Telecommunication and Mass Media Convergence: the Irish Approach

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Introduction

Everyone has different needs:

- **European: Digital agenda 2020**
  - Basic BB to all Europeans by 2013
  - 50% of all households to subscribe to 100Mbs (or above) by 2020
- **Network Operators: NGN deployment**
  - Separate fixed, mobile networks being replaced by IP-based networks, providing triple play services
  - Cable networks also providing triple play services
- **Consumers: Mass media convergence**
  - Consumer concerned with the service; not the means of delivery

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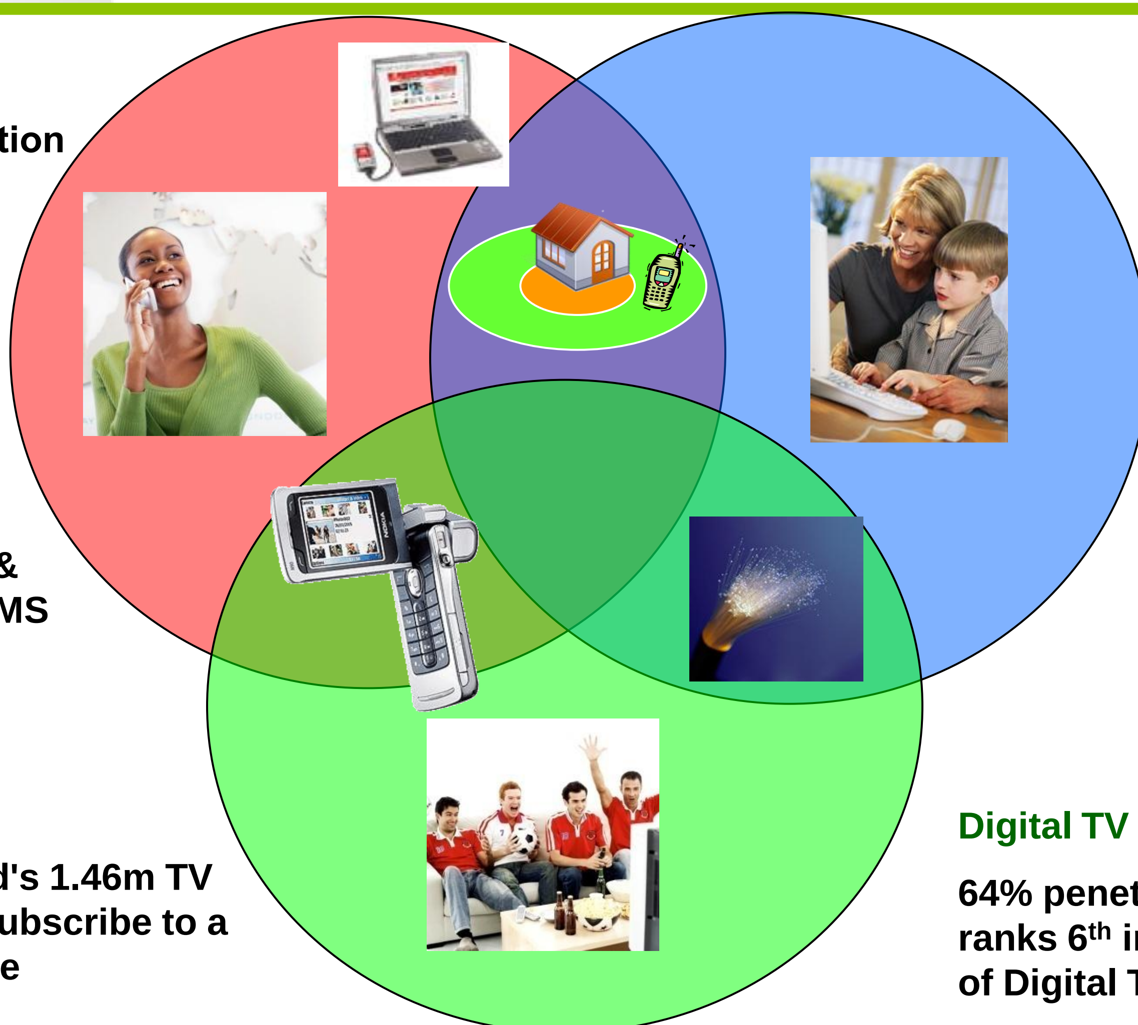
Converging Communications Environment - Ireland

Mobile

Q1'10 penetration 119% - at a plateau?

3 billion SMS & 11.3 million MMS sent in Q1 '10

75% of Ireland's 1.46m TV households subscribe to a pay-TV service



Broadband

1.5m subscriptions of which 0.5m are mobile broadband

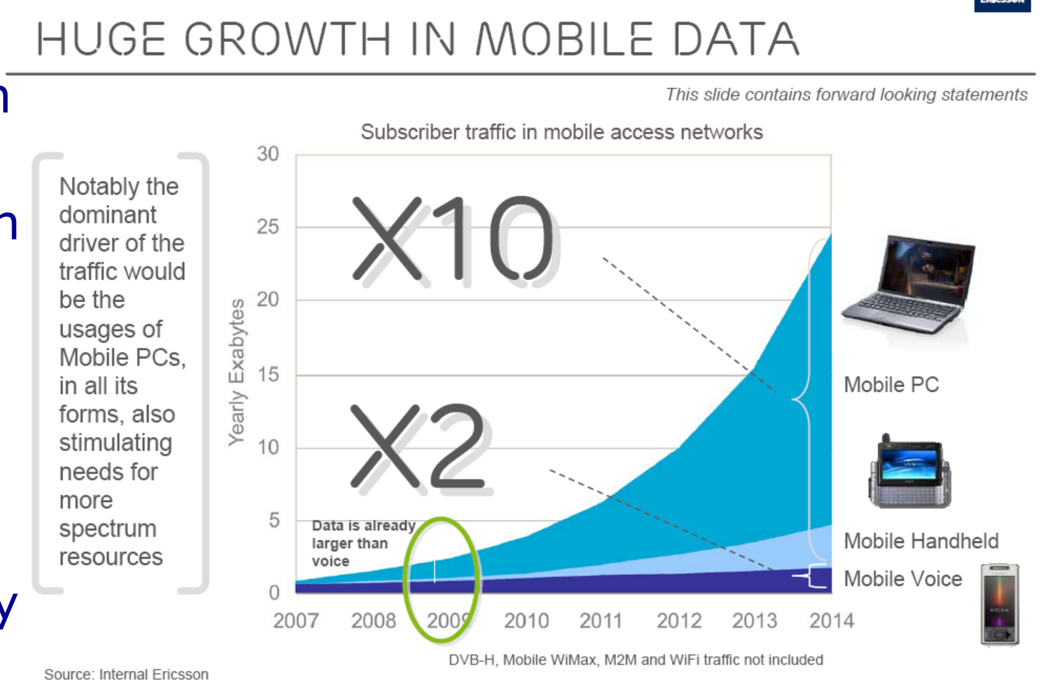
Next Generation Networks: planning and roll-out

Digital TV

64% penetration; Ireland ranks 6th in Europe in terms of Digital TV penetration

Future demand for data services

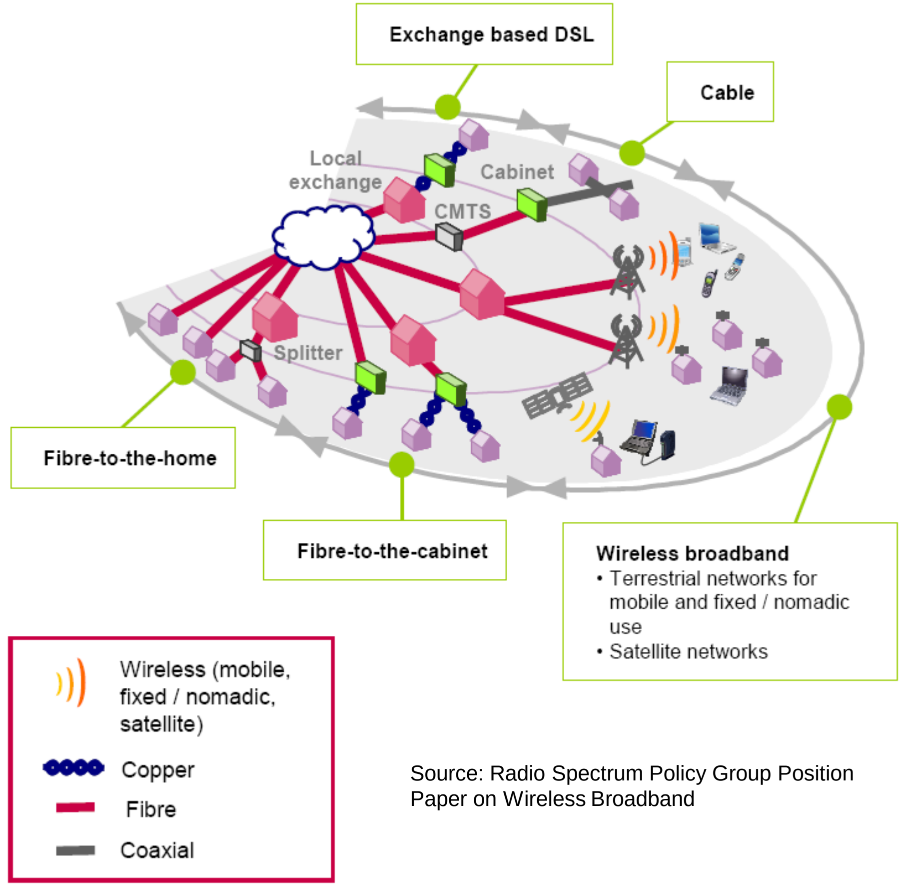
- Forward looking statements by Ericsson project significant growth (factor of 10) in worldwide mobile traffic (data services) by 2014. By 2013 there are likely to be 3bn broadband subs, of which 80% are likely to be mobile



Source: Forum Europe Conference "Implementing a digital dividend strategy" Nov 30 2009

Converged networks

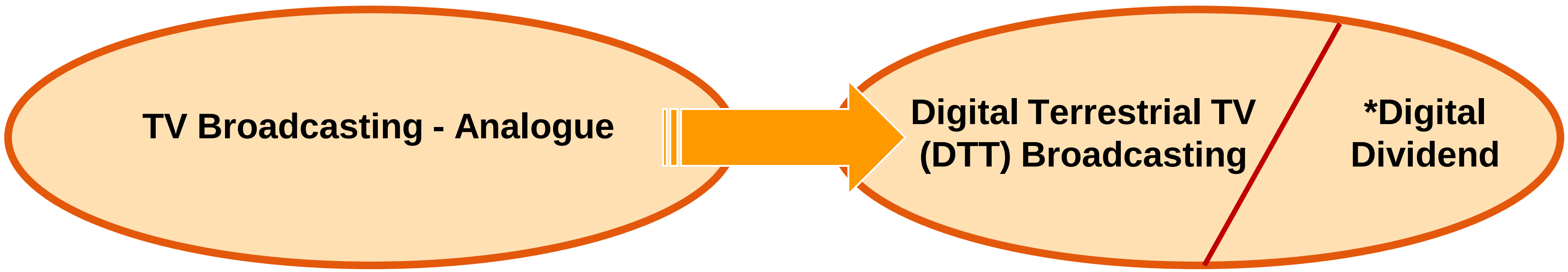
- **Broadband networks are a changing concept, continuously evolving…**
- **Broadband is principally delivered through wired networks today, but with an increasing and important role for wireless in the future**
- **Digital Dividend potential to create new, innovative high-tech wireless networks**



Source: Radio Spectrum Policy Group Position Paper on Wireless Broadband

Digital Dividend – What is it?

- The digital dividend: spectrum (790 to 862 MHz) freed by the transition to digital broadcasting (DTT)



- *Potential uses include:
  - Broadcasting (maintain current offer, offer more and better quality e.g. HDTV)
  - Wireless broadband (overcome the digital divide, provide cost effective broadband)
  - New services and/or new applications

European background

- **EC Recommendation (Oct 09)**
  - MS complete analogue switch-off by Jan 12
  - MS support harmonised conditions of use in the 800 band for ECS/ECN (other than broadcasting)
  - MS to report to Commission by mid-2010 on ASO progress (as set out in Communication)
- **CEPT (ongoing studies)**
  - Harmonisation of European Digital Dividend sub-band (790 – 862 MHz)
  - Harmonised technical approach to Digital Dividend in the EU

Digital Dividend in Ireland

- **Particular benefits for Ireland**
  - Mobile BB is a key driver for overall BB growth
  - Possibility of minimising the urban / rural divide
- **Economic benefits**
  - Estimated to be worth €17bn to €44bn across Europe
  - For Ireland alone, the <u>private</u> value could be €230m to €615m
  - For Ireland, the total value could be between €2.1bn and €9.8bn

Digital Dividend in Ireland

- **Challenges**
  - Commercial Digital TV is currently widespread
    - Commercial – Satellite, MMDS, Cable
  - Commercial DTT bid halted – temporarily?
- **Progress on public service DTT**
  - ComReg has coordinated 6 muxplan
  - Broadcasting Act 2009 requires RTÉ to establish a DTT network
  - ComReg issued a DTT multiplex licence to RTÉ in Dec 2007
    - Saorview
    - Currently undergoing technical receiver testing

Ireland's Spectrum Advantage

Ireland has a Natural Spectrum Advantage

- High Availability of Spectrum
  - Geographic Location
    - Only one international land border to co-ordinate with compared to other European countries which have many land borders
  - Low defence use of spectrum in Ireland
  - Relatively low population density
- Member State of EU and active member of CEPT
- Supportive Regulatory Environment
  - Test & Trial Ireland designed for R&D

Any available frequency band **at any location** is considered for Test or Trial purposes

ComReg – proactively supporting access to spectrum for R&D

- **Test & Trial Ireland**
  - Allows Tests or Trials of Wireless devices in a live radio spectrum environment
    (as opposed to using an indoor anechoic chamber)
  - In Ireland, any available spectrum at any location is considered
- **Areas of current interest**
  - Continuation of Existing Licences, e.g.
    - Mobile Broadband (LTE, WiMAX, 3G), Mobile Communications for Vessels, Aircraft, Remote Communities, Etc.
  - Smart Networks for Utilities;
  - Cognitive Radio / 4G;
- **Over 110 Licences issued since launch in 2005**

www.testandtrial.ie

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Licenses allocated

- **Universities**
  - University College Dublin
  - Trinity College Dublin
- **Major network operators**
  - Vodafone, O2, Hutchison
  - BT
  - UPC
- **Equipment manufacturers**
  - Ericsson, Motorola
  - Intel, IBM