

ITU Kaleidoscope 2014 Living in a converged world - impossible without standards?

IMT Standardisation and Spectrum Identification: Regulatory and Technology Implications

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# How do National Regulators and ITU interact with regard to Technology Selection?





ITU

### **IMT** Standardisation



### **IMT Spectrum Identification**







#### 900 MHz, 1800 MHz, 2.5 GHz

800 MHz, 2.3 GHz, 3.5 GHz

700 MHz

400 MHz, 1.4 GHz, 3.8 GHz??

## Impact of IMT Standardisation on Technology



 Technology Selection: Neutrality vs. Standardisation vs. IMT Standards.

Technology Generations:
2G, 3G, 4G vs. IMT-2000, IMT- Advanced

## Impact of IMT Standardisation on Spectrum Re-Farming

- Allocation vs. Identification.
- IMT-2000: 3G in 2000 MHz?
- 900 MHz: 3G in 2G Bands.
- 700 MHz: Global Harmonisation.
- IMT: IMT-2000 & IMT-Advanced



### Impact of IMT Standardisation on Technology Development







- OHG: CDMA 2000 vs. WCDMA.
- 3GPP vs. 3GPP2
- WiMAX vs. LTE.
- IMT-2000: 2Mbit/s, IMT-Advanced: 1 Gbit/s.

### Conclusions



- The IMT standardisation process has created a new type of technology neutrality that is limited to the IMT standards.
- The IMT identification process has created an indirect link between the spectrum and the IMT standards.
- The ITU-R set the framework for both cooperation and competition between the different technologies proponents.



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