



# Monitoring compliance with the EU Net Neutrality regulation

A report to the European Commission

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# About this document

This document is a report to the European Commission on our approach to monitoring and ensuring compliance with EU Regulation 2015/2120 on open internet access from May 2016 to April 2017.

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## Section 1

# Introduction

### EU regulation aims to ensure a well-functioning internet

- 1.1 The EU Regulation on open internet access<sup>1</sup> (the Regulation) imposes a range of obligations on internet service providers (ISPs) in relation to their provision of internet access services (IAS). The Regulation came into effect on 30 April 2016.
- 1.2 The Regulation is intended to address concerns identified in the “net neutrality” policy debate, in particular to “*safeguard equal and non-discriminatory treatment of traffic in the provision of internet access services and related end-users’ rights*” and “*guarantee the continued functioning of the internet ecosystem as an engine of innovation*”.<sup>2</sup>
- 1.3 To secure these goals, the Regulation imposes measures dealing with the way ISPs manage data traffic on their networks and the terms and conditions of, and the information included in, the contracts they offer for the provision of IAS.
- 1.4 The Body of European Regulators for Electronic Communications (BEREC) published Guidelines on the Implementation by National Regulators of European Net Neutrality Rules,<sup>3</sup> to help ensure consistent application of the Regulation across the EU. We were involved in developing the Guidelines, which inform our approach to ensuring compliance with the Regulation.

### Ofcom is responsible for enforcing the Regulation

- 1.5 The Regulation requires national regulatory authorities (NRAs) to monitor and ensure compliance and to promote the availability of non-discriminatory IAS at levels of quality that reflect advances in technology. NRAs are also required to publish an annual report on their monitoring activity and findings.
- 1.6 Ofcom is the UK NRA responsible for enforcing the Regulation.<sup>4</sup> This report covers our activity and findings between May 2016 and April 2017, divided into sections covering:
  - Monitoring the quality of IAS;
  - Safeguarding open internet access;

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<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.

<sup>2</sup> EU Regulation 2015/2120, Recital (1).

<sup>3</sup> BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality Rules, 30 August 2016 (‘BEREC Guidelines’), available at: [http://berec.europa.eu/eng/document\\_register/subject\\_matter/berec/regulatory\\_best\\_practices/guidelines/6160-berec-guidelines-on-the-implementation-by-national-regulators-of-european-net-neutrality-rules](http://berec.europa.eu/eng/document_register/subject_matter/berec/regulatory_best_practices/guidelines/6160-berec-guidelines-on-the-implementation-by-national-regulators-of-european-net-neutrality-rules).

<sup>4</sup> See The Open Internet Access (EU Regulation) Regulations 2016 (SI 2016 No. 607).

## Monitoring compliance with the EU Net Neutrality regulation

- Traffic management;
- Transparency measures; and,
- Complaints and remedies.

1.7 Our approach to monitoring and enforcing the Regulation has focussed initially on residential services. It has included a broad span of work, including:

- An extensive research programme looking at the quality of IAS in the UK and the traffic management practices of ISPs, using both direct measurement and the issuance of formal information requests;
- A programme of stakeholder events and bilateral engagement;
- Monitoring complaints, news media and other sources to identify practices of potential concern in relation to the Regulation;
- Internal review and informal engagement with stakeholders in respect of certain practices of potential concern, though we have not initiated any formal investigations;
- A review of ISPs' contract terms and provision of information about traffic management and other relevant characteristics of IAS; and,
- A project to review and improve the information about broadband speeds ISPs must provide consumers.

1.8 Our work suggests that there are no major concerns regarding the openness of the internet in the UK, which the Regulation is intended to secure. We have however identified some areas that require improvement in ISP compliance with the Regulation. We will continue our work on the provision of speeds and other information by ISPs during 2017-18, as well as the monitoring of ISPs' practices, and will open investigations as appropriate.

## Section 2

# Monitoring the quality of IAS

## We measure and report on the quality of UK internet access services

### *Article 5 of the Regulation*

*1. 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. [...]*

*National regulatory authorities shall publish reports on an annual basis regarding their monitoring and findings, and provide those reports to the Commission and to BEREC.*

- 2.1 We have a multi-pronged approach to measuring the availability of high-quality IAS delivered over fixed and mobile networks in the UK. Our approach includes monitoring consumer complaints, conducting market surveys, requesting information from ISPs, and technical network monitoring. We measure various indicators, including broadband speeds and web browsing performance.
- 2.2 This section sets out our research methods and key findings. It covers in turn: measuring fixed broadband quality, measuring mobile broadband quality, and monitoring consumer satisfaction and complaints.

### Fixed broadband networks: measuring IAS quality

- 2.3 We measure the availability of high-quality IAS on fixed broadband networks through a programme of regular monitoring and reporting. We use two complementary methods to measure the quality of IAS on fixed networks.
- 2.4 First, we analyse information provided by ISPs regarding the sync speed of each active line. In 2016, we collected sync speed data at the address-level from the four largest networks, as well as from smaller network providers.<sup>5</sup> This gives a measure of the maximum possible connection speed achievable between the ISP's access network and the consumer premises.<sup>6</sup> The findings of this analysis are published in our Connected Nations report.<sup>7</sup>
- 2.5 Second, we analyse data collected by our research partner SamKnows Limited from a panel of volunteers. Volunteers connect a hardware measurement unit to their broadband router. These units run tests that measure various indicators affecting the user experience of various online activities. The panel is selected to be representative in terms of geographic location, broadband connection technology, ISP and broadband package.<sup>8</sup>
- 2.6 This method measures actual speeds, Netflix streaming performance, and average daily disconnections. It also measures other indicators affecting the performance of IAS per ISP package, including web browsing speed, latency, packet loss, Domain

<sup>5</sup> Ofcom, [Connected Nations](#), 16 December 2016, pp. 81, 83.

<sup>6</sup> Ofcom, [Connected Nations](#), 16 December 2016, p. 83.

<sup>7</sup> See Ofcom, [Connected Nations](#), 16 December 2016.

<sup>8</sup> Ofcom, [UK Home Broadband Performance](#), 12 April 2017, p. 56.

Name Server (DNS) resolution, DNS failure, and jitter.<sup>9</sup> The findings of this analysis are published in our Home Broadband Performance report.<sup>10</sup>

### Fixed broadband networks: key findings

- 2.7 In terms of sync speeds, we found that average download speeds have increased, while upload speeds have remained static. The average download speed of all active connections in the UK was 37Mbit/s in 2016. This was an increase of 28% compared to 2015.<sup>11</sup>
- 2.8 In terms of the actual speeds consumers experienced, we found that the average speed of residential fixed broadband services in the UK was 36.2Mbit/s in 2016. This was an increase of 25% compared to 2015.<sup>12</sup>
- 2.9 That said, actual download speeds vary significantly across the day. Speeds slow down during busy periods when traffic volumes are highest. The average download speed recorded during peak-time (8pm-10pm) was 33.6Mbit/s in 2016, 86% of the average maximum speed. The highest average download speed was between 12am and 6am, at 38.9Mbit/s.<sup>13</sup>
- 2.10 Comparing sync and actual speeds, we found that the average actual speeds experienced by consumers were around 2% lower than the sync speeds. This disparity is more pronounced in rural areas: while speeds in urban areas were just 1% lower than sync speeds, in rural areas, the difference was 9%.<sup>14</sup> This could suggest that speeds in rural areas are lower than they would be under ideal conditions due to the available backhaul capacity, impeding optimal performance.
- 2.11 In terms of sync speeds, the average upload speed of all broadband services was 4Mbit/s in 2016. This was an increase of just 7% compared to 2015.<sup>15</sup>

### Mobile broadband networks: measuring IAS quality

- 2.12 We measure the availability of high-quality IAS on mobile broadband networks through a programme of regular monitoring and reporting. As with our analysis of fixed broadband networks, we use two complimentary methods.
- 2.13 First, we collect data using proprietary testing software running on a consumer handset (the Samsung Galaxy S6 Edge+ handset with a 4G SIM). We take measurements both driving and walking, with a mixture of indoor locations such as shopping centres and outdoor locations, for instance along public streets.<sup>16</sup>
- 2.14 In 2016, we tested the 4G services in seven UK cities.<sup>17</sup> We took measurements in a radius of 10km from a centre point in each city. We chose cities that had 4G

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<sup>9</sup> Ofcom, [UK Home Broadband Performance](#), 12 April 2017, p. 36.

<sup>10</sup> See Ofcom, [UK Home Broadband Performance](#), 12 April 2017.

<sup>11</sup> Ofcom, [Connected Nations](#), 16 December 2016, p. 27.

<sup>12</sup> Ofcom, [UK Home Broadband Performance](#), 12 April 2017, p. 6.

<sup>13</sup> Ofcom, [UK Home Broadband Performance](#), 12 April 2017, p. 10.

<sup>14</sup> Ofcom, [Connected Nations](#), 16 December 2016, p. 31.

<sup>15</sup> Ofcom, [Connected Nations](#), 16 December 2016, pp. 27-28.

<sup>16</sup> See Ofcom, Smartphone Cities, [Technical Annex](#), 31 March 2016.

<sup>17</sup> Belfast, Birmingham, Cardiff, Edinburgh, London, Sheffield and Southampton.



coverage from all four national mobile network operators in the UK (EE, O2, Three, and Vodafone).<sup>18</sup>

- 2.15 Through this research, we collect data on download speeds, web browsing times, upload speeds, YouTube streaming resolution and network response times (measured through ping tests). We publish our findings annually in the Smartphone Cities report.<sup>19</sup>
- 2.16 Second, in 2016 we piloted a new methodology to collect data from a panel of consumers who install an Ofcom-branded research app on their handset. The app, provided by our technical partner P3, passively measures consumer experience of using mobile services when panellists use their phone. Additional satisfaction measurements are captured via pop-up style surveys, which allow us to correlate consumer experience and perception.
- 2.17 The first research phase ran from September to December 2016. Over 4,000 respondents took part for seven days or longer by the end of the fieldwork. We recently published our first results of this research.<sup>20</sup>

### Mobile broadband networks: key findings

- 2.18 Through our fieldwork measurements, we found that the average mobile download speeds achieved across the seven cities we measured ranged from 13Mbit/s (on the O2 network) to 32Mbit/s (on the EE network). On average 94% of download tests achieved speeds of over 2Mbit/s. We consider this to be the minimum speed sufficient to support high-capacity video services for mobile.<sup>21</sup> For all cities, the time taken to download the BBC homepage varied from four to five seconds on all networks, with an average 98% success rate.<sup>22</sup>
- 2.19 Overall, the fastest download speeds were seen in the mornings (Mon-Fri) and at the weekends, achieving speeds of 21Mbit/s on average. Weekday evenings provided the slowest average download speeds overall.<sup>23</sup>

### Monitoring consumer satisfaction and complaints

- 2.20 We collect information on consumer satisfaction through surveys. This includes satisfaction with fixed and mobile broadband services generally and with the speed of fixed services specifically. We publish our findings annually in the Communications Market Report.<sup>24</sup>
- 2.21 In relation to fixed services, we found that the proportion of respondents claiming to be 'very' or 'fairly' satisfied with their overall fixed broadband services remained mostly stable in 2016, at 87%. The proportion of fixed broadband users who said they were 'very' or 'fairly' satisfied with the speed of their fixed broadband service also remained stable, at 82%.<sup>25</sup>

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<sup>18</sup> Ofcom, [Smartphone Cities](#), 16 December 2016, pp. 1, 30.

<sup>19</sup> See Ofcom, [Smartphone Cities](#), 16 December 2016.

<sup>20</sup> See Ofcom, [Consumer Mobile Experience Report](#), 16 June 2017.

<sup>21</sup> Ofcom, [Smartphone Cities](#), 16 December 2016, pp. 4-5.

<sup>22</sup> Ofcom, [Smartphone Cities](#), 16 December 2016, pp. 19-20.

<sup>23</sup> Ofcom, [Smartphone Cities](#), 16 December 2016, p. 27.

<sup>24</sup> Ofcom, [The Communications Market 2016](#), 4 August 2016, p. 167.

<sup>25</sup> Ofcom, [The Communications Market 2016](#), 4 August 2016, p. 167.

- 2.22 In relation to mobile services, we found that overall satisfaction levels remained stable in 2016. 91% of mobile users said that they were 'very' or 'fairly' satisfied with their mobile service.<sup>26</sup>
- 2.23 In addition, we also monitor consumer complaints to our Consumer Contact Team and feed this into our monitoring and enforcement work. These cover a wide range of issues but are logged using a three-tier category system. This helps us to identify relevant complaints about the quality of their broadband service, including the speeds they are getting and the information provided to them.
- 2.24 We think that there is currently low awareness of the Regulation's requirements by consumers. To help increase awareness and understanding, we have published information on our website explaining consumers' rights under the Regulation.<sup>27</sup> We will promote this information through social media and other consumer advice bodies. We also plan to follow this with a short video.

### UK legislation provides penalties for breaches of the Regulation

#### *Article 6 of the Regulation*

*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. [...]*

- 2.25 UK national regulations designate Ofcom as the national regulatory authority for the purposes of the Regulation.<sup>28</sup> They also set out Ofcom's powers to enforce the Regulation.<sup>29</sup> These include the power to impose a penalty for a breach of the traffic management and transparency obligations of the Regulation of up to 10% of the turnover of the relevant business, and a power to impose a penalty for breach of a requirement to provide information to Ofcom of up to £2,000,000.
- 2.26 In addition, Ofcom may require operators who have breached the Regulation to take steps to comply with their obligations and to remedy the consequences of their breach. Operators have a duty to comply with any such requirements imposed by Ofcom. This duty is enforceable in civil proceedings by Ofcom.

<sup>26</sup> Ofcom, [The Communications Market 2016](#), 4 August 2016, p. 169.

<sup>27</sup> See Ofcom, <https://www.ofcom.org.uk/phones-telecoms-and-internet/advice-for-consumers/advice/net-neutrality>.

<sup>28</sup> The Open Internet Access (EU Regulation) Regulations 2016 (SI 2016 No. 607), <http://www.legislation.gov.uk/uksi/2016/607/contents/made>.

<sup>29</sup> The Open Internet Access (EU Regulation) Regulations 2016 (SI 2016 No. 607), Regulations 19-22.

## Section 3

# Safeguarding open internet access

## End-users have the right to access and distribute content of their choice

- 3.1 In addition to monitoring the overall quality of IAS in the UK (as set out above), we monitor ISPs' compliance with specific obligations under the Regulation. This includes end-users' right to access and distribute content of their choice:

### *Article 3 of the Regulation*

*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.*

*[...]*

*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.*

- 3.2 The above two paragraphs of Article 3 establish the rights of end users to access and distribute the content of their choice, and prevent ISPs from limiting the exercise of those rights through agreements with end-users and commercial practices.
- 3.3 In the UK, a self-regulatory scheme was already in place which broadly sought to secure equivalent rights for consumers prior to the adoption of the Regulation. The Broadband Stakeholder Group (BSG) Open Internet Code of Practice commits signatory ISPs to neutrality and transparency in traffic management on their networks.<sup>30</sup> By the end of 2014, all major UK fixed and mobile ISPs had signed up to the Code. In 2016, the BSG revised the Code to reflect the Regulation.<sup>31</sup>
- 3.4 Over the past year, we have held stakeholder events to share our views on compliance and consider specific stakeholder concerns. We have also held a number of bilateral stakeholder meetings.
- 3.5 Alongside these, we have monitored ISPs' compliance with these obligations and sought to identify any specific practices of concern by reviewing consumer and industry complaints, news about marketplace developments and the websites of, and other communications from, ISPs.

## End-users have the right to use terminal equipment of their choice

- 3.6 Article 3 (1) establishes the rights of end users to access the internet using the "terminal equipment of their choice". During the first year of operation of the

<sup>30</sup> Latest version available at <http://www.broadbanduk.org/wp-content/uploads/2016/06/BSG-Open-Internet-Code-2016.pdf> .

<sup>31</sup> See BSG, <http://www.broadbanduk.org/2016/06/14/bsg-new-open-internet-code-clarifies-the-rules-on-internet-traffic-management-for-all-players/>.

Regulation we identified a practice of concern through our own engagement with ISPs and independent monitoring.

- 3.7 We have opened an initial enquiry into the matter. The purpose of an enquiry is to determine whether there is a case to answer, and if there is, whether it would be consistent with Ofcom's administrative priorities to carry out a formal investigation. If we decide to investigate, we will, in accordance with our normal process, publish the details on our website.

### **Zero-rating practices**

- 3.8 The Regulation does not preclude ISPs from setting a data cap on the IAS products they offer end users. In some cases, ISPs may wish to include a "zero-rating" feature on an IAS with a data cap, under which access to specific services does not count towards the data cap.
- 3.9 The Regulation does not prohibit zero-rating outright. However, as the BEREC Guidelines note, IAS with zero-rating should be assessed closely by NRAs to ensure that they do not undermine the goals of the Regulation. The Guidelines recommend that such assessments should take into account:
- i) the goals of the Regulation;
  - ii) the market positions of the ISP and Content and Application Providers ('CAP') involved;
  - iii) the effects on consumer and business customer end-user rights;
  - iv) the effects on CAP end-user rights; and,
  - v) the scale of the practice and presence of alternatives.<sup>32</sup>
- 3.10 Over the past year, Ofcom identified two zero-rating products offered in the UK market. The products related to zero-rating of music streaming and messaging services respectively.

### **Music streaming zero-rating product**

- 3.11 Between September and December 2016, a mobile operator offered purchasers of selected iPhones, who also contracted for a mobile IAS with a data allowance of 30GB or more, zero-rated access to certain music streaming services.
- 3.12 We did not formally assess the product's compliance with the Regulation, in light of its brief availability. We also noted in particular the very significant data allowance of at least 30 GB. This would permit hundreds of hours of music consumption within the data cap and hence reduce the incentive on users to restrict themselves to the zero-rated music services. The high data cap would be likely to limit harmful effects of the zero-rating practice on end user rights.<sup>33</sup>

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<sup>32</sup> BEREC Guidelines, paragraphs 40-48.

<sup>33</sup> Para 48 of the BEREC Guidelines states that the incentive effects of a zero-rating service increase, as data caps decline.

### Online messaging services zero-rating product

- 3.13 In November 2016, an operator launched a 4G mobile product including zero-rated use of certain messaging services. We considered a number of factors in assessing the need for formal investigation into the product's compliance with the Regulation, particularly:
- 3.13.1 While the market position of the CAPs is strong, the market position of the ISP is not. The operator's market share in mobile services is small and the offer is limited to customers contracting for a 4G service.
  - 3.13.2 The data caps for the zero-rated IAS range from 300 MB to 20 GB per month. However, the volume of data arising from use of the messaging services - that which is "zero-rated" - makes up only a small proportion of even the lowest of these caps. (The more data-intensive voice and video calling functions are not zero-rated.) This suggests that the incentives on users to avoid alternative messaging services will be limited in their effect.
  - 3.13.3 Finally, we understand from the operator that they are seeking to add new messaging providers to the zero-rating product.
  - 3.13.4 These factors led us to conclude that the product would be unlikely to have a significant impact on end user rights or on innovation in the online services market. We have therefore not opened a formal investigation into the product.

## Section 4

# Traffic management

### ISPs are required to treat all traffic equally

- 4.1 In addition to the general obligation not to limit end user rights discussed above, the Regulation sets out specific obligations for ISPs in relation to their management of data traffic on their networks:

#### *Article 3 of the Regulation*

*3. 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.*

- 4.2 To monitor ISPs' traffic management practices and ensure compliance with the Regulation over the past year, we have requested information from ISPs and reviewed consumer and industry complaints, news about marketplace developments, and the websites of, and other communications from, ISPs.
- 4.3 Since 2012, the major UK fixed and mobile ISPs have published information about their traffic management practices in a common template: the Key Facts Indicator (KFI). The published KFIs are a primary information resource, which Ofcom has reviewed regularly as part of its scrutiny of traffic management practices in the UK both before and after operation of the Regulation.

## Information requests to ISPs

- 4.4 In addition, Ofcom monitors traffic management practices in the UK by requesting data from operators annually under our formal information gathering powers. Operators are legally obliged to respond.
- 4.5 In June 2016, we asked six fixed and four mobile operators, collectively covering around 90% of UK broadband subscriptions, to tell us about the steps they take to manage traffic on their networks, including:
- the types of traffic management procedures they use;
  - whether data caps are in place for any of their packages; and
  - the impact of traffic management, in terms of the number of subscribers affected.
- 4.6 We found that over 90% of UK fixed line subscriptions have no data cap. Around 25% of subscriptions are subject to some kind of fair use policy, under which heavy users' upload line speeds are temporarily limited if they upload more than a set amount of data during a 1-2 hour measurement period.
- 4.7 More recently, we found that one operator deploys traffic management practices which warrant further assessment under the Regulation. The practices identified affected a significant minority of subscriptions to IAS. We have opened an initial enquiry into the matter. As set out above, the purpose of an enquiry is to determine whether there is a case to answer, and if there is, whether it would be consistent with Ofcom's administrative priorities to carry out a formal investigation. If we decide to investigate, we will, in accordance with our normal process, publish the details on our website.
- 4.8 We will continue to monitor ISP traffic management practices in the UK and consider their compliance with the Regulation. We report on ISP traffic management practices as part of our yearly Connected Nations report on UK telecommunications infrastructure.<sup>34</sup>

## ISPs may provide specialised services under certain conditions

- 4.9 The Regulation sets out that ISPs may also provide “*services other than internet access services*” (typically called ‘specialised services’). Specialised services may only be provided under conditions which ensure that there is no detriment to the provision of IAS:

### *Article 3 of the Regulation*

*5. 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*

<sup>34</sup> Ofcom, [Connected Nations](#), 16 December 2016, Section 6 on Internet Access Services.

*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.*

- 4.10 This part of the Regulation aims to ensure that the provision of specialised services does not have “a negative impact on the availability or general quality of internet access services”<sup>35</sup>. As outlined in the previous section, Ofcom has an extensive programme of work intended to secure the continued availability and general quality of IAS in the UK, including through measurement and reporting on IAS quality and on the experience of UK users of IAS. We have also worked to improve the accuracy and reliability of the information provided consumers about the IAS offered to them.

### **ISPs are required to abide by data protection rules when managing traffic**

#### *Article 3 of the Regulation*

*4. 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 shall also comply with Directive 2002/58/EC of the European Parliament and of the Council.*

- 4.11 The lead authority responsible for enforcing data protection obligations in the UK is the national Data Protection Authority, the Information Commissioner’s Office (ICO). We are in discussion with the ICO regarding ISPs’ processing of personal data for traffic management purposes. We have a Letter of Understanding with the ICO which sets out a coordinated approach for those areas where we share a common enforcement responsibility. We intend to update this Letter of Understanding to better reflect our respective roles and cooperation in relation to the Regulation.

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<sup>35</sup> EU Regulation 2015/2120 Recital 17



## Section 5

# Transparency measures

## ISPs must provide information about the IAS they offer

### *Article 4 of the Regulation*

*1. 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). [...]*

## Monitoring and enforcement of ISP transparency

5.1 Ofcom has initiated two projects in the course of monitoring and ensuring ISPs' compliance with Article 4:

- A review of ISP contract terms and information provision; and,
- A review of the existing voluntary Code of Practice covering fixed line ISP provision of speeds data.

### Review of ISP contract terms and information provision

5.2 To monitor ISPs' compliance with their transparency obligations, we have analysed complaints to our Consumer Contact Team and issued a formal information request to the eight largest fixed and mobile ISPs. We requested the ISPs to provide us with copies of their consumer contracts for any service that provides internet access and cross reference to the relevant parts of the contract that reflect the transparency

obligations of the Regulation (with the exception of fixed speeds information, since this is subject to a separate review, as set out below).

- 5.3 We are presently analysing the information we collected from ISPs and carrying out additional checks against the information that is available on the ISPs' websites. Our initial view is that, on the whole, ISPs are publishing information about their traffic management measures and how these could affect service. We have identified areas, such as the availability of remedies in cases where consumers are experiencing continuous or regular performance issues, in which the information being provided falls short of what is required under the Regulation. We will engage with individual ISPs to ensure that all relevant information is clearly included in their contracts.
- 5.4 With regard to mobile speed information, we have found that currently only one of the main mobile UK ISPs appears to provide information in its contract with end customers about estimated maximum upload and download speeds. We are exploring with this ISP the approach and methodology behind the speed information that they provide to their customers. We will also engage with the remaining ISPs to ensure that they provide adequate information, in accordance with the requirements of the Regulation.
- 5.5 As part of our analysis and our engagement with the ISPs, we will consider whether any formal enforcement action may be appropriate.

#### We are updating the voluntary codes for fixed broadband speeds information

- 5.6 We already have measures in place to ensure transparency and quality of speed information provided in relation to fixed broadband services at point of sale. In 2008, we agreed a voluntary Broadband Speeds Code for residential services with the main ISPs. We have also developed an equivalent Code for business services ('the Codes').<sup>36</sup>
- 5.7 The current Codes require signatories to:
- 5.7.1 provide clear and accurate speed information at point of sale. The information given at point of sale is the maximum speed supported by the line (sync speed) in the form of a range, namely the speed achieved by between 80% and 20% of similar lines (the 80th-20th percentile range);
  - 5.7.2 provide speed information in a durable format after sale, within seven days of the service being purchased; and,
  - 5.7.3 help customers with speed issues and allow customers the right to exit the contract without penalty if they do not receive a minimum guaranteed speed (achieved by the lowest performing 10% of similar lines).
- 5.8 We are revising the Codes to align them with the Regulation's transparency requirements. To revise the Codes, we have engaged extensively with industry, through six workshops held between October 2016 and March 2017 and numerous

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<sup>36</sup> See 2015 Voluntary Code of Practice: Broadband Speeds, available at [https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0012/40431/broadband\\_speeds\\_code\\_june\\_2015.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0012/40431/broadband_speeds_code_june_2015.pdf); 2016 Voluntary Business Broadband Speeds Code of Practice, available at [https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0034/85768/business\\_broadband\\_code\\_2016.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0034/85768/business_broadband_code_2016.pdf).

bilateral meetings. We have also analysed information gathered through mystery shopping and by issuing formal and informal information requests.

- 5.9 As part of our revision of the Codes, we seek to ensure that end users are provided with useful and clear information about the speed which CPs are able to realistically deliver. We are discussing with signatories to the Code making available realistic normally available speed information which reflects an estimate of speeds experienced at peak time, rather than maximum speeds only. This information is to be provided at point of sale as well as after sale. Customers will therefore get a better idea of how contention will affect the speed of their service at the times they are most likely to be using it, before purchasing the service.
- 5.10 In addition, advertised speed information must be included in contracts under the Regulation. In the UK, the Committee of Advertising Practice (CAP) has responsibility for the broadband speeds information included in advertising. The CAP is currently consulting on new guidance regarding the advertising of broadband speeds claims for fixed broadband services. This follows research by the Advertising Standard Authority (ASA) showing that ads following the current guidance still have the potential to be misleading.
- 5.11 CAP is proposing to move away from the current guidance on advertising speeds, which recommends that advertisers only use maximum speed claims that are achievable by at least 10% of customers and are preceded with the words “up to”, and qualified where appropriate. Alternatives include:
- a median download speed (available to at least 50% of consumers) measured at peak-time or over 24 hours; or
  - a range of download speeds available to the 20th to 80th percentile of users measured at peak time or over 24 hours.

## Section 6

# Complaints and remedies

## ISPs shall put in place adequate complaints procedures

### *Article 4 of the Regulation*

*2. 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.*

- 6.1 Under UK telecoms regulations, all ISPs must have and comply with procedures that conform to the Ofcom Approved Code of Practice for Complaints Handling ('Code of Practice').<sup>37</sup> The Code of Practice includes requirements on transparency, accessibility and effectiveness.
- 6.2 ISPs are also required to include information about Alternative Dispute Resolution (ADR) on consumers' bills and to write to consumers whose complaints have not been resolved within eight weeks to inform them of their right to ADR. Where complaints reach deadlock, a consumer can also request a 'deadlock letter' from their provider, enabling them to take their complaint to an ADR scheme. We actively monitor and enforce these requirements.
- 6.3 We are presently reviewing the relevant regulation and have proposed strengthening the rules on complaints handling. The proposals include requiring CPs to inform customers how their complaint will be handled, how long it will take, and that they have the right to use ADR if their complaint concludes without a resolution. We are also currently reviewing our approval of the ADR schemes. We will consider whether the schemes continue to meet required criteria such as accessibility, effectiveness and fairness.

## National law provides consumer remedies and redress

### *Article 4 of the Regulation*

*4. 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.*

- 6.4 In the UK, consumers have access to several different remedies in cases of poor or non-performance by their ISP. First, under the voluntary Broadband Speed Codes, customers receive a minimum guaranteed speed after sale. If this speed is "significantly below" the speed information given at point of sale, and if the customer speed remains below the minimum guaranteed speed even after the ISP has tried to address the issue, the customer has a right to exit the contract without penalty.

<sup>37</sup> See General Condition 14.4. Ofcom, General Conditions available at [https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0026/86273/CONSOLIDATED\\_VERSION\\_OF\\_GENERAL\\_CONDITIONS\\_AS\\_AT\\_28\\_MAY\\_2015-1.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0026/86273/CONSOLIDATED_VERSION_OF_GENERAL_CONDITIONS_AS_AT_28_MAY_2015-1.pdf).

- 6.5 As noted above, we are currently revising these Codes. We propose to continue defining a minimum speed which will trigger the right to exit without penalty in the revised Codes.
- 6.6 Second, depending on the circumstances, under UK general consumer/contractual law, consumers may be entitled to a refund for a loss of/lower service levels, or may have the right to leave their contract without penalty.
- 6.7 Third, we have recently published a consultation on our plan to introduce automatic compensation for residential fixed landline and broadband consumers who are affected by quality issues such as delayed repair or loss of service. We did not propose to introduce automatic compensation for mobile consumers. We intend to carry out further work to monitor the degree of loss of service that mobile consumers are experiencing, to inform our future policy making in this area. The consultation is on our website.<sup>38</sup>

### **We are considering how best to empower consumers to monitor IAS quality**

- 6.8 The Regulation refers to the possibility of NRAs certifying speed and quality of service monitoring mechanisms for IAS. We have not yet certified any quality of service monitoring mechanism. As part of work revising the voluntary speeds Codes, we are considering how best to empower consumers to demonstrate non-conformity of performance.
- 6.9 Nonetheless, we have released a checker tool which allows consumers to measure the performance of their internet connection they receive on their mobile and fixed networks. The tool is available as a smartphone app for iOS and Android devices, or can be used directly on the Ofcom website.<sup>39</sup> The checker runs a series of tests and measurements which are set out in detail on our website.<sup>40</sup> If the checker finds any problems with the consumer's connection, it provides tips on how performance may be improved. In future, we will review the efficacy of the checker tool and consider whether to develop a certified tool for consumers to monitor the quality of their IAS.

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<sup>38</sup> See <https://www.ofcom.org.uk/consultations-and-statements/category-2/automatic-compensation>

<sup>39</sup> See <https://www.ofcom.org.uk/checker>, <https://checker.ofcom.org.uk/>.

<sup>40</sup> See [https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0035/95957/Ofcom-Mobile-and-Broadband-Checker.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0035/95957/Ofcom-Mobile-and-Broadband-Checker.pdf) .