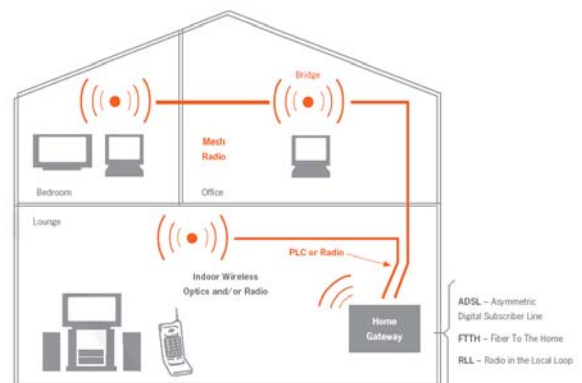


OMEGA project Convergent Home Networks

Jean-Philippe Javaudin
OMEGA project coordinator
Orange Labs

OMEGA project in a nutshell

- **Goal: Define and demonstrate an hybrid wired/wireless home network up to Gbps speed**
- Objective 1.1 The Network of the Future.
- Start 01/2008, End 12/2010, 19,4 M€ of budget
- 21 partners from industry and academia (~70 individuals)
- **Network Project**
 - Scenarios, services and techno economics
 - Connectivities at Gbps
 - Inter-MAC convergence layer
 - Architecture security continuity of services
 - Demonstration, Dissemination & Standardisation
- **Perimeter**
 - Use of UPnP for QoS (with FP7 ALPHA project)
 - Device management (local/remote)
 - Continuity with access networks
 - 3G/4G, Optical access networks
 - Services: Work on the impact of the introduction of new services on Digital Home Network (DHN) architecture
- **Project website**
 - <http://www.ict-omega.eu>





Online Applications
 =>More Bandwidth
 =>Lesser Latency

Family daily usage
 =>Simultaneous flows



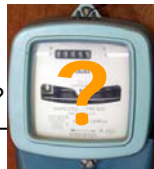
New usages
 =>Combined services
 =>Advanced 3D services



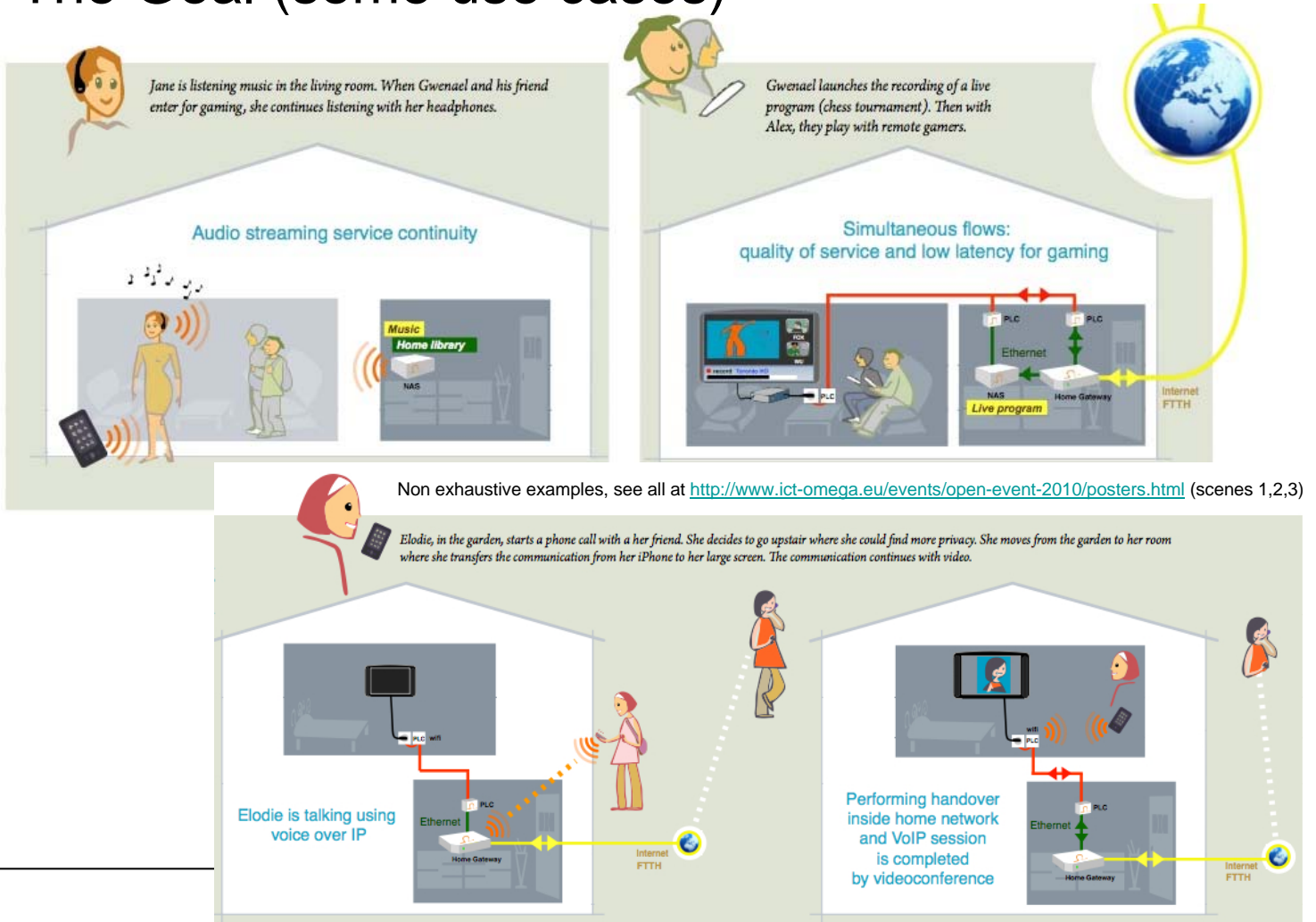
Harsh reality
 =>Cable clutter !
 =>(Un)desired emissions ?

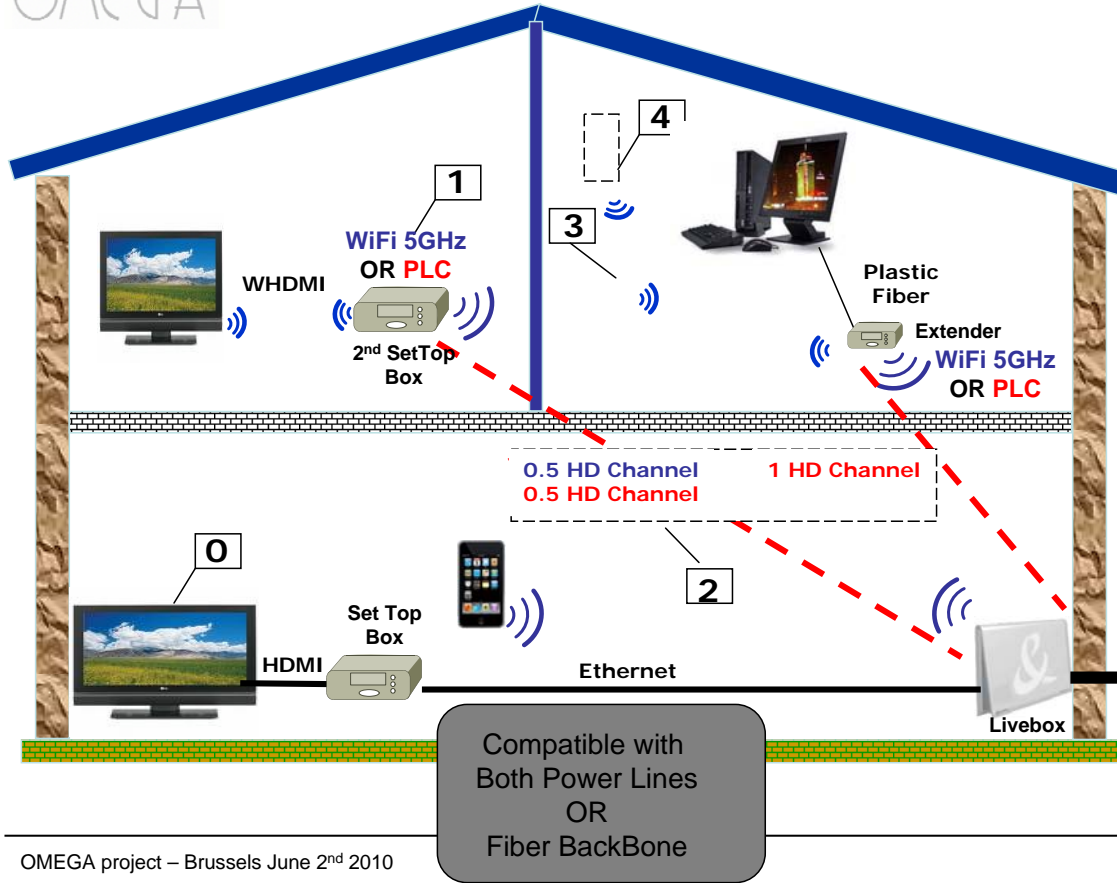


What about the energy cost ?

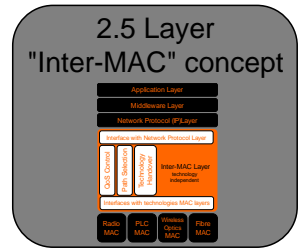


The Goal (some use cases)

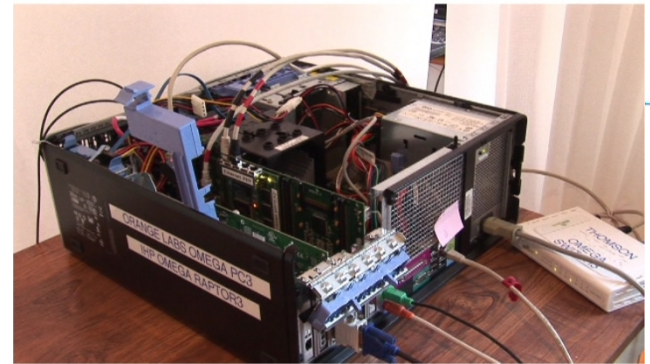
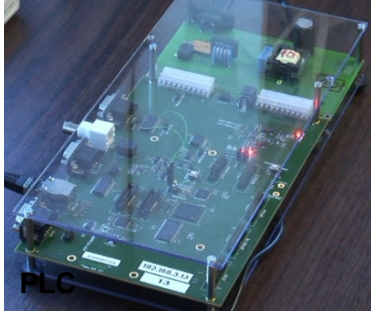




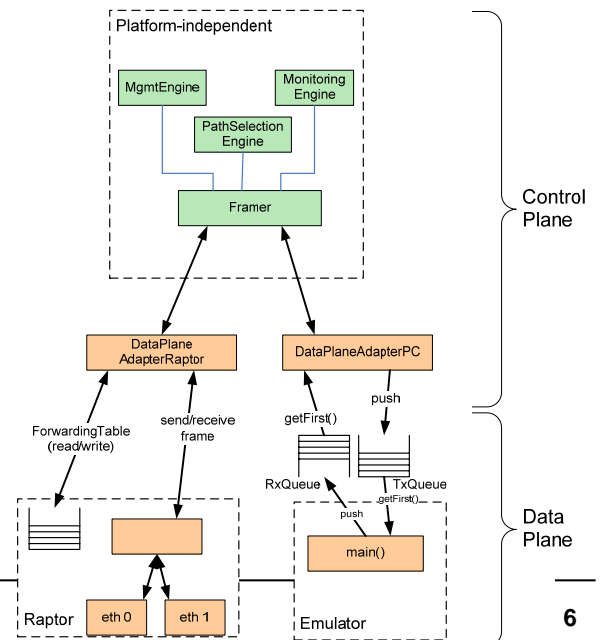
- Network Use cases :
- 0-Legacy Upward OK
 - 1-PLC Wifi redundancy
 - 2- Load balancing
 - 3-Handovers
 - 4-Coverage extension



OMEGA Demonstrators



Inter-MAC



- Preparation of demonstration V2 at the end of the project
 - More inter-MAC functionalities implemented
 - path (re-)selection, QoS control ...
 - Additional connectivities integrated
 - 60 GHz, IRC, ...
 - to be shown at 3rd Open Event in Rennes in February 2011
- Prepare standardisation of convergence in the Home Networks
- Contact: info@ict-omega.eu
- IP coordinator: jeanphilippe.javaudin@orange-ftgroup.com
- Website: <http://www.ict-omega.eu>