The Gigabit infrastructure : Continuity, Volatility, Monopoly ?

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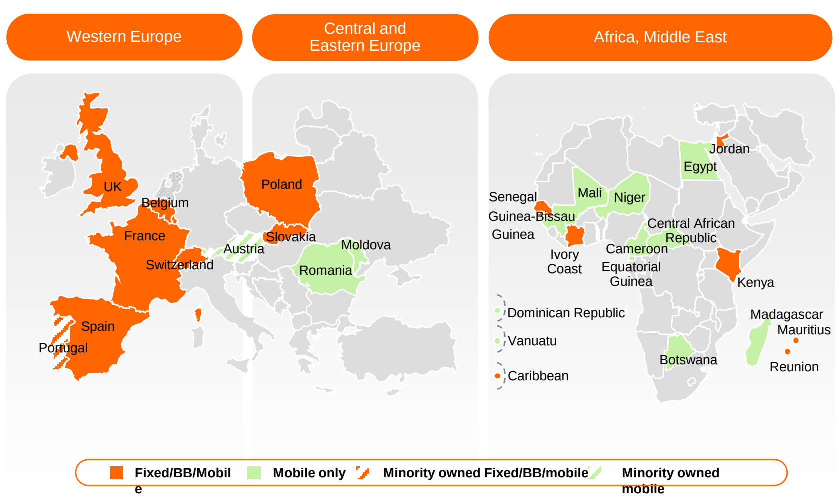
FT / Orange balanced international footprint serving more than 170 millions customers



The current situation in Orange footprint

- Orange has more than 12 million ADSL customers in Europe, 59% equipped with Livebox, 47% with VoIP and 13% with IPTV
- In France, Orange serves 7.8 million ADSL customers, 75% equipped with Livebox and 64% using VoIP (=35% of total telephone traffic)
- Orange is a global leader for IPTV deployment on DSL, and has a ambitious content aggregation policy
- Slow take off of fiber optics deployment in most European countries, compared to Asia or the USA, in spite of many operators willing to invest (for instance, in France, 3 players are willing to invest in FTTH + a cable operator with HFC)

A major disruption is taking place

- Fiber optics technology has performances which makes wide area networks perform as local area networks
- This needs huge investments in brand new infrastructures, built for many years (300 billion € estimated for Europe)
- Future technologies, such as wavelength multiplexing and optical amplification, could drastically impact the network structure (→ 10 times less network nodes) by 2015 / 2020
- Fiber ushers a exciting era for new usages
- But, except for HDTV, there is not yet a clear visibility of new services taking full advantage of these new infrastructures, and providing stable business models

It is not only a pure access technology issue

- In this uncertain environment, competition through infrastructures is the best way for innovation and growth
- Wireline and wireless technologies will complement each other, according to their specificities
- With increasing bandwidth in access networks, core networks will also have to evolve, with increased capacity and differentiated quality management (NGN / IMS)
- Existing Internet structure and protocols (BGP, peering agreements) might become too coarse to deal with this evolution. Other forms of managed IP networks interconnection are needed.

We need a stable and predictable environment, especially for the regulatory framework in Europe

- Existing framework is based on asymmetric regulation on existing copper networks, and is not the right basis to foster investment in new infrastructures
- Structural separation remains in recently approved EU “telecoms package” (September 24th, 2008), which could undermine innovation. Duct opening and sharing of indoor cabling should be sufficient to sustain innovation in dense areas.
- A draft Commission Recommendation on Next Generation Access Networks, published recently, encourages end to end infrastructure competition, but might not yet provide the right incentive for a huge investment with risk in new access networks, for Europe development and growth.

together we can do more

orange™

thank you !

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