Merger Control Telecoms High Tech



Tokyo 11 December 2015

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Background -- The 2004 Amendments to the Merger Regulation



- Modernization of the Merger Regulation
 - 1989 Regulation
 - » Required notification within a week of signing
 - » Creation or strengthening of dominance was sole substantive test

The 2004 reforms

- Introduction of SIEC Test (to capture so-called 'gap' cases)
 - » Dominance no longer the exclusive substantive test
 - » §§ 24/25 of the 2004 Horizontal Merger Guidelines
 - Expansion of unilateral effects to oligopolistic markets
 - > Broader than 'gap' cases
 - > Response to Airtours: reduces need for coordinated effects as a theory of harm

Horizontal Merger Guidelines



§24 HMG: A merger may significantly impede effective competition in a market by removing important competitive constraints on one or more sellers, who consequently have increased market power. The most direct effect of the merger will be the loss of competition between the merging firms. For example, if prior to the merger one of the merging firms had raised its price, it would have lost some sales to the other merging firm. The merger removes this particular constraint. Non-merging firms in the same market can also benefit from the reduction of competitive pressure that results from the merger, since the merging firms' price increase may switch some demand to the rival firms, which, in turn, may find it profitable to increase their prices. The reduction in these competitive constraints could lead to significant price increases in the relevant market.

- Identifies two theories of harm:
 - Direct pricing effects on merging parties
 - Indirect effects on rivals who may have incentives to raise prices

Horizontal Merger Guidelines



§25 HMG: Generally, a merger giving rise to such non-coordinated effects would significantly impede effective competition by creating or strengthening the dominant position of a single firm, one which, typically, would have an appreciably larger market share than the next competitor post-merger. Furthermore, mergers in oligopolistic markets involving the elimination of important competitive constraints that the merging parties previously exerted upon each other together with a reduction of competitive pressure on the remaining competitors may, even where there is little likelihood of coordination between the members of the oligopoly, also result in a significant impediment to competition. The Merger Regulation clarifies that all mergers giving rise to such noncoordinated effects shall also be declared incompatible with the common market.

 Creates a theory of harm based on unilateral effects in oliogopolistic markets without single firm dominance or tacit collusion

Analytic Road Map under SIEC Test and HMG §§ 24/25



- Oligopolistic markets defined in economic sense of interdependence -- not merely concentrated markets
 - Pre-merger competition was already limited
 - EC relies on limited pre-merger competition as a basis for predicting merger will lead to SIEC
 - » No need for merging parties to be each other's closest competitor
 - » Absence of robust pre-merger competition may be predicated on existence of high margins, pricing above variable cost etc.
 - > Outokumpu/INOXUM
 - > GE/Alstom
 - In cases in which there is no quantification, §25 provides the sole (purely theoretical) basis for the competitive assessment

Analytic Road Map under SIEC Test and HMG §§ 24/25 in Telco cases



- Theory of harm based on unilateral effects absent dominance in oligopolistic markets
 - May or may not be quantification and reliance on quantification uneven
 - » In Telco cases UPP/GUPPI only or UPP combined with Merger Simulation
- Efficiencies considered and rejected
- Counter-factual considered (failing company, likelihood of exit, weakened competitive strength) and normally rejected
- Remedies imposed almost now with up-front buyer as precondition to closing
 - *i.e.*, divestiture/licensing must be implemented with approved buyer/licensee before merger can close
 - Puts risk of successful remedy on merging parties

Telcoms Cases



Recent Telcoms Cases



- 5 major Phase II cases since 2014 with wellestablished analytic framework
- Telcos have argued that concentration is required to ensure investment
 - Translation:
 - » Higher prices required to support investment?
 - » Enhanced efficiencies required to support investment?
 - » Enhanced quality justifies higher prices?
- EC argues that concentration and increased customer base may reduce incentives to invest
 - Is this a realistic concern where investment and quality are key competitive parameters?

Recent Cases



- M 6992 Hutchison 3 G UK/Telfonica Ireland, 28 May 2014
 - 4 to 3 merger of 2nd and 4th players; merged entity and Vodaphone would each have ~40% MNO share, Eircom ~20%
- M 7018 Telefonica Deutschland /E Plus, 2 July 2014
 - 4 to 3 merger of 3rd and 4th players resulting in 3 MNOs of similar size with merged entity No. 3 on overall retail market, No. 1 in terms of MNO subscribers and No. 1 in pre-paid segment
- M 7419 TeliaSonera/Telenor (Denmark) (4 to 3 merger between No. 2 and No. 3) withdrawn September 2015 because unwilling to give required remedies reportedly involving divestiture of 40% network capacity)
- Pending Phase II cases
 - M 7612 Hutchison/3G UK (UK)
 - M 7637 Liberty Global/BASE (Belgium)

Recent Cases



- Horizontally affected markets:
 - Retail mobile services (includes business, private customers and data only services, pre and post-paid segments)
 - Wholesale markets for access and call origination/termination (customers are VMNOs)
 - Wholesale markets for international roaming (customers are MNOs operating in other countries)
- Geographic markets are national

Unilateral Effects



Structural Analysis



Retail market for mobile services

Hutchison 3G UK/Telefonica Ireland

- No requirement to show that 3G and O2 are each other's closest competitors (sufficient that 3G is an important competitive constraint) (HMG §25)
 - » Elimination of competition between merged parties (HMG §24)
 - » Larger customer base will reduce incentives to compete and invest
 - » Strategic complementarity: merged entity's rivals will also have incentives to raise price (HMG §24)

Telefonica Deutschland/E-Plus

- Telefonica and E-Plus are close competitors (HMG § 25)
 - » Elimination of competition between merged parties (HMG § 24)
 - » Increase in size, revenues and customer base will reduce incentives to compete and invest
 - » Reduced incentives of rivals to compete post-merger as a result of elimination of E-Plus which was the most aggressive price competitor (HMG § 24)

Hutchison 3G Austria/Orange Austria



- In M 6497, Hutchison 3G Austria/Orange Austria,
 December 2012, EC rejected existence of a 25% market share safe harbor
 - Four to three merger involving 3rd and 4th players with combined share of ~25%
 - » HHI and HHI delta above safe harbor levels under EC guidelines
 - » High diversion ratios between merging parties
 - » Significant margins realized by merging parties (HG§ 25)
 - » Pre-merger importance of parties concerning acquisition of new business

EC HHI Guidelines



- Concerns unlikely if:
 - Post merger HHI below 1000
 - Post merger HHI between 1000-2000 and delta below 250
 Post merger HHI above 2000 and delta below 150

except where

- (a) merger involves a potential entrant or a recent entrant with a small market share
- (b) one or more merging parties are important innovators in ways not reflected in market shares
- (c) there are significant cross-shareholdings among the market participants
- (d) one of the merging firms is a maverick
- (e) indications of past or ongoing coordination, or facilitating practices, are present
- (f) one of the merging parties has a pre-merger market share of 50 % or more

Quantification



Hutchison 3 G UK/Telefonica Ireland

- UPP and demand estimation-based merger simulation (31 page Economic Annex)
 - Diversion ratios derived from customer switching data
 - Baseline simulation based on contribution margins
 - Sensitivity analysis using estimated incremental margins
 - » Multi-segment baseline UPP analysis predicted price increases between 24% and 5% depending on operator and segment
 - » Sensitivity analysis predicted increases between 17% and 3%
- In response to Parties' critique, Commission recalculated UPP taking into account customer switching inertia/insensitivity to price increases and reduction in usage
 - Customer inertia/insensitivity reduced predicted increases in baseline scenario to a high of 21% and a low of 5%, with somewhat lower increases in sensitivity analysis
 - Introduction of 20% diversion ratio to outside good as proxy for reduced usage reduced predicted price increases between 16% and 4% in the baseline scenario and 12% to 2% in the sensitivity scenario
- Overall predicted price increases in post-paid private segment where Parties had strongest positions were on average 6% in baseline and 4% for sensitivity scenario, with overall marketwide average increase being 4% and 3%, respectively, for baseline and sensitivity scenarios
- No attempt at demand-based merger simulation (although Commission did model market-wide price increase when rival equilibrium reactions are accounted for)



Telefonica Deutschland /E Plus

- UPP and demand estimation-based merger simulation (78 page Economic Annex)
 - UPP
 - » Sought to account for reduced consumption or switching to outside alternatives (using shares of VMNOs)
 - » Predicted price increases are described as 'high' but are redacted in public version of the Decision

Quantification -- Hutchison 3G/Telefonica Ireland: Demand Model (Post-Paid Private Segment only)



- Demand model sought to quantify the relationship between the number of contestable subscribers' (new plus retained) and changes in a given tariff
 - After refinement, predicted overall >4% increase for post-paid private segment
- However, Commission rejected its demand estimation model as unreliable because it
 - Failed to approximate level of observed incremental margins
 - Failed to predict observed pre-merger margins
 - Was highly sensitive to small changes in details of tariff calculations
- Thus in Hutchison 3G/Telefonica Ireland Commission relied only on UPP, a screening test, and, in essence, acknowledged its inability to confirm UPP results through a demand model
 - Is reliance on UPP justified in these circumstances?

Quantification -- Telefonica Deutschland/E-Plus: Demand Simulation Model (Residential Segment Only)



- Merger simulation based on demand estimation in residential segment only
 - Attempt to quantify relationship between contestable customers (new plus retained customers) and changes in price
 - Discrete demand model using both random co-efficient and nested logit models
 - » Predicted price increases are redacted in Decision
- In response to Parties' criticisms Commission acknowledged that
 - Random coefficient model is less reliable than nested logit model but did not reject coefficient model results
 - Commission concluded that demand estimation results were sufficiently reliable and predicted significant price increases for residential segment consistent with the UPP results
- Impossible to evaluate as all data have been redacted

Quantification in Hutchison 3G/Orange Austria



 Commission used GUPPI (gross upward pricing pressure) and concluded merger would lead to 10-20% increase in post-paid private segment

No attempt at merger simulation

Coordinated Effects



Coordinated Effects



 In both Telefonica Deutschland/E-Plus and Hutchison 3G/ Telefonica Ireland the Commission examined but did not find a likelihood of coordinated effects:

Hutchison 3G UK/Telefonica Ireland

- » Plus factors
 - Removal of a maverick
 - > Transparent retail prices
 - > Pre-merger convergence of prices
- » Negative factors
 - > Eircom's incentive not to follow coordination given its smaller size and different cost structure

Coordinated Effects



- Telefonica Deutschland 3G/E-Plus

- Plus factors
 - Increased market share symmetry
 - Transparency of retail prices and customer flows
- Negative factors
 - Insufficient evidence to establish coordinated effects under *Airtours* test
 - » ability to reach and maintain tacit agreement and absence of dynamic disruptive factors
- Conclusion: In both cases the Commission concluded that it could not meet the Airtours test for coordinated effects but that the remedy would address coordinated effects in the Irish and German retail markets, if there were any

Counter Factual





Hutchison 3G UK/Telefonica Ireland

O2 will remain a strong competitor in Irish mobile retail market despite Telefonica's announced intention to sell O2 and exit the Irish market

- Unclear Telefonica would exit absent merger
- O2 could be sold to a different owner who would have the incentive to maximize value of O2 brand and customer base
- Despite declining shares and weakness in network quality O2 remains the second largest competitor and customers surveyed consider that O2 « is here to stay »

Role of Telefonica Absent Merger



Telefonica Deutschland 3G/E-Plus

- Absent the merger Telefonica would continue to be an important competitive force
 - Already owns a 2G and 3G mobile network albeit with lower coverage and quality than other 3 incumbents
 - Has started 4G rollout
 - Increasing demand for data services will not hurt Telefonica (market survey)
 - Internal Telefonica and E-Plus documents suggest Telefonica would remain a competitive force
 - Telefonica is able to invest and compete in the German retail market despite declining revenues and earnings

Efficiencies





Hutchison 3 G UK/Telefonica Ireland

- Parties claimed
 - Scale efficiencies
 - 4G deployment efficiencies
 - Increased coverage of underpopulated areas
- Commission findings:
 - Verifiable efficiencies are lower than claimed efficiencies
 - Network scale efficiencies not merger-specific (would have been realized absent merger through network sharing agreements)
 - Scale efficiencies relating to fixed costs not likely to be passed on to consumers
 - Increased coverage would not be material and would not offset harm caused by merger

Efficiencies



Telefonica Deutschland/E-Plus

- Parties claimed
 - Demand-side efficiencies: Faster and broader 4G rollout and enhanced higher speed network quality as a result of spectrum compatibility
 - Supply-side efficiencies: Lower cost 4G rollout
- Commission findings:
 - Demand-side efficiencies not timely (won't be realized within 2-4 years)
 - For supply-side efficiencies can only consider incremental cost savings resulting from merger
 - » Merger-specific supply-side efficiencies do not outweigh projected harm
 - » Issues re verifiability and inconsistencies between parties' submissions and responses to information requests

Remedies



Remedies



Overview:

- In both cases principal remedy was capacity agreement with upfront VMNOs
- In both cases possible spectrum divestitures designed to bring about entry of a 4th MNO but no requirement to implement and express doubts about entry occurring in *Telefonica Deutschland/E-Plus*
- In both cases vertical component to ensure or improve existing wholesale or network sharing agreements with rival MNOs

Remedies



Hutchison 3 G UK/Telefonica Ireland

Market entry:

- Capacity agreements with (i) an upfront MVNO for a minimum of X% of merged entity's network capacity; and (ii) 2nd MVNO for X% of merged entity's network capacity (potentially up to 30%) on a fixed price/fixed capacity basis)
 - » 2nd MVNO not upfront
 - Requirement to be concluded within specified time period after which a Divestiture Trustee will sell the capacity on merged entity's behalf
 - » In both cases
 - price to be set in accordance with a reasonable glide path for first 5 years of capacity agreement
 - 5 year term with 5 year renewal option under a capacity-based MVNO model
 - MVNOs may increase capacity up to 15% of the merged entity's capacity during initial or subsequent term of agreement
- Divestiture of 2 blocks of 1800 MHz and 2 blocks of 2100 MHz and one block of 900 MHz spectrum: To one of the Upfront MVNO or 2nd MVNO to facilitate entry as MNO. MVNOs have 10 year option dating from January 2016
 - » No default sale by Divestiture Trustee if MVNOs not interested in acquiring spectrum
- Vertical remedy: Unilateral offer to Eircom to amend and strengthen Eircom's existing network sharing agreement with O2 to increase, inter alia, pace of site consolidation.

Telefonica Deutschland/E-Plus

- MVNO Upfront Remedy: Prior to closing, Telefonica to enter into up to 3 capacity-based wholesale agreements with upfront Mobile Bitstream Access (MBA) MVNOs
 - Would cover up to 20% initially and ultimately 30% of the merged entity's network for up to 10 years
- MNO Remedy (not upfront buyer): Telefonica to facilitate entry of a 4th MNO by offering (i) spectrum leases (in addition to German Telco Regulator's upcoming spectrum auction); (ii) national roaming; (iii) sites; (iv) passive radio network sharing; and (v) sale of shops
 - If MNO agreement not concluded by end of 2014, MNO Agreement will be offered to the Upfront MVNOs
 - » No sale by Divestiture Trustee if MNO/MVNO not interested
- Vertical remedy: Telefonica to extend existing wholesale agreements with its and E-Plus's wholesale partners and to offer 4G services wholesale

Comment on Remedies



- In both Telefonica Deutschland/E-Plus and Hutchison 3G UK/Telefonica Ireland remedy discussions went three rounds with extensive market testing and modifications
 - Foolproofing remedies: Merging parties bear the risk of the upfront MVNO remedy since they cannot close until the arrangements have been entered into and thus have strong incentives to offer agreements that are commercially acceptable to the MVNO(s)
 - Unused open doors: In Telefonica Deutschland/E-Plus the Commission acknowledged that it was unlikely that an MNO would purchase spectrum under the MNO commitment and the Commission did not require default sale by Divestiture Trustee
 - » It nevertheless concluded that the commitment coupled with the German regulator's planned spectrum auction would 'keep the door open' to new entry
 - What is the utility of an open door no one uses?
- In Hutchison 3G Austria there was also no provision for sale by Divestiture Trustee in the event no MNO was interested in acquiring spectrum on the terms offered by Hutchison 3G Austria



M 7217 FACEBOOK / WHATSAPP 3 October 2014

- Buyer: Facebook provides websites and applications for mobile devices offering social networking, consumer communications and on-line advertising
- Target: WhatsApp provides consumer communications services via the mobile app WhatsApp

Relevant Product Markets



- Consumer communications services
- Social networking services
- On-line advertising services

Consumer Communications Services



- Defined as multimedia solutions that enable people to reach out to contacts in real time via smart mobile devices
 - Stand-alone apps such as WhatsApp, Viber, Facebook messenger, Skype; or
 - As part of a broader social networking platform Facebook, LinkedIn
 - » Proprietary apps (Apple FaceTime, i-Message)
 - » Nonproprietary apps (like WhatsApp)
 - » Distribution platform
 - > WhatsApp smartphones only
 - Facebook smartphones, tablets and PCs

Commission assessed the effects of the Transaction on the market for consumer communications apps offered for all operating systems and including all communication functionalities (but excluding SMS, MMS, voice calls, emails) for smartphones which was, it said, the narrowest possible relevant product market for consumer communications services

- Relevant geographic market:
 - EEA if not worldwide (given greater geographic reach of WhatsApp in EEA)
 - » Despite varying national shares, varying competitors and fact that WhatsApp charged subscription fees in UK and Italy

Social Networking Services



- Differ from consumer communications in that environment is richer and not used for two-way real-time communication
 - Not segmented according to platform or operating system
 - Leaves open whether there should be segmentation between private and professional purposes
 - Leaves open whether consumer communication apps such as Facebook Messenger and WhatsApp fall within social networking services market
- Relevant geographic market:
 - EEA wide, if not global, since Parties shares highest in EEA

On-Line Advertising Services



- On-line advertising services constitute a relevant product market distinct from off-line advertising services without further segmentation
- Relevant geographic market:
 - Either national or based on linguistic borders within EEA

Competitive Assessment – Consumer Communications Services



- Market shares
 - Combined EEA Shares 30-40% in EEA market for consumer communications apps on iOS and Android smartphones:
 - > WhatsApp: 20-30%
 - Facebook Messenger: 10-20%
 - » Main competitors
 - > Android's messaging platform: 5-10%
 - Skype: 5-10%
 - > Twitter: 5-10%
 - > Google Hangouts: 5-10%
 - > iMessage: 5-10%
 - Viber: 5-10%
 - > Snapchat: 0-5%
- Combined share significantly higher than next closest rivals' but dominance not expressly addressed

Closeness of Competition



Closeness of competition:

- Facebook Messenger and WhatsApp are not close competitors given differences relating to
 - » Identifiers used to access the service (phone numbers vs Facebook ID)
 - » Source of contacts (handset address book vs Facebook users)
 - » User experience (Facebook richer)
 - » Privacy policy (Facebook collects user data for its advertising activities)
 - » Intensity of use
 - > WhatsApp closer to Viber
 - Facebook Messenger closer to Twitter/Google Hangouts
- One or more Facebook and WhatsApp features are offered by other players
- High degree of multi-homing
 - » No significant switching costs despite possible issues re recreating user's network

Barriers to Entry and Expansion



- Consumer communications market characterized by disruptive innovation
 - In 2013, use of messaging and social apps grew by 203% which was more than any other app
 - Development and launch costs low
 - No IP barriers
 - Parties do not control operating systems, email addresses, phone numbers
 - » Data portability not an issue given spontaneous short-term nature of chatting
 - » Interoperability not currently an issue and would be technical barriers in creating barriers to interoperability

Network Effects



- WhatsApp 600 million users, Facebook Messenger 250/350 million users but network effects not a barrier:
 - Fast moving sector with low switching costs, low entry barriers and strong record of new entry
 - Multi-homing is common
 - Parties do not control essential parts of network or operating system
 - Neither WhatsApp nor Facebook Messenger are pre-installed on a large base of handsets
 - Technical integration of WhatsApp and Facebook likely to be difficult
 - » Already significant overlap between WhatsApp and Facebook networks
 - Between 20-60% of WhatsApp users use Facebook Messenger and 70-90% of WhatsApp users were Facebook users
 - > 60-70% of Facebook Messenger users already use WhatsApp

Competitive Assessment -- Social Networking Services



- Facebook is the world's largest Social network provider but no horizontal overlap so issue is potential entry by WhatsApp
 - No indication of planned entry by WhatsApp
- Even assuming horizontal overlap including providers of communications services in market for networking services would greatly expand number of players to 13 or more
 - Facebook and WhatsApp are not close competitors and WhatsApp does not offer homepage feeds or timelines
 - Potential integration not an issue because not planned and in any event 70-90% of WhatsApp users already use Facebook

Competitive Assessment -- On-Line Advertising



- No horizontal overlap as only Facebook active in on-line advertising (with a 20-30% share in some Member States)
 - WhatsApp would have to deviate from its no advertising policy and this could alienate some users
 - Even if WhatsApp introduced advertising there would still be a large number of competitors providing services that compete with Facebook including Google, YouTube, Yahoo, MSN and local providers

Conclusions



A surprising outcome?

- Depth of investigation suggests that complainants advanced various theories of harm with Telecom operators being particularly opposed
 - » Market survey does not appear to have supported complaints
 - » Pre-existing overlap between Facebook and WhatsApp users mitigated concerns as did dynamism of sector, absence of barriers to entry (IP/proprietary operating systems) and large number of rivals despite high market shares of the combined entity in the market for consumer communications services

