re-think the standard landscape

Marc Fossier

France Telecom / Orange Group

Chief Technology Officer
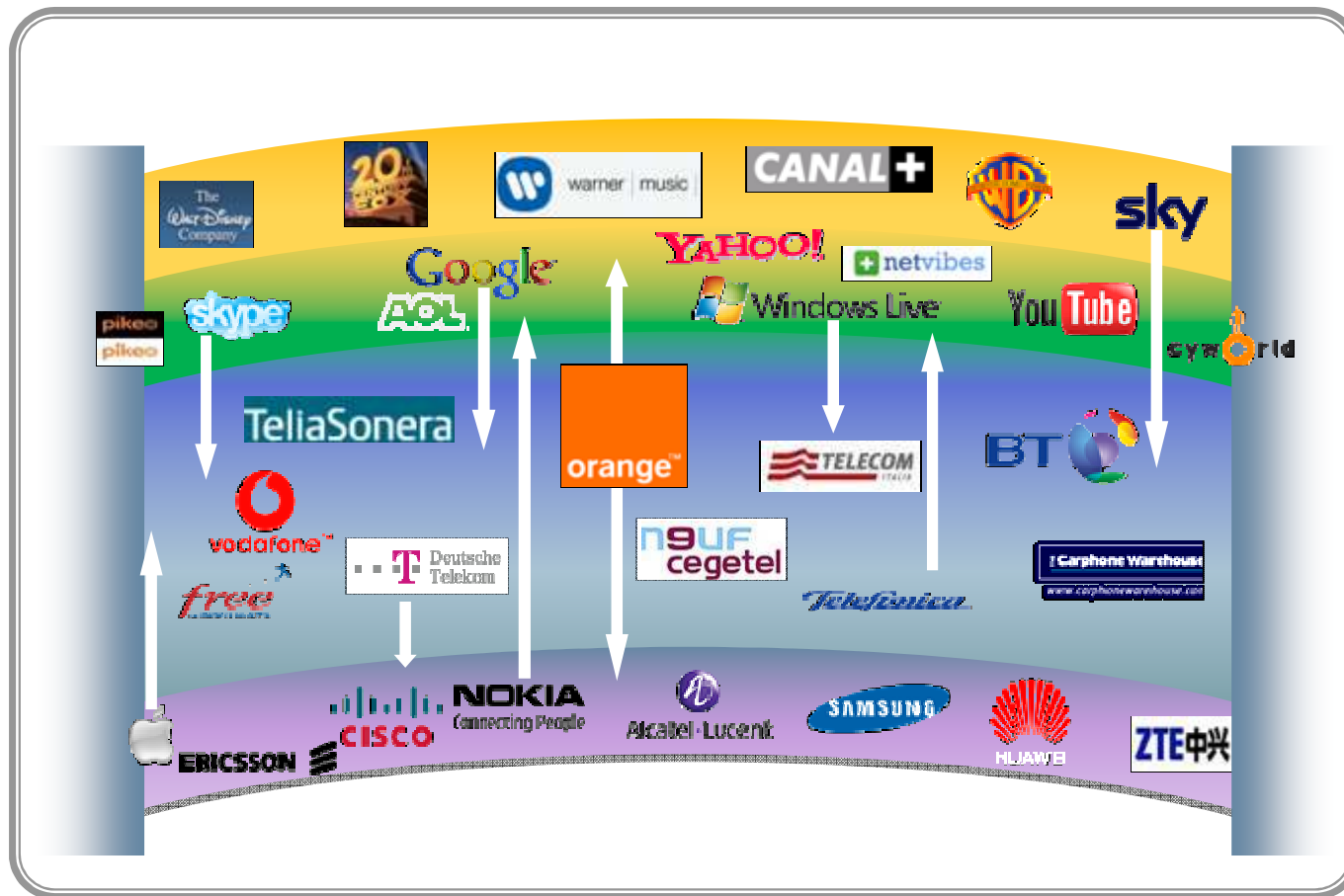
GSS – Standardisation session

20th October 2008

if not precised, figures are at Dec 31, 2007

telecoms are evolving very quickly

- Evolution toward IP protocol everywhere

  → convergence between networks and between services

- Radio & wireless technologies everywhere

  → less and less separation between fixed and mobile services

- Increased processing and storage capacities in devices

  → more complex interactions between networks and "terminals"

- Users become "nodes" of several physical and social networks

  → new usage patterns & business models, and sustained innovation
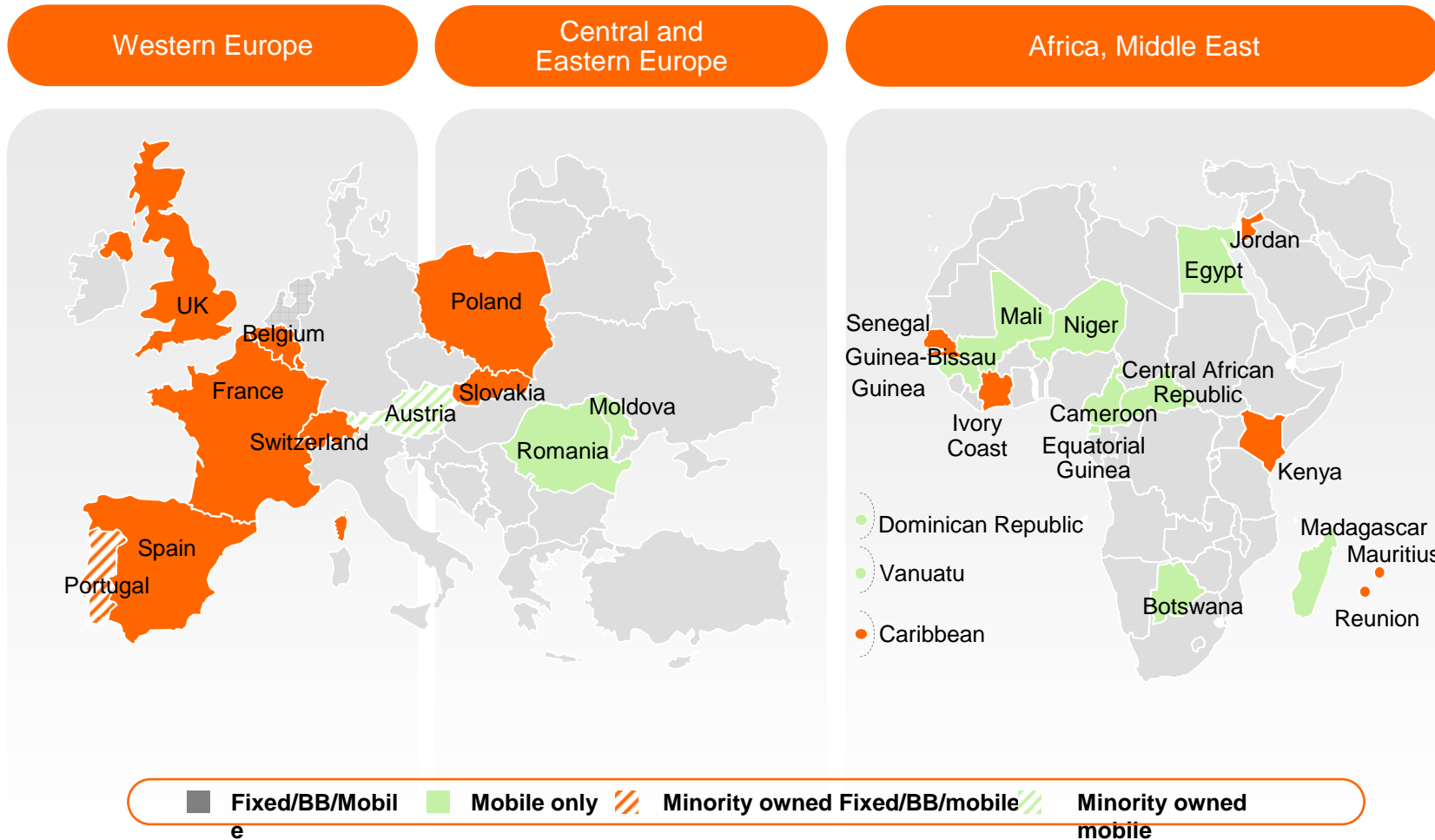
ecosystem is also changing significantly

- blurring boundaries across the value chain
- faster innovation in products and services
- emergence of global players

if not precised, figures are at Dec 31, 2007

FT / Orange has adapted to this new environment

- Integration of different technologies and networks to better serve our customers at home, on the move, and at the office

- Innovation in new services, such as broadband, IPTV, home networking, e-health or online services

- International presence, with dedicated attention to local situations and needs

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

| Western Europe | Central and Eastern Europe | Africa, Middle East |

Western Europe: UK, Belgium, France, Switzerland, Spain, Portugal

Central and Eastern Europe: Poland, Slovakia, Austria, Moldova, Romania

Africa, Middle East: Jordan, Egypt, Senegal, Guinea-Bissau, Guinea, Mali, Niger, Central African Republic, Ivory Coast, Cameroon, Equatorial Guinea, Kenya, Dominican Republic, Vanuatu, Botswana, Madagascar, Mauritius, Reunion, Caribbean

Legend: Fixed/BB/Mobile | Mobile only | Minority owned Fixed/BB/mobile | Minority owned mobile

Dec 31, 2007

standards are key for economic development, and even more for telecommunications

- To guarantee interoperability across operators and vendors

- To ensure fast development of innovation

- To ensure economy of scale

- To allow open provision of telecom services, through different operators operating in different countries

- Orange is committed to standards

- With an increasing international footprint, Orange is using standards to ensure deploying services as fast as possible

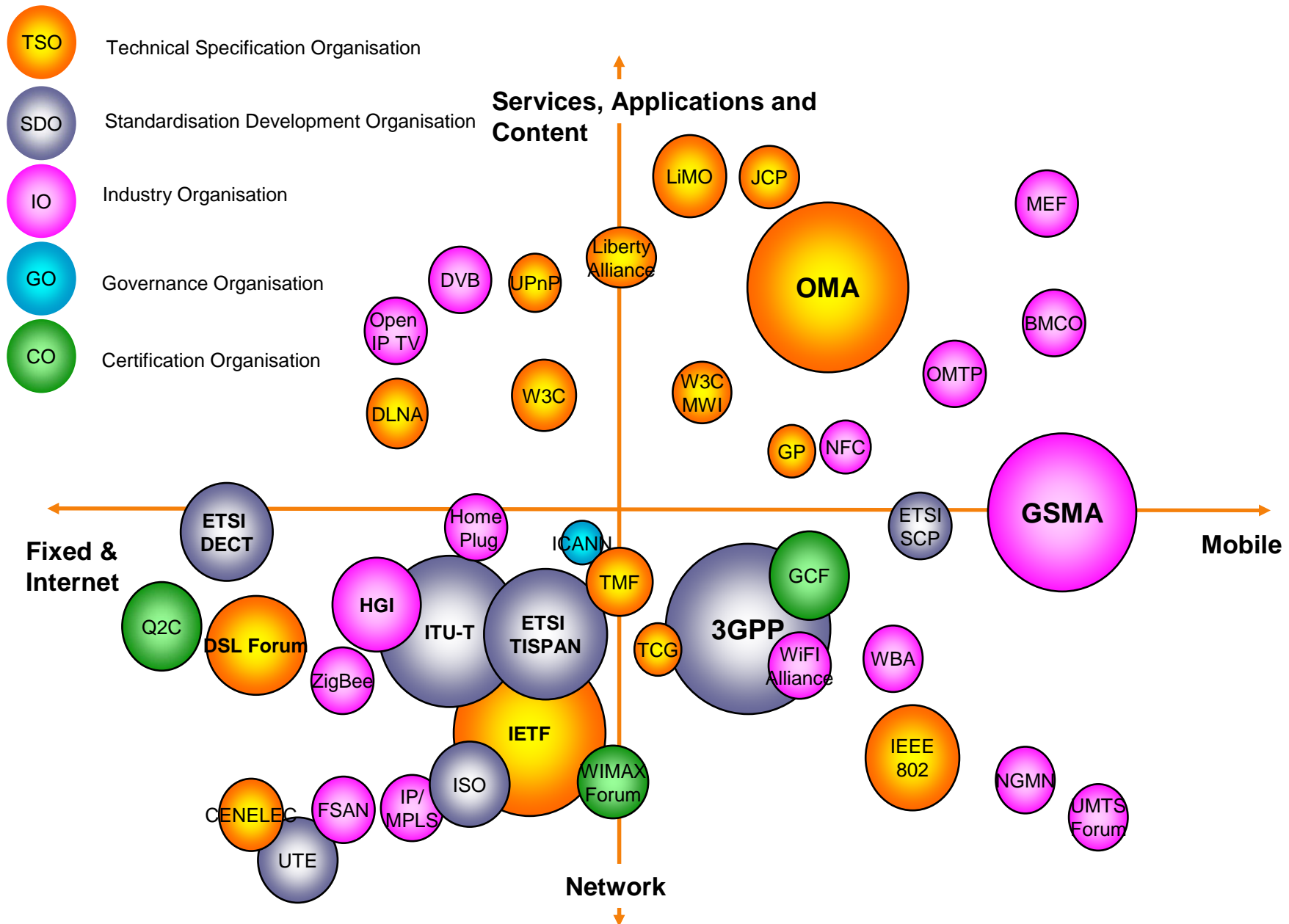- Orange is not only using standards, but also very actively participating in their development

If not precised, figures are at Dec 31, 2007

- Orange is involved in 90+ Organizations

- There is not really any other choice for Orange

- But this generates :
    - Overlapping of standards developments
    - Competition among standards organizations
    - More and more complex coordination
    - Increase cost and time to develop standards
    - Lack of global architecture

- And it leads to fragmentation of solutions and increased time to market of standardized solutions, with bad side effects
    - Need for new organizations to profile standards to ensure interoperability
    - Emergence of more and more proprietary solutions

a classification attempt…

Legend:
- TSO — Technical Specification Organisation
- SDO — Standardisation Development Organisation
- IO — Industry Organisation
- GO — Governance Organisation
- CO — Certification Organisation

Services, Applications and Content

Fixed & Internet

Mobile

Network

Bubbles: LiMO, JCP, MEF, Liberty Alliance, DVB, UPnP, OMA, BMCO, Open IP TV, W3C MWI, OMTP, DLNA, W3C, GP, NFC, GSMA, ETSI DECT, Home Plug, ICANN, ETSI SCP, HGI, TMF, GCF, ITU-T, ETSI TISPAN, 3GPP, Q2C, DSL Forum, TCG, WiFI Alliance, WBA, ZigBee, IETF, IEEE 802, CENELEC, FSAN, IP/MPLS, ISO, WIMAX Forum, NGMN, UTE, UMTS Forum

actions are needed

- Foster coherence of standards activities

- Accelerate standardization work in order to cope with market evolution

- Redefine the role of each organisation and promote "complementarities" instead of competition

- Reduce overlap between organisations

- Keep strong commitment to international standards, taking into account all stakeholders needs

- Develop a overall standardisation architecture, to ensure better anticipation and consistency, for the benefit of all players

increased involvement of CTOs of major telecoms standards actors could support this evolution

expected outcomes

- **Better identification of organisations roles and missions**

    - Reduced overlap

    - Clear recognition of a few key organisations able to standardise a complete system, avoiding scattered technology standards without links together

- **Overall and global vision, allowing the entire industry (operators, vendors) and member states to focus on common future issues**

    - Benefiting also the emerging countries in simplifying the landscape in identifying clearly where to contribute effectively.

- **New collaborative spirit for standardisation work, to better serve world citizens needs and business expectations**