



Wir bewegen



Informationen



Die Informationsmanager

**23<sup>rd</sup> Voorburg Group Meeting  
Aguascalientes 22-26 September**

***Telecommunications***

***SPPIs***

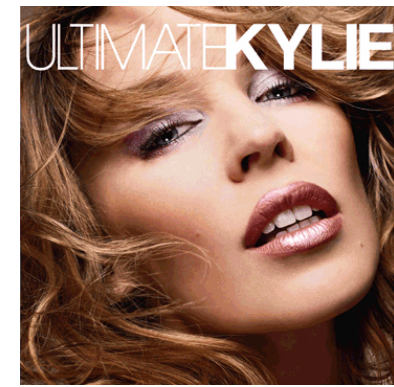
***Christian Puchter***

23.09.2008

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# Definition of the country we are looking at



# Countries developing or having developed SPPIs for telecommunications

## According to an OECD inquiry:

33 Countries: AUS, AUT, BEL, BGR, CAN, CHE, CYP, CZE, DEU, DNK, ESP, EST, FIN, FRAN, GBR, GRC, HUN, ITA, JPN, KOR, LTU, MEX, NLD, NOR, NZL, POL, SVK, SVN, SWE, USA, CHN, HKG, VNM

Price Collection: Quarterly (18)  
Monthly (12)  
Semi-annually (1)

Pricing Method: Unit Value (16)  
Price of repeated service (16)  
Con-tract (3)  
Component Pricing (3)  
Model Pricing (2)

# Definition of service being priced

## Telecommunications

*ISIC Rev. 3.1: Code 64.2*

*NACE Rev. 1.1: Code 64.2*

**ÖNACE 2003 (= NACE Rev. 1.1): Code 64.2**

### This class includes:

- transmission of sound, images, data or other information via cables, broadcasting, relay or satellite
- telephone, telegraph and telex communication
- maintenance of the network, transmission (transport) of radio and television programmes
- internet access provision

### This class excludes:

- production of radio and television programmes even if in connection with broadcast (see 92.20)

# Definition of service being priced (cont.)

## Telecommunications NACE Rev. 1.1 (Code 64.20)

NACE Rev .1.1	Description	CPA 2002	Description	Service products
64.20	Telecommunications	64.20.1	Data and message transmitting services	64.20.11 Public local telephone services 64.20.12 Public long distance telephone services 64.20.13 Mobile telephone services 64.20.14 Shared business network services 64.20.15 Dedicated business network services 64.20.16 Data network services 64.20.18 Internet access provision services
		64.20.2	Other telecommunications services	64.20.21 Television transmission services 64.20.22 Radio transmission services 64.20.23 Interconnection services 64.20.28 Other telecommunications services
		64.20.3	Radio and television cable services	64.20.30 Radio and television cable services

## ÖNACE Rev. 1.1 (Code 64.20) Telecommunications

- **ÖNACE 64.20-01: Telecommunications** (without cable TV and radio activities)
  - Data and message transmitting services (ÖCPA 64.20.1)
  - Other telecommunications services (ÖCPA 64.20.2)
  
- **ÖNACE 64.20-02: Cable TV and radio activities**
  - Radio and television cable services (ÖCPA 64.20.3)

# Definition of service being priced (cont.)

## Telecommunications NACE Rev. 2 (Code 61)

NACE Rev.2	Description	CPA 2008	Description	Service products
61.1	Wired telecommunications activities	61.1	Wired telecommunications activities	61.10.1 Data and message transmitting services 61.10.2 Carrier services for wired telecommunications 61.10.3 Data transmission services over wired telecommunications networks 61.10.4 Wired Internet telecommunications services 61.10.5 Home programme distribution services over wired infrastructure
61.2	Wireless telecommunications activities	61.2	Wireless telecommunications activities	61.20.1 Mobile telecommunications services and private network services for wireless telecommunications systems 61.20.2 Carrier services for wireless telecommunications 61.20.3 Data transmission services over wireless telecommunications networks 61.20.4 Wireless Internet telecommunications services 61.20.5 Home programme distribution services over wireless networks
61.3	Satellite telecommunications activities	61.3	Satellite telecommunications activities	61.30.1 Satellite telecommunications services, except home programme distribution services via satellite 61.30.2 Home programme distribution services via satellite
61.9	Other telecommunications activities	61.9	Other telecommunications activities	61.90.1 Other telecommunications services

## ÖNACE Rev. 2 (Code 61) Telecommunications

- 61.1 Wired telecommunications activities
- 61.2 Wireless telecommunications activities
- 61.3 Satellite telecommunications activities
- 61.9 Other telecommunications activities



# Pricing unit of measure

## Depends on the chosen pricing methodology

- Rates
- Bills
- Turnover / quantities

# Price collection

Rates					
Private	daytime tariff	evening/ weekend	Business	daytime tariff	evening/ weekend
National			National		
Variable fees			Variable fees		
Local	4,08 Cent	1,13 Cent	Local	3,40 Cent	1,13 Cent
National	4,92 Cent	2,17 Cent	National	4,50 Cent	2,17 Cent
to 0664/0680	13,63 Cent	11,00 Cent	to 0664/0680	13,02 Cent	11,00 Cent
to 0676/0677	16,53 Cent	13,33 Cent	to 0676/0677	15,87 Cent	13,34 Cent
to 0699/0688-8/0681	16,80 Cent	13,55 Cent	to 0699/0688-8/0681	16,13 Cent	13,55 Cent
to 0650	17,91 Cent	14,49 Cent	to 0650	17,05 Cent	14,49 Cent
to 0660/0678	21,03 Cent	16,98 Cent	to 0660/0678	20,07 Cent	16,97 Cent
Fixed fees			Fixed fees		
Telephone extension	€ 13,32		Telephone extension	€ 18,90	
ISDN	€ 22,16		ISDN	€ 24,90	
			ISDN Multi	€ 349,90	
			ISDN Passiv Multi	€ 249,90	

# Price collection (cont.)

Unit Values					
Minutes - National to mobiles		Q1-07	Q2-07	Q3-07	Q4-07
Enterprise 1	Private	186.924	212.503	210.830	246.918
Enterprise 2	Private				
Enterprise 3	Private				
Enterprise 4	Private	1.570.697	1.455.265	1.379.430	1.475.380
Enterprise 5	Private	128.898	126.378	132.510	145.320
Enterprise 6	Private				
Enterprise 7	Private	177.053	202.386	214.764	243.856
Enterprise 8	Private	958.279	986.079	900.597	955.250
Enterprise 9	Private	315.500	275.700	237.900	230.700
Turnover - National to mobiles		Q1-07	Q2-07	Q3-07	Q4-07
Enterprise 1	Private	28.602	32.598	32.158	37.804
Enterprise 2	Private				
Enterprise 3	Private				
Enterprise 4	Private	287.470	265.371	252.228	270.221
Enterprise 5	Private	21.348	20.389	19.323	19.100
Enterprise 6	Private				
Enterprise 7	Private	30.343	34.732	36.745	34.807
Enterprise 8	Private	187.986	195.679	178.151	186.164
Enterprise 9	Private	62.200	54.600	46.900	45.900

# Market conditions and constraints

ÖNACE category (Rev. 1.1)	Employees	Number of enterprises	Share on turnover of ÖNACE 64 2006
64 Post and Telecommunications	48.390	572	100 %
64.2 Telecommunications	18.471	211	74,80 %

ÖNACE category (Rev. 1.1)	Employees	Number of enterprises	Share on turnover of ÖNACE 64.2 2006
64.2 Telecommunications			in 1000 €
<b>Total</b>	<b>18. 471</b>	<b>211</b>	<b>7.219.790</b>
	1 – 9	166	2,19 %
	10 – 19	20	3,37 %
	20 – 49	10	1,36 %
	50 – 249	7	c.
	≥ 250	8	c.

## Market conditions and constraints (cont.)

ÖNACE category (Rev. 1.1)	Number of enterprises	Share on turnover 2006
<b>64.2 Telecommunications</b>		in 1.000 €
<b>TOTAL</b>	<b>211</b>	<b>7.219.790</b>
<b>64.20-01 Telecommunications (without cable TV and radio activities)</b>	<b>144</b>	<b>94,64 %</b>
<b>64.20-02 Cable TV and radio activities</b>	<b>67</b>	<b>5,36 %</b>

ÖNACE category (Rev. 2)	Number of enterprises	Share on turnover 2006
<b>61. Telecommunications</b>		in 1.000 €
<b>TOTAL</b>	<b>319</b>	<b>7.917.396</b>
<b>61. 1 Wired telecommunications activities</b>	<b>135</b>	<b>49 %</b>
<b>61.2 Wireless telecommunications activities</b>	<b>57</b>	<b>49 %</b>
<b>61.3 Satellite telecommunications activities</b>	<b>c.</b>	<b>c.</b>
<b>61.9 Other telecommunications activities</b>	<b>c.</b>	<b>c.</b>

# Special conditions or restrictions

- Liberalized service branch
- RTR has to ensure free and fair market competitions
- Mobile segment is rapidly growing
- For some areas unfortunately no b2b data available
- Record keeping practice: internet, turnover data

# Sample Design



Enterprises



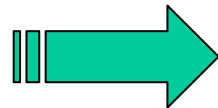
## Telecommunications

(without cable TV and radio)

Method: Cut-off sample  
(90% turnover coverage of each submarket)

Source: RTR

Services



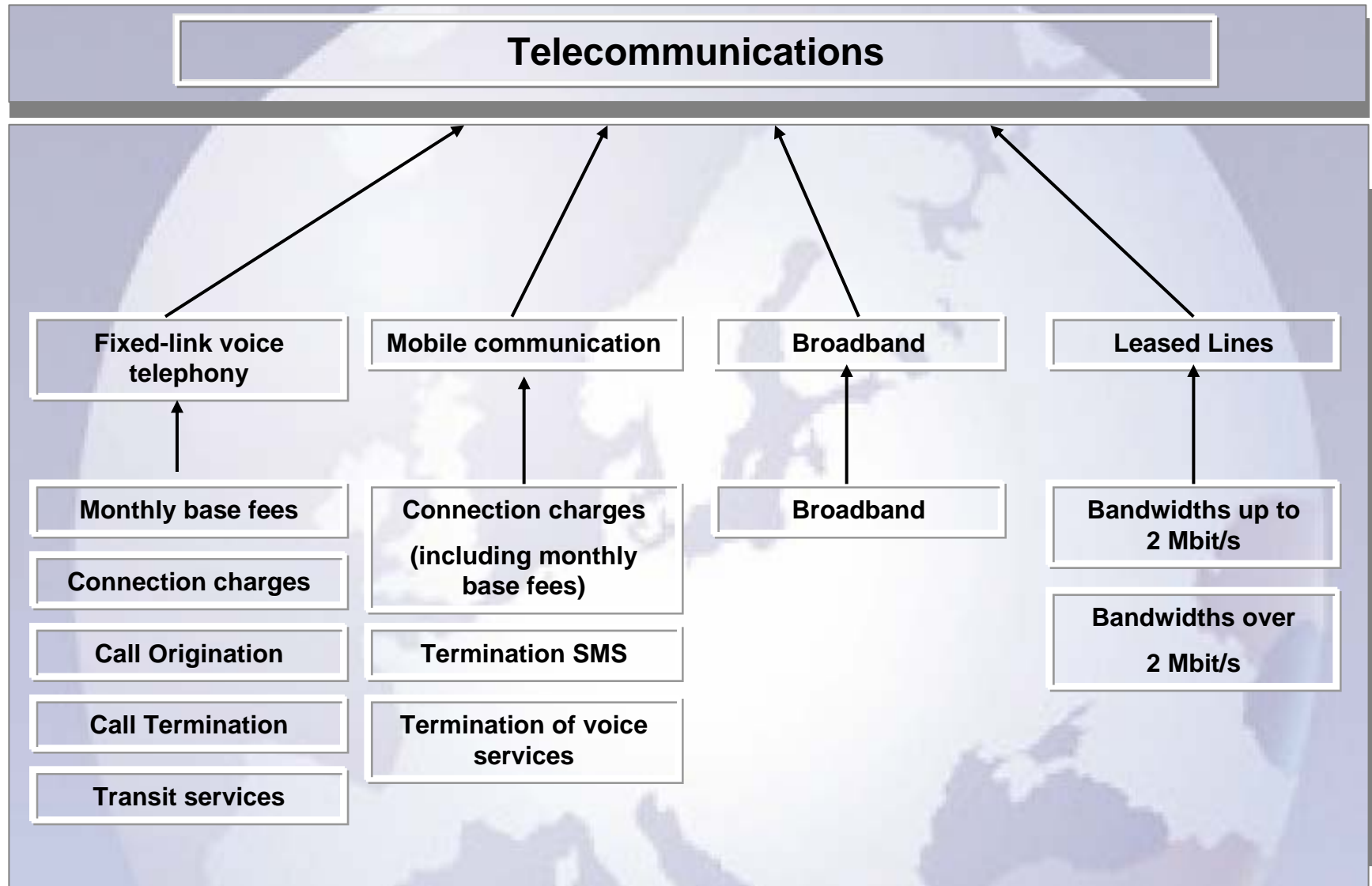
## Telecommunications

(without cable TV and radio)

Method: selected „b2b“ services

Source: RTR

# Evaluation of standard vs. definition and market conditions





## Bill method

### ➤ Advantages

Recalculation of originally selected bills

Bills consist of various different services of the branch

Prices can be estimated

Discounts should be included

### ➤ Drawbacks

Burdensome

Selection of simple bills

Bundling

## Rate method

### ➤ Advantages

**Provision of rates**

**Rates and tariffs could be entered in bills by the NSI**

**Services (bills) held constant over time**

**Also discounts should be incorporated**

### ➤ Drawbacks

**Discount information not always available**

**Bundling of services**

**Changes in the price of one rate influence other rates**

# SPPI Pricing Methods

## Unit Value method

### ➤ Advantages

**Provision of turnover and quantity data**

**Delivered by the accounting system of the enterprises**

**Not so burdensome**

**Probably collected by national regulatory authority**

**Discounts are already incorporated**

### ➤ Drawbacks

**In general not the most favoured pricing method**

**Only for homogeneous groups of services advisable**



# Index characteristics – Telecommunications (cont.)

- **Start 2005**
- **Liberalized market**
- **Monitored by the RTR**  
(Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR-GmbH))
- **Communication Survey Regulation 2004**
- **"B to All" index**
- **Fixed-base index (base year 2006)**
- **Revision every 5 years**

# Index characteristics – Telecommunications (cont.)

- **Unit values**
- **Survey (turnover & quantities) is carried out by the RTR**
- **23 reporting enterprises (represent 90% of each submarket)**
- **193 Unit values**
- **22 low level sub-indices calculated by using the weighted arithmetic mean**
- **4 main sub-indices calculated by using the weighted arithmetic mean (fixed-link – mobile – broadband – leased lines)**
- **Weights for the aggregation of all sub-indices are based on turnover data**

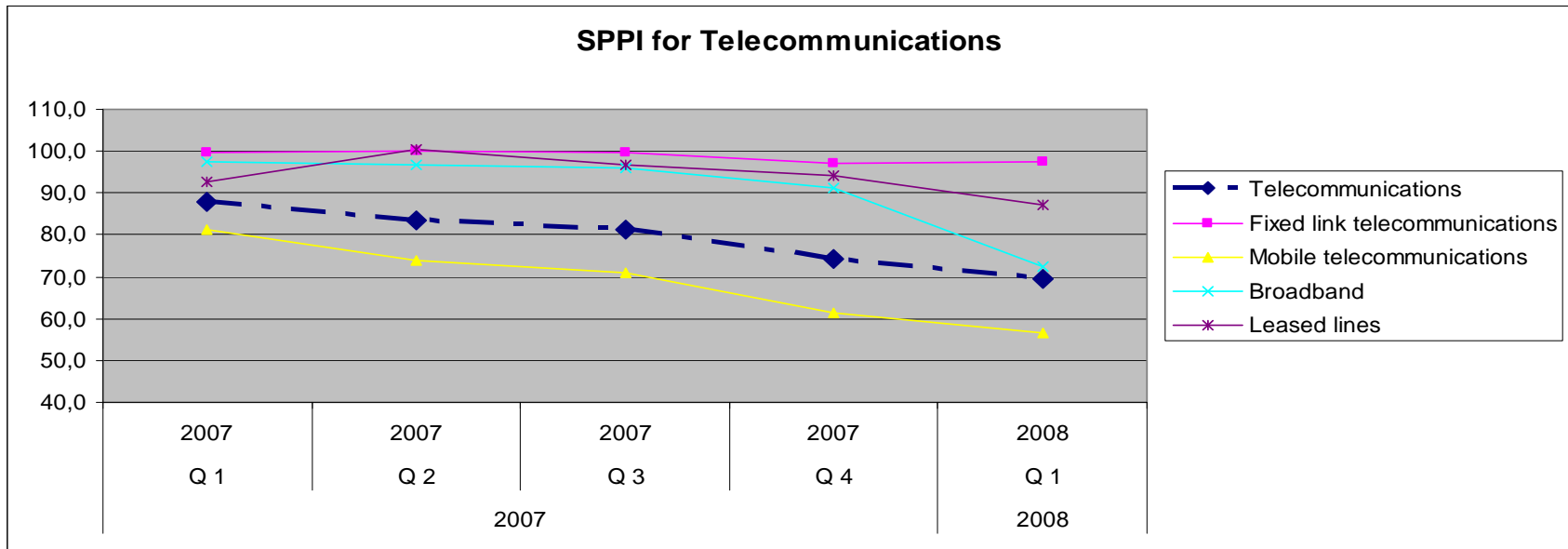
# Index characteristics – Telecommunications (cont.)

- **Fixed-link:** Fixed-link telecommunication to mobile - calls to Austrian mobile networks  
(turnover & minutes)
- **Mobile:** Call termination fees ( = interconnection service)  
(turnover & minutes)
- **Broadband:** Broadband internet access  
(turnover & number of broadband circuit points)
- **Leased lines:** Leased lines with bandwidths over 2 Mbit/s  
(turnover & number of lines)

# SPPI Telecommunications

	2007				2008			
	Q 1	Q 2	Q 3	Q 4	Q 1 <sup>1)</sup>	Q 2	Q 3	Q 4
<b>Telecommunications total</b>	<b>87,9</b>	<b>83,6</b>	<b>81,5</b>	<b>74,2</b>	<b>69,4</b>	-	-	-
<b>Fixed-link Telecommunications</b>	<b>99,8</b>	<b>100,0</b>	<b>99,7</b>	<b>97,0</b>	<b>97,5</b>	-	-	-
<b>Mobile Telecommunications</b>	<b>81,1</b>	<b>74,1</b>	<b>70,9</b>	<b>61,3</b>	<b>56,5</b>	-	-	-
<b>Broadband</b>	<b>97,6</b>	<b>96,7</b>	<b>96,0</b>	<b>91,1</b>	<b>72,3</b>	-	-	-
<b>Leased lines</b>	<b>92,5</b>	<b>100,4</b>	<b>96,6</b>	<b>94,2</b>	<b>87,2</b>	-	-	-

<sup>1)</sup> preliminary



2006 = 100



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***Telecommunications  
National Accounts / Turnover***

***Josef Auer***

23.09.2008

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# NA CONCEPTS: Working classification



<b>ÖNACE 64</b>	<b>64.11 + 64.12 + 64.20-01</b>	<b>National post activities Courier activities other than national post activities Telecommunications</b>
	<b>64.20-02</b>	<b>Cable, Radio and TV distribution</b>

## Data source

- Structural business survey
  - Results of Input/Output Analysis
  - Annual company reports
  - Annual auditing reports
- + Adaptions for NA requirements

## Important branch-specific aspects:

- Quickly developing products
- Complex charging mechanisms
- Radical technical changes (→quality)
- Discounts in the business segment
- Bundling of products (mobile phone services)

## Recommendations

### (HB on price and volume measures)

- General: “indicators to be fully representative of the products and the full range of charges made”
- A method: quality adjusted PPIs for b2b, CPIs (adj. to basic prices) for b2c
- B method: PPIs (non-QA, imperfect coverage), UVIs (for homogeneous products), volume indicators (reflecting full range of products), detailed CPIs (if price developments in business and household sector similar)
- C method: CPIs (if different price developments for business and household transactions are evident but no differentiation is made)



## Present NA practice in Austria

### ➤ 64a Post and courier activities, Telecom

Weighted (by turnover) composite index consisting of:

- Index for mobile phone services (HICP sub-index)
- Index for the Austrian Telekom (HICP sub-index)
- Index for postal services (HICP sub-index)

### ➤ 64b Cable TV and radio activities

HICP sub-index for television cable charges

## Assessment of employed methods

Currently applied deflation indicators do not meet all demands of a B method: CPIs without differentiation business vs. household

Perspective: gradual implementation of SPPIs

= change from an imperfect B method → A method

# Compilation of turnover index

For the moment only **turnover index in nominal values**

= total turnover of the current month in percentage of the average monthly turnover in the base period (year 2000)

administrative data source = monthly in-advance-reports of the companies on VAT to the tax authorities containing total taxable turnover. The quarterly total turnover is aggregated from the monthly data base.

For compilation of **turnover volume indexes** no legal requirements exist - therefore a calculation is not planned at the moment.

# Turnover by products



Telecommunication services are not part of the service branches for which turnover data on product level should be collected according to Annex 8 of the SBS Recast Regulation therefore such compilation is not done at the moment.



# Thank you for your attention

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