**Arriving on Neutral: A Comparative Analysis of Net Neutrality Policy Making in Chile and the Netherlands**

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Information and communication technologies (ICTs) have become essential tools in today’s globalizing, interdependent and interconnected world. The expansion of these communication abilities is not without its problems, however. The large costs of invention and innovation have resulted in the creation of global telecommunications conglomerates that control the majority of information technology access, from broadband service to email servers to content application, while new firms face steep barriers to entry. Additionally, technology advances like deep packet inspection, throttling, and filtering, have made monitoring and regulating traffic via broadband connections more prevalent (Mueller 2010). Development and deployment of technologies capable of restricting and monitoring access to specified content types, as well as access by certain types of users, became a business strategy for corporations selling internet packages to end users (Bendrath & Mueller 2011, 1145). Most internet service providers (ISPs) engage in some sort of internet traffic management practice (ITMP), though the details of these practices are rarely disclosed to customers or regulators. Industry experts and users rights groups are concerned that ISPs have the ability to effectively implement censorship easily and invisibly by way of these techniques (MacKinnon 2012, 121), which means that many content creators and end users are not aware that their internet use is being affected by their ISP’s ITMP. Indeed, several incidents of purported discriminatory traffic management by Comcast, Verizon, and Madison River Communications (Nuechterlein & Weiser 2013, 199; Stiegler & Sprumont 2013, 124) have shown that these concerns are not merely hypothetical. The rapid rate of technological change has also left elected officials and regulatory bodies struggling to keep up; serving the best interests of citizens without stifling the economic, political, and social interactions that these technologies embody is no easy task. The rise of the use of social media for coordinating movements that have dramatic consequences for legal and governmental systems, the use of websites by governments for the disseminating information and conducting government business, and the increase in content streaming and downloading with its drastic effects on copyright and trademark enforcement have brought the issues of network neutrality to the forefront of political agendas.

There are many stakeholders that are affected by net neutrality policies and practices, including ISPs and consumers of internet services; content and application producers (CAPs) are also affected by these policies, as their ability to function is directly related to whether ISPs are willing to transmit their content to end-users. In general, ISPs and advocates of free market approaches to telecommunications markets oppose net neutrality, while CAPs (including Amazon, Netflix, Google, and Yahoo!) endorse net neutrality as a positive addition to regulatory frameworks for telecommunications (DeNardis 2014, 142). However, the debate suffers from a general lack of salience among end users, with the average American remaining “generally unaware of the issue” (Stiegler & Sprumont 2013, 124).

Net neutrality arises is a response to the perceived tendency for ISPs to infringe on access to legal content via the internet. Net neutrality, or Open Internet initiatives, usually encompass “…two different types of substantive rules: (1) a ban on ‘blocking’ or ‘degrading’ lawful content over an internet access platform and (2) a ban on, or at least close regulation of, contractual deals between broadband networks and content providers for favored treatment over that platform” (Nuechterlein & Wiser 2013, 198). Polices and laws enshrining these principles have been passed in many states since 2010, with Chile becoming the first to embrace net neutrality and the Netherlands following closely behind in 2011. Other states, including Denmark and Sweden, have determined that laws mandating net neutrality are neither necessary nor desirable, instead choosing to let consumer choice and market mechanisms ensure that principles of net neutrality are generally followed. The United States represents a unique position in the net neutrality policy discussion; while the United States is typically seen as a pioneering and dominant force in most ICT-based innovation and policy making, no net neutrality policy has been able to withstand court challenges or (as of 2017) administration change. Thus, while the principles of neutrality are generally agreed upon, the policies that are enacted to make these principles a reality are diverse from state to state.

A significant portion of the net neutrality literature is devoted to making economic arguments about the feasibility and potential effects of such policies on firms and consumers. Most of these studies present models constructed through theoretical analysis that generally lack any empirical data on the effects of an actual implementation, or focus exclusively on the economic aspects of net neutrality. Essentially, the literature remains almost entirely focused on whether net neutrality is a normatively desirable policy for states to pursue, or the technical differences between policy alternatives (Bauer & Obar 2010).

The empirical research on net neutrality policies tends to focus on the implementation of specific net neutrality policies. The most prolific research in this field has been conducted by Christopher Marsden (2013; 2015; 2016). Marsden considers the implementation of net neutrality policies comparatively across states in Europe, Latin America, and North America, with more recent work focusing on zero rating prohibition exclusively. However, the inclusion of the United States in such studies shows that the literature focus remains on implementation and policy outcomes. There is therefore a substantial literature gap when considering policy processes in technology policymaking in general, and net neutrality policy in particular. This paper seeks to rectify this gap by comparatively considering the policy processes of two states with relatively mature and stable net neutrality policies.

**Methodology**

To assess net neutrality policy processes from conception to implementation, a comparative case study on the two oldest net neutrality policies that remain intact was conducted. This is in line with the traditional approaches to exploratory telecommunications policy research (Sutherland 2016); while necessarily lacking causal mechanisms that would provide explanations and policy recommendations, the field has grown to expect and accept this type of research in emergent technology fields. In the typology of case studies presented by Yin (1994), this comparative case study is best described as illustratively descriptive: it seeks to thoroughly describe the phenomena of successful net neutrality policy creation and identify future sources of causal research that assesses the impacts of actors and context on this success. The cases in this paper consist of data and information gathered from secondary sources that consider both the implementation of the state’s net neutrality policies, and the events, framing, and involved actors that preceded the implementation.

Each case is assessed using the multiple streams policy process framework as created by Kingdon (1995) and further described by Zahariadis (2007). This framework considers policy processes at the system level, and uniquely allows for the consideration of large amounts of complexity in the system (Zahariadis 2007, 66). Three separate streams (problem, politics, and policy streams) exist within the policy system, and the “combination of all three streams into a single package dramatically enhances the chances that a specific policy will be adopted by policy makers” (Zahariadis 2007, 65). Figure 1 shows how these streams, as well as the policy windows they create and the policy entrepreneurs that can interpret or impact these streams, are assessed using the descriptive case study data. The Problem Stream considers the specific issues that policy makers seek to solve, and is assessed through the identification of focusing events in each case. While the Politics Stream typically includes multiple aspects of the governance process, the location of the net neutrality policy-making process is the representative data point for this stream in this study. The Policy Stream looks at the content of the policy itself: hard or soft law, specific activities that are included, and monitoring or punitive mechanisms. The Policy Entrepreneurs are shown by the main net neutrality support coalition’s leadership, and the Policy Window that resulted in the specific action is illustrated by the framing that the Policy Entrepreneurs successfully used. Because the policy output is the dependent variable on which cases were selected (the successful implementation of a net neutrality policy), the differences in outputs are not considered.

**Figure 1: Multiple Streams Framework Assessment Criteria**



**Cases**

A side-by-side comparison of key aspects of the policy strategies and outcomes of both cases can be found in Table 1. Also included for reference is the general ISP market for each country – the Netherlands’ market is primarily made up of multi-national telecommunications corporations, while Chile’s consists mostly of country-specific providers due to restrictions on foreign board members and management of utility corporations. Both have privately owned ISPs and a history of government regulation of telecommunications utilities and services.

***Chile***

Chile was the first state to successfully pass a net neutrality law in 2010, and see it implemented in 2011 (Marsden 2015; Walker 2015). Net neutrality became a part of the national consciousness of Chile as a result of several court cases between 2003 and 2007 that involved ISPs’ ITMPs that lacked transparency and considerably reduced the quality of service (Vargas-Leon 2015). Chile’s path to net neutrality spanned four years, with initial information and legislative proposes dating to 2007 after the conclusion of the last of these cases. Vargas-Leon notes that these prolonged discussions involved all branches of Chilean government, as well as civic society and mass media, though no mention is made of corporate interests in her account. As with all net neutrality policy debates, there are many stakeholders with differing perspectives that are involved in this policy process. However, the success of the net neutrality legislation passed by Chile was ultimately the result of a large, coordinated grassroots movement led by a coalition of NGOs. The leader of this coalition was NeutralidadSI, an organization that lits its mission as “approval of net neutrality legislation for internet users in Chile” (NeutralidadSI n.d.) that also aimed to inform citizens without technical expertise or experience about the importance of net neutrality within the greater context of civil rights. The leadership of the organized civic movement is cited as the main impetus for Chile’s status as the first state to implement net neutrality (MacKinnon 2013, 121; Ruiz 2010), with the process being referred to as “crowdsourcing for civil rights” by NeutralidadSI. The efforts of the civic coalition were oriented towards passing an amendment to existing telecommunications laws in Chile’s legislature. Known as Law 20435, the net neutrality legislation passed in Chile in 2010 modified existing telecommunications laws by adding three amendments to the General Law of Telecommunications that dates to the 1980s (Belli & De Filippi 2015, 96; Ruiz 2010). It focuses primarily on the rights of individuals by creating “a new group of guarantees and rights for internet users” (Vargas-Leon 2015, 111-112), and did not take effect until 2011 to allow ISPs time to determine how to comply with these newly codified rights. As Pisanty notes, “[net neutrality] was broadly well received” (2015, 136).

The law prohibits “arbitrary” interference by ISPs in users’ attempts to access legal content, and also requires that ISPs inform users of any changes in service (Vargas-Leon 2015, 112). The implementation of this legislation provided the Chilean Secretariat of the Ministry of Transport and Telecommunications (SUBTEL) with the authority to enact further clarifying regulations, as well as to investigate violations and punish those found to be engaging in discriminatory behavior (Vargas-Leon, 113). Of course, these requirements only apply to those using and accessing legal services and content.

***The Netherlands***

The Netherlands became the second state, and the first in Europe, to enact net neutrality legislation (MacKinnon 2012, 121). The Netherlands’ net neutrality policies were passed by the Dutch legislature in 2012 as amendments to the existing Telecommunications Act that dates from 1998, with an implementation date in early 2013 to allow time for the ISPs to ensure compliance (Marsden 2013, 8). The first amendment (Article 7.4a) explicitly added net neutrality principles to Dutch law by allowing non-discriminatory traffic management as necessary, but excluding any charges or prioritization of traffic based on services or applications; the second (Article 7.4) imposes transparency requirements that mean end-users must be informed of all traffic management policies and procedures (van Eijk 2014, 11-14).

Several focusing incidents, including the discussion among mobile broadband providers of potentially blocking Skype and the discovery of throttling behavior by cable broadband operators (van Eijk 2014, 8), brought public attention to ITMPs in use. Additional interviews via mass media with key ISP executives expressing support for management techniques that conflict with net neutrality, as well as investigations by government regulatory institutions into current usage of these techniques by ISPs, further informed and advanced the net neutrality cause (van Eijk 2014, 9). Additionally, the NGO Bits of Freedom began an aggressive public information campaign by informing the public and actively lobbying for strict net neutrality regulations, which included drafting amendments to submit to the Dutch legislature (Bits of Freedom n.d.). The goal of the net neutrality debates and amendments were, from the perspective of Bits of Freedom, to “…maximize choice and freedom of expression on the internet for end-users” (Bits of Freedom 2011, translated in van Eijk 2014, 32-36); in other words, the debate was framed in terms of civil liberties by coalition leadership. Net neutrality policies also found support from international content and application creators, such as Skype; vocal opposition from the ISP industry was also present in the debate (O’Brien 2011). However, despite the tendency to vastly outspend civic organizations in net neutrality conflicts (Herman & Kim 2014, 32), the business groups failed to mobilize the same level of support. A key reason for the lack of industry influence is likely the widespread support within the European Union’s institutions for net neutrality and the implementation of policies that prevent discriminatory ITMP (Associated Press 2011).

**Table 1: Summary of Net Neutrality Policy Processes in Chile and the Netherlands**

|  |  |  |
| --- | --- | --- |
|  | **Chile** | **The Netherlands** |
| **Policy Window:****Framing** | Civil rights; consumer rights | Freedom of expression; privacy |
| **Policy Entrepreneurs:****Main Coalition Leadership** | NGO – NeutralidadSI; primarily civil society movement with limited coordinated opposition from ISPs | NGO – Bits of Freedom; with support from the European Union and opposition from ISPs  |
| **Politics Stream: Institutional Location** | Legislative body – policy as amendment to existing telecommunications laws (General Telecommunications Law) | Legislative body – policy as amendment to existing telecommunications laws (Telecommunications Act) |
| **Problem Stream: Focusing Events** | Several court cases between 2003 and 2007 regarding ISPs’ quality of service due to throttling and blocking | Proposed blocking of particular free online services that are competitors for major ISPs’ services in 2011 |
| **Policy Stream: Policy Content** | Amendment to existing telecommunications law; only allows degradation of service for security concerns or by user requests; zero rating status under the law unclear | Amendment to existing telecommunications law; only allows degradation of service to ease congestion or for security concerns; no zero rating permitted |
| **Additional Descriptive Information** |
| **Implementation Year** | 2011 | 2012 |
| **Law Type** | Hard Law | Hard Law |
| **Policy Outcomes** | Positive impact on political aspects (free speech, civic participation); neutral relationship to edge provider innovation; negative impact on network investment and innovation | Positive impact on political aspects (free speech, civic participation); negative relationship to edge provider innovation; negative impact on network investment and innovation |
| **Internet Service Providers** | 2 primary providers, 10 providers total; heavily regulated by SUBTEL; privately owned; restrictions on international ties for telecom providers; privately owned | 9 service providers with international ties; classified and regulated as telecommunications providers |

**Analysis**

Perhaps most importantly, legislative action was used in both Chile and the Netherlands to enact net neutrality policy changes. “Legislation is accomplished by developing or updating the country’s communications laws and clarifying the authority of the telecom regulator” (Layton 2015, 158). This means that, rather than locating the policy-making process within regulatory bodies by attempting to construe existing legislation as applying to ISPs, the legislation itself is updated to explicitly place ISPs within existing telecommunications frameworks. This is especially important because legislative approaches have been shown to be more successful than regulatory approaches, which have a tendency to result in legal challenges that strike down the regulatory action (Layton 2015, 160). Additionally, the placement of net neutrality debates in legislative bodies provides a legitimacy to the outcomes that is not present in appointed or professional regulatory bodies’ rulemaking processes: “…it is ostensibly democratic, and the law-making approach ostensibly includes the appropriate consultations with the public, edge providers, and operators” (Layton 2015, 159). Both cases demonstrate a policy strategy firmly rooted in the legislative bodies of national governments. The use of legislative processes to pursue net neutrality is a key similarity, then, that can at least be considered an attribute of the successful policy process experienced in both states.

The role of NGOs as coalition organizers and leaders is also of vital importance to both cases. NeutralidadSI and Bits of Freedom recruited and coordinated citizens that influenced policy outcomes, and provided policy-makers with an alternative viewpoint to that of the ISPs. Each state also had a series of focusing events that became part of the public discourse on net neutrality, on which the coalition leadership was able to capitalize when engaging in educating and recruiting average citizens. While these events differ, with Chile’s being part of the judicial process and the Netherlands’ being the actions or proposed ITMP of ISPs, the ability of these widely publicized events to create a salient moment for net neutrality is vitally important to the social mobilization of the broader population. It is also important to note that Chile’s net neutrality coalition didn’t face coordinated opposition (though ISPs individually opposed net neutrality legislation on principle), while the Netherlands’ coalition did. Regardless, both cases featured a strong NGO leader that effectively used the focusing events in each state to mobilize a grassroots effort to enact new net neutrality policies.

A final key characteristic shared by both cases in the framing of net neutrality as a civil rights (Chile) or civil liberties (Netherlands) issue instead of a technical efficiency issue. Bauer and Obar note that “the current policy debate blends interrelated issues: (1) concern about the potential abuse of market power… and (2) concern about the regulatory framework that best facilitates dynamic efficiency” (2010, 70). In both cases presented here, coalition leadership has managed to separate these two issues from each other and focus on the potential market power abuses. This is mainly a result of the particular focusing events that demonstrated the industry’s propensity to engage in discriminatory ITMP. With highly publicized, and therefore highly salient, instances of ISPs using these tactics to restrict the internet activities of their customers, each leading NGO was able to transition away from efficiency concerns and reorient the policy debate towards civil rights and civil liberties.

The literature points to several key outcomes that differ by the implementation of either hard or soft law. First, strict net neutrality requirements that aling most closely with hard law implementations (like those in both the Netherlands and Chile) are positively correlated with achieving the political goals of net neutrality (Bauer & Obar 2014). In particular, strict constraints have been shown to have positive effects on freedom of speech and civic participation, while using tiered services with pricing discrimination has a negative relationship with these goals (see Bauer & Obar 2014, 13). While it is not necessarily true that states with soft laws, or those lacking any net neutrality regulation, have ISPs that engage in discriminatory practices, they are also not prohibited from choosing to do so. Thus, the regulation of ISPs through hard law has a positive impact on desirable political outcomes like free speech, while the imposition of soft law does not yield these benefits.

Additionally, the imposition of soft laws has a positive effect on edge provider (or internet application) innovation, especially among local developers. Layton notes that “countries with soft net neutrality innovation have a high level of edge provider mobile app innovation… almost all of the countries with soft approaches appear consistently in the top 10 of the ITU’s ICT Development Index” (2015, 169). The author also notes that research on most countries (including Chile) with hard laws does not indicate any relationship between net neutrality and innovation at all, though the Netherlands is a unique case where a correlation between net neutrality and negative growth innovation is seen (Layton 2015, 170). While the effects of hard laws on innovation are mixed, the positive correlation between innovation growth and soft laws are indicative of diversification among content providers through these types of guidelines. This should be contrasted with networked-based economic consequences of hard and soft laws, as discussed by Bauer and Obar (2014). Hard laws are found to have negative effects on investments to increase capacity and efficiency of broadband networks, as well as providing negative incentives to innovate in the network context, while allowing tiered service with pricing discrimination is found to be positively correlated with investment and innovation incentives (Bauer & Obar 2014, 13). Thus, the structuring of ITMP can have impacts on innovation and investment for both ISPs and their networks, and edge providers and their content.

Two other observations regarding the implementation of net neutrality policies warrant mentioning. First, despite the presence of strict net neutrality provisions in hard law in Chile since 2011, practices violating net neutrality were still seen among some ISPs. “…despite the existence of a net neutrality law, by 2013 some telecommunications companies in Chile… were accused by civil society organizations of slowing down the speed of specific online services, such as YouTube and P2P networks” (Vargas-Leon 2015, 113). Violations of net neutrality policies remain very difficult for end users and non-experts to detect, so some ISPs appear willing to risk the consequences because of the low likelihood of being caught despite the legal consequences in hard law regulatory regimes. A second observation is that hard laws have seemed to inadvertently prioritize the provision of content by US-based providers. “…bans on paid prioritization actually serve established American companies to the detriment of non-US entrants” (Layton 2015, 173) because new entrants can no longer purchase improved service provision for end users. Thus, as observed above, hard laws not only have negative effects on edge provider innovation, they also serve to reinforce the hegemony of US internet content providers to the detriment of local content.

**Conclusion**

Chile and the Netherlands are two states that have passed, implemented, and sustained net neutrality policies when many other states have failed to do so, including the United States. States that have implemented net neutrality have focused on legislative policy processes, and have contended with social movements led by NGOs that succeeded in framing net neutrality as a matter of civil rights or civil liberties. However, net neutrality is still a relatively new policy arena that has few proven strategies with lasting policy to attest to their effectiveness. As additional states adopt and successfully implement net neutrality policies, the strategies for policy change and content of these policies should be evaluated to better understand the role that actors and framing play. Given the demonstrated applicability of the Multiple Streams Framework to telecommunications policy studies in this paper, further use of this policy process analysis method should be made, especially when considering emergent policy arenas.

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