

#### International Telecommunication Union

## To regulate or not to regulate?



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## **Question:**

What is the role of NCA in the field of supervision or measuring or regulation in the telecommunications market? Short answer: the role of the NCA is decided the communications law the authorization of NCA



## **European telecommunications law** Regulatory framework



**Basic directives** 

(2002/21/EC) on a common regulatory framework

(2002/19/EC) on access and interconnection

(2002/20/EC) on the authorisation of electronic communications networks and services

(2002/22/EC) on universal service and users' rights relating to electronic communications networks and services

(2002/58/EC) on privacy and electronic communications (from 31/10/2003)

(2002/77/EC) on competition in the markets for electronic communications services





## Hungarian telecommunications law

Act C of 2003 on electronic communication (Act was adopted by Parliament at its session of 24 November 2003.)

### Further legal materials

Decree 8/2004 (IV.20.) IHM on detailed conditions and technical requriements of universal services,

Government Decree 345/2004 (XII.22.) on the requirements related to the quality of electronic communications services in relation to the protection of consumers;



## Articles of Act C of 2003, deals with QoS

- article 86 (related to general rules),
- article 88 (related to network contracts),
- article 120 (related to universal service providers),
- article 123 (related to control of universal service),
- article 127-130 (related to subscriber contract),
- article 131 (related to conditions of contract),
- article 137 (related to restriction of the service),
- article 138 (related to subscriber reports and complaints),
- article 139-150 (related to quality requirements of performances of subscriber service)



### according to the Act C.: Article 123

(1) The authority shall control the universal service providers with regard to the execution of the activity and performance of the contract on an ongoing basis. The authority shall notify the minister when it identifies any breach of the obligations undertaken in the contract. The universal service provider shall submit the data required for controlling compliance with its obligations to the authority on an ongoing basis. The data providing evaluation on compliance with the obligations shall be publicly available.



cont.ed:

(2) When the universal service provider fails to meet the service quality values specified in the contracts for an extended period, the Authority may order their inspection by an independent expert and prescribe that the service provider concerned pay the costs thereof.

The authority carries out market surveillance activity within its official sphere of authority and during this activities does the control of quality of different services.

according to the Decree 8/2004 Article 16:

The requirements of universal service's quality are in the Annex 1 of this Decree.



## Requirements related QoS according to the Decree 8/2004 and the measuring result

Num- ber	Service parameters		Measuring result 2005.					
		<b>Target</b>						
		<u>values</u>	I.	II.	III.	IV.	annual	
			quarter	quarter	quarter	quarter	data	
1.	Provisioning time	max. 30 day	10,2	11,2	11,44	12,02		
2.	Response time for faultreporting service	answer: max. 30 s ratio:	99,798					
	Set vice	min. 92 %		99,729	96,4	94,0		
3.	Fault clearing [%]	min. 90	98,017	95,297	90,564	94,5		
4.	Unsuccesful call	One area: max. 1,4 %	0,097	0,119	0,054	0,04		
	ratio	internal:	0,225	0,196	0,267	0,07		
		international: max. 2,7 %	0,029	0,026	0,129	0,01		
5.	Call setup time	max. 12 s	max. 12 s	max. 12 s	max. 12 s	max. 12 s		
6.	Response time for operation service	answer: max. 30 s ratio:	95,02					
		min. 92 %		97,166	96,555	94,2		
7.	Billing complaints	max. 1,6 %	Annual data	Annual data	Annual data	Annual data	0,5	



# Requirements related QoS according to the Decree 8/2004 and the measuring result (cont.ed:)

Num-	Service	<u>Target</u>	Measuring result 2005.					
ber	parameters	values	I. quarter	II. quarter	III. quarter	IV. quarter	annual data	
8.	Down time	all: max. 4 hour One area: max. 8 hour	Annual data	Annual data	Annual data	Annual data	0 0,1	
9.	Operability of public payphones	min. 92 %	95,91	95,07	94,56	95,5		
10.	Failure rate (related to subscriber access point)	max. 2 %	Annual data	Annual data	Annual data	Annual data	0,4	
11.	Speech transmission quality	B = 3,5 point	Annual data	Annual data	Annual data	Annual data	"best"	
12.	Data transmission quality	Bit error rate: max. 10 <sup>-4</sup> % Speeed: min. 9600 bit/s	0,012*10 <sup>-4</sup>	0,402*10 <sup>-4</sup>	0,29*10 <sup>-4</sup>	0,4*10 <sup>-4</sup>		
13.	Call cut off rate	24 hours: max. 0,5%	0,247	0,449	0,345	0,3		
		1 hour: max. 3%	1,377	1,810	1,529	1,3		



## Obligations of NCA related to QoS

according to the Government Decree

345/2004 (XII.22.):

to give the answer: it has to list the obligations of service providers,

concern the Government Decree

345/2004 (XII.22)



## Obligations of service providers

•according to the Government Decree 345/2004 (XII.22.):

SP has to give requirements, as a figure, concern

- objective for the appropriate level of the service indicators, included in the first attachement of the Government Decree 345/2004 (XII.22.),
- further service objective for the unacceptable level of the service indicators and
- indicators (are in his General Service Conditions) should be comparable,



cont.ed:

to control his all service quality indicators,

and two further obligations, related no to quality indicators:

- once a year to certificate the conformity of his service,
- to elaborate a technical documentation to the certificate.



## General quality indicators, concern all telecom. services:

- delivery time,
- time limit for faultclearing of reported quality complaints,
- time limit for reported billing complaints,
- availability of service
  (2. attachement of G.D.

345/04)



# Special quality indicators, concern the telephone services:

- unsuccessful call ratio,
- call setup time,
- response time for operator service,
- bit fault ratio per access line

(2. attachement of G.D. 345/04)



 Special quality indicators, concern Internet services:

- abnormal suspension of services,
- guaranteed up- and download speed,
- bit fault ratio per access line

(2. attachement of G.D. 345/04)



# Special quality indicators, concern broadcasting:

- carrier level at the subscriber access point,
- max. signal-level -difference at the subscriber access point,
- signal/noise ratio at the subscriber access point
  - (2. attachement of G.D. 345/04)



## Obligations of NCA related to QoS

- NCA controls whether keep the SP-s the General Terms and Conditions of Contract or not (NCA performs the control under its market surveillance activities)
- if the SP deviates from the GTCC (related the undertook values of quality indicators)
   authority may apply sanctions.



## Value of ASR in PSTN and VoIP networks.

Source: Minacom

Origin: Canada

Origin. Canada		Network Performance		
Destination	-			
Destination	Carrier	ASR		
		%		
Australia	PSTN	100.0		
	VolP	90.0		
	Summary	95.0		
Hong Kong	PSTN	60.0		
	VolP	100.0		
	Summary	80.0		
Korea, Republic of	PSTN	100.0		
	VolP	80.0		
	Summary	90.0		
New Zealand	PSTN	100.0		
	VolP	100.0		
	Summary	100.0		
Philippines	PSTN	100.0		
	VolP	90.0		
	Summary	95.0		
Singapore	PSTN	100.0		
	VolP	80.0		
	Summary	90.0		
Taiwan, Province of China	PSTN	90.0		
	VolP	100.0		
	Summary	95.0		
Thailand	PSTN	80.0		
	VolP	100.0		
	Summary	90.0		



#### **Conclusion:**

One of the important persons of the Hungarian telco said about the role of NCA in the field of telecom. QoS regulation: "more important role of NCA in the QoS regulation does not serve for interest of market. If the market exists, than the competition provides for the quality. Only, in the case of monopolium justified to increase the control of NCA on the QoS of telecommunication services" (remarks to the Regulation Strategy of NCA, 2005)



Thank Ms. Magdolna Nandorfi for her help and thank you for your attention!