

RESPONSE TO THE PUBLIC CONSULTATION ON THE OPEN INTERNET AND NET NEUTRALITY

1) BACKGROUND

A) THE END-TO-END PRINCIPLE

The Internet architecture follows the end-to-end principle.

Data flowing through the Internet are codified via a stack of layered protocols to turn the user's information into electrical signals that can be transmitted over a wire (the physical connection to the Internet)

Once the electrical signal reaches the user in the other end, the inverse conversion through the stack of layered protocols takes place, so the information can be processed by the computer -or any other electronic communication device you consider- in that end of the network.

The mission of the different ISPs between the origin and destination of the communication is to get both ends in touch, by appropriately routing data between them.

So, intelligence is not in the network (that only deals with transmitting electrical signals from an origin to a destination, disregard of their meaning) but in the ends connected to it. This happens this way even in the “Cloud Computing”, where some mistakenly say that intelligence “is now in the network”, when it actually happens the same thing but in different points connected to the network.

B) IMPARTIALITY OF COMMUNICATIONS

The term “Net Neutrality” is something relatively new that has emerged lately in the Internet; however, the idea of a neutrality in communications is way older, going back to the 19th century and the creation of the U.S. telegraphic network between the East and the West Coast. According to the law governing these communications (1860):

“messages received from any individual, company, or corporation, or from any telegraph lines connecting with this line at either of its termini, shall be impartially transmitted in the order of their reception, excepting that the dispatches of the government shall have priority...”

(An act to facilitate communication between the Atlantic and Pacific states by electric telegraph, June 16, 1860)

This approach of having no possibility to pay in order to get a higher priority is what has caused the rise of telecommunications in our society, from the telegraph and up to the Internet age. Without that condition, a world fully connected like today's would have been unthinkable.

Net Neutrality means that those signals must be processed in order, as they reach the different ISPs engaged in the communication, without neither nothing nor nobody can alter that order.

2) THE CURRENT SCENARIO

A) THE FLAT RATE AND NET NEUTRALITY

Ten years ago, there was no flat rate in Spain. From the user's point of view, that meant only a few could afford such a luxury as connecting to the Internet before 10PM, the time of day where a reduced rate started. At that hour, everybody connected simultaneously to the Net, and the speed of the connection was accordingly and significantly reduced due to the obvious line congestion. Once the reduced rate time expired, users massively disconnected their computers again, and that happened day after day.

Many different citizen mobilizations with campaigns like “we keep watching the clock” forced the spanish dominant operator (the one and only by then) giving in to the set up of a flat rate, that is, a data rate which did not depend neither on the time of the connection nor on the volume of the transmitted information.

This flat rate was a social conquest, which allowed thousands of people to afford the access to the Internet and thus, the access to the Knowledge and Information Society. But it was not only a social conquest; it also represented an enormous capital injection for the dominant operator's coffers, who saw an spectacular rise in its number of clients, and consequently to its income. So, the flat rate is something that has been beneficial for both the operators and their clients. Can some of you, dear Commissioners, imagine that we would go back to that scenario in 2010? Can you imagine that people, starting tomorrow, could only connect to the Internet in very specific hours of day or night and they were obliged (as they could not afford it) to be disconnected during the rest of the day? Can any of you now imagine a world not connected to the Net around the clock?

Well, right now the flat rate it's being put in question in Spain; it is a fact that there is no flat rate at all in mobile communications so, the flat rate ISPs want to remove is the only one that exists, that is, the landline flat rate. And, to put in question the flat rate is to put in question Net Neutrality itself.

In mobile networks, ISPs are charging accordingly to the volume of information being transmitted. If you only surf the Net without exceeding a certain data limit, there is no problem. But this limit is easily exceeded when you use VoIP and/or Tethering, or when you try to watch a video on-line; in this case, some ISPs automatically switch you to the premium rate. (Some other ISPs even forbid the use of VoIP and/or Tethering in their mobile networks). So, not knowing how much would they pay monthly and fearing to find a huge bill the next month, users avoid using these services. Hence, attacking the flat rate for electronic communications also implies to attack Net Neutrality, since users cannot access perfectly legal applications and/or services of their choice.

B) THE PRETENDED “SCARCITY OF RESOURCES” IN MOBILE NETWORKS

Another bogus argument used by ISPs to remove the flat rate is that a kind of “mobile network congestion” is taking place, so this situation is no longer sustainable. So, on one hand, we have the ISPs saying that an intensive use of mobile networks is not possible, while on the other hand they are offering special rates plans for massive downloads of music and video content managed by themselves.

Hence, that resource scarcity does not really exist. They are using that argument as an excuse for them to be allowed to remove the flat rate without somebody asking them too many questions, thus being able to make more money for the very same service.

Net Neutrality must be a principle guaranteed by law, with the only exception of the specific moments when there is a real congestion in the networks. For instance, nobody complains when his or her New Year's Eve SMS do not reach their destination. In such a situation, everybody understands that too many people are simultaneously sending such SMS, thus causing a real network congestion.

However, when these congestions become frequent, without a justified reason, the ISP should invest in improving the network capacity, since the network will have rendered obsolete.

Main argument we are now hearing to justify the end of Net Neutrality and the end of the Flat Rate is that the current Internet model is no longer sustainable. It seems the big telecom companies do not make enough(?) money yet. However, you simply have to take a look at their balance sheets, dear Commissioners, trying to find their losses; it will prove as an impossible mission to all of you.

Reality is that these undertakings should reinvest their profits to improve and expand the telecommunication infrastructures, since they are the backbone of the Knowledge and Information Society. However, they are actually using those profits to instead go to the market and buy another enterprises.

Besides, their business is communication networks and they are lacking their compromise to improve communications to instead get into the contents business, completely alien to them. Telecommunication enterprises should be devoted to networks and leave contents to other enterprises.

C) THE FALLACIOUS ARGUMENT OF “GOOGLE USES OUR NETWORKS SO, THEY MUST PAY US FOR THAT”

It has also become obvious the will of the ISPs to make more and more money by means of any excuse, no matter how absurd does it seem. The last one we had to put up with in Spain is that of “Google/YouTube send their information trough our networks, monopolizing them and, hence, they must pay us for that”, recently used by Telefonica's CEO.

Statements like this one, from an ISP's CEO, are certainly shameful, since any usual citizen discovers the fallacy as soon as they hear it. The ones paying the ISPs are their subscribers. Whether these subscribers decide to use YouTube, Daily Motion or any other video service is up to them. They are the applications or services of their choice, like any other could be. And it is not Google using their networks, but the ISP's subscribers using what they have paid for, and deciding to use Google or whichever service of their choice.

And statements like this prove that the E.U. must put certain ISPs in its place once and for all, to avoid that the abuses being planned nowadays, will finally be carried out. If the E.U. really wants to be the "Europe of the citizens" -as they repeat time and again- , the E.U. must act now to prove it, by protecting Net Neutrality, Flat Rate and the concept of Universal Service for the Internet by law; since all of them, although different concepts, are closely related. And that protection, as already happened with the telegraphic service in the U.S, will determine the success or failure of the Knowledge and Information Society in Europe.

On the contrary, allowing attacks to Net Neutrality like the ones some ISPs are now planning will have the only effect of turning the Internet into a walled garden and the sell of it in a kind of wrapped packages, also turning the Internet in a kind of pay per view TV like any other, where only the wealthiest will be able to access more information, to the detrimental of the poorest citizens, when these poorest citizens are precisely the ones who need more help, support and ease to join the Knowledge and Information Society.

We must remind that the Universal Declaration of Human Rights clearly states in its Article 27 that "Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits."

And, above all, we should also remind that this kind of Declarations should not only be a set of nice words, nor should they be considered as if they are no worth the paper they are written on. Instead, they should be considered a guiding principle in the conduct of the European Union.

Finally, protecting Net Neutrality means to foster the prominence of citizenship. In a world where citizens are the ones increasingly creating contents (blogs, videos, etc) giving priority to big groups' pay per view contents necessarily implies taking it away from citizens, suffocating creativity in our society and, avoiding the creation of SMEs and the development of these entrepreneurs, who are the contributors to the success of the Internet and the creation of employment and wealth on a larger scale.

3) THE FUTURE

(Consequences of the end of Net Neutrality)

In a feasible scenario of prioritisation of services and applications, the following would likely occur:

A) REMOVAL OF COMPETITION

ISPs will prioritise the content providers with which they have signed agreements, probably exclusive ones. Imagine an ISP who has an exclusive agreement with content provider A. An European entrepreneur then creates an enterprise B to compete in the contents market. However, since the ISP (where data from B must go through) is prioritising data from A, subscribers from the new content provider B will perceive less quality in its contents, as well as problems in its reception; hence, these subscribers will end up opting for the content provider A, of which they perceive a better quality. So, although in theory the existence of another content providers is allowed, the practical effect will be that A's competition will have been completely removed.

B) THE INTERNET AS A WALLED GARDEN OF APPLICATIONS AND SERVICES

The basic user is offered a basic package of e-mail and search engine (of course, both of them belonging to the provider the ISP has signed an exclusive agreement with).

If this basic user wants to access another provider of e-mail and/or search engine, audio/video data, teleconferencing and/or VoIP, he or she is offered a higher rate. And if he or she wants to do everything we can do nowadays in the Internet, with no restriction at all, they will be offered the premium rate.

In a country like Spain, where most of the people live with low wages relative to prices, and they have to control the very last cent they spend monthly, the consequence of this behaviour will be obvious: A big part of the population will have to abandon the Internet we know today.

So, not only the ISPs but also the content providers will see their income significantly reduced, as well as their perspectives of getting new subscribers.

As for the users, they will go back to the preInternet age or they would connect to the Net in a very sporadic way. Suddenly, Knowledge and Information Society would collapse.

Since it is crystal clear that, in Spain, the only goal of most ISPs is making money at all costs, without offering a good service to subscribers at the same time (we have one of the most expensive and slowest ADSL of the whole E.U, that is, one of the worst ones) this strategy of selling the Internet as a range of gift wrapped packages has just one way to work:

If ISPs charge less to basic users (as they argue) it becomes evident that premium users should compensate for that difference. But premium users will be a few compared to the thousands that will not be able to afford that premium package. Hence, premium users will not be sufficient for ISPs to make more money. So, the only solution for this is that ISPs will keep charging basic users the same amount, give or take. Even if they charged half the current average price, they would be offering a minimum part of what we now have, so consumers would actually be paying more than they do now.

To sum up, the relative price we pay for the Internet access will be much more abusive than it is now, with only a few of the applications and services of our choice that we enjoy nowadays.

C) THE END OF INNOVATION

Imagine that an entrepreneur creates a certain application B, technically much better than an existing application A. If they would compete in the same circumstances, B would clearly win. However, an ISP is prioritising the application A, according to the exclusive agreement with the provider of the A application. As a consequence of this prioritisation, the perceived quality -not the actual one- of the application B leaves a lot to be desired and, consequently, application B fails.

All the know-how and the efforts put in improving technology has been suddenly reduced to nil by the simple fact that an ISP has a big -economic- interest that nobody puts “its” provider A in the shade.

All this is not science fiction but the logic consequence of allowing ISPs to prioritise the traffic that goes through their networks according to their own criteria. Not to mention the possible privacy violations that could take place if ISPs then decide to go one step beyond and examine the contents of the users' electronic communications to decide whether they must have a higher priority or not.

For all these reasons we consider that Net Neutrality, the Flat Rate and the Universal Service for the Access to the Internet must be protected and established by law as fundamental principles in the European Union.

Chile, one of the most prosperous countries in Latin America has already protected Net Neutrality by law. It seems that Barack H. Obama also wants to defend it. Will the European Union be the last one to do it, or will european people be a global model of what the Internet should be for a change? Does the E.U. prefer the repressive and outdated model of Sarkozy's and Zapatero's governments for the Internet? Or will the E.U. prefer the model of progress and development of Estonia, which has turned this country into the most advanced one in the E.U. regarding the development of electronic communications?

Now it depends on you.

RESPONSES TO THE QUESTIONNAIRE

Q1. Is there currently a problem of net neutrality and the openness of the internet in Europe? If so, illustrate with concrete examples. Where are the bottlenecks, if any? Is the problem such that it cannot be solved by the existing degree of competition in fixed and mobile access markets?

A:

Yes, specially -although not only- in the wireless field. Since the four main Spanish ISP are grouped in a body called RedTEL, competence cannot solve these problems since competence is non-existent in practice in our country.

It is perfectly well-known the policy of blocking fully lawful services such as Skype (VoIP) and P2P applications by wireless operators.

Q2: How might problems arise in future? Could these emerge in other parts of the internet value chain? What would the causes be?

A:

Problems will raise by allowing ISPs, that should only be devoted to infrastructures, to get involved in the contents and services business. This will inevitably lead to an Internet like a walled garden, where each ISP will boost their own services to the detriment of the competence's, or the ones produced by home users.

This is equivalent to allowing logistics enterprises to maintain the road network. Naturally, they would improve the most important roads for their distribution network and they would forget about the rest. In short, this only leads to the private interests taking priority over the public interests. And, we cannot afford these risks in something so sensitive and key for the development of Europe as the Internet is.

In fact, home users are systematically marginalized in broadband access, since -although it is clear that the 'A' in ADSL means asymmetric- the uplink capacity is clearly insufficient, thus hindering the contributions of individuals to the Net and the use -by SMEs- of such useful applications as videoconferencing; since the uplink of the broadband is so narrow, the Internet is mostly unidirectional in practice.

Q5: To what extent will net neutrality concerns be allayed by the provision of transparent information to end users, which distinguishes between managed services on the one hand and services offering access to the public internet on a “best efforts” basis, on the other?

A:

Information transparency has nothing to do with Net Neutrality, in our opinion. In case all the ISPs of a country agree (see question 1 above) on systematically violating it but they openly inform about it in their contracts, users will have no possibility to choose an operator that respects it; however, ISPs will be completely transparent regarding the conditions they offer.

Anyway, preoccupations on Net Neutrality will not be dispelled until contracts have a compulsory clause forcing the ISPs to treat all traffic equally. In that case, fail to comply would constitute breach of contract and should be strongly penalized by the E.U., not by the Member States, since in some cases there could be more or less close relations between the national governments and the operators, which would not “encourage” much to apply these fines.

On the other hand, Net Neutrality in practice means that the ISPs granting the access should be limited to offer a good service and to avoid messing with things that are no concern of them.

You just have to imagine the following reasoning:

an operator decides to offer its voice service at a higher price if the content of the call is a professional one. Hence, the ISP decides to charge less to voice communications of a personal type but, only if the call is not too long. The ISP argues that couples in love waste too much time talking on the phone and saturate their networks uselessly so, once that period is expired, the call will automatically be cut without the possibility of making another call until the following day or, the persons engaged in that conversation will be charged an extra fee.

Can any of the Commissioners honestly answer what would they think of such a practice? Well, that situation that sounds really weird is precisely what many ISPs want to make to the Internet.

That is, to unilaterally decide if the content of the electronic communication is more or less important, and get paid more or less according to their own criteria. ISPs should be limited to provide the bandwidth, because whatever users want to do with that bandwidth, within the law, is none of the ISPs' business.

Q6: Should the principles governing traffic management be the same for fixed and mobile networks?

A: We think this is easy to answer with another question: Is the Internet a different one depending on that you access it via a wireless device or via a landline? Of course not, hence the principles regulating both should be the same in both cases. And these principles must be that of no discrimination of the resources being accessed in the Internet, and to only allow traffic management in the sporadic cases (not recurring ones) where a real network congestion is taking place.

Moreover, from the point of view of the user the frontier between the use of landlines and wireless is more and more fuzzy, both for personal and professional uses. Users want to do the same in landlines as well as with their wireless access. What do we want connectivity in a mobile device for, if we cannot use it in practice?

Q7: What other forms of prioritisation are taking place? Do content and application providers also try to prioritise their services? If so, how – and does this prioritisation affect other players in the value chain?

A: There is an ISP in Spain offering IPTV services over the same ADSL wire. The access uses to be a 10Mbps broadband, with the IPTV getting between 4 and 6Mbps reserved to work without interruptions, and the rest is left to the Internet access.

We have a reported instance of an user calling his ISP when his access stopped working; a while after reporting the problem (an hour or so) the IPTV service was restored, but the Internet access did not work until the following day. Since both services work over the same wire, the only possibility is that the ISP was prioritising his “star” IPTV service over the rest of the Internet access.

That is, it seems such prioritization practices related to the content are already taking place in Europe. And, it is worth remarking, that of course, nobody in technical support asked that particular user if he considered more important the access to the Internet or watching television in that moment. You only have to think that the affected user was a telecommuter to be aware of the seriousness of these behaviour.

Q8: In the case of managed services, should the same quality of service conditions and parameters be available to all content/application/online service providers which are in the same situation? May exclusive agreements between network operators and content/application/online service providers create problems for achieving that objective?

A: Obviously, there would be problems. With the resale of the Internet access, some operators can use the network of another operator by paying a certain amount of money. If the dominant operator blocks some contents/services/applications, then the operator that depends on it will not be able to offer them to its subscribers, being somehow enslaved to the dominant's desires.

Q9: If the objective referred to in Question 8 is retained, are additional measures needed to achieve it? If so, should such measures have a voluntary nature (such as, for example, an industry code of conduct) or a regulatory one?

A: Measures should obviously be of a regulatory nature, each and every of the conditions affecting citizens should be regulated to avoid they end up being harmed, we remind that governments should watch over the citizens' interests at their first goal, and not for the interests of undertakings and "friends".

Q10: Are the commercial arrangements that currently govern the provision of access to the internet adequate, in order to ensure that the internet remains open and that infrastructure investment is maintained? If not, how should they change?

A: They will not be the adequate until the respect for Net Neutrality, the establishment of an affordable Flat Rate and the consideration of Universal Service for the Internet Access are all guaranteed by European laws.

Q11: What instances could trigger intervention by national regulatory authorities in setting minimum quality of service requirements on an undertaking or undertakings providing public communications services?

A: For instance, in those cases (already happening) where the traffic is so deteriorated that the user, already exasperated, calls his/her ISP only to get the answer that the speed they are measuring at that moment is slightly over 10% of the contracted one and, as a consequence, they do not see there is a problem at all.

It is clearly abusive that NRAs only demand to the ISPs a minimum of a 10% of the contracted speed to consider that the service being rendered is good enough. We also have reported instances of an user calling his/her ISP because their Internet access was not working properly. Technical service went so far as to answer (cynically) that “speed was over that 10% so they did not see what the problem was”.

Anyone with a 3Mbps access can guess that any activity in the Internet turns almost impossible with a speed of 0,3Mbps, with the added frustration of technical support washing their hands of the problem. You just have to imagine what would happen if, as a consequence, the user would decide to only pay 10% of his/her monthly bill to understand the defenslessness in which telecommunication users find themselves.

Q12: How should quality of service requirements be determined, and how could they be monitored?

A: Just for a start, ensuring that the offered speed is ALWAYS the contracted one. Nobody can think of the person in charge of the petrol station telling a client he must pay the €70 in gasoline that he is asking for, but he or she will only get €15 because there is a very long queue and he must give petrol to everybody.

To be able to monitor this behaviour, a kind of Office of Citizen's Complaints should be created, in order to keep a record of the telecommunication users' complaints. Once the number of these complaints is abnormally high, this office should order the competent authorities to intervene in the problem.

Nowadays, telecommunication services are among the services registering the highest level of complaints in the spanish consumer associations; however, the situation has not shown any improvement since there is not a body (or it is inoperative, if it does exist at all) that put this in order for the operators to warrant a good service to citizens. Again, the role of the NRA should be reduced to the least expression. It makes no sense to talk about an european single market in an European Union, while the very same E.U. delegates its power to each Member State Authorities, as if these States were something separated from the Union.

Q13: In the case where NRAs find it necessary to intervene to impose minimum quality of service requirements, what form should they take, and to what extent should there be co-operation between NRAs to arrive at a common approach?

A: See question 12 above. In a joined Europe, it makes no sense to talk about NRA but to talk about ERA (European Regulatory Authorities)

Q15: Besides the traffic management issues discussed above, are there any other concerns affecting freedom of expression, media pluralism and cultural diversity on the internet? If so, what further measures would be needed to safeguard those values?

A: Yes, the thirst to control and spy each and every activity of each and every european citizen in the Internet. This way to act turns every european citizen in a kind of “a priori criminal”, who must be controlled as if citizens were enjoying a parole.

The added measure would just be to protect the privacy of users by preventing these practices of the ISPs, governments and corporations and imposing exemplary sanctions to those engaging in the spying of the electronic communications. Right after this habit of spying data, next logical step would be the control of what is allowed and what not (far beyond law) to pass through the Net and the logical consequence of censorship or even worse, self-censorship by users.

Europe cannot neither accept nor afford to become a surveillance society instead of a freedom society. As Benjamin Franklin once said: “They who can give up essential liberty to obtain a little temporary safety, deserve neither liberty nor safety”

This document is also endorsed by the following organizations and citizens' initiatives, which are representatives of civil society:



[Asociación Europea Pro Dominio Público \(European Public Domain \)](#)



[C.C.O.O. de Catalunya](#)



[Coordinadora Verde](#)



[Unión de Oficiales de la Guardia Civil](#)



[Asociación Española de Reprografía](#)



[Sindicato Andaluz de Ingenieros Informaticos](#)



[Colegio Profesional de Ingenieros Informaticos de Andalucía](#)



[Colegio Profesional de Ingenieros Técnicos Informáticos de Andalucía](#)



[Liga Española Pro-Derechos Humanos](#)

Red Sin Censura

[RSC \(Red Sin Censura \)](#)



[La eDemocracia y los Nuevos Derechos](#)