



GSMA Public Policy Position

Recommended Band Plan for Digital Dividend 2 in ITU Region 1 (EMEA)

May 2014

Background

At WRC¹-07 the 790 to 862MHz band (or '800MHz' band) was allocated for mobile service in Region 1 (Europe including Russia, the Middle East, and Africa), with Region 2 and some countries in Region 3 allocating spectrum down to 698MHz. Region 3 had a mixed identification, but has subsequently mainly opted for the 698 to 806MHz band.



Region 2



Region 1



Region 3

A decision at WRC-12 created the possibility to allocate the 694–790MHz frequency band (or '700MHz' band) after WRC-15 for mobile service and to identify it for IMT in Region 1. The agreement on a 700MHz allocation brings Region 1 in line with frequency allocations in Regions 2 and 3, so the potential for creating an almost global market for mobile devices in this band should be studied.

The outcome of the WRC-12 was based on a commitment of most parties to seek harmonisation of that band and the adjacent band (790-862MHz) already allocated to mobile service in Region 1 and the allocation does not come into force until WRC-15, giving time for technical studies and for countries to rearrange existing frequency usage.

GSMA recommendation on the preferred frequency arrangement in the 700MHz band

Recognising:

- The importance of harmonisation, which offers:
 - Lower costs for consumers, as device manufacturers can mass-produce less-complex devices that function in multiple countries on a single band
 - Availability of a wider portfolio of devices, driven by a larger, international market
 - Roaming, or the ability to use one's mobile device abroad
 - Less cross-border interference
- The opportunity of the Asia Pacific band plan (3GPP Band 28) to become virtually a global band, means the ecosystem (and reuse of part of the Asia Pacific band plan in Region 1) will offer the greatest benefit for consumers and mobile operators.

¹ <http://www.itu.int/ITU-R/index.asp?category=conferences&rlink=wrc&lang=en>



- Large parts of the Asia Pacific region and some Latin America countries have declared support for the Asia Pacific band plan.

The GSMA recommends:

- Supporting the 2x30MHz band plan that consists of 703-733MHz (uplink) paired with 758–788MHz (downlink) as the preferred 700MHz band plan for Africa, Middle East and Europe. This baseline band plan is based on the reuse of the lower duplexer of the APT band plan (i.e. 2 x 30 from the APT 2 x 45 MHz).
- Harmonising the regulatory and technical conditions for the 700MHz band plan in EMEA with the Asia Pacific band plan to maximise economies of scale including interoperability and roaming.
- Maximizing the harmonized use of the 700MHz band for mobile network operators (public commercial applications).
 - GSMA therefore recommends, when implementing the GSMA-preferred band plan for the 700MHz and 800MHz bands in Europe, Africa and the Middle East, that the duplex gap be used for public commercial mobile networks (supplementary downlink).
 - GSMA recognizes, however, that some governments may want to consider another option – use of the duplex gap for Public Protection/Disaster Relief (PPDR) mobile broadband applications.
 - Although governments have options for dedicated PPDR networks outside the 700 MHz range, for those governments that wish to deploy PPDR in 700MHz, GSMA recommends that such governmental networks operate outside of the 2x30MHz aligned with the lower duplexer of the harmonized Asia Pacific Telecommunity (APT) band plan (subject to studies to avoid any interference to mobile network operator use), or through commercial agreements.