

Identification of competition problems and selection of remedies to deal with them

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*Telecommunication Market Analysis for the CEE countries and
Baltic States*

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1. Defining relevant markets ✓
2. Identifying firms with SMP
3. Remedies

- To identify candidate markets the Commission started by hypothesising where SMP appears to be a problem (circularity)
 - Many markets in the sector – only a small number are named by the Commission
- Lack of effective competition is defined as SMP? (absence of single or collective dominance on that market)
 - Supply-side:- Time horizon; Competition for the market
- SMP is based on competition law concept of dominance used in Merger cases

- “An undertaking shall be deemed to have SMP if,
 - either individually or jointly with others,
 - it enjoys a position equivalent to dominance, that is to say
 - a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers.”

(Art. 14 (2) Framework Directive)

- Reflects definition of dominance outlined by ECJ in its *United Brands* judgement, a case involving the interpretation of Article 82 of the EC Treaty

- Single dominance
 - Typical case in fixed networks, and generally in termination
- Joint dominance
 - Potential case in mobile
- Leveraged dominance
 - Problem in many vertically integrated industries – especially telecoms

- Data - Quantities include:
 - Call minutes (peak; off-peak; calls to mobiles; calls from mobiles to fixed; on-net calls; off-net calls), revenues, number of access lines, number a residential subscribers, number of business subscribers by type of access (e.g. single line, fibre etc), numbers of subscribers according to the category it fits into of the bill amount.
 - E.g. Leased lines - Data about national and international leased lines, national leased lines – not including tail ends – by bandwidth (analogue 1020; 64kbps; 2mbps; 34mbps;155mbps)
 - Data should be collected from all licensees that provide services identified in either candidate or related markets.

- Herfindahl Hirschman Index (HHI) = $S(a^2 + b^2 \dots y^2 + z^2)$
 - where a, b ... y and z are the market shares.

Service examples	'Market' shares	HHI	CR2	CR4
Total				
PSTN & ISDN				
PSTN & ISDN & CabTeleph & Fixed wireless				
CabModem & xDSL				
PSTN				
ISDN				
xDSL				
FWA				
CATV				
....etc				

- Other information about:
 - the market's structure
 - the nature of the product and the uses to which it is put
 - the manner in which the product is traded
 - the conduct of the participants
 - the degree of demand substitutability
 - the expected degree of supply substitutability.
- Much of the above would be obtained as part of the market definition exercise.

Individual dominance

Individual SMP - Criteria

- Market share of leading firm
 - Absolute market share (> 40% / > 50%)
 - Relative market share (HHI over 1800; between 1,000 and 1,800 are moderately concentrated)
 - Market share stability
 - Share of market growth

Individual SMP - Criteria

→ Barriers to entry and expansion

- Economies of scale and scope in combination with sunk costs
- Vertical integration, including bottleneck elements
- Product range
- Regulatory barriers, e.g., access deficit in voice telephony, limited number of spectrum licenses
- Access to capital
- ...

→ Countervailing buying power

Joint dominance

- Concept of tacit collusion
 - A group of firms able to adopt through implicit collusion a common policy on the market and to act to a considerable extent independently of their suppliers and customers.

Joint SMP - Criteria

- Four main factors
 1. gains from cheating (undercutting rivals)
 2. profit loss if rivals retaliate
 3. likelihood of retaliation
 4. weight of future profit losses relative to today's gains
- Need entry barriers, otherwise:
 - collusion is self-defeated (hit-and-run entry)
 - prospect of entry weakens retaliation

Joint SMP - Criteria

- To assess these 4 factors need information about:

- Demand characteristics

- growth / decline
- market fluctuations
- demand elasticity?
- buying power

- Market concentration

- Combined market share of leading firms / Concentration ratio
- Herfindahl Hirschman Index
- Stability of market shares

- Maturity of market / extent of technological innovation
- Repeated interactions
- Symmetry of position
 - Similarity of cost structures
 - Similarity of products
- Collective dominance - tripartite test (Airtours judgement)
 - Market transparency allowing monitoring of behaviour of others
 - Need a punishment mechanism that deters deviations from tacit co-ordination
 - Lack of competitive constraints from actual or potential competitors or customers (countervailing buying power)

1. Defining relevant markets ✓

2. Identifying firms with SMP ✓

3. Remedies

Recap:

- NRAs are required to:
 - Define their relevant markets
 - carry out market analyses to establish the state of competition in defined markets
 - identify SMP operators and impose specific and appropriate obligations on them

- If competition is **effective**, existing *ex ante* obligations must be removed and new ones must not be imposed
- If competition is **not effective**, *ex ante* obligation(s) must be imposed on SMP operator(s)

- Imposition of *ex ante* obligations does not depend on abuse of dominant position
- Potential market failures addressed by remedies
 - At retail level: Excessive prices, predatory prices, bundling
 - At wholesale level: Refusal to supply, excessive access prices, quality degradation, margin squeeze
- What market failure problems are not covered?
 - Market failure caused by poorly designed legal institutions
 - Market failure caused by regulatory intervention

Remedies - Criteria

- Large degree of flexibility with regard to *ex ante* obligations
- *Ex ante* obligations must be specific and appropriate / proportionate with regard to regulatory objectives
 - at least 1 remedy
 - lightest remedy that will ‘solve’ the problem
 - Focus on wholesale markets – retail market remedies should be very rare!
- Difficult trade-off between infrastructure competition and service competition

Remedies

Universal Service Directive

Retail markets

- Carrier selection / pre-selection (for SMP operators on retail market for access to public telephone network)
- Minimum set of leased lines up to and including 2 Mbit/s
- Retail price control
 - Price cap
 - Cost orientation
 - Benchmarks

Access Directive

Wholesale markets

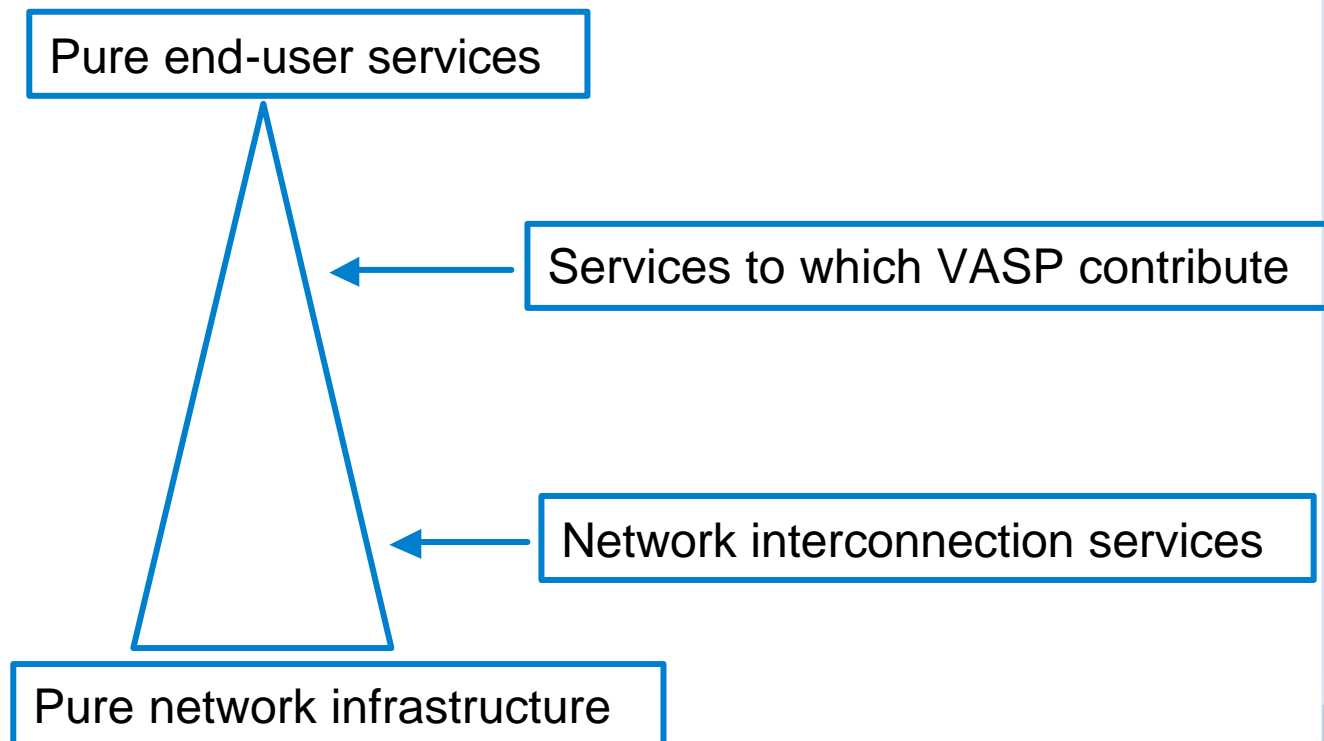
- Transparency
- Non-discrimination
- Accounting separation
- Mandated access
 - Access to unbundled local loop
 - Resale
 - Co-location
 - Roaming
 - Interconnection
 - ...
- Price control and accounting rules / cost orientation

Remedies - Issues

- Transparency or Non-discrimination: Could they be a sufficient remedy in some cases?
- Accounting separation: not a solution in itself but a regulatory aid.
- Price control:
 - How should margin squeeze be addressed?
 - Should there be cost-based price for a wholesale “anchor” product?
- Mandated access:
 - Where should be the access points?
 - At what price, and for how long?

Vertically integration & market structure

- Access and competition in a vertically integrated network industry



Mandated access to what?

- Market power is leveraged from the bottom upward, suggesting:
 - that the quality of competition depends on ONOs providing services that are built up from the bottom.
 - Such services will involve self provided infrastructure, systems and services.
- At entry ONOs tend to provide certain elements only
 - Why? - because of existing market power at crucial places in the value chain:
 - (i) Uncertainty, due to the gap in information and experience
 - (ii) Economies of scale and scope

Mandated access: to what?

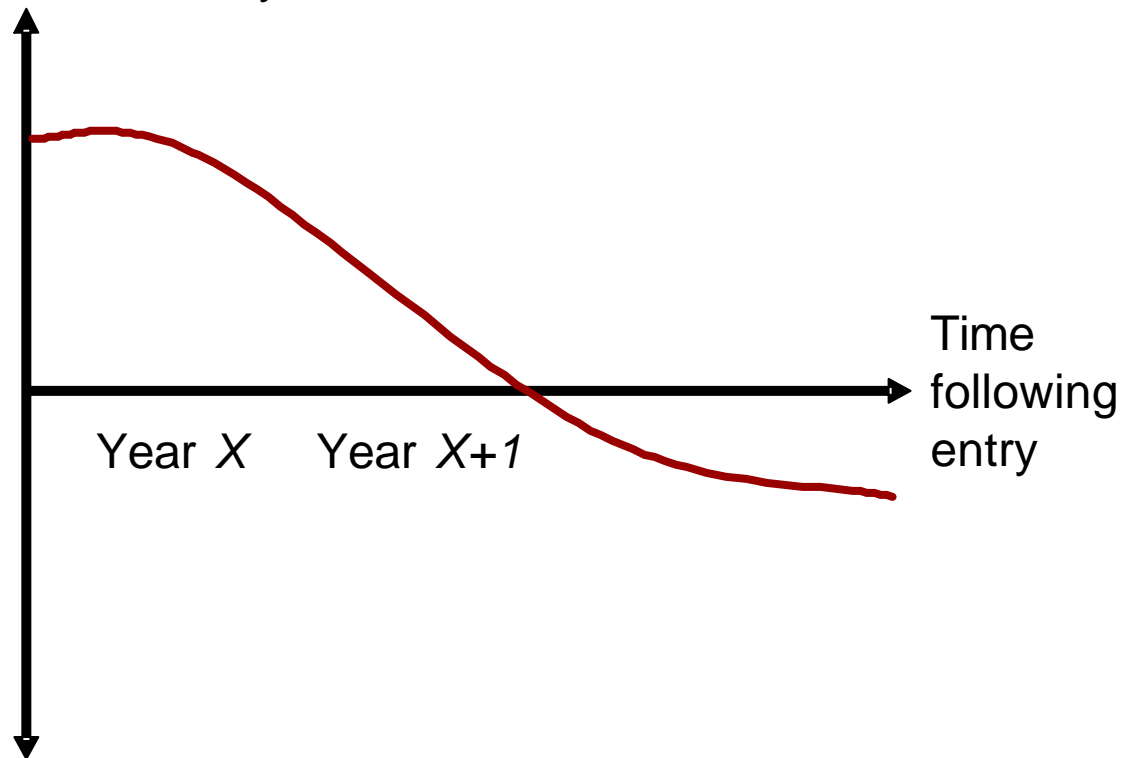
- Suggests 2 classes of non-replicable investment:
 - (A) Essential facilities - Those that will not be replicated for the foreseeable future
 - (B) Those that are likely to become replicable once ONO's move down their experience curve.
- ONOs need access to both at the time of entry.
- Ideally regulatory treat for (A) should be slightly different than for (B).

Mandated access: to what?

- (A) should always involve cost based access (all capital, operating and risk related costs) (LRIC)
- For (B) the NRA needs to:
 - do its best to identify the Bs
 - have a strategy designed to encourage ONOs to invest in them.
- Suggests that if there is cost-based access to the Bs from the date of liberation, this would not last indefinitely.

Mandated access: at what price & for how long?

Cost-based (B) class access
elements are compliments to own
facilities investment by ONOs

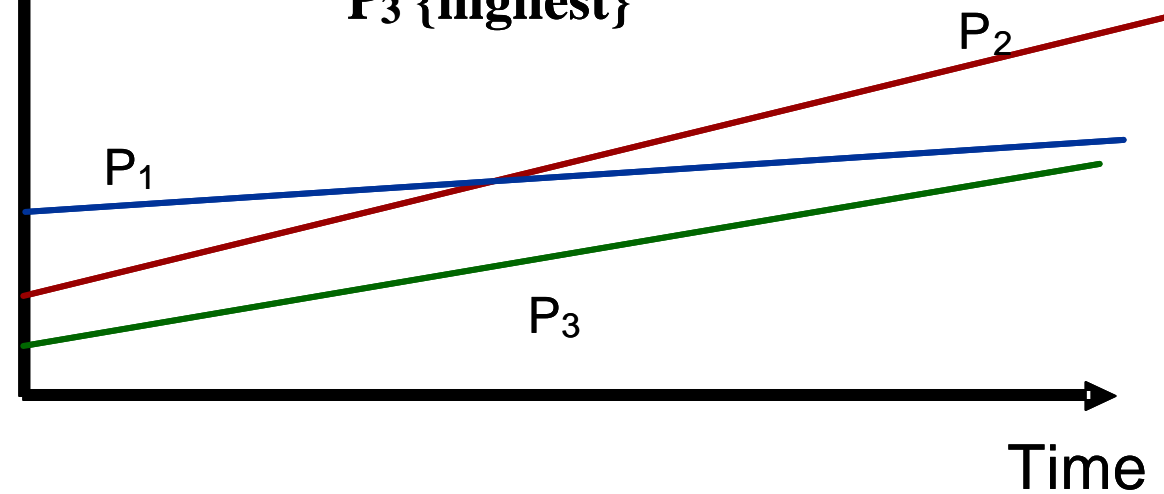


Cost-based (B) class access
elements are substitutes to own
facilities investment by ONOs

Mandated access: at what price & for how long?

Level of competitive
infrastructure

Price and conditions of access to (B)
class elements of SMP incumbent:
 P_1 {lowest};
 P_2 {higher};
 P_3 {highest}



EU framework - Outlook

- Today's question: What type of intervention is needed?
- Legal certainty about concepts such as “relevant market” and “dominance” both applied in *ex ante* regulation and *ex post* antitrust proceedings
- Remedies may vary significantly across countries
- Strong enforcement mechanism to ensure that existing *ex ante* regulation is reassessed market by market
- In-built deregulation in the new framework
 - SMP based on dominance
 - Technological convergence

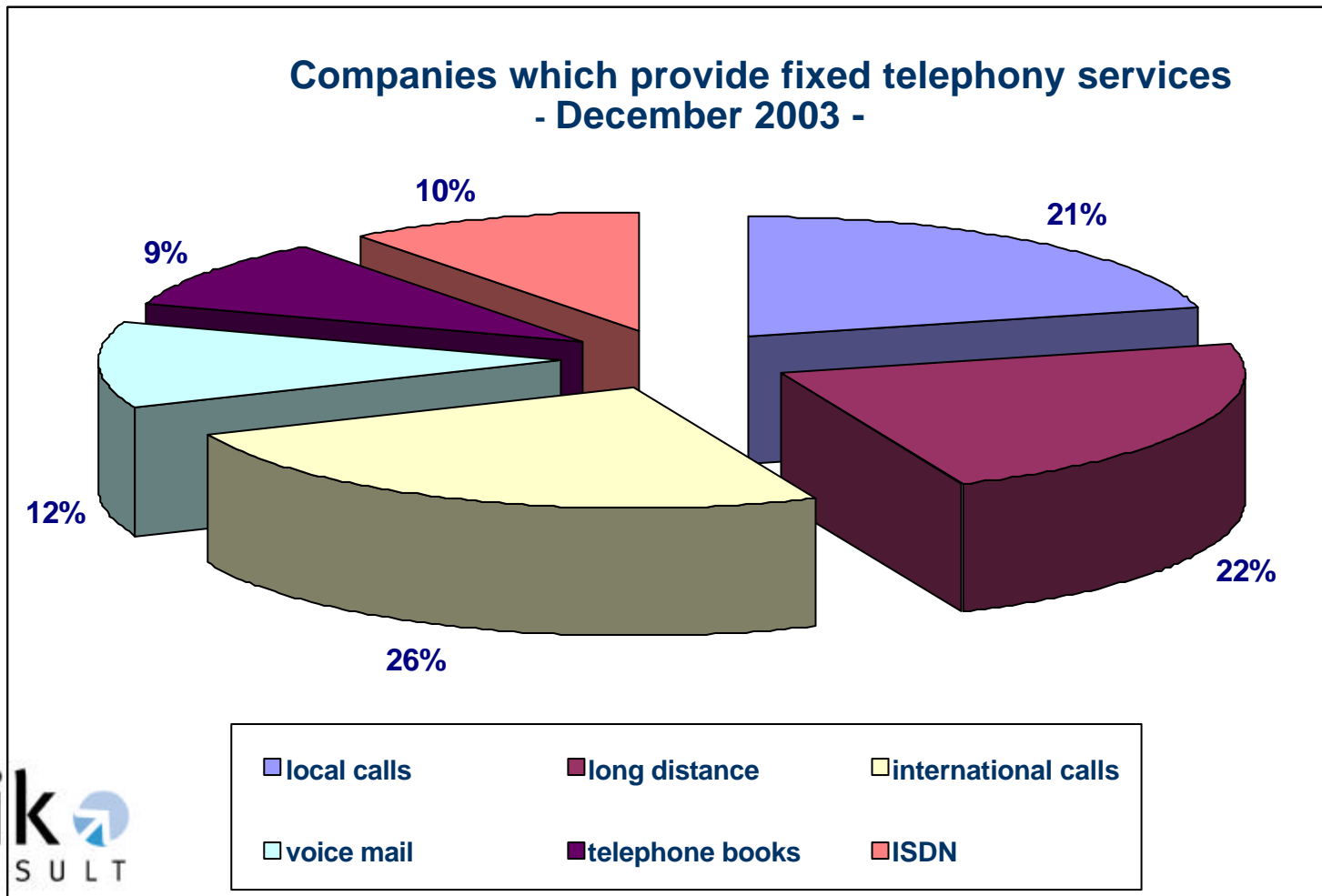
Right of appeal

- Article 4 of the Framework Dir. 1. MS shall ensure that there is an effective appeal mechanisms to an independent which may be a court,
 - shall have the appropriate expertise available
- If it is not a court its decision shall be subject to review by a court or tribunal.

Market Analysis in Romania

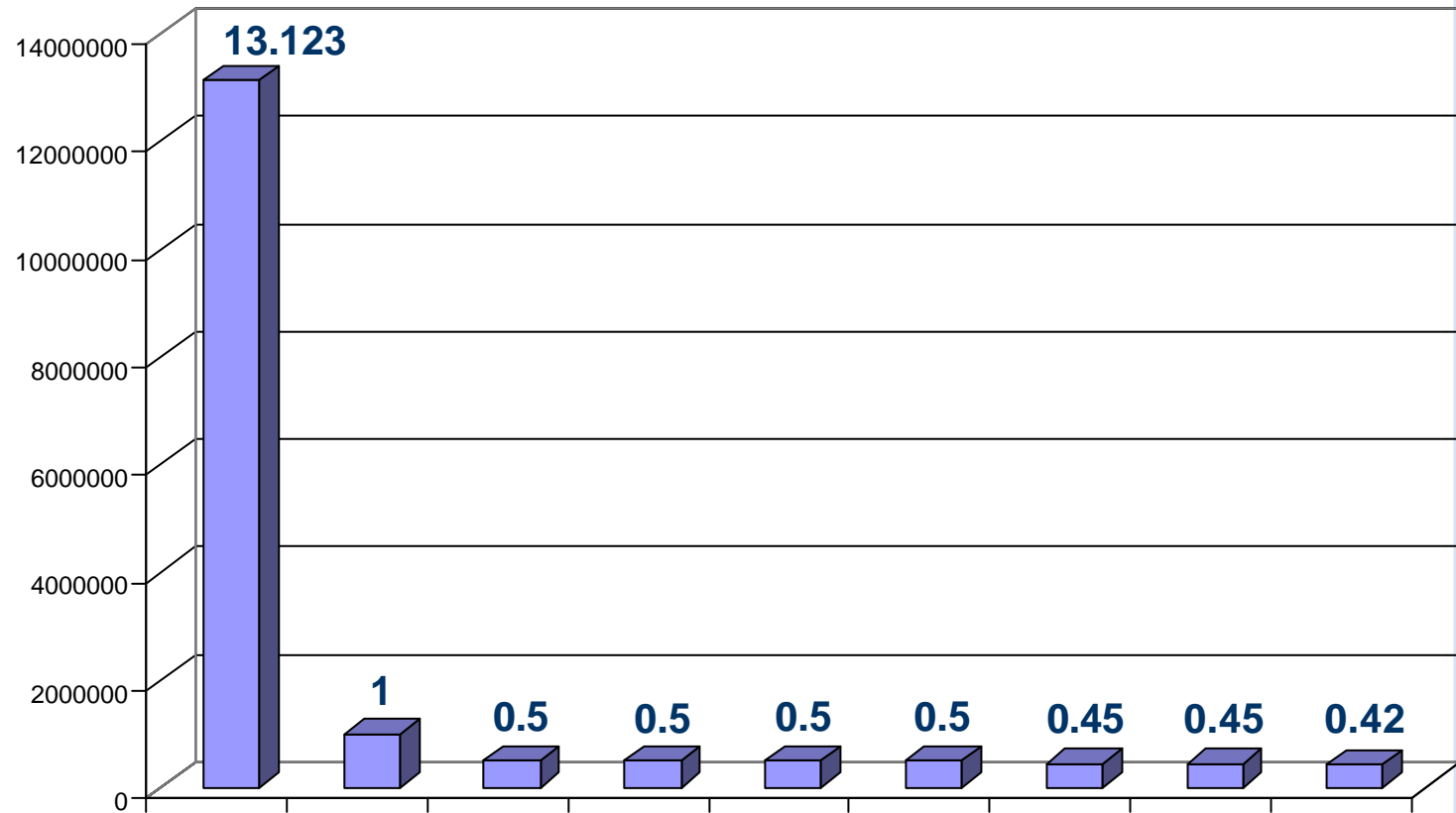
Firms authorised to provide fixed telephony services, 12/2003

- Can only comment on what was done at March 03
- Operators claim a lack of data



Geographic numbers granted

Geographic numbers granted (billion)



Mobile shares

Band	Technology	Operators	Subscribers
900 MHz	GSM	Mobifon S.A.	2,746,000
		Orange România S.A.	2,589,557
1800 MHz	DCS	Cosmorom S.A.	83,724
450 MHz	CDMA2000	Telemobil S.A.	142,000

- Mobile appears to be a primary problem area – possible joint dominance
- Remedy is not in the list – license another MNO
- To help overcome 3rd mover disadvantage include 2 and 3G

Romania

- ANRA purchased a survey to obtain the data not provided by operators
- The type of questions asked must be straightforward and be about facts that virtually all respondents will know
- Stated preference ? Revealed preference.

Question and Number	Score ¹
• S 5. Is there a fixed phone within your household?	1
• S 8. When was the fixed line installed in your household?	2
• Q 10. What type of Romtelecom subscription is used within your household?	2
• Q 59. How many of these calls are...On – net calls; Off – net calls; Calls to fixed line; International calls; No answer?	5



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Relevant product markets (Com Recommendation)

- Fixed narrowband

Retail markets

- Access for residential customers
- Access for non-residential customers
- National calls for residential customers
- National calls for non-resid. customers
- Intern'l calls for residential customers
- Intern'l calls for non-resid. customers

- Dial-up internet access not defined as relevant retail market

Upstream wholesale markets

- Call origination on the public telephone network (voice calls and dial-up Internet calls)
- Call termination on individual public telephone networks
- Transit services in the fixed public telephone network
- Unbundled access to metallic loops and sub-loops

Cost orientation: Problem of common costs

- Cost orientation not defined in EU law

- Incremental cost of service $A=10$

- Incremental cost of service $B=6$

- Cost of providing A and B together =28

- Stand alone cosy of providing $A =22$

- Stand alone cosy of providing $B =18$

