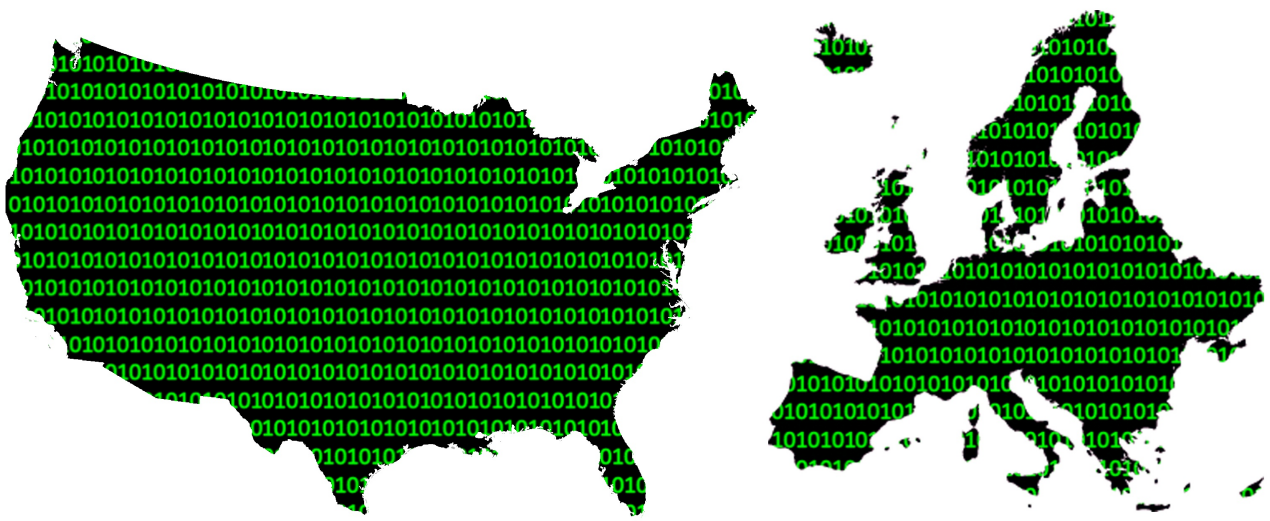Round Table Report

Regulating a Borderless Internet: EU vs US Perspectives on Net Neutrality

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White Paper

Speakers

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Foreword

Early in 2015, the Federal Communications Commission voted on a new set of rules applying Title II of the Communications Act of 1934 to the internet, bringing broadband Internet under the regulatory framework of public utility services. At the same time on the other side of the Atlantic, the European Union is about to decide on its own framework for regulation of the network. After a vote in Parliament in 2014 which toughened up the proposal of the Commission, Member States have recently reached an agreement and are proposing a principle-based approach to Net Neutrality. Issues, however, such as how to tackle positive discrimination also known as 'zero-rating' appear to remain unresolved.

Foreword

Executive Summary

Net Neutrality is the principle that all traffic going through a network should be treated equally independent of content, application, service, device, source or target. Net Neutrality is vital not only for protecting the rights of millions of European consumers but also for ensuring a fair competitive field in the IT market that will foster innovation and underpin the growth of the EU economy that is still recuperating from the adverse effects of the recent global economic recession.

The recent proposal of the Council of EU which arguably deviates from the pro-Net Neutrality course set by the European Commission and Parliament has fuelled the ongoing policy and regulatory debate.

Within this context, the set of distinguished speakers share their insights through political, regulatory and commercial perspectives, employing the comparison between the US and EU angle to debate the current European approach.

The diversity amongst the views and interests of the EU Member states and stakeholders necessitates the adoption of a clearly defined and ambitious pan-European approach that will provide EU regulators with effective tools to uphold the principles of Net Neutrality in practice.

Executive Summary

Introduction

Mr. Mael Brunet introduced OpenForum Europe (OFE), a Brussels-based, not-for-profit organization with the mission to support openness in the IT market. He then talked about the OpenForum Academy (OFA), a global think-tank comprised of more than 40 fellows with the aim to examine the paradigm shift towards openness in computing and how this trend is changing the role of computing in society.

Ms. Marietje Schaake stressed the importance of the round table at this time of transition. Indeed, the timing of the discussion could not have been better as Europe is currently building up to a crucial decision of the Council of the European Union on Net Neutrality.

Net Neutrality is of vital importance not only for ensuring openness in the IT market but also for the future of Europe and its Digital Economy. This importance has already been recognized in the Netherlands, the first country in the EU to have Net Neutrality enshrined by law. The issue of Net Neutrality in the Netherlands emerged during a shareholder meeting of the major (previously state-owned) telecommunications operator KPN[1]. During the meeting, one of the board members presented a shareholder with different

> *"Net Neutrality is important not only for the sake of consumer rights but also for ensuring a fair competitive ground that will foster innovation and new jobs creation"*

solutions to break out of the competition in VoIP services, thus sparking a major discussion on two main issues: (i) the ability of telecommunications operators to look into the data packages of consumers and (ii) the reason why telecommunications operators do not provide free services. It was this discussion that led the Dutch Democrats 66 party to seek and ultimately achieve to have Net Neutrality enshrined by Dutch law.

Net Neutrality is frequently presented as over-regulating the open internet. This perception, however, could not be any further from the truth. Rules are required to ensure fair competition in the market and in this respect Net Neutrality is absolutely necessary. Until recently the European Commission (EC) believed that transparency of terms of use and competition amongst telecommunications and internet operators would suffice to ensure fair competition and further rules would not be required. However, as revealed by a major research undertaken by the European Consumer Rights Organization, millions of Europeans still do not have access to all sites of the World Wide Web because of blocking and throttling.

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1 http://www.kpn.com/

It is evident that consumers and especially internet users should be in the center of focus within the context of Net Neutrality, but future legislation is also vital. For instance, the absence of clear rules on Net Neutrality can have adverse implications on the innovation potential of many young start-ups that may not get the chance to compete on a fair ground with major market players. Therefore, Net Neutrality is important not only for the sake of consumer rights but also for ensuring a fair competitive ground that will foster innovation and new jobs creation.

The Connected Continent legislative package was an important step forward, including Net Neutrality as one of its main pillars. In order to have clear rules, however, further work was necessary by the European Parliament to sharpen the definitions of the EC and thus better clarify the concept of Net Neutrality. The European Parliament supported these more clear definitions with a majority vote and now we are at the doorstep of another challenge in the face of the Council's mandate on Net Neutrality.

The Council's proposal on Net Neutrality and roaming charges are disappointing to a point that they may even be considered as insulting to European citizens. For instance, if we promise consumers and internet users to end roaming charges by the end of 2015, then the suggestion to give 5 MB for free every day is an infinite distance away from that ambition. For reference, 5 MB corresponds to 30 seconds of high quality news (or a minute and half in low quality) or to listening the Bohemian Rhapsody by Queen once. This is hardly the kind of ambition that we need to have in order to create a single telecom market which is an essential building block for the Digital Single Market that will never materialize if procedures and decision-making continue to be so complex.

Developments in the US with respect to Net Neutrality are very encouraging and Europe must also quickly advance in this respect. The EC can utilize the Netherlands paradigm as a modern 21st century example of how progress towards Net Neutrality could be realized - hard work is necessary and special attention must be paid to understanding the technicalities that are so important - so as to work towards an ambitious vision of a Digital Single Market in Europe that is essential for underpinning economic growth in an increasingly competitive world.

Mr. Antonios Drossos stressed that the core issue in the Net Neutrality debate is the price of open internet access. In fact, the question that needs to be answered is: "*Do we want competitive internet access in Europe or do we want telcos' vertically discriminated (zero-rated) video and cloud services*"? With this question in mind, Mr. Drossos elaborated on the notion of Net Neutrality and specialized services provided by mobile operators.

Net Neutrality is about safeguarding open, non-discriminatory internet access based on three core elements:

- No application/service technical discrimination: e.g. blocking, throttling, fast lanes or any other form of prioritization or technical restriction that has a similar effect.
- No application/service price discrimination: e.g. zero-rating, sponsored data, differential pricing based on bundling or any other form of price discrimination that has a similar effect.
- Non-discriminatory network management: application-/service-agnostic and fully transparent.

Specialized services encompass all non-internet access services offered by telecommunications and mobile operators (e.g. IPTV, VoLTE, SMS, connected car, tele-medicine, etc.).

In the context of Net Neutrality, mobile operators should be allowed to provide specialized services but not at the expense of internet access services. More specifically, mobile operators should be restricted from collectively starving mobile internet access capacity by allocating the majority of the licensed public radio spectrum capacities to specialized services. This way, we can ensure that such services are not employed as means to undermine the provision of internet access services.

"In markets where mobile internet prices are expensive and volume caps are overly restricted, zero-rating is a game changer"

If we are to effectively foster Net Neutrality, however, the diversity of volume caps across the EU-28 must also be addressed. For instance, Finland has the lowest mobile internet GB prices; the highest consumption per capita; the highest penetration; and the second fastest speeds among EU-28 and OECD markets. At the same time all of its three main mobile operators are profitable. It is evident that there is not an issue of Net Neutrality in Finland as there in little to no zero-rating and consumers have nearly unlimited internet access at their disposal. In contrast, on an EU-wide level, a profoundly huge difference exists in terms of mobile internet prices. For example, additional mobile internet access volume in Greece can cost as high as €16.89 per GB while in Finland only €0.17. In other words, it costs almost 100 times more to buy additional mobile internet access volume in Greece than in Finland. Considering that a substantial percent of all internet access is realized through mobile networks the question arises: *"When will the EC start measuring mobile internet prices in Europe"*?

In markets where mobile internet prices are expensive and volume caps are overly restricted, zero-rating is a game changer. In October 2014 the Digital Fuel Monitor tracked and reported 92 zero-rated mobile services provided by mobile operators in OECD countries. Overall, zero-rated services are anti-competitive as they restrict the consumer's choice and

place competing services at a disadvantage. In particular, the flip-side of zero-rating is that due to restricted volume caps it severely restricts the usability of all non-zero-rated services which get throttled as soon as consumers deplete their artificially low volume caps. For instance, consumers in Finland can watch as much Netflix in

"If Net Neutrality rules are to be useful, they have to ban price discrimination such as zero-rating"

their fixed programme connection as in their mobile because it is affordable. However, in other markets of Europe where mobile operators have launched their own zero-rated video services and/or film stores consumers cannot actually watch other alternatives beyond their volume cap as additional mobile internet volume is too expensive. In consequence, as consumers who want to purchase more GBs cannot afford to do so, mobile operators are actually losing potential revenues. If this practice is allowed to continue then mobile operators are likely to favor their own zero-rated services leading to the provision of unfair competion to services offered by other parties.

It is straightforward that mobile operators have a fundamental conflict of interest in selling both open internet access and their own or their selected partners' online video and cloud services. This is because open mobile internet access to consumers needs to be offered at an affordable price for consumers to use. Restricting open mobile internet access (by setting low volume caps), however, would enhance the appeal of their own zero-rated services. With this in mind, it becomes clear that banning zero-rating can lead to lower mobile internet access prices as many past market practices have also shown (e.g. KPN in the Netherlands doubled the volume allowance in mobile internet keeping the prices unchanged with the aim of allowing their customers to enjoy free video). Therefore, if Net Neutrality rules are to be useful, they have to ban price discrimination such as zero-rating.

Still, the US Federal Communications Commission (FCC) on 26th February 2015 adopted rules that do not outright ban zero-rating and other forms of price discrimination. Indeed, zero-rating is not included in FCC's three Bright Line Rules (No blocking, no throttling and no paid-prioritization, i.e. to favor 3rd party internet traffic for a fee or prioritizing own content and services). The FCC plans to deal with zero-rating under the general Open Internet Conduct Standard on a case by case basis, if and when complaints are filled. Senior officials of the FCC, stated that, at the moment, they do not consider zero-rating of a mobile operator's own or affiliate content as acceptable. The same applies to zero-rating of third party apps for a fee. However, zero-rating third party applications or application classes (e.g. the music streaming service of T-Mobile in the US)

without a fee may be acceptable as it is non-discriminatory. At the same time in Europe, ten Member States put forward a Net Neutrality proposal that, if adopted, would ban harmful price discrimination practices such as zero-rating. The proposal, however, is fiercely opposed by big EU member states and their dominant telecommunications groups.

The allocation of the licensed public radio spectrum between internet access services and specialized services is a crucial issue for telecommunications operators. Operators can offer internet access as well as specialized services across this spectrum. The question is, however, how much capacity should be dedicated to open internet access and accordingly, how much to specialized services?
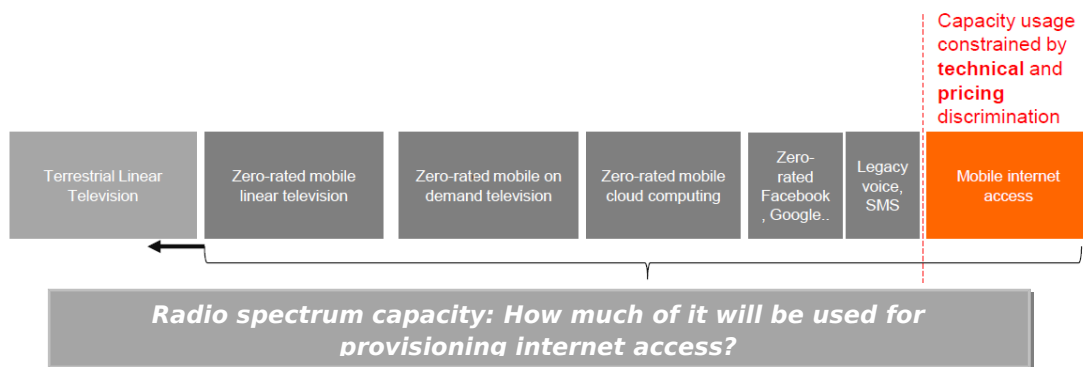
The Parliament attempted to address this question in 2014 by allocating the priority to open internet access over specialized services. However, this is not enough. It would be better if specialized services are provided over a dedicated frequency as this way they would not pose any interference to open internet access. Indeed, new specialized services should be provisioned over new dedicated frequency bands. For instance, new specialized services such as tele-health services and connect cars could be allocated a dedicated radio spectrum thus eliminating any discrimination issues whatsoever. Conversely, legacy specialized services (e.g. mobile voice and SMS) should be provisioned, under strict conditions, over dedicated blocks of the currently assigned mobile licensed bands.

In conclusion, price discrimination (e.g. zero-rating), if allowed to persist, will erect a new insurmountable barrier to the EU's Digital Single Market. The suggestion by the Presidency of the EU Council to omit the potentially anti-competitive practice of price discrimination from the scope of Net Neutrality regulation and instead, allow Member State legislative discretion will balkanize internet access and prevent the creation of a European Digital Single Market by creating new service-specific monopolies.

Mr. Kevin O'Brien highlighted that regulating Net Neutrality at pan-European level is quite a challenging task due to the great diversity that

exists in terms of views and opinions across EU Member States. In the existing framework, regulators can implement local traffic management monitoring, look for examples where they think that the spirit of the framework has been breached and ultimately determine ways to intervene. This approach, however, is based on a country-specific basis and in result, produces the great differences that are observed across Europe.

In spite of its challenging nature, regulating Net Neutrality is of paramount importance as it addresses the future of Europe rather than the present. It is the way to gain a foothold that will fundamentally change the open internet experience and thus we should act now. As a result, Net neutrality has in recent years become a prominent area of interest for BEREC, the Body of European Regulators for Electronic Communications, which is composed of high level representatives of the relevant National Regulatory Authorities (NRAs) in each EU Member State. A lot of work has been done by BEREC through its expert working groups on a variety of issues that are enveloped in the Net Neutrality debate. They have developed a number of frameworks for quality and traffic management monitoring, exploring in detail transparency and as well as competition issues including competition pressures and the incentives of both network operators and OTT market players in terms of content and applications. Some indicative findings that have resulted from the work of BEREC over the past few years are:

- Monitoring of traffic management should happen at Member State level.
  There is also a great probability that national regulators will have to introduce minimum Quality of Service (QoS) standards. Still, Many Member States have yet to begin discussing Net Neutrality as it has not come forth to them as an issue.
- There is plenty of evidence (e.g. based on questionnaire-based surveys) indicating occasions of VoIP blocking and p2p file sharing being throttled or prevented as well as occasions where telecommunications operators have prevented certain services from being made available.
- The more the consumer is informed the more he/she is empowered. In this respect, 3rd party analysis can inform consumers and help them choose products in cases where Net Neutrality issues may be emerging. In a competitive market, practices that are not within the interest of the consumer should be driven away.
- Net Neutrality becomes even more important in markets that can be characterized as oligopolies. Free open internet access has to be a cornerstone in Europe's Digital Strategy policies.

BEREC is currently engaging with various European institutions on matters regarding the Connected Continent legislative package. At the same time,

among others, they are also: conducting a feasibility study on opt-in quality monitoring system for Europe; working on ecosystem dynamics with a focus on the demand side investigating the competitive pressures caused by consumer demand and what these mean for the future in terms of Net Neutrality issues; and running a traffic management monitoring investigation. With respect to its engagement with European legislators, the key point that BEREC is currently making to the Council, is to ensure good quality and clear definitions. This is because as a regulator the worst thing to have is loopholes and in particular legislation that seems to aspire to protect the consumer in a certain way but when implementing it, one might either find that it is not clear enough to ensure court protection or even that it is written is such a way that telecommunications operators may circumvent the legislation from the very start. Along these lines, BEREC is providing comments to the Council's Net Neutrality proposal based on their combined view of how their approach can be improved.

Mr. O'Brien concluded by stressing two important issues:

- Even though transparency to consumers should be the aim of every regulator, at the moment it does not appear to exist on a sufficient degree.

"Regulators need […] tools that are clearly defined and can be effectively implemented in practice."

- Regulators need potent tools. This means tools that are clearly defined and can be effectively implemented in practice. Determining clear definitions, however, might not be an easy task due to problems such as linguistic differences and may result on additional time requirements. Policy makers need to devote enough time and to provide regulators with tools that can be implemented and have proper enforcement power.

Mr. Frode Sørensen provided a quick overview of the Norwegian perspective on Net Neutrality as regulated by Nkom, the Norwegian Communications Authority. Nkom adopted a co-regulatory approach and launched the Norwegian guidelines on Net Neutrality in 2009 which is now the longest running Net Neutrality regime in Europe. Co-regulation is an approach in which the regulator co-develops guidelines along with the industry and thus goes beyond the self-regulatory approach that typically focuses on transparency issues only.

The co-regulatory approach that was adopted in Norway produced guidelines that are comparable to the European Parliament's decision in

2014. In addition to addressing transparency issues, the Norwegian guidelines also allow for specialized services. Furthermore, the rules are clearly prescribing non-blocking and non-throttling as well as criteria for reasonable traffic management. A comparison between the European approach to Net Neutrality and the respective FCC rules in the US is provided in the table that follows.

	Europe	United States
No blocking	X	X
No throttling	X	X
No prioritization		X
Specialized Services	X	X
Ban zero-rating		Case by case
IP interconnect		Case by case

The European and US approaches to blocking, throttling and specialized services are rather similar. However, the FCC has included prioritization aspects that have

"End-Users should get to decide how they would like to use their IAS"

not been addressed by European policy makers yet. Moreover, banning zero-rating has been explicitly included the FCC rules along with some aspects concerning IP interconnecting that are to be approached and examined on a case by case basis.

Specialized services introduce an extensive exception from Net Neutrality. For instance, in the Norwegian guidelines of 2009 operators were provided with an opening to launch and provide such services that do not need to adhere to Net Neutrality rules. However, in order to create this opening and at the same time protect Net Neutrality, specialized services must be (virtually or physically) separated from Internet Access Services (IAS) at the network layer and must not be provided at the expense of IAS.

There have been quite diverging opinions across Europe regarding the need to protect specialized services. However, specialized services utilize built-in QoS mechanisms, they should therefore not need protection against IAS. It is in fact the other way round - IAS needs protection against specialized services.

The provision of application-agnostic traffic management allows ways for operators to differentiate their service offers without breaching Net Neutrality. In particular, differentiating service offers based on access speed or data volume is not considered as a violation of Net Neutrality as long as all applications are treated equally. And the other way round, any differentiation based on specific content or applications would constitute a

breach of Net Neutrality. The same principle applies in the case of zero-rating as well, where specific content or applications are favored based on the choice of the operators themselves instead of the end-users. However, in the Norwegian point of view it is end-users that should decide how they would like to use their IAS.

It is also possible for telecommunications operators to have an application-agnostic QoS-architecture where the end-user is in control of this quality function, e.g. as proposed by Barbara van Schewick. However, this particular idea has not been included in neither the US nor the EU Net Neutrality regulation, but it is definitely a possibility that should be explored in the future.

Mr. Sørensen concluded his presentation by pondering on the difficulty to reach an agreement on the Net Neutrality debate: "*Is it because we do not understand the value of the internet or is it because we do not understand to a sufficient extent how the internet works*"? When attempting to answer this question, one should keep in mind that:

- The Internet is different from traditional telecommunication.
- Reverse engineering telecoms into IP can hardly be called innovation.
- Internet applications are decoupled from the underlying network, which is completely different from specialized services that are typically vertically integrated.
- The internet provides global connectivity and its value is adversely affected in case of blocking or throttling of on-line applications and services. Therefore we should avoid fragmenting the internet through application-specific service differentiation.
- There is a need for a pan-European approach to Net Neutrality so as to avoid having divergent policies adopted across European countries.

Mr. Jens-Henrik Jeppesen introduced participants to the Center for Democracy and Technology (CDT), a US-based organization with an affiliated office in Brussels that has been supporting Net Neutrality on both sides of the Atlantic. He then stressed the importance of Net Neutrality by quoting Tom Wheeler, chairman of the FCC: "*Neither governments not corporations should interfere with what we as end-users choose to access on the internet*". This is the fundamental concept that should characterize Net Neutrality law on both sides of the Atlantic with the aim to ensure an open internet that will serve as a limitless innovation platform.

In this respect, the direction of the FCC vote in the US as well as the corresponding draft order were very encouraging. It was undoubtedly a milestone decision but the efforts to protect the open internet did not end there. The Congress has decided not to counter the FCC but there is a real possibility that they will try to de-fund its enforcement activities. In particular, they will attempt to put forward a legislation that will make it

really difficult for the FCC to actually enforce an open internet decision. Moreover, there are also several cases of US companies that have expressed their intention to challenge the decisions of the FCC in court. It is evident that this is an ongoing battle. Similarly, when the proposal of the EC came out in 2013, it required a lot of further strengthening. The Parliament's amendments aimed at tightening both the definitions and the language were very effective and now the 'battle' continues with the text of the Council's proposal on protecting the open internet. Indeed, there are still many open issues and definitions that need strengthening as well as language that needs to be improved.

In fact, a close look at the Council's text reveals that price discrimination and zero-rating have been major topics of discussion in the Council Working Group. The circle that they tried to square is the problem caused by a number of countries that would not agree to address price discrimination in the current proposal. Despite their efforts, the road towards the resolution of this problem is still not entirely clear as it is uncertain whether the current text can provide regulators with enough power to effectively address commercial practices that severely limit the freedom of users to choose. Furthermore, another issue that emerges from the Council text regards the many references of terms such as "preferred" and "user preferences". Such references may be quite dangerous in the sense that, in practice, more often than not consumers do not really get to express a lot of their preferences to Internet Service Providers (ISPs). Instead, consumers typically have only a limited amount of services made available to them. Therefore, special attention must be paid to not allow specialized services in through the back door by e.g. having users tick a box that can serve as a tacit acceptance or expression of preference which the ISP can then use to prioritize certain traffic over others. Finally, the disappearance of specialized services from the Council text is a rather interesting development that sparks an intriguing debate: "*Is it possible to make the Council's text robust and meaningful even without a definition of specialized services*"?

"It is uncertain whether the current text (of the Council) can provide regulators with enough power to effectively address current commercial practices that severely limit the freedom of users to choose"

Considering the amount and intensity of opposition against any form of open internet and Net Neutrality rule in EU legislation, the progress that has been made so far is rather positively surprising.

Discussion

Question: *Many support that there is still much work to be done in order to improve and strengthen the text of the Council's proposal. What is it exactly that we should expect to see changed?*

What definitely needs to be improved are the definitions included in the text, many of which are interrelated. For instance, if there are provisions on how Net Neutrality should be preserved and these include the restriction of specialized services, there should be clear texts on both to ensure that they are clearly defined. The ambivalence, however, in the current text of the Council is rather concerning. If the text is interpretable in many different ways then what we typically see in practice is that the closest common denominator is sought by those who stand to benefit (e.g. those that want to preserve their gatekeeper position in the market or those that want to strike special deals for zero-rating, etc.). In order to avoid this outcome, what the Parliament can and should do now is make their voices heard.

The current Parliament is keen to achieve a clear definition of Net Neutrality in the Council's text as evidenced by several statements made in various contexts (e.g. in debates, conventions, etc.). The effort to improve the text will continue once Council members crystallize their position. In the meantime, however, the fact that the process is moving so slow in addition to the fact that the Council's proposal is not forward-looking make for an unbalanced debate that must be changed.

Europe is already witnessing the problems caused by the lack of Net Neutrality in the present. If we do not address them now the future will not see an EU that encourages innovation for the creation of new jobs and economic growth towards a Digital Single Market.

Question: *There have been arguments made by representatives of telecommunication operators that Net Neutrality can have adverse effects on the quality of their provided services and consequently on European consumers. Is framing the debate in this manner one of the problems that Europe has to face in the process of passing a Net Neutrality law?*

Such statements are not useful at all. It is entirely possible to ensure QoS in an application-agnostic way and telecommunication operators are already aware of this. In fact, there are such practices in place at the moment. For example many telecommunications providers have VIP customers that in times of traffic congestion are prioritized over normal customers. This end-user type of discrimination can be acceptable as it is not price-based discrimination.

However, price discrimination is key if we want to prevent specialized services from undermining the capacity of internet access based on the current proposal of the Council. This is because if additional internet

access volume (i.e. GBs) is too expensive to buy then automatically the volume capacity is allocated to specialized services. Therefore, the current proposal of the Council will not be successful unless it addresses issues that concern internet speed and volume packages.

Question: *The timing that the Council has chosen to advance its Net Neutrality legislation appears to imply that Europe is following the lead of the US. Is this the case or is it really just a coincidence?*

The truth is that the Parliament has already been working on this matter for years. Therefore, the premise that Europe is following the lead of the US does not hold any actual meaning. What would be meaningful, however, is to explore ways that the EU and the US could collaborate to follow the same directions towards Net Neutrality. Of course, the first priority is to ensure that Europe is heading towards the right direction and this is not the US direction, it is the Net Neutrality direction. From there, the next step could be to ensure that Net Neutrality is nurtured at global scale even at developing countries. However, in developing countries it is not so much of a question of having open or neutral internet but more about whether there is access to anything at all. Therefore, before discussing about Net Neutrality in developing countries the entirely different circumstances that apply there must be first taken into account.

Question: *What do we need to specifically change in the Council's text to make it useful for countering the type of practices that we are seeing all over the European marketplace with respect to price discrimination?*

The Council's document is generic and unclear which makes it rather difficult to be used as an effective regulatory tool to counter these practices. When compared to the US, the problem in the EU lies within the great diversity among the views of Member States and thus it might prove to be challenging to achieve a common ground on Net Neutrality. As such, a principal concern regarding the continuation of the legislative process is related to how clear the definitions are, especially considering that specialized services are not explicitly mentioned in the Council's current proposal. If the text is not clear enough specialized services will actually end up being provided in the expense of internet access services inescapably leading to internet traffic prioritization.

In order to achieve a Single Digital Market we first need to achieve a Single Telecom Market. European legislators are fighting hard to resolve terminating monopolies in mobile services and there has been much progress in this respect. However, the vertical integration of mobile operators can lead to a new type of terminating monopoly that is created when they price discriminate a menu of service applications. For example, if a customer of e.g. Mobistar that zero-rates Netflix wants to switch to another provider that does not zero-rate Netflix, he/she will not be able to transfer these services over. This new type of terminating monopoly can

manifest even within the national borders of a country amongst its different mobile operators once the customer signs up to price discriminated services that are not provided by another operator. Consequently, the only available option for a customer that wants to switch to another mobile operator is to leave the content and services of the previous operator behind. In essence, these practices balkanize the internet experience of end-users as they prevent them from having the same experience in another operator.

Question: *Would Net Neutrality be required in a more competitive market?*

There is a strong interrelation between competition and Net Neutrality. Unfortunately, a closer look at current commercial practices reveals a severe lack of competition as well as many types of discrimination that restrict the consumers' freedom of choice. Europe has to ensure that the principle of fair and equal competition is upheld with whatever means necessary including Net Neutrality rules that are clear as well as anti-trust and other measures. Furthermore, competition helps strengthen the Net Neutrality case. The more telecommunications players, the greater the possibility will be that one or more of them will offer open and neutral access.

Question: *Will the initiative of the Netherlands to enshrine Net Neutrality by law affect the development and adoption of a Net Neutrality legislation by Member States at pan-European level.*

The adoption and enforcement of a common Net Neutrality law across the EU would be ideal. However, this will never be possible without strong leadership. In this respect, Dutch legislators were perfectly legitimate to take the lead and address the concerning practices that were identified in their market. In fact, it is rather disappointing that while there are similar practices in other Member States, the leadership of these governments has yet to act. Strong leadership such as in the case of Norway and of later initiatives in other EU countries has been instrumental for getting Europe to its current state with respect to Net Neutrality. Net Neutrality is becoming increasingly important for preserving a level playing field in Europe that fosters the creation a single telecom market and by extension a Digital Single Market. However, the difficulty of decision-making and the lack of willingness of Member States to go beyond of what they perceive as their own interest is really concerning not only for breeding the Digital Single Market but also for the direction that we want to go as a European single market.

At this decisive moment we have to work hard to get Net Neutrality right at the present as to pave the way for the crucial developments in the future.

Question: *Will the decision of the US with respect to the FCC's Open Internet rules have any effect on the European stance on Net Neutrality?*

The decisions taken in the US will continue to play a role in the European Net Neutrality debate. As the internet is global and the discussion about net neutrality also tends to be global, the EU has to take into account developments that transpire in the US as well as other countries across the world. Net Neutrality is crucial for innovation as well as fundamental rights, both of which are central to Europe's future. The successful rollout of a Digital Single Market will not happen without an open, neutral internet. Hopefully, it is only a matter of time before Net Neutrality is enshrined by law in the EU as well as the US.

Conclusions

Net Neutrality is of grave importance for ensuring openness in the IT market but also for innovation, fundamental rights and the future of Europe and its Digital Economy. Europe is faced with significant challenges with regard to Net Neutrality; the prevalence of incidents of Net Neutrality breaches (e.g. zero-rating) is unfortunately very real. Good quality legislation and clear, transparent definitions are needed today especially to ensure the future, yet regulating Net Neutrality at EU level has proven to be notoriously hard.

In April 2014, Europe took a decisive step towards safeguarding an open internet through a promising vote at the European Parliament in favor of Net Neutrality. However, almost a year later, the proposal of the Council of the EU appears to be diverging from this path. Developments in the United States are notably more encouraging. The comparison between the EU and the US approaches to Net Neutrality suggests some crucial differences of perspectives (e.g. in addressing price discrimination practices). In contrast to the US, the Net Neutrality debate in the EU is characterized by the wide diversity of views among its Member States. Many of the Member State voices echo conflicting interests while others do not recognize Net Neutrality as a priority yet - making it hard to find common ground.

Significant effort is still required to strengthen the proposal of the Council of Europe and align it with the principles of Net Neutrality. Regulators require more transparency and efficient tools (e.g. monitoring tools) that can be implemented and enforced in practice ensuring appropriate court protection for European consumers. The definitions (elaborated within the proposal) are still not clear enough and in many parts its language needs tightening so as to leave no space for potential loopholes.

There are examples that the EU can benefit from - from the Dutch and Norwegian Net Neutrality approaches, to the rules of the Federal Communications Commission in the US, positive ideas and evidence are not rare. But we should be prepared for a long struggle; Net Neutrality will not be decided over one positive milestone. At this decisive turning point, leadership is absolutely essential to steer the discussion clear from narrow national interest perceptions and to fully realize the real stakes in question. And make no mistake - what is at stake here is the very heart of our European digital economy and our core, indisputable democratic rights and values.

Short Speaker Bios

Marietje Schaake - *MEP, ALDE-Group*

Marietje Schaake (@marietjeschaake) has served as a Member of the European Parliament from the Netherlands since 2009 with the European liberal group (ALDE). She serves on the International Trade committee, the committee on Foreign Affairs, and the subcommittee on Human Rights. She is the founder of the European Parliament Intergroup on the Digital Agenda for Europe. She is Vice-President of the US Delegation and serves on the Iran Delegation.
Marietje has pushed for completing Europe's digital single market and copyright reform. She is strongly committed to an open internet in discussions about internet governance and digital (human) rights. Marietje is a Commissioner on the Global Commission on Internet Governance.

Antonios Drossos - *Managing Partner, Rewheel*

Rewheel is a Helsinki based independent strategic advisory firm that specializes in mobile data profitability, telecom competition and pro-competitive regulatory policies. Rewheel established and operates the Digital Fuel Monitor service. Digital Fuel Monitor tracks and reports the competitiveness of mobile internet (mobile telecom markets) in EU28 & OECD. Digital Fuel Monitor measures the price of open mobile internet access, roaming prices, end-user perceived speeds, consumption, penetration and last but not least vertically integrated price discriminated zero-rated services.

Kevin O'Brien *- Vice-Chair of BEREC, Chair of ComReg, Ireland*

Kevin O'Brien was appointed as Commissioner in ComReg, the Irish communications regulator, in November 2011. Prior to joining ComReg Mr O'Brien held a number of senior management positions within the Irish Civil Service, having responsibilities at different stages for Energy, Broadcasting and Communications policies. He also worked in the Irish Department of Foreign Affairs and the Irish Revenue.

Frode Sørensen *- Senior Adviser, Norwegian Communications Authority (Nkom)*

Norway has the longest running net neutrality regime in Europe, using a co-regulatory approach. Frode Sørensen has been leading the development of the net neutrality policy at Nkom since 2007 and is an architect behind the Norwegian guidelines for net neutrality published in 2009. He is also chairing BEREC Net Neutrality Expert Working Group since it was established in 2010.

Jens-Henrik Jeppesen - Representative and Director of European Affairs, Center for Democracy & Technology

For the past 15 years, Jens has been engaged in European and international public policy in various organisations, focusing on digital economy and technology policy. Currently he is working in the Center for Democracy & Technology, "a champion of global online civil liberties and human rights, driving policy outcomes that keep the Internet open, innovative, and free".