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Mobile telephony mergers: Telefonica/E-plus

Mannheim, 5 December 2014

12th ACE Annual Conference, 2014

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Agenda

- Background
- Efficiencies
- Quantification of expected price effects
- Potential remedies

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Background

The European Commission recently investigated „4 to 3“ mergers…

- Austria – 2012, Ireland – 2014, Germany – 2014 (Telefónica/E-Plus, focus of this presentation)

…in a dynamic industry with potentially high efficiencies

- Investment in mobile network key (4G)
- Move from voice to data

Some features that these cases have in common

- „Gap cases“ – mergers did not lead to single firm dominance and focus on unilateral effects
- „Guppi cases“ – upward pricing pressure analysis was used and extended to calibrated merger simulation
- „BLP cases“ – last cases involved extensive discussions on how to estimate demand (and square that with UPP)
- „Efficiency cases“ – quantification, verification, pass-on, merger specificity

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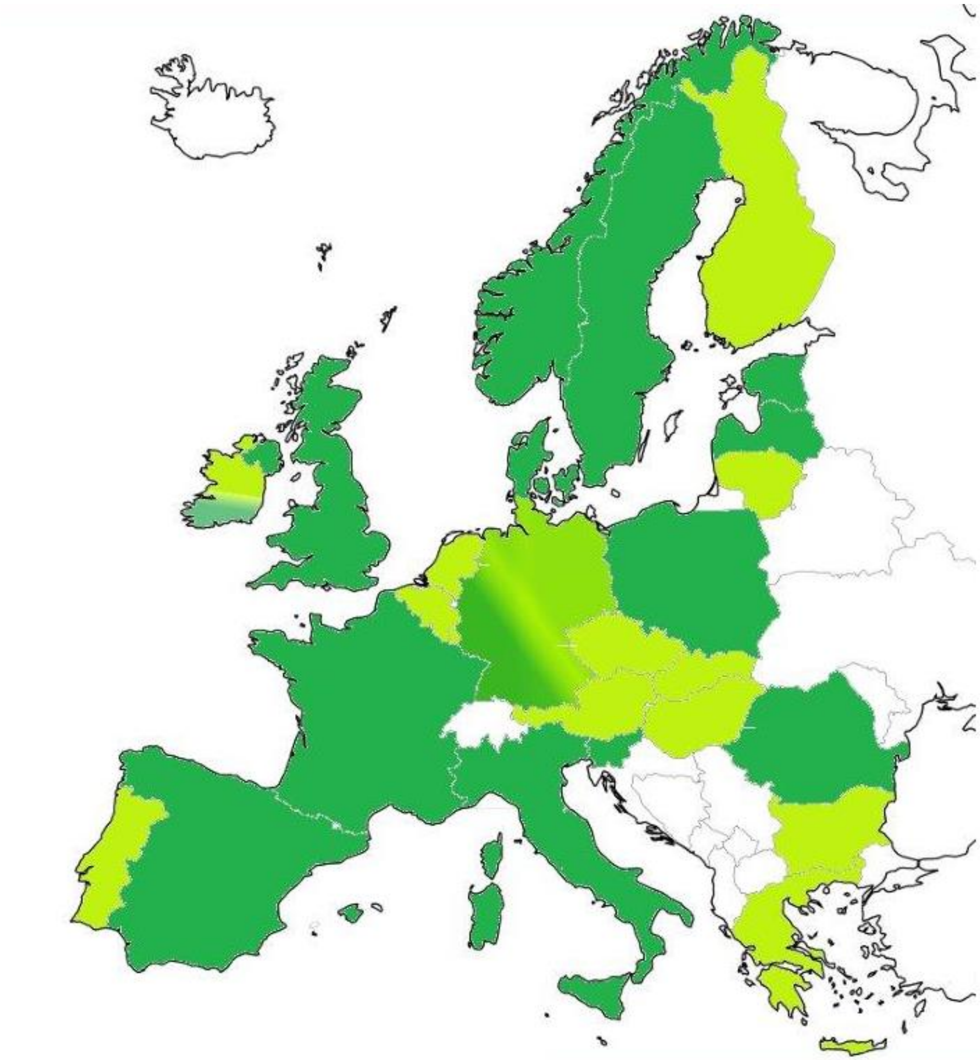
Number of MNOs by Member State and recent changes*



Concentration of MNOs in Europe

4 MNOs

4 to 3 MNOs

3 MNOs

Source: E.CA Economics; Data from 2012, taking into account the recent merger cases. Shows only MNOs with more than 1% subscriber market share

Telefónica Deutschland/E-Plus

MNOs [retail rev. share; network level]

- Deutsche Telekom: [30 – 40%]
- Vodafone: [30 – 40%]
- Telefónica Deutschland [15 - 25%]
- E-Plus [15 - 25%]

non-MNOs [15 - 25% retail rev. share; retail level]

- Mobile Virtual Network Operators
- Service Providers (e.g. Freenet, Drillisch, etc.)
- Resellers (e.g. Aldi, Lidl, etc.)

Segments

- Prepaid/ post-paid
- Residential/ Business
- Data-Only, etc.

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Evidence from other countries?

- SO referred to studies that found that higher concentration goes along with higher prices: „Indeed, there are also empirical studies that suggest a correlation between concentration of retail mobile communication markets and price level" (SO 394)

- Decision dismisses all price concentration studies as unreliable: „Therefore, the Commission considers it to be appropriate **not** to rely on any of those studies" (Decision 558)

Our theme

Approach to quantification and efficiencies…

- UPP, extended UPP and BLP
- quantification, verification, pass-on, merger specificity

…taking constraints in a merger proceeding into account

- Standard and burden of proof
- Interaction and timeline

Note our background

- Worked for Telefónica in Telefónica/E-Plus (Germany) and Hutchison 3G/Telefónica (Ireland)
- Worked for a third party MNO in Hutchison 3G/Orange (Austria)

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Investment and merger assessment

In a future oriented industry…

- LTE roll-out plan (and synergy case) has five year perspective
- Shift from voice to data: continuous improvement of networks required
- Network quality important for entire economy

…investment is key…

- High share of capex
- Network quality dependent on merged network and roll-out plan

…and this has implications for the merger assessment

- Need to take into account (at least some) fixed cost savings
- Need to account for network quality improvements
- Need a long-run view: Ignoring the effect in 4 years ignores consumers in the semi-urban and rural areas

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Network quality and marketing

- Advertisement is all about network quality
- Coverage is critical for mobile users
- Plus
  - call success rate, time to place the call,
  - average speech quality, data upload and download speed

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Efficiency hurdles

If not considered as competitive effects (which they are not), efficiencies must be

- Presented by parties
- Verifiable (and de facto: quantifiable)
- Merger specific
- Passed-on to consumers

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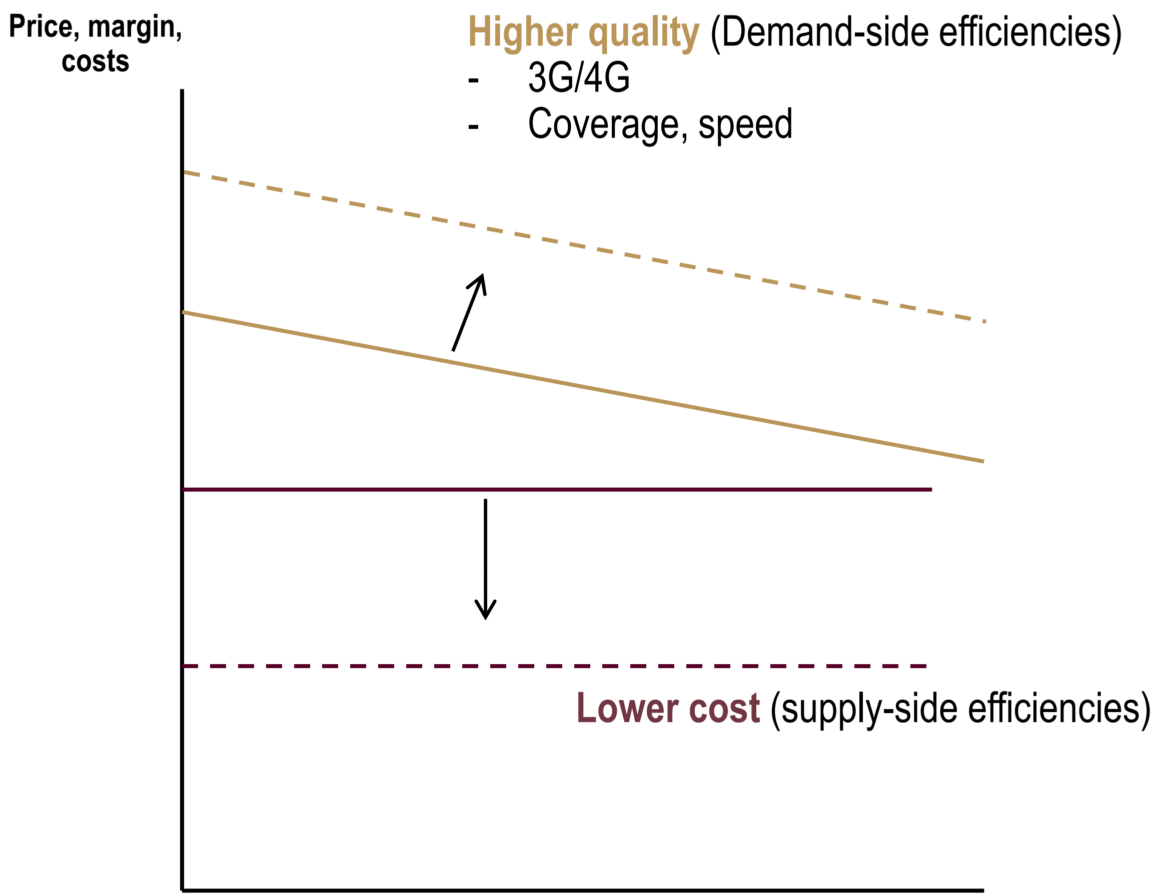
Quantifiability

Quantifiable

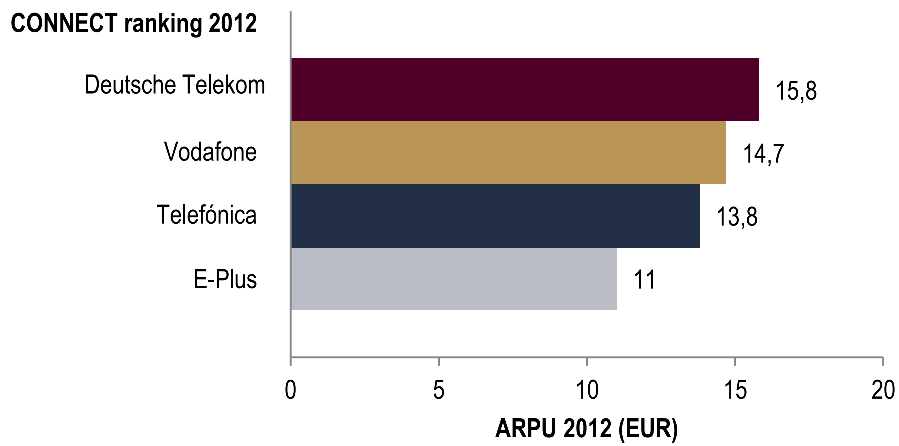


Qualitative

- Horizontal re-positioning intensifies competition
- Vertical re-positioning intensifies competition and creates incentives to invest in quality
- Lost in the process by definition?

Quantifiability of quality improvements – tricky business

- ARPUs are higher for higher quality networks
- Percentage price premium is also visible in like-for-like tariff comparisons
- Also true for SPs that offer a network choice (for an otherwise identical tariff)
- Marketing studies indicate that majority of brand premium is due to higher network quality



Back-of-the-envelope calculation

- Take survey data
- Calculate the share of the difference in brand evaluation due to network quality
- Multiply with the percentage voice price difference

Regression analysis

- Take price and quality test scores from past
- Estimate price increase associated with increase of quality test score
- Control for other factors (operator fixed effects

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Verifiability

Is there not an overwhelming case for network efficiencies?

- Authentic (not prepared for competitive assessment) synergy case
- Detailed planning of sites, related (supply-side) efficiencies documented and reported to shareholders
- Telefónica network engineer expertise explaining why a joint network will lead to higher quality
- Clear intuitive incentive of the merging Parties to take up the high quality network chance
- Network perceived as major weakness of the Parties
- Data-centric world means increased importance of network quality
- CHIP magazine with similar prediction
- Replies to market investigation clearly voice concerns as for the Parties' increased network quality

Which additional information would satisfy the Commission as for the verifiability of network efficiencies?

Even if the Commission does not agree with the Parties' estimates, should it not make its own assessment based on the available evidence?

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Pass-on

- Use cost savings and quality improvements in merger simulation
- Key discussion here on the cost savings: which matter for pricing decisions?

There is no evidence of short-run marginal cost pricing and…

- Short-run marginal costs are so low that short-run marginal cost pricing would not allow the investments required
- Regulators simulate the outcome of a competitive market based on long-run incremental costs

…the SO itself proposed to include fixed costs when analysing pricing decision in the context of MTR efficiencies

- “the Commission considered in the Statement of Objections that an average measure of long term incremental costs may constitute a more appropriate benchmark than the Notifying Party’s assumption of zero costs” (Decision 1239)
- The Decision considered that “MTR savings should be assessed both under a short and a longer term perspective” (Decision 1241) but then the “baseline scenario” for quantification is based on contribution margins which account for direct costs only (Decision 694)

Only a long-run view can lead to outcomes that capture the essence of the industry and are in the interest of consumers

Merger specificity

Careful analysis of merger specificity shows that there will be no sharing between the parties…

- International experience does not support asymmetric network sharing
- Previous discussions which failed for a reason

…and the competitive assessment in the decision is in line with this…

> "Thus, absent the proposed transaction, E-Plus [and Telefonica] would continue to be an MNO with an independent network based on 2G, 3G and 4G technologies" (Decision 405 and 439)

…but then regards network sharing a realistic and reasonably practicable alternative to the merger (Decision 1113)

If we have it both ways we will tend to block mergers that benefit consumers

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Conclusions on quality improvements and cost reductions (efficiencies)

Verified and quantified efficiencies…

- No denial by any party that there will be sizeable efficiencies – only issue here can be the exact quantification
- Supply side: We calculated sizeable cost savings
- Demand side:
  - Network quality improvements due to network merger and joint roll-out
  - No question of sizeable consumer benefits and they do matter for low and for high value customers – we provided point estimates that can be incorporated in the merger simulation analysis

… and the decision agrees that they are merger specific based on a likelihood standard (as absent the merger there would be four networks)

…and passed on to consumers

- Which is immediately evident for the quality improvements (which is not denied)
- And also evident for cost savings as they occur for all definitions of costs that are relevant for pricing

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Potential remedies

Merger simulation based on estimated demand vs UPP

Usually better as it derives critical inputs…

- Explicitly models consumer demand and price elasticities based on actual behaviour (revealed preferences)
- Therefore attempt welcome

…but needs careful implementation

- Current approach ignores quality improvements, brand re-positioning, competition by non-MNOs
- Implementation needs to account for brand effects and other specificities
- Noticed other technical implementation issues (which are not discussed here)

Contains two steps

- Demand estimation
- Merger simulation

EC uses UPP- and DE-based techniques as complements
At which levels is consistency required?

UPP-Analysis		Merger-Simulation with estimated demand
Assumed **profit margins** based on accounts		Estimate of demand elasticities
Assumed Diversion-Ratios based on Switching-Data	= Not necessary*	Implies **profit margins** that matter for pricing decisions
Price increase	= Sufficient *	Price increase

* *Telefónica Deutschland/ E-Plus* (719) – (721)

Note on quantitative techniques and competition policy

Models lead to price increases by assumption if efficiencies are ignored

Thus, either efficiencies must be taken into account in the competitive assessment…

…or the authority makes use of a threshold under which price increases are considered "minor" and even without proof of efficiencies as compensated by efficiencies

Or the authority prohibits all mergers (to the detriment of consumers)

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Potential „remedies“

- Mobile telecom is an industry with high investment requirements and potentially large efficiencies
- Current approach to assess such mergers
  - Vertical integration (high contribution margins) creates problems at the competitive effects level
  - Efficiencies are not taken into account due to interpretation of the verifiability, quantifiability and merger specificity hurdle
- Assuming other things are done right, this results in systematic over-enforcement
- Proposed remedies
  - Align standard for merger specificity with counterfactual analysis
  - Align margins with implied margins
  - Make use of past experience and efficiency credits
  - (But: keep burden of proof with parties)

Thank you!

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