

# **Political Economy of the Network Neutrality in the European Union**

Meelis Kitsing  
Department of Political Science  
National Center for Digital Government  
University of Massachusetts Amherst  
Amherst, MA 01003, USA  
Email: [mkitsing@polsci.umass.edu](mailto:mkitsing@polsci.umass.edu)

Prepared for delivery at the Internet, Politics and Policy 2010: An Impact Assessment  
conference at Oxford University, UK, on September 16-17, 2010.

### **Abstract**

During the last years network neutrality has become an important regulatory policy issue in Europe and the United States. The 2009 EU telecom reform was in the center of attempts by content providers to introduce net neutrality regulations. However, these efforts were not fruitful as minimalist and ineffective approach for tackling a wide range of issues related to network neutrality prevailed in the final version of telecom package. This outcome is result of interaction of interests, ideas, institutions and uncertainty which created unfriendly environment for potential network neutrality legislation. As a result interests of network operators prevailed over the interests of content providers in this new emerged regulatory regime.

**Keywords:** net neutrality, political economy, european union, content providers, network operators, regulation

## **Introduction**

This paper will analyze the debate about neutrality of electronic communication networks (net neutrality) in the context of telecom reform in the European Union (EU). In November 2009, EU adopted new telecom regulations and directives bodies, which uses relatively minimalist concept of net neutrality. The EU understands net neutrality primarily as a way to ensure minimum quality of service requirements. Given the presence of similar vested interests as in the American debate on the net neutrality in 2006 as well as in 2009 and 2010, this paper explores on the basis of primary and secondary sources why large telecom companies as network operators and content providers such as Google and E-Bay were both supportive of the final version of the telecom package. Standard political economy and the experience of American net neutrality debate suggest that these two groups have interests that are diametrically opposed to each other. In order to explain the outcome, the paper maps out interaction of interests, ideas and institutions of the network neutrality debate in the European Union.

The paper is structured as follows. It starts with the discussion of the concept of network neutrality. Then it discusses the concept in the context of European debate. This is followed by analysis of different interests, ideas and institutions. After that paper offers a brief but critical case study of Estonia in order to understand how dynamics of domestic politics may have shaped the country's position on the EU network neutrality regulations.

## **The Concept of Network Neutrality**

The term "net neutrality" has become increasingly used among wider public and the media often describes it as "a set of regulations to prevent internet service providers favoring particular companies' traffic" (Waters 2010). However, the essence of the term is not easy to define. Both proponents and opponents of net neutrality use the term in discussing wider variety of phenomena related to the internet. Hence, the term is subject to what social science methodologist call "conceptual stretching" which implies that the same concept is used differently and its use may be heavily context dependent (Sartori 1970).

There is a danger that the concept of network neutrality may not have any substantive meaning as a result of this conceptual stretching. Particularly, as some of its proponents use the term interchangeably with the term "open internet" which, of course, many people would support but they understand the meaning of the concept fundamentally differently. In other words, the concept of network neutrality may have to do more with the public relations and social construction of public debates for the benefit particular vested interest rather than something concrete that can be easily legislated and implemented through public policy. Particularly so as the concept of network neutrality "spans over vague concepts of fairness and civil liberty more than economics" in public debates (Cave and Crocioni 2007, 270). The social construction of net neutrality debate is further supported by evidence that its leading proponent is Google (Waters 2010).

However, some scholars have tried to define and describe the concept of net neutrality. Baumol, et al. (2007) define net neutrality as "a policy proposal that would, among other things, regulate how network providers manage and price use of the

network.” (quoted in Cave and Crocioni 2007, 670) However, this definition is quite narrow – particularly if we consider what other scholars mean by the concept and how it is understood in public policy debate.

Sidak (2006) argues that the net neutrality consists several different propositions rather than a single concept. First, proponents point out that internet access providers such as, Internet Service Providers (ISPs) must not have higher prices for priority delivery. Some of them want to eliminate price discrimination in providing internet access. In some cases even traffic prioritization per se is criticised. Prioritization has become an important way to handle data growth, which is adding significant new complexity to the way the Internet works. Some data (a live sports event or phone call) must go immediately from one party to another or the experience is ruined. Other data (an email) can be delayed a few seconds and the user will never notice. Second, the proponents want access to specific websites or Internet applications by final users always be open and never denied. Third, according to proponents of net neutrality access providers such as ISPs must not be allowed to integrate backwards into the production of content or applications (Sidak 2006). This is also known as functional separation.

In order to clarify further the meaning of the network neutrality, we can consider even more detailed elements that go under the broad concept of network neutrality. Eli Noam points out that there are multiple possible meanings to the phrase net neutrality that can be the following (Hart 2006, 5): First, there should be no different quality grades (fast lanes) for internet service. Second, there should be no price discrimination among internet providers. Third, there should be no monopoly price charged to content and application providers. Fourth, nothing should be charged to providers for transmitting their content. Fifth, there should be no discrimination [against] content providers who compete with the carrier’s own content. Sixth, there should be no selectivity by the carriers over the content they transmit. Seventh, there should be no blocking of the access of users to some websites. Noam’s list overlaps to a great degree with the propositions articulated by Sidak. After outlining these scholarly attempts in conceptualizing the net neutrality we can turn to the EU legislative efforts.

## **The European Union on Network Neutrality**

How do these abstract principles concerning economic, political and social aspects of internet translate into actual policy proposals in the European Union (EU)? Even though some groups like the European Green Party took a broad approach and saw the net neutrality as a freedom of speech issue, the EU’s legislative attempts have defined network neutrality quite narrowly. The EU Commission’s understanding of the network neutrality is not as comprehensive as above-mentioned scholarly approach and as in the case of current US administration. EU Commission’s Communication published in September 2008 discussed network neutrality solely in the context of network management:

It is against this background that concerns have been raised about preserving "**net neutrality**" as the internet evolves. New network

management techniques allow traffic prioritization. Operators may use these tools to optimise traffic flows and to guarantee good quality of service in a period of exploding demand and rising network congestion at peak times. However, traffic management could be used for anti-competitive practices such as unfairly prioritising some traffic or slowing it down and, in extreme cases, blocking it. (Commission of the European Communities 2008, 7)

This concern over traffic prioritization found its way into so-called Telecom Package, which in its first versions set forth narrow but straightforward net neutrality provisions. The European Parliament included in the first draft of its regulations a prohibition against “hindering or slowing of traffic” (European Parliament 2008). However, this was excluded in the final version versions of the telecom package.

The Council of Ministers and European Parliament reached a compromise and approved the telecom package in November 2009 (European Commission 2009). The EU Commission summed up the net neutrality provisions found in the package in the following way:

...Under the new EU rules, national telecoms authorities will have the powers to set minimum quality levels for network transmission services so as to promote "net neutrality" and "net freedoms" for European citizens. In addition, thanks to new transparency requirements, consumers must be informed – before signing a contract – about the nature of the service to which they are subscribing, including traffic management techniques and their impact on service quality, as well as any other limitations (such as bandwidth caps or available connection speed). (European Commission 2009a).

The approved version of the package gives authority to national telecom regulators to ensure minimum quality of service requirements. It also asks service providers to provide information to consumers about the quality of service. In other words, already narrow network neutrality provisions as initially envisioned by the EU Commission are watered down and almost non-existent in the package.

However, the package includes some other provision, which relate to a broader concept of network neutrality such as backward vertical integration. EU Commission points out that “National telecoms regulators will gain the additional tool of being able to oblige telecoms operators to separate communication networks from their service branches, as a last-resort remedy” (2009a). Nevertheless, these are additional measures. The functional separation has been already legislated through previous measures as will be discussed below. The implementation of these measures may differ in the different member-states. At best, the EU gained a new formal measure to implement functional separation – success of which may depend more on national authorities than the EU Commission.

## **Explaining the Outcome**

The final version of EU telecom package is explained by considering interaction of ideas, institutions and interests. Since most of this research was conducted during on-going

debate on the telecom package the sources for identifying interests were scarce. Many informants were not willing to talk about the issue on-the-record. However, it was possible to gather information by talking to informants off-the-record and gain access to documents that were publicly not available. In the process of collecting information for the purposes of this paper six informants in private and public sector talked with the other and some of them provided sensitive documents. I refer to informants below as “Informant 1..6”. In addition to these primary sources, the research uses publicly available information to construct a narrative. This preliminary information can be further verified as the telecom package has recently been approved. This implies that different parties involved in lobbying and negotiations may be less sensitive about sharing information.

Social science research on information technology about the network neutrality has sometimes accepted the normative claim that network neutrality legislation is in the public interests. It has been argued that large corporations block network neutrality regulations, because it damages their business interests. This can be labeled as Craigslist’s view of the network neutrality debate because this is how the debate was characterized on the website of Craigslist in Spring 2009 (the post is no longer available) and has been characterized by its founder Craig Newmark (Newmark 2006). It is seen as a struggle of small guys against big business.

What’s is forgotten in this characterization, of course, is the fact that Craigslist is a content provider. So are many companies that support network neutrality. Network neutrality may or may not be good for public welfare depending on what is exactly meant by its proponents, However, it is certain that content providers are convinced that supporting network neutrality legislation is beneficial to their business agenda.

## **Interests**

The basic political economy of network neutrality is simple: interests of content providers clash with those of network providers. It is an attempt by content providers to change existing equilibrium in the cyberspace and increase their power vis-à-vis network providers by using government regulation. This is how the leading European regulatory experts characterize the push for the network neutrality regulations:

Net neutrality being an attempt by content and application providers – the likes of Amazon, eBay, Google, Microsoft, Yahoo! and Intel - to constrain the behaviour of broadband Internet access providers – such as AT&T, Verizon, Comcast and Sprint - through political pressure. (Cave and Crocioni 2007).

In other words, it is a classic case of political rent seeking where a group of companies tries to advance their business interests by government intervention. Usually, it is assumed in the public choice literature that political rent seeking serves vested interests - but not the general interest of wider public (Krueger 1974). However, there are exceptions to this rule if certain conditions are met. For instance, lobbying for opening a protected market can simultaneously serve interests of the lobbyist, other companies planning to enter the market and general public because it will increase competition,

which potentially may lower prices. Certainly this is the way in which content providers characterize their position by emphasizing the importance of openness of and freedom to use the internet that the network neutrality legislation should secure. Even the term “network neutrality” puts content-providers support for new regulations in a more favorable light than network operators who have to be against “neutrality”. Hence, it is to a great degree to activism of content-providers that “mundane conflict of business interest - content versus the network industry and its vendors – has risen to such a high position on the business agenda” (Thorngren, 2006).

Of course, network operators see the network neutrality legislation as purely benefiting content providers at the expense of other business and consumers. Telecom companies commissioned a study by Copenhagen Economics, a consulting firm, which calculated in 2008 that average monthly broadband subscription prices could rise from 33 euros to 44 euros in Sweden and from 29 to 39 euros in Germany as a result of comprehensive net neutrality regulation (Tait 2008). According to the firm, the loss of consumer welfare, which is an aggregate indicator of impact of price increase on all consumers, in Germany could total 1.7 billion euros as a result of new rules (Tait 2008).

As the network neutrality regulation would reduce flexibility in management of the networks, then network providers argue that the network neutrality regulations will contribute to the internet traffic jams. This is so because of Web 2.0 type applications are creating a crushing new burden of data on the networks. For instance, the BT Wholesale calculated that 30 minutes of TV content accessed over the Internet consumes the same amount of online bandwidth as about 78,000 emails. As companies push more content onto the Internet, the networks at some point will reach capacity. Network neutrality regulations will accelerate these problems because flow of some data such as emails cannot be delayed in order to make space for priority data such as video. Heavy regulation may also create disincentives to invest in networks as these investments cannot be recouped.

A view of network operators along the similar lines was expressed in the Financial Times about the delay of the telecom package adoption in May 2009: “Telecom companies declined to comment publicly, but privately welcomed the delay to regulations that they have lobbied against for years. ”We never like uncertainty in the regulation, but doubt is better than some of the stuff that was in the package, one executive said. He added: “I still think most of it will go through, but we may have bought ourselves a year “”(Pignal 2009).

### **Mutual Interdependence**

As the interests of content- and network providers seem diametrically opposed to each other, it is surprising that both of these groups ended up in supporting the prevailing minimalist provisions on network neutrality in the EU telecom package. European Telecom Network Operators’ Association (ETNO), an organization representing interests of leading European telecom companies, expressed its public support to the final version of the package (Kiviniemi 2009). ETNO Director Michael Barthomelew told to the Wall Street Journal that telecom package’s “new provisions to boost investment in superfast broadband networks should be quickly put into practice” (Kiviniemi 2009). This was echoed by BT Group PLC’s president of public and

government affairs Larry Stone who told to the Wall Street Journal that “his company strongly supports the EU's regulatory push for a more consistent European telecom market "allowing for more competition, innovation and consumer choice in the telecoms sector”” (Kiviniemi 2009). After two years of extensive lobbying and pushing their narrow agenda, it seems that this narrow self-interest became enlightened self-interest. Or it may be a realization that more favorable package is not feasible as expressed by a telecom executive in the Financial Times (cited above). Is ETNO expressing revealed preferences of network providers and not their real preferences? Nevertheless, the simplistic characterization of the interests ignores the fact that network operators and content providers operate in the environment of mutual interdependence. Both of them are selling complementary goods. An increase in demand for one good increases the demand for another good. Operators need content because this will increase demand for their network services and allow recouping investments in increasing the network capacity. Content-providers need increased capacity of networks because this allows them to create and sell even more data-intensive content. In the European context sellers of both of these goods have to be functionally separated which makes even more sense in characterizing the interaction mutual interdependence.

### **Prisoner’s Dilemma or Battle of the Sexes?**

In the terms of game theory, it may seem at first sight that content providers and network operators played the cooperation game of prisoner’s dilemma during the two years of extensive lobbying. They have reached optimal outcome (3,3) instead of suboptimal outcome (2,2) (Figure 1). However, this is not the game they actually played because win-lose payoffs in the scale of (1,4) or (4,1) are not characteristic to this game (Figure 1).

(Figure 1 about here)

Such significant loss or gain would not be possible in this game because regardless of other party’s actions loss to one party means immediately loss to another party. In other words, if network operators face tougher regulatory environment, then they may not make sufficient investments in the network infrastructure, which will reduce demand for content as well. If the content-providers have to operate in the environment where they have disincentives to produce content, then the demand for network capacity will plummet as well. Furthermore, regulatory intervention may not stop with attempts to secure “neutrality” of networks. As Google has recently discovered “neutrality” principles may be become rallying cry for activists who would like to secure more neutral search in the internet (Waters 2010). In this sense, strong push for network neutrality may come back to haunt content providers as the next natural step would be more neutral delivery of content.

Hence, it would be more feasible to suggest that the game played here is actually a coordination game of the battle of sexes. In this game both sides are better off coordinating their activities with each other. Multiple equilibrium are possible – (3, 4) or (4, 3) (Figure 2). The outcome depends on the relative bargaining position of different parties. At this particular juncture, the outcome is closer to original position of network



operators than that of content providers. The lack of coordination would result much worse outcome for both parties – (1, 2) or (2, 1) (Figure 2).

(Figure 2 about here)

This outcome for content providers would mean that they may get tough network neutrality regulations. These restrictions create disincentives for operators to increase capacity and/or imply that consumers have to pay higher prices for this capacity. This would reduce demand for the content. In addition, there is a danger that next step would be to secure more “neutral content” as was discussed above. For operators it would mean that with complete flexibility in network management and without considering the interests of content providers, content providers face disincentives to create sufficient content. This, in turn, will reduce the demand for network services. Hence, the strategies of network operators and content-providers are incentive-compatible.

Of course, this is a stylized narrative based on analogies of two games. Reality is certainly much more complex and interests of all operators and content providers are not perfectly aligned. Even if the analogy of that of the battle of sexes game – not that of prisoner’s dilemma – is correct, then it must be explained why particular equilibrium has prevailed. Why the final version of telecom package is more favorable to the interests of network operators than that of content providers?

### **Public Debate**

The explanation can be found by adding ideas and institutions to the picture. I start by considering ideas. The public debate – or to be more precise - the lack of public debate on the net neutrality in the EU has created much less favorable environment for the legislation than in the US. While in the US the net neutrality has received a considerable attention in the media such as National Public Radio and even in Daily Show of Comedy Central, it is perceived as highly technical issue in the EU. It would be fair to say that many experts working and investors in the field of telecommunications are not just familiar with the debate but have never heard of the term “net neutrality”. Some of the ideas assembled under this concept may be, of course, familiar to them.

In the US the debate has taken concrete political leanings where Democrats usually tend to support network neutrality regulations and most Republicans oppose it (Hart 2006). This is, of course, simplification as some Republicans have taken and still take a different position.

Nothing of that sort has emerged in Europe where most politicians have no position on the net neutrality. Hence, the issue seems to concern primarily lobbyists for particular interests and experts who have studied the issue. As far as the public debate is concerned, then it seems to be relatively unimportant issue – perhaps even a non-issue. There are no important political actors who are willing to invest their political capital for focusing on this issue. Therefore, it is also relatively easy to facilitate compromises as many political actors have not taken firm position on the issue. All of this is not helped by the fact that main supporters of the network neutrality legislation are American companies such as Google, E-Bay and Skype (even though the latter has significantly

more employees in the EU than in the US it was owned by E-Bay until September 2009 when its founders together with London and Silicon Valley-based venture capital firms purchased a majority stake in the company). At the same time, network providers are usually European companies.

The low profile debate is a logical outcome in a way because the institutional framework in Europe is different. As the leading EU regulatory experts Cave and Corcioni (2007) point out:

The net neutrality debate originated in the U.S. and is at least partly conditioned by the U.S. specific regulatory and market features. It is most importantly the retail ISPs, operating at the IP layer of the network, making prioritization decisions. In the U.S. it is much more likely that the ISP is affiliated to the network access provider than in Europe. This is because the degree of access regulation for Internet broadband in the U.S. is currently considerably lower than in Europe where often because of access obligations, the retail ISP is not the wholesale network provider. Effectively there have been opposite regulatory trends to access to broadband networks in the U.S. and Europe. U.S. access obligations have been largely removed, while since 1998 European National Regulatory Authorities (NRAs) and the European Commission have increasingly extended access obligations to broadband networks at different levels. (Cave and Corcioni 2007).

In other words, some important goals that are expected to be achieved by the specific network neutrality regulations in the US have already been implemented in the EU by other means.

### **Institutions**

Even more importantly, the institutional framework allows to understand the constraints on vested interested and the emergence of minimalist net neutrality regulations in the EU. Often scholars studying the EU regulations proceed as the EU is a federal state akin to that of the United States. Similarly lobbyists seem to think that regulatory decisions are simply made in Brussels and there is no need to look beyond it (Informant 1). This line of thinking reflects a profound failure to grasp the nature of EU. Obviously, the EU is much more than simply a regional international organization but it is not a Westphalian state either. Even though, the EU has been give a vast authority over the economic regulation it is far from becoming in any way similar to the US federal government. First, the EU directives however detailed and uniform may they seem in print have to be implement by national authorities. Second, there is on-going resistance to increase regulatory powers of the EU over that of national authorities.

As Oxford scholar Jan Zielonka has pointed out there are competing sources of authority in the EU with overlapping jurisdiction resulting in “maze Europe” (Zielonka 2006). This implies that EU is not something in between an international organization and Westphalian state, which develops in the direction of the latter. Rather, it is

something completely different which the state-centric approaches are not capable of grasping. According to Zielonka EU's model is closest to that of Neomedieval Empire – not to that of Westphalian state (Zielonka 2006).

Telecommunication regulations as expressed in the EU Telecom Acquis seem at first sight highly uniform and detailed. However, as the research has demonstrated these uniform rules are often implemented differently in different the EU member states (Tenbuecken 2006). For instance, the independence of telecom regulator has considerable variance across the EU countries despite the perceived uniformity of telecom regulations on this issue.

Similar dynamics played out in the EU telecom package. The implementation of minimum quality requirements falls under responsibility of national telecom regulators. As this was the main way to implement network neutrality regulations, it is natural to expect a high degree of variance what network neutrality means in practice in different EU countries. Even if the language concerning the network neutrality in the telecom package would have been more explicit and detailed, then implementation of these seemingly uniform provisions would have been probably fairly diverse.

Now if we put the interests of content-providers and network operators into the context of ideas and institutions, then it is obvious that both institutional and ideological environment were more in sync with that of network operators. Content providers had to argue for network neutrality regulations in an environment where general public was indifferent for their cause. Institutional nature of the EU was not supportive either as effective legislation of network neutrality demands much more uniformity and enforcement capacity of federal state than it is available in the current EU. In addition, support for their cause means more centralization, which is opposed by many member states regardless of how noble the cause might be.

### **Uncertainty**

At last but not least, timing was not favorable for content providers either. The EU telecom package was supposed to be approved by the Council of Ministers and European Parliament by May 2009. However, the Council and Parliament were able to reach compromises on most issues – including the network neutrality provisions discussed above – except the one concerning copyright. Council proposed tough provisions denying access to the Internet to those who have violated copyrights online three times (three-strikes), while Parliament saw the access to the Internet as a basic human right which cannot be taken away without due judicial process. Elections to European Parliament took place in the summer of 2009 and new EU Commission was appointed and confirmed in the beginning of 2010. All of these developments increased uncertainty. The ETNO director Michael Barthomelew expresses the importance of reducing uncertainty. He told to the Wall Street Journal that the compromise reached on the telecom package “marks the end of a long period of uncertainty for the telecoms sector” (Kiviniemi 2009).

In other words, the current minimalist network neutrality regulations were a better outcome than no new telecom package in the near term and potentially even worse telecom package in the longer term (Informants 2 and 5). Hence, actors did not push for re-negotiations of any clauses in the telecom package after the elections (Informant 2). The main focus was on reaching the compromise on the copyright issue.

## The Case of Estonia

Estonia is one of the smallest of the EU members and hence the country may seem insignificant in the EU policy-making processes. However, its authority in ICT-related issues is considerably larger than its size. In spite of being a former socialist bloc country and new member state of the EU, it is one of the leading pioneers in ICT-related policy-making in the whole European Union.

Estonia's efforts in implementing e-government have received constant praise (United Nations 2008). Since 2005 it has held remote electronic voting four times. In the last elections almost 16 percent of votes were submitted online and the use of remote electronic voting was correlated with increase in turnout (Vabariigi Valimiskomisjon 2006). The main office of Skype, peer-to-peer online phone service provider, is based in Estonia (Lumiste, Pefferly and Purju 2007). Estonia has set up a NATO cyber security center as a result of the 2007 cyber attacks that brought country's electronic communication networks to standstill. All of these factors make Estonia a critical case in understanding how ideas, institutions and interests interact in the network neutrality debate.

Starting with the interests, then the position of Skype is dominant in Estonian policy-making. The company is basically seen as a national treasure and its interests are considered to be in sync with the interests of Estonia. Skype's country manager Sten Tamkivi is also an adviser to Estonian president Toomas Hendrik Ilves on ICT issues. All of this, of course, ignores the fact that until September 2009 the main shareholder of Skype was E-Bay, which had purchased the company from Danish-Estonian-Swedish founders in 2003 for \$ 2.6 billion. E-Bay's and Skype interests in the network neutrality debate are consistent with the interests of other content providers such as Google. Skype supported tougher network neutrality regulations through its lobbying efforts both in Estonia and Brussels (Informant 3).

Hence, it is not surprising that a short speech given by the Estonian Minister of Transport and Communication Juhan Parts at the EU Council of Ministers' meeting in November 2008 echoed rhetoric of content-providers such as eBay, Google and Skype (Informant 2). After it became clear that the EU Council of Ministers and Parliament were not able to reach a compromise on the telecom package in May 2009 because of the copyright issue, the minister expressed opinion that Estonia should support reopening the negotiations on other issues in the package (Informant 5).

In comparison with the US supporters of network neutrality, Juhan Parts is from a center-right conservative party of Isamaa and Res Publica Liit (IRL), which is chaired by famous Estonian economic reformer Mart Laar. He is one of the most important ministers in a center-right coalition government made up of market liberal Reform Party and above-mentioned conservative party. This is further proof that ideological lines in the network neutrality debate are not as clear-cut in the European countries as they are in the United States.

However, giving full-fledged and vocal support by the government for Skype's position was complicated because of the cyber security agenda (Informant 5). Tougher network neutrality regulations imply that management of electronic communication networks becomes less flexible. At the same time, great degree of flexibility is needed to

respond effectively to cyber attacks. Some traffic must be blocked, delayed and so on. Hence, official Estonian position was thorn between these two sides.

Therefore it is not surprising that Estonian government kept a low profile in this debate. The network neutrality was not discussed in the government meetings where the telecom package was on the agenda (Informant 4 and 6). There was almost no public debate on the issue. Indeed, even people with experience in the field of telecommunications were generally unaware of the concept of network neutrality. The case of Estonia demonstrate further the complexity of network neutrality regulations and how even the presence of dominant content provider does not lead to uniform position. Furthermore, the lack of public debate and debate in government supports the broader points made in previous discussion.

## **Conclusion**

The analysis finds that institutional structure and uncertainty over potential outcomes in the future constrained the interest groups. This explains the network neutrality regulations found in the EU telecom package. The new law's contribution is minimal to the existing institutional equilibrium in the EU. The previous regulatory framework provides already tools for functional separation and protection of consumer rights. European telecom markets have been sufficiently competitive and the abuse of market power can be tackled on the basis of competition law.

The paper characterized the strategic interaction of interests as coordination game such as the battle of sexes. Since network operators and content providers sell complementary goods, then they operate in the environment of mutual interdependence with compatible incentives. Multiple outcomes are possible in this interaction. The emerged outcome is explained by interaction of ideas, institutions and interests – and of course, the timing of these interactions.

European telecom companies were concerned about the regulatory uncertainty as the new European Parliament elections took place in June 2009 and new telecom commissioner was appointed in the end of 2009. Hence, telecom companies preferred the current version of the telecom package to minimize the risk of potentially more interventionist legislation in the future. The current institutional framework and environment for public debate on net neutrality was not favorable to interests of content providers. Reaching a more favorable equilibrium from their perspective would have meant significantly more regulatory uniformity and centralization, which contradicts the nature of EU institutional framework.

## **References**

- Cave, Martin, and Petro Crocioni. 2007. Does europe need network neutrality rules? *International Journal of Communication* 1 : 669-79.
- Commission of the European Communities. 2008. *Communication from the commission of the european communities to the european parliament, the council, the european economic and social committee and the committee of the regions. communication on the future of networks and the internet*. COM (2008) 594 final.

- European Commission. Main elements of the reform. in European Commission [database online]. 2010 [cited February 2010 2010]. Available from [http://ec.europa.eu/information\\_society/policy/ecommm/tomorrow/reform/index\\_en.htm](http://ec.europa.eu/information_society/policy/ecommm/tomorrow/reform/index_en.htm).
- . Reforming the current telecom rules. in European Commission [database online]. 2010 [cited February 11 2010]. Available from [http://ec.europa.eu/information\\_society/policy/ecommm/tomorrow/index\\_en.htm](http://ec.europa.eu/information_society/policy/ecommm/tomorrow/index_en.htm).
- Electronic Communication Networks and Services*, Public Law A6-0321/2008, (2008): , <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P6-TA-2008-0449+0+DOC+XML+V0//EN>.
- Hart, Jeffrey A. 2006. Democracy in the age of the internet: An analysis of the net neutrality debate of 2006. *Proceedings of American Political Science Association Annual Meeting*.
- Kiviniemi, Peppi. 2009. European parliament agrees on overhaul of telecom rules. *Wall Street Journal*, November 6, 2009.
- Krueger, Anne. 1974. The political economy of the rent-seeking society. *American Economic Review* 64 : 291-303.
- Lumiste, Runno, Robert Pefferly, and Alari Purju. 2007. *Estonia's economic development: Trends, practices, and sources. A case study*. Washington, DC: World Bank Commission on Growth and Development,
- Newmark, Craig. 2006. Keep the internet neutral, free and fair. *CNN.com*, October 20, 2006. <http://edition.cnn.com/2006/US/06/09/newmark.internet/index.html> (accessed February 12, 2010).
- Pignal, Stanley. 2009. Web push derails europe telecoms reform. *Financial Times*, May 6, 2009.
- Sartori, Giovanni. 1970. Concept misformation in comparative politics. *American Political Science Review* 64 (4): 1033-53.
- Sidak, J. G. 2006. A consumer-welfare approach to network neutrality regulation of the internet. *Journal of Competition Law and Economics* 2 (3): 349-474.
- Tait, Nikki. 2008. Net neutrality could rise broadband prices. *Financial Times* (October 21).
- Tenbuecken, Marc. 2006. The regulation of network infrastructure in the new european union: Regime similarity after two decades of reform. University of Konstanz.
- Thorngern, B. 2006. Net neutrality: Not as neutral as it sounds. *Ericsson Business Review* 1 .
- Waters, Richard. 2010. Net neutrality comes back to haunt google. *Financial Times*, July 14, 2010, sec Companies and Markets.
- Zielonka, Jan. 2006. *Europe as empire: The nature of enlarged european union*. Oxford: Oxford University Press.

**Figure 1: Cooperation Game: Prisoner's Dilemma**

	Cooperate	Defect
--	-----------	--------

Cooperate	<b>3, 3</b>	4, 1
Defect	1, 4	<b>2, 2</b>

Payoffs: (Network Operators, Content Providers)

**Figure 2. Coordination Game.**

	More Net Neutrality Regulations	Less Net Neutrality Regulations
More Net Neutrality Regulations	<b>4, 3</b>	2, 1
Less Net Neutrality Regulations	1, 2	<b>3, 4</b>

Payoffs: (Network Operators, Content Providers)

Note: 4 is the highest payoff. 1 is the lowest payoff.