

The First Annual Asia-Pacific Spectrum Management Conference 2013 was held in Thailand on 26 August 2013. This Conference, specialises in policy focused conferences and events, providing a platform for discussion and debate on topical issues across a variety of different sectors. These events were organised with clients and partners and aimed to progress ideas and actions on important issues, all within a balanced and neutral setting. The conference focused on policy issues concerning the management of radio spectrum and its impact on the essential downstream industries, such as mobile broadband, broadcasting and public safety, that spectrum supports. It was attended by approximately 100 delegates from more than 20 countries across the Asia Pacific region as well from Europe and America. The writer attended the conference as an invitee by the organiser.

The Conference was officially organised by Forum Global, the international arm of Forum Europe which was founded in 1989 by Giles Merritt, former columnist for the International Herald Tribune and the Financial Times. Headed by a team of events specialists with over 20 years of experience, who organised the annual European Spectrum Management Conference in Brussels, in combination with the Event Partners, Huawei and Samsung. In developing the concept and agenda for the conference, Forum Global was supported by the event Knowledge Partners, Aetha Consulting and NERA Economic Consulting. Ericson and Coleago Consulting were the Platinum Sponsors of the event, Plum Consulting was the Gold Sponsor whilst Motorola Solutions and Qualcomm were Silver Sponsors.

The Conference followed a similar format to its sister conferences in Europe and the America and involved a mixture of keynote speeches, presentations on topical issues and follow up panel discussions on each major topic area, together with scheduled time for informal networking. Uniquely, the conference brings together all the major stakeholders in spectrum management, including policy makers, telecoms industry representatives, equipment manufacturers and expert consultants, facilitating a rounded discussion from multiple perspectives.

Keynote presentations

The opening keynote presentation was given by Eun-Ju Kim (Regional Director for Asia and the Pacific, International Telecommunication Union) in the form of a 15 minute pre-recorded video

presentation. Dr. Kim highlighted the importance that spectrum plays in the realisation of many ICT services in the region including ensuring that all parts of the region's population will in the future have access to broadband Internet services. Second presentation was made by Yu Quan (Chief Strategy Officer, Wireless Networks Product Line, Huawei), which introduced the mobile data traffic challenge faced in the region and highlighted how finding additional licensed and unlicensed spectrum was key to meeting that challenge. The third presentation was made by Juho Lee (Head of 3GPP Standardisation, Samsung Electronics), introduced the vision for 5G of providing

technologies to deliver universal access.

Session 2: Finding the spectrum for the next generation of mobile broadband:

This session focused on the potential scope for expansion of the 3.5 GHz band given existing use of the spectrum for satellite services (C-Band), whether there was any interest in the region in the use of 450 MHz band for mobile broadband services, whether handset would be available to support the multiple bands under consideration by the ITU and the importance of low frequency spectrum to overcome the digital divide.

Session 3: Managing the Digital Switchover in the Asia Pacific Region:



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Back From Bangkok, Thailand

1Gbps data rates at the cell edge and highlighted the need for sufficient spectrum supporting wider bandwidths to be made available for this. The keynote presentations session was moderated by Amit Nagpal (Partner at Aetha Consulting).

Following these opening presentations four sessions was held, where twenty presentations were made, which covered a wide range of topics including the limited fixed broadband infrastructure in the region, how wide frequency channels need to be in order to support 5G data rates, the challenges associated with identifying new spectrum bands and the time scale for migrating from 2G to 3G to 4G to 5G services in the region.

Session 1: Delivering spectrum to meet the broadband needs of tomorrow and tackle the digital divide:

This session briefly discussed two concrete targets set by APEC are to achieve universal broadband access by 2015 and to provide access to the next generation of high-speed broadband networks and services by 2020. Against this backdrop, a number of countries are now developing plans for national broadband networks, utilising a number of different

In the Asia-Pacific region, the switchover from analogue to DTT is planned for 2020 at the latest. In many countries however, policy makers are seeking to make spectrum available for mobile broadband sooner. This session focused on whether there was sufficient spectrum for introducing HDTV service on the terrestrial platform if the 700 MHz band was made available for mobile.

Session 4: Best Practice in Spectrum Pricing and Allocation :

Ensuring the correct valuation of spectrum is essential to promote effective and efficient use. However, in recent allocations, large variations in the price paid for spectrum have been seen across the Asia-Pacific region, even where there are similarities in social, economic and technological situations. This causes problems for operators, hindering opportunities for predictable economies of scale and scope in manufacturing.

This session concluded with a discussion of the scope for new operator to enter the mobile market through spectrum auctions, the potential role of spectrum trading in maximising efficient use of the spectrum, the role of the reserve price in ▶



spectrum auctions and the scope for incorporating policy objectives into licence conditions. So they are automatically taken into account by bidders in spectrum auctions.

Highlights of the Conference

A number of major themes emerged during the conference that cut across the different topics discussed in the individual panel sessions. Reputed speakers from the Asia, EU and the America delivered their presentations during the day long conference.

1. Rapid growth in demand for mobile data services: The increasing adoption of mobile data devices, such as smart phones and tablets, and the corresponding explosion in mobile data traffic levels was raised several times during the conference. It was also noted that data traffic levels in the Asia-Pacific region will significantly exceed levels in Europe and North America due to the higher population densities and lower availability of fixed telecoms infrastructure. Furthermore, the conference noted that the growth in demand for mobile data services was not just coming from users of commercial mobile services-for example the public safety community also needs access to dedicated mobile

broadband services in times of emergency.

2. Ensuring existing spectrum bands harmonised across the region for mobile are made available in individual countries: It was noted that whilst this problem was not specific to the Asia-Pacific region, the difference between the amount of spectrum that had been identified across the region and the amount of spectrum assigned in each country was significantly greater in Asia than in other regions.

3. Development of plans for the switchover to digital television: Whilst several countries are well-progressed in respect to their plans to migrate to digital television and switch-off analogue television networks, many countries in the region have yet to produce a plan coordination of national plans, particularly in relation to the time scale for switching-off analogue services, is key to enabling the full benefits of the digital dividend to be realised across the region.

4. Identification of new harmonised spectrum bands for mobile broadband: Several speakers highlighted the work being undertaken in preparation for the World Radio Communications conference in 2015 (WRC-15) to identify new frequency bands that could be made

available for mobile technologies in order to support forecast traffic levels as well as the challenges associated with making these new bands available.

5. Planning ahead for 5G: Speakers also highlighted the need for WRC-15 to agree an agenda item for the next World Radiocommunications Conference to look at frequency bands above 6GHz in order to identify the large contiguous blocks of spectrum that are needed to realise the vision proposed for 5G- For all mobile users to benefit from data rates of 1 Gbps+ regardless of their location.

Conclusion

With contributions from all the main stakeholders at both a policy and industry level from the Asia-Pacific, the conference took a comprehensive look at spectrum management policies across the region. It offered the chance to look at the best practices in areas such as spectrum pricing and allocation, what additional spectrum is available for next generation mobile broadband, the Digital Switchover in the region, broadband coverage for rural areas and tackling the digital divide. The event also explored the possible scope and benefits of deepening co-ordination of spectrum policy across the Asia-Pacific region. 