced open data ¹⁴ and open-source measurement tool, which allows measuring different QoS-parameters, including blocking of UDP and TCP ports. Within the framework of monitoring activities according to the OIR the test results are used. Documents and reports of RTR use data of these measurements on a regular basis (e.g., "Internet Monitor") ¹⁵ , which monitors the development of IAS in Austria. RTR-NetTest data also include information about the various technologies being used for IAS in Austria. Distinctions are made between 3G (UMTS, HSPA), 4G (LTE), 5G (NR) as well as on the basis of measurements of various fixed and network technologies. These measurements were taken with the aid of a browser or app (for Wi-Fi) and have been aggregated under the heading of (W)LAN. 5G achieves significantly higher download speeds than other mobile telecommunications standards. Comparing the first quarters of 2025 and 2026, similar values were recorded for 4G and 5G: for 4G 57 Mbps in the first quarter of 2026 and for 5G 150 Mbps. For (wireless) LAN, the median figure rose by 9%, from 64 Mbps in the first quarter of 2025 to 69 Mbps in the first quarter of 2026. The key figures presented in the Net Neutrality Report 2026 by RTR can be understood as revealing a basically positive development in the availability of non-discriminatory IAS during the reporting period. It can be concluded that the availability of non-discriminatory IAS at levels of quality that reflect advances in

¹³ Available at <https://www.netztest.at>

¹⁴ The results of several million tests can be downloaded at <https://www.netztest.at/en/Opendata>

¹⁵ Available at <https://www.rtr.at/TKP/aktuelles/publikationen/uebersichtseite.de.html>

	technology (requirement in Article 5(1) of the OIR) was ensured in Austria over the reporting period between May 2025 and April 2026.
BE	BIPT carried out an extensive measurement campaign to assess the quality of mobile IAS in Belgium under real-life usage conditions. Measurements were conducted on roads, railway lines and in major shopping centres, using commercial 5G smartphones and a methodology designed to reflect the actual end-user experience. The campaign covered the mobile networks of Orange Belgium, Proximus and Telenet. The results showed that mobile IAS generally provide a high level of performance and reliability. On roads, web-browsing success rates ranged from approximately 95% to 97%, while messaging services achieved success rates above 92% for all operators. Average download speeds were well above the levels required for comfortable mobile internet use. The measurements also identified differences depending on the usage environment. Performance was strongest on roads and in large indoor commercial environments, whereas railway environments remained more challenging. Although more than 97% of voice calls could be successfully established on the tested railway lines, data services showed lower performance levels, particularly for bandwidth-intensive applications such as video streaming. Successful uninterrupted playback of YouTube videos in trains ranged between 42% and 57%, compared with more than 83% on roads. Overall the findings indicate that mobile IAS in Belgium remain widely available and reliable with no evidence of systematic degradation inconsistent with the OIR. The measurements nevertheless highlight the continuing challenges of providing a consistent quality of experience in railway environments and other technically demanding locations.
BG	Drive tests for QoS of mobile IAS (5G and LTE) were carried out in all 27 main (district) cities, other settlements of various sizes and along main national roads. The results show speeds twice as high (download and upload) in the capital city and on highways compared to the previous year.
CZ	An important observation is the increase in the average performance of IAS at a fixed location over the reference period, as measured by the NetTest tool, when the performance of services reached an average value of 105.33 Mbps in the download direction, which is an increase of approximately 6 Mbps compared to the previous period. In terms of service performance in the upload direction, the average value was 66 Mbps, which is an increase of about 6 Mbps compared to the previous period, just as in the download direction. At the end of 2025 and at the beginning of 2026, CTU conducted annual measurements of the coverage of the Czech motorway infrastructure with GSM, LTE and 5G mobile network signals in all available frequency bands. The technical indicator monitored was the download speed, with the minimum value decisive for determining coverage being set at 5 Mbps under the terms of the auction specified in the Call for Offers for the purpose of awarding the rights to use radio frequencies to ensure a public communication network in the 800 MHz, 1800 MHz and 2600 MHz bands. The measurement results show that a transmission speed higher than the specified limit of 5 Mbps can be achieved on more than 98% of 250-meter-long highway sections.

DE	End-user measurements are covered in annual reports. A reporting period runs from October in one year to September in the following year. <u>Fixed broadband connections:</u> between October 2024 and September 2025, the proportion of users across all bandwidth categories and providers whose fixed broadband connection had a download speed at least half their contractually agreed maximum speed was 85.9% (2023-2024: 86.5%); the proportion of users whose connection had a speed equivalent to or higher than their contractually agreed maximum speed was 45.9% (2023-2024: 45.2%). The results differ especially with respect to bandwidth classes and providers. Based on the speeds measured as a percentage of the contractually agreed speeds, upload performance was on a similar level compared with the download performance. Looking at providers' latency times, the best results were achieved especially in higher bandwidth classes. <u>Mobile broadband connections:</u> As in the previous year, a technology-specific evaluation was conducted, distinguishing between 4G and 5G. The reason for this is that 5G enables very high data transfer rates to be achieved. The results in the two upper bandwidth classes are considerably better for 5G than for 4G. In these bandwidth classes 5G significantly outperforms 4G due to the absence of contractual limitations. In some cases, measured 5G data rates substantially exceed the estimated maximum speeds specified in user contracts. Based on the speeds measured as a percentage of the contractually agreed estimated maximum speeds, upload performance was similar to download performance. The latency measured on mobile broadband connections was noticeably higher than on fixed broadband connections.
EL	Country-level results for the actual Internet speeds that can be achieved via fixed connections are derived from EETT's statistical processing of the ISPs' subscribers measurement data. The user measurements are conducted via EETT's online system for performance evaluation of broadband connection services¹⁶. Note that the measurement period is 01 January 2025 to 31 December 2025. Mean DL speed: 163.82 Mbps (47.66%), Mean UL speed: 80.38 Mbps (219.22%) Median DL speed: 91.74 Mbps (30.27%), Median UL speed: 13.88 Mbps (44.28%) Furthermore, for the period from 01 May 2025 to 30 April 2026, EETT carried out measurements to verify the published broadband performance maps of mobile communications networks, as follows. During November-December 2025, EETT conducted a pilot programme of mobile speed measurements using suitable terminal devices, in order to apply the OIR speed-deviation control methodology for the verification of operators' mobile speed maps. Verification measurements were carried out at 36 points nationwide (mainly within urban areas), revealing certain discrepancies between the published maps and the measurements, and indicating that it would be appropriate to carry out a wider set of measurements. Across the positions for which complete results, the measured download and upload speeds agreed with (i.e. did not deviate from) the operators' published speed maps across the three operators combined, the overall

¹⁶ Available at <https://www.hyperiontest.gr>

	agreement rate was approximately 70.8% (72.3% for download and 69.2% for upload). The average measured speeds across the three operators combined were approximately 346.1 Mbps for download, the median value was 297 Mbps and 50.1 Mbps for upload, the median value was 44,10 Mbps. The results of the pilot measurements were communicated to the operators, to be considered in their planning for 2026. Building on the experience of the above pilot programme, EETT subsequently designed a nationwide measurement campaign covering 800 points. The selection of points was based on stratified random sampling with a total of 8 strata, combining 4 different population-density levels with the distinction between mainland and island areas of the country. The campaign covers areas with a population density greater than 50 inhabitants per square kilometre, corresponding to 10% of the country's surface area, where 96% of the population resides. The methodology allows the verification of the speed classes, as stated in the current version of the maps, across all of the above areas with an error of approximately 5%, provided the maps have an accuracy of approximately 95%. This measurement campaign started in March 2026 and is ongoing. Based on the results obtained so far, deviations are observed, for all operators, considerably more often in the uplink than in the corresponding downlink direction. The measurement campaign is expected to be completed by the end of 2026.
FI	Traficom has performed regional measurements on specific locations based on end-user complaints. The measurements were done using Traficom's bittimittari.fi measurement service and the test calls on a predetermined route. For example, in October 2025, Traficom measured the quality of mobile networks in Posio and Porvoo¹⁷, as well as, in March 2026, in Inari and Utsjoki¹⁸. The main findings were that there are vast differences both in between geographical areas and between different operators, but that in general the networks work quite well. In Finland, the speed for universal service obligation is set to 5 Mbps, which is why it is mentioned in the articles as a sort of basic line. However, there is no legally determined minimum speed for mobile connections per Article 5(1) of the OIR.
FR	On the fixed internet market, Arcep initiated a co-construction approach with the measurement ecosystem stakeholders (ISPs, measurement tool vendors, academic, and consumer associations) to enhance the quality of measurement tools accessible to end-users and currently on the market. The API project and the code of conduct for measurement tools are part of this new form of fixed IAS quality monitoring. On the mobile internet side, Arcep's monitoring system focusses on the issues of coverage and QoS. In 2023, the quality measurement of mobile IAS in the country has evolved to better reflect the user experience. Arcep defined thresholds of quality (3, 8 and 30 Mbps), and measured the level of completion of each of these

¹⁷ Results available at <https://www.traficom.fi/fi/uutiset/matkaviestinverkon-yhteyksissa-suuria-operaattorikohtaisia-eroja-eri-alueilla-suomessa> (in Finnish)

¹⁸ Results available at <https://www.traficom.fi/fi/uutiset/traficomin-mittaukset-osoittavat-suuria-aluekohtaisia-eroja-matkaviestinverkoissa-pohjois-suomessa> (in Finnish)

	thresholds, for each IAS, and divides the data according to the type of areas (dense, intermediate, rural).
HR	In Croatia, end-users can check the IAS speeds by using two tools HAKOMetar (fixed network) and HAKOMetar Plus (mobile/WLAN network). According to the results of the individual measurements conducted, the vast majority of the users who have performed the measurements using HAKOMetar are achieving at least minimum speeds stipulated by the Ordinance. Results from the HAKOMetar Plus showed that the overall quality of IAS in the country is constantly growing. Also, in 2026, HAKOM carried out annual QoS data gathering through drive test measurement campaign in mobile networks across the territory of Croatia. The measurement campaign covered 32 cities and 2500 kilometres of roads and highways in Croatia, that is, the area where more than 50% of the total population or approximately 2 million inhabitants live. The measurements showed that the performance of Croatian mobile networks is still very high and that operators continued to invest in development and increased transmission capacities and quality while simultaneously investing in new technologies. The measurement report on the QoS in mobile networks is available on the HAKOM website ¹⁹ .
HU	With the more widespread deployment of 5G mobile networks, mobile IAS is now often on par with fixed IAS in terms of speeds and latency.
IT	Fixed IAS quality is measured in each Italian region with probes measuring the profiles corresponding to the most common offer and the one with the highest number of activations in the previous 12 month. Data are aggregated and published every 6 months and yearly and published on the webpage ²⁰ . Mobile IAS quality is measured with drive test campaigns. In 2025, last measurement campaign for mobile networks involved 45 cities with static and dynamic measures and included 5G networks ²¹ . Users can also verify the QoS measured in the nearest measurement point to their address using a web GIS application.
LT	Mobile data speeds continue to increase (up 16% from previous year), average mobile download speed for all three ISPs measured in 2025 was 222 Mbps. Some areas still lack the level of coverage by high-quality IAS that main cities enjoy. Fixed broadband coverage growth to rural or remote areas is stagnating, while in major cities FTTH availability is high.
LU	The number of measurements follow a decreasing trend, most likely due to good quality IAS resulting of the increasing take-up of very high-capacity networks in Luxembourg. However, measured speeds have decreased since the previous reporting period. This evolution may be explained by a significant part of the measurements that are related to situations where end-users experienced issues with the quality of their IAS. Aggregated results are published in the annual OI report.

¹⁹ Available at

https://www.hakom.hr/UserDocsImages/2026/dokumenti/20260604_NET%20CHECK_Hakom%20CRO_Benchmark_Online%20report_revidirano_v2.pdf?vel=4849090

²⁰ Available at https://www.misurainternet.it/valori_statistici/

²¹ Results for the official campaign are published on the website www.misurainternetmobile.it

NO	The measurement results indicate a continued positive development of IAS speeds for mobile and fixed networks in the market, and those results are included in the Open Internet Annual Report to be submitted end of June.
PL	From the date of the Internet Quality Monitoring System certification (from 25 July 2025 to 30 April 2026), 64 measurement kits were loaned to users who submitted applications through the e-service. Measurements were successfully completed in 57 cases. Based on the analysis of the measurement results, it was found that in the download direction, in 7 cases the measured speed was below 80% of the value typically available according to the applicant's declaration, while in the upload direction, in 12 cases the measured speed was below 80% of the value typically available according to the applicant's declaration.
PT	ANACOM published quarterly reports based on the main results²² of the tests ran by NET.mede users. For the most recent data (Q3 2026): NET.mede users ran around 106 thousand measurements via web browser or the NET.mede application. The downward trend in the proportion of tests carried out through fixed accesses (52% this quarter) was maintained, in contrast to the increasing trend in tests carried out through mobile accesses (36%). Regarding the results of the tests carried out, through a web browser or the NET.mede application, in half of the tests (median) it was found: • in fixed residential accesses: a download speed of 229 Mbps or more, an upload speed of 105 Mbps or more and a latency of 12 ms or less; • in mobile accesses: a download speed of 20 Mbps or more, an upload speed of 12 Mbps or more and of 33 ms or less. Compared to the same quarter last year, there was an improvement in download speed (+12%), upload speed (+2%) of residential fixed accesses and latency is the same. In mobile access, there was also an improvement in download speed (+5%), upload speed (7%) and latency (-11%) for the same period of time. This evolution may reflect, among others, in the case of fixed accesses, the adherence of users to offers with higher speeds.
RO	IAS users performed measurements within the Netograf platform during the reference period, but the analysis of the measurements including the main findings is not publicly available yet.

Table 24. Main findings of measurements of IAS quality

7. Article 6 – Penalties

Question 26. In the reporting period, were there any changes in the rules on penalties to infringements of articles 3, 4, and 5 pursuing to article 6 of the OIR you apply?

²² The latest report is available at <https://www.anacom.pt/render.jsp?contentId=1823366>

If yes, please provide details.

In the reporting period, there weren't any changes in the rules on penalties to infringements of articles 3, 4, and 5 pursuant to Article 6 of the OIR.

8. Other relevant information

Question 27. Related to the OIR, regarding the reporting period, are there any **other relevant information** (not mentioned before) that you would like to share? Have there been any of the following?

- i. new court proceedings;
- ii. NRA's regulatory decisions;
- iii. updates to cases reported previously;
- iv. internal or external implementation actions;
- v. guidance (of e.g. NRA, ministry) on additional transparency or information requirements on ISPs;
- vi. any additional remedies for consumer redress in relation to non-conformance of IAS with the contract terms;
- vii. other, please specify.

Court proceedings

In the reporting period, DE reported a *new court proceeding* on the Telekom's product "5G+ Gaming" which was considered as a permissible specialised service by the Higher Regional Court Cologne. In interim relief proceedings, the Cologne Administrative Court rejected Telefónica's application against regulatory net neutrality measures and upheld the ban on its 'heavy user' and M2M restrictions (main proceedings pending). For other details, please see Annex I.

Also, RO provided an *update on their national case*: by its Judgment in case C-367/24²³ from 10 July 2025, the Court of Justice of the European Union established that "Article 3 of [OIR] must be interpreted as precluding an option for unlimited internet access, at no additional cost, offered by a provider of internet access services to its customers, which, when activated,

²³ Available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:62024CJ0367&qid=1786371053937>

enables those customers to use video-streaming services without the data thus used being set off against the data allowance included in the basic monthly charge, but limits the bandwidth applied to that content, irrespective of the distributors or providers, in comparison with that applied to other categories of traffic, while, where that option is not activated by those customers, all traffic, including video streaming, enjoys the same bandwidth strength, but the amount of data used is set off against the data allowance subscribed to by those customers". For other details, please see Annex I.

Other actions

In the previous reporting year, in AT, at the request of the Federal Office of Metrology and Surveying, acting as the market surveillance authority, proceedings were initiated under Regulation (EU) 2019/1020 (Market Surveillance Regulation) to prevent access to a website listing a dangerous product by means of an order issued by the Telecom-Control Commission. This proceeding was discontinued in August 2025 due to the withdrawal of the request.

In the reporting period, ILR sent its biannual questionnaire to gather information on the transition from IPv4 to IPv6 in LU.

As a general practice, BEREC continued sharing information between NRAs.

Annex I: Summary of national rules, guidance, measurement tools and court cases

Annex I describes the relevant national rules, regulations and specifications in force, internet access quality monitoring tools provided, and OIR-related court proceedings based on the NRA responses to the questions 3, 13, 18, 21, 23 and 27.

Question 3. Has the **location of the Network Termination Point (NTP)** been formally determined in your country or has there been a legislative process to impose the access of free modems?

If yes, please provide details (e.g., when has the location of the NTP been determined or the access of free modems been imposed? Were BEREC's NTP Guidelines taken into consideration (both in case of determination of the location of the NTP or legislative process)? Is it location A, B or C (if necessary, depending on the type of network)? Links to relevant documents).

If *no*, please provide information if there are discussions or plans to specify the location of the NTP in your country and the reasons for this.

In 11 Member States (BE, CY, DE, DK, EL, FI, HR, LI, NL, SI, SK), NRAs conducted formal assessments of the location of the NTP, as described in the table below:

NRA	Formal assessments
BE	In September 2023, BIPT decided formally that NTPs on copper, coax and fiber networks are located on point A for IAS. As a consequence, from 01 November 2024 on, customers will be able to buy and use their own modem. BIPT's decision ²⁴ is based on the BEREC NTP Guidelines ²⁵ . Television and telephony services were excluded from the decision.
CY	The NTP has been determined before 01 May 2022. According to Law 24(I)/2022, NTP means the physical point at which an end-user is provided with access to a public electronic communications network, and which, in the case of networks involving switching or routing, is identified by means of a specific network address, which may be linked to an end-user's number or name. It is located in point A for all technologies.
DE	The NTP has been determined before 01 May 2022 and can be read in Article 73 Paragraph 1 of the Telecommunication Act ²⁶ (TKG). NTP location is A for fixed line networks. For mobile networks, it is the air interface. These stipulations carry over

²⁴ Available at: <https://www.bipt.be/consumers/publication/decision-of-26-september-2023-regarding-the-identification-of-the-network-termination-point-for-broadband-services-and-tv-services>

²⁵ BEREC Guidelines on Common Approaches to the Identification of the Network Termination Point in different Network Topologies (BoR (20) 46) (hereinafter referred to "BEREC NTP Guidelines");

²⁶ Available at https://www.gesetze-im-internet.de/tkg_2021/_73.html

	legal provisions dating from 2016 which in effect already took into account criteria now contained in the BEREC NTP Guidelines. Article 73 Paragraph 2 TKG states that BNetzA may grant exceptions from these provisions for specific network topologies or technologies, but not individual networks. In this case, the NRA must take account of the BEREC NTP Guidelines. Currently, proceedings are ongoing with regard to the NTP of FTTH GPON networks.
DK	The NTP was already determined in 2000 at point A for all technologies (Danish Act N. 418 on competition and end-users' rights at the telecom market from 31 May 2000) ²⁷ . The current legislation, Consolidated Act N. 955 of 17 June 2022 on Electronic Communications Networks and Services ²⁸ , also refers to this definition.
EL	EETT issued a new Regulation ²⁹ for the NTP (published in Gov. Gazette 7271/B/31-12-2022, entered in force on 01 October 2023) which defines the NTP location for the fixed service at point A according to the BEREC NTP Guidelines with the exception of FTTH networks where the NTP is defined after the ONT. In cases where the ISP provides terminal equipment with built-in ONT, and in order to ensure the end-user right of free choice of the router, the end-user may request the provision and installation of discrete ONT equipment.
FI	The NTP was defined in the Regulation 65 A/2014 M, which came into force on 17 December 2014. That Regulation has since been replaced by newer versions and currently the NTP is located at point A for all technologies (as defined in Chapter 2, Section 4 of the Regulation 65 E/2022 ³⁰).
HR	HAKOM has defined the NTP at point A for all network topologies, excluding FTTH for which it was defined at point B starting from 01 January 2024. The BEREC NTP Guidelines were taken into consideration. (Article 30 of the Ordinance on manner and conditions for the provision of electronic communications networks and services ³¹).
LI	The NTP is defined in Article 3 paragraph 1 of the Ordinance of 14 January 2025 ³² on electronic communications networks and services (VKND) ³³ , LGBl. 2025 N.52. The location itself is not determined in detail.
NL	The NTP is located at point A for every technology. The BEREC NTP Guidelines have been taken into account. ACM issued guidelines in 2021 ³⁴ .
SI	The NRA issued a decision ³⁵ on 10 May 2023, specifying that the NTP is located at point B according to the BEREC NTP Guidelines.

²⁷ See the Danish Act n. 418, section 3, subsection 3: <https://www.retsinformation.dk/eli/lt/2000/418>

²⁸ See the Consolidated Act N. 955 of 17 June 2022 on Electronic Communications Networks and Services, Section 2 (8):

https://eng.sdfi.dk/Media/638022868804652495/Act%20on%20Electronic%20Communications%20Networks%20and%20Services_oct2022.pdf

²⁹ Available at <https://www.eett.gr/anakinosi/kanonismos-gia-to-simeioy-termatismoy-diktyoy-statheris-ypiresias/>.

³⁰ Available at https://www.finlex.fi/data/normit/48858/M_65_E2022_M_EN.pdf

³¹ Available at https://narodne-novine.nn.hr/clanci/sluzbeni/2023_07_86_1346.html

³² Available at <https://www.gesetze.li/konso/2023216000>

³³ Available at <https://www.gesetze.li/konso/2025052000>

³⁴ Available at <https://www.acm.nl/nl/publicaties/acm-publiekert-de-beleidsregel-handhaving-besluit-eindapparaten>

³⁵ Available at <https://www.uradni-list.si/glasilo-uradni-list-rs/vsebina/2023-01-1696/splosni-akt-o-lokacijah-omreznih-prikljucnih-tock>

SK	The Act N. 452 of 2 November 2021 on electronic communications states in Article 2 (6) that “ <i>network termination point means the physical point at which a subscriber is provided with access to a public network, and which, in the case of networks involving switching or routing, is identified by means of a specific network address, which may be linked to a subscriber’s number or name</i> ”.
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Table 25. Information on formal assessments of location of the NTP

Of the remaining NRAs that indicated that they did not take a formal decision, three NRAs (AT, EE, LT) did investigate the possibility of formally specifying the location of the NTP but decided not to do so as the current situation seems to satisfy the customers. Further information is provided in the table below:

NRA	No formal decision taken
AT	There has been an evaluation regarding the determination of the NTP in 2023. Currently, the NTP is either in the end-user’s wall or the router provided by the ISP. Due to Article 3(1) of the OIR, end-users have the right to use their own router and this is why, they can use the bridge modus of the router provided by the ISP, thereby it only has a modem function. WLAN, Firewall etc. are deactivated and end-users can plug in their own router. During the evaluation, RTR discussed the question of the NTP definition with ISPs and other stakeholders. RTR also analysed national end-user complaints and requests as well as international practice. The ISPs stated that there are only a few people who want to use their own router and there are only a few complaints about this issue. Nevertheless, transparency regarding this issue is key and some ISPs have improved the information on their websites. RTR is monitoring the situation, in case the interest in having a router different from the one that an ISP is offering increases, a re-evaluation can take place.
EE	There are no discussions or plans to specify the location of the NTP. The end point is specified in the communications services contract. In general, end-users are free to choose modems and routers as long as they are compatible with the ISPs’ networks.
LT	There was no need to formally define the NTP, but generally it is considered at point A according to the BEREC NTP Guidelines.

Table 26. Information on NRAs’ that have decided to not define the NTP

Question 13.a. In the reporting period, have **any new national specifications** been set or changed in relation to the **different types of speeds** laid out in article 4(1), sub. d.?

If yes, please provide details.

Question 13.b. Were these requirements:

- i. imposed by the NRA or another competent Authority?
- ii. agreed upon by market players?

iii. legally binding?

Specifications set

National specifications in relation to different types of speeds have been set in 17 Member States (AT, BE, BG, CY, CZ, DK, EL, FI, HR, IT, LT, LV, MT, NL, RO, SI, SK). There is a variety of institutional settings on how specifications are set. In 16 cases (AT, BE, BG, CY, CZ, DK, EL, FI, HR, LT, LV, MT, NL, RO, SK, SI), this involved activities by the NRA, which takes the form of recommendations, secondary legislation or decisions. In four cases, they were agreed upon by market players (DK, EE, IT, MT), but there are also cases where the agreement by market players comes along with legally binding specifications.

13 NRAs (BE, BG, CY, EL, FI, HR, IT, LT, LV, NL, MT, SI) used percentage values by defining minimum and normally available speeds as a percentage of the maximum speeds, as presented in the table below:

NRA	Specifications of speeds by the use of percentages	Achievability of speeds
BE	Normally available upload and download speed: speed the end-user can expect during at least 95% of the time.	• Minimum upload and download speed: speed below which the ISP will never go, except in case of interruption of the connection; • Maximum upload and download speed: speed the end-user may expect to receive in principle at least once a day.
BG	The normally available speeds should be 80% of maximum speed.	Normally available speed should be available 80% of the time over 24 hours.
CY	According to the provisions of the OIR, as adopted in national secondary legislation (Decree 72/2017) the speed values to be included in the contract, including information published on the ISP's website, is presented as follows: • as far as fixed networks are concerned, minimum, standard and maximum speed, in percentage of advertised speed; • as far as mobile networks are concerned, where applicable, the advertised speed, in percentage to the estimated maximum speed.	In relation to the provision of broadband internet access from a fixed network, ISPs are required to set the time periods within the day in which maximum speed is achieved, the periods expected to reach normally available speed, and the periods when speed may be limited to the minimum.
EL	ISPs can perform individual measurements at subscriber connection	Peak hours from 19:00 to 23:00 for residential users, and from 09:00 to

or aggregate measurements over a geographical area (e.g. municipality, or area defined by local exchange). The measurement sample should not be older than one year and estimates should be defined by confidence intervals with confidence level $\geq 95\%$. Based on the measurement sample, the minimum, maximum and normally available speeds are defined as follows: • Minimum speed 5% of measurements during peak hours; • Maximum speed 95% of measurements during non-peak hours; • Normally available speed 50% of measurements during peak hours. The updated national OIR (issued by EETT on 26 February 2024) defines that the realistic maximum download/upload speeds achievable in mobile networks can belong to 7 new speed classes (categories), namely: • ≥ 1 Gbps; • ≥ 300 Mbps < 1 Gbps; • ≥ 100 Mbps < 300 Mbps; • ≥ 30 Mbps < 100 Mbps; • ≥ 10 Mbps < 30 Mbps; • ≥ 2 Mbps < 10 Mbps; • ≥ 128 Kbps < 2 Mbps. The speed classes are common for download and upload, and entered into force on 26 February 2025 (the operators have to update per area their online speed maps with these new classes). The realistic speeds refer to measurements conducted outdoors by users not moving on a vehicle. Regarding mobile networks, the amended National Speed Regulation (OIR) introduces the obligation for providers to offer a zoom-in/zoom-out function on online speed maps (which enters into force 12 months after the publication of the regulation, i.e. on 26 February 2025),	17:00 for non-residential (business) users. ISPs are free to provide different intervals for peak hours, based on the actual usage of their networks.
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	and requires the update of speed maps at least every six months in case of changes to the network (immediate effect, i.e. from 26 February 2024). Similarly, from 26 February 2025, the speed measurement applications implemented by mobile communications providers, for the control of the published broadband performance maps of their networks by their users and forming an integral part of all forms of contract with them, are obliged, among other things, to record the user's location and any inability to connect to the network at the time of measurement.	
FI	Requirements set for subscriptions with the maximum speed ≤ 100 Mbps: • Minimum speed must be at least 70% of maximum speed • Normally available must be at least 90% of maximum speed	Normally available speed should be achieved 90% of the time during each four-hour period.
HR	• Minimum speed $\geq 70\%$ of max. speed • Normally available speed: not specified because of the high threshold for minimum speed	
IT	For fixed networks: • Minimum speeds: 95 quantiles of download/upload data transmission speeds measured during the entire observation interval, i.e. the measured values for which 95% of the transfer speeds recorded during the observation period are greater than these values; • Normally available speeds: 75 quantiles of download/upload data transmission speeds measured during the entire observation interval, i.e. the measured values for which 75% of the transfer speeds recorded during the observation period are greater than these values; • Maximum speeds: maximum values of download/upload data transmission	The measurement time interval is 6 months for statistical comparative values and 24 hours for single users' lines. Measures are sampled every 15 minutes.

	speeds measured during the entire observation interval. Average and standard deviations are also calculated and published.	
LT	• Minimum speed is such speed that ensures the provision of IAS; • Normally available speed is calculated as 80th percentile of all speed values measured; • Maximum speed is calculated as 95th percentile of all speed values measured.	
LV	<u>Fixed network:</u> • maximum (advertised) speed; • normally available speed must be at least 70% of maximum (advertised) speed and not less than the minimum speed value set by the NRA; • minimum guaranteed speed must be at least 20% of maximum (advertised) speed and not less than the minimum speed value set by the NRA. <u>Mobile network:</u> • maximum (advertised) speed; • minimum guaranteed speed must be not less than the minimum broadband IAS connection speed value set by the NRA, at the fixed-service receiving location within the ISP's designated coverage area in the mobile network, within the end-user's premises or household, if the IAS is provided using a router-modem.	<u>Fixed network:</u> • Normally available speed must be accessible to the end-user at least 95% of the time within a 24-hour period. • Minimum speed for the fixed network should be at least 6 megabits per second for download speed and at least 2 megabits per second for upload speed. <u>Mobile network:</u> • Minimum guaranteed speed for both download and upload directions, at the fixed-service receiving location within the ISP's designated coverage area in the mobile network, within the end-user's premises or household, using a router-modem, should be at least 2 Mbps. Minimum guaranteed speed must be accessible to the end-user at least 95% of the time within a 24-hour period. In other cases, ISPs determine the minimum guaranteed speed value.
NL	ISPs are obligated to specify in their contracts internet speeds on fixed networks: • Minimum speed; • Normally available speed; • Maximum download speed.	• The measured speed can never be below the minimum speed, except if a situation occurs as described in Section 7.1a of the Dutch Telecommunications Act. • The normally available speed must be reached in at least eight out of ten measurements of an IAS that an end-

		user conducts in a single week. The measurements should be spread out evenly across at least three days in said week and can be done at any given time during the day, but that no more than one measurement per hour can be counted. • At least 90% of the maximum speed is reached in one of the ten measurements that an end-user conducts in a single week.
MT	All fixed broadband ISPs are obliged to include in their contracts a metric termed Typical Speed Range (TSR).	An NRA decision published in 2016 defines the TSR as a metric with which the ISP indicated the expected performance of a fixed broadband connection. The TSR is expressed as a range between two figures - the minimum and maximum speeds. Therefore, a broadband connection is expected to perform within the declared TSR. The Decision also states that in those cases where the headline speed includes a numerical figure to describe speed, the IAS provider is expected to provide a connection which can physically achieve the stated headline speed. The same rules apply to broadband services which are marketed as fixed, even if these are offered through mobile infrastructure.
SI	• Minimum speed must be at least 50% of the maximum and at least 25% of the maximum inlet and outflow speed using FWA access; • Normally available speed must be at least 80% of the maximum incoming and outgoing connection speed. In the case of FWA access, the normally available speed must be at least 50% of the maximum speed.	• Normally available speed: at least 90% of the time of the day outside peak hours; • Maximum speed: achievable at least once per day; • Minimum speed: lowest actual data transfer speed from the server or to the server (except for network failures).
SK		• Normally available speed: 90% of any continuous 4-hour measurement period;

		• Maximum speed: at least once between 00:00 and 24:00.
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Table 27. Specifications of speeds by the use of percentages and achievability

Legally binding or informal

In 12 of the 17 Member States (BE, CY, CZ, DK, EL, HR, IT, LV, MT, NL, RO, SI) that have set national specifications, the requirements or NRAs' opinion/recommendation were legally binding. In the remaining Member States (AT, BG, FI, PL, SK), the specifications or requirements were not legally binding.

Question 18. In the reporting period, have you imposed **any new additional transparency requirements** or **changed the existing ones** regarding the publication of information referred to in article 4(1), subs. 1 a-e?

If yes, please provide details of the requirements.

Eight NRAs (AT, BE, BG, DE, EL, IT, LT, SI) have imposed additional transparency requirements regarding the publication of information referred to in Article 4(1), subparagraphs 1 a-e, as summarised in the table below:

NRA	Additional transparency requirements
AT	• On an informal level, transparency requirements are regularly discussed with ISPs. • RTR had/has bilateral meetings with ISPs, which also cover issues regarding the OIR and the accompanying BEREC OI Guidelines. • Also, the regular exchange between ISPs and RTR concerning different matters of telecommunications (including OI issues) is ongoing. Within this forum, RTR presents the latest developments regarding OI to the ISPs, and ISPs are welcome to present their views. • Furthermore, there are some non-binding templates/recommendations for ISPs, available on RTR's website.
BE	On 23 February 2022, BIPT published guidelines on the use of the term "unlimited internet" in commercial communications of ISPs. BIPT acknowledges that a fair use policy (FUP) can define the limits of the "fair use" to guarantee high-quality internet to all of the network's customers. BIPT, however, finds that ISPs may only use the term "unlimited" for tariff plans where the data volume allows most of the customers to access to the internet without speed restrictions. BIPT thinks that for fixed internet the limit in the FUP should be set at a monthly data volume of at least 3 terabytes, while in the case of mobile internet this is 300 gigabytes. The matter of transparency is also dealt with by the BIPT Guidelines. These Guidelines state that in pre-

	contractual and contractual documents and on the ISP website clear, easy to understand and to access, precise and up-to-date information needs to be given on the FUP and on what the FUP means in practice. In addition, the Guidelines state that if the FUP is applied, only speed reductions are admissible, not blocking the “unlimited” IAS offer. Finally, there is a review clause in the Guidelines to adjust the thresholds where appropriate.
BG	In its Position, CRC expressed its view about publishing the information referred to in Article 4(1) (b) of the OIR, regarding the consequences of IAS’ speed reduction when the data cap is exceeded. The Position of CRC elaborates what this information should include and the way it should be presented in the contracts/ general conditions and on the ISPs’ websites.
DE	The ordinance for framework provisions on the promotion of transparency, publication of information and additional facilities for cost monitoring on the telecommunications market entered into force on 01 June 2017. From that date on, the ordinance obliges fixed and mobile ISPs to provide more transparency when offering IAS.
EL	As of 26 August 2024, according to the updated national OI Regulation issued by EETT and published in the Gov. Gazzete (OJ 1282/B/26-2-2024), the following additional transparency requirement applies: the operators are obliged to inform the consumers on the actual speeds for fixed and mobile networks before concluding a contract. This includes all sales channels, both offline and online. In the latter case the operators have to make available appropriate web page within their sites.
IT	AGCOM (by virtue of a competence attributed by the Decree Law of 16 October 2017, N. 148 art. 19 quinquiesdecies), adopted a resolution (N. 292/18/CONS) regarding the definition of the technical characteristics and the corresponding names of the various types of physical infrastructure used for the provision of telephone services, television networks and electronic communications. With this provision, AGCOM proposed some transparency measures in the broadband and ultra-broadband retail offers, requiring the operators to make clear the physical architecture through which the respective fixed access services are offered, as well as the QoS that the user could experience. The definitions and technical characteristics of the access network architectures are introduced at the same time (see Q14). Resolution N. 106/25/CONS, among other provisions, introduces a classification system for mobile offers using 5G technology, aimed at ensuring greater transparency for end-users. This system is designed to help users make informed choices intuitively and involves the use of labels that indicate the characteristics of the service offered, particularly any speed limitations. A green label will indicate 5G offers provided without contractual speed limitations imposed by the operator. Yellow and red labels will be used to signal the presence of speed limits, with yellow for download limits equal to or greater than 20 Mbps and red for limits below 20 Mbps. Within these labels, the value of the applied speed limit will be clearly indicated, making the actual maximum achievable speed immediately understandable to the user.
LT	In connection to transposing the EECC into national law, new rules for publication of QoS parameters were approved. For the IAS, operators must publish not only the

	information about QoS parameters referred to in Article 4(1), subparagraphs 1 a-e of the OIR, but also latency, jitter and packet lost ratio.
SI	Based on the General Act (legally binding since autumn 2019), AKOS requires ISPs to communicate to end-users the information regarding speeds on monthly bills, user portals or any other adequate transparent way that allows the user to get acquainted with this information at any time and in each billing period.

Table 28. Introduction of additional transparency requirements

Question 21. In the reporting period, is there any change regarding NRA's or national interpretation of "**significant discrepancy, continuous or regularly recurring**" as stipulated in article 4(4)?

If yes, how are these terms interpreted?

If yes, was the definition:

- i. imposed by the NRA (e.g. using article 5(1))?
- ii. voluntarily agreed upon by the market players?
- iii. other, please specify.

13 NRAs (BG, CY, CZ, DE, EL, ES, HR, IT, LV, MT, PL, RO, SI) gave a material interpretation of "*significant discrepancy, continuous or regularly recurring*", as can be seen in the table below:³⁶

NRA	Interpretation
BG	• Significant continuous discrepancy – two consecutive weeks in one billing period; • Regularly recurring discrepancy – more than one temporary discrepancy; • A temporary discrepancy – three consequent days in one billing period.
CY	Non-compliance if results of measurements over three consecutive days show that the speed received by the end-user is less than or equal to 80% of the minimum or normally available speed specified by the ISP.
CZ	• For the IAS at a fixed location, significant continuous discrepancy from the normally available speed shall mean a continuous decrease in the actually achieved speed below the defined value of the normally available speed in an interval longer than 70 minutes. Regularly recurring discrepancy from the normally available speed shall mean a discrepancy at which the actually achieved speed decreases at least three times below the defined value of the normally available speed in an interval longer than or equal to 3.5 minutes in a time range of 90 minutes.

³⁶ See the 2020 iteration of this report, which illustrates those cases where there was already such an interpretation, https://berec.europa.eu/eng/document_register/subject_matter/berec/reports/8256-report-on-the-implementation-of-regulation-eu-20152120-and-berec-net-neutrality-guidelines

	For the mobile IAS, significant continuous discrepancy from the advertised speed shall mean a continuous decrease in the actually achieved speed below 25% of the value of the advertised speed in an interval longer than 40 minutes. Regularly recurring discrepancy from the advertised speed shall mean a decrease in the actually achieved speed at least five times below 25% of the value of the advertised speed for an interval longer than or equal to 2 minutes in a time range of 60 minutes.
DE	Legal basis entitling the consumer to reduce the contractually agreed fee (§57 (4) TKG); interpretation by binding notice by BNetzA (according to §57 (5) TKG). <u>Fixed networks:</u> The binding notice on fixed-line internet access specifies the non-conformity regarding fixed down and upload speeds if one of these cases occurs: 90% of the contractually agreed maximum speed is not achieved at least once at two out of three measurement days; - the normally available speed is not achieved in 90% of the measurements; - the speed falls below the contractually agreed minimum speed at least two out of three measurement days. - By measuring with the broadband monitoring mechanism, the following requirements need to be considered: 30 measurements must be performed; - The measurements must be taken on three separate days with at least one day without measurements in between those days - The number of measurements is to be spread equally over the three measuring days, so that 10 measurements are taken on a specific day; - Measurements can be conducted not closer than every five minutes, between the fifth and sixth measurement of a day there has to be a break of at least three hours - The 30 measurements have to be conducted within 14 days; - The measurements must be taken using a LAN connection; - The measurements are to be carried out using the installable version of the NRA's broadband monitoring mechanism. <u>Mobile networks:</u> The binding notice on mobile internet access specifies the non-conformity regarding down- and upload speeds if: - the following values are not achieved on at least three of five measurement days at least once each: 25 percent of the respective contractually agreed estimated maximum speed for download/upload in areas with high household density, 15 percent of the respective contractually agreed estimated maximum speed for download/upload in areas with medium household density, or 10 percent of the respective contractually agreed estimated maximum speed for download/upload in areas with low household density, whereby the land area of the Federal Republic of Germany is divided into 300 m x 300 m square grid cells; 30 measurements performed on five different measurement days within a period of no more than 14 days;

	• six measurements per measurement day with a gap of at least three hours between the third and fourth measurement of a measurement day, and a gap of at least five minutes between all other measurements of a measurement day; • a measurement day may be concluded early with fewer than 6 measurements once the speed has been achieved at least once in both download and upload. • majority principle: if on three days a clear result is established, the campaign is terminated early; • the measurements are to be carried out using an application based on the NRA's broadband monitoring mechanism; • Various parameters are a prerequisite for carrying out the measurement; some of these are captured automatically by the application e.g. location, location accuracy, technology used; others must be confirmed manually.
EL	According to the updated national open internet regulation, there is a change in the threshold value below which the speed discrepancy is considered to be significant: regarding the FTTH/FTTB technology, significant discrepancy is defined to occur when the realistic minimum subscriber's speed is less than 90% of the minimum contracted speed (DL/UL) instead of less than 80% which was used previously.
ES	There has to be a breach of either minimum or normally available speed. It has to be "continuous".
HR	If an end user complains about broadband speed on a fixed electronic communications network, the end-user must submit to the operator the results of at least three tests conducted in a period of five consecutive days (at least one test must be carried out every 24 hours) which shows that speeds is below 70% of maximum/advertised speed. Tests are carried out by means of a certified tool HAKOMetar for broadband speed tests prepared by the NRA. The results of the tests represent adequate proof in the procedure for the resolution of complaints made by end users.
IT	The regulation for fixed networks (Resolution N. 156/23/CONS) allows end users to ask for compensation if contractual IAS speeds are not met. To verify speeds, end-users must utilise the certified free measurement software Ne.Me.Sys. This software tests the line speed every 15 minutes over a 24-hour period. If contractual speeds are not achieved on two separate occasions within 30 days, end users will have the option to terminate their contract without incurring additional costs. This regulation was developed in consultation with a technical committee comprising operators, consumer associations, and the Ministry, and was subsequently approved by the NRA.
LV	<u>Fixed networks:</u> • maximum (advertised) speed; • normally available speed, which is available to the end-user no less than 95% of the time per day and whose value is not lower than 70% of the maximum (advertised) connection speed and is not lower than the minimum broadband IAS determined by the SPRK connection speed value in a fixed electronic communications network;

	• minimum guaranteed speed, the value of which is at least 20% of the maximum (advertised) connection speed specified in the contract and is not lower than the minimum broadband IAS connection speed value determined by the SPRK in a fixed electronic communications network and which describes the lowest speed that can be available to the end-user during peak hours. <u>Mobile networks:</u> • maximum (advertised) speed, which describes the maximum speed actually available to the end-user; • minimum guaranteed speed, the value of which is no less than 95% of the time per day is not lower than the minimum broadband IAS connection speed value determined by the SPRK in a mobile electronic communications network at the fixed service receiving location in the coverage area specified by the operator in the end-user's premises or household, if the IAS is provided through a router-modem. A mobile ISP shall determine the minimum guaranteed speed if he provides the IAS to the end-user in another way. If any of the above-mentioned conditions are not fulfilled during emergency measurements, it is considered that there is a significant discrepancy in the quality of the IAS.
MT	• “significant discrepancy”: this definition is implicit as any connection performing below the stated ISP’s information regarding speed is considered as discrepant; • “regularly recurring”: no interpretation published.
PL	UKE has a new mechanism based on hardware agents (so-called White Boxes) provided by Samknows/Cisco as part of the SMJI project. Hardware agents are loaned to subscribers upon request. For a set period of time (usually two weeks), the loaned agent performs an hourly series of QoS measurements. After the WB returns to the UKE, the system sends a measurement certificate to the subscriber. The previous mechanism, available at https://pro.speedtest.pl, performed measurements at OSI Layer 4 and was an application launched by the subscriber. The current mechanism is based on a hardware agent and certifies measurements at OSI Layers 4 and 2 in accordance with the ITU-T Y.156sam standard. Compliance testing with the RFC2544 methodology was also performed.
RO	<u>For fixed IAS:</u> In the guidelines issued, ANCOM recommended the conditions that must be met and the procedures that a user must follow in order to ascertain on one hand the significant discrepancies and on the other hand the continuous or regularly recurring discrepancies. In order to ascertain significant discrepancies, the user must perform, under certain conditions, at least six measurements during 24 hours, of which at least one measurement must be performed in the 23:00-07:00 timeframe. Measurements must be carried out at intervals of at least one hour apart. A discrepancy is considered significant, if at least one of the following cases occurs: • the minimum speed is not achieved for at least two measurements; • at least half of the measurements performed by the user do not exceed 50% of the normally available speed indicated in the contract.

	To ascertain continuous or regularly recurring discrepancies between contractual speeds and the actual performance of the IAS, the user has to perform measurements, under certain conditions, for at least 5 days (of which at least one weekend day) during a maximum of 30 consecutive days, performing at least 6 measurements per day, of which at least one measurement per day in the 23:00-07:00 timeframe. Measurements must be carried out at intervals of at least one hour apart. A discrepancy is considered continuous or regularly recurring, if at least one of the following cases occurs: • the minimum speed is not achieved for at least two measurements; • at least half of the measurements do not achieve the normally available speed; • no measurement achieves the maximum speed. <u>For mobile IAS:</u> ANCOM established a procedure that a user must follow in order to ascertain significant, continuous or regularly recurring discrepancies between the contractual speeds and the real performance of the IAS. Thus, the user will have to perform measurements, under certain conditions, for at least five days (of which at least one must be a weekend day) during a maximum of 30 consecutive days, performing at least six measurements per day, of which at least one measurement per day in the 23:00-07:00 timeframe. Measurements must be carried out at intervals of at least one hour apart. A discrepancy is considered significant, continuous or regularly recurring, if at least half of the measurements performed are below certain values, assumed by ISPs in their contracts. These values are calculated according to a series of rules established in the guidelines developed by ANCOM.
SI	• Minimum speed: at least one of the correctly performed measurements, regardless of the time of the day, falls at the specified minimum speed. • Normally available speed: the average of all correctly performed measurements outside the peak hours is lower than the contractually agreed normally available speed (the measurement with the highest and lowest speed are excluded from the calculation).

Table 29. Interpretation of terms

Question 23. In the reporting period, have there been any updates regarding your **IAS quality monitoring tool** for consumers or any respective measurement tool projects?

If yes, please provide details.

21 NRAs (AT, BG, CY, CZ, DE, DK, EL, FI, HR, HU, IT, LT, LU, ME, NO, PL, PT, RO, SE, SI, SK) provide an IAS quality monitoring tool and in 11 Member States (AT, BG, CY, CZ, DE, FI, HR, IT, PL, RO, SK) and ME, it is considered a certified monitoring mechanism according to Article 4(1) (d) of the OIR.

NRA	Name of the tool	URL	Certified
AT	RTR-Netztest / RTR-NetTest	https://www.netztest.at https://www.rtr.at/TKP/service/rtr-nettest/help/Desktop_App.en.html	Yes
BG	CRC nettest	https://nettest.crc.bg/#/home	Yes
CY	cyNettest	https://cynetest.ee.cy/ https://ocepr.ee.cy/el/content/cynetest-systima-ektimisis-poiotitas-eyryzonikon-syndeseon#English_Version	Yes
CZ	NetTest	https://nettest.cz/en/	Yes
DE	Breitbandmessung	https://breitbandmessung.de	Yes
DK	Tjekditnet (Ookla)	https://tjekditnet.dk/	No
EL	HYPERION (only for fixed networks)	https://hyperiontest.gr	No
FI	Bittimittari.fi	www.bittimittari.fi/en	Yes
HR	HAKOMetar HAKOMetar Plus	https://hakometarplus.hakom.hr/home	Yes
HU	Szelessav	http://szelessav.net/en/internet_speedtest	No
IT	Ne.Me.Sys/Misura Internet	https://misurainternet.it	Yes
LT	matuok.lt (Ookla)	http://matuok.lt	No
LU	checkmynet.lu	https://checkmynet.lu/	No
ME	EKIP NetTest	https://nettest.ekip.me/en/test	Yes
NO	Nettfart	https://nettfart.no/en/test	No
PL	SMJI	https://uke.gov.pl/system-monitorowania-jakosci-internetu/	Yes
PT	NET.mede	https://netmede.pt/	No
RO	Netograf	https://www.netograf.ro/#/	Yes
SE	Bredbandskollen	http://www.bredbandskollen.se/	No
SI	AKOSTestNet	https://akostest.net	No
SK	Merač Internetu	https://merac.teleoff.gov.sk	Yes

Table 30. IAS quality monitoring tools provided by NRAs

All of the above-mentioned IAS quality monitoring tools can measure download and upload speeds as well as latency. Additionally, many tools allow to perform measurements of jitter (16 out of 21) and packet loss (12 out of 21). With some of these tools (8 out of 21), end-users can also check if any ports are blocked. All but one tools are available as a browser version. The majority of these tools (15 out of 21) are provided as an Android or iOS app, while some (8 out of 21) also consist of installable clients.

NRA	DL speed	UL speed	Latency (ping)	Jitter	Packet loss	TCP/UDP port blocking	Web browser	Android app	iOS app	Installable client
AT	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
BG	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
CY	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
CZ	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
DE	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes
DK	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	No
EL	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No
FI	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
HR	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
HU	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No
IT	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes
LT	Yes	Yes	Yes	Yes	No	No	Yes	No	No	No
LU	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
ME	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No
NO	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No
PL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
PT	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
RO	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
SE	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	No
SI	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
SK	Yes	Yes	Yes	No	No	No	Yes	No	No	No

Table 31. Indicators measured with the tool and supported platforms

Question 27. Related to the OIR, regarding the reporting period, are there any **other relevant information** (not mentioned before) that you would like to share? Have there been any of the following?

- i. new court proceedings;
- ii. NRA's regulatory decisions;
- iii. updates to cases reported previously;
- iv. internal or external implementation actions;
- v. guidance (of e.g. NRA, ministry) on additional transparency or information requirements on ISPs;
- vi. any additional remedies for consumer redress in relation to non-conformance of IAS with the contract terms;
- vii. other, please specify.

NRA	Court proceedings
AT	Please see chapter “Measures in accordance with Article 5(1)” in RTR’s Net Neutrality Report 2026 (and also in the past OI reports). The list of all cases and court proceedings (including a brief overview)³⁷ and the links to the individual decisions³⁸ can be found on the RTR website. • In 2022, rights holder requested ISPs to implement amongst others IP-blocking for certain websites. The TKK decided that those IP-blockings infringe Article 3 (3) of the OIR. The rights holder appealed to the Austrian Federal Administrative Court. During the appeal procedure, the Austrian Federal Administrative Court referred three out of eight similar cases to the ECJ for preliminary proceedings, in particular regarding the question whether IP-blocking is in compliance with the law of the European Union. However, the rights holder withdrew the appeal in the national appeal procedure, resulting in termination of the proceedings. This is why, the preliminary questions of the Austrian Federal Administrative Court became obsolete. Consequently, the ECJ removed the joint cases C-832/24 to C-834/24 from the register of the Court of Justice and the decisions of the TKK have taken legal effect.
DE	StreamOn: The Administrative Court of Cologne ruled in its interim proceedings (11 November 2018) that BNetzA is not hindered to enforce its decision of 15 December 2017, forbidding the video throttling contained in the zero-rating offer StreamOn. Telekom DE appealed the interim ruling. The Higher Administrative Court finally confirmed in the interim proceedings (12 July 2019) that BNetzA’s decision has to be executed immediately. Telekom DE deactivated its video throttling on 9

³⁷ Available at https://www.rtr.at/TKP/was_wir_tun/telekommunikation/weitere-regulierungsthemen/netzneutralitaet/nn_reports.en.html

³⁸ Available at https://www.rtr.at/TKP/was_wir_tun/telekommunikation/weitere-regulierungsthemen/netzneutralitaet/nn_procedures.en.html

	August 2019. The Administrative Court of Cologne suspended the main proceedings and addressed the ECJ (preliminary ruling) for a clarification whether (inter alia) the throttling of video streaming is in line with Article 3(3) of the OIR and the principle of equal treatment. The ECJ pronounced its judgment on 2 September 2021, as already outlined in Chapter 1 of this Report. Following this ruling, BNetzA prohibited the marketing of the zero-rating option and terminated the existing customer contracts. Vodafone Pass: There were no court rulings in administrative court proceedings against BNetzA's decisions. However, there was one court ruling in civil proceedings: A consumer association sued Vodafone for various clauses in the T&Cs of Vodafone Pass. On 8 May 2019, the District Court of Düsseldorf ruled inter alia that the clauses used are misleading insofar as it is not obvious for the end-user that (e.g.) voice- or video-telephony is not zero-rated. Regarding tethering, the court argued that counting data consumed by tethering against the data allowance does not constitute a violation of Article 3(1) of the OIR. The District Court of Düsseldorf passed the issue of tethering to the ECJ (preliminary ruling) requesting clarification whether there is a violation of Article 3 of the OIR because zero-rating of applications in Vodafone Pass applies only when a mobile device is used. The ECJ pronounced its judgment on 2 September 2021. Following this ruling BNetzA prohibited the marketing of the zero-rating option and terminated the existing customer contracts. Freedom to use terminal equipment: In May 2023, the German Federal Court of Justice ruled on Article 3(1) of the OIR more precisely regarding the right to use terminal equipment of one's choice. The case originated in civil legal proceedings. The German consumer protection association (vzbv) had sued Telefonica Germany GmbH for the use of a clause in its general T&Cs according to which customers were not allowed to use LTE routers in its unlimited data plans of mobile tariffs. Hence, according to the T&Cs, SIM cards of these mobile tariffs should not be used as substitute for fixed tariffs at home. In parallel, BNetzA had ordered the ISP (and other ISPs) not to use this clause. On 19 December 2025, the Higher Regional Court Cologne ruled on a lawsuit against Telekom Deutschland GmbH concerning the product "5G+ Gaming" and a potential violation of the OIR. The court dismissed the claim, classifying the add-on option as a permissible specialised service rather than an IAS, meaning that the strict net neutrality rules do not apply. The court also found that the prioritisation of data transmission was objectively necessary to achieve the quality level required for real-time gaming. In interim relief proceedings, the Cologne Administrative Court rejected Telefónica's application against regulatory net neutrality measures and upheld the ban on its 'heavy user' and M2M restrictions. The main proceedings are still pending, and the case is currently before the Higher Administrative Court of Münster.
IT	On 2 August 2018, AGCOM published a decision stating that end-users have the right to freely choose their broadband router (AGCOM Resolution N. 348/18/CONS). According to AGCOM, ISPs cannot require end-users to rely exclusively on the router supplied by the ISP itself. This decision was appealed. With sentences N. 1200/2020 and N. 1201/2020, the Lazio Regional Administrative Court confirmed the lawfulness of the provision of article 5, paragraph 1 of resolution N. 348/18/CONS. The sentences were appealed to the Council of State. On 2 August 2021, the Council of State rejected the request to modify the previous decision N. 1200/2020. On 11

	January 2024, the Council of State rejected the request to modify the previous decision N. 1201/2020.
RO	ANCOM concluded that a certain traffic management practice constitutes an infringement of Article 3(3) third subparagraph of the OIR and ordered that ISP to stop the practice. The ISP challenged ANCOM's decision in front of the Romanian Courts and asked for both the suspension and the annulment of the decision. In the first instance, the Bucharest Court of Appeal decided to suspend the ANCOM decision until the ruling on the substance on its annulment. ANCOM appealed the ruling of the Appeal Court on the decision suspension. However, the appeal was rejected on 12 December 2019 by the decision of the High Court of Cassation and Justice, Administrative and Fiscal Contentious Section, and thus the decision on the suspension has remained definitive. Regarding the cause which concerns the annulment of the ANCOM President's Decision N. 669/08.08.2018, on which the Bucharest Court of Appeal, Administrative and Fiscal Contentious Section VIII, was to issue the ruling on the substance, after several deferrals of the ruling, on 26 May 2021, the Court decided to annul the above-mentioned decisions. ANCOM appealed the Court decision regarding the annulment of the ANCOM President's Decision N. 669/08.08.2018. The case reached the High Court of Cassation and Justice in Romania (ICCJ), the last level of jurisdiction in this case. As a result of Telekom RO Mobile's request, ICCJ considered necessary to address a preliminary question to the ECJ, to clarify the interpretation of the provisions of Article 3 of the OIR. The case was registered under Case C-367/24. More precisely, the ICCJ decided, in April 2024, to ask the ECJ to answer the following question: <i>"Article 3 of the [OIR] is to be interpreted as meaning that a tariff option launched by a telecommunications service company that allows end customers who have accessed it to use free of charge all video streaming services, regardless of the content providers from which they originate and regardless of whether or not they have the quality of content partners of the telecommunications service company, without the volume of data consumed through the use of these services being included in the volume of data provided monthly by the mobile phone tariff, but with a bandwidth limitation for this type of content, is compatible with the obligations arising from these provisions?"</i> ANCOM has submitted written observations before the ECJ, therefore a ruling of the Court was expected.

Table 32. Court proceedings related to the OIR

Annex II: Abbreviations for countries

Throughout the report, Eurostat country codes are used as abbreviations for the names of the Member States³⁹. The country codes and the respective names of the NRAs are shown in the following table.

Austria	AT	RTR	Latvia	LV	SPRK
Belgium	BE	BIPT	Liechtenstein	LI	LLV
Bulgaria	BG	CRC	Lithuania	LT	RRT
Croatia	HR	HAKOM	Luxembourg	LU	ILR
Cyprus	CY	OCECPR	Malta	MT	MCA
Czech Republic	CZ	CTU	Montenegro	ME	EKIP
Denmark	DK	ADSI	Norway	NO	NKOM
Estonia	EE	ECSTRA	Poland	PL	UKE
Finland	FI	TRAFICOM	Portugal	PT	ANACOM
France	FR	ARCEP	Romania	RO	ANCOM
Germany	DE	BNETZA	Slovakia	SK	RU
Greece	EL	EETT	Slovenia	SI	AKOS
Hungary	HU	NMHH	Spain	ES	CNMC
Ireland	IE	COMREG	Sweden	SE	PTS
Italy	IT	AGCOM	The Netherlands	NL	ACM

Table 33. Country codes and NRAs

³⁹ The Eurostat country codes are available via the official link: http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Country_codes

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