

Future Internet for Visualisation Services

Smart Infrastructures for 2015

Augustin Grillet (augustin.grillet@barco.com)

BARCO nv - Corporate R&D

www.barco.com

Barco – company description

- International company, headquartered in Kortrijk, Belgium
- Active in more than 90 countries
- Focus on **professional visualization markets** worldwide
- Listed on NYSE Euronext Brussels
- Sales 2008: 725 M€
- 3,300 employees
- **10% of sales invested in R&D**
- Mission: to excel in creating stakeholder value, by offering user-friendly imaging solutions to selected professional markets worldwide



Background

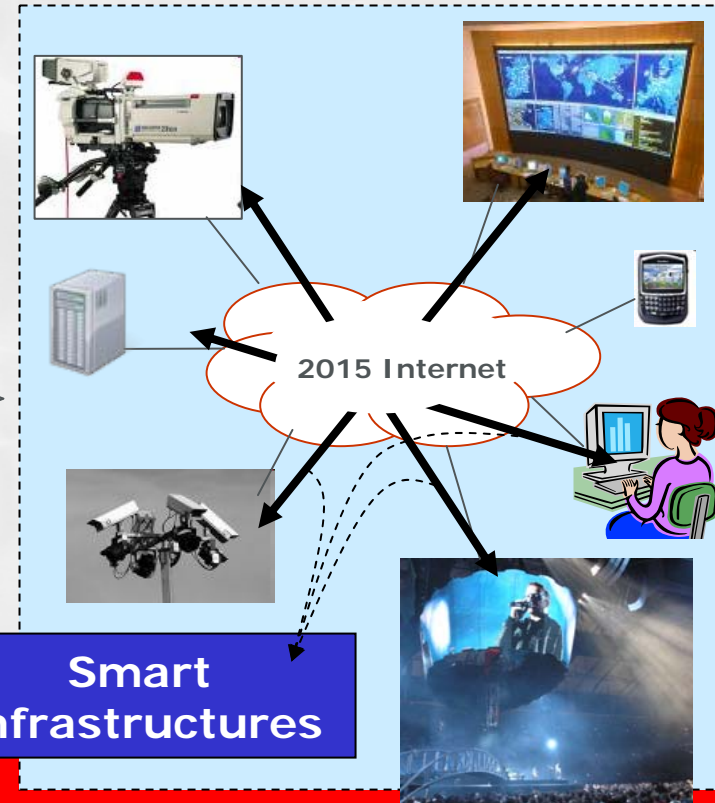
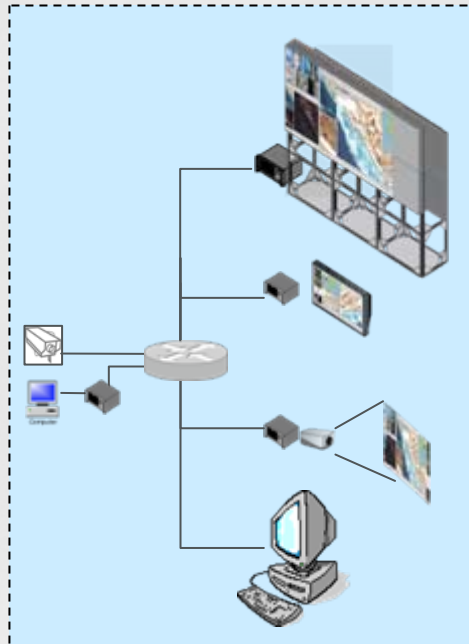
- Barco: Pioneer in “IPfication” of professional visualisation markets with its networked visualisation systems offerings



Vision for the Future Internet

- Rationale: value proposal of European Industry in Professional Visualisation Markets shifting to services-based offerings
- 2015 vision: from hardware centric images & data visuals based on localised, dedicated infrastructures and proprietary networks to visualisation on demand using in/out content networks

⇒ *Need for a powerful Future Internet platform able to support **Smart Professional Visualisation Infrastructures** with adequate QoS*



Contributions to the PPP FI - 1

- Identification of addressable markets/applications and definition of new Service business models
 - broadcast (content production),
 - audio visual events,
 - collaboration,
 - surveillance,
 - emergency centers,
 - etc.

- Identification of the specific requirements
 - High bandwidth load (now HD images, future is 8k)
 - Low latency and QoS to enable real time image processing services
 - Hdw independent: from mobile devices to large display walls
 - Context & content awareness, metadata
 - Interaction & new user experience



Contributions to the PPP FI - 2

- Identification of key Platform enablers
 - High capacity networks
 - Computer platforms (e.g. GPGPU)
 - Media conversion / transcoding
 - Smart scalable compression
 - Virtualisation/cloud computing technologies
 - Shared infrastructure

- Contribution to solving the key remaining challenges
 - Resource abstraction, transparent hdw/sfw + management
 - Common APIs, interoperability of content delivery platforms
 - Flexibility & scalability
 - Reliability, privacy & security
 - QoS/QoE

- R&D focus
 - Adjacent technologies such as compression aimed at maintaining high quality & working in low latency
 - Intelligent middleware systems to manage media, storage, adaptative delivery, etc.
 - Increase media awareness of networks
 - Increase network awareness of media
 - Standardisation on media exchange

Contributions to the PPP FI - 3

- Barco networked visualisation systems product lines

- Media servers
- Visualisation platforms
- Display & multi-viewers controllers
- Encoders/decoders
- Networked monitoring systems
- Networked multi-windowing & desktop sharing softwares

