



# ANCOM

National Authority for Management and  
Regulation in Communications of Romania



## **Monitoring compliance with the provisions of the Regulation (EU) 2015/2120 on open internet access**

**30 April 2016 – 30 April 2017**

The [National Authority for Management and Regulation in Communications](#) (ANCOM) is the body that protects the interests of the communications users in Romania, by promoting competition in the communications market, ensuring the management of scarce resources and encouraging innovation and efficient investments in infrastructure. For further information on ANCOM's activity please visit [www.ancom.org.ro](http://www.ancom.org.ro), [www.portabilitate.ro](http://www.portabilitate.ro) and [www.veritel.ro](http://www.veritel.ro). For testing and monitoring your internet service quality, please access [www.netograf.ro](http://www.netograf.ro)

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# 1. General overview

## 1.1. Legal framework

Before the entry into force of Regulation (EU) 2015/2120<sup>1</sup> (hereinafter *the Regulation*) there was no national net neutrality law imposing net neutrality obligations in Romania.

The regulatory framework related to net neutrality consisted of the transparency provisions on traffic management practices, laid down by the Universal Service Directive, transposed into national law by Government Emergency Ordinance no. 111/2011 on electronic communications, with the subsequent amendments and completions<sup>2</sup> and of the provisions of ANCOM's Decision no. 1201/2011 on establishing the quality indicators for the provision of the internet access service.

After the entry into force of the Regulation, the National Authority for Management and Regulation of Romania (hereinafter *ANCOM*) decided to complete its provisions by means of secondary legislation. Taking utmost account of the provisions of BEREC Guidelines<sup>3</sup> on the Implementation by National Regulators of European Net Neutrality Rules (hereinafter *BEREC Guidelines*), ANCOM's decided to modify its secondary legislation with the aim to improve transparency on the quality parameters of the internet access service (hereinafter *IAS*), including on the speeds indicated in the Regulation.

According to article 5 para. (1) of the Regulation, ANCOM "*shall closely monitor and ensure compliance with Articles 3 and 4*" and "*shall publish reports on annual basis regarding their monitoring and findings*". The present report refers to the period of time elapsed between 30 April 2016 and 30 April 2017.

## 1.2. The institutional implications of Regulation (EU) 2015/2120

Several national authorities ensure the monitoring and supervision of the application of the Regulation.

The main authority responsible for monitoring and ensuring compliance with the provisions of the Regulation is ANCOM who can verify the compliance by the internet access service providers (hereinafter *providers* or *ISPs*) with most of the provisions of the Regulation. These are new powers that the authority received in the field of net neutrality.

No national law was required in order for ANCOM to receive and exercise these powers as the national legislation already contained the necessary provisions in this regard.

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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> The consolidate version of Government Emergency Ordinance no. 111/2011 on electronic communications is available here: [http://www.ancom.org.ro/en/uploads/links\\_files/O\\_U\\_G\\_\\_Nr\\_111\\_2011\\_Consolidata\\_13\\_iunie\\_2014\\_en.pdf](http://www.ancom.org.ro/en/uploads/links_files/O_U_G__Nr_111_2011_Consolidata_13_iunie_2014_en.pdf) (English version);

<sup>3</sup> [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)

Together with ANCOM, there are two other national authorities involved in monitoring the application of the Regulation, as follows:

- The National Consumer Protection Authority (hereinafter *CPA*): regarding the provisions of article 4 para. (4) of the Regulation. CPA is the authority that can apply sanctions in case of non-conformity of performance with the provisions of the contract. However, the non-conformity will have to establish using the certified mechanism agreed by ANCOM.

Since 2010, ANCOM has an official collaboration agreement with the CPA that establishes in detail the way in which the two authorities collaborate, especially in order to solve more efficiently the complaints received from the consumers.

- The National Data Protection Authority (hereinafter *DPA*) is the only authority responsible for monitoring compliance by the providers with the provisions of the national legislation in the field of data protection when applying Regulation (EU) 2015/2120, including when enforcing the data protection obligations referred to in Article 3 para. (4) of the Regulation.

ANCOM doesn't have the power to verify data protection breaches or privacy obligations.

Between ANCOM and DPA there is no formal agreement, but according to the Romanian law if one authority is receiving a complaint does not have the legal power to solve, then it must send the complaint to the competent authority within a 5-day timeframe.

### **1.3. Internal organization**

Within ANCOM there is no formal dedicated department(s) or team on net neutrality put in place, but tasks regarding monitoring and ensuring compliance with the Regulation are carried out by different persons from different units of ANCOM covering economical, legal and technical expertise and are carried along with other tasks normally performed by them. Internal meetings took place in order to identify the optimal approach, to clarify some legal dispositions and to amend the current secondary legislation.

### **1.4. External organization**

At national level, ANCOM has organised several meetings (both individual and collective) with stakeholders in order to clarify various aspects regarding the implementation of the provisions of Regulation, including issues mentioned in the BEREC Guidelines. The topics approached during these meetings envisaged: the quality assessment procedure, respectively the procedure for assessing discrepancies between the speeds specified in contracts and those resulting from measurements, defining the speeds laid down by the Regulation, aspects taken into consideration by providers in establishing the respective values, as well as traffic management practices. Discussions with the internet access service providers revealed different approaches to the analysed aspects, so that one cannot refer to a common approach as regards defining speeds or interpreting the meaning of "significant discrepancy, continuous or regularly recurring" in the Regulation.

At international level, ANCOM was part of the drafting team developing the BEREC Guidelines helping to ensure as much consistent application of Regulation across Member states level as possible while taking into consideration national legislation.

## **2. Monitoring obligations**

In the first year of implementation, ANCOM has focused on analysing the complaints received with regard to the provisions of the Regulation and, where needed, requests of information were sent to ISPs

### **2.1. Commercial practices**

After the entry into force of the Regulation and the publishing of the BEREC Guidelines on 30 August 2016, in Romania there were no complaints about possible breaches of the Regulation's provisions with regard to commercial practices. Yet, in December 2016, a petition was submitted to ANCOM related to a zero-rating practice of a mobile operator.

An investigation has started at the beginning of 2017, but it was not finished as the terms and conditions of that practice have changed. Pursuing that, at the beginning of April 2017, ANCOM has requested official information about zero-rating practices from all mobile operators in Romania.

The received answers mentioned zero-rating (or price discrimination) offers with regard mainly to:

- music and video streaming services
- social media services
- instant messaging services (including voice and video)
- applications used for cost control, top-up credit/data traffic, add/remove options
- clouds services

As the Regulation does not prohibit per se this type of practices, an in-depth analysis will be made by ANCOM in the following period also taking into consideration the provisions of the BEREC Guidelines.

### **2.2. Traffic Management**

Regarding the traffic management practices used/applied by ISPs, ANCOM has payed close attention to end users' complaints that could be due to specific practices.

In the relevant period, ANCOM has received approximately 40 complaints regarding the performance of the IAS (fixed and mobile), representing about 1.50% of the total complaints referring to the electronic communication services received by ANCOM.

In order to clarify/solve these complaints, ANCOM sent the providers formal information requests. Each situation was analysed separately, but most of them have been clarified/solved by the providers. On request, the providers have accepted the termination of the contract concluded with the end-user without penalty.

In most of the cases, the complaints regarding the speed of the internet access services in mobile networks have been caused, according to the providers, by insufficient indoor or outdoor coverage or SIM card incompatibility. Some complaints regarding the speeds of the fixed IAS revealed that the performance of the service was hindered by a malfunction of the terminal equipment (e.g. router).

### **3. Transparency measures for ensuring open internet access**

In accordance to the legal provisions in the electronic communications field granting ANCOM the competence to establish both the quality parameters to be measured by electronic communications services providers, and the content, format and manner of publishing them, in 2011, ANCOM adopted Decision no. 1201/2011 imposing on internet access providers transparency obligations in their relationship with the end-users. Through this decision, ANCOM established a set of administrative quality indicators (supply time for internet access service, fault repair time, frequency of the end-user complaints, fault report rate, frequency of bill correctness complaints, end-user complaint resolution time), as well as a set of technical quality indicators (data transmission speed, packet transmission delay, jitter and packet loss rate). As regards the technical indicators, Decision no. 1201/2011 provides the fact that ANCOM develops, manages and makes publicly available an interactive application enabling the end-users to measure the technical quality parameters of their own provider.

Taking into account the provisions of the Regulation and the BEREC Guidelines, ANCOM has initiated the process of amending Decision no. 1201/2011. In the next period, the draft decision is to be launched for public consultation. The draft decision is aimed at reviewing Decision no. 1201/2011, based on objective and transparent criteria, at updating the provisions with the users' needs, the providers' requests and taking into account the EU legislative framework. The provisions of the draft decision aim to establish a relevant set of (technical and administrative) quality indicators for the provision of the internet access service from the end-users' point of view, to define and establish the measuring methods for the relevant set of indicators, imposing on the providers the obligation to publish the quality parameters and to include them in the contracts concluded with the end-users. The Decision will not impose target-values for these parameters. The committed value of the parameters (quality level) is established by the providers through the contract on the provision of the internet access service concluded with end-users, irrespective of the payment method (prepaid or post-paid cards).

By this draft decision, ANCOM defined the technical quality parameters provided in the Regulation, without interfering with other issues regarding these parameters. The parameters were defined in broad terms, precisely for not hindering/restricting the providers. Thus, ANCOM aims to closely monitor the implementation of the Regulation's provisions by the providers and to step in subsequently, as appropriate. Moreover, the draft decision establishes also the quality parameters measured by the end-users, so that they can monitor and assess the contracted service quality.

### 3.1. Data transmission speed

Data transmission speed is the data transmission rate, measured in Megabits/second (Mbps), achieved separately for the transmission of the test files downstream, respectively upstream, between the end-user's terminal equipment and a test server.

The data transfer speed is specified on the basis of the transport layer protocol payload.

For **internet access services in case of fixed networks**, the following parameters have been defined:

- *Minimum speed* – the lowest data transmission rate that an end-user can experience in accessing the service. In principle, the actual speed, experienced by the end-users, should not be lower than the minimum speed, except in cases of service interruption.
- *Normally available speed* – the data transmission rate that an end-user can experience most of the time when accessing the service, during a specified period.
- *Maximum speed* – the data transmission rate that an end-user can experience at least once during a specified period.
- *Advertised speed* – the data transmission rate that a provider uses in advertising materials, in promoting commercial offers. The advertised speed should not exceed the maximum speed.

For **internet access services in case of mobile networks**, the following parameters have been defined:

- *Estimated maximum speed* – the data transmission rate that an end-user can experience in realistic usage conditions. This speed will be specified separately, for different network technologies.
- *Advertised speed* – the data transmission rate that a provider uses in advertising materials, in promoting commercial offers. The advertised speed should not exceed the estimated maximum speed.

In order to ensure the possibility to assess the quality of the service provided, the technical quality parameters will be accompanied by the following information:

- a description of the factors influencing the achievement of the minimum speed, the normally available speed and the maximum speed, for internet access services in case of fixed networks;
- a description of the methodology used to ascertain the estimated maximum speed and a description of the conditions under which the estimated maximum speed could be achieved, for internet access services in case of mobile networks.



The data transmission speed measured by ANCOM's application, called *Netograf*, is calculated in real time for internet access services, in case of both fixed and mobile networks, by dividing the dimension of the test file by the transfer time required for error-free transmission. The results will be presented to the user after the measurement has been completed. Measurements are performed at the edge of the network by means of which the internet access services is provided (e.g., at the end-users' premises, for fixed access, or via the radio access network, for mobile access). The test server is located outside the network, at the national internet exchange point (IXP). The measurement uses multiple TCP connections for saturating the measured path.

The quality of an internet access service must not be assessed based exclusively on data transmission speed. Packet transmission delay, jitter and packet loss rate are the parameters that, besides data transmission speed, may create a thorough and accurate image of the internet access service quality. ANCOM did not impose on the providers the obligation to publish the three quality parameters and to include them in the contracts concluded with the end-users. Nevertheless, the decision defines these parameters and ANCOM's application will measure them. Thus, the end-users are able to receive relevant, complete, comparable and easily accessible information on the quality of the internet access services.

### **3.2. Netograf.ro**

At the end of 2014, ANCOM made available to the interested parties Netograf.ro, an online application where internet access users can assess the providers' performance from the technical quality parameters perspective, as well as their evolution over time, respectively the improving or the degrading quality of the internet access service offered. The application is available on [www.netograf.ro](http://www.netograf.ro).

Using this application, internet access service users can measure parameters such as the download speed, the upload speed, delay and jitter.

Before performing a test, the user is presented a series of information fields (IP address, location detected, information regarding the terminal equipment used). Furthermore, although the provider is automatically detected, the user can choose another provider, if the identified one is not the respective user's provider. To perform a test, the user must select his internet access service offer, and the access type (wired/wireless, indoor/outdoor).

The values of quality parameters resulted from the measurement are displayed in real time to the users. The users can compare the measured values with those parameter nominal values indicated by the providers in the contract. Moreover, for registered and logged-in users, the application enables a history of individual measurements, offering a series of additional functions, such as the possibility to sort measurements by tested connection and to display graphs and tables with the historic values of the performed tests.

On its website, ANCOM publishes regular statistics on the quality of the internet access services. Thus, in order to compare the quality achieved by different providers of internet access services, or to assess the quality of various connections from one provider, the application returns the number of measurements and average values of the quality parameters, according to the options selected by end-users (period, offer type, test location).

### 3.3. Extending Netograf.ro

ANCOM intends to complete the capabilities of Netograf.ro by developing functionalities that meet the necessities of the end-users and of the internet access service providers.

The new system functionalities will be as follows:

- applications dedicated to mobile terminals (for the three most frequently used types of operation systems), which can be downloaded for free from the official applications' shops, which enable the users to measure the technical quality parameters of their mobile internet connection and to view statistics/history/information on the performed tests;
- applications dedicated to fixed terminals (for the most frequently used two types of operation systems), the installation kits of which the users will be able to download from [www.netograf.ro](http://www.netograf.ro) and which enable them to measure the technical quality parameters of their fixed internet connection and to view statistics/history/information on the performed tests;
- a module for mapping the results, by means of which the users will be able to see the measurement results distributed geographically on the map of Romania;
- a measurement module based on advanced technologies, which enables measuring speeds above 300 Mbps with greater accuracy.

Thus, the users of internet access services will be able to benefit from a unique, independent, objective and free-of-charge tool for quality assessment measuring the technical parameters, by which they will be able to measure their own connections through a dedicated browser and dedicated applications, on fixed or mobile terminals, with access to the history of their own measurements. Internet access services users will be able to monitor the conformity of the contract provisions regarding the quality of service, by comparing the performance committed by the providers under contract to that resulting from a set of measurements performed by means of Netograf.ro. Moreover, the users will be able to access the statistics based on the tests performed by other users over a defined period. The end-users could compare the quality of the services ensured by different providers and could make informed choices when they conclude a contract with a provider of internet access services or intend to switch providers. Furthermore, the users will be able to view the results of all the measurements, geographically distributed on the map of Romania, according to the selected criteria.

The implementation of these new modules and applications for measuring the internet access service quality, will contribute to achieving the ANCOM objective of increasing competition in the market and of improving the quality of internet access services and of the performance of electronic communications networks. The current and future functionalities of the platform Netograf.ro ensure the characteristics of the certified monitoring mechanism within the meaning of the Regulation (EU) 2015/2120.

## **4. Report on the quality of the internet access service**

Every year, ANCOM provides a report on the quality of the internet access service, based on the measurements performed by the users through Netograf.ro. The report presents comparative statistics on service quality, as well as analyses on the dynamics of service quality. In 2016, statistics were generated upon analysing 183,000 valid tests, 30% more than in 2015. Out of all the valid tests, 84.36% were performed using fixed connections and 15.64% were performed over mobile connections. This difference may be due to the fact that the mobile internet service is generally limited in respect of the data volume that can be transferred by the users and therefore, the latter are rather reluctant to performing tests over mobile connections.

Taking into account the fact that fixed and respectively mobile internet access connections present different technical characteristics and subsequently trigger substantially different values of the quality parameters, ANCOM's analysis was conducted separately for providers of internet access services using fixed networks and respectively for providers of internet access services using mobile networks.

### **4.1. Quality of internet access service in case of fixed networks**

According to the results of the tests performed using Netograf.ro, during 2016, the average download speed on a national level was 94.95 Mbps for the fixed internet access service. The average upload speed on a national level was 78.80 Mbps.

In 2016, compared to 2015, the download speed achieved over connections using fixed network increased on a national level, by 77.47%, while the upload speed over the same connection type increased by 50.81%.

Looking at the 5 largest providers of internet access using fixed networks, by number of connections, which hold together more than 90% market share, one can witness an increase both on the level of average download speeds, and on that of upload speeds, measured by means of Netograf.ro.

### **4.2. Quality of internet access service in case of mobile networks**

The average download speed on a national level is 25.90 Mbps for the mobile internet access service. The average upload speed on a national level is 10.32 Mbps for the mobile internet access service. In 2016, we witnessed an increase in the download speed on a national level, by 34.75%, respectively by 27.10% in the upload speed, compared to 2015.

As regards the quality achieved by each mobile internet access provider, one can see significant difference among providers concerning the average speeds measured in 2016.

Data registered by means of Netograf.ro regarding transfer speeds are correlated with the general trend resulted from the providers' statistical data reports, corresponding to their committed transfer speeds. Thus, in 2016, in the case of internet access connections using fixed

networks, the number of connections ensuring speeds up to 30 Mbps dropped by 9%, whereas the number of high speed connections increased by 5% for speeds ranging from 30 Mbps to 100 Mbps, respectively by 4% for speeds above 100 Mbps, compared to 2015. Regarding mobile internet access connections, in 2016, the number of connections corresponding to 3G and higher technologies increased by 15.50%, while the number of 4G connections increased by 113%, compared to 2015.

Therefore, the providers' enhanced offers (from the perspective of the quality level mentioned in the contract) are directly reflected also in each end-user's quality of experience in using the internet access service.

## **5. Transparent, simple and efficient procedures to address end-user complaints**

According to the secondary legislation issued by ANCOM<sup>4</sup>, providers have to publish on their website and also hand to end-users at the conclusion of the contract, a procedure that details the steps the end-user has to follow in order to submit a complaint related to the provision of electronic communication services. This is a general procedure that also applies to the complaints related to the application of the Regulation.

Concerning the minimum required content of the procedure, in ANCOM's decision no. 158/2015, the Authority has established that providers should include in the procedure and thus make transparent the following information:

- the means by which an end-user can submit a complaint;
- the name, address and the working program of the department in charge of solving the complaints;
- the maximum timeframe for submitting the complaint, if applicable;
- the maximum timeframe for solving the complaint;
- the maximum timeframe for remedying the disturbance;
- the compensations applicable if the provider exceeds the timeframe for solving the complaint and for remedying the disturbance;
- the timeframe and means by which the provider informs the end-user on the outcome of his/her complaint;
- an information according to which the end-user can address a complaint to the NRA or can use other Alternative Dispute Resolution procedure if he/she is not satisfied by the way in which his/her complaint was solved by the provider.

All electronic communication service providers have implemented this procedure, it is mandatory, and subject to sanctions, if not implemented according to the conditions set by ANCOM's decision no. 158/2015.

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<sup>4</sup> [http://www.ancom.org.ro/uploads/forms\\_files/decizia\\_2015\\_1581428306401.pdf](http://www.ancom.org.ro/uploads/forms_files/decizia_2015_1581428306401.pdf) (Romanian version only)

## 6. Penalties

With regard to the sanctions applicable in case of non-compliance with the provisions of the Regulation, according to the provisions of article 142 point. 55 of Government Emergency Ordinance no. 111/2011, the non-observance by the providers of the obligations deriving from the regulations of the European Union in the field of electronic communications, where the competence of monitoring and verification of the compliance with these obligations belongs to the national regulatory authority constitutes a contravention that can be sanctioned by ANCOM. Therefore, ANCOM can sanction any non-observance of the provisions of the Regulation, with the exceptions mentioned above related to the competence of the national CPA and the national DPA.

Government Emergency Ordinance no. 111/2011 also provides for penalties applicable to infringements of the provisions of Articles 3, 4, and 5 of the Regulation.

According to article 142 point 55 and article 143 of the Government Emergency Ordinance no. 111/2011, the breach of the obligations laid down by this Regulation constitutes a contravention that can be sanctioned by ANCOM as follows:

- with fines ranging from 5,000 RON (~1,100 EUR) up to 60,000 RON (~13,000 EUR) and, in case of repeated breach, up to 100,000 RON (~22,000 EUR);
- with fines of up to 2% of the annual turnover or 5% in case of repeated breach, for the providers with an annual turnover of more than 3,000,000 RON (~660,000 EUR).

Where an infringement has been discovered, according to the provisions of article 149 para. 1 letter a) of the Government Emergency Ordinance no. 111/2011 ANCOM may also require the cessation of the infringement either immediately or in a reasonable timeframe, as well as any other measures necessary to ensure the cessation of the infringement and the remediation of the occurred situation. The measures shall be proper and proportionate to the committed breach and shall provide a term within which the provider must comply with them.

Between 30<sup>th</sup> of April 2016 and 30<sup>th</sup> of April 2017, ANCOM did not impose any sanctions for breaches of the Regulation's (EU) 2015/2120 provisions.

## 7. Traffic management measures maintained until 31 December 2016

In 2016, based on article 10 para. 3 of the Regulation, an operator has notified ANCOM its self-regulatory scheme implemented in its network that allowed the operator to block the access to websites containing or promoting sexual materials involving minors.

The national legislation doesn't allow or oblige operators to block the access to this kind of websites, therefore ANCOM has taken the necessary steps to notify the European Commission,

according to article 10 para. 3 of the Regulation, in order for these self-regulatory measures to be maintained until 31 December 2016. These measures could be maintained in the long run (beyond 31 December 2016) only if a modification of the national legislation transposing article 25(2) of Directive 2011/92/EU<sup>5</sup> is made in the sense that operators should be allowed by law to block the access to some websites in certain justified cases (i.e. child online pornography) so that the blocking is done based on the exception contained in article 3 para. 3 subparagraph 3 letter (a) of the Regulation.

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<sup>5</sup> Directive 2011/92/EU of The European Parliament and of The Council of 13 December 2011 on combating the sexual abuse and sexual exploitation of children and child pornography, and replacing Council Framework Decision 2004/68/JHA

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