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| 36th ECC Meeting |  |
| Cluj-Napoca, 11th – 14th March 2014 |  |
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The 36th meeting of the Electronic Communications Committee (ECC) was held in the city of Cluj-Napoca, Romania, at the kind invitation of the National Authority for Management and Regulation in Communications of Romania (ANCOM).

# Opening of the meeting

The ECC Chairman, Mr Eric Fournier (F), opened the meeting and welcomed the participants to Cluj-Napoca.

The Chairman gave the floor to Mr. Catalin Marinescu, President of ANCOM, who welcomed the delegates in Cluj-Napoca, a city rich in history with a strong cultural, academic, industrial and business involvement. Cluj is at the same time a citadel of technology with a project under finalisation, TETAPOLIS, a highly specialised scientific and technologic park. The president of ANCOM expressed its appreciation of the work of ECC and stressed the important issues which are on the agenda of the meeting, among them the election of a vice chairman for ECC and the chairman of WGFM. He concluded his speech by wishing the group an excellent meeting and an enjoyable stay in Romania.

The meeting was attended by 73 delegates representing 29 Administrations, the European Commission, the Office and 7 observers. The list of participants can be found in Annex 02/TEMP 01 Rev1. The list of output documents is given in Annex 01.

# Adoption of the Agenda, Schedule of work

The Chairman informed the meeting about the last update of the draft agenda. The meeting adopted the agenda as given in Annex 03.

# Procedure for Appointment of Chairmen

## Appointment of a new ECC Vice Chairman

The ECC has received only one application from the Russian Federation, therefore the meeting appointed by acclamation its candidate. The new ECC Vice Chairman, Mr Sergey Pastukh (RUS), thanked the participants for the confidence placed in him.

## Appointment of a new ECC WG FM Chairman

The ECC has received only one application from Germany; therefore the meeting appointed by acclamation its candidate. The new WG FM Chairman, Mr Thomas Weilacher (D), thanked the participants for the confidence placed in him.

# Reports on ECC and other activities

## #35 Steering Group Meeting

The Chairman introduced the minutes of the last ECC SG meeting (ECC(14)004).

 ECO Bulletin on on-going/new issues in other regions or organisations

The Director of the Office, Mark Thomas, introduced Doc. ECC(14)013, the ECO’s regular bulletin on ongoing or new issues in other regions or organisations. He noted that there were 14 substantial items in the report, and time would not allow for an introduction and explanation of each.

The bulletin draws attention to ECC groups which have or may have an interest in the issue reported, and the Office would use its experts to draw those WGs/PTs’ attention accordingly.

Various market and regulator developments had a familiar shape (technological neutrality and auctions for MFCN in India, a self-certification regime for equipment introduced in Japan). There were reports from APT (relating to WTDC14 preparation) and CITEL (in relation mainly to PPDR). Developments relating to wireless broadband in UHF highlighted various emphases (bandplan in Brazil, auction value in Canada, and the challenges of a ‘reverse auction’ in the US). The US topics included:

MCA

3.5 GHz for small cell deployments (12) - a white space approach

ITS (noting also the prospect of joint ETSI- US standardisation work)

Receiver performance

Emergency call handling – caller location identification

Non-geostationary satellite coexistence with GSO and other non-GEO systems – relevant to ESOMPS, inter alia.

purchase by a US satellite company of a satellite operator with equipment using 2 GHz in Europe.

The Director observed that the last two of these items may be specific market developments which have the effect of moving the need for spectrum management policy to be developed in these areas in Europe; external triggers could often be the stimulus for regulatory development. Indeed the operator concerned in this case was already making contributions to PT SE40.

# Draft ECC Decisions

## Final Approval of the Draft revised ECC/DEC/(11)06 on Harmonised frequency arrangements for mobile/fixed communications networks (MFCN) operating in the bands 3400-3600 MHz and 3600-3800 MHz based on the results of the Public Consultation

The ECC PT1 chairman introduced the revised ECC Decision (11)06 further to the public consultation. ECC PT1 resolved all the comments received during the public consultation, except those related to the channelling arrangements in the 3400-3600 MHz. Further to the public consultation, the revised deliverable has been largely improved.

Moreover ECC PT1 identified the need to correct a table of the technical annex of the ECC Decision (Annex 4, Table 5, frequency range 3490 – 3500 MHz). ECC PT1 assumed the same correction should be introduced into ECC Report 203 (corrigendum – tables 5, 28 & 36), CEPT Report 49 (corrigendum tables 5, 11 & 17) and the corresponding EC Decision under revision process based on CEPT report 49. In this table 5, this BEM element was previously stated as an e.i.r.p. level. It has been modified as “at the antenna port” since spurious requirements converted to 5 MHz bandwidth are used in the 3490-3500 MHz band.

Based on this proposal from ECC PT1, ECC agreed, in accordance with the spirit of RoP 12.5.3, to correct editorially the revised ECC Decision, the ECC report 203 and the CEPT report 49 and instructed ECO to take on board the task.

Moreover, ECC considered the comments related to the channelling arrangements in the 3400-3600 MHz band. INFO 2, a multi-company document, reiterated their willingness to maintain the current regulatory framework in the ECC Decision (11)06 with both FDD and TDD harmonised frequency arrangements for the 3.4-3.6 GHz band on an equal regulatory status. This contribution mentioned also a LTE FDD trial in the frequency band 3.4 - 3.6 GHz. Further to exchange of views between administrations and based on the result of public consultation, ECC confirmed its decision from the last meeting on the preferred harmonised frequency arrangements for the 3.4-3.6 GHz. ECC agreed also on some editorial improvements on the revised ECC Decision.

Concerning the footnote 1 on comparable technical specifications in EC Decision, EC confirmed its intention to adopt at the next RSCOM a revision of EC framework based on the CEPT report 49. In consequence, ECC agreed to instruct ECO to generate an editorial update with the relevant reference of the future EC Decision based on CEPT report 49 and highlighted that fact in the footnote 1.

The ECC approved the revised ECC/DEC/(11)06 for publication (Annex 07/TEMP 02 Annex 2 Rev2).

25 CEPT administrations confirmed their intention to implement this ECC Decision.

The following countries will implemented partially this ECC Decision for the following reason:

Norway partial implementation; only in the frequency band 3.6-3.8 GHz

The Netherlands partial implementation: MFCN can only be implemented in part of the country and furthermore, in the upper part of the band the Netherlands intend to introduce broadband for local applications. For the planning of these systems the technical conditions of the existing ECC Decision(11)06 have been used. In this way the FSS use of the band can be protected.

Sweden partial implementation; does not intend to implement TDD as preferred channelling arrangement in 3.4-3.6 GHz

Russian Federation partial implementation; not in the band 3.6-3.8 GHz (FSS protection)

ECC agreed on a cover letter (Annex 04/TEMP 02 Rev1) to inform the European Commission on the editorial amendment of CEPT Report 49 (Annex 05/TEMP 02 Annex 1 and Annex 06) and on the final revision of ECC/DEC/(11)06 (Annex 07/TEMP 02 Annex 2 Rev2) for the 3.4-3.6 GHz and 3.4-3.8 GHz bands fully consistent with CEPT Report 49.

## Final Approval of Draft revised ECC/DEC/(06)07 on Mobile Communication on board Aircraft based on the results of the Public Consultation

ECC noted that ECC PT1 resolved the editorial comment received during the public consultation in order to update the footnote 1 with the reference to EC framework: Decisions 2008/294411/EC and 2013/654/EU, as well as Commission Recommendation 2008/295/EC.

The ECC approved the revised ECC/DEC/(06)07 for publication (Annex 08/TEMP 04 REV1).

25 CEPT administrations confirmed their intention to implement this ECC Decision.

# CEPT Reports in Response to EC Mandates

## EC mandate unpaired 2 GHz and results of the Call for Inputs on the outline of the response to the Commission in respect of the development of a CEPT response to the EC Mandate “To undertake studies on the harmonised technical conditions for the 1900-1920 MHz and 2010-2025 MHz frequency bands (‘unpaired terrestrial 2 GHz bands’) in the EU”

The EC Mandate on the “unpaired 2 GHz bands” addresses Broadband DA2GCS, PMSE, DECT, PPDR and SRD in these bands.

 “The outline of the response to the Commission in respect of the development of a CEPT response to the EC Mandate ‘To undertake studies on the harmonised technical conditions for the 1900-1920 MHz and 2010-2025 MHz frequency bands’ (unpaired 2 GHz bands)” was submitted to ECC in November 2013 by WG FM and was subsequently sent out for consultation, which ended on the 20th of December 2013.

The comments received during the public consultation, see Annex 6 to ECC(14)008, were considered by WG FM.

Mr Sergey Pastukh introduced the revised Outline of the CEPT response as provided in Annex 1 to ECC(14)008 to the meeting.

Mr Karl Loew informed the meeting about the relevant studies within WG SE.

WG SE had informed WG FM that the studies on the compatibility and sharing between DA2GC and PMSE in the unpaired 2 GHz bands are mature enough to be taken into account by WG FM when preparing the draft final CEPT Report. However, the studies related to other compatibility cases are not mature enough and SE7 is tasked to finalise these studies until May 2014. WG FM had further been invited to provide guidance whether the evaluation of the ‘Call for input’ might have changed the priority of the other options PPDR, DECT and SRD. The aim is to send the complete draft ECC Report with all sharing and compatibility studies at the next WG SE meeting to public consultation.

The latest results from WG SE had been taken into account by WG FM.

During the discussion Sweden highlighted that only a limited number of administrations had provided a view during the public consultation (on the ‘Call for Input’). France and Germany indicated that the views of the relevant stakeholders were mainly of interest and it has to be assumed that other administrations are happy with the proposed way forward, including the grouping of the candidate applications.

Finally the meeting agreed on this Outline (Annex 10/ TEMP 05). It will be submitted to the European Commission for discussion during the 47th Radio Spectrum Committee meeting from 19-20 March 2014, but it will not be published on the ECC website as it is normally done for CEPT Reports. The final CEPT Report on this Mandate, including also the information from the Outline, will be published on the ECC website.

The meeting also agreed on a cover letter to the European Commission as given in Annex 09/TEMP 06 Rev1.

The scenarios on the possible future use of the bands 1900-1920 MHz and 2010-2025 MHz were also introduced to the meeting (Annex 2 to ECC(14)008).

The two scenarios, as agreed by WG FM, comprise the preferences arising from the contributions to the Call for Inputs and reflect the results of the studies that were to date carried out in WG SE.

Scenario 1 describes the combination of DA2GCS FDD + DECT/SRD + PMSE/PPDR, scenario 2 describes the combination of DA2GCS TDD + DECT/SRD + PMSE/PPDR.

WG FM proposed to use these two scenarios for the on-going work, including the technical studies within WG SE.

It was highlighted during the discussion, that the upper band of scenario 2 is attractive for PMSE (including PPDR) because the adjacent band above 2025 MHz is already used for PMSE in some countries and the tuning range of many cameras covers also the band 2010-2025 MHz.

Furthermore it has to be considered that sharing between PMSE/PPDR and DECT/SRD would be very challenging because of the expected uncoordinated use of DECT/SRD.

Some countries indicated a preference for scenario 2. Some others emphasised that the current authorisation rights for the unpaired 2 GHz bands would be a big burden for a new radio application in the future, especially by taking into account the duration of the licences.

The Russian Federation had a preference for scenario 1 (DA2GCS FDD), because it does not believe that the spectrum demand for Broadband DA2GCS (20 MHz) could completely be realised by applying scenario 2, especially because of the protection requirements for the UMTS FDD bands above 1920 MHz.

The meeting agreed that the studies, especially the technical studies, should be finalised first and then a preference for an option could be considered.

During the discussion on the spectrum requirements, for Broadband DA2GCS and for PMSE, Mr Thomas Weilacher informed the meeting that this and other relevant background information on DA2GCS is provided in draft ECC Report 214 which had been adopted for public consultation at the last WG FM meeting.

Finally the meeting agreed to keep the scenarios unchanged, to use them for the ongoing studies and also to submit the description of these scenarios to the European Commission (Annex 11/[no Temp doc available, Annex 2 to ECC(14)008]).

The final CEPT response to the EC Mandate is expected to be sent to public consultation in June 2014, in accordance with the EC Mandate schedule.

## EC mandate 5 GHz: Approval of the interim report to the European Commission

ECC considered 7 input documents in relation to the draft interim CEPT Report in response to the EC Mandate on RLANs in 5GHz (Doc ECC (14) 007, 008 A03 + section 6.1, 009, 010, 015 + Annexes, 020, 005 section 3.1).

The Chairman of WG FM introduced the document ECC(14)008 Annex 3 containing draft Interim Report from CEPT to the European Commission in response to the EC Mandate «to study and identify harmonised compatibility and sharing conditions for Wireless Access Systems including Radio Local Area Networks in the bands 5350-5470 MHz and 5725-5925 MHz ('WAS/RLAN extension bands') for the provision of wireless broadband services». He also highlighted that the most critical issues raised during WGFM meeting were the following:

Status of RLANs: Concerns were expressed on situations where protection to RLAN would be required from existing co-primary services in the extension bands (5350-5470 MHz and 5725-5925 MHz) and possible revisiting the status of RLAN 5 GHz in the existing bands 5150-5350 MHz and 5470-5725 MHz.

Coexistence RLANs with radars: approaches and distribution of future burden for protection of radars, especially which frequency changes may occur for each pulse, were discussed.

Protection of SRDs;

Interpretation of the task 1 of the EC Mandate in particular in bullet points 1.3 and 1.4 of this task. There was conflicting views with regards to expected protection requirements of the incumbent services and applications highlighted under these bullet points:

Studies with radio applications which are not specifically requested by EC (SRDs, public transport automation (like subways)).

The WGSE chairman also informed the meeting that WG SE has performed on request of CPG initial compatibility studies for RLANs and radio services/systems operating in the band 5725 - 5925 MHz to support the preparation of WRC-15 AI 1.1 in the JTG4-5-6-7. The preliminary results of the studies were also included in the Interim Report.

With regard to the EC Mandate more detailed studies will be carried out by SE24. The following services/applications are addressed in the EC Mandate:

Safety-related ITS systems in the band 5875-5905 MHz;

Transportation systems, i.e. non-safety ITS in the bands 5855-5875 and 5905-5925 MHz, TTT/DSRC in the bands 5795-5805 and 5805 - 5815 MHz

FSS (Earth to space) in the band 5725 - 5925 MHz;

BFWA (FS) in the band 5725 - 5875 MHz;

Broadband Direct air to ground communications (DA2GC) in the band 5855-5875 MHz (potential future use);

Wireless Industrial Applications (WIA) in the band 5725-5875 MHz. (potential future use)

WG SE informed WG FM about the new organization of work and WG FM invited WG SE to conduct studies on

Short range devices in the band 5725-5875 MHz;

Amateur 5725 – 5850 MHz and Amateur Satellite (Space to Earth) 5830 – 5850 MHz;

Other transportation systems used within CEPT for public transport automation (like subways) in the band 5915-5925 MHz;

The compatibility scenarios addressed in WGSE would also take into account both directions of interference recognizing that WGFM will be responsible for assessing any potential regulatory implications.

General Principles on assumptions to be used in the studies

Document ECC (14) 009 gives the views from Germany on the Interpretation of task 1 of the EC Mandate. This was in response to the conflicting views expressed in the WGFM meeting described above with regard to expected protection requirements of the incumbent services and applications highlighted under these bullet points. The document invited ECC to confirm some views on the guiding principles for the future compatibility and sharing analysis to be carried out in response to the EC mandate on 5GHz. It was underlined that cooperation and discussion between all concerned parties is needed in order to identify feasible and satisfying coexistence solutions. After some discussion the meeting agreed on the following principles which are reflected in the interim CEPT report:

“ECC would also like to indicate that when carrying out compatibility and sharing assessments between WAS/RLAN and the relevant services and applications identified in this report, ECC intends to use the following principles:

there will be a similar approach to deriving the appropriate level of protection for all of the incumbent primary radio services covered by tasks 1.1, 1.2 and 1.3 of the mandate.

the sharing and compatibility studies will assume that WAS/RLANs are operating on a secondary basis to the existing primary radio services covered by tasks 1.1, 1.2 and 1.3 of the mandate.

any mitigation measures that may be applied (in principle to either service) will have to ensure an appropriate level of protection to the incumbent primary radio services covered by tasks 1.1, 1.2 and 1.3 of the mandate.

any mitigation measures that may be applied to enable compatibility and sharing with the incumbent primary radio services covered by tasks 1.1, 1.2 and 1.3 of the mandate should be based on solutions that are mutually agreed by all the relevant parties.

that the sharing and compatibility analysis for all of the services and applications to be studied under the mandate will look at the potential for interference in both directions in order to give a clear view on any future sharing environment. “

The ECC chairman noted that these guiding principles should also be taken into account by ECC subordinate groups when carrying out their allocated tasks in response to the mandate.

Draft Interim CEPT Report on 5GHz RLANs

The relevant input documents were presented to the meeting. Input Documents ECC (14) 007, 015 Annexes 02 gave the general views of NATO and ASD-Eurospace respectively on the possible use of the 5GHz extension bands by WAS/RLAN. Input Documents ECC (14) 010, 015 + Annex 01, 020 presented by Germany, Austria and France proposed some changes to the interim CEPT Report as presented by WGFM to the ECC in ECC(14)008 Annex 3. Apart from editorial changes the input documents proposed the following substantive changes that were agreed by the meeting:

Changes to Section 2 of the report to the document to introduce some text on the ongoing work with ITU regarding the update to ITU-R Recommendation M.1638.

Add an additional section to describe Other Systems that operate on a national basis in some CEPT countries in the frequency range 5915-5925 MHz

Some clarifications around the WAS/RLAN parameters used in the studies carried out by WGSE.

Other substantive changes proposed to introduce views on the effectiveness of the current DFS mechanisms and to conclude that it was necessary to foster a case by case individual authorisation rather than a general authorisation for WAS/RLANs as a result of the interim sharing studies were not agreed by the meeting. After discussion, it was decided to introduce some text highlighting some of the conclusions contained in ECC Report 192 in relation to non-compliant products and/or intentional illegal use of RLAN equipment in the 5 GHz band as well as making it clearer in section 3 of the that the studies were only addressing the possible use of WAS/RLANs under a general authorisation regime.

During the discussions Sweden also highlighted some concerns around the lack of reference material contained in section 2 for the FSS services to be studied. The meeting agreed to consult with the ECO to provide the appropriate references in this section.

The meeting then carried out a drafting exercise to address the results of their discussions and the approved Interim CEPT Report on the EC mandate on 5GHz WAS/RLANs that will be sent to the EC can be seen in Annex 12/TEMP 07 Rev2.

Statement from EC Councillor

The EC Councillor clarified that the statement at the FM (sharing of burden) is not putting in question the protection of primary services as contained in the radio regulations. The aim is to ensure that all sides make an effort and cooperate on the studies that should take place. In the Mandate the Commission has reflected the priority it sees in protecting Copernicus and ITS, based on the Radio Spectrum Policy Programme.  For other existing use the facilitation of coexistence means that all potential solutions should be looked. In this context he wondered about the discussion on frequency hopping radars, where proposals for 1 pulse detection were being made while existing harmonised standards contain 9 pulse detection conditions.

# Report from the TG6 “Long Term vision for the UHF broadcasting band”

Mr. Jaime Afonso (TG6 chairman) presented Doc. ECC(14)021 containing the summary of the activities of the ECC Task Group 6 (TG6) - "Long term vision for the UHF broadcasting band".

Since the last ECC meeting in November (35th ECC), two TG6 meetings took place. The 2nd meeting of ECC TG6 was held in Lisboa (Portugal) from 3 to 5 December 2013, and was attended by 66 participants including 21 Administrations. The 3rd meeting of ECC TG6 was held in Copenhagen (Denmark) from 11 to 13 February 2014, and was attended by 67 participants including 21 Administrations.

## Working Document towards the Draft ECC Report

The main objective of TG6 is to conduct studies aiming at the development of a long term vision for the UHF broadcasting band (focusing on the band 470-694 MHz) in Europe, and to prepare a draft ECC Report. Based on the layout agreed in the 1st TG6 meeting, several contributions have been received dealing with the different sections of the Report.

The Working Document towards the ECC Report is contained in annex 1 of Doc. ECC(14)021. The TG6 Chairman presented this document, highlighting the main areas of work, namely on the chapters dealing with the “Background”, “Technology, service and network evolution” and “Long term vision issues”.

The TG6 chairman emphasized that the group has successfully achieved the target, as agreed in the 1st TG6, to finalize in its 3rd meeting the list of scenarios that will be further assessed, noting that some further amendments maybe still expected in the description of those scenarios as it was not possible to conclude the text in all of them.

Several comments and observations were made in the ECC with the regard to this draft working Document towards the ECC Report. In particular, during the discussion, the following was highlighted:

Concerning the Section dealing with “Economic Value of the Spectrum”, TG6 needs to keep in mind that the Report should not go into extensive and detailed discussion in the Report, i.e. a simple, balanced and concise text is expected.

Given the relatively high number of scenarios and the complexity involved in its description and assessment TG6 should endeavour to streamline the Chapter on “Long Term Vision issues” in order to simplify its reading while rationalizing the analysis of the different scenarios. One possibility that TG6 needs to consider is to introduce this Chapter by giving a high level description of those agreed scenarios, e.g. through an appropriate categorization of the scenarios, similar to what is currently contained in the “Analysis of the scenarios and combinations” section.

The meeting underlined the importance to keep focus at the development of a long term vision for the UHF band.

The meeting also underlined the importance of assessing cross border coordination issues namely when a combination of scenarios is involved. This matter is also part of flexibility that TG6 is requested to deal with according to its ToR.

It was also mentioned that that TG6 needs to consider the rights of use currently assigned in relation to the UHF band, namely its duration.

In the response to what might be the “Recommendations” (Chapter 7) from the draft Report, the TG6 chairman mentioned that the intent of this chapter is to reflect the results of the ECC report in way that Administrations could use those as a “toolbox”. One example on what might be envisaged to be reflected in the “Recommendations” Chapter deals with the indicators that are needed to monitor and check the assumptions on expected developments. In this respect a reflection was made that TG6 most likely will not arrive to a solution by identifying a single “golden” scenario that is envisaged in UHF band in a long term vision.

The ECC was also informed that, taking into account the amount of work involved until the completion of the Report and the time pressure to finalize the TG6 tasks, it was decided to progress the work until the next meeting by electronic means. In that regard, TG6 decided to create three groups in the ECO Forum to deal with specific issues of the draft ECC Report.

## Related EU activities

In the course of the last TG6 meetings the activities ongoing in EU, related to the TG6 tasks were noted. In particular, special attention was given to the mandate of the High Level Group (HLG) on the future use of the UHF band (470-790 MHz) and to the study on “challenges and opportunities of broadcast-broadband convergence and its impact on spectrum and network use”. In the 3rd TG6 meeting it was also noted that the RSPG work programme addressed therein the “long term strategy on the future use of the UHF band (470-790 MHz) in the EU”. Therefore the coordination of the activities sponsored by the Commission with the ones ongoing in CEPT, namely in TG6, was discussed in the ECC meeting. The guidance provided by the meeting can be summarized as follows:

Given the linkage of the ECC Report under development in TG6 and the activities recently launched in RSPG with a view to develop an Opinion on a “long-term strategy on the future use of the UHF band (470-790 MHz)” it was concluded that the TG6 output would be an important element to feed the work in RSPG.

It was found useful to have an exchange of information with the study team (Plum) with a view to have “cross-fertilization” as much as possible with the study addressing “challenges and opportunities of broadcast-broadband convergence and its impact on spectrum and network use”. With this regard it is noted that the three public workshops will be held and the first one will take place in Brussels on 27 March.

It was also pointed out that the ECC –EC consultation meeting could also provide an opportunity to discuss the issue in order to better synchronize the overall activities.

## Data and venue of the next meeting(s)

The next meetings of TG6 are scheduled as follows:

ECC TG6 - M4: 02 - 04 April 2014, ECO, Copenhagen,

ECC TG6 - M5: 13 -15 May 2014 [tbd]

# Progress report on response to EC Mandate 700 MHz

ECC noted the cooperation process in place with WG FM/PT FM 49, WG FM/PT 51 and WG SE/ SE 7, the progress made in the development of the response to the EC mandate 700 MHz leading by ECC PT1 and the relevant Correspondence Group activities (see ECC(14)06 \_Annex 4).

Concerning the DTT/mobile issue at 694 MHz, ECC noted that CEPT administrations decided to limit the preliminary range of values for OOB emission limit to be considered in the studies to [-40...-46] dBm/(8 MHz) (for 10 MHz IMT channel). It has been confirmed that the on-going follow-up studies in the CPG PTD correspondence group will primarily focus on the values in this range in order to assess their impacts on both the broadcasting service and the mobile service. However, values outside the range may still be proposed in contributions. Moreover, the ECC PT1 chairman highlighted the initiative to collect further information from the industry. In particular, in order to define the IMT user equipment OOBE limit required to protect the DTT reception and to assess its impact on the broadcasting and mobile sectors, having in mind the aim to achieve economies of scale, substantial additional information from the industry is required from broadcasting and mobile industry side. This information to be provided by 11 April 2014 will also be helpful in order to make a decision on the preferred 700 MHz band plan.

In this context, ECC invited administrations to be ready to contribute at the next ECC PT1 meeting on the identification of a preferred frequency arrangement between the two options already identified in the interim report to EC:

Option 1 (2x30 MHz Lower Duplexer APT band plan)

Option 2 (2 X 40 MHz)

It was highlighted that it is key to cope in the given timelines that ECC/PT1 will take a decision between those two options at its next meeting.

It was noted that sub-options (for option 1) are likely to remain undecided when the CEPT report will be sent into public consultation. One administration expressed concern about additional contributions received at the last ECC PT1 on possible new sub options of the 700 MHz band plan option 1, since this administration was of the opinion that this will complicate the process of finding a solution. It has been mentioned that these proposals will be considered at the next ECC PT1 meeting and any confirmed sub options will be refined during the public consultation process. Those sub options may offer some flexibility at national level according to the demand. The European Commission underlined the need to identify in the relevant sub-options possible spectrum to accommodate PMSE, in accordance with the EC mandate. In conclusion, ECC invited ECC PT1 to make effort to reduce the number of sub options to be considered in the final report while maintaining some possible national flexibility according to the demand.

The WG SE chairman confirmed that SE 7 will provide before the next ECC PT1 relevant BEM for PMSE usage (wireless audio applications) in the duplex gap of the 700 MHz band plans under consideration.

ECC confirmed the need to submit the draft CEPT report for approval for public consultation at its next plenary meeting and invited administrations and industry to contribute to the various correspondence group activities including on BEM (block edge mask) issues.

ECC discussed also the issue raised by a letter from Cable Europe to ECC PT1 chairman on the missing element from their view point in the interim report sent to EC. It has been recalled that the Interim Report covers the status of the work in response to the 3 tasks of the EC Mandate to be done in the first phase. ECC collaborates actively with the standardization bodies in support of their standardization work relating to interference mitigation. In the current draft of the response to the EC Mandate, ECC is addressing this matter by describing the evolution of the spectrum usage and new radio environment. This enables ETSI and CENELEC to adapt the appropriate EMC immunity requirement in a timely manner. A response to Cable Europe, copy to ETSI and CENELEC, to be sent by the ECC PT1 chairman has been developed based on proposal to improve the text of the interim report on the concern raised. (Annex 13/TEMP 10 Rev1). In addition, it was also confirmed that ECC will not conduct compatibility studies with cable networks.

# Decisions on ECC Decisions in progress, newly proposed or under review and other issues from the subordinate bodies

## Cross-border coordination for 700 MHz band

The ECO Director introduced Doc. ECC(14)14. This set out a proposal to establish an online tool for CEPT members’ use which would give improved visibility to the bi- and multi-lateral coordination processes. This may be used in the context of possible future reallocation of the 700 MHz band to the mobile service.

The proposal recommended that the tool would:

be provided by ECO, but not actively managed by it;

aim to be a relatively simple database covering only limited detail of the proposed broadcast GE06 plan changes which would be relevant to rearrangement of the band to enable use by mobile services;

be associated with an ECC Decision to use it, with;

that Decision being developed by an ECC subordinate body (WG, PT, CG,TG).

Mr Thomas further explained that the proposed approach responded to ECC guidance to achieve simplicity and relevance and had been influenced by the advice of the ECC Steering Group. The database would be passive, in other words it would not provide analysis in relation to equitable access or the criteria used in negotiation.

He believed that an ECC Decision was essential in order to ensure that administrations fill data into the database, without which its use would have no value. The recommendation for an ECC entity to develop a Decision was intended to achieve the consensus and commitment needed to make the tool viable. Amongst the challenges that group would face would be how to represent the multiple options which might be proposed by an administration within a complex negotiation process, when only one plan rearrangement would be expected as an outcome.

The delegates expressed differing levels of support for the proposal. The principle of transparency and information was supported. However, there were particular doubts expressed by several administrations about the desirability of an ECC Decision, about the added value of a new database compared with existing ones (EFIS, ITU), and the administrative burden it might bring. Switzerland stated that the proposal was focused too heavily on the needs of broadcast-centric countries. Several administrations pointed out the need to reconcile the objectives of simplicity of a database with the complexity of national circumstances. Portugal preferred to wait for decisions at a political level on the 700 MHz before committing to the proposal, and indicated that it is possible to gather reliable information without an ECC Decision, e.g. as for the questionnaire process used for ECO Report 03.

The meeting agreed that the matter should be further considered, namely to consider the requirements for collection of information in respect of:

data format specification;

the database which would be most appropriate;

the most useful formats of presentation.

The ECC tasked TG6 to address the issue; given its expertise on the subject above.TG6 should report to the ECC until its November meeting. This will enable ECC to decide about the next steps for database development, aiming to ensure more transparency concerning the information arising within the bi- and multi-lateral coordination processes.

## LSA for MFCN in 2 300 – 2 400 MHz

Mr Sergey Pastukh informed the meeting that WG FM, during its latest meeting, had adopted the draft ECC Decision on harmonised technical and regulatory conditions for the use of the band 2.3-2.4 GHz for MFCN. This ECC Decision differs from existing ECC Decisions on MFCN due to the shared use of the band and that is reflected in the draft.

Three annexes of the draft ECC Decision contain the harmonised frequency arrangement, the least restrictive technical conditions (BEM) and the guidance on the implementation of Licensed Shared Access. Regarding the BEM, the work was conducted in cooperation with ECC PT1.

WG FM also adopted the draft ECC Recommendation on cross-border coordination for MFCN in the 2.3-2.4 GHz band for public consultation.

This ECC Recommendation provides guidance to administrations on:

coordination between MFCN systems in border areas in the band 2.3-2.4 GHz,

coordination between MFCN systems and other systems in neighbouring countries in the band 2.3-2.4 GHz.

WG FM had also finally adopted and published ECC Report 205 on LSA (Licensed Shared Access) during its latest meeting.

This information was noted by the meeting. It was highlighted by France, that the possible impact on RLANs in the adjacent band 2400-2483.5 MHz is still an issue. The ETSI Liaison Officer supported that compatibility with RLANs above 2400 MHz should further be considered.

The representative from the European Commission, Mr Andreas Geiss, informed the meeting that the Commission had proposed a draft mandate for the advisory procedure during the next Radio Spectrum Committee meeting from 19-20 March 2014.

## Future regulations for DA2GC

Mr Sergey Pastukh informed the meeting about the ongoing activities regarding Broadband DA2GC. WG FM had adopted draft ECC Report 214 for public consultation during its latest meeting.

The WG SE chairman informed the meeting about the related technical studies. WG SE had finally adopted ECC Report 209 on “Compatibility/sharing studies related to Broadband Direct-Air-to-Ground Communications (DA2GC) in the frequency bands 1900-1920 MHz / 2010-2025 MHz and services/applications in the adjacent bands” and ECC Report 210 on “Compatibility/sharing studies related to Broadband Direct-Air-to-Ground Communications (DA2GC) in the frequency bands 5855-5875 MHz, 2400-2483.5 MHz and 3400-3600 MHz” during its latest meeting.

The outcome related to the unpaired 2 GHz bands was also taken into account in relation to the work on the Mandate of the European Commission, see agenda item 6.1 above.

In summary five different options as part of a future regulation on Broadband DA2GC had been considered by WG FM for the unpaired 2 GHz bands and for the 5.8 GHz band. They are based on three ETSI System Reference Documents and they take into account FDD as well as TDD solutions.

During the WG FM meeting, the possibilities for the most appropriate regulation for Broadband DA2GC had been discussed without reaching an agreement. In principle one regulation could be developed which cover all options, or different regulations could be developed, e.g. related to specific options and/or to specific bands.

WG FM had decided that the content for a Broadband DA2GC regulation should further be developed, by considering the five options. WG FM had not yet decided whether an ECC Decision (or 2 ECC Decisions) or an ECC Recommendation (or 2 ECC Recommendations) would be more suitable. This issue had also been discussed during the last SG meeting.

During the discussion some administrations preferred an ECC Decision (besides the question on the number of ECC Decisions) because of the pan-European character of this radio application which they consider as a significant harmonisation matter. Whereas other administrations preferred not to adopt a work item for the development of a regulation now, but to study this issue further, or to adopt a work item only for an ECC Recommendation.

It was also mentioned that S-band MSS systems (1980-2010 MHz / 2170-2200 MHz) had been brought into the discussion and in Europe such systems may include a Complementary Ground Component (CGC) which, from the system proponent point of view, might also be used to provide communication to aircraft in the future.

The WG SE chairman confirmed that a work item had been adopted for the relevant technical studies on this matter. However, the regulatory aspects need to be clarified on EU level (COCOM).

Some administrations had the view that the number of options should be reduced before a work item for the development of a regulation for Broadband DA2GC could be adopted. But it was also emphasised during the discussion that a reduction of the number of options could cause disadvantages for specific system proposals as provided by the three System Reference Documents.

By taking into account the competing system proposals, the meeting decided not to reduce the number of options.

The meeting decided that WG FM should further work on the regulation for Broadband DA2GC on the assumption that the harmonisation will be done by the means of an ECC Decision (or more than one ECC Decision), noting that this could be reconsidered later in the light of further rationale from administrations preferring an ECC Recommendation.

ECC further decided that, if more than one deliverable were developed for the regulation, the aim should be to adopt all deliverables in the same point of time.

## Report on the results of the workshop on spectrum occupancy measurements, held on 15 January 2014 in Mainz, Germany

The WG FM Chairman introduced the document ECC(14)008 Annex4 rev1 containing Report of the ECC Workshop on Measurement of Spectrum Occupancy held in January 2014 in Mainz, Germany. He also introduced assessment of Microsoft Spectrum Observatory possibilities for the spectrum occupancy measurement as in Annex 2 of the above mentioned document. He indicated that this assessment was developed by WG FM on request of ECC and is intended for publication on the ECO Web server.

On request of ECO it was discussed and agreed at which part of the ECO Web server the assessment should be published. The Russian Federation proposed to consider this document as an ECC Opinion or ECC View and publish it under deliverables section. After some discussion it was agreed that the text should be published as ECC Statement and for this reason some amendments to the ECC(14)008 Annex4 rev1 was agreed.

ECO proposed to add an additional paragraph with regard to the proposal on current and possible future approaches for spectrum occupancy measurements presented during the Workshop, including based on the use of mobile devices or on the deployment of spectrum monitoring vehicles with a view to reflect a positive effect from the usage of spectrum occupancy measurement results for spectrum management. This was agreed by the meeting and after some further editorial changes the document was approved for publication on the ECO Web server as in Annex 14/ TEMP 09 Rev1.

The meeting also agreed to address this issue in an ECC Newsletter.

## Report on the CPG-EC workshop on the WRC-15 preparation, held on 10 December in Brussels.

A workshop, jointly organised by the CEPT and EC, on the European preparations for the ITU WRC 15, took place the 10 December 13 in Brussels.

For further information please check the related [Summary of the Workshop](http://cept.org/files/1051/Workshops/EC-CEPT%20work%20shop/Summary%20of%20the%20Workshop_v9Jan14.docx)

## Unwanted emissions of mobile terminals in the SRD band 863-870 MHz

The WG SE chairman highlighted the findings in the study on “Adjacent band co-existence of SRDs in the band 863-870 MHz in light of the LTE usage below 862 MHz” (ECC Report 207). In this Report two fundamentally different sources of possible interference from LTE terminals into SRDs were identified: blocking effect and interference from unwanted emissions falling into the band of SRDs. They differ in a way that blocking can be mitigated by improving the victim’s characteristics, while mitigating unwanted in-band interference requires a reduction of the Out-of-Band (OoB) emissions of the interferer.

Considering blocking, it appears that the most severely impacted SRDs are those of Category 3 receivers. Using Category 2 receivers will help coexistence with adjacent band LTE use and this will improve one of the interference problems. The SRD industry has indicated to improve the coexistence by moving towards the performance seen in Category 2 receivers. With regard to the other interference problem, measurements of real equipment provided in this Report have shown that the OoB emissions of the LTE terminals are in the order of 15-20 dB below the mask specification in current standards. A reduction of the OoB emission limits in the standards would reduce the impact of the unwanted emissions in the SRD receivers.

The WG FM chairman reported that this issue was also discussed during the last meeting based on the Liaison Statement from WG SE, but not very much in detail because of lack of time.

This issue was also discussed by the ECC Steering Group. The ECC SG identified three options to transfer the results towards standardisation:

LS to ETSI inviting an update of 800 MHz LTE TS standard (new OoB emission limit above 863 MHz);

ECC Recommendation for OoB emission limits (similar to ERC Recommendation 74-01 on spurious emissions);

Change of ECC Decision (09)03 on MFCN at 800 MHz (OoB emission limits for TS above 863 MHz).

During the discussion on the most appropriate way forward, different views were provided.

Germany informed the meeting that this issue can be seen as similar to the GSM-R interference cases, but the difference is that for the impact on the GSM-R cab radios the base stations of the public mobile networks are the potential interferer and for the SRDs the Terminal Stations (TS) are the potential interferer.

Finally the meeting agreed to send a Liaison Statement to ETSI (Annex 15/TEMP 08) to inform ETSI TC ERM that there is a good opportunity for a significant improvement of ETSI harmonised standards on LTE to enable the coexistence of SRDs and LTE in adjacent bands taking into account the ongoing activity by the SRD industry to update the SRD harmonised standards to move towards the performance seen in Category 2 receivers. The ETSI Liaison Officer welcomed such a statement from the ECC.

## Mobile Communications on board Vessels

ECC noted that ECC PT1 is currently developing by correspondence a draft ECC report covering coexistence of MCV system (UMTS (2 GHz), LTE (1800 MHz) and LTE (2.6 GHz)) with land-based systems and additional information about unintended roaming.

Compared to the initial assumptions for future MCV systems made by ECC#32 (possible use of UMTS in the 2GHz band and LTE in 2.6GHz band by MCV), ECC PT1 informed ECC on an additional study on the possible use of LTE in the 1800 MHz band by MCV.

ECC confirmed this extension of the scope of activity and that the revision of ECC/DEC/(08)08 will be done based on the results of the studies on those possible new MCV systems.

## Result of questionnaire on coverage obligations

The ECC PT1 chairman introduced the results of the questionnaire on coverage obligations responding to a request from the last ECC and the proposed way forward. 29 administrations have replied to the questionnaire including a number of non EU countries (see doc ECC(14)019) indicating a significant interest in the subject. In a short time frame a summary of responses have been drafted by ECO and the proposed way forward submitted to ECC has been developed by correspondence. It has been mentioned that ECC PT1 members have been informed on this input to ECC on behalf of the ECC PT1 chairman. Nevertheless, no objection has been received on the proposed way forward.

During the discussion, one administration expressed severe concerns on the development of guidelines which could be used by administrations while planning their enforcement activities of relevant coverage obligations. Another suggested PT FM 22 as the responsible entity for the proposed task.

In conclusion, due to the large support expressed for the proposed way forward resulting from an initial activity of ECC PT1, ECC invited this PT:

To review the practices in the different CEPT countries and identify commonalities in the approaches as currently implemented.

To develop a set of possible measurable criteria which can be used, under a voluntary approach, by the national authorities in their enforcement of coverage obligations for future licences to use spectrum, bearing in mind that the definitions and enforcement of coverage obligations are to be considered a national matter.

To define guidelines which could be used by administrations while planning their enforcement activities of relevant coverage obligations

Moreover, ECC requested ECC PT1 to deliver to ECC in November 2014 its draft ECC report for public consultation and invited ECC PT1 to establish liaison statement with WG FM/WG FM 22, as appropriate, on measurement issues.

## Review of ECC Decisions

The WG FM Chairman introduced the List of ECC Decision for regular review process as in Document ECC(14)008 Annex 05. He indicated that this list also include proposal from the ECC PT1.

The WG FM Chairman indicated that in order to respond to the ETSI request with regard to the possible impact on ETSI standard changes to the ECC Decisions into the List of ECC Decision for regular review the new column “Impact on ETSI standards” was included. He asked the meeting to endorse this proposal. The proposal was agreed without further comments.

ECC noted that ECC PT1 decided to formally initiate the regular review (5 years period) on the following Decisions:

ECC/DEC/(02)06 on the designation of frequency band 2500-2690 MHz for UMTS/IMT-2000

 ECC/DEC/(05)05 on harmonised utilisation of spectrum for IMT-200/UMTS systems operating within the band 2500-2690 MHz

ECC/DEC/(09)03 on harmonised conditions for Mobile/Fixed Communications Networks (MFCN) operating in the band 790-862 MHz

ECC requested ECC PT1 to delay until the end of on-going process in 2 GHz unpaired band (in particular 1900-1920 MHz) the review of the ERC/DEC/(94)03 on the frequency band to be designated for the coordinated introduction of the Digital European Cordless Telecommunications system.

# Report from RSCOM, RSPG and TCAM

The EC Councillor introduced document ECC(14)23 which gives an overview of ongoing actions related to the EU.

RSPG:

RSPG improved its Work programme “2014 and beyond” following the result of the public consultation.

In particular, the RSPG agreed to develop:

An Opinion on “A long-term strategy on the future of the UHF band in EU” (Final Opinion February 2015)

Report(s) on “Efficient awards and use of spectrum in harmonised ECS bands” (Final Report November 2015). Cooperation with BEREC is foreseen with a common workshop.

An Opinion on “the update of RSPP”. This activity will be launched at the end of 2014.

A draft for an additional Work Item on “Wireless Backhaul including small cell issues” to be confirmed at the next plenary meeting.

RSC

The next RSC meeting is expected to vote on the revised Commission Decision on harmonisation of the 3.4-3.8 GHz band, in line with the work done by CEPT. Furthermore, a vote is expected on two new Mandates to CEPT related to the frequency bands 2.3 GHz and 1.5 GHz, respectively. The launch of these mandates takes into account the work conducted in the context of the inventory, including the RSPG Opinion on wireless broadband which recommends the Commission to consider these bands for the adoption of complementary measures. Other important discussion will take place in terms of guidance to CEPT regarding SRDs, draft elements for a decision on wireless microphones and the spectrum inventory.

# Report from ETSI

Michael Sharpe presented document 24, the ETSI report to ECC. He drew the attention of delegates to inter alia the following points:

The intention of ETSI to establish liaison with IEC TC69 on Wireless Power Transfer. ETSI to ensure that radio frequency aspects are adequately covered.

The status of draft Harmonised Standard EN 301 598 on TV White Spaces which has been submitted to National Vote, having resolved technical comments from a number of countries.

The schedule to update EN 300 328 in two stages: initially to update test methods to take into account additional requirements for Bluetooth, and to incorporate Industrial Automation requirements as a second step. TC ERM has created a new Task Group, TG41, to deal with other requirements for Wireless Industrial Automation, including at 5,8 GHz.

The revision on EN 302 858 for Automotive Short-Range radar in 24 GHz, noting the continuing demand from industry to use the band while it is still available.

The effect of the abrogation of the Automotive EMC Directive in favour of UNECE Regulation 10, which has more stringent spurious emissions requirements on radio transmitters which are factory fitted to road vehicles.

Work underway on TC Railway Telecommunications (RT) to improve receiver performance and enable co-existence with LTE.

Continuing correspondence with FM22 on field measurements to assess conformity with Block-Edge Mask restrictions. This had been discussed at the last ECC-ETSI Officials meeting, but there was still a need for the two committees to come to a shared understanding.

ETSI’s work in areas other than radio which may be of interest to Administrations, including Location-Enhanced Emergency Call, access to emergency services by people with special needs using ”Total Conversation”

The status of joint work with CENELEC on ”Digital Dividend” to respond to a Commission request to improve standards in the light of current & foreseen regulatory changes in the UHF TV broadcasting band. He reported that the Joint Working Group had been working as in informal capacity while waiting for CENELEC to ratify the decision to form the group. He emphasised that the participation by CEPT/ECC was very important to the work. He encouraged Administrations to take part using their ETSI membership, pending the receipt of a formal invitation after the group has been formally established.

The initiative to enhance co-operation with National Standards Organisations and encourage close links between NSOs, National Administrations and lical industry on a National level.

The status of the revision of the RTTE, EMC and Low-Voltage Directives.

# Work Programme of the ECC and its subordinated bodies

ECC PT1 Work program

The ECC PT1 chairman mentioned that contributions from Industry and from one administration have been received at the last meeting on possible proposal for the WRC-15 Agenda Item 10 work in support of CPG-PTA. In consequence, a preliminary work item has been added: “To support CPG-PTA in the development of a proposal for a WRC-18 Agenda Item on “Future IMT systems above 6 GHz”” in the ECC PT1 work program.

The UK, who initiated this work item, informed the meeting that in response to the liaison statement from CPG PTA to all ECC groups, and that the expertise on IMT sits with ECC PT1, they feel that ECC PT1 is the most suitable group to have the initial discussion on a possible future WRC agenda item. It has been mentioned that ECC PT1 already developed an initial working document to capture the various proposals for a new WRC-18 Agenda Item „Future IMT systems above 6 GHz“ and to describe next steps and open items. ECC PT1 expects to receive further contributions on the topic that will lead to a refinement of the proposal to CPG PTA. During the discussion, the frequency bands mentioned by research projects at the last RSPG have been recalled.

ECC confirmed that a work item on WRC-18 Agenda Item is already active in CPG PTA who is leading this activity in ECC. In consequence a dedicated work item is not needed and ECC PT1 is invited to respond to the CPG PTA on the basis of the liaison statement received.

# Matters related to European Communications Office, ECO

## Update on Communications (monthly bulletin, Twitter: progress and use policy)

The Office Director, Mark Thomas, introduced Doc. ECC (14)016 which provided a short summary update of the ECC’s publication of its Newsletters, its Monthly Bulletins, and its use of Twitter. He drew attention to delays with much of this work due to resource constraints and prioritisation. The Newsletter should now be published in March and the Monthly bulletins were getting back to greater regularity and timeliness.

## Research activity

The Doc. ECC (14)017 presented an update on research activity. The research activity page of the CEPT/ECC web-site gives a summary at <http://www.cept.org/ecc/topics/research-activity> . This interaction had reached a stage of maturity; ECO would still maintain its interest, but with a lower level of intensity.

## Website update: merger of e-mail reflectors and Group Membership, progress report

The ECO Director reported that a beta version of the system to merge group e-mail reflector and group membership was now implemented with TG6, and the experience gained was being used to upgrade to a final version for deployment. The system would now be tried with a group which already has an existing e-mail reflector; probably PT SE19. One of the more difficult issues to resolve was when e-mail reflector lists included generic ‘postbox’ addresses which did not correspond to an individual who could establish a profile on the website and membership of a relevant group. e.g ‘mail@nationalregulator.org’

# Remaining issues from the CPG, WG FM, WG SE, WG NaN, ECC PT1

WG FM

Mr Sergey Pastukh (RUS) inform the meeting that WG FM established a new Project Team on private/professional land mobile systems, especially for railway applications and seeking authorisation from ECC on participation of the chairman of the new Project Team (FM PT 54) in meetings at the European Commission related to GSM-R, especially at GFUG (“GSM-R Follow-up Group”, established by DG Move) meetings. The PT 54 Chairman will be appointed in May 2014. ECC agreed with the proposal of WG FM and authorised the future Chairman of FM PT 54 to participate in the relevant meetings on behalf of ECC, especially at GFUG meetings. Mr Sergey Pastukh (RUS) also reported that the WG FM CG on 5 GHz RLAN will be converted into a project team at the May 2014 meeting of WG FM.

Mr. Sergey Pastukh (RUS) informed the meeting that at the next WG FM meeting a new Vice-Chairman of WG FM will be appointed and invited administrations to nominate candidates on this position. He further indicated that during last WG FM meeting a number of ECC deliverables was approved for publication:

Revised ERC Recommendation 70-03 «Relating to the use of Short Range Devices (SRD)».

New ECC Report 189 «Future Spectrum Demand for Short Range Devices in the UHF Frequency Bands».

New ECC Recommendation (14)02 «Protection of fixed monitoring stations against interference from nearby or strong transmitters».

New ECC Report 192 «The current Status of DFS (Dynamic Frequency Selection) in the 5 GHz frequency range».

New ECC Report 204 « Spectrum use and future requirements for PMSE ».

New ECC Report 205 «Licensed Shared Access (LSA)».

As well as for public consultation:

Draft new ECC Decision «Harmonised technical and regulatory conditions for the use of the band 2300 - 2400 MHz for MFCN ».

Draft new ECC Decision 14(AA) on the withdrawal of ECC Decision (02)07.

Draft amended Annex 2 «List of searchable applications» of ECC/DEC/(01)03 for administrative consultation only.

Draft new ECC Recommendation « Cross-border coordination for MFCN and between MFCN and other systems in the frequency band 2300-2400 MHz».

Draft new ECC Report 214 « Broadband Direct-Air-to-Ground Communications (DA2GC)».

ECC noted this information.

Mr Sergey Pastukh (RUS) drew the attention of the ECC to the Questionnaire on the PMR/PAMR application in the 400 MHz frequencies which was approved by WG FM in February 2014 and indicated that this Questionnaire is the first one when electronic facilities developed by ECO will be used and experience from this will be assessed. He also reported about decision of WG FM taken with respect different issues as presented in Document ECC(14)008 highlighting in particular the following:

WG FM is planning to finalise ECC Report 44 on frequency management during major events at its next meeting in May 2014;

WG FM agreed on a new work item for the revision of ECC/REC/(05)01 with the aim to establish a harmonised file format for data collected by mobile data collection methods in support of future measurement campaigns and to facilitate exchange of data;

WG FM concluded that two candidates 400 MHz and 700 will be considered for a future ECC Decision. The military band 4940-4990 MHz was proposed for consideration for BB PPDR. WG FM agreed to wait for the results of national joint civil-military discussions before possibly starting discussions on this band;

WG FM plans in May 2014 meeting to consider the draft report on digital video links for PMSE to provide updated parameters for sharing and compatibility studies compared to ERC Recommendation 38;

WG FM agreed that the relevant national information on TV White Space Databases should be provided on the ECO web site and informed ETSI on this conclusion;

WG FM agreed to perform study in the frequency ranges 862-868 MHz for high power non-specific SRDs for fixed installations including smart meters with up to 500 mW e.r.p. and duty cycle restrictions, and in the frequency range 870-875.8 MHz to investigate whether the duty cycle restriction for the low power SRD applications could be lifted;

WG FM agreed to wait with consideration of regulatory approach for WIA until study results between WIA and WAS/RLAN in 5 GHz become available;

 WG FM considered proposal to use MSS CGC in the bands 1980-1995 MHz and 2170-2185 MHz for aero broadband passenger connectivity. WG FM noted that it is necessary to clarify the possibility of usage of this Aero-CGC under the existing ECC Decision (06)09 and decided to monitor the discussion on this issue at EU level.

This was noted by the meeting.

It was questioned why WG FM asked WG SE to investigate additional opportunities in the frequency range 862-868 MHz for high power non-specific SRDs for fixed installations including smart meters with up to 500 mW e.r.p. and duty cycle restrictions. It was clarified that this proposal should be seen as an alternative and as complementary for the new entry in 870-875.6 MHz in Annex 2 of ERC/REC 70-03 which cannot be implemented by some administrations. However, this should not be understood as a presumption of any future decision.

Denmark asked for clarification with regard to the letter from FM PT 49 Chairman with regard to the necessity for administrations to be prepared at the next meeting of this Project Team to choose one of the bands (400 MHz or 700 MHz) for the use by BB PPDR. Mr. Sergey Pastukh (RUS) clarified that FM PT49 was not tasked to choose the band at the May 2014 meeting of WG FM and that at WG FM level stable ECC Report B on PPDR is expected only in early 2015.

A number of administrations indicated that they prefer to wait for the result of the studies before taking a decision about a frequency band for BB PPDR. After some discussion ECC agreed that at this stage selection of one frequency range for BB PPRD would be premature and tasked WG FM to consider the issue based on this assumption.

Statement from UK

"The UK would also like to note that in addition to exploring the issues related to possible BBPPDR use in the 400MHz and 700MHz bands, WGFM also agreed at its last meeting for the need to continue the discussions reflecting possible usage of commercial IMT bands by PPDR agencies for BBPPDR services in the draft ECC Report B."

Mr Thomas Weilacher (D) informed the meeting because of being appointed as Chairman of WG FM he would not be able to chair FM PT48 after the WG FM meeting in May and invited administrations to consider a candidate on this post. He also informed the meeting that the activity of FM PT48 could most likely be finalised by the end of this year.

The European Commission intends to issue two new Mandates to CEPT, related to wireless broadband electronic communications services in the 1.5 GHz and 2.3 GHz bands, after discussion at the next Radio Spectrum Committee meeting from 19-20 March 2014. According to the draft Mandates, first deliverables from the ECC on both Mandates are expected for the Radio Spectrum Committee meeting in July 2014, which requires that ECC will be in the position to adopt these deliverables during its meeting in June.

ECC authorised WG FM to start with the development of these deliverables in case the final Mandates will provide the same time schedule as the current drafts for these CEPT deliverables.

It is expected that WG FM can prepare the relevant draft deliverables for adoption at the ECC meeting in June because the substantial material is already available.

Finally Mr Sergey Pastukh invited the administrations to consider hosting the planned two WG FM meetings in the year 2015.

WG SE

The Chairman of WG SE briefly reported about the remaining issues from WG SE contained in ECC(14)005. He highlighted the following points:

* WG SE approved finally one Recommendation and six ECC Reports:

 ECC Recommendation (14)01: Radio frequency channel arrangements for fixed service systems operating in the band 92-95 GHz

ECC Report 211: Technical assessment of the possible use of asymmetric point-to-point links

ECC Report 206: Compatibility studies in the band 5725-5875 MHz between SRD equipment for wireless industrial applications and other systems

ECC Report 207: Adjacent band co-existence of SRDs in the band 863-870 MHz in light of the LTE usage below 862 MHz

ECC Report 208: Impact of RFID devices on radio services in the band 13.56 MHz

ECC Report 209: Compatibility/sharing studies related to Broadband Direct-Air-to-Ground Communications (DA2GC) in the frequency bands 1900 – 1920 MHz / 2010 – 2025 MHz and services/applications in the adjacent bands

ECC Report 210: Compatibility/sharing studies related to Broadband Direct-Air-to-Ground Communications (DA2GC) in the frequency bands 5855-5875 MHz, 2400-2483.5 MHz and 3400 – 3600 MHz …

* WG SE approved for Public Consultation (till 7th of April 2014) one Draft Revision of an ECC Recommendation and one new Draft ECC Report:

Draft Revision of ECC/REC(01)04: Recommended guidelines for the accommodation and assignment of multimedia wireless systems (MWS) and point-to-point (P-P) fixed wireless systems in the frequency band 40.5 –
43.5 GHz

Draft ECC Report 215: Assessment of the technical feasibility of introducing very narrow channel spacing in some existing plans, in guard bands and centre gaps of FWS channel arrangement at 6 GHz and 10 GHz

* The Leeheim monitoring station is tasked by SAT MoU to perform regular measurements of the Iridium unwanted emissions in the radio astronomy band 1610.6 – 1613.8 MHz. First tests of new measurement equipment have shown that the sensitivity of a new spectrometer is better compared to spectrometer supplied by CRAF during the previous campaign. The measurements carried out so far by Leeheim monitoring station confirmed earlier measurements results conducted in 2011 and documented in ECC Report 171. This gives an indication that operational parameters of Iridium have not been modified since then.
* WG SE has adopted after considerable discussion a new work item on “compatibility studies for the use of aeronautical CGC systems operating in the bands 1980 - 2010 MHz and 2170 - 2200 MHz. This new work item was proposed by INMARSAT to address compatibility issues for a new planned MSS systems consisting of hybrid architecture composed of a satellite network and a Complementary Ground Component (CGC). SE40 has recently developed the ECC Report 197 dealing with compatibility studies between terrestrial Mobile Satellite Service (MSS) user terminals. However this Report did not consider potential use of aeronautical CGC systems, which would introduce new interference scenarios.
* WG SE has also adopted a new work item on narrow channel spacing in the bands 5.925-6.425 GHz and 6.425-7.125 GHz used by the Fixed Service as follow-on activity (Draft ECC Report 215). SE19 has considered the subsequent revision of the corresponding Recommendation, ERC/REC 14-01 and ERC/REC 14-02, or production of a new specific recommendation to include narrow channels (2 MHz, 1 MHz, 0.5 MHz, 0.25 MHz, 0.025 MHz) in the L6 (5925-6425 MHz) and U6 (6425 - 7125 MHz) bands in the guard band and centre gap.
* It is to be noted that there is a relation with the on-going work on the assessment of the feasibility of joint use of the adjacent bands 5.925-6.425 GHz and 6.425-7.125 GHz for P-P links on a long term basis.
* The European Parliament has approved the proposed RED at 13th March 2014. It is expected that the Council will adopt it at their next scheduled meeting.
* With regard to spectrum engineering the main outcome is that “Radio equipment is defined as an electrical or electronic product, which intentionally emits and/or receives radio waves for the purpose of radio communication and/or radio determination, or an electrical or electronic product which must be completed with an accessory, such as antenna, so as to intentionally emit and/or receive radio waves for the purpose of radio communication and/or radio determination.” Further it is stated, that all radio receivers including receive-only equipment are covered and the former exemption for any type of broadcasting receivers as covered by the R&TTE Directive is completely deleted.
* WG SE noted that a new version of SEAMCAT 4.1.0 is published. The current version is 4.1.0 [(http://www.seamcat.org](http://www.seamcat.org/)/).
* WG SE was informed that the budget for 2014 was approved by the ECO council. SEAMCAT Technical Group (STG) developed a list of priority in the work of the 2014 budget. WG SE endorsed the items identified for 2014 by STG.
* WG SE has appointed a new vice chairman Mr Krunoslav Bejuk (HAKOM, Croatia), by acclamation.
* WG SE considered that the tasks mandated to SE44 were completed, and no requests were received for further studies. Two comprehensive ECC Reports (209 and 210) were developed. WG SE will provide support with regard to the technical aspects about DA2GC, if required by WGFM. The WG SE chairman thanked the SE44 chairman, Mr Stefan Bach, and all participants of SE44 for their excellent work. SE44 was formally closed.
* WG SE has set up a new Forum Group Wind Turbines dealing with interference of wind turbines to other radio services such as fixed service, radar or broadcasting, etc.. Swedish studies have shown scattering effects from wind turbines may have a significant effect on the available fading margin for a fixed radio link. The number of wind turbines is increasing rapidly and interference to other radio services may be also increasing, not only to fixed service, but also to radar or broadcasting, etc.. WG SE agreed that technical information is required and would be very helpful for Administration.

WG SE agreed to create a work item directly under WG SE, the output will be an ECO Report.

ECC PT1

Cross border coordination

ECC PT1 is studying the possibility to develop a new generic recommendation for new frequency bands. A correspondence group is currently active on that issue. Administrations are invited to contribute.

3.4-3.8 GHz TDD networks synchronisation

ECC PT1 finalised a draft ECC Report on TDD network synchronisation. It is focusing on practical technical solutions of TDD networks synchronisation to be implemented by adjacent TDD network operators. This draft ECC Report has been approved by ECC PT1 and will be submitted to public consultation

ECO Report 03 “mobile licensing in CEPT countries”

ECC PT1 decided that it was too early to move to the new procedure of generating the content of ECO Report 03 from EFIS data base at this point in time. In consequence, ECC PT1 agreed to maintain the current practices. The regular annual update through the ECO as it has been done in past years has been launched. Administrations were invited to respond to ECO before the 13rd of March in order to update the ECO report 03. ECC PT1 chairman invited administrations to contribute to the update if this is not already done.

ECC PT1 developed a guidance document in order to increase the consistency of national entries for the “mobile bands” in the EFIS database for the purpose of generation of ECO Report 03 on the licensing of “mobile bands” in CEPT from the “Right of use” module of EFIS. More consistency of national entries for the “mobile bands” is a prerequisite to generate the content of ECO Report 03 from EFIS. Administrations are invited to respond to take into account this guidance document when updating EFIS. This information has been shared with WG FM.

Correspondence group (CG) activities

Details on CG activities between ECC PT1 plenary meetings are available on the ECC PT1 web site.

CPG

The next CPG will be held from the 25th to 28th March 2014 in Riga, Latvia.

WG NaN

The next WG NaN will be held the 9th and 10th April 2014 in Lisbon, Portugal.

# Contacts and co-operation with outside bodies

## MoU CENELEC-ECC (progress report)

The ECC Chairman presented the new draft MoU with CENELEC (Doc. ECC (14)012. He explained that, following the ECC meeting in Berlin, he contacted the CENELEC secretariat for expressing the request from ECC to have an MoU rather than a “cooperation agreement” and not to associate CEN to the MoU. ECO also proposed a redrafting of the article 4 on copyright after having consulted a lawyer. The document was subsequently reviewed and improved by the ECC steering group.

It was clarified that the obligations of ECC and CENELEC are not symmetrical since EMC immunity requirement specified by CENELEC have to adapt to the ECC radio spectrum measures and not vice-versa. It was noted that the text still require some editorial improvement.

The meeting entitled the ECC Chairman to enter into negotiation with CENELEC to sign such an MoU.

In info3Rev1, Switzerland raised an issue with regard to the PLT standard part 3 which will be developed by CENELEC. Concerning this matter, ECC decided that WG SE will coordinate CEPT position with the view to ensure that radio services remains adequately protected in particular in the band from 30 MHz to 87.5 MHz.

## Cooperation with ADCO

The ECC chairman explained that, following the liaison statement sent by ECC at its Berlin meeting, ADCO responded positively to the ECC proposal, and will attend the next ECC meeting, in June 2014, to make a presentation of their activity.

## LoU ASECAP-ECC

The ECC Chairman explained the request from ASECAP (European Association of Operators of Toll Road Infrastructures) to sign an LoU with ECC, taking into account their involvement in the 5.8 GHz discussion and presented the draft LoU (Doc. ECC (14)011).

The meeting entitled the ECC Chairman to enter into negotiation with ASECAP to sign such a LoU.

# Schedule of Meetings

The ECC steering group at its last meeting has synchronised the agenda for the various sub group of ECC for the year 2015.

# Date and Place of next meetings

The following meetings of the ECC are scheduled:

|  |  |
| --- | --- |
| Date: | Country: |
| 24th – 27th June 2014 | Denmark, Aarhus |
| 25th – 28th November 2014 | Switzerland, Montreux |
| 10th -13th March 2015 | Hungary |
| 30th June - 03rd July 2015 | Finland |
| March 2016 | TBD |
| June 2016 | [Sweden] |
| November 2016 | TBD |

# Any other business

ECC Chairman also indicated that following the CEPT-RCC meeting on WRC-15 preparation, he was requested to send a letter to the RCC Chairman for establishing cooperation similar to what was successfully achieved at WRC-12. The element of this letter will be further discussed at the next CPG meeting.

The ECO Director informed the meeting that a further workshop was organized for 4th June in Copenhagen, at the ECO new premises, aimed as an introduction for newcomers to the ECC work.

The ECC technical secretary requested the authorization of the plenary to editorially modify the Appendix 1 of the Working methods in order to update the names and coordinates of the various chairman of WORKING GROUPS, PROJECT TEAMS and TASK GROUPS of ECC.

The plenary agreed to task the technical secretary to do so (see Annex 16).

# Approval of the minutes of the 36th ECC meeting

The ECC approved the minutes of the 36th ECC meeting as given in Document ECC(14)025.

# Closure of the meeting

The Chairman expressed his gratitude to the National Authority for Management and Regulation in Communications of Romania (ANCOM) for hosting the meeting in the very nice city of Cluj-Napoca and for having organized a memorable social event.

He thanked also for the kind words of welcome, Mr Catalin Marinescu, President of ANCOM.

He conveyed special thanks to Mr Bogdan Iana, Ms Mihaela Tanos for the perfect organisation as well as Ms Iulia Nicoleta Iancu, Ms Flavia Petrus and Mr Sorinel Calinciuc. He also appreciated the excellent support from all the people behind the scene for their efforts before and during the event.

He thanked again Geir Sundal for all the work done as vice chairman during 6 years, for his support, particularly in difficult situation, and for his sense of humour in all circumstances. He wished that Geir would continue supporting ECC as Chairman of the ECO council and by his wise advice during the next ECC meetings.

He also expressed his appreciation to his second Vice-Chairmen Mr Jaime Afonso for his support and congratulates one more time Mr Sergey Pastukh, new ECC vice chairman and Mr Thomas Weilacher, new WGFM chairman. He stressed the key role of the Secretary, Mr Christian Rissone, in ensuring the success of the meeting.

At the end he thanked the ECC participants for their contributions and their willingness to compromise. With that he wished all participants a safe trip home.

The Chairman then closed the 36th ECC meeting.