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REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL

on the implementation of the open internet access provisions of Regulation (EU) 2015/2120

1. 1. INTRODUCTION

The principle of the open internet is embedded in Regulation (EU) 2015/2120[1], which has applied in all Member States since 30 April 2016. The Regulation grants end-users the directly applicable right to access and distribute lawful content and services of their choice via their internet access service. It enshrines the principle of net neutrality: internet traffic must be treated without discrimination, blocking, throttling or prioritisation. The end-users' rights cannot be limited by the agreements between them and their internet providers, or by traffic management practices undertaken by the providers. The principle of the open internet has been included in the European Declaration on Digital Rights and Principles[2], which shows its continuing importance in the EU.

The Regulation empowers the Body of European Regulators for Electronic Communications (BEREC) to issue guidelines in close cooperation with the Commission on the obligations of the national regulatory authorities (NRAs) to monitor and ensure compliance with the provisions on open internet. BEREC published the first version of the guidelines[3] in August 2016 and updated them in 2020[4] and 2022[5]. The BEREC Open Internet Working Group, in which the Commission participates, aims at ensuring consistency in the application of the Regulation across Europe.

The Commission was required to review the Regulation's provisions on open internet access (Articles 3, 4, 5 and 6) and submit a report to the European Parliament and the Council, 'accompanied, if necessary, by appropriate proposals with a view to amending the Regulation', by 30 April 2019 and every 4 years thereafter.

The first report on the implementation of the Regulation was published in April 2019[6]. It concluded that the Regulation was appropriate and effective in protecting end-users' rights and promoting the internet as an engine for innovation, and that there was no need to amend it. Since then, the Commission, BEREC and the NRAs have continued to monitor developments in the market and the implementation of the open internet rules.

The aim of this second report is to provide an assessment of the implementation of the four articles of the Regulation since 2019, including in the light of market and technological developments. For the purpose of this assessment, the Commission gathered feedback on how the Regulation supported the open internet access from a wide range of sources:

[1] 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; OJ L 310, 26.11.2015, p. 1; hereinafter referred to as the Regulation.

[2] European Declaration on Digital Rights and Principles for the Digital Decade 2023/C 23/01; OJ C 23, 23.1.2023, p. 1–7.

[3] BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality Rules, BoR (16) 127, 30 August 2016.

[4] BEREC Guidelines on the Implementation of the Open Internet Regulation, BoR (20) 112, 11 June 2020.

[5] BEREC Guidelines on the Implementation of the Open Internet Regulation, BoR (22) 81, 9 June 2022.

[6] Report from the Commission to the European Parliament and the Council on the implementation of the open internet access provisions of Regulation (EU) 2015/2120, COM (2019) 203 final.

1) the national implementation reports from the NRAs[7] and BEREC[8];

2) the BEREC Opinion for the evaluation of the application of Regulation (EU) 2015/2120 of December 2022[9];

3) the SMART 2019/0024[10] study ('the study'), that collected factual information on the implementation of the Regulation through desk research, interviews, a survey, expert panels, and a targeted stakeholder workshop held on 30 January 2023, and provided assessment and recommendations;

4) ongoing contacts with stakeholders at all levels.

The report also takes into consideration the jurisprudence of the European Court of Justice (ECJ) on the interpretation of the provisions of the Regulation.

2. 2. CONTEXT

Since the 2019 report, there have been some important developments. Among the legal, judicial and regulatory developments are:

- four judgments of the ECJ on the Regulation, one of September 2020[11], and three of September 2021[12];

- the entry into force of the European Electronic Communications Code[13], which among others expanded the consumer-protection aspects of Directive 2002/22/EC[14] to which the Regulation refers;

- two revisions of the initial BEREC guidelines published in August 2016: the first in June 2020 clarified certain parts of the guidelines and took account of the experience of NRAs in applying them; and another in June 2022 reflected the ECJ judgments on 'zero tariff' offers.

Among the potentially relevant technological developments, as well as global and geopolitical events since 2019 are:

[7] The Commission publishes on its website (Open Internet | Shaping Europe's digital future (europa.eu)) the annual country reports on the open internet provided by the NRAs. So far 6 sets of the reports are available.
[8] So far, BEREC has adopted 6 annual reports on the implementation of Regulation; all are available on its website: www.berec.europa.eu.
[9] BEREC Opinion for the evaluation of the application of Regulation (EU) 2015/2120, BoR (22) 163, 12 December 2022.
[10] 'Study on the implementation of the open internet access provisions of Regulation 2015/2120 No. 2022-008', carried out by ICF and WIK Consult.
[11] Judgment of the Court (Grand Chamber) of 15 September 2020 in Joined Cases C-807/18 and C-39/19 - Telenor Magyarország.
[12] Judgments of the Court (Eighth Chamber) of 2 September 2021 in Case C-854/19 - Vodafone, Case C-5/20 - Vodafone, and Case C-34/20 – Telekom Deutschland.
[13] Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code, OJ L 321, 17.12.2018, p. 36.
[14] Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive), OJ L 108, 24.4.2002, p. 51.

- the COVID-19 pandemic, which led to an increase in internet traffic, raising questions about possible measures to manage network congestion and their validity under the Regulation;

- the progressive deployment of 5G mobile networks, bringing increased opportunities to provide different services with different quality of service (QoS) levels;

- the EU sanctions against Russia in response to the military aggression against Ukraine, including restrictions against several media outlets that cover all means of transmission and distribution in – or directed at – the EU Member States (including cable, satellite, internet protocol TV, platforms, websites and apps)[15].

3. 3. COMMERCIAL DEVELOPMENTS

3.1. 3.1. Restrictions on the free use of equipment, services and content

The Regulation provides for the end-users' right to access and distribute information and content, to use and provide applications and services, and to use terminal equipment of their choice. This right is irrespective of the end-user's or provider's location or the location, origin or destination of the information, content, application or service.

The Regulation also clarifies that end-users should be free to choose their terminal equipment and that providers of internet access services should not impose restrictions on the use of terminal equipment connecting to the network beyond those imposed by manufacturers or distributors of terminal equipment.

In its guidelines BEREC clarified that, when considering whether end-users are able to use the terminal equipment of their choice, NRAs should first assess whether an internet access service provider provides 'obligatory equipment', and whether there is an objective technological necessity for the obligatory equipment to be considered part of the internet access service provider's network.

The study confirms that restrictions on the use of terminal equipment are relatively widespread and that the response of NRAs to such restrictions is not uniform. Router freedom is considered important in countries where the network termination point (NTP) excludes the router[16]. In general, compared with the situation reported in the 2019 report, although there is now more transparency about the location of the NTP and conditions for using alternative equipment to that supplied by the internet access service provider, the situation across Europe remains varied. In this regard, the NRAs and BEREC could explore a more coordinated approach and narrower definitions.

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[15] Council Regulation (EU) 2022/350 of 1 March 2022 amending Regulation (EU) No 833/2014 concerning restrictive measures in view of Russia's actions destabilising the situation in Ukraine; OJ L 65, 2.3.2022, p. 1–4, and Council Decision (CFSP) 2022/351 of 1 March 2022 amending Decision 2014/512/CFSP concerning restrictive measures in view of Russia's actions destabilising the situation in Ukraine, OJ L 65, 2.3.2022, p. 5–7.

[16] Out of 24 NRAs which responded to this question within the study, 16 reported that the NTP is defined in their jurisdiction. Out of these, in the case of 7 the NTP excludes the router, 4 Member States include the router within the NTP definition, and in a further 5 the definition varies by technology. In 8 of the Member States for which information was available, consumers have been required to make use of routers supplied by ISPs.

Overall, some Member States made steps to support increased choice in terminal equipment, compared to the situation reported in 2019. Stakeholders confirm that challenges regarding limitations on terminal equipment and the use of devices have reduced. Nonetheless, some stakeholders call for improved enforcement and greater clarity on the interpretation of specific terms.

3.2. 3.2. ‘Zero tariff’ options

The ‘zero tariff’ option is a commercial practice where an internet access provider applies a ‘zero tariff’, or a reduced tariff, to all or part of the data traffic associated with an application or category of specific applications, offered by partners of that access provider[17]. Such data are therefore not counted towards the data volume purchased by end-users as part of their basic package.

As noted in the 2019 report, such ‘zero tariff’ options were in general considered not prohibited by the Regulation. BEREC in its 2016 guidelines indicated how such options should be assessed, and further developed its assessment methodology of ‘zero tariff’ and similar offers in its 2020 guidelines. ‘Zero tariff’ options were present in most Member States and overall, widespread on the market[18].

In fact, all the ECJ judgments on the Open Internet Regulations were issued in cases related to ‘zero tariff’ options.

First, in 2019, the ECJ considered packages offered by an internet access service provider, which enabled end-users to use certain specific applications and services covered by a ‘zero tariff’ with the related traffic not counted towards the data volume of the basic package of the internet access service, with specific conditions of use attached to such offers. The ECJ emphasised in its ruling that the general obligation to treat traffic equally as a principle applies to applications and services covered by ‘zero tariff’.

In 2021, the ECJ ruled that ‘zero tariff’ options are incompatible with the Regulation. Limitations on bandwidth, tethering, or use when roaming, on account of the activation of such options, are also incompatible with EU law.

Following the ECJ rulings, BEREC noted in its 2022 guidelines that commercial practices could include ‘differentiated pricing’ in which the price for a given amount of data is not the same for all traffic across a particular internet access service traffic; however, those practices ought to be ‘application agnostic’. In other words, internet access service providers may include in their commercial practices a different price for a certain amount of data (including a ‘zero tariff’ option or a reduced tariff), as long as this data traffic is used irrespectively of the application.

BEREC considers any differentiated pricing practices that are not application agnostic (such as applying a ‘zero tariff’ to internet access service providers’ own applications or allowing content and application providers to subsidise their own data) to be in general inadmissible.

[17] See definition by ECJ in Judgments in Cases C-854/19, C-5/20 and C-34/20.

[18] Still in 2022, the applications most subject to ‘zero tariff’ were music streaming (20 Member States), video/IPTV (20 Member States) and social media (18 Member States). ‘Zero tariffs’ were also reported for voice and short messages (15 Member States), cloud services (8 Member States), and gaming (6 Member States).

Following the ECJ rulings, as of December 2022, 'zero tariff' options have been fully withdrawn or are being withdrawn from the market[19]. NRAs and operators report that customers receiving 'zero tariff' options are being transitioned to plans with additional or unlimited data, or in a few cases to time-based discounts.

The study shows that there is general agreement among the stakeholders that the ECJ judgments and the updated BEREC guidelines have brought clarity on 'zero tariff' options. A few NRAs indicated that 'zero tariff' options for the customer care sites were allowed in their Member States, while others allowed 'zero tariff' options for social or educational purposes. According to the study, some stakeholders consider that 'zero tariff' options for social or educational purposes should be permitted as such, while others fear that this could open the door to breaches of the Regulation's principles and is not needed in cases where sufficient bandwidth is provided in consumer packages. More clarity on the interpretation of terms related to 'zero tariff' options in those instances could be useful.

4. 4. TRAFFIC MANAGEMENT

The Regulation also affirms that internet access service providers must treat all traffic equally, without discrimination, restriction, or interference; they must not block, slow down, alter, restrict, interfere with, degrade or discriminate between specific content, applications or services. The Regulation provides for a few exceptions that are limited to:

a) compliance with EU legislative acts, or national legislation, including with orders by courts or public authorities vested with relevant powers;

b) preservation of the integrity and security of the network, of services provided, and of the terminal equipment of end-users;

c) prevention of network congestion and mitigation of the effects of exceptional or temporary network congestion.

4.1. 4.1. Blocking and throttling of content

The study shows that authorised blocking is widely reported, in particular under two exemptions: (a) legislation and (b) security and integrity.

Blocking of content has occurred in many Member States based on legislation/legal rulings including blocking of illegal gambling and child pornography, extremist content, breach of copyright, threat to state, and on the basis of EU sanctions against Russia. Especially in the context of the sanctions against Russia, some internet access service providers expressed concerns that they lacked legal clarity as to the circumstances in which they were permitted or required to block content. In this regard, BEREC highlighted that NRAs have sought to assist internet access service providers in the practical implementation of the sanctions in order to avoid over- or under-blocking. However, it also recalled that NRAs are not responsible for deciding on or overseeing the implementation of sanctions.

[19] As of December 2022, 'zero tariff' options have been fully withdrawn (not marketed and withdrawn from existing customers) in 6 Member States (HR, EE, LT, LU, MT, SI), while in a further 5 (AT, DK, CZ, DE, HU), existing customers are still served, but the phase-out of 'zero tariffs' was due to be completed by March 2023 (or January 2023 in the case of DK).

The use of throttling to address time-limited network congestion issues (exemption (c)) is less widely reported by NRAs. It has been used mainly when end-users exceed the capacity in mobile data plans; and to prevent network overload on mobile networks during power outages to ensure access to calls and emergency services or during periods of network failure or sudden increases in traffic.

4.2. 4.2. Impact of COVID-19 on traffic management

When the COVID-19 crisis started, and with it the lockdown measures, BEREC and the NRAs worked closely with the Commission[20] to provide swift and clear guidance to stakeholders. They also continued to report on the situation in the following months[21].

Several NRAs noted that no throttling was required during the COVID-19 pandemic, even during the peak of the crisis, when lockdown measures implemented in the Member States resulted in an increase in teleworking and distance learning, thus increasing traffic on the network. On traffic management during the COVID-19 pandemic, throttling for COVID-19-related reasons was not reported in any Member State in any of the 2022 NRAs' reports.

The COVID-19 crisis is an excellent example of the adaptability and applicability of the Regulation to specific challenges, such as the peak in internet traffic during the crisis. This example is strong evidence that the interplay of the Regulation, the BEREC guidelines, and the cooperation of the Commission provides for a future-proof tool to manage unexpected developments as and when they occur. Moreover, the COVID-19 crisis also shows that the current infrastructure was able to cope with a sudden, unexpected, and sustained peak in internet traffic.

Still, significant investments will be needed in the coming years to ensure that all the targets of the Digital Decade Policy Programme[22] can be met, and that the European infrastructures can cope with a likely increase in network traffic and keep up with new technological developments. The Commission is currently soliciting the views of stakeholders on the investments needed to build the internet infrastructure of the future in an exploratory consultation running from 23 February 2023 to 19 May 2023. In that context, it should be noted that the Digital Decade Policy Programme stresses the principle that 'all market actors benefiting from the digital transformation should assume their social responsibilities and make a fair and proportionate contribution to the public goods, services and infrastructures, for the benefit of all Europeans'. This is also in line with the political commitments included in the European Declaration on Digital Rights and Principles. The above-mentioned exploratory consultation also seeks stakeholders' views on how this principle could be implemented in practice – if relevant – to help roll out the infrastructure needed to enable Europe to lead the digital transformation. However, the fact that a debate is currently ongoing with and between the different stakeholders on this issue, does not put into question the net neutrality rules, the

[20] Joint Statement from the Commission and the BEREC on coping with the increased demand for network connectivity due to the COVID-19 pandemic of 19 March 2019.
[21] In the Joint Statement BEREC committed to setting up a special reporting mechanism to ensure regular monitoring of the internet traffic situation in each Member State to be able to respond swiftly to capacity issues. Initially, the report was issued twice a week and then monthly, as the reported situation stabilised, and updates from NRAs moderated.
[22] Decision (EU) 2022/2481 of the European Parliament and of the Council of 14 December 2022 establishing the Digital Decade Policy Programme 2030, OJ L 323, 19.12.2022, p. 4.

importance of which has also been restated in the Declaration on Digital Rights and Principles.

5. 5. TECHNOLOGICAL DEVELOPMENTS

5.1. 5.1. Development of 5G technologies

As highlighted already in the 2019 report, the Regulation was deliberately conceived as a principle-based set of rules that could be applied to the foreseeable development of new technologies, such as 5G and new services (e.g. network slicing, 5G QoS identifier (5QI), mobile edge computing, and 'network as a service'). The Commission in 2019 committed to both continue to follow this issue closely as 5G developed in the market, and work closely with BEREC to update its guidelines, which it did in 2020.

The revised 2020 BEREC guidelines provide considerable clarifications relevant for 5G technologies, elaborating on their compatibility with the Regulation. The guidelines explain how internet access service providers may differentiate the QoS level of internet access service subscriptions. The QoS levels should remain 'application agnostic' while the end-users should remain in control over which applications are transmitted over which QoS level.

To date, neither BEREC nor the Commission are aware of any specific example where the implementation of 5G technology would be impeded by the Regulation.

5.2. 5.2. Technology developments and specialised services

The Regulation provides for the possibility to offer services other than internet access services. Such services, commonly referred to as 'specialised services', are optimised for specific content, applications, or services, or for a combination of these, where such optimisation is necessary to meet their quality requirements. Providers may offer or facilitate specialised services only if the network capacity is sufficient to provide them in addition to any internet access services without degrading the quality of the latter.

The BEREC guidelines clarify how the rules in the Regulation should be understood by elaborating on the conditions for providing specialised services, which are provided in the Regulation itself. In this respect, the 2020 guidelines indicate that different applications (in the form of specialised services) can be treated differently when it is objectively necessary to meet an application's requirement for a specific level of quality that cannot be met over a best-effort internet access service. The BEREC guidelines acknowledge that the internet and the nature of internet access services will evolve over time. The three examples of specialised services, indicated in the BEREC guidelines and available in many Member States, are: VoLTE, IPTV, and VoIP.

The assessment of compliance remains first and foremost with the provider considering to offer a specialised service, as no prior permission from NRA is required to offer such services to end-users. To establish whether a service is in- or out-of-scope, the Regulation requires internet access service providers to: (i) prove the need for each application to be treated in a particular way; (ii) show that it is separated from the internet access service; and (iii) demonstrate that such treatment will not have a negative impact for the end-users.

The views of the consulted stakeholders on the development of specialised services differ. Some consider that the need for specialised services may decline as the average quality of internet access services increases. Others are of a view that the demand for specialised services may grow in the context of 5G network slicing. BEREC notes that on the one hand a service that today requires optimisation and qualifies as a specialised service may not require it in the future due to the improving general quality of internet access services, whilst, on the other hand, additional services may emerge that would need to be optimised. This could be the case with the transition to Web 4.0[23] and the development of 'networks as a service', where networks will be expected to provide transmission, storage, and computing functions[24].

As the development of technology continues, different stakeholders say that it is sometimes not clear whether certain experimental services and technologies would fall under the remit of the Regulation, and whether their applications would be considered lawful. Up until now, the NRAs and BEREC applied a case-by-case approach to new technologies. BEREC still favours this approach for the reason that only a few specialised services have been implemented so far. However, this lack of legal certainty may have a chilling effect on investments and innovation. In this respect, while some stakeholders, including consumer organisations, are satisfied with the current BEREC guidance, many larger internet access service providers consider that the current rules and approach do not provide sufficient certainty to enable them to launch services based on network slicing or define specialised services.

Greater legal certainty could therefore be beneficial to both innovators and consumers in the future. How to achieve it, by signalling that new high-performance services should be possible within the scope of the Regulation, and whether such 'signposting' should be done via a clarification in the BEREC guidelines (e.g. in shorter intervals commensurate with market and technological developments) or by the Commission, is one of the matters to focus on in the near future.

6. 6. CONTRACTUAL TRANSPARENCY, REGULATORY MONITORING AND PROCEDURES

6.1. 6.1. Transparency obligations

The Regulation sets out several transparency requirements, mainly about information on speeds and traffic management practices. It requires internet access service providers to provide information about remedies available in case of discrepancies between actual and contractually agreed speeds, and put in place transparent, simple, and efficient procedures to address end-users' complaints. Any significant discrepancy between the actual performance of the internet access services regarding speed or other QoS parameters and the performance indicated by the provider should, where the relevant facts are established by a monitoring mechanism certified by the NRA, trigger remedies available to consumers under national law.

Overall, there have been significant improvements in transparency thanks to the implementation of the Regulation. The Regulation is considered by consumer

[23] The fourth generation of the World Wide Web.

[24] For example, services provided over software-defined networks of the future may feed into the concept of specialised services, e.g. services for building automation, connected cars, high-quality consumer applications, or secured connectivity.

organisations, civil rights organisations, and NRAs to be effective in ensuring transparency on broadband speeds, the treatment of traffic, and means of redress for the consumers when they do not receive the QoS they expect.

Most NRAs consider that internet access service providers have complied with the transparency requirements, and that significant improvements have been made since the 2019 report. Some challenges remain, in particular among smaller (often local) providers, and in some cases with the reporting of speeds (e.g. on maps) by mobile providers or misrepresentation of the term 'unlimited' data[25]. Moreover, there has been significant progress by NRAs in introducing monitoring tools to enable consumers to verify that the speeds they are receiving match those contractually agreed[26].

Some stakeholders would like the BEREC guidelines to provide more detailed and prescriptive recommendations on the approaches that NRAs should take to enforce transparency; to provide clarity regarding speed concepts and measurement; and to ensure consistency when reporting on the actual speeds versus contractual or advertised speeds. Consumer and civil rights organisations also noted that information is not easy to understand for consumers, highlighted gaps between actual and contractual speeds, and inefficiencies in complaint handling by internet access service providers. BEREC did not identify specific transparency monitoring issues, noting that transparency requirements were generally fulfilled by providers.

6.2. 6.2. Supervision and enforcement

The Regulation gave NRAs powers to ensure that its objectives are met. Since the Regulation entered into force, NRAs' decisions taken against internet access service providers have been challenged in court in eight Member States[27]. In the vast majority of cases, courts' decisions have confirmed the NRAs' decisions. In its 2020 guidelines, BEREC noted that there are three types of actions which NRAs can pursue to monitor and ensure compliance: (i) supervising or monitoring the application of different requirements; (ii) enforcement; and (iii) reporting on findings from the monitoring exercises. The imposition of any requirements and measures should be assessed based on their effectiveness, necessity and proportionality.

According to the study, enforcement practices differ widely. Whereas some NRAs pursue multiple cases and conclude cases with formal findings or decisions, others enforce the provisions of the Regulation through informal dialogue, and others use a combination of approaches to achieve compliance. Stakeholders broadly agree that NRAs have acted in accordance with the BEREC guidelines. Views about the degree to which the guidelines have led to more consistent practices across Member States are more varied, with consumer rights organisations agreeing strongly with this statement, while internet access service providers are more neutral on this point.

[25] This was addressed through BIPT guidelines in BE.
[26] 7 NRAs provide a certified tool (AT, HR, CY, DE, IT, PL, RO), while 11 additional NRAs provide a tool which they do not claim is certified (CZ notes that certification is planned), 3 further NRAs are planning to introduce such a tool or are in the process of testing it (BG, FI, LV).
[27] BoR (22) 128, Chapter 9 and Annex I.

6.3. 6.3. Sanctions

Sanctions and the methods for calculating penalties differ widely between Member States. For example, 13 Member States have set penalties linked to the company's turnover, while others have a fixed maximum amount or a combination of the two. The maximum penalties vary from 0.25% to 5% of the average annual worldwide turnover, or are set at a maximum amount which ranges from EUR 100 000 to EUR 5 million. Only a few penalties have been imposed to date, and all of them were well below the applicable maximum.

7. 7. CONCLUSIONS

The rules enshrined in the Regulation are at the core of the functioning of the internet ecosystem in Europe and have been recalled in the European Digital Rights and Principles with a political commitment to protect and promote an open internet in the European digital transformation. This report highlights specific issues that deserve special attention by the Commission and BEREC in the near future, in order to guarantee that the application of the Regulation continues to be relevant and in line with technological developments.

Since the 2019 report, technological changes, but especially major market and geopolitical changes, took place that could not have been foreseen when the Regulation was drafted. The fact that the Regulation and its implementation have been able to stand the test of time, confirms that the principle-based approach of the Regulation continues to guarantee the essential balance between the protection of end-user rights and the need to foster a competitive EU digital single market. From this assessment, the Commission concludes that, compared with the situation in 2019 when the first report was issued, the principles of an open internet remain relevant, from the perspective of end-users, content and application providers, and internet access service providers.