15. Salzburger Telekom-Forum
26. August 2014

Breitbandregulierung in Europa

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Outline

- The Article 7 FD mechanism and harmonization measures under Art. 19 FD
- NGA Recommendation (Sep 2010)
  - Objectives, principles and implementation
- Recommendation on non-discrimination and costing methodologies (Sep 2013)
  - Objectives, principles and implementation
- Relevant Markets Recommendation (Oct 2014)
  - Principal changes, implications

Economic regulation in the EU
Regulatory framework – a recap

- National Regulatory Authorities (NRAs) of the European Union must conduct market analyses to review if specific markets are competitive.

- For markets that:
  - ***(i) meet specific criteria; and***
  - ***(ii) are not effectively competitive***

  NRAs can impose remedies on the operator that has significant market power (ability to behave independently of competitors, customers and consumers).

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State of regulation Aug 2014

(green)	Effective competition - no ex ante regulation
(red)	No effective competition - ex ante regulation
(yellow)	Partial competition - partial ex ante regulation

1	1st round-competition/regulation
2	2nd round-competition/regulation
3	3rd round-competition/regulation
4	4th round-competition/regulation

	2007 RECOMMENDATION							2003 RECOMMENDATION								
	Access to PSTN for res & non-res.	Call orig. on fixed network	Call term. on fixed network	Unbund. access	Broadb. access	Term. segments LL	Voice call term. on mobile networks	Local/nat. call for res.	Internat. call for res.	Local/nat. call for non-res.	Internat. call for non-res.	Retail LL	Transit on fixed network	Trunk segments LL	Access & call orig. on mobile network	Broadcast Transmis.
	Market 1	Market 2	Market 3	Market 4	Market 5	Market 6	Market 7	ex-Mkt 3	ex-Mkt 4	ex-Mkt 5	ex-Mkt 6	ex-Mkt 7	ex-Mkt 10	ex-Mkt 14	ex-Mkt 15	ex-Mkt 18
Austria	3	3	3	3	3	4	4	3	2	4	3	4	1	2	1	3
Belgium	2	1	2	2	2	1	2	2	1	2	1	1	2	1	1	w
Bulgaria	1	2	3	2	2	2	2	1	1	1	1	1	1	1		
Croatia		1	1		1	1	1					1		1		
Cyprus	2	2	2	3	3	1	2	2	2	2	2	1	2	1	2	2
Czech Republic	3	3	3	2	2	2	3	2	2	2	1	2	1	1	1	2
Denmark	3	3	3	3	3	3	3	2	2	1	1	2	1	1	1	1
Estonia	3	3	2	3	3	2	3	1	1	1	1	1	1	2	1	2
Finland	2	3	2	3	3	1	1	2	1	2	1	2	2	1	V	2
France	3	3	3	4	4	2	3	1	1	1	1	2	1	2	W	3
Germany	3	2	3	3	2	1	4	2	1	2	1	2	2	1	1	2
Greece	2	2	3	3	3	2	3	3	1	3	1	2	3	2	1	1
Hungary	4	3	3	3	3	3	4	2	2	2	2	3	2	2	2	2
Ireland	2	2	3	2	2	2	1	2	2	2	2	2	2	2	1	2
Italy	2	2	2	2	2	2	3	2	2	2	2	2	2	2	2	2
Latvia	1	2	3	3	3	2	3	3	3	3	3	3	2	1	1	1
Lithuania	1	1	3	2	2	1	3	3	2	3	2	1	1	1	1	4
Luxemburg	1	2	2	1	1	1	2	2	2	2	2	1	1	1	1	
Malta	2	2	3	2	2	2	3	2	2	2	2	2	2	2	2	1
Netherlands	3	2	4	3	3	3	4	2	2	2	2	2	2	2	1	2
Poland	2	2	2	2	2	1	3	1	1	1	1	2	1	1	2	2
Portugal	1	1	1	2	2	2	2	1	1	1	1	1	1	2		1
Romania	2	2	2	1	1	1	2	1	1	1	1		2			1
Slovakia	3	3	3	2	2	2	3	2	2	2	2	2	2	1	1	2
Slovenia	3	2		3	3	2	5	2	1	1	1	2	3	1	3	2
Spain	3	2		2	2	3	3	2	2	2	2	2	2	3	1	3
Sweden	2	2	3	2	2	2	3	1	1	1	1	2	2	1	1	3
UK	4	3	3	2	3	4	3	2	2	2	2	3	2	3	1	1

Situation as at 12/08/2014

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Commission intervention tools

- Notification of national draft measures under Articel 7 FD - Commission can intervene
- Comments
  - **NRAs to take utmost account**
- Phase II investigation
  - **Art.7 Framework Directive**
  - **Art.7a Framework Directive *(from May 2011)***
- Veto (market definition + SMP finding)
- Art.7a Recommendation *(from May 2011)* on remedies

Art. 19 Framework Directive

- Harmonised application of EU regulation
  - Promote a consistent implementation of remedies

- European Commission can issue a Recommendation or a Decision if implementation of framework across the EU presents divergences that may create a barrier to the internal market.

- National regulators must take "utmost account" of the Commission's recommendations when imposing remedies.

NGA Recommendation (2010) (1)

- Continued availability of wholesale access products
  - Civil engineering infrastructures (equivalence of access)
  - Terminating segments (in-house wiring)
  - Unbundled fibre loops (ODF and/or cabinet)
  - Fibre-based WBA
- Relaxation of access regulation
  - Infrastructure competition (Recommend 22) – diff. remedies
    - Several alternative infrastructures (FttXs, cable)
    - Competitive access offers + ancillary services (backhaul)
    - Likely to result in effective retail competition
  - Co-investment agreements (Recommend 28) – no SMP
    - Joint deployment of multiple FttH lines in specific areas,
    - Equivalent and cost-oriented access to shared infrastructure
    - Effective downstream competition (bitstream, retail)

NGA Recommendation (2)

- Cost-orientation as matter of principle
  - Ensuring service-based competition
  - Consistency in ducts, copper LLU and fibre access pricing
- Rewarding risks
  - Sunk costs, uncertainty on the demand and on technological evolution
  - Risk premium (FttH rollout)
- Pricing flexibility when justified
  - Price differentiation (long-term v. short-term contracts)
  - Volume discounts
  - Retail minus for bitstream when sufficient competitive constraints + margin squeeze test

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SMP and product/geographic submarkets

- SMP in market 4 in all MS
- No SMP in market 5 (RO, MT), residential BB (AT), low quality WBA (NL), subnational markets (PT, UK, PL, FI)
- CZ-2013-1322 (market 5)– insufficient indirect constraints from cable and WiFi to warrant no SMP finding in geographic sub-market - *veto*
- PL/2014/1632 (market 5) – no SMP in cable/LLU areas based on distinct cumulative criteria (per commune) - *comments*
    - Retail market share <40%
    - at least three operators provide retail broadband access to which at least 65 % of premises have access (e.g. cable + LLU)
    - no more than 10 % of premises in a given communal area have no access to the Internet.
- Limited geographic remedy differentiation (FR)
- Emergence of duopolistic market structures in submarkets

Access to civil engineering

- Mandated duct access (AT, BE, DK, EE, FR, DE, EL, PT, HU, IT, PO, SI, ES, HR, LT, SK, UK, BG, LV,MT),
  - sometimes limited to certain network segments
  - Mostly part of market 4, often ancilliary
- No duct access (CZ, FI, RO, SE)
  - Few ducts (NL, BE) – but dark fibre
  - no demand (FI, SE but extensive backhaul remedy, RO)

Access to terminating segments

- Explicitly mandated as part of SMP obligations in about 1/3 of Member States
- Mandated as part of symmetric obligations in FR, PT, HR, IT, ES (FttH)
- Access points sometimes not determined or limited to in-building wiring

Access to FttH

- ODF unbundling mandated in an increasing number of MS (HR, FI, HU, LT, DE, NL, PL (conditional on duct space), SI, SE, SK, MT, AT, DK, EL, IT
  - But: forward looking and limited to PtP
- Not imposed (CZ, FR, PT, RO, UK), not included in market 4 (BE, ES)
  - Delays in market reviews, different network characteristics
- Virtual unbundling in market 4 (UK, AT, DK)
  - Same characteristics as physical unbundling
  - Transitory period towards WDM
  - Altnets often rely on market 5 remedies, varying characteristics of 'enhanced bitstream' (interconnection, QoS, speed/symmetry, multicast, price control)
- Symmetric access regime (FR/2014/1603)
  - Access to in-building wiring, co-investment scheme (multi-fibre), third party (cable und municipal) bitstream offers likely to result in retail competition, but no LLU or bitstream over fibre

Access in case of FttN

- Mandated in majority of MS
- Typically cabinet unbundling
- Vectoring and sub-loop unbundling
  - Presently not compatible
  - (BE/2011/1227)
    - Withdrawal of SLU for Vectoring
    - Re-imposition of SLU still possible
  - (DE/2013/1484)
    - altnets can exercise grandfather rights (e.g. if they offer bitstream to third parties, and cable is not strong in specific area)
    - May allow altnets to gain critical mass for SLU in certain areas (control of 100% of street cabinets)

Pricing principles

- Large majority of MS uses cost orientation, some retail minus (more important in market 5), or price caps.
- Around 2/3 of MS use CCA, 1/3 HCA
- ½ LRIC, 1/2 FDC (market 4); 1/3 LRIC, 2/3 FDC (market 5)
- SK/2011/1262 – no price control for fibre loop - *withdrawn*
- FI/2012/1328-1329 (mkts 4, 5) – non-imposition of price control for copper and fibre bitstream – *Commission Recommendation (Art. 7a FD)*
- CZ-2013-1509 (market 5) – no price control absent competition safeguards - *withdrawn*

Recommendation on non-discrimination and costing methodologies

- Surest way to non-discrimination is Equivalence of Input (EoI)
- Stable and consistent wholesale copper access prices in Europe in the transition to NGA
  - Recommended costing methodology by end 2016
    - BU-LRIC+ estimating current cost of modern efficient NGA
    - Different valuation for reusable civil engineering
    - Cost adjustment (FttX → copper) or overlay network (copper & FttX)
- No price regulation on NGA networks in presence of
  - EOI, technical and economic replicability, plus competition safeguards (copper anchor *or* alternative infrastructures)

Implementation – Art. 7a Recommendations

- AT/2013/1475-1476 – LLU and WBA prices (margin squeeze test with prices below cost-oriented level)
- EE/2013/1453-1454 - LLU and WBA prices (HCA)
- IT/2013/1489-1490 – LLU and WBA prices (WACC)
- ES/2013/1466 – WBA prices (mark-up)

Article 7a Recommendations since May 2011

DE/2013/1527 Market 7	Original approach maintained
IT/2013/1489 Market 4	Approach adapted
IT/2013/1490 Market 5	Approach adapted
AT/2013/1475 Market 5	Original approach maintained
AT/2013/1476 Market 4	Original approach maintained
ES/2013/1466 Market 5	Approach adapted
DE/2013/1460 Market 3	Original approach maintained
EE/2013/1453 Market 4	Original approach maintained
EE/2013/1454 Market 5	Original approach maintained
DE/2013/1430 Market 3	Original approach maintained
DE/2013/1424 Market 7	Original approach maintained
FI/2012/1328 Market 4	Approach adapted
FI/2012/1329 Market 5	Approach adapted
PL/2012/1311 Market 5	Approach adapted
NL/2012/1284 Market 3	Original approach maintained
NL/2012/1285 Market 7	Original approach maintained

The 2014 Recommendation on relevant markets as proposed to COCOM

1. Wholesale call termination on individual public telephone networks provided at a fixed location *(current Market 3)*

2. Wholesale voice call termination on individual mobile networks *(current Market 7)*

3. a) Wholesale local access provided at a fixed location *(current Market 4)*

   b) Wholesale central access provided at a fixed location for mass-market products *(mainly current Market 5)*

4. Wholesale high-quality access provided at a fixed location *(mainly current Market 6)*

How to delineate broadband markets? (1)

i. ***Local access***
   - Comparable to current Market 4, but includes certain virtual unbundling solutions
   - Localness, Generic and uncontended, allows for sufficient control
   - No preference for virtual unbundling

ii. ***Central access*** (for mass market services)
   - Comparable to current Market 5 but without certain high-end/high quality access products
   - Best-effort QoS
   - Access seekers have limited control / possibility to differentiate

How to delineate broadband markets? (2)

iii. Wholesale high-quality access market at a fixed location

- Focus on service/product characteristics (rather than specific technologies)
  - Low/zero contention
  - Appropriately high upload speeds (or even symmetrical up- and download speeds)
  - Guaranteed availability
  - High QoS (SLAs, 24/7 support, repair)
  - Handover points defined according to density and distribution of business users
- Result: product market likely to include (new) products beyond traditional terminating segments of Leased Lines
- However, presumption that trunk/core elements are replicable remains valid

Conclusions

- Important differences in speed and technology of NGA deployment remain and also determine choice of regulatory approach
- (Fibre) LLU and duct access become widespread, variations in backhaul and permitted use of ducts
    - Significance in practice, uncertainties over roll-out ('fibre to the IP')
- Due to NGA technology (GPON, vectoring) and scale economies importance of virtual solutions
    - Which market?
    - Varying technical specifications (VULA, 'enhanced bitstream')
- Emphasis on consistent pricing (and costing methods)
- Deregulation in regional markets important in market 5 (no SMP)
    - Differentiation into mass market and high quality market matters for business users

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Thank you for your attention!

Questions?