

Spectrum needs for mobile services and other sectors: a regulatory perspective

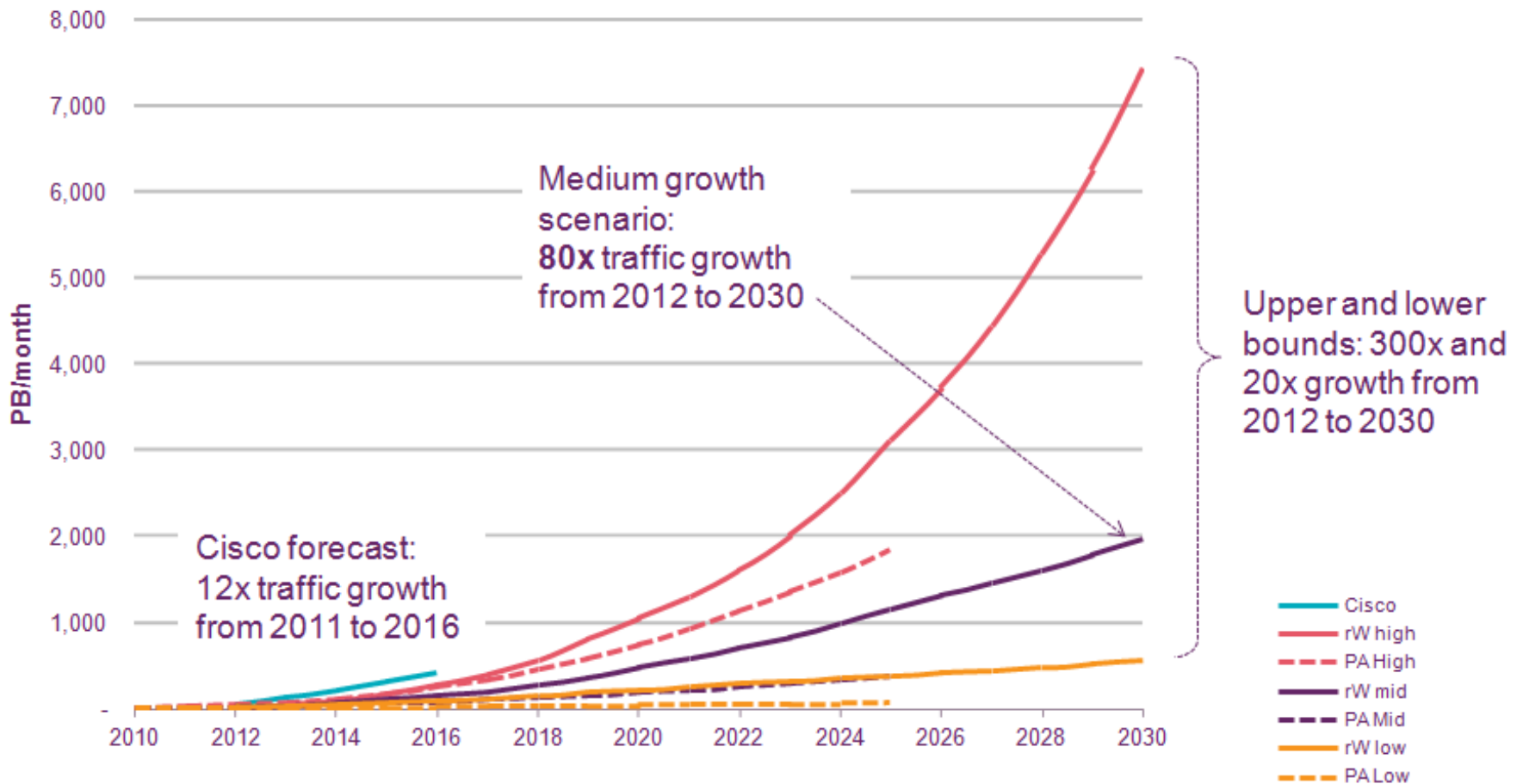
Chris Woolford
Director, International Affairs

2 July 2013

Harmonisation is key for many services

- Allocation decisions need to be taken at regional (or even global) level
 - Reduces risk of harmful cross-border interference
 - Provides economies of scale for industry
 - Consumers expect devices to be interoperable across national borders
- As a result many important spectrum decisions are taken at international level
 - In Europe, CEPT and EU are therefore key drivers in terms of determining how spectrum should be used
 - Though of course administrations drive the development of work in these forums
- But the international decision making processes around allocation of spectrum can be very slow (especially at global level)
 - How can we ensure that international aspects keep up with the pace of change and rapid technical advancement ?

Mobile data growth forecasts



Source: Real Wireless

... and other sectors aren't far behind...

- Emergency services pushing for new spectrum allocations
- Broadcasters want to deploy more and enhanced services (HD etc)
- Wireless cameras and wireless microphones
- Massive growth predicted in M2M communications and RFIDs
- WiFi and spectrum for licence exempt devices
- Transport and satellite communications
- Space and scientific applications
- Energy sector (including smart grids and smart meters)
- and others.....

We need to be smarter about how we use spectrum

- Regulators need to ensure spectrum can be used optimally
 - Unnecessary regulation must not be allowed to stand in the way of deployment of new technologies or new services
 - Spectrum users need flexibility to respond to changing consumer and business needs
- Spectrum sharing offers opportunities to use spectrum more efficiently
 - Need incentives to encourage spectrum users to look for sharing opportunities
 - Emerging technologies, such as geolocation databases, offer opportunities for more dynamic spectrum sharing
 - Spectrum sharing opportunities can apply in both public and private sectors
 - Demands for dedicated spectrum should be robustly tested
- International processes should not be allowed to further slow down the release of new spectrum
 - Decisions must be robust and based on evidence (eg cba)
 - Opportunities for more rapid access to spectrum (eg sharing) should be explored

But it isn't just about spectrum

- More spectrum alone cannot accommodate the increases demand for data that are being predicted
 - New technologies also need to drive more efficient use of spectrum (eg LTE)
 - Advances in network topology can help to accommodate increased demand (eg small cells)
 - balance between licensed and license-exempt access to spectrum
- Poor quality receivers (eg in neighbouring bands) should not stand in the way of deployment of new services
 - Review of R&TTE Directive could be a significant opportunity within Europe

Need a strategic approach to spectrum management which is sufficiently forward looking (eg to allow time for international harmonisation) but also takes into account technical and network developments