



Bundesnetzagentur

# Net Neutrality in Germany

## Annual Report 2021/2022





# Net Neutrality in Germany

## Annual Report 2021/2022

Report of the Bundesnetzagentur to the European Commission and BEREC  
pursuant to Article 5(1) Regulation (EU) 2015/2120

Reporting period: May 2021 to April 2022

Courtesy Translation

**Bundesnetzagentur für Elektrizität, Gas,  
Telekommunikation, Post und Eisenbahnen**

Section 122: Net Neutrality, Platform Monitoring, Artificial Intelligence

Tulpenfeld 4

53113 Bonn

Telephone: +49 (0)228 14-0

Fax: +49 (0)228 14-8872

Email: [info@bnetza.de](mailto:info@bnetza.de)

## Contents

Contents.....	3
1 Introduction.....	5
2 Supervision and enforcement of Regulation (EU) 2015/2120 on open internet access....	7
2.1 Competence.....	7
2.2 Methods of supervision and enforcement .....	7
3 Enforcement activities regarding Regulation (EU) 2015/2120 and the findings of monitoring work.....	8
3.1 Safeguarding of open internet access .....	8
3.1.1 Agreements and commercial practices – Article 3(1) and (2).....	8
3.1.2 Traffic management – Article 3(3) .....	10
3.1.3 Data protection and obligations for the protection of privacy – Article 3(4) .....	13
3.1.4 Services other than internet access services (specialised services) – Article 3(5) .....	14
3.2 Transparency measures – Article 4 .....	15
3.2.1 Contractual arrangements – Article 4(1) .....	15
3.2.2 Complaints procedure – Article 4(2) .....	16
3.2.3 Monitoring mechanism – Article 4(4).....	17
3.2.4 Additional legislative measures – Article 4(3) .....	19
3.3 Supervision and enforcement – Article 5.....	19
4 Penalties – Article 6.....	24
Publisher's details.....	25



# 1 Introduction

1. Regulation (EU) 2015/2120 laying down measures concerning open internet access (TSM Regulation) aims to establish common rules to safeguard equal and non-discriminatory treatment of data traffic in the provision of internet access services and related end-users' rights.<sup>1</sup> It aims to protect end-users and simultaneously to guarantee the continued functioning of the internet ecosystem as an engine of innovation.<sup>2</sup>
2. In accordance with Article 5(1), national regulatory authorities (NRAs) must publish reports on an annual basis on their monitoring and findings, and provide these reports to the European Commission and the Body of European Regulators for Electronic Communications (BEREC).
3. BEREC published "Guidelines on the Implementation by National Regulators of European Net Neutrality Rules" on 30 August 2016 in accordance with Article 5(3). The guidelines are designed to provide guidance on implementing the obligations of NRAs and contribute to the consistent application of the Regulation. The guidelines have since been revised twice. The guidelines were first revised in 2020 to reflect the NRAs' practice to date as well as the first judgments by the European Court of Justice (ECJ). They were then revised again in light of the ECJ judgments of 2 September 2021 on zero-rating options (for further details, see paragraphs 24-28). These revised guidelines were published on 14 June 2022.<sup>3</sup> The Bundesnetzagentur was actively involved in both revision processes.
4. In accordance with the BEREC guidelines (see paragraph 182), NRAs should publish their reports on an annual basis by 30 June. The reports should cover the period from 1 May to 30 April. The present report covers the period from 1 May 2021 to 30 April 2022.
5. By publishing this report, the Bundesnetzagentur fulfils its reporting duty on its monitoring and findings for the sixth year of application of Regulation (EU) 2015/2120. Also by the publication of this report, the Bundesnetzagentur simultaneously fulfils its reporting duty under section 55(4) sentence 3 para 1 of the German Telecommunications Act (TKG).
6. The report focuses on the following issues: the safeguarding of open internet access (Article 3), transparency measures (Article 4), supervision and enforcement (Article 5), and penalties (Article 6).
7. The report covers the most significant activities of the Bundesnetzagentur with respect to the following:
  - the prohibition of restrictions on the free choice of terminal equipment in mobile flat rate contracts (Article 3(1); see paragraph 15);
  - the prohibition of the "StreamOn" and "Vodafone Pass" zero-rating options (Article 3(3); see paragraphs 24-28);

---

<sup>1</sup> 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, Official Journal 2015, L310/1. Any Article without reference to an Act or to a Regulation shall be understood to refer to Regulation (EU) 2015/2120.

<sup>2</sup> See recital 1 of the Regulation.

<sup>3</sup> [https://berec.europa.eu/eng/document\\_register/subject\\_matter/berec/regulatory\\_best\\_practices/guidelines/10280-berec-guidelines-on-the-implementation-of-the-open-internet-regulation](https://berec.europa.eu/eng/document_register/subject_matter/berec/regulatory_best_practices/guidelines/10280-berec-guidelines-on-the-implementation-of-the-open-internet-regulation)

- DNS blocking because of copyright infringements and the EU's restrictive measures suspending the activities of Russia Today and Sputnik (Article 3(3); see paragraphs 29-32 and 33-36);
- the investigation of transparency measures (Article 4(1); see paragraphs 43-46), including handling of consumer complaints relating to low data transmission rates (Article 4(1) sentence 1 point (d) in conjunction with Article 4(4); see paragraphs 50-54);
- the operation of a quality monitoring mechanism (section 43a(3) TKG, Article 4(4) and Article 5(1); see paragraphs 68-84).

## 2 Supervision and enforcement of Regulation (EU) 2015/2120 on open internet access

### 2.1 Competence

8. In Germany, the Bundesnetzagentur is responsible for enforcing the rules on net neutrality under Regulation (EU) 2015/2120.
9. Depending on the matter at issue, the Bundesnetzagentur may consult with other authorities, for example the Bundeskartellamt, the state media authorities and the Federal Commissioner for Data Protection and Freedom of Information (BfDI). Data protection falls under the joint responsibility of the Bundesnetzagentur and the BfDI (see paragraphs 37-40).

### 2.2 Methods of supervision and enforcement

10. Under Article 5(1), the Bundesnetzagentur must closely monitor and ensure compliance with Articles 3 and 4. The Bundesnetzagentur is responsible ex officio for enforcing Regulation (EU) 2015/2120 on open internet access. Its main information sources are complaints, the public media and other sources (for example information from other authorities or from providers of internet access services who inform the Bundesnetzagentur of a new business model).
11. In many cases the Bundesnetzagentur will take action following a complaint (complaint-based approach). The Bundesnetzagentur will support the complainant if the complainant's concerns seem plausible or justified. By taking this approach, the Bundesnetzagentur is able to identify the main issues from the end-user's perspective and take appropriate measures vis-à-vis the provider concerned if necessary.
12. In addition, the Bundesnetzagentur takes into account other information about any infringement of Regulation (EU) 2015/2120 (for example information from public media or from the internet).
13. Providers of internet access services are required to carry out a self-assessment of the compatibility of their contracts with the net neutrality rules set out in Regulation (EU) 2015/2120 and, if necessary, must amend their contracts accordingly. There is no obligation to notify the Bundesnetzagentur, but the authority is willing to discuss or answer questions regarding the design of new business models. Notwithstanding the above, it may intervene if it finds any contracts for internet access services are defective.

### 3 Enforcement activities regarding Regulation (EU) 2015/2120 and the findings of monitoring work

14. The Bundesnetzagentur's activities related to various provisions of the Regulation.

#### 3.1 Safeguarding of open internet access

##### 3.1.1 Agreements and commercial practices – Article 3(1) and (2)

Article 3(1) and (2) Regulation (EU) 2015/2120

(1) End-users shall have the right to access and distribute information and content, use and provide applications and services, and use terminal equipment of their choice, irrespective of the end-user's or provider's location or the location, origin or destination of the information, content, application or service, via their internet access service.

This paragraph is without prejudice to Union law, or national law that complies with Union law, related to the lawfulness of the content, applications or services.

(2) Agreements between providers of internet access services and end-users on commercial and technical conditions and the characteristics of internet access services such as price, data volumes or speed, and any commercial practices conducted by providers of internet access services, shall not limit the exercise of the rights of end-users laid down in paragraph 1.

#### Mobile flat rates

15. Several providers offering mobile flat rates had been prohibiting the use of fixed LTE routers. The Bundesnetzagentur had initiated action against the providers concerned (see the 2019/2020 and 2020/2021 annual reports) and completed the procedures during this reporting period. The Bundesnetzagentur found that all the providers were infringing the end-users' right pursuant to Article 3(1) to use terminal equipment of their choice and prohibited the relevant contractual clauses. In the course of the reporting period, several providers amended their contracts, while several others filed appeals and/or started the process of amending the terms and conditions of their contracts.
16. Independent of this, the Federation of German Consumer Organisations (Verbraucherzentrale Bundesverband e. V. – vzbv) brought civil actions against these providers at the end of July 2020 for violating the freedom of choice of terminal equipment. In the course of the civil law proceedings the Bundesnetzagentur adopted a position in line with vzbv. The point of view of vzbv and the Bundesnetzagentur on the inadmissibility of these terminal equipment clauses has since been confirmed in four different civil law proceedings, including proceedings in the second instance (see judgment by Düsseldorf regional court (LG) of 25 August 2021 (12 O 147/20); Kiel LG of 22 October 2021 (4 O 120/20); Cologne higher regional court (OLG) of 11 February 2022 (6 U 94/21) – final; Munich OLG of 17 February 2022 (29 U 747/21)). An appeal has since been filed against the decision by Munich OLG and so the matter is now being dealt with by the Federal Court of Justice (BGH). A decision in the appeal proceedings at the OLG in Schleswig is still pending.

**"Vodafone Pass" – tethering**

17. In the civil law proceedings between Vodafone GmbH and vzbz concerning various clauses in the "Vodafone Pass" general terms and conditions, Düsseldorf OLG referred the question of tethering to the ECJ. The court sought clarification as to whether an infringement of the end-user rights pursuant to Article 3(1) exists when the applications of the partners participating in "Vodafone Pass" are only zero-rated (and so do not count towards the data volume) when a mobile device is used. If the mobile device, in contrast, is coupled with other terminal equipment (tethering), data traffic resulting from the usage of the other terminal equipment is counted towards the data volume. This was cited by vzbz as a violation of the end-users' right to use terminal equipment of their choice. The question was referred to the ECJ for a preliminary ruling.
18. The ECJ ruled in its judgment of 2 September 2021 that zero-rating options in themselves are in breach of the TSM Regulation because such a commercial practice is incompatible with the obligation of equal treatment of data traffic. According to the ECJ, the disputed clause on tethering is also in breach of the obligation of equal treatment of all data traffic since it only applies when a zero-rating option is activated. Vodafone GmbH consequently withdrew its appeal before Düsseldorf OLG. Because the ECJ judgment relates to tethering in conjunction with a zero-rating option, no general statement about contractual clauses for tethering was made.

**IPv4/IPv6 addresses**

19. Complaints relating to IPv4/IPv6 addresses were again received in the reporting period. In some cases, end-users were unable to use particular services and applications via their internet access service because of the lack of public IPv4 addresses (there had been similar cases in the past: see the net neutrality report for 2020/2021, paragraph 19 et seq, for 2018/2019, paragraphs 19-22, and for 2017/2018, paragraph 28). These cases were solved by the providers in various ways – either by providing a public IPv4 address or with alternative mechanisms, depending on the individual circumstances – without the Bundesnetzagentur needing to intervene.
20. In other cases, consumers were interested in the question of whether an internet access provider is required to provide a public IPv4 address free of charge. So far the providers concerned have been able to offer their customers a satisfactory solution. The Bundesnetzagentur is, however, continuing to monitor the situation.
21. In other cases, consumers were interested in getting a public IPv6 address. The Bundesnetzagentur pointed out that there was no breach of the net neutrality rules in these cases. BEREC also made it clear in its guidelines (paragraph 16) that providers of internet access services are not required to offer connectivity with both IPv4 and IPv6. There is therefore no leverage in these instances to require providers to offer their end-users an IPv6 address as well.

**Inapplicability of the Regulation**

22. Investigations showed that Regulation (EU) 2015/2120 did not apply to a number of consumer complaints. For example, problems experienced by end-users when using particular services occurred outside the scope of their internet access services, either at the level of applications (when using content services) or IP interconnection.

23. In several cases end-users of email service could not receive incoming emails. They believed that internet access providers were blocking emails of certain email providers. The blocking, however, was not carried out at the network level by the internet access providers but at the application level by email service providers involved. For this reason the Net Neutrality Regulation did not apply.

### 3.1.2 Traffic management – Article 3(3)

#### Article 3(3) Regulation (EU) 2015/2120

Providers of internet access services shall treat all traffic equally, when providing internet access services, without discrimination, restriction or interference, and irrespective of the sender and receiver, the content accessed or distributed, the applications or services used or provided, or the terminal equipment used.

The first subparagraph shall not prevent providers of internet access services from implementing reasonable traffic management measures. In order to be deemed to be reasonable, such measures shall be transparent, non-discriminatory and proportionate, and shall not be based on commercial considerations but on objectively different technical quality of service requirements of specific categories of traffic. Such measures shall not monitor the specific content and shall not be maintained for longer than necessary.

Providers of internet access services shall not engage in traffic management measures going beyond those set out in the second subparagraph, and in particular shall not block, slow down, alter, restrict, interfere with, degrade or discriminate between specific content, applications or services, or specific categories thereof, except as necessary, and only for as long as necessary, in order to:

- (a) comply with Union legislative acts, or national legislation that complies with Union law, to which the provider of internet access services is subject, or with measures that comply with Union law giving effect to such Union legislative acts or national legislation, including with orders by courts or public authorities vested with relevant powers;
- (b) preserve the integrity and security of the network, of services provided via that network, and of the terminal equipment of end-users;
- (c) prevent impending network congestion and mitigate the effects of exceptional or temporary network congestion, provided that equivalent categories of traffic are treated equally.

### Zero-rating

24. The ECJ issued three judgments in the reporting period that resulted in the prohibition of the zero-rating options offered on the German market, including Telekom Deutschland GmbH's "StreamOn" and Vodafone GmbH's "Vodafone Pass" options.

25. The ECJ ruled in its judgments of 2 September 2021 that the "StreamOn" and "Vodafone Pass" zero-rating options were not compatible with the principle of equal treatment of all data traffic within the meaning of Article 3(3) of Regulation (EU) 2015/2120 (see cases C-854/19, C-5/20, C-34/20). The ECJ understands the principle of equal treatment as a general obligation to treat all traffic equally, meaning that neither technical nor tariff-related unequal treatment of different types of traffic within one tariff is admissible. Zero-rating options treat data traffic unequally by not counting certain services and applications towards the data included in a tariff and thus allowing unlimited use of them, as opposed to all other services and applications.
26. The Bundesnetzagentur consequently prohibited the marketing of the "StreamOn" and "Vodafone Pass" zero-rating options on 28 April 2022. These offers violate net neutrality provisions, as they do not treat data traffic equally. Two different deadlines were set. The Bundesnetzagentur ordered that new marketing of "StreamOn" and "Vodafone Pass" had to end by 1 July 2022. The two zero-rating options are not to be bookable via any sales channel after that time. The zero-rating options for existing customers are to cease by the end of March 2023. As there is a large number of affected customers, the implementation period is necessary to enable a consumer-friendly transition to other tariffs.
27. Finally, BEREC's guidelines on net neutrality were revised during the reporting period in light of the ECJ judgments (see paragraph 3 above). The Bundesnetzagentur is required to take "utmost account" of these guidelines. The Bundesnetzagentur synchronised the implementation of the ECJ judgments with these activities at BEREC level. The Bundesnetzagentur issued its prohibition orders following the publication of BEREC's draft guidelines for consultation. Because the multi-stage administrative procedure comprises the steps under section 202 TKG as well as the procedure for appeals, it will be possible to take account of the final version of BEREC's guidelines in the decisions in any appeal proceedings.
28. As a further consequence of the ECJ judgments, Telekom and Vodafone withdrew the actions they had filed with the administrative court against the original notices issued in 2017 and 2018 relating to the – now discontinued – use of video throttling and clauses on roaming. However, the civil court proceedings at Düsseldorf OLG for the action relating to tethering brought by vzbv (see paragraphs 17-18 above) are still ongoing.

### **DNS blocking**

29. The Bundesnetzagentur checks that any site blocks implemented by internet access providers, such as DNS blocks, are not in breach of the net neutrality rules. However, the Bundesnetzagentur's activities do not include ordering site blocking itself under Regulation (EU) 2015/2120 (which was the aim of several complaints and queries). Site blocks implemented by internet access providers are essentially in breach of the principle of equal treatment of all data traffic within the meaning of Article 3(3) of Regulation (EU) 2015/2120, except when there is a reason to justify an exception. One particular reason justifying an exception is set out in Article 3(3) point (a) of Regulation (EU) 2015/2120. According to the provision, unequal treatment of data traffic – such as site blocking – is justified if necessary, and as long as necessary, to comply with Union legislative acts, or national legislation that complies with Union law, to which the provider of internet access services is subject, or with measures that comply with Union law giving effect to such Union legislative acts or national legislation, including with orders by courts or public authorities vested with relevant powers. Such legislation can come from various areas and includes copyright law.
30. In January 2021 the Online Copyright Clearance System (CUII) was established, increasing the focus on the issue of DNS blocks. The CUII is a joint initiative of rights holders from the cultural and creative

industry and four major German internet access providers. The aim is to enable DNS blocks to be implemented in an out-of-court procedure and by all internet access providers involved for websites with business models that are based on publishing copyrighted works without the permission of the rights holders. The CUII's procedure blocks websites that structurally infringe copyright. These websites are specifically designed to infringe works protected by copyright, and the amount of legal content on the websites is negligible compared to the amount of illegal content.

31. Rights holders can make a blocking request to the CUII; an examination body comprising former BGH judges assesses the request to determine whether the legal requirements enabling a block to be put in place are met. The body bases its assessment on the prerequisites for blocking developed by supreme court case law. Rights holders are able by virtue of section 7(4) of the German Telemedia Act (TMG) to request internet access providers to block sites if there is no other way of resolving the infringement and if the block is reasonable and proportionate. The CUII's examination body forwards the results of its assessment as a recommendation to the Bundesnetzagentur. This is done on a voluntary basis. The Bundesnetzagentur checks whether the prerequisites of Article 3(3) point (a) of Regulation (EU) 2015/2120 are met, that is whether the DNS block is necessary to implement national or European legislation and is therefore justified under Article 3(3) point (a).
32. The Bundesnetzagentur's checks and opinions before a DNS block is set up are informal, since the Regulation neither provides for an ex ante examination by the Bundesnetzagentur nor requires approval by or notification to the Bundesnetzagentur of DNS blocks implemented by internet access providers. The Bundesnetzagentur sends its informal opinion to the CUII. The providers can only set up a DNS block if there are no net neutrality concerns. Five DNS blocks – for the websites nsw2u.com, newalbumreleases.net, streamkiste.tv, bs.to and kinox.to – were set up in the reporting period following this procedure. The websites infringed copyright by offering films and series for streaming, music for downloading or video games. In three other cases, the Bundesnetzagentur asked the CUII for further substantiation of its recommendations because it considered the grounds presented for blocking to be insufficient on the basis of established case law.

### **Restrictions on Russia Today and Sputnik**

33. The EU's sanctions adopted against Russia because of the Ukraine war include prohibiting the distribution of content by Russia Today and Sputnik. Council Regulation (EU) 2022/350 of 1 March 2022, which amends Council Regulation (EU) No 833/2014 imposing restrictive measures, prohibits operators from broadcasting and from enabling, facilitating or otherwise contributing to broadcast any content by Russia Today or Sputnik, including through transmission or distribution by any means such as cable, satellite, IPTV, internet service providers, internet video-sharing platforms or applications, whether new or pre-installed.<sup>4</sup> Council Regulation (EU) 2022/350 is directly applicable in Germany. However, the Bundesnetzagentur is not responsible for enforcing the Regulation and therefore does not monitor its implementation.
34. Instead, the Bundesnetzagentur is responsible for ensuring compliance with the net neutrality provisions of Regulation (EU) 2015/2120, which state that providers of internet access services must not treat data traffic differently and in particular must not block or discriminate against websites, unless there is a

---

<sup>4</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022R0350&from=EN>

reason to justify an exception. A reason justifying an exception may arise from Union legislative acts or national legislation when it is necessary to block particular websites for particular reasons. Council Regulation (EU) 2022/350 provides such a reason justifying an exception. The Bundesnetzagentur therefore considers the internet access providers' blocking of the relevant domains to be compatible with the net neutrality provisions. The Bundesnetzagentur informed the internet access providers about this through the industry associations. It also pointed out that the list of domains to be blocked is not final and may be changed depending on further developments. The Bundesnetzagentur's approach and the legal stance are also in harmony with BEREC's position.<sup>5</sup>

35. An application for interim relief was filed by a private person with Cologne administrative court. The application requested the blocks for the websites [www.vesti.ru](http://www.vesti.ru) and [www.deutsch.rt.com](http://www.deutsch.rt.com) to be lifted. In its response to the application, the Bundesnetzagentur dismissed the request as unfounded. Firstly, there is no infringement of Article 3(3) point (a) of the TSM Regulation. Domain blocking is justified as an exception when ordered by Union law – in this case by Council Regulation (EU) No 833/2014 as amended by Council Regulation (EU) 2022/350. Secondly, there were no grounds of urgency justifying the application for interim relief. A decision on the application for interim relief was issued after the end of the reporting period; the application was dismissed by Cologne administrative court on 15 June 2022.
36. The EU General Court also came to the conclusion in a similar case that there were no grounds of urgency. In this case, Russia Today France had filed an application for interim relief to lift the broadcasting ban on 8 March 2022. The application was dismissed on 30 March 2022 (case T-125/22). The court ruled that there were no grounds of urgency justifying the ban on Russian state media to be lifted because the order suspending broadcasting activities by Russia Today France in the EU was only temporary – until 31 July 2022 or until the end of the military aggression against Ukraine. Furthermore, the interest of the applicant in up-to-date reporting by Russian state media had to be put behind the EU's vested interest in protecting the European population from the systematic disinformation and destabilisation campaigns undertaken by the leadership of the Russian Federation to justify and support its continued military aggression against Ukraine.

### 3.1.3 Data protection and obligations for the protection of privacy – Article 3(4)

Article 3(4) Regulation (EU) 2015/2120

Any traffic management measure may entail processing of personal data only if such processing is necessary and proportionate to achieve the objectives set out in paragraph 3. Such processing shall be carried out in accordance with Directive 95/46/EC of the European Parliament and of the Council. Traffic management measures shall also comply with Directive 2002/58/EC of the European Parliament and of the Council.

37. In Germany, both the BfDI and the Bundesnetzagentur were responsible for monitoring the data protection obligations in line with telecommunications law at the beginning of the reporting period.

---

<sup>5</sup> BEREC press release of 4 March 2022: [https://berec.europa.eu/eng/news\\_and\\_publications/whats\\_new/9321-berec-open-internet-regulation-is-not-an-obstacle-in-implementing-eu-sanctions-to-block-rt-and-sputnik](https://berec.europa.eu/eng/news_and_publications/whats_new/9321-berec-open-internet-regulation-is-not-an-obstacle-in-implementing-eu-sanctions-to-block-rt-and-sputnik); BEREC press release of 11 March 2022: [https://berec.europa.eu/eng/news\\_and\\_publications/whats\\_new/9340-berec-supports-isps-in-implementing-the-eu-sanctions-to-block-rt-and-sputnik](https://berec.europa.eu/eng/news_and_publications/whats_new/9340-berec-supports-isps-in-implementing-the-eu-sanctions-to-block-rt-and-sputnik).

38. Article 3(4) refers to Regulation (EU) 2016/679 (European General Data Protection Regulation, GDPR), since it replaced Directive 95/46/EC (see Article 94 GDPR). As the GDPR is directly applicable, the BfDI is solely responsible for monitoring data protection in telecommunications services insofar as it is not a matter of supervision with regard to the obligations laid down in Directive 2002/58/EC (see Article 95 GDPR). The obligations laid down there concern in particular the traffic data of interest within the framework of Article 3(4) of Regulation (EU) 2015/2120, i.e. data that is collected, processed or used in the provision of a telecommunications service, section 3 para 70 TKG. To this extent the joint responsibility of the BfDI and the Bundesnetzagentur continues in principle unchanged.
39. The E-Privacy Regulation (2002/58/EC), which is currently being discussed at a European level, is likely to replace the E-Privacy Directive. The E-Privacy Regulation will probably also lead to changes in data protection supervision in Germany. It is not yet clear when the E-Privacy Regulation is expected to enter into force.
40. With the entry into force of the revised TKG in 2021, the sector-specific data protection rules set out in Part 7 of the old TKG are now part of a separate piece of legislation, the Telecommunications Telemedia Data Protection Act (TTDSG). Sector-specific rules for telecommunications, including telecommunications secrecy, are now set out in Part 2 (sections 3 to 18) of the TTDSG. Some of the Bundesnetzagentur's previous tasks are now the sole responsibility of the BfDI. The provisions assigning the responsibilities are set out in sections 29 and 30 TTDSG. The new TKG retains the requirement for telecommunications service providers to inform the Bundesnetzagentur, the BfDI and, under certain circumstances, those affected if a personal data breach occurs (section 169 new TKG; section 109a old TKG). However, a distinction must be made between this requirement and the requirement to report to the BfDI under Article 33 GDPR. Further information is available on the websites of both the Bundesnetzagentur and the BfDI.

#### 3.1.4 Services other than internet access services (specialised services) – Article 3(5)

Article 3(5) Regulation (EU) 2015/2120

Providers of electronic communications to the public, including providers of internet access services, and providers of content, applications and services shall be free to offer services other than internet access services which are optimised for specific content, applications or services, or a combination thereof, where the optimisation is necessary in order to meet requirements of the content, applications or services for a specific level of quality.

Providers of electronic communications to the public, including providers of internet access services, may offer or facilitate such services only if the network capacity is sufficient to provide them in addition to any internet access services provided. Such services shall not be usable or offered as a replacement for internet access services, and shall not be to the detriment of the availability or general quality of internet access services for end-users.

41. No complaints about specialised services were addressed to the Bundesnetzagentur in the reporting period. There were also no specific enquiries from providers of internet access services about business models that contain specialised services.

42. With regard to the expected future provision of services on the basis of 5G mobile technology, the Bundesnetzagentur takes the view that such services constitute specialised services as far as they meet the requirements in Article 3(5) of Regulation (EU) 2015/2120. This will be the case in particular with time-critical and safety-critical services, for example in the field of connected and autonomous driving.

### 3.2 Transparency measures – Article 4

#### 3.2.1 Contractual arrangements – Article 4(1)

Article 4(1) Regulation (EU) 2015/2120

Providers of internet access services shall ensure that any contract which includes internet access services specifies at least the following:

- (a) information on how traffic management measures applied by that provider could impact on the quality of the internet access services, on the privacy of end-users and on the protection of their personal data;
- (b) a clear and comprehensible explanation as to how any volume limitation, speed and other quality of service parameters may in practice have an impact on internet access services, and in particular on the use of content, applications and services;
- (c) a clear and comprehensible explanation of how any services referred to in Article 3(5) to which the end-user subscribes might in practice have an impact on the internet access services provided to that end-user;
- (d) a clear and comprehensible explanation of the minimum, normally available, maximum and advertised download and upload speed of the internet access services in the case of fixed networks, or of the estimated maximum and advertised download and upload speed of the internet access services in the case of mobile networks, and how significant deviations from the respective advertised download and upload speeds could impact the exercise of the end-users' rights laid down in Article 3(1);
- (e) a clear and comprehensible explanation of the remedies available to the consumer in accordance with national law in the event of any continuous or regularly recurring discrepancy between the actual performance of the internet access service regarding speed or other quality of service parameters and the performance indicated in accordance with points (a) to (d).

Providers of internet access services shall publish the information referred to in the first subparagraph.

43. The vast majority of the complaints the Bundesnetzagentur receives from end-users are not about the transparency of contractual agreements but are about non-fulfilment of the contractually agreed performance (discrepancies between the contractually agreed internet speeds and the speeds actually measured). This now applies to a greater extent because the rules in the new TKG in force since the end of 2021 give end-users special termination and reduction rights as long as the end-users use the

measuring tool provided by the Bundesnetzagentur to prove discrepancies in performance. The tool can currently only be used to prove discrepancies in fixed-network performance.

44. The Bundesnetzagentur deals with these complaints on broadband speed discrepancies following the complaints procedure (see paragraph 49), also taking into account since December 2021 the general administrative order on the new reduction rules for fixed-network internet access (see paragraphs 56-62).
45. Where providers applied admissible traffic management measures, the Bundesnetzagentur ensured appropriate transparency in the contractual information. An example of this is the lower priority given when assigning resources to mobile-based fixed-line substitute products. If congestion occurs, users of this tariff are assigned fewer resources than other mobile users in the same cell. Traffic within each tariff is treated equally (and so there is no breach of the equal treatment obligation under Article 3(3) of the Regulation).
46. No complaints about the transparency requirements under Article 4(1) sentence 1 points (b), (c) and (e) were addressed to the Bundesnetzagentur during the reporting period.

#### **Report in accordance with section 55(4) sentence 3 para 1 TKG**

47. In accordance with section 55(4) sentence 3 para 1 TKG, the Bundesnetzagentur publishes an annual report on its surveys and findings that presents, in particular, the extent to which providers of publicly available telecommunications services provide the information required under section 55(2) TKG and Article 4(1) of the Regulation.
48. The following picture has emerged for the Bundesnetzagentur: fixed network providers provide information on the speeds as referred to in Article 4(1) point (d) in their general terms and conditions. The providers typically refer to specific figures for the respective speeds or express them as a percentage of the maximum speed. Advertised speeds typically correspond to maximum speeds. Mobile providers also provide information on the corresponding speeds in their general terms and conditions. The providers also increasingly describe the impact of traffic management measures (where they are applied and have been deemed admissible by the Bundesnetzagentur) on the internet access service.

#### **3.2.2 Complaints procedure – Article 4(2)**

Article 4(2) Regulation (EU) 2015/2120

Providers of internet access services shall put in place transparent, simple and efficient procedures to address complaints of end-users relating to the rights and obligations laid down in Article 3 and paragraph 1 of this Article.

49. The Bundesnetzagentur, in coordination with industry representatives, has designed a standard procedure for handling the complaints it receives from end-users. One of the aims of the procedure is to ensure that providers deal with complaints swiftly and properly as far as possible, especially in cases where the contractually agreed speeds are not delivered. All internet access providers were asked to set up special contact points to be able to deal with end-users' complaints about internet speeds as well as questions and complaints about the transparency of contracts as swiftly and properly as possible. The procedure means that, as a rule, the provider's response to a complaint is sent to both the Bundesnetzagentur and the end-user.

### Number of complaints

50. The Bundesnetzagentur forwards substantiated complaints from end-users, for which no solution has yet been reached between the end-user and the internet access provider, to the provider. The Bundesnetzagentur asks the consumers to measure their internet speeds using the desktop app version of the Bundesnetzagentur's broadband speed checker (see paragraph 68). In the relevant reporting period, around 1,050 substantiated complaints under the terms of Article 4(4) were submitted. In the previous reporting period, there had been about 630.
51. Moreover, it is possible to submit a request for a dispute settlement procedure to the Bundesnetzagentur.
52. The Bundesnetzagentur does not enforce individual end-users' special termination or compensation rights vis-à-vis providers, as it is up to the civil courts to do that.
53. Legal remedies for consumer rights are governed by civil law. No specific, additional remedies for consumer redress have been introduced for net neutrality.
54. There was also an increase in the number of enquiries about internet access services. While the Bundesnetzagentur received about 1,800 enquiries in the previous reporting period, about 2,300 enquiries were registered during this reporting period.

### 3.2.3 Monitoring mechanism – Article 4(4)

Article 4(4) Regulation (EU) 2015/2120

Any significant discrepancy, continuous or regularly recurring, between the actual performance of the internet access service regarding speed or other quality of service parameters and the performance indicated by the provider of internet access services in accordance with points (a) to (d) of paragraph 1 shall, where the relevant facts are established by a monitoring mechanism certified by the national regulatory authority, be deemed to constitute non-conformity of performance for the purposes of triggering the remedies available to the consumer in accordance with national law.

This paragraph applies only to contracts concluded or renewed from 29 November 2015.

55. In its guidelines BEREC clearly set out that a monitoring mechanism provided by an NRA and implemented for the purpose of Article 4(4) should be considered a certified monitoring mechanism (see BEREC guidelines, paragraph 161). The Bundesnetzagentur thus considers its "Breitbandmessung" broadband speed checker to be such a certified monitoring mechanism.

### Clarification of the undefined legal terms "significant discrepancy, continuous or regularly recurring [...] regarding speed"

56. The German legislators considerably strengthened consumer rights with the revised version of the TKG, which came into force at the end of 2021. Section 57(4) sentence 1 para 1 TKG gives consumers the right to reduce their contractually agreed fee or terminate their contract extraordinarily, without compliance with a period of notice, in the case of non-conformity of performance, provided that there is a significant discrepancy, continuous or regularly recurring, between the actual performance of the internet access service regarding speed or other quality of service parameters and the performance indicated by the

provider of internet access services in accordance with Article 4 (1) points (a) to (d) of Regulation (EU) 2015/2120. The new provisions entered into force on 1 December 2021.

57. The provisions in the TKG address the requirements arising out of Regulation (EU) 2015/2120. Proof of a deviation justifying a reduction in the agreed fee should be produced using a monitoring mechanism provided by the Bundesnetzagentur or a monitoring mechanism certified by the Bundesnetzagentur or by a third party commissioned by the Bundesnetzagentur. The Bundesnetzagentur can also issue an administrative order clarifying the undefined terms of "discrepancy, continuous or regularly recurring [...] regarding speed" following consultation with the stakeholders (see section 57(5) TKG).
58. In light of the new legal provisions, the Bundesnetzagentur put out for consultation a draft general administrative order on the new reduction rules for fixed-network internet access services in autumn 2021 and published a final version in December 2021. The administrative order entered into force on 13 December 2021.
59. The general administrative order specifies that customers must conduct a total of 30 measurements on three different calendar days to prove reduced performance. There must be a minimum gap of one calendar day between the measurement days and the measurements must be spread throughout the day. For a deviation to be accepted as warranting reduction, it suffices when the minimum speed is not reached at least once on two of the three measurement days. Reduced performance of the maximum speed is present when 90% of the maximum speed is not reached at least once on two out of the three measuring days. With regard to the speed normally available, a deviation is present when the speed is not attained in at least 90% of the 30 measurements. Both upload and download speeds are measured.
60. The Bundesnetzagentur has also provided a guide with specific requirements for the proof of performance procedure. The Bundesnetzagentur also released an updated version of the desktop broadband speed checker app that can be used to prove reduced performance. Further information is available at [www.bundesnetzagentur.de/internetgeschwindigkeit](http://www.bundesnetzagentur.de/internetgeschwindigkeit) and at [www.breitbandmessung.de](http://www.breitbandmessung.de) (in German).
61. The Bundesnetzagentur had issued a notice clarifying the undefined legal terms in Article 4(4) ("significant discrepancy, continuous or regularly recurring [...] regarding speed") in summer 2017. This notice was used as the basis for the draft general administrative order put for consultation but – in contrast to the general administrative order – only related to the download speeds of fixed broadband connections.
62. The updated desktop app was downloaded and installed about 70,000 times between the entry into force of the general administrative order and the end of April 2022. A total of more than 22,000 sets of measurements were completed, which is about one quarter of all those begun. The great majority of the sets of measurement were therefore not completed. Many consumers stop taking measurements part-way through a set if the results are good. Nearly all the sets of measurements that were completed demonstrated the end-users' entitlement to a reduction of their fee, with download speeds affected more than upload speeds.

### 3.2.4 Additional legislative measures – Article 4(3)

Article 4(3) Regulation (EU) 2015/2120

The requirements laid down in paragraphs 1 and 2 are in addition to those provided for in Directive 2002/22/EC and shall not prevent Member States from maintaining or introducing additional monitoring, information and transparency requirements, including those concerning the content, form and manner of the information to be published. Those requirements shall comply with this Regulation and the relevant provisions of Directives 2002/21/EC and 2002/22/EC.

63. At the national level, additional transparency requirements were adopted during a previous reporting period by way of the Ordinance concerning the promotion of transparency in the telecommunications market ("Transparency Ordinance"). This ordinance regulates the publication of information and additional measures for cost control on the telecommunications market.
64. The transparency ordinance entered into force on 1 June 2017. It was amended by the Telecommunications Legislation Modernisation Act (TKModG) of 23 June 2021. As before, it requires fixed network and mobile providers to provide more transparency when offering internet access services.
65. Providers of internet access services must provide product information sheets where the consumer can quickly see the essential contractual provisions in a simple way before concluding the contract. The product information sheet contains details of the available data transmission rates, the term of the contract and the monthly costs. Consumers are also informed of the contractually agreed data allowance (if relevant).
66. Moreover, consumers have the right to inform themselves of the quality of their internet access service using reliable measurement results, in particular regarding the available data transmission rates and how the rates achieved compare to the contractually agreed maximum speed. The annex to the ordinance sets out the format for this information. The provider of the internet access service must therefore inform the consumer of possible means of measuring the speed, for example by referring to the Bundesnetzagentur's broadband speed checker (see <https://breitbandmessung.de> – German website).

### 3.3 Supervision and enforcement – Article 5

Article 5(1) subpara 1 Regulation (EU) 2015/2120

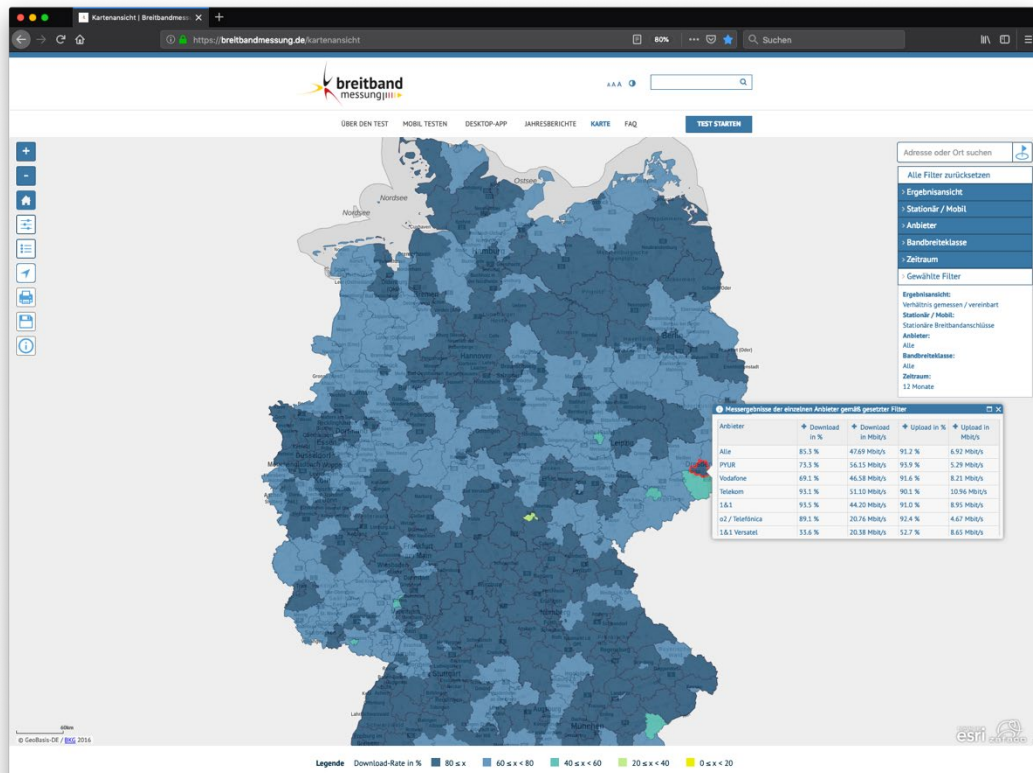
National regulatory authorities shall closely monitor and ensure compliance with Articles 3 and 4, and shall promote the continued availability of non-discriminatory internet access services at levels of quality that reflect advances in technology. For those purposes, national regulatory authorities may impose requirements concerning technical characteristics, minimum quality of service requirements and other appropriate and necessary measures on one or more providers of electronic communications to the public, including providers of internet access services.

### **Enforcement measures**

67. The Bundesnetzagentur issued several administrative orders in the reporting period to enforce the net neutrality obligations under Article 3 of Regulation (EU) 2015/2120. These included the prohibition orders issued as the conclusion to the procedures relating to the free choice of terminal equipment with mobile flat rates (see paragraph 15 above) and zero-rating (see paragraphs 24-28 above). In many cases, providers of internet access services have also voluntarily ceased infringements of the net neutrality provisions, whereas in others no infringement was detected. Some processes that were instigated in the reporting period to enforce Article 3 of Regulation (EU) 2015/2120 are still pending.

### **Broadband speed checker**

68. The Bundesnetzagentur provides a monitoring mechanism, the "Breitbandmessung" broadband speed checker, which allows consumers to monitor the quality and performance of their broadband internet access. An installable version (desktop app) can be used for fixed-line broadband and an app-based one (Android and iOS) for mobile connections. A browser-based version was used for fixed broadband connections up to 1 February 2021.
69. The measurement process used in the actual testing is technically identical for both fixed and mobile connections. The test measures the data transmission rate in both the download and upload directions. The measurement result is presented as an absolute value and as a relative value for the contractually agreed speed. Thus, the broadband speed checker allows the data transmission rate actually measured of a broadband connection to be compared with the data transmission rate contractually agreed. In addition, the delay and packet loss parameters are measured. However, only the time delay is presented to the end-user.
70. As well as being used as a monitoring mechanism to prove reduced performance (see paragraph 56 et seq), the broadband speed checker is used to collect test samples via crowdsourcing. The results are presented in an annual broadband speed test report. The sixth annual report was published on 14 June 2022.
71. Furthermore, the end-user can see in a map view the data transmission rates measured in specific regions; these are displayed as NUTS-3 clusters and in a table. Whereas the annual report on the broadband speed tests is for a fixed time period, the maps are updated daily and show the results of the previous 6, 12, 24 and 36 months.

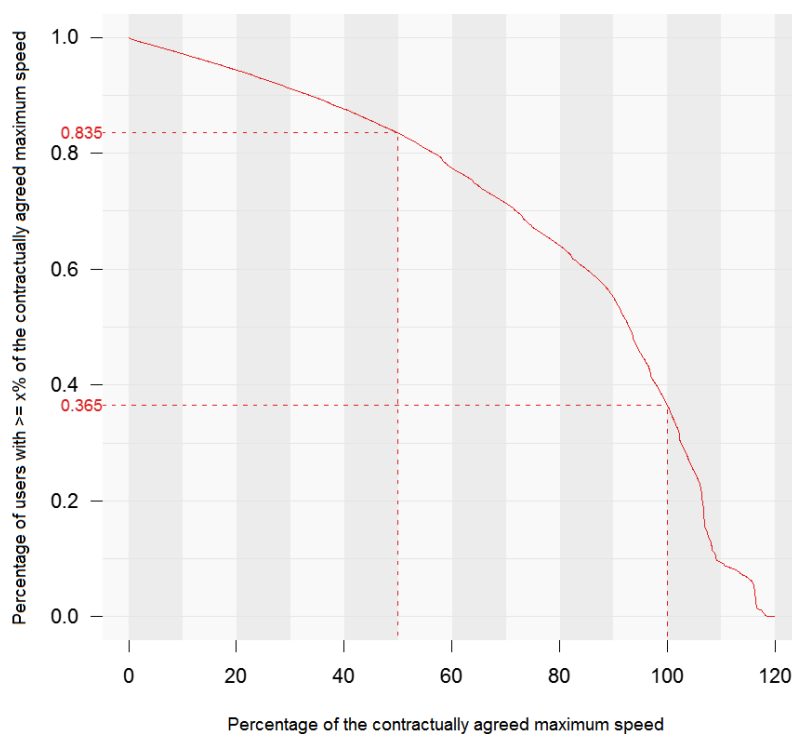


Example of map displaying aggregate results for the NUTS-3 level

72. There was a change in the broadband speed tests on 1 February 2021 when an extra option was added to the desktop app. The app, which already enabled end-users to use the test results as proof of speeds, now also enables end-users to make individual tests to check their contractually agreed speeds. The previous browser-based test was streamlined and can now be used by end-users to check actual speeds when using their browser and therefore test performance when surfing the internet. For the period beginning 1 February 2021, only individual tests made using the desktop app are included in the annual report.
73. It is important to note that the results obtained using the broadband speed checker depend on the end-user that is performing the test and the tariff that they have agreed with their provider. It is therefore not possible to draw conclusions from the results about broadband coverage or the availability of broadband internet access services.
74. For the purposes of the speed tests, a drop-down list of providers' tariffs is drawn up using the tariff data reported by the telecommunications companies. The users then select their individual tariff from the drop-down list before carrying out their tests.
75. The test sample is validated in an extensive process. In particular, any possible cause of measurement errors due to the end-user's environment is excluded as far as possible by using both technical information and information provided by the end-user.
76. Furthermore, multiple tests carried out on any fixed broadband connection are excluded for statistical reasons. Only one test per line and quarter is used for the report. Multiple tests on mobile broadband connections are kept in the sample due to the fact that even a minimal change in location may produce a completely different result.

### Main findings

77. The tests covered in the sixth annual report were carried out in the period from 1 October 2020 to 30 September 2021. A total of 315,638 valid tests on fixed broadband connections were made in the period up to 1 February 2021, and a total of 167,985 using the desktop app as from 1 February 2021. The report covers a total of 441,233 valid tests on mobile broadband connections.
78. Fixed broadband lines: in the period covered for tests using the desktop app (from 1 February 2021 to 30 September 2021), the proportion of all users across all bandwidth categories and providers whose connection had a download speed at least half their contractually agreed maximum speed was 83.5%; the proportion of users whose connection had a speed equivalent to or higher than their contractually agreed maximum speed was 36.5%.

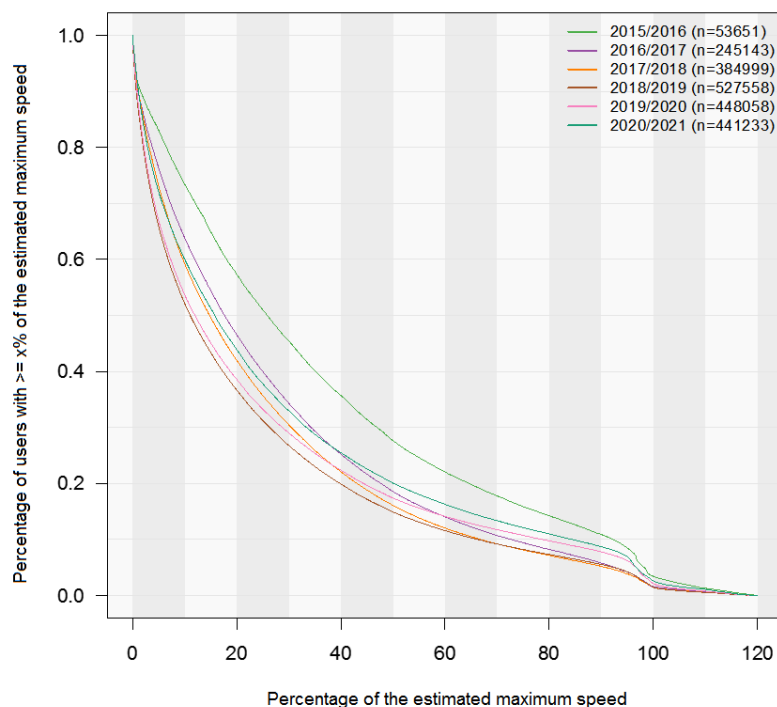


Percentage of the contractually agreed maximum speed

79. The results were mixed as regards bandwidth categories, providers and the time of day. The highest results were in bandwidth category 5 (50 Mbps to less than 100 Mbps). Based on the speeds measured as a percentage of the contractually agreed maximum speeds, upload performance was generally similar to download performance. End-users in the upper bandwidth categories, in particular, obtained good or very good results for latency times.
80. Most end-users (80.3%) were satisfied with the performance of their broadband connection (rating of 1 to 3 on a scale of 1 to 6, with 1 being the highest). Fewer than 10% of end-users gave their connection a rating of 5 or 6. Users were asked to rate their satisfaction before carrying out the speed tests. It emerged that the actual speeds measured by satisfied end-users were closer to the contractually agreed maximum speeds.
81. The download speed results from the browser-based tests made in the period from 1 October 2020 to 1 February 2021 are lower than the corresponding results from tests using the desktop app across all

bandwidth categories and providers. The two sets of results are not directly comparable because of the differences between the two methods. It is assumed that the results obtained using the desktop app are closer to the results expected under optimal test conditions. One reason is that it is technically possible with the desktop app to identify tests carried out via WLAN and exclude tests made with an inadequate network card and/or no power supply.

82. Mobile broadband connections: overall, mobile broadband performance was considerably lower than fixed-line broadband. The proportion of users across all bandwidth categories and providers whose connection had a download speed at least half their contractually agreed estimated maximum speed was 20.1% (2019/2020: 17.4%); the proportion of users whose connection had a speed equivalent to or higher than their contractually agreed estimated maximum speed was 2.6% (2019/2020: 2.1%).



Percentage of the contractually agreed estimated maximum speed

83. Again, the results differ with respect to bandwidth categories, providers and time of day. The results show that the proportions for the higher bandwidth categories were generally lower. 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, but the positive trend of previous years of lower latency times continued, although to a lesser extent.
84. The large majority of end-users (75.7%) once again gave their providers a rating of 1 to 3 (on a scale of 1 to 6, with 1 being the highest). This is slightly higher than in the previous 12-month period (2019/2020: 74.2%). Users were asked to rate their satisfaction before carrying out the speed tests. The mobile broadband speeds measured as a percentage of the contractually agreed speeds were again low. This suggests that mobile broadband users still tend to rate mobility and absolute speeds rather than whether or not they actually receive their advertised speeds.

## 4 Penalties – Article 6

Article 6 Regulation (EU) 2015/2120

Member States shall lay down the rules on penalties applicable to infringements of Articles 3, 4 and 5 and shall take all measures necessary to ensure that they are implemented. The penalties provided for must be effective, proportionate and dissuasive. Member States shall notify the Commission of those rules and measures by 30 April 2016 and shall notify the Commission without delay of any subsequent amendment

85. The TKModG (Telecom Modernisations Act), which entered into force in December 2021, introduced significantly stricter penalties for infringements of the net neutrality provisions. Infringements of Article 3(2) now also constitute an offence, and the maximum fines for serious breaches of the net neutrality provisions are higher. Various infringements of Article 3 and Article 4 can be penalised by a fine (see section 228 subsection (4) paras 1-5 in conjunction with subsection (7) TKG). The maximum fine that can be imposed differs in each case.
- The maximum fine for serious breaches of the net neutrality provisions – for example for 1) agreements and commercial practices infringing Article 3(2), 2) traffic management measures that are not permitted under Article 3(3) subparagraph 3 sentence 1, and 3) failure to comply with an order of the Bundesnetzagentur – is €1mn (see section 228(7) para 1 c)) or, in the case of legal persons or associations of persons with an average turnover of more than €100mn, up to 1% of the average annual turnover achieved worldwide in the previous three years (see section 228(8) para 2 TKG).
  - The maximum fine for infringements of the transparency measures in accordance with Article 4(1) sentence 1 is €100,000 (see section 228(7) para 4 TKG).
  - The maximum fine for failure to comply with information requests under Article 5(2) is €10,000 (see section 228(7) para 6 TKG).
86. Moreover, a penalty payment between €1,000 and €10mn can be imposed if a provider of internet access services does not comply with an administrative order (see section 202(5) TKG).
87. A fine imposed in regulatory offence proceedings serves as a penalty, whereas a penalty payment imposed in administrative proceedings serves to encourage the addressee to comply with an official order.

## **Publisher's details**

### **Publisher**

Bundesnetzagentur für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen

Tulpenfeld 4

53113 Bonn

### **Ordering address | Contact**

Section 122: Net Neutrality, Platform Monitoring, Artificial Intelligence

Tulpenfeld 4

53113 Bonn

[www.bundesnetzagentur.de](http://www.bundesnetzagentur.de)

Telephone: +49 (0)228 14-0

### **Last revised**

April 2022

### **Photo credit**

Title photo: [gettyimages/SEAN GLADWELL](#)

### **Text**

Section 122: Net Neutrality, Platform Monitoring, Artificial Intelligence

**Bundesnetzagentur für Elektrizität, Gas,  
Telekommunikation, Post und Eisenbahnen**

Tulpenfeld 4

53113 Bonn

Telefon: +49 228 14-0

Telefax: +49 228 14-8872

E-Mail: [info@bnetza.de](mailto:info@bnetza.de)

[www.bundesnetzagentur.de](http://www.bundesnetzagentur.de)