



**COUNCIL OF
THE EUROPEAN UNION**

Brussels, 19 June 2012

11558/12

**TELECOM 128
AUDIO 66
TRANS 213
AVIATION 105
ESPACE 32
MI 443
COMPET 454
RECH 291
ENV 560**

COVER NOTE

from: Secretary-General of the European Commission,
signed by Mr Jordi AYET PUIGARNAU, Director

date of receipt: 15 June 2012

to: Mr Uwe CORSEPIUS, Secretary-General of the Council of the European
Union

No Cion doc.: SWD(2012) 172 final

Subject: COMMISSION STAFF WORKING DOCUMENT - Report on the outcome of
the ITU World Radiocommunication Conference 2012

Delegations will find attached Commission document SWD(2012) 172 final.

Encl.: SWD(2012) 172 final



EUROPEAN COMMISSION

Brussels, 15.6.2012
SWD(2012) 172 final

COMMISSION STAFF WORKING DOCUMENT

Report on the outcome of the ITU World Radiocommunication Conference 2012

COMMISSION STAFF WORKING DOCUMENT

Report on the outcome of the ITU World Radiocommunication Conference 2012

1. SUMMARY OF OUTCOME

The ITU World Radiocommunication Conference 2012 (WRC-12) reached agreement on a number of issues that will contribute to improving the international regulatory environment for spectrum use, and facilitate the development of efficient and innovative wireless services and applications.

From the EU perspective, WRC-12 represents a positive development with regard to our policy objectives, and the Member States cooperated well in promoting the positions coordinated by CEPT in advance of the Conference. There were successful outcomes on the two issues of EU competence. The first, regarding the technical conditions for use of the 800 MHz band, was facilitated by successful coordination with non-EU countries using the frequency for other systems, with the result that the use of the 800 MHz band for wireless broadband can be ensured virtually throughout the EU. On short-range devices, the consensus on avoiding further regulation was preserved. However, there was a significant and unexpected development with the adoption of a resolution effectively committing to the allocation of the 700 MHz band for wireless broadband from 2015, on a co-primary basis with broadcasting, and work is to start shortly on the technical conditions to be applied. The implications for EU spectrum policy will have to be examined.

2. BACKGROUND

2.1. Communication/Council/EP

With the input from the Radio Spectrum Policy Group, the Commission adopted its Communication on the European Union's policy approach to the ITU World Radiocommunication Conference 2012 (WRC-12)¹ on 6 April 2011. The Council of Ministers adopted conclusions reflecting its view on the desired Conference outcome on 27 May 2011 and the European Parliament adopted its Resolution on the same subject on 15 September 2011².

2.2. CEPT coordination. CEPT in WRC-12

The European Conference of Postal and Telecommunications Administrations (CEPT) brings together 48 European administrations with responsibilities in the field of radio spectrum. All EU Member States are also members of CEPT. Other members include EFTA, the EU's eastern neighbours, including Russia, and the countries of the western Balkans.

¹ COM(2011) 0180.

² P7_TA(2011)0391.

CEPT starts preparing for a WRC immediately after the conclusion of the previous Conference. The aim is to reach what are termed European Common Positions (ECPs). The Commission evaluates the items on the agenda for the Conference and, where EU legislation may be affected or where existing or developing EU policy is concerned, participates actively in CEPT's preparation work to ensure that ECPs are aligned with the policy aims of the European Union.

Such positions are submitted as regional proposals within the ITU. During the Conference, the regional organisations, including CEPT, are the main negotiating bodies. As industry interests are also represented in the national and regional delegations, there is a continuing internal (and external) lobbying effort to steer negotiations in directions favourable to the various lobbyists. In all, almost 3000 delegates participate in a WRC.

2.3. Items of EU exclusive competence

The European Union is an observer in the ITU. Two items on the WRC-12 agenda were identified as falling within the EU's exclusive competence: 1.17 on sharing between mobile services and other services in the 790-862 MHz band, and 1.22 on short range devices. As observer status does not include the right to speak, an EU position has to be expressed through one or all of the Member States on behalf of the Union after being formalised by a Council Decision. However, the preparatory work in CEPT had achieved consensus in line with EU policy, and no formalisation process was deemed possible, given the limited time before the Conference itself.

3. MAJOR ISSUES

3.1. The digital dividend at 800 MHz

The previous WRC in 2007 allocated the 800 MHz band to the mobile service (co-primary with broadcasting) with an implementation date of 2015. Thereafter, the European Union adopted legislation³ to enable the use of wireless broadband in the 790-862 MHz band. Furthermore, the Radio Spectrum Policy Programme⁴ stipulates that all Member States should implement broadband in this band by 1 January 2013, with possible temporary derogations until 2015. The outstanding issue for WRC-12 was that some Member States also had external obligations to protect aeronautical radionavigation use in Russia, Belarus and Ukraine. Following bilateral agreements between all parties involved and a European proposal for a WRC resolution to protect the aeronautical systems, while making wireless broadband possible in most of the affected Member States, this agenda item was successfully concluded. The outcome of this package of agreements is that wireless broadband towers can be erected without restriction up to 50-60 km from the EU's external borders and up to less than a third of that distance following coordination with the neighbouring states. As these neighbouring states are expected to switch to using the band for wireless broadband in the coming years, the WRC-12 outcome provides a stable path to deploy 4G networks in the vast majority of EU territory.

³ Decision No 2010/267/EU of the European Commission of 6 May 2010; OJ L 117, 11.5.2010, p. 95.

⁴ Decision No 243/2012/EU of the European Parliament and of the Council of 14 March 2012; OJ L 81, 21.3.2012, p. 7.

3.2. The 700 MHz band

Just before the Conference, the Arab Spectrum Management Group (ASMG) had suggested extending the allocation to broadband in the 790-862 MHz band to include the 694-790 MHz band (already allocated in the other two World Regions). As the Conference got underway, it emerged that the African Telecommunications Union (ATU) strongly supported this allocation and that both groups viewed it as a vital aim for the Conference. Neither group is a substantial user of the 700 MHz band for broadcasting. Any vote in the WRC would have been overwhelmingly in favour of the allocation during the Conference, but negotiations between CEPT and the Regional Commonwealth in Communications (RCC, representing the CIS countries) on the one side and the ASMG and ATU on the other led to a compromise. This postpones the co-primary allocation to 2015, following studies to establish the practicality of coexistence and the consequences for other services. In addition, the lower edge of the band can be adjusted in 2015. The Commission stressed that, from the EU perspective, the WRC in effect sets the rules that apply at the EU's external borders. Any decision on allocation of the 700 MHz band to broadband within the EU would be taken in accordance with the Radio Spectrum Policy Programme's inventory process, where this band and other candidate bands would be evaluated according to a wider set of criteria than those applied in the ITU context.

3.3. Galileo

The European aim of having an additional allocation of 2483.5-2500 MHz to radionavigation satellites was satisfied with a minor concession to safeguard radars in Russia and some neighbouring countries. This will provide Galileo and other radionavigation satellite systems with spectrum for their future services. A late attempt by our coordinator to gather signatures to a new note in Appendix 5 was partially successful, gaining some 80 countries. This will permit radionavigation satellite and mobile satellite systems to transmit at higher power levels in those countries before requiring coordination with their terrestrial services.

3.4. SESAR and aviation

The Single European Sky air traffic management research programme (SESAR) is intended to enable Europe to meet future capacity and air safety needs in one of the densest air traffic areas in the world. At WRC-12, three bands were considered for possible re-allocation to aeronautical services. Regarding the lower of the three bands (112-117.975 MHz), all the regional proposals were identical and the issue was concluded at the first meeting, confirming the use of the band for aeronautical mobile routing services.

In the middle band (960-1168 MHz), discussions focused on footnotes and country exclusions. This stemmed mainly from use of non-ICAO-approved aeronautical systems in some countries, which would require coordination with ICAO-approved systems.

From the EU policy perspective, all the three bands under consideration were safeguarded, including the use of 5000-5030 MHz for future use by Galileo. An attempt by the US to make this available for general aeronautical use (which would have had serious implications for Galileo) was averted.

The provisions regarding the role of ICAO and the ITU Radiocommunication Bureau in the assessment of how mobile satellite spectrum is organised to meet the requirements of aeronautical routing systems were contentious, and the resulting compromise established a rather convoluted system for the participation of these and other bodies.

3.5. Cognitive Radio and Software Defined Radio

Software Defined Radio (SDR, where the signal characteristics are modified in software) was already considered early in the Conference as not needing any regulatory action, as any such radio would be required to comply with existing regulations. The negotiations on Cognitive Radio (CR, where a radio finds available spectrum and uses SDR or other technology to transmit a signal) were more complicated, as Russia, in particular, wanted to be able to regulate its use. In the end, they were concluded without changes to the Radio Regulations, in line with the EU policy aim. A non-binding recommendation will accompany this. The effect is that a country can come back to the issue at a later stage, but for the time being cognitive radio developments are safe.

3.6. Short Range Devices (SRD)

The issue of Short-Range Devices was quickly resolved at the beginning of the meeting with all regions agreeing that no changes were necessary. This is in line with the clear position set out in the Commission Communication.

3.7. Audiovisual

Electronic Newsgathering (ENG) services involve wireless connectivity between microphones, cameras, uplink buses etc. used where news events take place. Typically, use is intensive but localised and limited in time, such as the Olympics, but smaller-scale events have the same characteristics as well. The EU policy has been to avoid hard harmonisation (as this would block the spectrum when not in use), but to encourage de facto harmonisation through an ITU Recommendation. This was also the outcome of the Conference.

For many years, there has been an allocation to satellite broadcasting in the 21.4-22 GHz band for analogue high definition services. This has never been active, so WRC-12 looked at making the allocation effective, a matter of interest to Europe with its strong satellite sector. The WRC resolved the issue of sharing with other services and how to provide the uplink from Earth to space. The issue required delicate negotiations by CEPT, and the price for agreement was a compromise to allow certain non-European planned networks to ‘jump the queue’ when filing for satellite slots at the ITU. As EU undertakings are world leaders in the broadcasting satellite sector, this new allocation will provide the sector with increased capacity to offer content.

4. OTHER ISSUES

4.1. Maritime

The two maritime items, channelling arrangements for communications to and from vessels and the requirements for safety systems for ships and ports, were unexpectedly difficult. The outcome was a compromise to enable the introduction of digital systems, but only in 2017 in the first case and with regional variations in the second.

4.2. Scientific services and combating climate change

A new allocation for space research in the 22.55-23.15 GHz band was achieved in line with the European proposal. Two allocations for oceanographic radars and a lightning detection system were also achieved, together with expansion of the bands available for meteorological satellites. The protection of passive Earth observation satellite services in the 86-92 GHz band was also assured. These provisions will assist in the battle against climate change in line with EU policy aims.

4.3. Other satellites

There was no support for allocating additional spectrum to mobile satellite services at this Conference.

5. POLICY CONSEQUENCES AND WRC-15

The agenda adopted for WRC-15 contains a number of items for which the Radio Spectrum Policy Programme has recently identified the directions and where the EU will be developing its views based on the inventory process. It is clear that the new item on more spectrum for broadband is one such, and it is clear that developments regarding the 694-790 MHz band will require careful consideration and a coordinated approach within the EU.

The European Union may also wish to take a position on additional spectrum for Earth exploration satellite services and on wireless avionics onboard aircraft, which may both have an impact on combating climate change, as well as for the emerging use of Unmanned Aerial Systems (UAS) in civil applications. This may relate, in particular, to securing data-links for the safe insertion of UAS into non-segregated airspace for the purpose of environmental monitoring. Furthermore, allocating the 77.5-78 GHz band to automotive short-range radar would be in line with existing EU legislation.

The Commission will evaluate these and other items on the WRC-15 agenda and take an active part in the preparatory work in CEPT. The Commission will also request the Radio Spectrum Policy Group to provide strategic advice on items on the WRC-15 agenda.