

The logo for ERG, consisting of the letters 'ERG' in a bold, orange, sans-serif font. The letters are set against a circular, glowing background that resembles a sun or a light source. The background is a mix of blue and white, with a grid-like pattern of lines. The logo is positioned on the left side of a horizontal banner that spans the top of the slide.

Networks 2008

September 30, Budapest

Convergence: Challenges in Regulation

Chris Fonteijn

IRG Boardmember

Chairman of the Commission of OPTA

The logo for the Emergency Response Group (ERG) features the letters 'ERG' in a bold, orange, sans-serif font. The letters are set against a circular, glowing effect that resembles a sun or a lens flare. This circular element is positioned on the left side of a horizontal band that spans the width of the slide. The band has a gradient from light blue on the left to dark blue on the right, with a thin orange line running through its center. The background of the slide is a dark blue, textured surface that looks like a globe or a satellite map.

Agenda

- 1. What is convergence?**
- 2. Activities ERG on Convergence**
- 3. Challenges for Regulators:**
 - **Market Regulation**
 - **End User Interests**
 - **Should regulators converge?**

The logo for ERG (Entertainment Regulation Group) features the letters 'ERG' in a bold, orange, sans-serif font. The letters are set against a circular, glowing background that resembles a sun or a lens flare. This circular element is positioned on the left side of a horizontal banner. The banner itself has a dark blue background with a grid of thin, light blue lines. A thick, horizontal orange line runs across the banner, passing behind the 'ERG' logo. Below the banner, the background of the slide is white with a series of horizontal, light blue lines that create a sense of motion or a digital interface.

Convergence

Traditionally segregated communication, information and entertainment markets are converging on a common 'information delivery chain'.

This convergence affects the who, how, what, when and where of regulation.



ERG

Convergence

Audivisual (broadcasting) services:

- Streamed media (radio, TV)
- Packaged (movies)

Communication services:

- Voice
- Text

Convergence through technological advances in:

- Storage capacity
- Processing and transmission speeds,
- Compression
- Standardization



Integrated Information market

- All services can be delivered on different platforms – telephone line, cable, wireless, satellite
- New suppliers disrupt traditional regulatory models and relationships
- Existing players moving into other markets and vertically integrating

Source: RAND Europe

The logo for ERG (Energy Regulatory Group) is displayed in large, bold, orange letters. It is set against a background of a stylized globe with a grid pattern, overlaid with a horizontal blue and orange gradient bar. The globe is partially obscured by a white, curved, motion-blurred effect.

Consequences Convergence

- **End-users will increasingly purchase bundled services from a single provider. A typical “Multiplay” bundle in the future may comprise of:**
 - **Broadband access**
 - **Voice services**
 - **Digital Television**
- **However, still a large customer base purchases legacy services like: analogue television**
- **Future trend: Fixed-Mobile Substitution will make consumers less dependent on fixed services, however fixed connections are by far still the most common access infrastructure**
- **Demands by business users may differ from consumer needs.**

Activities ERG on Convergence

ERG projectteam Convergence works on

- **Access to content (i.e. issues in distribution and conditional access to content; content regulation falls outside the scope of the regulatory framework and outside the scope of most NRAs)**
- **Netneutrality**
- **Interoperability**

Major topics include:

- **Access to networks**
- **Access to content (distribution issues)**
- **Bundling of broadband services and related consumer protection issues.**

Other Relevant Activities ERG

Convergence can be seen as driver for operators to upgrade their access networks (Next Generation Access).

ERG published an Opinion on Regulatory Principles of NGA in October 2007 in response to Commission's request:

- The document deals with the economics and regulatory implications of NGA networks and includes detailed guidelines to make the Regulatory Framework fit for the new challenges posed by NGA networks
- Economics of NGA networks are likely to vary across different technologies and different geographies, i.e. between and within Member States.

⇒ No one size fits all approach

EC has launched a public consultation (18 September) on regulatory principles to be applied by Member States to NGA through a Recommendation. This builds on the ERG opinion.

Casus NL: Convergence and Market Regulation

- **Convergence leads to regulatory requirements**
 - Access to bandwidths capable of multiplay now and in the future
 - Regulatory environment should be neutral to end user services where possible; infrastructure competition as a base rule for regulation
- **Two major access infrastructures for the future:**
 - Fibre
 - Cable
- **What about wireless?**
- **Questions on the future of access**
 - Can effective competition be ensured in the long run with such a duopoly?
 - Also in general, a duopoly has certain risks of non-competitive behaviour

Two infrastructures seem not enough

Casus NL: The Dutch Broadband Arena

High Network Density:

- Cable networks cover 94% of households
- Incumbent network KPN covers 99% of households
- Networks alternative DSL operators cover 50-70% of households, based on LLU
- Over 40 local FttH/FttB initiatives, 170.000 connected/passed and 70.000 activated (1-2% of households)

High Broadband Penetration:

- 5,7 million broadband connections (Q2 2008), 78% of households
- 60% DSL (10% non-KPN), 38% Cable, 2% other
- Among the leaders of the world (EU Implementation Report, OECD)

Casus NL: KPN's migration to NGA (All-IP)

Nationwide single technology multi-service network

Affects both core (IP / Ethernet) and access network

- VDSL2 on existing sub loop (FttC)
- FttH (mainly) in new housing developments

Sale of MDF locations (expected revenue ~ €1.0 billion); gradual phasing out

Evolution of plans of KPN:

- combination of FttC and FttH
- FttH jointly deployed by KPN and Reggefiber

Access to the All-IP network:

- KPN voluntarily offers access via its Open Wholesale Model
→ wholesale broadband access (WBA)

Casus NL: Regulatory Environment

- **Regulation tailored to infrastructure competition incentives**
- **Building block: regulation of local loop unbundling since 1997**
- **Success of LLU meant lesser or no regulation of Wholesale Broadband Access**
- **Next Generation networks & current market trends require new tailor-made decisions and possibly coregulation**

Casus NL: Challenges in Market Regulation

Infrastructure-based competition can facilitate convergence:

- Migration copper to fibre for SMP and alternative operators
- Will involve regulation of fibre
- Physical unbundling of fibre loops is possible in NL
- Differentiation in regulation of copper and fibre where necessary
- Incentives for innovation and new investments

Outcome National consultation of draft Market Decisions 2009-2011:

- Regulatory certainty required for investments
- Additional measures required for effective fibre-based competition

Casus NL: Cable and NGA

- **Consolidation of the market: two largest cable operators cover around 70% of the consumer market**
- **Convergence of services: increasing tendency to offer multiplay service**
- **Political desire for more access regulation (e.g. resale) vs. absence of competition problems**
- **Development of digital broadcasting services on other infrastructures (KPN, wireless) while the dominant position of cable operators is still enforced via analogue TV**
- **OPTA proposes in its draft market decision to impose a resale obligation for the cable connection including the analogue TV offer**

The logo for ERG (Energy Regulatory Group) features the letters 'ERG' in a bold, orange, sans-serif font. The letters are set against a circular, glowing effect that resembles a sun or a light source. The background of the logo is a dark blue and green abstract pattern with horizontal lines, suggesting a globe or a network.

Convergence and End User Interests

- **Migration Issues**
- **Transparency**
- **Universal Service**

Should regulators converge?

- **Convergence needs a regulatory/policy response across the whole information delivery chain:**
 - Regulate where it is most effective
 - Avoid markets distortions and regulatory flight
- **Different regulatory models across Europe.**
- **A fully converged/integrated regulator does not exist anywhere: regulators cooperate with general competition authorities and specific regulatory bodies.**
- **ERG intensifies co-operation with Radio Spectrum Policy Group in 2008. A first step towards more consistency in regulation?**