

# Regulation and Spectrum Policy

**Open Mobile Summit**

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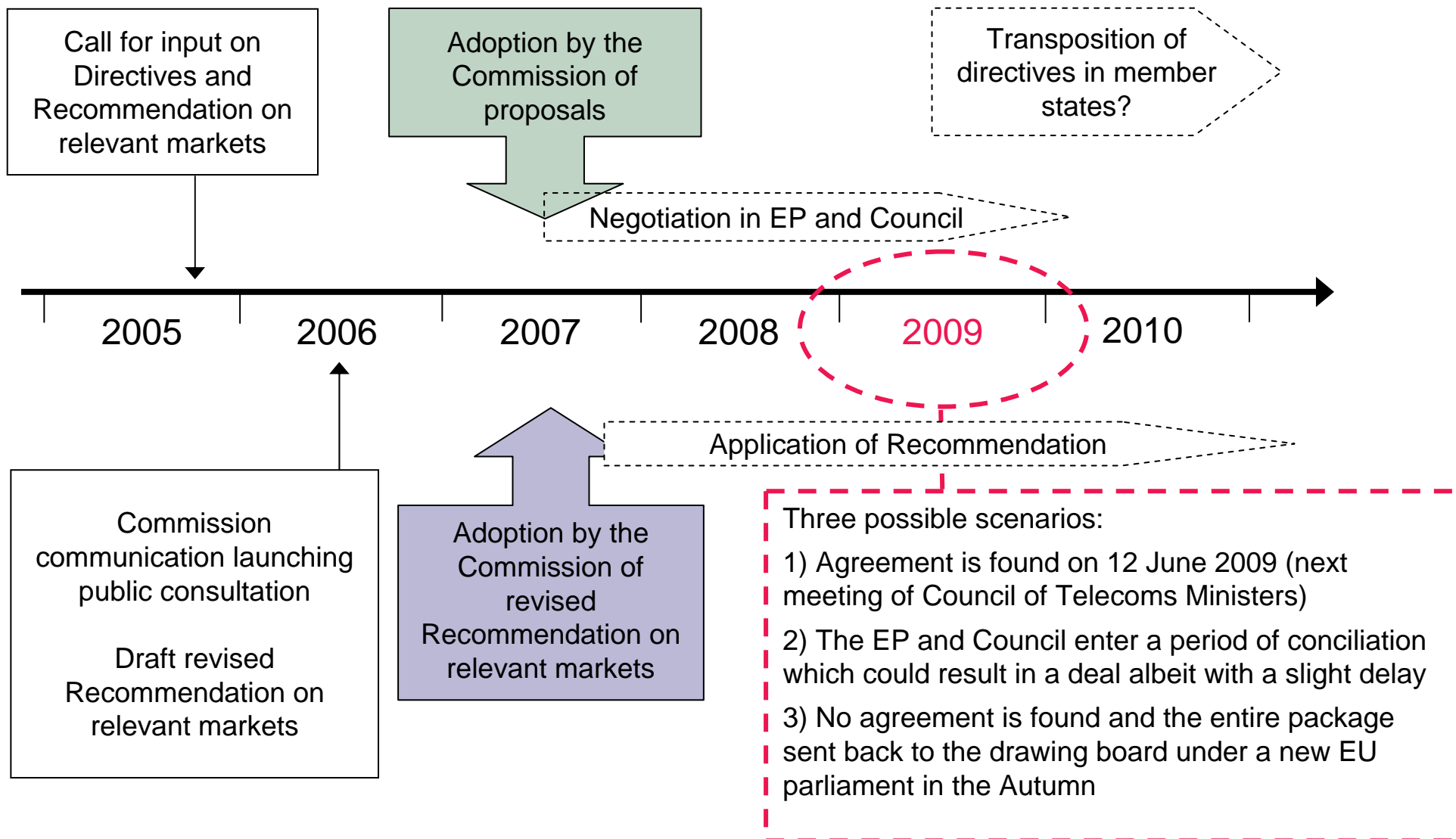
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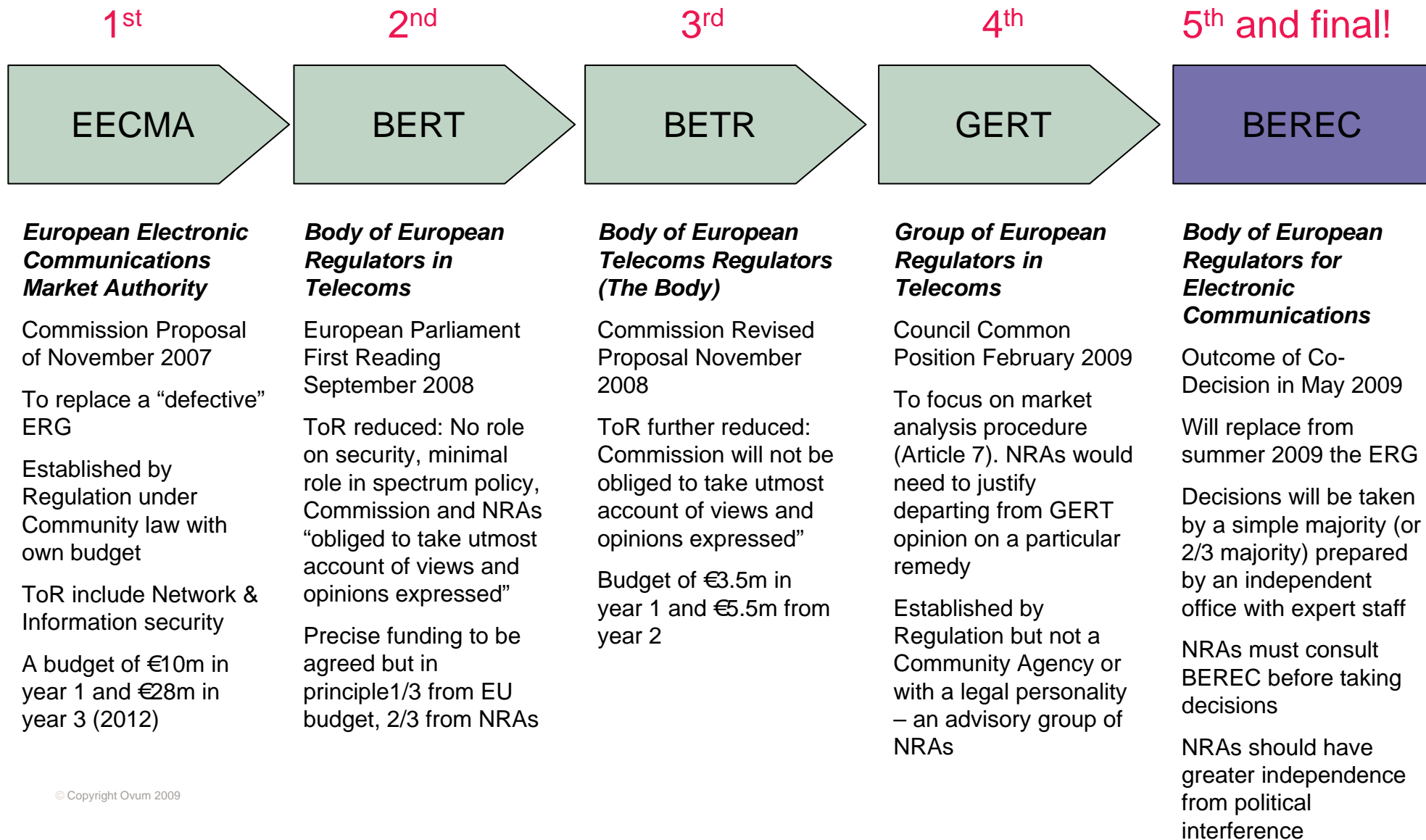
- EU Framework Review
- EU Institutional reforms
- Functional separation
- Spectrum: policy and spectrum demand
- Internet rights

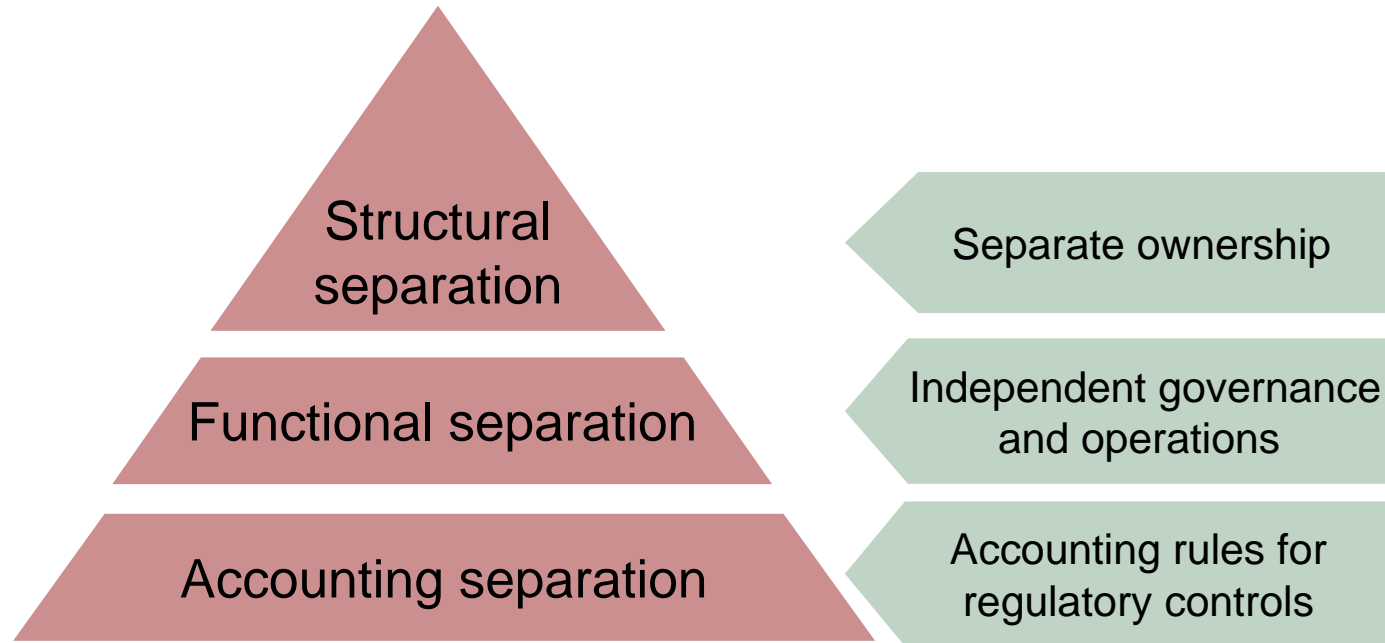
# The path to the EU Telecoms Regulatory Framework reform



- **A range of consumer protection measures** ✓
  - Consumers will have the right to port their number (both fixed and mobile) within 1 working day
  - Consumer contracts must specify information on the minimum service quality levels, as well as on compensation and refunds if these levels are not met.
- **Functional separation as 'a remedy of last resort'** ✓
  - A national regulator can use this tool as an exceptional measure which must be first agreed with BEREC.
- **Spectrum policy** ✓
  - Harmonisation measures to promote use of digital dividend for wireless broadband
  - Flexibility to allow innovative spectrum use – especially to overcome the broadband divide
  - New GSM directive will allow re-farming of the 900 MHz band
- **Next Generation Access** ✓
  - Specific guidelines will follow but essentially 'riskiness of investments' will be taken into consideration so a fair rate of return can be earned
  - Balance between infrastructure and service competition re-assessed. New rules on sharing of passive elements (ducts, poles etc.)
- **Institutional reforms** ✓
  - Harmonisation measures: the EC gains the power to oversee remedies proposed by NRAs to avoid inconsistent regulation that goes against the single market. Binding decisions could follow...
  - BEREC will replace ERG and decisions taken by a simple majority for opinions and two-thirds majority in other cases
- **Recognition of the right to internet access...** ✗
  - No restrictions on internet access without prior ruling by judicial authorities
  - Due to content rights issues

# Institutional reforms





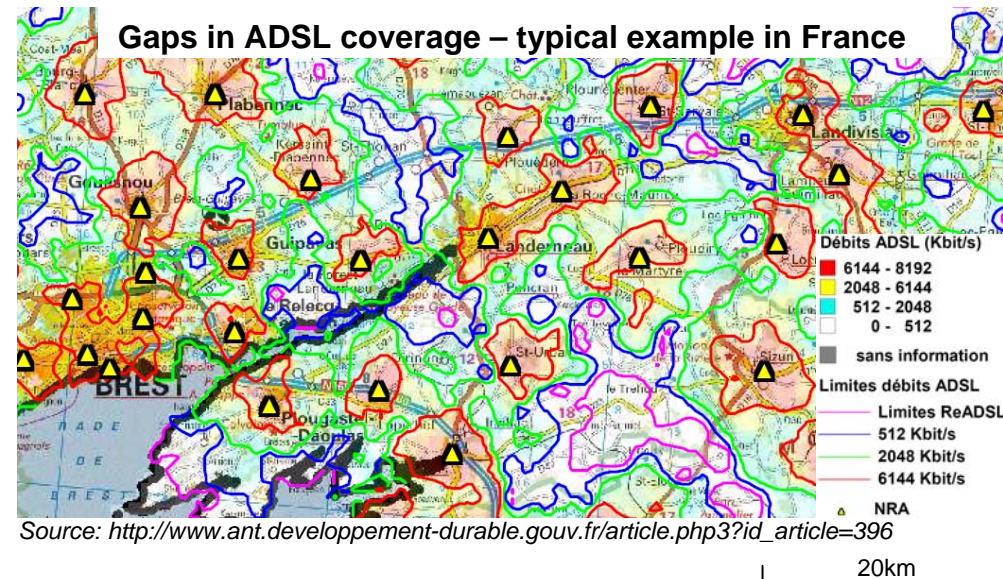
- **Accounting Separation** is the preparation of separate ‘sets of financial statements’ for different business lines of the dominant operator. Its objective is to provide transparency over the interaction and transactions between those lines (e.g. intercompany transfer pricing)
- **Functional separation** requires a vertically-integrated operator to establish a business unit to service its upstream wholesale customers which is separate from its own downstream operations. Via operational and management separation this is aimed to ensure the provision of fully equality access products and to facilitate the monitoring of anticompetitive practises
- **Structural separation** ( “ownership unbundling” or “divesture”) requires the vertical integrated operator to separate its network infrastructure from those units offering services using this infrastructure.

- Functional separation contains elements of behavioural and structural remedies
- Benefits
  - may facilitate control of discrimination and anticompetitive behaviour
  - reduces the level of information asymmetry available to allow/enable anticompetitive practises
  - provides incentives for engaging in efficient pricing at wholesale level
  - more flexible - the boundaries of FS can be changed in time if things don't work as expected
- Costs
  - the network company may still have incentives to discriminate against downstream competitors
  - Increase transaction costs between two part of the business
  - requires a strong regulator and has significant implementation costs
- Questions
  - impact on investments decisions
  - NGN deployment might change network architecture radically in a way that is difficult to predict today
  - what's access in an NGN world?

- Digital Dividend (UHF Bands IV and V: 470-862 MHz)
  - Ongoing work in EC, ERG and the Radio Spectrum Policy Group (RSPG) consultation<sup>1</sup> closes 30<sup>th</sup> June and provides summary of national status; CEPT and WRC also.
  - Primary interest in 790-862 MHz (the 800 MHz band). Lower digital dividend bands more suited to broadcasting
  - Opportunities for digital broadcasting, wireless broadband, mobile multimedia/TV and other services
  - Harmonised policy needed to maximise economies, support ecosystem and reduce cross border interference
  - Technology neutrality policy is expected
  - DTT / migration programme varies by country
  - A technical and socio-economic challenge to achieve optimal solution
  - EC study on digital dividend in process
- 2.6 GHz mobile expansion band
  - Allocated for future mobile broadband services by ITU World Radio Conference.
  - Attractive for UMTS/LTE and mobile WiMAX
  - Spectrum has been allocated in some countries (HK, Norway Sweden), other awards planned for late 2009 and 2010
  - Complexities may cause slippage. E.g lengthy consultation processes; litigation by operators, uncertainty about political / regulatory objectives
- LTE and HSPA community keen to use the band .... and the 900MHz band too.

<sup>1</sup> [http://rspg.groups.eu.int/\\_documents/documents/meeting/rspg19/rspg09\\_272\\_draft\\_Opinion\\_digitaldividend.pdf](http://rspg.groups.eu.int/_documents/documents/meeting/rspg19/rspg09_272_draft_Opinion_digitaldividend.pdf)

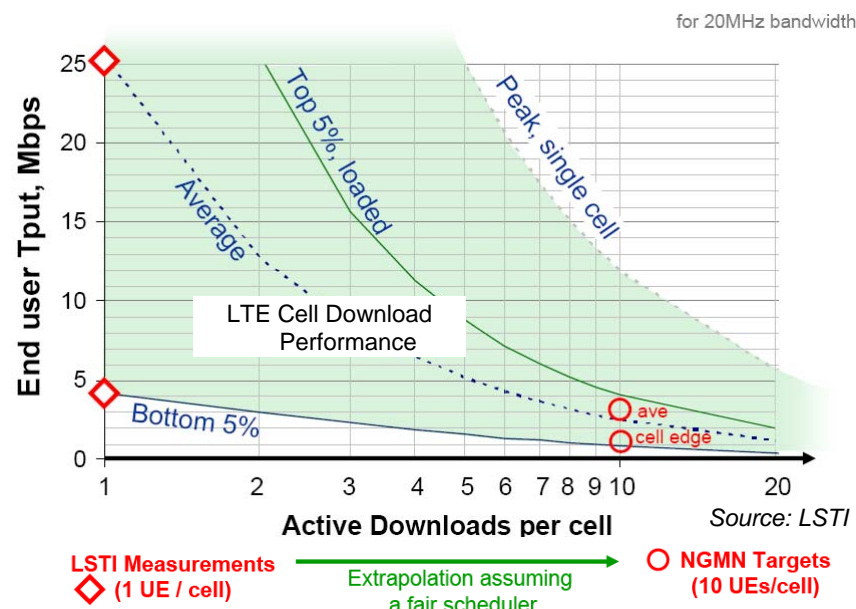
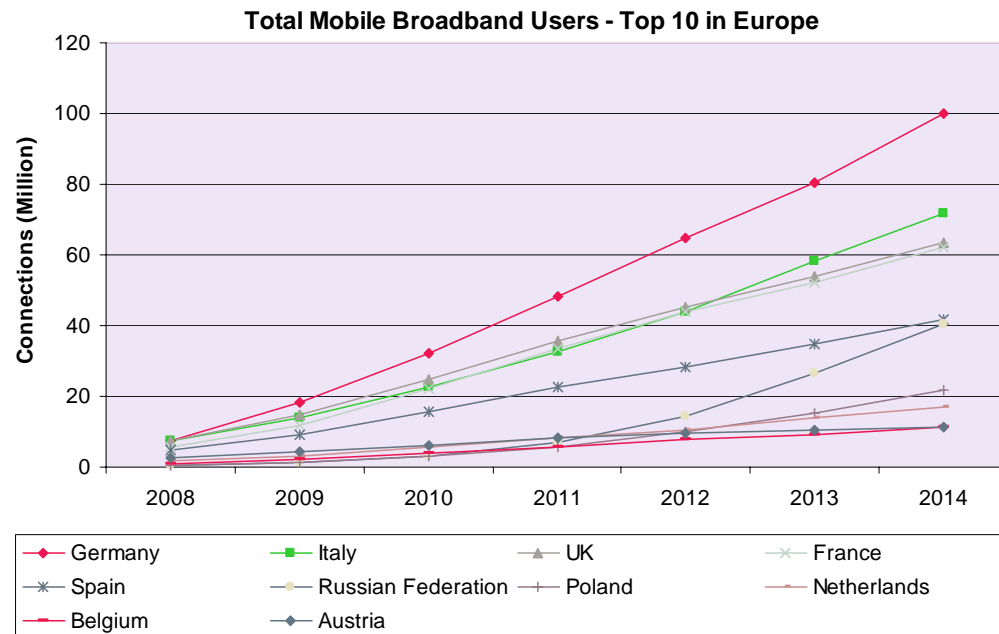
- One argument for the use of DD and 900MHz spectrum is to help overcome broadband coverage gaps
- 900 MHz band
  - Allocated to GSM in most of Europe
  - Reallocation complicated by existing licences e.g. UK 900MHz spectrum held by O2 and Vodafone
  - Commitment to move to technology neutrality – opening up for UMTS900, WCDMA and LTE
  - Boost WCDMA deployment, leading to est. €1.6 billion capex savings
- Ovum UMTS900 study for GSMA:
  - Advantages for rural coverage and in-building reach
  - UMTS900 offers between 50% to 80% percentage increase in the coverage area per Node-B (km<sup>2</sup>) compared to UMTS2100, leading to capex and opex reductions
  - UMTS900 overlay network can improve ‘coverage holes’ in today’s UMTS2100 networks
  - Interest in 900 MHz band for LTE services – for same reasons.... Technology neutrality
  - Harmonised use helps ecosystems



... but what is the demand for spectrum?

# Mobile broadband – demand for spectrum

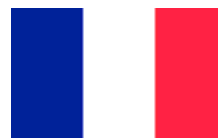
- Huge growth in mobile broadband take-up, since 2007 – and forecast to continue
- Stimulated by devices with improved user interfaces, new applications, strong marketing and (too?) low prices
- 28% 3G broadband users use mobile BB exclusively as their consumer broadband<sup>1</sup>
- But – talk of mobile broadband providing 10's Mbps performance are misplaced
- Challenges:
  - User expectations for a consistent performance
  - Cell density
  - Backhaul demand – FTT Node?
  - Universal / national coverage
- Harmonised policy needed to enable devices and services economies of scale



<sup>1</sup> Ovum report for UMTS Forum: LTE Mobile Broadband Ecosystem: The Global Opportunity

- On 6 May 2009 the EP unexpectedly decided to reinstate an amendment relating to Internet rights – something the Council has so far been against.
- Amendment 138/46 forbids the disconnection of Internet access without judicial oversight.
- Consumer rights activists were unimpressed because the wording allowed the decision to be made without requiring the intervention of a court
- Regardless of the net neutrality issues – the decision will affect the mobile services:
  - product definition – can ‘all you can eat’ packages be sustained?
  - pricing vs performance vs QoS

- The issue is hot in France and the UK:



France: Three strikes and you're out!

Law was passed on 14 May. It creates an agency that can block users internet access for 2 – 12 months for persistent downloading of copyrighted material. No court is consulted.

- ISPs are reluctant to act as the middle man



UK: Digital Britain/Digital Rights Agency

ISPs may be required to collect information on internet users that repeatedly download copyrighted material and to make that information available to rights holders

- The new EU Framework review:
  - is the culmination of detailed debates – but is ultimately dependent on the NRAs to make it succeed
  - is consumer-centric, which may be a challenge for operators and service providers
  - if approved by the Council of Telecoms Ministers on Friday, will take until mid/late 2011 to transpose into national legislation
  - Provides the basis for significant increases in mobile broadband services.
- But....
  - the business model for mobile broadband is still immature and developing
  - HPSA is preparing the route for LTE, which will provide the opportunity for capex and opex reduction
  - WiMAX is finding a role in Europe to provide services to areas poorly served by ADSL

Thank you