Net Neutrality in the Netherlands

van Eijk, N.

Published in:
Gyeongje Gyuje wa Beob = Journal of Law and Economic Regulation

Citation for published version (APA):
The Netherlands is among the first countries that have put specific net neutrality standards in place. The decision to implement specific regulation was influenced by at least three factors. The first was the prevailing social and academic debate, partly due to developments in the United States. The second was the implementation of the amended European regulatory framework for the communication sector. Concrete developments in the Dutch market were the third factor.

The first part of this chapter describes the three factors in detail. It sketches the context of the debate including the amendments that were introduced to regulate net neutrality. Specific incidents contributed to the willingness to change the telecommunications act.

Next the relevant provisions are mentioned including the explanatory memoranda, as they offer the necessary background for the interpretation of the provisions. Three provisions are relevant: the core article on net neutrality and two supporting provisions on transparency and deep packet inspection.

The new rules have to be implemented and supervised by the ACM (the Authority for Consumers and Markets), who had to deal with some first cases. Next to the role the regulator, the market was faced with the consequences of the regulation and changed its pricing policies. We also mention the fact that the rules were more or less extended into the framework of broadcasting regulation.

The analysis and conclusions promote an integral value chain approach. It’s not possible to restrict net neutrality to ‘network neutrality’ exclusively. Other value chain elements need to be considered as well. It should be established which elements of the value chain affect the process of free exchange between the information provider and the information user. This is a matter far more complex than would be in line with a typical telecommunications approach where the accent is mainly on the provider of telecommunications networks and telecommunications services. The convergence between telecommunications and communications regulation can’t be ignored. At the same time, overregulation and underregulation will mean that any problems concerning throttling and blocking of Internet traffic will occur or be aggravated elsewhere in the value chain. The intended purpose will then not be achieved.

Real net neutrality issues will arise in the context of the distribution of audio-visual services. It is expected that questions on interconnectivity (including the role of so-called Content Distribution Networks (CDN’s)) will get a more prominent place.

---

**Contents**

I. Introduction of Net Neutrality Issues in the Netherlands  
II. Net Neutrality Regulation Standards in the Netherlands  
III. Analysis  
IV. Comments on the KCC’s ‘Guidelines for Network Neutrality and Internet Traffic Management’

---

**Abstract**

The Netherlands is among the first countries that have put specific net neutrality standards in place. The decision to implement specific regulation was influenced by at least three factors. The first was the prevailing social and academic debate, partly due to developments in the United States. The second was the implementation of the amended European regulatory framework for the communication sector. Concrete developments in the Dutch market were the third factor.

The first part of this chapter describes the three factors in detail. It sketches the context of the debate including the amendments that were introduced to regulate net neutrality. Specific incidents contributed to the willingness to change the telecommunications act.

Next the relevant provisions are mentioned including the explanatory memoranda, as they offer the necessary background for the interpretation of the provisions. Three provisions are relevant: the core article on net neutrality and two supporting provisions on transparency and deep packet inspection.

The new rules have to be implemented and supervised by the ACM (the Authority for Consumers and Markets), who had to deal with some first cases. Next to the role the regulator, the market was faced with the consequences of the regulation and changed its pricing policies. We also mention the fact that the rules were more or less extended into the framework of broadcasting regulation.

The analysis and conclusions promote an integral value chain approach. It’s not possible to restrict net neutrality to ‘network neutrality’ exclusively. Other value chain elements need to be considered as well. It should be established which elements of the value chain affect the process of free exchange between the information provider and the information user. This is a matter far more complex than would be in line with a typical telecommunications approach where the accent is mainly on the provider of telecommunications networks and telecommunications services. The convergence between telecommunications and communications regulation can’t be ignored. At the same time, overregulation and underregulation will mean that any problems concerning throttling and blocking of Internet traffic will occur or be aggravated elsewhere in the value chain. The intended purpose will then not be achieved.

Real net neutrality issues will arise in the context of the distribution of audio-visual services. It is expected that questions on interconnectivity (including the role of so-called Content Distribution Networks (CDN’s)) will get a more prominent place.
in the debate. Concepts such as ‘managed’ versus ‘unmanaged’ services need to be clarified and implemented in practice.

Keywords: net neutrality, transparency, deep packet inspection, regulation, Netherlands, Europe, value chain approach

I. Introduction of Net Neutrality Issues in the Netherlands

The Netherlands is among the countries that have put specific net neutrality standards in place. The Netherlands was the first country to do so in the European Union. The decision to implement specific regulation was influenced by at least three factors. The first was the prevailing social and academic debate, partly due to developments in the United States. The second was the implementation of the amended European regulatory framework for the communication sector. Concrete developments in the Dutch market were the third factor.

In this section, these concrete developments are discussed first, followed by a description of how the Dutch regulation regarding net neutrality came to be

---

1) In this paper, there are frequent references to sources that (unfortunately) are only available in Dutch. Nevertheless, references to these sources are included to ensure that the information provided in this paper is adequately accounted for.


4) As from 1 April 2013, the OPTA (Onafhankelijke Post en Telecommunicatie Autoriteit, Independent Post and Telecommunication Authority) has merged with the Competition and Consumer Authorities into the ACM (Autoriteit Consument en Markten, Authority for Consumers & Markets).

5) See the work of many excellent authors and also: P. Nooren, A. Leurdijk & N. A. N. M. van Eijk, Net Neutrality and Audiovisual Services (Aanhangsel Handelingen II) (Appendix Official Report), 2008/09, pp 2765 and 2766.

6) See the work of many excellent authors and also: P. Nooren, A. Leurdijk & N. A. N. M. van Eijk, Net Neutrality and Audiovisual Services (Aanhangsel Handelingen II) (Appendix Official Report), 2008/09, pp 2765 and 2766.

7) UPC is owned by Liberty Global Group (http://www.libertyglobal.com).
In April/May 2011, mobile providers indicated that they intended to implement further activities in the field of traffic management, involving traffic throttling, blocking certain applications or requesting compensation for the use of certain applications. These announcements coincided with growing concern for traditional call traffic and SMS traffic being lost to applications like Skype and WhatsApp. The interview with a senior KPN executive had huge impact. He said: “We will not block services, but we will try to price them, or we will price them” and “We are able to identify what – DPI – what is actually the destination of specific data packages.”9 Again, MPs asked questions. OPTA, the supervisory body of the telecommunications sector, started an investigation. The public prosecutor also looked into the question if this was contrary to the provisions of Dutch Criminal Law (see Section 1.3), more in particular the provisions on unauthorized wiretapping.

### 2. Legislative Developments

Attention to net neutrality becomes clearly evident in the European discussion on amending the European framework for the communication sector. This debate came to a climax during the negotiations between the European Council and the European Parliament. The parties involved, particularly the industry on the one hand and NGOs on the other hand, were lobbying actively, and their view points were paid attention to in the media.9 This led to Articles 21 and 22 in the Universal Services Directive, as adopted in 2009.10 These provisions set out the European framework on net neutrality (transparency and quality of service criteria).

The Dutch government opted for using an Internet consultation procedure to implement the amended European rules, which started in April 2010.11 This kind of procedure is not compulsory, but it is applied in the event of more controversial subjects (‘testing the water’) and/or when the stakeholders’ structured input is sought.12 In the preliminary draft for legislation which was the subject of the consultation, the principle had been that implementation was to be restricted to a minimum conversion into national law,13 ‘Gold plating’ had to be prevented as much as possible. The proposed provision on net neutrality was therefore restricted to prescribing transparency and providing the possibility of further regulation. A lot of reactions were the result, advocating more material, more concrete approach to net neutrality. These reactions were partly caused by a call from Bits of Freedom,14 a very active NGO, to react. Not surprisingly, the reactions of the market parties were primarily focused on keeping the net neutrality regulation as restricted as possible. In its reactions to the consultation, the government indicated it did not want to work towards further more detailed regulation, but it committed itself to provide some additional explanation in the explanatory memorandum to the definitive legislative proposal.15

In the build-up to the legislative proposal, an active lobby was started to achieve a more substantial form of net neutrality. For instance, several concepts of legal provisions were discussed with political parties. The legislative proposal sent to parliament in November 2010 was in line with the earlier reaction to the preliminary draft of the consultation:16 introduction of transparency towards the end-user and the possibility to continue developing net neutrality on the basis of further rules. The fact that various political parties were interested in the subject was revealed by their written questions about the bill. The government’s answers were restricted to explaining the chosen approach again. Parliament was not satisfied with the answer and passed a resolution asking the government to come up with a material regulation of net neutrality.17

---

8) Quotes are from: http://pulse.companymovecast.nl/playerv1_0/default.aspx?id=121938&bb=true&swf=true (segment at 3h 33mn).
9) See for example the 2010 position paper of Dutch NGO Bits of Freedom (BOF): https://www.bot.nl/live/wp-content/uploads/Position-Paper-netneutrality.pdf, but also the activities of organisations such as EDRI (www.edri.org) and La Quadrature du Net (http://www.laquadrature.net/) drew attention.
12) Starting 2014, the Internet consultation procedure will become obligatory for all law proposals.
14) www.bot.nl.
15) Results and conclusions of the consultation (in Dutch): http://www.internetconsultatie.nl/nrffimplementatie
explicit reference to the intention of market parties to block or charge for certain services (see Section 1.1).

It is more than symbolic that the first amendment submitted to the legislative proposal concerned net neutrality. The representative of D’66 (liberal democrats) proposed the introduction of a new provision 7.4a regulating several material aspects of net neutrality. Gradually, support for the proposal grew. The final draft of the amendment was signed by a majority in parliament. The government made the best of a bad job and accepted the amendment with open arms. Two small Christian parties in parliament proposed a subamendment. On the basis of this subamendment, an exception was made to the proposed blocking prohibition for ‘ideological reasons’. The minister left it to parliament to judge this subamendment. In June 2011, parliament adopted the amendment and by mistake also the subamendment. Soon after this, the adoption of the subamendment was cancelled. The discussion in the Senate did not yield any additional viewpoints, and on 4 June 2012 the act was published in the Dutch Official Gazette. The effective date of the net neutrality provision was fixed for 1 January 2013 to give the market parties ample opportunity to prepare sufficiently. The provision as such is discussed in Section 2.

The initial remarks of the European Commission on the Dutch net neutrality provision were negative. In May 2012, Commissioner Kroes said: “I also asked European national legislators and regulators to wait for better evidence before regulating on an uncoordinated, country-by-country basis that slows down the creation of a Digital Single Market.” This is a clear reference to the Dutch rules, which she had previously called ‘premature’. However, no further action was taken to revoke the net neutrality rules.

Yet, it is clear that the provisions of the newly proposed regulation ‘laying down measures concerning the European single market for electronic communications and to achieve a Connected Continent’ are less far-reaching than the Dutch regulation. If the amendment proposal makes it intact through the European decision-making process, it probably necessitates adjustment of the Dutch net neutrality regime. Nevertheless, the European Commission has indicated that there might be no conflict between the proposed European regime and the Dutch net neutrality regulation. In a letter to Bits of Freedom a Commission representative writes: ‘For our part, we are convinced that our proposal is compatible with the Dutch law and its explanatory memorandum, as we understand it, and that the Netherlands will not have to change anything in its legislation when our proposal is adopted into EU law.’

3. Judicial Developments

In Section 1.1, it is described that before and at the time of the legislation process there were two cases in which the regulatory authority proceeded to making a further inquiry.

The first case concerned traffic throttling by cable operator UPC. According to the findings of the investigation by telecom regulator OPTA, UPC had taken measures, and the practice was believed to be not structural. If there were a structural restriction of Internet speed in the use of certain services, it would have to be regarded as an amendment of the contract with the end-users. In such case, end-users should have the opportunity to terminate the contract, according to OPTA.

19) Kamerstukken (Parliamentary documents) II, 2010–2011, 32549, nr 29. The majority consisted of almost all political parties with the exception of the two parties that had formed the government (conservatives and Christian democrats).
20) A minority government that did not have a majority in parliament and therefore depended on the support of opposition parties, including the PVV (Geert Wilders’ political party) with which it had entered into a tolerance agreement.
OPTA also immediately made a provisional inquiry among providers of mobile networks (KPN, Vodafone, T-Mobile and Tele2) into the intention of implementing traffic management and payment for services. This ‘Quickscan’ was performed in collaboration with the supervisory authority on privacy, CBP (College Bescherming Persoonsgegevens, Dutch Data Protection Authority). The Quickscan results confirmed that all parties involved used techniques for structurally analysing data packages that were transported across their mobile networks (Deep Packet Inspection, DPI).29 No signs were found that the providers investigated read their subscribers’ e-mail messages, viewed photographs sent, or read contributions to social networks.30 Simultaneously, it was found that providers in their analysis took cognizance of more data than merely information intended for handling traffic, including tracking applications such as WhatsApp, GoogleTalk and Twitter. Both authorities did not rule out the possibility of a breach of the freedom of communication31 or the applicable privacy rules32, but in anticipation of a definitive investigation they saw no reason yet to take enforcement measures. Further investigation was to follow, led by the supervisory authority on privacy.

The definitive investigation into DPI practices of mobile providers was completed in 2013.33 From the reports by the CBP published in July 2013 it became clear that in the supervisory authority’s opinion most providers take insufficient care when dealing with personal details (untimely anonymisation or deletion, shortcomings with respect to transparency and obtaining end-user consent). Market parties have taken additional measures or promised to do so. In one case, DPI data was used for marketing purposes. The CBP did not impose any specific sanctions but announced it would verify to what extent the violations found continued, after which decisions will be made on imposing enforcement measures.

The criminal investigation in this DPI case confirmed that KPN had its analysis software extended to recognise and monitor applications like Hyves, WhatsApp and Viper.34 The communication content, however, was believed to be excluded from the analyses. The exploratory investigation did not yield any indication that KPN was guilty of illegally tapping its end-users. Consequently, there was no reason to suppose there was any punishable behaviour and that a formal criminal investigation had to be conducted.

4. Administrative developments

In the previous subsections, it is described how net neutrality in the Netherlands has come about. Besides written questions from parliament and the involvement of supervisory authorities – including the Public Prosecutor’s Office – no specific regulation or enforcement activities have been undertaken with respect to net neutrality or DPI. The legal provision, however, has been complemented with a ministerial order (see Section 2.2).

II. Net Neutrality Regulation Standards in the Netherlands

The facts about what type of legal provisions has been introduced in the Netherlands are dealt with in this section. The text of the explanation to the provision, which is very extensive and helpful in interpreting the provision, is included unabridged. Additionally, the special provision on Deep Packet Inspection (DPI) - as part of the rules on communication confidentiality - has been included. The current state of affairs concerning implementation and enforcement is dealt with in this section as well (paragraph 2.2).

29) For everything on DPI see Milton Mueller’s DPI project: http://dpi.ischool.syr.edu/Home.html.
31) As guaranteed in the Dutch Constitution (article 13) and in the Telecommunications Act (article 18.13).
34) This investigation has not been disclosed publicly, but the conclusions can be found in a letter from the Minister of Security and Justice to parliament (Kamerstukken II, 2010/11, 32549, nr 45).
1. Provision in the
Dutch Telecommunications Act

1) Net Neutrality

The regulatory process described above resulted in a new article in the Telecommunications Act, in which net neutrality is further developed materially. The text of the article is provided below.\(^\text{35}\)

**Article 7.4a**

1. Providers of public electronic communications networks via which Internet access services are delivered and providers of Internet access services shall not hinder or slow down applications or services on the Internet, unless and to the extent that the measure in question with which applications or services are being hindered or slowed down is necessary:
   a. to minimise the effects of congestion, whereby equal types of traffic must be treated equally;
   b. to preserve the integrity and security of the network and service of the provider in question or the end-user’s terminal;
   c. to restrict the transmission to an end-user of unsolicited communication within the meaning of Article 11.7(1), provided that the end-user has given its prior consent for this to be done;
   d. to implement a legislative provision or court order.\(^\text{36}\)

2. If an infraction of the integrity or security of the network or the service or a terminal of an end-user, as referred to in (b) of the first paragraph, is being caused by traffic coming from the terminal of an end-user, the provider, prior to taking the measure which hinders or slows down the traffic, must notify the end-user in question, in order to allow the end-user to terminate the infraction. Where the required urgency means that this is not possible prior to the measure being taken, the provider must give notice of the measure as soon as possible. The first sentence shall not apply where this concerns an end-user of a different provider.

3. Providers of Internet access services shall not make their charges for Internet access services dependent on the services and applications which are offered or used via said services.

4. Specific rules with regard to the provisions in paragraphs 1 to 3 may be provided by way of a general administrative order. The proposal for a general administrative order as provided for under this paragraph shall not be made earlier than four weeks after the draft has been submitted to both Houses of the States General.

5. In order to prevent the degradation of service delivery and the hindering or slowing down of traffic via public electronic communications networks, minimum requirements regarding the quality of service of publicly available electronic communications services may be imposed by or pursuant to a general administrative order on providers of public electronic communications networks.

The explanatory memorandum to Article 7.4a is also quite extensive and reads as follows:\(^\text{37}\)

End-users should be able to decide what content they want to send and receive, and which services, applications, hardware and software they want to use for such purposes (in accordance with paragraph 28 of Directive 2009/136/EC). The original article 7.4a proposed by the Minister cannot adequately ensure this, because it allows providers to restrict access to websites or services. Internet Service Providers will increasingly take measures to hinder or slow down Internet traffic, either at their own initiative or under pressure from third parties, unless

---


\(^{36}\) For reasons of completeness, the rejected sub amendment would have introduced a fifth exemption (‘or e. to comply with an express request by the subscriber to obstruct services or applications due to ideological reasons specified by the subscriber if the provider does not offer the subscriber a monetary or other advantage for this request and the provider already offered the option of complying with such a request prior to 1 June 2011.’).

this is prohibited. This amendment is intended to replace Article 7.4a Telecommunications Act proposed by the Minister.

The amendment aims to maximise choice and freedom of expression on the Internet for end users. The term “Internet” refers to the global, worldwide network of endpoints with IP addresses assigned by the Internet Assigned Numbers Authority. It is not intended to prohibit the “reservation” of bandwidth for IP-based services which are offered through its own network, including IP-based television that is not offered via the Internet: these are no services or applications on the Internet. The term Internet should be interpreted broadly, however, to ensure that providers cannot circumvent the scope of this provision. The term “provider of an Internet access service” refers to the term as used in the appendix under Article 13.2a of the Telecommunications Act.

It is clear that the term Internet access service should be interpreted broadly, to prevent circumvention of this provision. If access to websites, multiple services or applications, including apps, is offered, this should at any rate be considered an Internet access service. It is, therefore, at any rate not allowed to offer a service consisting of access to (certain) web pages, services or applications, where the use of certain applications or services are blocked or priced differently. This means that providers are allowed to offer separate services over the Internet, but may not offer packages to access a part of the Internet. Of course, providers may differentiate their subscriptions for internet access or in other ways, such as bandwidth and data limits.

This restriction on the behaviour of providers of Internet services is necessary to ensure open and unrestricted access to the Internet for (online) service providers, citizens and business. It should be prevented that Internet access service providers block or restrict specific information or services.

The amendment prohibits the hindering or slowing down of services or applications on the Internet. This means firstly that a provider may not hinder or slow down a service or application of a specific party. It also means that the provider may not hinder or slow down any specific service or application, such as Internet telephony. The amendment seeks inter alia to prevent the damage a user suffers by breach of the standards contained herein.

To avoid misunderstanding, applicants would like to emphasise that the providers under this article are allowed to provide separate services over the Internet. This allows the provider to offer a separate subscription for mobile VoIP calls instead of the regular cell phone (think for instance of a VoIP mobile phone subscription). Although this service is provided over the Internet, it is not a service intended to provide access to Internet. Such a service is not an Internet access service as defined in this article, but a telephone service. In these cases, it allowed to block the remaining internet traffic (in the case of a VoIP-only subscription all traffic that is not used for VoIP).

Only in certain, limited cases as described in Article 7.4a, first paragraph sub a to d, an exception may be made to the principle that ISPs may not hinder or slow down traffic from end users. Those exceptions must also be interpreted narrowly, whereby the assessment of the necessity must be based on criteria of proportionality and subsidiarity which are similar to criteria established in the context of the application of the European Convention on Human Rights.

The exception under a aims to ensure that in case of congestion, traffic which should be passed without delay (such as VoIP) can be passed quickly, and that in such a case other traffic may be delayed. Few measures will in the opinion of the petitioners be deemed necessary. The most effective method to combat the effects of congestion is indeed to avoid congestion. Providers can avoid congestion in the first place by adequate investment in capacity. However, if there is congestion, then the measures under this exemption are designed to encourage end-users continue to have maximum access to information, disseminate information and use applications or services. Providers may under
this exception only take measures which are not discriminatory, so providers must treat the same or similar services equally. It is to be expected that a heavier service will be delayed first. The measures should be removed as soon as there is no congestion anymore.

The amendment does not seek to prevent the provider from applying necessary network management in order to ensure proper transfer and access. In addition, the provider in the case of congestion may prioritise proportionally the traffic of Internet subscribers with high bandwidth over the traffic of Internet subscribers with a lower bandwidth, in proportion to the difference in bandwidth between these subscriptions.

The exception under b is aimed at blocking traffic which affects the safety or integrity of the network or the terminal of the end user (as discussed in the above mentioned paragraph 28). Traffic which affects the safety or integrity of the network, can for example be traffic from computers that are part of a botnet and which is used for a distributed denial of service attack. Violations of the security or integrity of the terminal are for example traffic used by a hacker without authorisation of the user views, copies or manipulates files on the PC. Again, a measure must be proportionate, so must be restricted to only the traffic that affects the security or integrity, and should no longer be in force if the traffic is not being transmitted anymore. The term “integrity and security” should be interpreted narrowly and does not protect interests of third parties. The measures for the integrity and security of the service and network also include the blocking of outbound spam by the provider.

The exception under c is designed to make it possible to block unsolicited commercial communications such as spam.

The exception under d is designed to allow for the situation where providers are required by statute to hinder or slow down to certain traffic, or are required to do so under a court order.

The second paragraph seeks to ensure that a measure which safeguards the integrity or security of a network or service is protected with sufficient procedural safeguards. Internet providers under this paragraph would for example only be allowed in limited cases, to block traffic from botnets within its network, when they have informed an end user from whose computer the traffic originates, an opportunity to take action to stop the transmission of the traffic. This is intended to prevent the undesirable situation where a company network is shut off from the internet if a provider has determined that within this network there is a computer that is part of a botnet. The administrator of the company will then first have the opportunity to turn the infected computer off itself.

The third paragraph is intended to prevent Internet service providers to charge prices which result in restrictions of access to specific services or applications on the Internet. This still allows for the charging of different prices for different types of bandwidth. Under this paragraph, providers are prohibited from charging a higher price for Internet access where internet telephony is used than for Internet access where it is not the case.

To avoid misunderstanding, the authors would like to emphasise that it is permissible to offer an Internet access service in conjunction with filtering software or technology, for “parental controls” or filtered Internet for religious communities and schools. To prevent circumvention of the principle of net neutrality, the provision, quality or the rate of Internet access service may not depend on whether the filtering software or technology is used. The subscriber must be free to obtain the Internet access service without the filtering software.

Lastly, it remains possible to provide a mobile Internet access service to customers in the Netherlands alone, and not abroad. This may be attractive to a subscriber which would like to avoid data roaming costs abroad.

The fourth paragraph makes it possible to make further rules regarding the provisions in the first, second and third paragraph. In the case of (at the time of establishment of this article
as yet) unforeseen circumstances it may be necessary to clarify or specify the first to third paragraph. For such legislation, only clarifications of the first to the third paragraph may be arranged. This regulation at a lower level may not introduce additional exceptions to the principle of net neutrality. These rules must be filed beforehand at the parliament.

The fifth paragraph was proposed by the government to implement Article 7.4a.

Article VIb proposes a transition regime for Article 7.4a. Article 7.4a as it is replaced after the effective date will apply to all contracts for an Internet access service. In the interest of legal certainty, and in order to give the providers a reasonable time to comply with this obligation, it is proposed that existing agreements are exempt from Article 7.4a. This transition is valid for one year after the effective date. The obligation to act in accordance with Article 7.4a is valid for all contracts to supply an Internet access service after the date of entry into force of section 7.4a and agreements concluded after that date (automatically) be extended or renewed. Of course, providers remain free to offer subscriptions before entry into force of section 7.4a which already comply with Article 7.4a in anticipation of the enactment.

2) Transparency

The transparency obligation regarding net neutrality from the European Framework is part of another general article in the Telecommunications Act (Article 7.3), which is about disclosure of information by providers of public telecommunications networks and services to end-users. The text reads as follows:

Article 7.3:

(…)

4. Rules may be set by ministerial order regarding the information to be provided by the provider of public electronic communications networks or publicly available electronic communications services to end-users and to Our Minister regarding:

(…)

- c. the measures taken by the provider in the case of congestion and the consequences there of for the quality of service delivery;

(…)

3) Deep Packet Inspection

The regulation concerning the application of DPI, also introduced via an amendment, can be found in Article 11.2a of the Telecommunications Act and reads as follows:

1. Without prejudice to the provisions of the Criminal Code and the other provisions by or pursuant to this Act, the provider of a public electronic communications network and the provider of a publicly available electronic communications service shall ensure the confidentiality of communications and the associated data via their networks or services.

2. The provider of a public electronic communications network and the provider of a publicly available electronic communications service shall refrain from tapping, listening in, or other kinds of interception or surveillance of communications and the related data, unless and in so far as

- a. the subscriber concerned has given explicit consent for these actions;
- b. these actions are necessary to preserve the integrity and security of the networks and services of the provider in question;
- c. these actions are necessary for the transmission of information via the networks and services of the provider in question; or
- d. these actions are necessary to implement a legislative provision or court order.

3. Prior to the acquisition of consent within the meaning of paragraph 2(a), the provider shall provide the following information to the subscriber:

- a. the type of information that will be tapped, listened to, intercepted, or made the subject of surveillance;
- b. the purposes for which the information will be tapped, listened to, intercepted, or made the subject of surveillance; and

c. the duration of the tapping, listening in, interception, or surveillance.

4. A subscriber may withdraw the consent within the meaning of paragraph 2(a) at any time.

The explanatory memorandum to the article states the following:

When Directive 2002/58/EC on privacy and electronic communications (ePrivacy directive) was implemented in the Dutch law, the Minister of Economic Affairs indicated that it did not provide for an implementation of Article 5 of the Directive (Kamerstukken II 2002/03, 28 851, No. 3, p. 46). He then announced, partly at the urging of the Raad van State (Kamerstukken II 2002/03, 28 851, No. A, p. 3), that an implementation proposal would be proposed at a later date. The abovementioned provision was, in the opinion of the petitioners, never properly implemented. The European Commission now initiated infringement proceedings against the United Kingdom as a result of the inadequate implementation of this Article, further underscoring the need for proper implementation in Dutch law.

Currently, only the third paragraph of Art. 5 ePrivacy directive, regulating the use of cookies and spyware, among other things, is implemented in Dutch law (see art. 4.1 of the present Decree on Universal Service and users’ interests and the amendment of the Telecommunications Act to implement the revised Telecommunications directives). This implies that an important part of this provision is not implemented. This amendment seeks to implement Article 5 paragraph 1 of the ePrivacy directive.

Articles 139c and 273d of the Penal Code include provisions aimed to prevent the provider from violating the confidentiality of communications. This proposal is intended to supplement these articles. On this basis, explicit consent of the subscriber is required and also the purposes for which communication may be controlled are limited. This provision is enforced by OPTA [The Dutch National Regulatory Authority] instead of the public prosecutor.

- **Paragraph 1** of this article contains a general duty of care for providers regarding the communications and related data being transported through their network and services. This is an elaboration of the duty of providers to ensure and respect the confidentiality of communications. This paragraph shall not affect the provisions of Section 13 Telecommunications Act, inter alia, which concern the interceptability of the networks and services. The term “communications and related data” is broad and includes traffic and location data.

- **Paragraph 2** contains a general prohibition to listen to traffic that is transported via service providers, except if specifically defined exceptions apply. Not only the storing of, but also the storage without analyzing the communication is prohibited under this paragraph. The exceptions under a to d should be interpreted restrictively, as evidenced by the words “unless and to the extent”. The authors with these phrases emphasise that an exception should never go further than necessary, and thus must meet strict requirements of proportionality. Also the use of the term “necessary” in the exceptions is intended to underline this. The exception under a is aimed to grant the user the freedom to choose to have his communication analyzed. Because this is a severe curtailment of privacy and the confidentiality of communications from both the subscriber and other users with whom the subscriber communicates, this requires that the consent of the customer’s be explicit. This refers to the consent as required by Article 23 of the Data Protection Act. The exception under b is intended to allow for providers to take measures necessary for protecting their networks or services. The exception under c comes from Article 5 paragraph 1 of the ePrivacy directive. The exception under d is intended to clarify that a provider may comply with a legal requirement or court order.

If a corporation uses a third company to enable

---

the performance of activities (e.g. through subcontracting), the corporation (as the principal) is responsible for the quality of service to its customers and for complying with legal obligations. This also applies to the provider of a public electronic communications network or the provider of a public electronic communications having work executed for the benefit of its network or services. The provider in the arrangements with the third party from now on will also have to provide for ensuring compliance with the obligations contained in this article regarding the confidentiality of communications and data. After all, if the obligations contained in this article are violated, the national regulatory authority will hold the provider responsible, even if the provider has outsourced the work to a third party.

2. Implementation and Application

1) Actuality of Implementation and Application of the Standards

The rules on net neutrality have been laid down in further detail in a special ministerial order, stipulating that providers need to inform end-users on “measures for measuring and controlling traffic with the purpose of preventing a network connection from being filled to its maximum capacity or overflowing, and the way in which these procedures may have consequences for the quality of services.”

The concrete application of the regulation has been submitted to the ACM (the Authority for Consumers and Markets, successor of the OPTA; see footnote 3). ACM is also charged with supervising compliance and enforcement. To date, the ACM has not issued any further directives as to net neutrality. On its website, it only provides a summary of the current rules, and refers to the possibility of reporting complaints. It is still unclear if the supervisory authority will provide a more detailed explanation of the enforcement policy to be conducted. It has been suggested that the ACM prefers additional European rules on net neutrality. In this context, a critical presentation at an international conference was referred to, in which it is also said that the ACM is held to execute the law. Whether the ACM actually prefers European rules to national rules has not been established yet, but it would be in line with the view of the Body of European Regulators for Electronic Communications (BEREC), which the ACM is part of. In several documents, BEREC has expressed its opinion on net neutrality and has pointed to the importance of a European approach.

2) Impact of the Standards on the Market and Economy

The net neutrality provision had a direct impact on the strategy of market parties, especially with respect to mobile communication. Originally, the providers intended to charge for specific services, but they had to abandon the idea due to the new net neutrality rules. This led to a subscription structure, where the emphasis on data traffic has increased. Data bundles are more specifically priced, and existing packages with unlimited data access have been replaced by packages with a specific size (data caps) and speeds. The exact effect on the consumer price for mobile communication is not clear yet. Comparative studies are not yet available either. A price strategy change was necessary at any rate, since there had been a decrease in revenue from classic services (calls and SMS) for some time, rendering the older business model obsolete.

Since the provisions on net neutrality took effect, no visible changes have occurred in Internet access provided via fixed networks. In the Netherlands, there is strong competition between Internet access via the existing telephone network (VDSL/pair bonding, 8-80Mb) and via cable television networks (DOCSIS, 50-200Mb). The available subscription types are primarily based on data speeds rather than on the amount of data. The providers do use a ‘fair use’ restriction, which is known to be applied in exceptional cases.

3) New or Emerging Issues

According to the media, the ACM would investigate at least three new cases. These cases include

---

40) Article 3.5a of the ‘Besluit universele dienstverlening en eindgebruikersbelangen’ (Stb. 2012, 236).
providing Internet access (with restrictions) on trains – a service provided by T-Mobile in collaboration with NS (Dutch railways) – and bundling free data access into a mobile service/app in combination with a specific mobile subscription via mobile provider Vodafone. Additionally, provider KPN and/or MVNOs (Mobile Virtual Network Operators) were believed to block traffic on their network via a certain port number (port 5060 used for the VoIP-protocol SIP). Additionally, provider KPN and/or MVNOs (Mobile Virtual Network Operators) were believed to block traffic on their network via a certain port number (port 5060 used for the VoIP-protocol SIP).

News reports are indicating that T-Mobile informed the regulator but – according to comments by T-Mobile – the regulator didn’t give a reaction. In the Vodafone-case deliberations with the regulator resulted in an adjusted offer which meets the regulatory requirements. After intervention by the regulator the matter was settle and a technical solution was put into place. According to the spokesperson of the ACM, the regulator is further investigating the incident and looks into options to avoid future incidents'.

4) Extension of Net Neutrality to Broadcasting Distribution Networks

Content-related access issues have a rich history in the Netherlands when it comes to a related domain: the distribution of television programmes via cable television networks. The Netherlands is among the most densely cabled countries in the world (homes passed > 90%), making content distribution via these networks essential for service providers. Entering the Dutch market is extremely difficult without access to cable networks. Meanwhile, the market share of cable operators with respect to content distribution has decreased to approximately 66% (homes connected). The introduction of IP television, primarily provided by incumbent KPN, is the major cause of this decrease. The present strong competition between the two dominating networks is the main reason why the ACM refrained from regulating the CATV-networks (based on the EU-framework). This decision was upheld in court. Nevertheless, parliament introduced two amendments (to the Telecommunications Act and to the Media Act) as part of the implementation of the new European telecommunications framework to regulate wholesale access to the so-called ‘analogue basic package’. However, these provisions have been challenged by the European Commission, who started an infraction procedure against the Netherlands.

In the past few decades, there have been several disputes on access of CATV networks. The launch of channel Sport 7 in 1996 is a classic example. Sport 7 obtained the rights to the Dutch soccer competition but failed because no distribution contracts could be entered into.

In July 2013, a provision was launched via an amendment to the Dutch Media Act, which “makes it possible to prescribe a form of net neutrality on cable television networks.” With further ministerial regulation it will be possible to designate services, the signal of which has to be passed on as an integral part of the programme channels. Rules can also be set as for the transmission of these types of services. The provision is intended to prevent blocking of certain facilities, such as teletext, subtitling for the disabled, and HbbTV signals (interactivity). These signals are normally sent along with the broadcast signal. It is presumed that the government will first negotiate with the parties involved to come to a voluntary solution. Any measures to be imposed should be in line with European law. In the explanatory memorandum to the provision, the net neutrality regulation is referred to explicitly.

III. Analysis

In this section, the impact of net neutrality on the national policy is briefly discussed. Next, some critical comments about the current regulation are provided. Finally, some wider considerations are given with respect to the net neutrality problem.

45) http://webwereld.nl/e-commerce/79367-vodafone-past-niet-netneutraal-aanbod-aan
47) ACM, telecommonitor Q1 2013.
1. Policy Aspects

The history of how the Dutch net neutrality provision came to be, shows that there has been a major shift in the regulation and policy-making process. Originally, it had been proposed that the rules of the European Framework should be complied with slavishly, but eventually a material regulation of net neutrality was opted for.

A choice for the regulation also meant a choice for the principle of an open Internet. This is important for both the providers of information services and the end-users. More important interests, such as the freedom of speech, also benefit from such approach. Even though the Netherlands may sometimes boast a high level of freedom of communication, it is a good idea to lay it down in rules.

The chosen regulation is further expected to contribute to innovation. This was one of the reasons why the government backed the amendment proposed by parliament. Governmental support for the ‘Dutch solution’ has increased ever since. The Netherlands has explicitly distanced itself from ETNO proposals (the association of European Telecommunications Network Operators), in which telecom providers were given a leading role with respect to access to their networks.51) The same happened with initiatives in the context of the ITU conference in Dubai.52)

In two recent studies commissioned by the Dutch government, the importance of an ‘open Internet’ strategy is also stressed. In an Analysys Mason study, open access is positioned as a wider concept which also plays a part in the current discussion on connected TV.53) In a second economic study by SEO, it is concluded that “Network neutrality enhances innovations by small content and application providers (CAPs), but it also provides benefits for large CAPs and internet service providers (ISPs). Network neutrality affects innovation incentives positively by effectively reducing market power of Internet service providers and increasing connectivity between end-users.”54)

The challenge for the next few years is to establish if the expected effects will actually occur.

2. Regulatory Aspects

Also with respect to the legal aspects of the provision, the major test is yet to come. Will the provision work in practice? A thorough look at the text and the explanation reveals a number of discussion topics. Some are mentioned below but are only limited to the core parts, as formulated in paragraph 1, sub a, paragraph 3 and paragraph 4.

Essentially, Article 7.4a of the Telecommunications Act is focused on the providers of public electronic communications networks across which Internet access services are provided and on the providers of Internet access services. They are two players in a wider Internet value chain. For instance, it is also stated in the explanation that apps would be covered by the regulation, but it may be argued that apps are rather associated with over-the-top services (OTT), which are part of a different layer than telecommunications networks and services. It is important that it becomes clear who the addressees of the regulation are and next to establish if this would cause the regulation to meet its purpose or not. Answering this question about the addressees is also relevant for the application of the non-discrimination provision (paragraph 1, sub a).

The risk of overregulation or underregulation is also evident with respect to the aspect of throttling or blocking services. After all, these are the two activities that might form a basis for intervention. In the explanatory memorandum, a restrictive interpretation is suggested. This could mean that the threshold for intervention is low. On the other hand, favouring certain services doesn’t automatically result in throttling or blocking.

Whether there will be any intervention at all, primarily depends on the question of whether or not congestion occurs. The congestion concept is a big elephant in the room. Can congestion be defined as something static, or is a more dynamic approach preferable? Should peak load be taken into account,

or should there be dimensioning which guarantees certain minimum levels?

Additional rules can be set, if necessary. This is in line with Article 22 of the European Universal Service Directive. But what do these ‘quality of service’ criteria need to focus on? On further information about the congestion concept, or is their also room for more extensive forms of regulation, including considerations of pluralism and must carry as we know them from the CATV-environment?

Part of the net neutrality issue is the application of DPI. From the perspective of solving the congestion problem and managing Internet traffic, DPI is a relevant technology. In the description of the incidents, the use of DPI – whether or not permitted – is explicitly dealt with. DPI is standing practice. The fact that the new regulation clearly shows that it is the end-user who is primarily in control concerning the application of DPI, fits in with the applicable frameworks with respect to privacy and communications freedom-regulation. It is less clear if any permission revoked by the end-user for the use of DPI has consequences for applying the net neutrality regulation.

3. Final Remarks

The introduction of a material provision on net neutrality is an interesting development. It will be even more interesting to see if the intended objectives are met.

This would at least require an integral value chain approach. Then, it will be impossible that net neutrality is restricted to ‘network neutrality’ exclusively; the other value chain elements will need to be considered as well. To achieve the right relationship between purpose and means it will need to be established which elements of the value chain affect the process of free exchange between the information provider and the information user. This is a matter far more complex than would be in line with a typical telecommunications approach where the accent is mainly on the provider of telecommunications networks and telecommunications services. The convergence between telecommunications and communications regulation can’t be ignored. At the same time, overregulation and underregulation will mean that any problems concerning throttling and blocking of Internet traffic will occur or be aggravated elsewhere in the value chain. The intended purpose will then not be achieved.

In a previous study, it was pointed out that the distribution of audio-visual services could become the major ‘net neutrality battlefield’. The audio-visual services in particular require much capacity and may lead to congestion. According to recent statistics, one third of downstream traffic in the United States is taken up by Netflix. If YouTube is included, this is about half of total traffic. These indicators are significant, in the knowledge that this type of traffic will only increase. It makes high demands on how networks and network management are set up. The conflict between Comcast and Level 3 indicates which interests are at stake. These are partly technological challenges, such as arranging interconnection as part of building robust Content Distribution Networks (CDN’s). Interconnection was a classic issue in the POTS era (Plain Old Telephone Service) but is expected to undergo a revival – ‘back to the future ‘ – in the Internet era. After all, to provide high-quality video services to the end-users, they will need to be supplied closer and closer to these end-users. This means: new interconnection agreements. Interconnection as such has hardly been recognised as relevant for promoting and securing an open Internet.

In addition to technological issues, a growing number of issues becomes visible that has many similarities with questions that were asked (and are still being asked) about access to networks for the distribution of broadcast programmes. If a priority lane (‘managed traffic’) is allowed in the first place – a generally accepted principle in the current net neutrality debate – several questions will need to be answered: Who will have access to this priority lane? Under what conditions? What to do in the event of congestion in the priority lane? How to preserve a


true open internet on the not managed lane?

Finally, the issue of ‘find and to be found’ is increasing rapidly. The fact that there is sufficient supply of content is not really important anymore, but rather how to create a link between supply and demand, between providers of information and consumers. If references to information are not included in selection systems and selection systems do not offer the end-user any free options/choices, information asymmetry will be the result. The significance of the asymmetry or removing it is huge, as it is a crucial factor for controlling the ‘eyeballs’ and consequently for affecting choices and the transactions arising from these choices. ‘Find and be found’ is a key element in the European discussion on convergence and connected TV.\(^{58}\)

It is clear that net neutrality cannot be considered merely a telecommunications issue. The intended purpose of net neutrality – here briefly summarised under the old adage that all services and applications should be available to all end-users – touches on all aspects of the information community, including arranging it. Social and economic interests are huge. A more converged approach is inevitable.

IV. Comments on the KCC’s ‘Guidelines for Network Neutrality and Internet Traffic Management’

1. Comparative Analysis with the Dutch Net Neutrality Rules

The Guidelines for Network Neutrality and Internet Traffic Management have been prepared and are supervised by the Korea Communications Commission (KCC). In a comparison with the Dutch regulation as laid down in Article 7.4a of the Telecommunications Act, the following observations can be made:


a) The addressees of the Dutch regulation are both the providers of networks across which Internet access services are provided and the providers of Internet access services. The guidelines focus on the second category.

b) The terms and conditions with respect to transparency have been laid down in greater detail than in the Dutch regulation. This does not alter the fact that such further details can be developed via a ministerial order.

c) In line with the FCC rules in the United States, Internet access providers are not allowed to block ‘lawful content’. In the Dutch regulation, ‘lawful’ is not used as a criterion; in addition to blocking, throttling is prohibited too. Presumably, blocking is also understood to include throttling of traffic.

d) The discrimination prohibition is focused on ‘shall not unreasonably discriminate lawful traffic’. Supplementary to the previous comment, the restriction of ‘unreasonable’ is added with respect to discrimination. The Dutch regulation does not have such a restriction but includes the term ‘necessary’. In terms of limitations ‘necessary’ is stricter than ‘reasonable’. To a large extent, the reasons for management mentioned are similar to those mentioned in the Dutch regulation (Article 7.4a, paragraph 1, sub a to sub d). There are two differences. In the Dutch regulation, spam is mentioned explicitly as a reason for traffic management. Additionally, ‘to implement a legislative provision or court order’ is stated under d. This limits the discretionary authority of service providers to determine what is lawful and what is not. This is also the reason why the term ‘lawful’ is not used in the Dutch regulation.

e) Where it is explicitly stated in the guidelines that managed services are permitted, this can be deduced from the explanation in the Dutch rules.

f) The guidelines leave room for preparing self-regulation with regard to network neutrality and Internet traffic management. The Dutch rules do not allow for self-regulation that might restrict the framework laid down in the Telecommunications Act. As to the content of the provision in the Act, there is no room for discretionary interpretation for providers.

g) The Dutch regulation of the telecommunications sector does not provide for bodies that
provide advice to the supervisory authority, although there are frequent consultations in the context of supervision and enforcement by the regulatory authority.

2. Evaluation on the Guidelines and Suggestions for Improvement

The (supposed) strength of the Dutch regulation is in the fact that it is a binding material regulation of net neutrality. What the effects of the provision will be like in practice, however, is not yet clear. Several discussion topics that also may be relevant for the regulation in Korea are referred to in paragraph 3.

It is unknown how the guidelines are/will be further legally embedded. A translation into national regulation may contribute to strengthening net neutrality (to the extent that the nature of the regulation is not restrictive).

It is left to the regulatory authority to work out the details of net neutrality. It is advisable that the democratic justification of net neutrality is provided for in the best way possible. After all, major interests are at stake, including the freedom of communication. It requires a conscious and independent regulator.

Experience shows that it is also difficult to assign market parties the role of judge. Preferably, establishing whether or not content is lawful needs to be concretised in legal frameworks, which in turn need to be controlled by independent courts. The same applies to a discrimination prohibition. If a criterion is interpreted as ‘reasonable/unreasonable’, the market parties involved generally will bear too big a responsibility.

It should be beyond any doubt that self-regulation is not to yield any restriction in the underlying net neutrality standard. Decision-making processes have to be transparent, for instance via open consultation procedures. In principle, the mere existence of advisory bodies does not restrict the regulatory authority’s independent discretion. To the extent that consultation is prescribed, the advice provided should be public.

References


FCC, Report and Order, In the Matter of Preserving the Open Internet; Broadband Industry Practices; GN Docket No. 09-191, WC Docket No. 07-52, December 21 (Released December


