**Summary of the Workshop jointly organised by the EC and the CEPT on the European preparations for the ITU World Radiocommunication Conference 2015 (WRC-15)**

The meeting was attended by more than 190 participants. Opening remarks and initial welcome were made by the Mr Andreas Geiss, acting Head of Unit of the European Commission's Unit for Radio Spectrum (DG Connect B4) and by Mr Alexander Kühn, CPG-15 Chairman (CEPT).

It was recalled by the Co-Chairman that this event is aiming to discuss some WRC-15 agenda items having potential influence on the EU policies in order to:

* assist the Commission's preparation of common policy objectives for WRC-15;
* inform participants of the workshop regarding forthcoming work of the Radio Spectrum Policy Group (RSPG) on WRC-15 related issues;provide feedback to CEPT from EU perspective which can be taken into account in its preparation process for the WRC-15.

It was also underlined that the successful outcome of the WRC-12 was possible only because of the good/enhanced preparation process and coordination between EU and non-EU members.

The workshop was arranged in three sessions: the first one dealing with wireless broadband, the second one dealing with other main topics identified by RSPG and a third session which provides a brief outlook on the further preparation within EU and CEPT.

**First session: Wireless Broadband (Agenda items 1.1 and 1.2)**

Mr Branimir Stanchev (DG Connect) informed about EU (spectrum) policy priorities in particular the requirement by the RSPP of 1200 MHz in total to wireless broadband, the current stage of the spectrum inventory, and important developments at level.

The spectrum inventory process initiated by the RSPP is continuously performed in cooperation with EC JRC and based on CEPT EFIS data base content. Member states will also submit additional data. EC is considering a list of frequency bands for a possible extension for mobile broadband / IMT. Furthermore it is planned to launch a study on the challenges and opportunities of broadband-broadcasting convergence in 2014 to archive better usage of the UHF band in the next year. EC foresee a number of challenges to be addressed.

An initial list of possible EU priorities for WRC-15 was presented including IMT identification in the 1.5 GHz range and allocations to the mobile service in the 5 GHz range as well as broadband PPDR. Attention was given to the time beyond WRC-15, for when there is a need for a long term strategy for the 700 MHz band.

The Mr Didier Chauveau (Chairman CPG PTD) presented the status of CEPT’s preparations on AIs 1.1 and 1.2 relevant to mobile broadband:

On AI 1.1, an initial list of candidate bands supported by CEPT was presented, as well as the recent ECC development in 1.4 GHz and 3.4-3.8 GHz range. Further preparatory activities on frequency bands which are subject to further consideration will take into account:

* + - * CEPT UHF long term strategy for broadcasting usage;
      * The negative results of compatibility studies for the band 2700-2900 MHz on co-channel and co-location operation with radars;
      * Intensive debates regarding RLAN at 5GHz band study, namely the expressed concerns at the European level regarding challenges to the operation of GMES/Copernicus programme in case of RLAN operation in the band 5350-5470 MHz.

Regarding AI 1.2 the CPG PTD Chairman draw the attention on a few options for a 700 MHz channeling arrangement considered by PTD. These options took also account of possible future usage of the duplex gap and guard bands by other applications (e.g. PPDR or PMSE). The following areas are still to be considered:

* + - * Coexistence between MS and BS at the edge 694 MHz;
      * ARNS requires protection therefore it is necessary to choose the scenario allowing avoiding undue coordination burden (process similar to AI 1.17 WRC-12 bilateral agreements?)

During an open discussion the following views from stakeholders were expressed:

Ericsson stressed growing broadband traffic especially in urban areas and the fact that from user perspective convergence between different services/applications is getting more visible. It was also underlined that industry will be happy to coexist with broadcasting.

EBU commented on European developments relevant to AIs 1.1 and 1.2 by stressing a number of challenges. This included the quality problem of providing spectrum capacity for high definition DTT in the case that the 700 MHz band is lost to broadcasting. EBU noted that the RSPP requirement of 1200 MHz for mobile service is already exceeded. As a conclusion, EBU does not support adding an IMT allocation in the 700 MHz-band.

The importance of protection of existing satellite spectrum was stressed in an ESOA presentation. Statistics of the satellite usage in the frequency bands up to 6 GHz was presented.

The importance of PPDR operation under all type of conditions was stressed in the presentation of the PPDR community. Asserted spectrum requirements for PPDR as a safety application should be provided in the 700 MHz range, at least at the CEPT level. Support was provided by German TETRA Networks as well as TCCA.

A description of the GMES programme was presented by ESA including financial aspects. There is a high risk of losing 5350-5470 MHz band even if RLAN will be using only the indoor scenario. All studies in ITU-R show a deficit in protection of EESS. The problem is that there are not so many mitigation technics to protect EESS. A wrong decision at WRC-15 would be unrecoverable.

CISCO expressed that not all sharing studies showed that compatibility between EESS and RLAN is not possible. Industry is ready to apply all possible mitigation technics to make this situation work.

**Second session: Other topics on WRC-15 Agenda**

Mr Björn Tegeby (DG Connect) made a presentation regarding EU objectives for non-broadband policy and indicated that in most areas the preparation at EU level was at an early stage The RSPG opinion on WRC-15 will be used as an input into the further development of EU policy objectives and the result will be submitted to the EU institutions for consideration.

The following areas considered at this session were linked to EU policies, notably: PPDR, aviation, automotive safety, scientific issues and space services.

Mr. Stephen Limb (CEPT Coordinator AI 7) summarised the development related to satellite Agenda items 1.7, 1.10, 7 and 9.1.2.

Mr Tony Azzarelli (CEPT CPG PTA chairman) informed about the development on science services (AI 1.11, 1.12, 1.13), PPDR (AI 1.3) and spectrum management for disaster relief situations (AI 9.1.7) (WRC-12). National circumstances will be taken into account identifying bands for PPDR as they can vary from country to country.

Mr Hans-Karl von Arnim (CEPT Coordinator 1.16) commented on the maritime issues AI 1.15 and 1.16.

Mr. Gerlof Osinga (CEPT CPG PTC chairman) informed the meeting about the CEPT’s status of preparations regarding the aeronautical part of PTC agenda:

* AI 1.17 (WAIC). The motivation is to develop a new generation of aircraft using wireless communications as part of the aircraft’s operation where it is possible. This is in order to reduce the weight of aircraft and to ensure safety of flights at the same time. A primary allocation for AM(R)S for the purpose of WAIC is supported by CEPT.
* AI 1.18 (short range radar applications). CEPT supports primary allocations for short range radars.
* AI 1.5 (UAS). It was recalled that this is a very complex agenda item. The application cannot be considered under safety services. There is no guarantee of reliable communications. The question under consideration whether we can rely on the usage of FSS for the Control and non-Payload Communication CNPC links?

On these items the following views from stakeholders were expressed during an open discussion:

On AI 1.5, SES sees the opportunity for the FSS community to assume a substantial role in the emerging civil use of UAS. Industry is of the opinion that more Ku-band spectrum is required (AI 1.6).

SES is of the view that it is feasible to achieve the balance between increasing flexibility while providing protection for existing services (AIs 7 and 9.1.2). Additional flexibility can be achieved, for example, by reducing unnecessary coordination.

Comments from EDA on CEPT development regarding AI 1.5: any positive outcome would be welcome if civil aviation requirements can be fulfilled, but official recognition of the use of Ku-band for RPAS (UAS) should not lead to constraints in those bands which are not applied today. From EDA’s perspective there is a need to work for the next generation (post 2025) in line with the development of a European solution. Since WRC-12, the band 5030-5091 MHz is allocated to AMSRS and AMRS to be used by internationally standardised aeronautical systems (5.443C &D).

Airbus made a brief presentation regarding AI 1.17 and commented on the goal of the AI which is from their perspective is a globally harmonized spectrum allocation for safety-related wireless applications guaranteeing a maximum degree of protection against interference from other radiocommunication services. The motivation is in reducing wiring complexity, decreasing fuel amount, better control of moving parts; avoiding redundancy of links which exist in the wired world.

Comment from Czech Administration regarding 1.5, 1.17 (best solution is to have a footnote to guarantee protection of WAIC applications in the RR).

ITU-R WP 5B chairman: safety is a main concern of aeronautical community therefore usage of FSS band for WAIC purpose is still under discussion within ITU-R.

Regarding AI 1.3, some industry representatives questioned whether, in the light of the RSPP requirements, No Change would be an option for Europe. Full respect of RSPP programme requirements was acknowledged, and hence Europe’s priority for reaching harmonised bands for PPDR applications. It was clarified that AI 1.3 contains aspects of worldwide dimension, whereas the RSPP concentrates on the harmonisation within the EU member states.

**Third session: Outlook on further preparatory acitivities**

Mr Wesley Milton (CEPT coordinator on AI 10) presented the CEPT activities on Future WRC Agenda Items and invited administrations and stakeholders to actively populate the list of future AIs.

Sweden mentioned that it is important to start developing the list of AIs for the WRC-18 as early as possible, taking into account that some of the AIs for the WRC-18 will be a consequence of decisions of the WRC-15.

Mr Rainer Wegner (RSPG WG WRC-15 Chairman) presented the step-by-step process of EU preparations for the WRC-15. This includes developing an RSPG opinion on Common Policy Objectives for WRC-15. The aim is to enable the European Commission and the other European institutions to offer guidance to member states in developing ECPs; and to ensure coordination between EU and non-EU countries.

Main issues to be addressed in the development of an Opinion are: spectrum for electronic communications services; spectrum for aviation, maritime and road safety; development of science services; satellite issues. A number of areas in EU policy have been identified most likely relevant for WRC-15 preparations. The plan is to develop the final Report by June 2014…

Several stakeholders from the broadcasting community: underlined that from their point of view EU doesn’t make adequate efforts to preserve spectrum for terrestrial broadcasting.

**Conclusions**

A common conclusion is that it is very important to make preparations as efficient as possible. EC stressed that the work on EU side should conclude by November 2014 in order to provide guidance to EU Member states as early as possible. Also it is very important to keep in mind which items could be interesting for the agenda for WRC-18.

The CPG chairman stressed that the scope of a WRC covers allocation only for radiocommunication services; identification for applications will be done at the national / regional level. It is also essential for Europe to continue with technical studies in order to have reliable technical background for the European Common Proposals for WRC-15. Noting the increasing number of interrelations between the AIs a consistent approach is needed in the preparatory process. The EU common policy objective is the tool to ensure this consistency while also support Europe´s spectrum policy interests. But in its development flexibility should be given in order to allow successful negotiations at the WRC level like in WRC-12. Thus EU member states should be able to speak with one voice, notwithstanding that a common view from all countries will be favourable.

Overall the Co-Chairman stressed the good result of the workshop and invited all participants to continue with active contribution to the preparatory work.