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Introduction

Framing the Network Neutrality debate: a multi-stakeholder approach towards a policy blue-print

by Primavera De Filippi and Luca Belli

Network Neutrality (NN) refers to the principle whereby all electronic communication should be treated in a non-discriminatory way, regardless of their type, content, origin or destination. Originally seen as a network design principle (Wu, 2003), it is, nowadays, increasingly regarded as a normative principle (BEREC, 2012) aimed at ensuring that all Internet users be granted universal and non-discriminatory access to all legitimate online resources (content, services, or applications), along with the right to have their own resources universally available on the Internet.

Although only a few countries have enacted NN regulations, so far the establishment of an open and neutral Internet is regarded as a key driver for economic growth (World Bank, 2009). At the European level, the European Parliament (2012a, 2012b) has explicitly recognized the importance to enshrine the NN principle into legislation to promote the establishment of a European Digital Single Market. To this extent, the European Commission recently proposed a Regulation for a Single Telecoms Market (September 2013) aimed at securing NN by precluding Internet Service Providers (ISPs) from discriminating against specific services, content or applications - while nonetheless allowing them to enter into contractual agreements to provide certain content and applications providers (CAPs) with enhanced quality of service.

Beyond economic considerations, the establishment of an open and neutral Internet is also a precondition for the full enjoyment of human rights (CoE, 2011). In his paper, Luca Belli reflects on the relationship between “Network Neutrality and Human Rights”. After introducing the concept of NN, the paper provides a general overview of the main discriminatory practices threatening NN, and their consequences on human rights. On the one hand, NN is constrained by the fact that national legislators can impose a series of limitations on users’ access to online resources for the sake of public order or morality. ISPs can in fact be required to block access to infringing online material, as well as to filter online communications that either support or promote illegal activities. While this is generally justified on legitimate purposes, authoritarian regimes could also abuse their leeway in order to enforce censorship. On the other hand, the NN principle may be endangered by traffic management policies aimed at improving the quality of specific online services by giving higher priority to certain data flows. Indeed, according to some ISPs, the current increase in

Internet traffic justify the use of traffic management techniques in order to optimise bandwidth allocation. These techniques are therefore being employed by telecommunication carriers (especially mobile-Internet access providers) as a means to ensure a minimum quality of service, frequently blocking, filtering, throttling or prioritizing specific data flows. To the extent that they might result in packet discrimination, these practices might impinge upon users' right to receive and impart information, as well as the privacy of their communications.

The potential for the Internet to further fundamental human rights (such as freedom of expression, access to knowledge and democratic participation) ultimately depends upon the design of the network which - based on the end-to-end principle - enables users to freely choose (and run) specific services and applications, as well as to connect the devices that they consider the most appropriate to satisfy their needs. Yet, as illustrated by Andrew McDiarmid and Matthew Shears in "The Importance of Internet Neutrality to Protecting Human Rights Online", Internet's full potential can only be unleashed insofar as the network stays compatible with the NN principle. To preserve users' fundamental rights, the Internet must, indeed, remain *global* (allowing for communications to be distributed worldwide), *user-controlled* (as opposed to being controlled by the content or access provider), *decentralized* (with most services and applications running at the edges of the network), *open and competitive* (with relatively low barriers to entry). McDiarmid argues that, given the growing role that the Internet plays with regard to various facets of our life, States have the duty to intervene so as to ensure that the network design remains such as to promote the exercise of fundamental human rights.

Indeed, NN is nowadays regarded as a precondition for users to fully enjoy their fundamental freedom of expression (OECD, 2005; CoE, 2011), defined by the Universal Declaration of Human Rights as "the right to freedom of opinion and expression; [including] freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers."

To this latter extent, Maria Löblich and Francesca Musiani have analysed the impact of NN on democratic participation in their paper on "Net Neutrality from a Public Sphere Perspective", through Peter Dahlgren's three-dimensional framework. Dahlgren (1995) distinguishes between the *structural dimension* of public sphere, referring to the various media available for the public to communicate, the *representational dimension*, referring to the output of such communication, and the *interactional dimension*, referring to the ways in which users interact with these media. The authors use this framework as an entry point to examine specific NN issues that relates to each of these three dimensions: the structural dimension serves as a basis to investigate the issues related to actual access to the Internet infrastructure; the representational dimensions is used as a means to investigate how NN relates to content, with regard to diversity, control, and censorship; and, finally, the interactional dimension is used to describe how new forms of communication that are emerging online could be affected by a derogation to the NN principle. They conclude that NN has become today an important precondition for achieving a properly functioning public sphere, fueled by a variety of information, ideas and opinions.

In addition to promoting freedom of expression, the NN neutrality principle also serves to preserve users' fundamental right to privacy and data protection. Indeed, in order to be able to discriminate amongst packets according to their nature, content, origin or destination, ISPs must rely on sophisticated traffic management techniques – such as Deep Packet Inspection (DPI) – which allows them to examine the content of packets traveling through their . Not only do such intrusive practices risk to jeopardise the open and neutral character of the Internet, but they are also likely to impinge upon the confidentiality of online communications - thereby potentially endangering the privacy of Internet users. In their paper on “Net Neutrality: Ending Network Discrimination in Europe”, Raegan MacDonald and Giusy Cannella condemn such practices by claiming that “reasonable” traffic management should be limited to the activities which are strictly necessary for the technical maintenance of the network (*i.e.* minimizing congestion, blocking spam, viruses, and denial of service attacks).

Yet, given the technical challenges that most ISP have to face in order to deliver packets without discrimination of content, ports, protocols, origin, or destination, violations of the NN principle must not be evaluated on an absolute basis, but rather assessed according to their context, their justifications, as well as the impact they might have on human rights. In this regard, Alejandro Pisanty analyses “Network Neutrality under the lens of Risk Management”, by providing an important framework to assess the likelihood of NN violations, along with suggestions on how to best deal with such violations.

By ascribing to the end-users the responsibility to establish and manage online communications, the end-to-end principle guarantee an active role to all Internet users, while also reducing the spectrum of interferences potentially limiting their ability to receive and impart information, at the network layer. Such an empowerment of the networks' ‘edges’ may be seen as one of the most significant galvaniser of freedom of expression in recent history. However, the great success of the Internet had democratised the network and widened its user-base, which is nowadays composed of less technically-erudite users compared to the original community of Internet-pioneers. Indeed, as highlighted by Louis Pouzin in his paper on “Net Neutrality and Quality of Service,” a dominant majority of end-users are not (interested in becoming) network experts. This element adds further complexity to the meaning and implementation of the NN principle. In fact, the NN debate is usually based on various assumptions as regards network usage and characteristics. For this reason, the author explores the various standpoints and interpretations of different actor, including network operators, content providers and end-users.

Yet, the rise of cyber-crime and the growing threats to network integrity and security have stimulated the development of “trust-to-trust” models, where private entities (such as ISPs, CAPs or DNS operators) undertake some forms of “network-patrolling” in order to provide a more trustworthy network. It is therefore the democratization of the Internet which spurred the establishment of several form of intermediations to ensure the provision of secure Internet communication - thus transforming the Internet into an increasingly centralized network structure.

Although certain types of network management are essential to guarantee network integrity and security, Internet traffic management (ITM) practices can affect the way in which end-users receive and impart information, thus limiting their capability to freely communicate. For this reason, in his paper on “Net Neutrality: Past Policy, Present Proposals, Future Regulation,” Chris Marsden highlights the fact that traffic discrimination can lead of censorship. Therefore, the NN debate can be considered as the latest phase of an eternal argument over control of communications media. Throughout this paper, the author presents the evolution of the NN regulatory debate, providing important elements for a transatlantic comparison. On the one side, U.S. jurisprudence underscores the role of NN regulation in fighting anti-competitive practices, while promoting accessibility and reducing barriers to enter the market. On the other side of the Atlantic, the question of NN cannot be properly analysed within the competition law framework alone, because - as stressed by the author - although the fair competition dimension of net neutrality regulation should not be neglected, it is of utmost importance to properly stress the human rights implication of this crucial debate.

In fact, ISPs’ position as “gatekeepers” may allow them to undertake an unchecked and unbalanced role as self-regulators, whose action is not framed by due process and rule of law principles. The regulation of ISPs’ traffic management practices is therefore instrumental to avoid dangerously unpredictable agglomerations of power in the hands of ISPs, safeguarding media pluralism and sheltering end-users’ fundamental rights.

To this latter extent, in his ‘Privatised Online Enforcement Series’ Joe McNamee underscores that, although most western democracies are grounded on the "rule of law", they frequently encourage Internet intermediaries’ self-regulation in a multitude of domains that have direct implications with regard to the protection of fundamental rights. Indeed, as stressed by the Advocate General of the European Court of Justice, Internet intermediaries’ self-regulation equals to "delegating the legal and economic responsibility of the fight against illegal downloading to Internet access providers.” These practices are criticized by the author, according to which the proliferation of self-regulatory solutions is based on the arguably questionable assumption that, however distasteful it is that private companies regulate and enforce the law in the online world, “it is better that ‘somebody’ is doing ‘something’”

The existence of numerous discriminatory ITM practices has been highlighted by the Body of European Regulators of Electronic Communications with regard to mobile Internet, and the capability of such techniques to expose Internet users’ personal data has been explicitly stressed by the European Data Protection Supervisor. These authoritative opinions suggest the need for an appropriate reflexion on NN, taking into consideration both the fair-competition and the human-rights dimension of the NN debate, with the help of reliable data. Indeed, both Marsden and Pouzin argue that, without factual observation of the service characteristics, there cannot be any credible assertion of NN and the elaboration of evidence-based policy-making becomes simply not possible.

Therefore, it is right and proper to note that the scope of NN regulation is not limited to the definition of this all-important principle and its limits, but rather encompasses the delineation of an appropriate monitoring and enforcement mechanism. A NN regulatory framework is

indeed instrumental to the achievement of three different goals: (i) clarifying what NN is and what is not; (ii) empowering Internet users, by ascribing them the right to undertake an action in front of the relevant authority upon violation of the NN principle; and (iii) investing national regulators with the powers and prerogatives needed in order to establish an appropriate monitoring and enforcement mechanism.

As highlighted by Luca Belli and Matthijs van Bergen, the Dynamic Coalition on Network Neutrality has been created as a self-organised, bottom-up collaborative effort, with the intention of fostering “A Discourse-Principle Approach to Network Neutrality”, thus analysing the various nuances of the NN argument and elaborating a model framework through a multi-stakeholder participatory approach. Indeed, it seems obvious that the inherent complexity of the NN debate, as well as the heterogeneity of the stakeholders involved, demand the institution of multi-stakeholder dialogue as an essential pre-condition for the elaboration of policy-recommendation on this delicate matter. The discussion arena provided by the Dynamic Coalition on Network Neutrality aims at generating momentum on this central issue, with the final goal of elaborating a model framework able to provide guidance to national legislators on how to properly safeguard net neutrality.

The following papers explore some of the most crucial facets of NN, underscoring its close relationship with the full enjoyment of end-users fundamental rights. Lastly, this report includes a proposal for a Model Framework on Network Neutrality that has been elaborated by the Dynamic Coalition through an open, inclusive and multi-stakeholder effort, in order to promote an efficient safeguard of the NN principle in accordance with international human rights standards.

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