



**spectrum and mobile broadband: the progress of global harmonisation**

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## 2007-2012 A difficult start

- WRC-07: non-uniform allocations in Regions 1, 2 and 3
- Legacy issues resulting from 2G allocations:
  - CDMA at 850 MHz
  - GSM at 900 MHz),
- Resulted in non-uniform solutions across the world

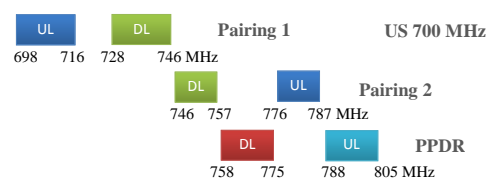


## US Band Plan

- In 2007, USA adopted a 700 MHz band plan, which led to two paired arrangements of 2x 18 MHz and 2 x 11 MHz for commercial services and 2 x 17 MHz for Public Safety services (PPDR).
- Following auction, AT&T and Verizon have already launched mobile broadband service respectively in parts of the paired arrangements, using LTE technology.
- Complexity of the plan has resulted in fragmentation of the market into two sets of incompatible equipment.
- Steps are being taken to create a public/private partnership for the development of a unified Public Safety network for all US states. Verizon proposes equivalent service on its 700 MHz network.
- Canada has announced its intention to follow this plan.
- Market is 330 Million people.
- No choice made at CITEL level between US and APT plan.



## US Band Plan



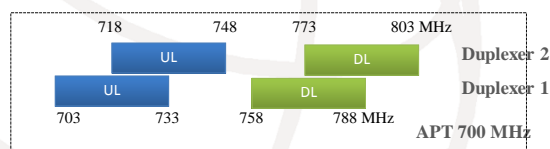
## European Band Plan

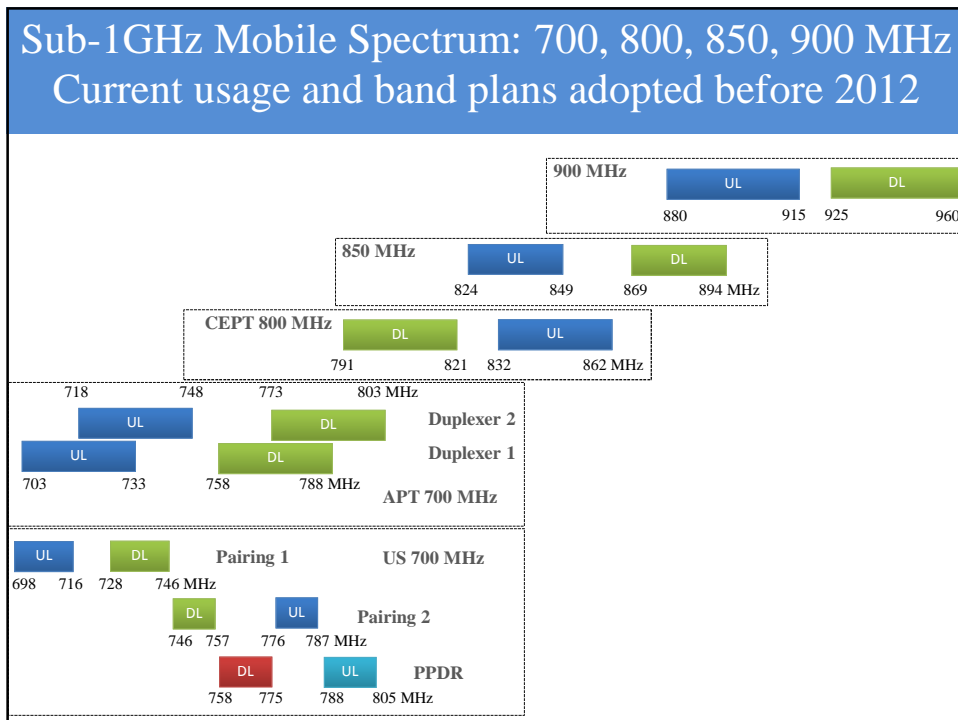
- In 2009, European countries (CEPT) adopted a harmonized band plan for mobile broadband at 800 MHz, with a 2 x 30 MHz paired arrangement.
- In the 27 countries of the European Union, this band plan is mandatory for the use of the 800 MHz band. Germany, Sweden, Spain, Switzerland, Italy and France have already auctioned that spectrum and service rollout has started, using LTE technology.
- The United Kingdom is expected to do the same in 2012.
- Market is 500 million people.



## Asia-Pacific Band Plan

- In 2010, the Asia Pacific Telecommunity (APT) adopted a paired arrangement of 2 x 45 MHz based on a dual duplexer implementation for the 700 MHz band, and a TDD arrangement covering the entire 703-803 MHz band.
- Several countries in Asia have announced their intention to follow this plan.
- Market is 4 billion people.

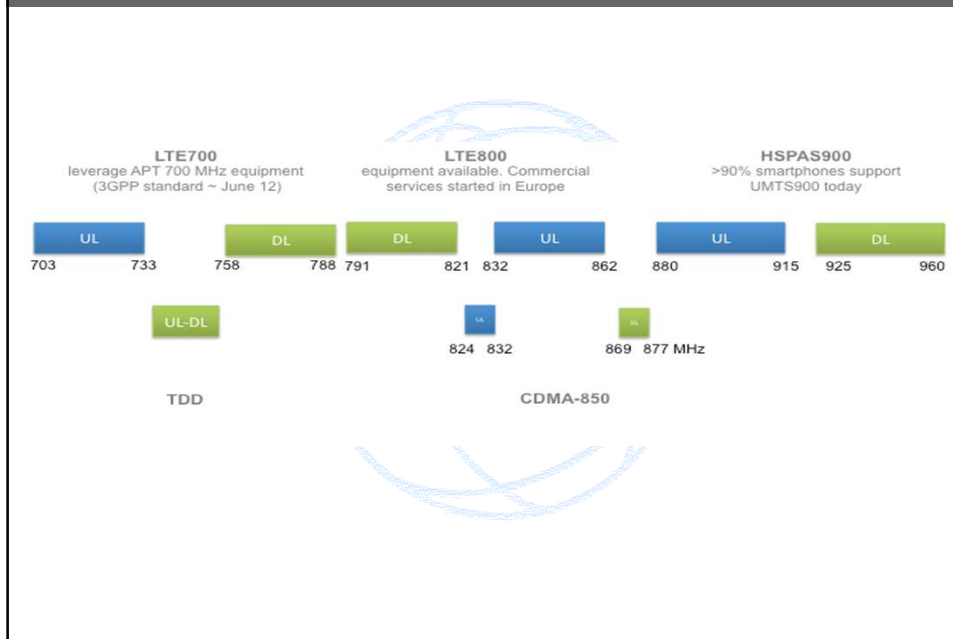




## WRC-12 decisions

- WRC-12 decided to allocate the 700 MHz band to the mobile service worldwide and identify it for IMT, in addition to the 800 MHz band, with a date of entry into force of end-2015.
- Affirmation by the international community of its commitment to work towards maximizing harmonization of the digital dividend spectrum for the mobile service.

## Example of possible joint harmonization of the 700/800/900 MHz bands



## Conclusions

- After a difficult start, the decisions by WRC-12 open the way to global harmonisation of 700-800-900 MHz bands
- Unique opportunity to resolve the legacy problems arising from unharmonised 2G allocations
- Allocation decisions should preferably await stabilisation of global harmonisation and equipment market

Thank you...

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