Draft Position paper for Latin America on Digital Dividend/UHF band plans

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Introduction

At the World Radio Conference in 2007, the band 698 to 806 MHz was identified for IMT (International Mobile Telecommunications) in ITU Region 2 (which covers the Americas). However the exact band plan to be used was not specified at WRC07.

There are significant benefits from countries in the region trying to harmonise this band, as far as possible. This helps improve roaming, reduces cross border interference, and perhaps most importantly reduces device costs. The GSMA therefore seeks to limit the number of options under consideration and offer guidance on what the best approach might be.

Discussion

Administrations and spectrum managers are looking for solutions to maximise the socio-economical benefits of spectrum assets. In particular, national regulatory authorities are considering the policy options which enable the rapid and effective extension of mobile broadband services. The need for broadband in Latin America is very clear: to stimulate economic development and to allow citizens to participate in the global knowledge based economy.

The GSMA is in favour of the harmonisation of frequency bands used for mobile broadband services, because this helps to reduce the cost of terminals for consumers. GSMA studies have shown that spectrum fragmentation can significantly increase the costs of ownership to consumers, and that developing markets are particularly sensitive to such costs.

From a spectrum point of view, optimisation of the use of the UHF band is crucial, for ensuring the widest geographical coverage of mobile broadband. This means that there is a need to maximise the amount of spectrum available to offer significant extra coverage benefits.

Globally, the GSMA favours the harmonisation of frequency bands used for mobile broadband services. With particular reference to the 698-806 MHz band, the GSMA supports two band plan options, namely:

Option 1. The Optimised "2 x 45" MHz conventional FDD band plan in 698-806 MHz, agreed within the Asia-Pacific Telecommunity's Wireless Forum (AWF) for Region 3 (Asia Pacific)[1]; and

Option 2. The US band plan in 698-806 MHz as specified by 3GPP for the USA[2].

Option 1 (the Asian band plan) may be an option that some countries wish to consider as it has the advantage that it has been designed assuming the spectrum is clear of other users without any specific legacy issues. This band plan could also offer significant benefits from economies of scale since is likely to be adopted by most of Asian Pacific countries (with over 50% of the world's population in Asia Pacific).

Option2, the US band plan has the obvious attraction in terms of equipment and device availability as services under this arrangement was deployed in the USA by end 2010.

Conclusion

Since use of the 698-806 MHz band is the alternative for Latin America band plan options 1 and 2 are the candidates to be considered in Latin America. Option 1 is likely to be better for those countries that prioritize making maximum bandwidth available and that can align with the Asian Pacific countries on timing regarding release of the band and deployment of mobile broadband technology. Option 2 (US band plan) is likely to be better for those countries that prioritize releasing the band for mobile broadband deployments within a short timeline.

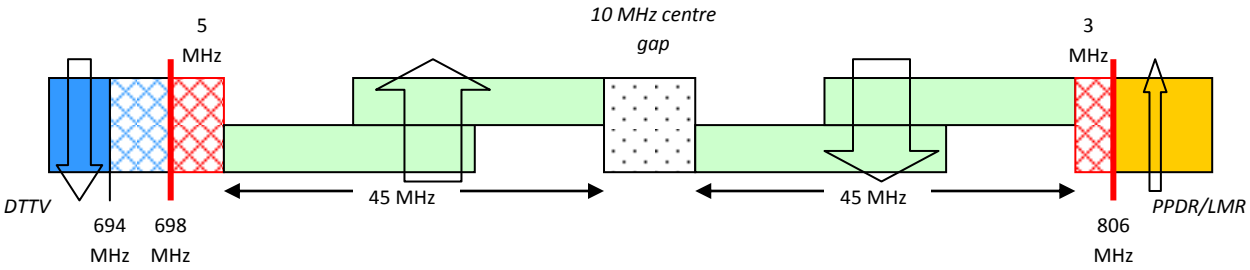
[1] AWF-9/OUT-13 / September 2010

[2] 3GPP TS 36.101 V10.1.1 (2011-01) – bands 12,13,14,17

Annex: Band Plans

Option 1

The Asia Pacific region, as specified in "APT COMMON VIEWS ON HARMONISED FREQUENCY ARRANGEMENTS FOR IMT IN THE BAND 698-806 MHZ".



Option 2

US band plan as specified in 3GPP Table 5.5-1 E-UTRA operating bands (3GPP TS 36.101 V10.1.1 (2011-01)

12	**699 MHz – 716 MHz**	**729 MHz – 746 MHz**	**FDD**
13	**777 MHz – 787 MHz**	**746 MHz – 756 MHz**	**FDD**
14	**788 MHz – 798 MHz**	**758 MHz – 768 MHz**	**FDD**
15	**Reserved**	**Reserved**	**FDD**
16	**Reserved**	**Reserved**	**FDD**
17	**704 MHz – 716 MHz**	**734 MHz – 746 MHz**	**FDD**