



COMMONWEALTH
TELECOMMUNICATIONS
ORGANISATION

Executive Overview of World Radiocommunication Conference 2015 (WRC-15)

WRC-15 issues: towards a roadmap for the Commonwealth

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Background

- WRCs held approximately every 4 years
- Brings together thousands of engineers, diplomats and business executives from over 150 countries to discuss and agree a revision to the Radio Regulations (RRs)
- The Radio Regulations - international treaty which provide global framework for spectrum use.
- WRC benefits from regional preparations
 - APT, ATU, CEPT, CITELE
 - ASMG, RCC
- Regional positions informed by
 - Industry perspectives
 - National and regional interests and ITU-R Studies
 - Harmonisation to enable economies of scale and interoperability; lower cost of devices
 - Prevention of harmful cross-border interference
- Commonwealth Preparatory Meeting
 - Not to take a position like regional organisations
 - But to enable a better understanding of regional positions and promote consensus on contentious issues

Future availability of spectrum for mobile broadband – Agenda Items 1.1 and 10

- WRC-15 is aiming to identify further spectrum bands for mobile broadband services given rapidly increasing demand
- CTO very active in broadband strategies and would encourage mix of technologies as appropriate to each country
- CTO promoting broadband deployment in emerging countries and the development of National Broadband Strategies
 - Broadband Strategy for Sierra Leone
 - Outline of Broadband Strategy in Barbados
 - Model of Broadband Strategy for island States
- Connecting Rural Communities and Broadband Conferences
 - 2014 Nairobi Kenya
 - 2015 Abuja Nigeria
 - 2016 planned to be held in Asia

Future availability of spectrum for mobile broadband – Agenda Items 1.1 and 10

- **UHF band: 470-694 MHz**
- Several Commonwealth countries
 - seek to ensure the protection of digital terrestrial television (DTT) operating in this band
 - oppose a co-primary mobile allocation (which would see the band allocated to both mobile and broadcasting) in the 470 – 694 MHz band.
- **S band: 2.7-2.9 GHz**
- Currently used for aeronautical, satellite and space science services
- Hardly any support from Commonwealth countries

Future availability of spectrum for mobile broadband – Agenda Items 1.1 and 10

- **L band: 1427-1452; 1452-1492, 1492-1518, global protection of 1518-1525 widely supported**
- **C band:**
 - 3.4-3.6, 3.6-3.7, 3.6-3.8,
 - **3.8-4.2 GHz not supported globally**
 - Footnote solution in 2007; will this work this time?
 - Concerns from countries who need spectrum for broadband
 - Concerns from countries who depend heavily on C band
 - Concerns of new entrants to satellite business
 - Focus likely to be on 3.4-3.6 and less likely on 3.6-3.8

Future availability of spectrum for mobile broadband – Agenda Items 1.1 and 10

- Agenda Item 10 Future studies above 6 GHz
- Most Commonwealth countries support a future Agenda Item (at WRC-19) on the availability of spectrum above 6 GHz for mobile broadband.
- Such spectrum is likely to be particularly useful for the next generation of mobile services – 5G
- Several Commonwealth countries have expressed the need to exclude the satellite bands mainly Ku and Ka band

Agenda 1.5 Use of FSS for Unmanned Aircraft System

- Most Commonwealth countries are not in support of the use of FSS for Unmanned Aircraft System
- Concerns of safety have been raised many civil aviation authorities
- CEPT has no position
- Commonwealth community needs further discussion

Global Flight Tracking

- ITU Plenipotentiary Conference held in Korea in October/November 2014 decided to place additional item on global flight tracking to the agenda of WRC-15.
- Follow up of the disappearance of Malaysian Airlines flight MH370 in March 2014 and the loss of Air France flight 447 in 2009.
- ITU Sharing Studies advanced
- Issues for consideration – No Change or Allocation
 - Primary allocation in 1087.7-1092.3 MHz to AMS(R)S limited to ADS-B
 - Primary allocation in 1087.7-1092.3 MHz to AMS(R)S limited to ADS-B and not claiming protection from ARNS in 960-1164 MHz
 - A secondary allocation in 1087.7-1092.3 MHz to MSS, limited to ADS-B

ESOMPs – Earth Stations on Mobile Platforms

- Issue raised under Agenda 9.2 Director's Report (difficulties and inconsistencies encountered in the application of the Radio Regulations)
- ESOMPs – an application of the fixed-satellite service, where the earth station may operate from a single defined location, multiple points or whilst in motion.
- Antenna technological developments have gone some way to lessen the potential for interference to other satellite systems and terrestrial fixed link services
- Most Commonwealth countries support need for global harmonisation
- Question to be answered - Principle of allocation through a Director's report

Conclusions

- Key issues presented
- Several other agenda items are important e.g Agenda Item 7 on satellite procedures
- Focus required to achieve Commonwealth Action on various agenda Items

Thank you for listening