

Broadband Network Access in Regulatory Framework in Germany

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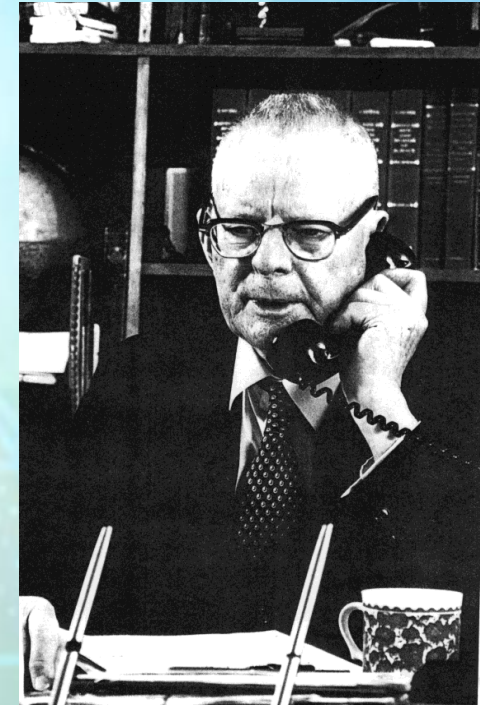


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1. Introduction

“**Quality** is what satisfies, or even excites, the end user.”

“**Quality** is a way of thinking that motivates people to constantly search for and implement innovative solutions.”



William Edwards Deming

Customer needs and customer satisfaction are therefore paramount!

2. Regulatory Framework in Europe

25th November 2009 the European Parliament and the European Council adopted the so-called Communications Package that includes:

Directive 2009/136/EC amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services, 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector, and Regulation (EC) No. 2006/2004 on cooperation between national regulatory authorities (NRAs) responsible for the enforcement of consumer protection laws (Official Journal L 337/11).

2. Regulatory Framework in Europe

25th November 2009 the European Parliament and the European Council adopted the so-called Communications Package that includes:

Directive 2009/140/EC amending Directives 2002/21/EC on a common regulatory framework for electronic communications networks and services, 2002/19/EC on access to and interconnection of electronic communications networks and associated facilities, and 2002/20/EC on the authorization of electronic communications networks and services
(Official Journal L 337/37)

2. Regulatory Framework in Europe

BEREC:

“Guidelines for Quality of Service in the Scope of Net Neutrality“

http://berec.europa.eu/eng/document_register/subject_matter/berec/regulatory_best_practices/guidelines/?doc=1101

The document contains guidelines for the NRAs that assist them in putting the EU Directives into practice. They achieve this by:

1. Publishing information on quality of service, thus promoting competition,
2. Clamping down on providers whose offers and contracts lack transparency,
3. Setting minimal requirements on the level of service quality preclude their deterioration (degradation).

2. Regulatory Framework in Europe

CEPT ECC Report 195 (PT TRIS):

“Monitoring of Quality of Residential Internet Access Service – Pre-selected minimal set of technical parameters and measurement methods. Best practices”

<http://www.cept.org/ecc/tools-and-services/ecc-public-consultation>

1. **Catalogue of minimum** technical and non-technical parameters for a more precise quantification of QoS for IAS and Internet services
2. **Models to measure** the technical parameters (scenarios, interfaces, specification of test data) for quantifying QoS with regard to:
 - ISP
 - Access to national data interchange points
 - Access to international data interchange points

3. State of Play of EU Directives in Germany



Deutscher Bundestag

Telecommunications Law Amendment (TKG)
from May 2012

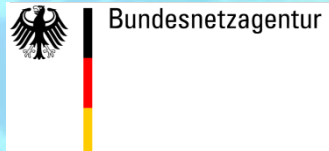


Bundesnetzagentur

Bundesnetzagentur (BNetzA)
(Federal Network Agency)

- § 43a TKG - safeguards extended requirements contained in contracts signed by end customers.
- § 45n TKG - stipulates which regulations underlie public disclosure requirements.

3. State of Play of EU Directives in Germany



Measurement study of the quality of service of broadband Internet access points (published April 10th 2013)

- 1) No matter what the technology, the products, or the provider, there is always a wide discrepancy between the maximum data transmission rate contained in the contracts and the maximum data transmission rate that is actually delivered.
- 2) The report also concluded that transparency regarding service provision was one of the key factors affecting customer satisfaction.
- 3) Until the end of 2013 Internet users can check at www.initiative-netzqualitaet.de whether data traffic in P2P applications is being transported at different data rates.

<http://www.bundesnetzagentur.de/qualitaetsstudie>

3. State of Play of EU Directives in Germany

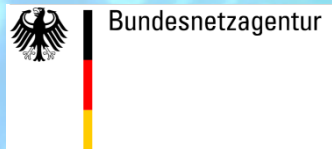


Analysis of existing telecommunications contracts both in landline and mobile wireless sectors (published April 10th 2013)

- 1) Providers make no or only very few concrete statements about the data transmission rates that can be realistically expected.
- 2) The end customer only has a rough idea of what goods and services he can expect.
- 3) Even after conclusion of contract and following successful provision of access, there are still no standardised mechanisms which provide end customers with a fully automatic overview of the performance of the actual connection.

<http://www.bundesnetzagentur.de/qualitaetsstudie>

3. State of Play of EU Directives in Germany



Discussion forum “Promotion of Transparency in End Customer Markets and Measurement Methods” aimed at providers, trade associations and end customers’ special interest groups (Spring 2013)

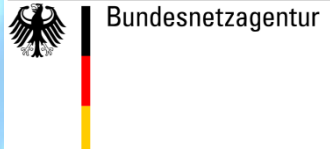
End customer tariffs with limited data transmission rate

- 1) Information must be available at conclusion of contract.
- 2) Provider self-monitoring directly after the connection is made.
- 3) Technical control by the end customer throughout the use of the connection (measurement method) and the possibility to acquire technical specifications of the basic performance parameters of the product before signing the contract.

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Comments by: 2nd September 2013

3. State of Play of EU Directives in Germany



Discussion forum “Promotion of Transparency in End Customer Markets and Measurement Methods” aimed at providers, trade associations and end customers’ special interest groups (Spring 2013)

End customer tariffs with limited data volume

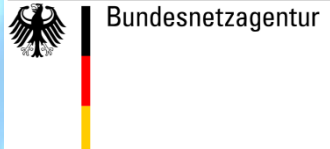
- 1) Continuous feedback on data volume used.
- 2) Detailed information for the end customer on change of provider.

Stipulation of the form in which measures to promote transparency on the end customer market are to be realised.

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3. State of Play of EU Directives in Germany



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Legal formulation of the proposed transparency measures

Option 1: Self-regulation, i.e. realisation of the transparency measures through a self-imposed, binding resolution of the branch.

Option 2: Regulation, i.e. throughout the branch, binding requirements issued by the Federal Network Agency (BNetzA).

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3. State of Play of EU Directives in Germany



Przetarg: Rozwój i eksploatacja urządzenia pomiarowego parametrów dostępu do Internetu dla użytkownika końcowego → ogłoszono **18.07.2014**

Agentura BNetzA potrzebuje system do pomiaru parametrów dostępu do Internetu.

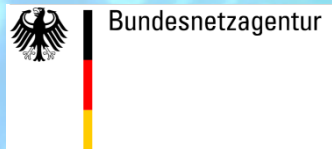
System ten powinien być w stanie niezależnie od operatora sieci i stosowanej technologii ustalać jakość dostępu do Internetu zarówno w sieciach stałych jak i w sieciach mobilnych.

System ten powinien posiadać zrozumiałą przez klienta stronę obsługi.

System ten powinien dostarczać wiarygodne zarówno dla klienta jak i dla operatorów sieci wyniki pomiarów.

<http://www.bundesnetzagentur.de/SharedDocs/BeschaffungAusschreibung/DE/2014>

3. State of Play of EU Directives in Germany



Przetarg: Rozwój i eksploatacja urządzenia pomiarowego parametrów dostępu do Internetu dla użytkownika końcowego → ogłoszono 18.07.2014

Koncepcja systemu powinna zawierać system pomiarowy i technikę pomiaru.

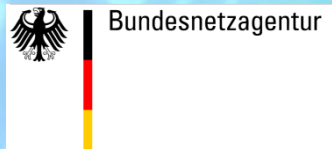
System pomiarowy powinien stanowić kombinację pomiędzy urządzeniem stosowanym w miejscu pomiaru i urządzeniem kontrolnym w sieci (serwer testowy).

Technika pomiarowa powinna opisywać przebieg całego procesu pomiaru.

Pomiary powinny być przeprowadzane przy użyciu połączeń testowych w sieci na zasadzie Client-Server.

<http://www.bundesnetzagentur.de/SharedDocs/BeschaffungAusschreibung/DE/2014>

3. State of Play of EU Directives in Germany



Przetarg: Rozwój i eksploatacja urządzenia pomiarowego parametrów dostępu do Internetu dla użytkownika końcowego → ogłoszono 18.07.2014

Wyniki wyników muszą być dostarczane w zrozumiałej formie do użytkownika końcowego.

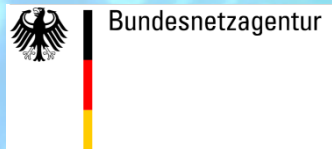
Wszystkie wyniki pomiarów powinny być zbierane w bazie danych.

Po obróbce statystycznej danych wyniki pomiarów powinny być transparentnie i anonimowo przedstawione w Online-Portal.

Urządzenie pomiarowe, technika pomiaru i baza danych muszą być dostarczone, zaimplementowane i obsługiwane przez wybrany podmiot wykonawczy.

<http://www.bundesnetzagentur.de/SharedDocs/BeschaffungAusschreibung/DE/2014>

3. State of Play of EU Directives in Germany



Przetarg: Rozwój i eksploatacja urządzenia pomiarowego parametrów dostępu do Internetu dla użytkownika końcowego → ogłoszono **18.07.2014**

Oferty należy składać w terminie do **22.09.2014** .

Opublikowanie wyników przetargu → **2.01.2015**

Do momentu rozstrzygnięcia planowane są workshops z udziałem BNetzA, operatorów sieciowych i firm ubiegających się o zlecenie końcowe.

Również podczas realizacji zlecenia planowane są workshops z udziałem BNetzA, operatorów sieciowych i firmy otrzymującej zlecenie.

Termin realizacji systemu → **8 miesięcy** od momentu otrzymania zlecenia

Eksploatacja systemu pomiarowego → **3 x 1 rok**

<http://www.bundesnetzagentur.de/SharedDocs/BeschaffungAusschreibung/DE/2014>

4. Conclusion and future works

- Transparency and neutrality of the services in networks are important aspects of the modern information society.
- European Parliament and European Council have adopted the so-called Communications Package that includes “Directive 2009/136/EC” and “Directive 2009/140/EC”.
- The groups BEREC and PT TRIS are extremely active in this area and have published two documents with recommended practices.
- The extent to which EU Directives have been implemented varies greatly throughout Europe. In Germany the process of putting EU Directives into practice is going ahead in leaps and bounds.
- It is expected that a final measurement system for the end of 2015 is in operation.

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Thank you for your attention!

