Dynamic Coalition on Network Neutrality

THE EVOLUTION OF THE NET NEUTRALITY DEBATE: ZERO RATING, SPECIALISED SERVICES, AD BLOCKING AND TRAFFIC MANAGEMENT

Outcome Paper to be discussed at 11th Internet Governance Forum

The Annual Report of the Dynamic Coalition on Network Neutrality[1] (DCNN) of the United Nations Internet Governance Forum gathers a series of case studies on a variety of net neutrality (NN) issues from the perspective of different stakeholders. This Outcome Paper provides an overview of the 2016 Report.[2] The double purpose of this report is to trigger meaningful discussion on NN trends, while providing informative material that may be used by researchers, policy-makers and civil society alike. Any interested individual can submit papers to be included in the report and submissions are evaluated for their novelty and undertake blind peer-review process. Researchers, practitioners and policy-makers regularly contribute to the DCNN report, providing a wide range of heterogeneous views on NN trends.

In 2016, Zero Rating (ZR) was by large the most debated NN issue, as reflected by the considerable number of contributions focusing on the topic within the DCNN report. Such high number of ZR-focused studies seems particularly useful to meet the increasing demand of research analysing the pros and cons of ZR. Furthermore, the report analyses other very important and debated topics, such as specialised services, ad blocking and reasonable traffic management, providing useful insight on some of the most recent policy evolutions in a variety of countries.

The report is structured in three sections analysing (i) Zero Rating Policy; (ii) Zero Rating Pros and Cons; (iii) Net Neutrality Exceptions and Violations.

The opinions expressed in this work are the responsibility of the authors.

1.1. Zero Rating Policy

The first section encompasses three analyses, priding insight on ZR practices, ZR policies as well as the consideration of ZR from the perspective of international human rights law. In his contribution on "Zero-Rating: From Generative Internet to Mobile Minitel?" Luca Belli stresses that the ZR debate is the latest chapter of the NN saga. The author argues that although the sponsorship of applications may seem beneficial to improve access to specific content and services, some ZR models may trigger a phenomenon defined by Belli as "Minitelisation of the Internet." This phenomenon consists in the Internet's evolution from a generative and general-

[1] See http://www.networkneutrality.info/sources.html as well as http://www.intgovforum.org/cms/dynamic-coalitions/1330-dc-on-network-neutrality#stakeholders

[2] The 2016 DCNN Report can be accessed here http://www.slideshare.net/FGV-Brazil/net-neutrality-reloaded-zero-rating-specialised-service-ad-blocking-and-traffic-management

purpose network, where users may freely generate and share innovation, into a predefined-purpose network, characterised by a centralised – and easy-to-control – configuration, where passive customers merely access predefined applications, as it happened in the old Minitel network. Belli notes that ZR practices are generally matched to reduced data caps and mainly implemented within mobile networks and consist in the sponsorship – by an operator or a third party – of the data consumption related to a limited set of applications, or class of applications, depending on the type of ZR. The author provides a taxonomy of ZR practices which is instrumental to stress the existence of various flavours of ZR and to identify which ZR practices conflict with the NN rationale and may lead to Minitelisation. Several ZR schemes are based on the provision of unlimited access exclusively to the applications approved by the operator, while billing and capping access to the rest of the Internet, in order to orient user experience towards a limited selection of applications. Belli stresses that such practices have the potential to restrain Internet openness, fostering a centralised model that characterised less innovative and more controlled networks, such as the Minitel. The author argues that Internet users cannot be deemed as mere consumers but should rather be considered as active "prosumers," for they can both produce and consume content and applications and, therefore, can directly contribute to the evolution of a generative network. Hence, to avoid Minitelisation and promote sustainable connectivity, policy makers should consider the entire spectrum of options available and encourage the experimentation of alternative connectivity models, such as e.g. community networks, rather than merely relying on ZR.

In his contribution on "Better Regulation of Net Neutrality: A Critical Analysis of Zero Rating Implementation in India, the United States and the European Union" Christopher Marsden critically examines the relatively few examples of regulatory implementation of NN enforcement at national level. It draws on co-regulatory and self-regulatory theories of implementation and capture, and interdisciplinary studies into the real-world effect of regulatory threats to traffic management practices. Most academic and policy literature on NN regulation has focussed on legislative proposals and economic or technological principles, rather than specific examples of comparative national implementation. This is in part due to the relatively few case studies of effective implementation of legislation. In his contribution, Marsden presents the results of empirical interviews conducted with regulators, government officials, Internet Access Providers, content providers, academic experts, NGOs and other stakeholders. The article notes the limited political and administrative commitment to effective regulation thus far, and draws on that critical analysis to propose reasons for failure to implement effective regulation. Finally, it compares results of implementations and proposes a framework for a regulatory toolkit. Notably, the contribution offers some elements that may be suited to a toolkit for regulators to respond to NN concerns, providing gouidance on:

- how to engage stakeholders, an especially important issue in the US and Indian case studies;
- how to measure NN, essential to implementing BEREC Guidelines for the European Union/Economic Area in 2017;
- how to access technical advice, which will help in defining the forensics of the regulation of ZR and NN more broadly; and
- an example of how regulators may respond to ZR offers, short of the total prohibitions seen in Chile, India.

In his contribution on "Zero rating and the Holy Grail: Universal Standards for Net Neutrality" Arturo Carrillo argues that frontline battles that have focused on ZR (as in India) have been largely devoid of rigorous reference to technical human rights considerations. But national debates on NN and ZR have and will continue to play out differently in other regions of the world that are subject to more robust human rights legal frameworks, such as Europe and Latin America. There, universally-recognized human rights norms codified in regional treaties – the American Convention on Human Rights; the European Convention on Human Rights – provide objective standards for consistently and justly analysing NN issues through region-specific human rights mechanisms. The purpose of this paper is to take one region as a case study in progress – Latin America – to map the human-rights framework that governs freedom of expression online, including NN and ZR, with reference to the challenges that a number of Latin-American countries are facing. The paper argues that the implementation of net neutrality protections by States in Latin America (and elsewhere), when oriented by a respect for fundamental human rights, can lead to more just and sustainable policies and outcomes than when it is not. In the end, the human rights framework will increasingly shape national policy-making in this area, and not just in Latin America. What emerges is a clearer picture not only of the human rights standards that, in fact, already apply to the net neutrality principle everywhere in the world, but also of the manner in which the constructive application of that framework can shape its implementation globally in more equitable terms.

1.2 Zero Rating Pros and Cons

The second section of this book includes four contributions debating the supposed benefits and potential harms of ZR practices.

In their contribution on "Zero rating: a global threat to the open internet," Gustaf Björksten, Raman Jit Singh Chima and Estelle Massé argue that ZR is the opposite of NN, the notion that all data on the internet should be treated equally. The authors argue that NN is central to maintaining the internet's potential for economic and social development, and for the exercise of internationally recognised human rights such as the right to free expression. Its principles help ensure that anyone, anywhere in the world, can receive and impart information freely over the internet, no matter where they are, what services they use, or what device they operate. Seen in this light, ZR is a form of "network discrimination" — it deliberately sets up a system where "the internet" you get is different for different people. The authors highlight that, around the world, advocates, tech companies, and users are debating this crucial issue. The contribution explores ZR, its technical impact on our use of the internet, and what decisions lawmakers and telecoms regulators around the world have already made regarding its use. After having provided a brief analysis of how ZR practices may affect users, the contributions explores a selection of regulatory approaches and wishes for vigilance from national regulators while arguing that multiple approaches should be considered to expand access to infrastructure.

In his paper on "The Economics of Zero Rating," Jeff Eisenach explores the ZR debate from a different perspective. The author presents an assessment of the benefits and costs of ZR, concluding that ZR programmes in general represent an economically efficient mechanism for increasing consumer welfare given the unique characteristics of information technology markets. The paper describes the state of play with respect to different types of ZR plans currently in the marketplace, and efforts by regulators in some countries to limit or prohibit their

availability. It goes on to present a brief explanation of the economic characteristics (i.e., dynamism, modularity, and demand-side effects) that distinguish information technology markets from markets for other types of goods, and which affect both market performance and the nature of the competitive process. It outlines the primary issues involved in assessing the impact of ZR plans on economic efficiency, competition, and overall economic welfare. The paper then presents an assessment of the two primary criticisms of ZR, namely the asserted potential for anticompetitive market foreclosure and concerns about diversity of expression. It argues that the ZR plans currently being offered almost certainly generate benefits well in excess of any costs. While regulatory authorities should remain vigilant in monitoring business practices, broad-based bans or restrictions on ZR plans are far more likely to harm consumer welfare than improve it.

In his paper on "Mobile Zero Rating: The Economics and Innovation Behind Free Data," Doug Brake argues that ZR programmes, which allow consumers to access certain Internet content and services without it counting against their monthly data plans, have proven polarising, being met with reactions ranging from derision to praise. The crux of the controversy is whether the practice of ZR violates the spirit of NN principles. Strictly speaking, zero-rated data is treated differently than other data in a way that influences consumer behavior. But adhering to such a strict interpretation of NN would be misguided. Brake argues that ZR products are unlikely to harm the open Internet; instead they are a sign of healthy product differentiation that more efficiently allocates scarce resources in a competitive market, ultimately improving consumer value. The Federal Communications Commission — along with other regulators around the world — is examining ZR, and while its case-by-case approach to overseeing these programs is sound, telecom regulators should make it clear that they believe nonexclusive ZR programmes are in the public interest.

Lastly, Tomiwa Ilori concludes the second section with his paper on "The Politics of Algorithms and Net neutrality in the Zero-rating Debate." Ilori argues that commercialization is fast becoming the best reason for justifying inequality, especially on the Internet. Fast and innovative ideas are first considered for their market value before any consideration is made for equality, equity and fairness. As it is fate of glass to break, so is it the fate of the Internet to be commercialised. The paper measures the tenacity of the NN debate within the politicisation of commercial interests between states and tech companies in the context of ZR debates and tries to assess how much equality has been the opportunity cost. Academic articles, newspaper reports, workshop feedbacks, submissions by stakeholders in the Telecommunication sector, public statistical figures are used to draw conclusions. Findings have revealed that there is a power play in sustainability of the NN debates but with no victor in sight just yet.

1.3 Net Neutrality Exceptions and Violations

The final section includes three contributions focusing on several crucial issues, with regard to NN violations and exceptions. In his paper on "European net neutrality at the beginning of a new era," Frode Sørensen provides an insightful perspective on the most recent development regarding NN in Europe. Notably, Sørensen stresses that the NN Regulation adopted in 2015, and the corresponding NN Guidelines issued by BEREC in 2016, lay the foundation for protection of the open Internet in Europe. In concrete terms, NN boils down to equal treatment of traffic on the Internet, whereby end-users themselves can decide how to use their own Internet access,

and whereby entry barriers for content and application providers are low. As a result of non-discriminatory treatment, the Internet should remain an open platform for communication useable for any purpose, stimulating the flourishing of social, democratic, cultural, and economic development. The fundamental characteristic of such an open platform is that it becomes application-agnostic, where applications running on end-user equipment receive equal treatment of traffic transmitted over the Internet. The paper explores the background and emergence of the European net neutrality Regulation, as well as the rules of the Regulation, focusing on three core issues that have attracted policymakers' and regulators' attention: zero-rating and other commercial practices; the distinction of different levels of traffic management; and the so-called specialised services. The paper illustrates how the European NN Regulation facilitates flexible network technology innovation, at the same time as it safeguards innovation at the edge of the network.

In her paper on "Users' rights, ad blocking and net neutrality," Roslyn Layton analyses one of the most debated NN topics in 2016: the compatibility of network-level ad blocking with the NN principle. Layton stresses that, at the global level, in 2016 more than 400 million users employ ad blocking on mobile phones, twice the rate of desktop ad blocking. Users employ ad blockers to ensure privacy, security, energy efficiency, usability, and to speed the running of mobile apps and websites. Layton explores the arguments both for and against ad blockers and how they may either support or conflict with net neutrality. Noting the growing tension between user-centric solutions and rigid NN rules, the article suggests that policymakers consider the unintended consequences. Ad blocking, a suboptimal solution to addressing unwanted ad tracking, is indicative of the unchecked oligopolistic ad tech industry which leverages NN rules to protect its revenue from competition and innovation. To conclude, Layton wishes that policymakers and NN advocates ensure that end users rights are not compromised under the guise of arbitrary bans on practices purporting to protect them.

Lastly, the report ends with Carlos Brito's paper on "Mexican ISP practices contrary to the network neutrality principle under the new telecommunications legislation." Brito briefly describes the unique Mexican regulatory framework, resulting from the 2013 telecommunications and competition constitutional reform. Such constitutional framework obliges the Mexican State to consider definitions and treatments of its regulatory policies within the respect and fulfillment of its obligations in human rights protection, both derived from its local legislations and international agreements. Moreover, it empowers the national regulator enjoys a broad set of faculties, obligations, capacities, and powers. The paper is based on an empirical approach aimed at evaluating the practices of nine Mexican Internet Service Providers (ISPs) with regard to a) zero-rating or tiering practices; b) throttling practices; c) deliberated blocking content practices; d) deep packet inspection practices; e) transparent and accessible traffic management policies. Such study interestingly demonstrate a recurrent NN problem *i.e.* the existence of a misalignment between the existing framework and the existing practices. Notably, one of the main finding of the report is that ISPs in Mexico already feature commercial offers that affect the principles of net neutrality. Despite the Telecommunications and Broadcasting Federal Law and the Constitutional dispositions, ISPs offer preferential access (free or partially free) to some Internet applications via ZR practices which have been de facto adopted by ISPs, taking advantage of the lack of regulations implementing the existing telecommunications law.