

The concept of net neutrality and the tension between public regulation and the private self-regulation of networks¹

JOAN BARATA

Vice dean and professor of communication law at the Blanquerna Communication Faculty, Universitat Ramon Llull

JoanBM3@blanquerna.url.edu

Abstract

Today, the concept of net neutrality has become one of the key aspects in any debate regarding the regulation of the internet and the content, services and applications it carries. Summarising considerably, this is a concept related to the guarantee of a certain level of openness in the functioning of the network on the internet and alludes to the way in which ISPs can (or can't) affect access or reciprocal communication via the internet between end users and suppliers of content, services and applications.

Keywords

Net neutrality, electronic communications, regulation, public interest, self-regulation..

Resum

El concepte de neutralitat de la xarxa s'ha convertit avui dia en un dels eixos de qualsevol debat sobre la regulació de la xarxa i els continguts, serveis i aplicacions que hi circulen. Per dir-ho d'una manera molt sintètica, es tracta d'un concepte vinculat a la garantia d'un cert nivell d'obertura en el funcionament de la xarxa a internet, i al·ludeix a la manera en què els ISP poden (o no) condicionar l'accés o la comunicació recíproca mitjançant internet entre usuaris finals i subministradors de continguts, serveis i aplicacions.

Paraules clau

Neutralitat de la xarxa, comunicacions electròniques, regulació, interès públic, autoregulació.

Introduction

Today the concept of *net neutrality* (NN) has become commonplace and one of the key aspects in any debate regarding the regulation of the internet and the content, services and applications it carries. In principle, it would seem that every time we refer to NN we are referring to a concept that has an agreed meaning among lawyers, economists and specialists in technology. However, the fact is that this is not necessarily the case. It's quite likely that, in any discussion dedicated to this area, the initial notion for each of the parties involved might be different, obviously affecting the analysis carried out. Consequently, the first question that needs to be answered in the NN debate is related to the meaning of the concept per se.

If we make an effort to take a step back from this and find a minimal, shared notion of NN that might be accepted by anyone involved in this debate, we could state, to begin with, that it is a concept related to the guarantee of a certain level of *openness* in the functioning of the network on the internet. In reality, and this is a conceptually important initial consideration, we would have to accept that the idea of neutrality would not be applied to networks seen as physical infrastructures but to the internet as a specific platform that allows access to services, content and applications. The concept of NN therefore affects the terms and conditions under which certain internet actors or intermediaries have the capacity to reach their ultimate destination, located at one of the ends of the aforemen-

tioned network. And this isn't just any term or condition but those which internet service providers (ISPs) have, at the same time, the technological capacity to influence. In short, the idea of NN refers to the way in which ISPs can (or can't) condition access to or reciprocal communication via the internet between end users and suppliers of content, services and applications.

It should be noted that it's difficult to find a network or distribution platform that is strictly neutral. It's evident that structural, technological and even economic elements influence any system of such characteristics, comprising a kind of *original sin* and therefore granting, at the outset, a greater capacity for intervention to some operators rather than others. We should note, for example, the debates regarding the rights of access, interconnection and local loop unbundling of fixed voice services, or the extreme case of railway networks. If this is the case, a strictly neutral view of how the internet works as a communication platform in the aforementioned terms would suppose that end users would be able to access absolutely any supplier at exactly identical speeds and levels of quality. However, a strictly neutral management of the network by ISPs would mean that any packet would have to be treated in the same way, irrespective of whether it was services with a high added value or merely a virus or spam. If we assume this starting point, any action by ISPs aimed at blocking viruses, spam or preventing network congestion would be seen as non-neutral and therefore contrary to the idea of net neutrality, as well as, for example, offering internet services based on providing a faster connection speed or greater

capacity for end users in exchange for paying a higher rate.

This strictly egalitarian view of NN, which was formulated at the beginning by Tim Wu, one of the first authors to deal with this issue, has been relatively detached from the current debate, although there are still unresolved controversial questions regarding this issue, such as the levels of connection quality offered to end users.²

In any case, and in an attempt to delimit some minimal defining elements, we can see how the idea of NN essentially influences the terms under which ISPs intervene in the exchanges and communication carried out between, on the one hand, end users and, on the other, operators using the internet platform to supply all kinds of services and content. If this is the case, a favourable attitude towards NN would involve understanding the need to guarantee that ISP intervention in this traffic does not unduly hinder these exchanges (either by prioritising certain suppliers over others or by blocking or hindering access to certain products or services). However, when is something undue obstruction, in other words, an abuse of the *natural* position of dominance that any ISP has over everything that circulates via the internet? Looking at the current debate, we can see that this abuse could occur, hypothetically, via the possible agreements between ISPs and suppliers of content or applications to prioritise their access by end users, or simply to decisions directly adopted by ISPs to prioritise those services that are particularly of interest in economic terms (such as the cases of vertical concentration). This is certainly the hard core of the NN debate

On the other hand, it's obvious that there would be other, non-neutral forms of managing the packets that circulate via the internet that would also present problems from the point of view of protecting a certain level of NN: for example, the situation whereby ISPs inspect and restrict certain content based clearly on *editorial* criteria, i.e. preferring content of a certain ideological bent over other content, blocking content that comes from certain countries, etc.

2. Net neutrality as part of the tension between self-regulation and regulation *per se*

Managing the internet, i.e. the conditions and speed of access to content, services and applications, as well as the technical features of the internet connection that allow for optimum use, are largely in the hands of ISPs. This is a fundamental starting point to correctly understand the rest of the elements in the debate regarding the regulatory approach to net neutrality. In other words, the public powers do not have the technical capacity to directly control or oversee what is happening on the internet, at least in terms of the issues mentioned.

From an economic and technological point of view, the internet could certainly self-regulate on the basis of agreements and, in short, the checks and balance that comprise the complex value chain on the internet as a distribution platform. Great economic value circulates on the internet via a large number of

intermediaries. And the truth is that that any of these intermediaries could obviously impose certain conditions or even offer special treatment in exchange for something or to benefit from specific economic interests. If we accept this system of the self-composition of interests, we also have to assume the definite risk of end users not being able to access the services, applications and content chosen under strictly equal conditions and on the basis of true freedom of decision, but that this would be in the hands of the different actors involved in the value chain and particularly, although not exclusively, ISPs. And I say not exclusively given that it is evident that other actors, such as large portals or search engines, obviously have the capacity to influence the terms under which a certain end user can access certain content or an application.

Certainly, it can be argued that any of the operators present on the network would presumably have the economic incentive to offer end users the widest range of content and services without any limitation and that, in the last instance, there will always be the guarantee of free competition, which must allow them to change provider. Notwithstanding this, and without prejudice to the difficulties this last element presents and which we cannot go into here, there is no evidence, as of today, that this incentive really exists or at least occurs in all cases. The presence of direct rivals, the need to avoid congestion in which certain interests are at a disadvantage, or even the *weak* position of certain new actors are factors that might play (and actually do play) a key role in the current cases of non-neutral management of networks. For example, look at the case of Comcast in the United States, where this cable company technically blocked audiovisual content via BitTorrent, taking into account that the company had its own subscriber content on offer, or the difficulties encountered today by any user of a mobile phone broadband network to use it to make free calls over a Skype type platform.

Consequently, if we accept as a feasible hypothesis (which seems reasonable) the fact that ISPs will not always, or necessarily, have the incentive to neutrally manage their networks, regulatory intervention *per se* can be seen as fundamental in order to guarantee this neutrality. Moreover, in terms of economic incentives, it is logical that those who have to invest heavily in networks in order to provide internet access services should then aspire to a certain amount of power regarding their management, in order to maximise the economic return from the technical capacities provided, as well as, in the ultimate instance, to obtain their *piece of the pie* regarding the economic value circulating via these networks.

At this point, several distinctions need to be made. Firstly, we must repeat that it's not just ISPs that can alter the management of the internet in accordance with a series of neutrality parameters. As has already been mentioned, large portals and search engines are, to some extent, a kind of essential hub in directing and redirecting internet traffic, on the basis of criteria and algorithms that are not understandable or transparent for end users. If this is the case, it is obvious that the intermediary role that corresponds to them is not at all irrelevant in terms

of *traffic regulation* and, therefore, constitutes an essential link in guaranteeing internet users full freedom of movement and choice. Nevertheless, the debate regarding the guarantee of certain principles in the area of these operators is still quite considerably eclipsed by that of NN *per se*.³ Secondly, we should also note that the subject in question is limited to a very specific area, namely that of access by end users to a wide range of content and applications without there being an unacceptable degree of discrimination or simply a blocking of certain parts. The question we must ask is whether the power of ISPs in access terms is the only area that is problematic in terms of the non-neutral management of the internet. By way of example, what if ISPs could *sell* relevant information regarding the functioning of the internet and user behaviour to third parties in order to optimise the use of a certain application to the detriment of others? Therefore, an analysis and a complete, detailed study of possible non-neutral and unacceptable behaviour by ISPs surely require a much broader understanding of how the internet works and its role and capacities. We must therefore be aware of the limitations of the current focus.

Thirdly, we should repeat that the NN debate is not only an economic issue located exclusively in the area of defending free market competition. As has been pointed out before, NN can also have an evident aspect of content control and, consequently, affect the fundamental rights of freedom of expression and of information. In other words, certain types of non-neutral conduct by ISPs (and not only these operators) can consist of *opening packets* transported in order to select the content that ultimately reaches the end consumer on the basis of politically motivated criteria, subject to certain limits of a sexual nature, types of language employed or even geographical and linguistic origin. It is evident that these cases are clearly related to the private censorship of content. If we accepted this practice, all expressive flows circulating on the internet would stop being subject, if applicable, to legal rules *per se*, placing the function of regulating free speech and the free circulation of information in the hands of network managers. A scenario, as you might suppose, that is absolutely undesirable in democratic terms.

Finally, we should also note that the regulatory response to the lack of net neutrality (in the terms under which the notion is described here), i.e. *public, external* regulation compared with the undesired effects of simple self-regulation operated between the different links in the value chain, has yet to be characterised in detail in any agreed manner. In other words, the fact that an agreement can be reached regarding the need to guarantee a certain level of openness and neutrality in how the internet supplies and accesses content, services and applications would not end the debate by itself, as we would still need to clearly identify the most suitable regulatory instruments to carry this out.

Although we can't go into such an important and extensive matter here either, we should note that, firstly, one of the initial questions to be asked is to what extent the current regulations regarding the right to competition (especially in terms of restrictions on abusing a dominant market position), as well as

in the area of protecting the fundamental rights of freedom of expression and of information, are enough to validate banning certain conducts on the internet, in accordance with what has been presented thus far. Another fundamental question to be discerned, essentially by lawyers, is related to the very legal nature of net neutrality: is it a right of any citizen that can be exercised against third parties with the same systems in order to guarantee it as with any other right? Or is it the beginning of network regulation, which must be respected by the legislator and the administration when exercising their powers? Would it be a simple guiding criterion or not a strictly binding objective which would be, in the last instance, related to the political criteria in force at any time and in relation to different types of networks and services, attending, however to parameters such as incentives and the specific level of investment at the time?

3. Regulatory measures related to protecting net neutrality

The first question that is worth dealing with in more detail is related to something that has been noted at the start of this article: the relation of the NN debate to the quality of service provided, especially in terms of the possible discrimination of prices paid by end users according to the breadth of the bandwidth used and the access speed. It seems clear that, as this area is not directly related to suppliers of content and applications but to agreements that ISPs might reach with end consumers, the issue would not be included within the hard core of the current NN debate. However, this does not mean that it is beside the point, as the levels of quality ultimately condition the possibilities to enjoy the services provided by the different suppliers operating on the internet. So a reduction in quality in the access service provided can end up giving rise to a situation in which end users cannot enjoy certain applications or services. In these cases, a justification based on "whoever pays more gets a better service" would seem insufficient because, in reality, this would effectively limit the access conditions and ultimately the openness of the internet as a distribution platform. This explains, for example, why among the extremely timid actions by the European Union in this area there is, nevertheless, a specific provision in section 3 of article 22 of the Directive regarding the universal service of electronic communications (Directive 2009/136/EC, of 25 November), which grants national regulators the possibility to impose certain levels of quality in those cases where there is a risk of significant degradation, with the aforementioned consequences.

Secondly, a fundamental regulatory element in the area of NN is related to transparency. This element has a clear dual aspect: on the one hand, it seems necessary for end users to at least be aware of the criteria for managing traffic applied by ISPs regarding their own network. On the other hand, and surely most importantly, transparency should also be linked to the supply of information by ISPs to the rest of the operators, so that they

can develop content, applications and services that are better adapted to the characteristics and traffic of networks at any given time, thereby optimising their use and avoiding, insofar as it's possible, situations of collapse or strangulation. Considered in isolation, transparency might seem a very simple measure and many would even take it as read. Nevertheless, and as has been mentioned, what really happens within the traffic a certain network is not revealed to the public or regulators, so that the imposition, correctly detailed and set up for its effective application and compliance, of the duty to make public and accessible the capacities and methods used to manage network traffic, becomes a truly important measure in the area of NN (in any of its senses) and an essential starting point for the discussion of more intense or specific regulatory measures.

This is actually the first of the regulatory directives included in the Open Internet Order recently approved by the Federal Communications Commission (FCC) and officially published on 21 September, before coming into force on 20 November 2011. It should be noted that the debate regarding the need to approve a regulation that guarantees a certain level of NN on the US bandwidth has formed part of political discussions over the last few years and, in fact, the FCC had taken some steps in this area⁴ and had even adopted a notorious decision in the aforementioned "ComCast case".⁵ However, the regulation finally drawn up by the FCC is based on establishing a general obligation of transparency, not necessarily precise in terms of its specific scope but "welcomed" as positive by all those involved in the debate.

Thirdly, it seems obvious that the unjustified blocking of services, content and applications, which therefore impedes access to a part of what is offered on the internet, would be unacceptable in accordance with parameters (we repeat) that are not only related to defending free market competition but the very idea of protecting free speech on the internet. The issue of the scope of the term "unjustified", which we have just used, is different, opening the door to questions related to internet traffic management. Along these same lines, the aforementioned decision by the FCC prohibits both the unjustified blocking of content and applications as well as unreasonable discrimination between them.

In this area, the idea of reasonable network management acquires particular relevance in order to avoid congestion or the circulation of content that is clearly "harmful", in any case understanding this idea of harmfulness in exclusively technical terms. In this respect it is evident that the detection, elimination or non-prioritising of spam, viruses and other forms of e-junk would come within the capacities attributable to an ISP and could even be required in terms of the obligation to maintain the different routes by which "legitimate" network content travel. It's not so clear, however, the way in which, if necessary, the corresponding regulation should be drafted or set up in this area: how free would the ISPs be to decide? Would strict proportionality be required in the sense of applying the less discriminatory technological measure irrespective of its cost?

How is this "principle" related to a hypothetical duty to invest in constructing and maintaining efficient networks? The answers to these questions could largely affect the effectiveness of the measures that need to be adopted and even network owners' incentives to invest. In the case of the FCC's decision, the excessively generic terms, ambiguous and not very restrictive, by means of which ISPs are empowered to take decisions in this area, have given rise to a large number of criticisms from some of the different operators.

Another question of interest that should be considered is to what extent a hypothetical regulation of NN must also be technologically neutral. In other words, do we have to apply and require the same neutrality criteria from all networks, either fixed or mobile, irrespective of the levels of competition and efficiency achieved and irrespective of the existing incentives for investment? More specifically, would it currently be sustainable to impose strict obligations in the area of neutrality (such as happens in the Basque Country,⁶ while in the United States the FCC refuses this categorically) on mobile networks that are currently developing and being implemented? On the other hand, should we treat as equal networks of domestic and commercial use that permit access to the internet at critical, intensive points in terms of general interest, such as public spaces, airports, certain infrastructures, etc.? This is a particularly delicate and relevant question, related directly to the future development of new generate networks in our immediate environments and one which, to a large extent, has yet to be resolved.

Finally, one last question of interest relates to the possibility that acceptable capacities for ISP network management should include some kind of capacity to discern and block certain content that might be considered "harmful", now not only in technical terms but also in legal terms. We are thinking, for example, of delicate content or content that contravenes the legislation in terms of intellectual copyright. This is certainly an important and valid debate, insofar as the public powers, given the difficulty of "catching" the majority of those responsible for content that circulates the internet, might be tempted to resort to "the last mile" and impose on ISPs powers of inspection and control which are currently difficult for the public powers to exercise directly. However, I believe that this measure, which consists of making ISPs guarantors and controllers of the legality of content, means giving them a disproportionate burden both from the point of view of content and also of the logical consequences: in other words, if we accept that ISPs are not neutral regarding the lawfulness of the content they carry, in that case they should be made accountable if they provide access to and distribute any unlawful content. We must repeat that experience shows this is a very tempting scenario for the regulatory powers, especially regarding the protection of intellectual copyright. However, it would clearly be disproportional and would violate the terms under which, to date, the effective exercise of artistic and expressive freedoms have been related to the exercise of legal responsibilities.⁷

Notes

1. Article produced as part of the research project *Communications, Regulation and the Public Interest*, by the Blanquerna Communication Faculty (URL).
2. See Wu, T. "Net Neutrality, Broadband Discrimination". *Journal of Telecommunications and High Technology Law*. Vol. 2, p. 141, 2003.
3. Regarding these issues, see PASQUALE, F. "Internet Nondiscrimination Principles: Commercial Ethics for Carriers and Search Engines". [Online]. *The University of Chicago Legal Forum*, 2008. <www.stanford.edu/dept/law/ipsc/pdf/pasquale-frank.pdf> .
4. A minimally detailed explanation of this evolution can be found in the article by LAGUNA DE PAZ, J. C. "Internet en un cruce de caminos: ¿neutralidad o gestión razonable de las infraestructuras? *Civitas Revista Española de Derecho Administrativo*. No.141, 2009, pp. 43 and sub. It should also be noted that, previously, the Canadian communication regulatory authority had also adopted a very interesting decision related to this area. See specifically the *Review of the Internet Traffic Management Practices of Internet Service Providers*, adopted by the *Canada Radio-Television and Telecommunications Commission*, on 21 October 2009: <www.crtc.gc.ca/eng/archive/2009/2009-657.htm> .
5. See the FCC's decision on this issue, adopted on 1 August 2008 (FCC 08-183).
6. On 22 June 2011, the Parliament of the Netherlands passed a law by virtue of which, among other aspects, providers of broadband mobile communication services must not block, discriminate or impose the payment of surcharge in using the internet service to carry out Skype type voice and/or image calls. It is certainly very advanced legislation compared with the regulations existing in the rest of the European Union, and is in stark contrast to the cautious, generic tone with which, on 19 April 2011, the European Commission had drawn up its communication addressed to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions on "The open internet and net neutrality in Europe" (COM (2011) 222 final). However, the decision by the Netherlands to opt for strict regulation in the area of defending NN has been criticised by the Vice President of the Commission and the head of the European Digital Agenda, Neelie Kroes, insofar as it not in line with the "wait and see" position currently endorsed by the Union's institutions.
7. Regarding the need to think of new regulatory systems in this area (including the so-called co-regulation), the following work is essential: MARSDEN, Ch. *Net Neutrality: Towards a Co-Regulatory Solution*. New York: Bloomsbury Publishing, 2010. Available at: <papers.ssrn.com/sol3/papers.cfm?abstract_id=1533428> .