Questions & Answers

Planning for the World Radiocommunication Conference 2015 (WRC-15)

An interview with Luis Fernando Borjón Figueroa, Commissioner, Instituto Federal de Telecomunicaciones (the national telecom regulator), Mexico
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The World Radiocommunication Conference in Geneva in November 2015 will provide a rare opportunity for governments from around the world to agree new international spectrum allocations for the mobile service. Mexico is the second largest mobile market in Latin America and is an active participant in current WRC-15 discussions.

1. **How important is mobile broadband in Mexico?**
   Mobile broadband is fundamental in Mexico. Broadband access is a constitutional right established by the reform of telecommunications in 2013. Since then, mobile broadband, which has now reached 47 million connections, has become increasingly critical by supporting over 50% of the total growth in national broadband access. 98% of Mexican wireless broadband connections are now delivered through mobile.

2. **What role does spectrum policy play in bringing faster mobile broadband to more areas?**
   Spectrum policy needs to be carefully planned so it can meet the demands of today and tomorrow. The key evolution in mobile services is the growth of mobile data. 40% of mobile traffic is now data in Mexico. Planning for the growth of mobile broadband data and the emergence of the Internet of Things (IOT) is fundamental. Central to this effort is planning for the mobile spectrum requirements of today as well as tomorrow and granting access to this spectrum in the proper way.

3. **How important for your long-term mobile future is making more spectrum available at WRC-15?**
   It is essential that countries consider their long-term future spectrum needs. For example, Mexico will grant the use of the 700 MHz band in 2015 through the public tender of a Wholesale Network to foster the growth of high speed wireless broadband services nationwide. However, this process started much earlier. It was almost 17 years ago when we started planning for the digital television (DTV) transition and visualizing the 700 MHz digital dividend whilst assessing our future mobile requirements and liaising with the United States around a harmonised approach to the 700MHz band. The mobile spectrum made available at WRC-15 is going to be crucial for the long-term future of mobile services by supporting growing consumer data traffic as well as new services like the Internet of Things. For this reason, I believe that governments need to be proactive and open at considering possible new mobile bands at WRC-15.

4. **How much of a challenge is rising data traffic in Mexico?**
   In Mexico, data currently represents 40% of total mobile network traffic and is rapidly growing. This is putting stress on mobile networks and may cause saturation in the future unless action is taken. There are three key elements to the solution. Firstly, we need to make sure there is sufficient mobile spectrum available. Secondly, we need to eliminate barriers to facilitate the best use of mobile technologies. On this regard we follow a technology neutral approach (i.e. spectrum licences can be used for the latest mobile technologies such as 4G). Thirdly, we need to foster the availability of base station sites, so spectrum can be reused efficiently.

   The challenge is becoming bigger as more people expect to have broadband access. Currently, 39% of the population uses mobile broadband so we still have a long way to go to reach universal adoption of technologies. However, the data traffic is growing rapidly and could reach 50% over the next year. The result will be even more data traffic which requires more spectrum, more cell sites and new mobile technologies that are essential to respond to this social need. This growing traffic – which includes a wide variety of different applications, especially bandwidth intensive video – in turn provides major socioeconomic benefits for Mexican citizens.

5. **What impact has the digital dividend had on Mexico and how is this impacting your plans for the 600 MHz band at WRC-15?**
The 700MHz digital dividend band is a very good example of positive spectrum management. In 1998, Mexico began planning how to conduct the transition from analogue to digital TV and therefore release the digital dividend for mobile services. There are 1500 TV stations and gap fillers in Mexico so re-planning the spectrum has been a significant effort. Mexico now has only 17 analogue TV transmitters on the 700MHz band, I am confident that with the efforts to switch-off analogue TV, we will conclude the liberation of this band by the end of 2015. This will allow 90 MHz of spectrum to be dedicated to providing high quality, nationwide broadband services using the APT 700MHz band plan. This has been a long process – 17 years in all – but showcases what is possible and we are now applying this experience to the next digital dividend which will be in the 600 MHz band.

The 600 MHz band, by which I mean 614-698 MHz, is allocated to mobile services and broadcast services on a primary basis in Mexico, as well as a number of other countries in the Americas. We believe that the rest of the Americas, and indeed the rest of the world, have the opportunity to harmonise around this mobile allocation at WRC-15 with a long-term vision. It is important to appreciate that there is no need to free the 600 MHz band immediately – but it forms part of our plans for the future growth of mobile broadband whilst granting conditions for the development of broadcast services below 608 MHz (i.e. channel 37).

6. **How important is having the flexibility to use the 600MHz band for broadcast and broadband services?**
It is not feasible to use the band for both services simultaneously, using traditional approaches, due to the high power levels needed for broadcast transmissions. For this reason, long-term decisions will be taken to guarantee the use of DTV services whilst obtaining a second digital dividend in the 600MHz band . Implementing provisions in the Radio Regulations at WRC-15 to permit either service in the band is not difficult and provides a better and harmonized grounding for future growth. As discussed previously, the band is already co-allocated to both the mobile and broadcast services on a primary basis in Mexico and several other countries in the Americas[1]. This simply gives governments the flexibility to make the band available for mobile services at some point in the future while continuing to operate broadcast services in the meantime. Nevertheless decisions at the WRC level foster the conditions for the development of new products for this band.

7. **How do you go through the transition from broadcast to mobile services in the 600 MHz band?**
The first step is to complete the transition from analogue to digital broadcasting. Digital broadcast networks provide much better options for spectrum planning as well as for multicasting. It becomes increasingly possible to repack digital broadcast channels with less spectrum limitations, especially as the technologies evolve. As has been said, these actions involve public services and will take time. Nevertheless if we take the proper decisions this year at WRC-15, the road to the future will be ready to deliver the maximum benefit to the general public.

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1. This is also the case in the whole of region 3 (i.e. Asia Pacific)