



ORGANIZACION DE LOS ESTADOS AMERICANOS
ORGANIZATION OF AMERICAN STATES

Comisión Interamericana de Telecomunicaciones
Inter-American Telecommunication Commission

**XXII MEETING OF PERMANENT
CONSULTATIVE COMMITTEE II:
RADIOCOMMUNICATIONS
INCLUDING BROADCASTING
November 4 to 8, 2013
Managua, Nicaragua**

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FINAL REPORT

(Item on the Agenda: 7)

(Document submitted by the Drafting Group)

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FINAL REPORT

XXII MEETING OF PERMANENT CONSULTATIVE COMMITTEE II: RADIOCOMMUNICATIONS INCLUDING BROADCASTING (PCC.II)

The XXII Meeting of Permanent Consultative Committee II: Radiocommunications including Broadcasting was held in Managua, Nicaragua, November 4 to 8, 2013.

I. AGENDA¹

1. Approval of the agenda and calendar.
2. Appointment of the Drafting Group for the Final Report.
3. Meeting of the Chairs of the Working Groups on:
 - 3.1 Working Group on Preparation for Regional and World Radiocommunication Conferences.
 - 3.2 Working Group on Terrestrial Fixed and Mobile Radiocommunication Services.
 - 3.2.1. Sub-Working Group on Spectrum Management.
 - 3.3 Working Group on Satellite Systems to Provide Fixed and Mobile Services.
 - 3.4 Working Group on Broadcasting.
 - 3.5 Rapporteur Group on the Technical and Regulatory Aspects Related to the Effects of Electromagnetic Non-ionizing Emissions.
4. Strategic Plan of PCC.II.
5. Agenda, Venue and Date of the XXIII Meeting of PCC.II.
6. Other matters.
7. Approval of the Final Report of the XXII Meeting.

¹ CCP.II-RADIO/doc. 3326/13

II. MEETING OFFICERS

Alternate Chair of PCC.II:
Executive Secretary of CITEL:

Mr. Franklin Merchán Calderon (Colombia)
Mr. Clovis Baptista (OAS)

Drafting Group:

Chair
Members

Mr. José Pablo de la Roca R. (Nicaragua)
Ms. Janet Hernández (United States of America)
Mr. Louis LePage (Canada)
Mr. Rafael Sánchez (Dominican Republic)
Mr. Alexander Tejada (El Salvador)
Mr. Jorge Barrera (Colombia)
Mr. Roger Rodríguez Bolaños (Nicaragua)
Mr. Eduardo Neón Rodríguez (Nicaragua)
Ms. Gabriela González (Nicaragua)

III. RESOLUTIONS

PCC.II/RES. 93 (XXII-13)²

TERMINATION OF THE RAPPORTEURSHIP ON TECHNICAL AND REGULATORY ASPECTS RELATED TO THE EFFECTS OF ELECTROMAGNETIC NON-IONIZING EMISSIONS

The XXII Meeting of Permanent Consultative Committee II: Radiocommunications including Broadcasting (PCC.II),

HAVING SEEN:

- a) The Report on the work of the Rapporteurship on the Technical and Regulatory Aspects Related to the Effects of Electromagnetic Non-Ionizing Emissions;
- b) That the above mentioned Report lists the main tasks performed by this Rapporteurship during the ten years of work;
- c) That said Report includes the tasks undertaken by the Rapporteurship that have not been completed,

CONSIDERING:

- a) That there are still difficulties in the Region regarding the deployment of wireless systems and associated infrastructures;
- b) That for the purposes of assisting the work of the various Administrations of the Region, it is necessary the continuation of the pending work identified in the Report,

TAKING INTO ACCOUNT:

- a) That this Rapporteurship has largely developed the problems related to Non Ionizing Radiations (NIR) and has proposed concrete solutions that are being implemented in several countries of the Region;
- b) That the VI Regular Meeting of the CITEL Assembly will define the structure and the topics to be addressed in the new period;
- c) That within this framework, it is suitable to terminate the functions of this Rapporteurship and proceed to close it accordingly.
- d) That the work pending resolution is under way and may be completed by the Secretariat of CITEL;
- e) That, for the completion of such work, the contribution of those who worked in its conduct , such as the Rapporteur and the Chairman of the PCC.II, may be necessary,

² CCP.II-RADIO/doc. 3371/13

RESOLVES:

1. To declare the completion of the work of this Rapporteurship.
2. To perform a final compilation of the work executed.
3. To create a space for Non Ionizing Radiations (NIR) in CITEL's website, which should include the aforementioned compilation, as well as links to the existing National Systems for Continuous Monitoring of NIR.
4. To negotiate with the Inter-American Development Bank (IDB) to obtain financing for the development of these systems for the countries that need them.
5. To designate as contact points for NIR issues, for these works, and for possible future requirements related to the work of the Rapporteurship on the Technical and Regulatory Aspects Related to the Effects of Electromagnetic Non-Ionizing Emissions, the current Rapporteur and the current PCC.II Chairman or whoever he/she designates.

INSTRUCTS THE EXECUTIVE SECRETARY OF CITEL:

1. To proceed with the tasks outlined in *resolves* 2, 3 and 4 with the cooperation of the persons mentioned in *resolves* 5.
2. To use, if necessary, the remaining funds of the Rapporteurship on Technical and Regulatory Aspects Related to the Effects of Non-Ionizing Electromagnetic Emissions to carry out the tasks outlined in *resolves* 2, 3 and 4.

PCC.II/RES. 94 (XXII-13)³

START OF WORK TO DRAFT A DOCUMENT OF GUIDELINES TO FACILITATE COORDINATION OF SPECTRUM USE BY TERRESTRIAL FIXED AND MOBILE SERVICES IN COORDINATION AREAS

The XXII Meeting of Permanent Consultative Committee II: Radiocommunications including Broadcasting (PCC.II),

RECOGNIZING:

- a) That several OAS/CITEL member countries share regions with commercial and populated areas that have high strategic importance for the economy and wellbeing of their inhabitants;
- b) That applications of radiocommunications in different frequency bands and for different services are used in these wide areas;

³ CCP.II-RADIO/doc. 3359/13 rev.3

c) The provisions of the International Telecommunication Union (ITU) Recommendation ITU-R SM.1049, “A method of spectrum management to be used for aiding frequency assignment for terrestrial services in border areas”;

d) That administrations should review and fine-tune actions aimed at ensuring spectrum availability and protection against harmful interference from communications systems operating throughout their territories, including areas that require coordination with other administrations,

CONSIDERING:

a) That the establishment of minimal reference guidelines for the functioning of radiocommunication systems in areas that require coordination with other administrations, in line with those specified by the ITU’s Radio Regulations, would constitute a valuable support tool for the administrations in spectrum planning;

b) That, as a result of the review of current agreements in the region and experience in their enforcement, recommendations, directives, and guidelines could emerge for the use of certain frequency bands, which could facilitate the coordination and solution of eventual problems of interference with other administrations that could arise in said coordination areas;

c) That it is necessary to pledge and join efforts to gather information and coordinate studies amongst Member Estates and Associate Members of CITEL, aimed at improving and fine-tuning frequency coordination and allocation processes in the coordination areas between administrations,

RESOLVES:

1. To start carrying out works aimed at compiling all current Coordination Agreements that describe the conditions of usage and coordination of the different frequency bands for various services.

2. To encourage the administrations to actively participate in sending agreements currently in force they had signed for their subsequent examination and review of the results that would make it possible to fine-tune and update them, to draft additional documents, and to set the basis for future coordination agreements.

3. To instruct the Sub-Working Group on Spectrum Management to start work aimed at drafting a document of guidelines to facilitate coordination of spectrum use for terrestrial fixed and mobile services in coordination areas.

4. To request the secretariat of CITEL to distribute this Resolution amongst the administrations in order to inform them about the beginning of the tasks previously described.

5. To request the Secretariat of CITEL the creation of an exchange of information setting related to the works mentioned within the Collaborative Space.

TECHNICAL NOTEBOOK ON “SPECTRUM MANAGEMENT MATERIAL”

The XXII Meeting of Permanent Consultative Committee II: Radiocommunications including Broadcasting (PCC.II),

RECOGNIZING:

- a) That the radio spectrum is a strategic resource for security, productivity, and the deployment of information and communication technologies for all economic sectors;
- b) That the entities tasked with spectrum management and planning must continually propose spectrum management alternatives that promote optimal use of this resource;
- c) That in accordance with the principle of the sovereignty of states, and depending on specific needs, technological evolution, and domestic policies, administrations develop guidelines to govern how the spectrum is managed;
- d) That the exchange of information and experiences among administrations of different countries in a collaborative spirit is an invaluable source of knowledge that serves as reference for administrations in decision-making processes,

CONSIDERING:

That the International Telecommunication Union (ITU) Radiocommunication Assembly, in Recommendation ITU-R. SM 1047 “National Spectrum Management” considers that material is needed to assist spectrum managers in the development and implementation of effective national spectrum management systems and strategies,

BEARING IN MIND:

- a) That it would be beneficial for the Member States and Associate Members to have information from different administrations regarding spectrum management policies and initiatives to enable them to compare views and problem-solving methods and to identify best practices and new regional trends in those activities;
- b) That since PCC.II has defined the concept of the Technical Notebook, it has been deemed advantageous to the region to use it as a platform for compiling and updating information in this area,

RESOLVES:

1. To approve the creation of a Technical Notebook on “Spectrum Management Material” to provide updated and in-depth information on experiences being implemented by Member States in spectrum management-related areas. Said notebook will include information on border area Coordination Agreements of member administrations, spectrum management policy documents, academic papers, articles, and publications by international organizations.

⁴ CCP.II-RADIO/doc. 3360/13 rev.2

2. To designate Mr. Camilo Zamora of the administration of Colombia as Coordinator of said Technical Notebook, to be tasked with compiling and updating the information contributed by the Member States and Associate Members.
3. To request the Secretariat of CITEL to distribute this resolution to the administrations to continue the information-compilation process.
4. To request the Member States to establish a point of contact for information exchange and the channeling of surveys and consultations on the Table of Contents of the Technical Notebook, regarding support material, new trends, and best practices in spectrum management, in order to facilitate more efficient channeling of information.

PCC.II/RES.96 (XXII-13)⁵

**RAPPORTEURSHIP ON THE TECHNICAL AND REGULATORY ASPECTS RELATED TO
THE EFFECTS OF ELECTROMAGNETIC NON-IONIZING EMISSIONS**

The XXII Meeting of Permanent Consultative Committee II: Radiocommunications including Broadcasting (PCC.II),

HAVING SEEN:

- a) Resolution 176 (Guadalajara, 2010) "Human exposure to and measurement of electromagnetic fields" of the Plenipotentiary Conference of the ITU, which took place in Guadalajara in 2010;
- b) The Report of the work performed by the Rapporteurship on the Technical and Regulatory Aspects Related to the Effects of Electromagnetic Non-Ionizing Emissions;
- c) That the above mentioned Report lists the main tasks performed by this Rapporteurship during the ten years of operation,

CONSIDERING:

- a) That difficulties still continue in the Region as regards to the deployment of wireless systems and their associated infrastructure;
- b) That the above mentioned Resolution 176 (Guadalajara, 2010) of said Conference encourages "... Member States in the various regions to cooperate in sharing expertise and resources, and identify a focal point or regional cooperation mechanism, including if required a regional center so as to assist all Member States in the Region in measuring and training";
- c) That having completed the work of the Rapporteurship it is necessary, in order to support the work of the various authorities in the Region, that some follow-up actions be taken,

⁵ CCP.II-RADIO/doc. 3420/13 rev.1

TAKING INTO ACCOUNT:

- a) That said Rapporteurship has widely developed the issues related to non-ionizing emissions (NIR) having proposed concrete solutions that are being implemented in several countries in the Region;
- b) That the work of this Rapporteurship has been presented and adopted by the International Telecommunication Union (ITU);
- c) That this Committee, with the termination of the work of this Rapporteurship, has designated focal points on the subject to continue dealing with the same when necessary;
- d) That the ITU, by virtue of a proposal of the Americas Region, in the last World Telecommunication Standardization Assembly, Dubai 2012, created the ITU-T Study Group 5 Regional Group for the Americas (SG5 RG-AMR);
- e) That this Study Group deals with the standardization of the issues related to the protection against the electromagnetic environment through its K series recommendations;
- f) That the coordinators of the SG5 RG-AMR were proposed by the Region itself;
- g) That resources exist within the Telecommunication Development Sector (ITU-D) to support development initiatives related to telecommunications and radiocommunications in all Regions,

RESOLVES:

1. To propose to the ITU that the current coordinators of the SG5 RG-AMR be designated as Regional Coordinators in the framework of Resolution 176 (Guadalajara, 2010), to facilitate collaboration on a regional basis on issues related to protection against the electromagnetic environment.
2. Consistent with Resolution 176 (Guadalajara 2010), to request the ITU-D to diligently consider funding initiatives related to the protection against the electromagnetic environment in Region 2, including for the creation of an ITU Regional Center for measurement and training.
3. That funding resulting from *resolves 2* above for the creation of the ITU Regional Center for Measurement and Training be provided through the ITU's Regional Office for the Americas.

INSTRUCTS:

1. The Executive Secretary of CITELE to communicate this Resolution to the ITU.
2. The contact points designated to address non-ionizing emissions (NIR) issues at this meeting, to initiate actions together with the Secretariat of CITELE for the purpose of creating the Regional Center pointed out in *resolves 2*.

PCC.II/RES. 97 (XXII-13)⁶

AGENDA, VENUE AND DATE FOR THE XXIII PCC.II MEETING

The XXII Meeting of Permanent Consultative Committee II: Radiocommunications including Broadcasting (PCC.II),

RESOLVES:

1. To hold the XXIII Meeting of PCC.II in Colombia, from 17 to 21 March 2014.
2. To approve the draft agenda for the XXIII Meeting, that is attached as an Annex.

ANNEX TO RESOLUTION PCC.II/RES. 97 (XXII-13)

1. Approval of the agenda and calendar.
2. Appointment of the Drafting Group for the Final Report.
3. Meeting of the Chairs of the Working Groups on:
 - 3.1 Working Group on Preparation for Regional and World Radiocommunication Conferences.
 - 3.2 Working Group on Terrestrial Fixed and Mobile Radiocommunication Services.
 - 3.2.1. Sub-working group on Spectrum Management
 - 3.3 Working Group on Satellite Systems to Provide Fixed and Mobile Services.
 - 3.4 Working Group on Broadcasting.
4. Strategic Plan of PCC.II.
5. Agenda, Venue and Date of the XXIV Meeting of PCC.II.
6. Other matters.
7. Approval of the Final Report of the XXIII Meeting.

⁶ CCP.II-RADIO/doc. 3422/13

DRAFT AGENDAS OF WORKING GROUPS

3.1 Working Group on the preparation of CITELE for Regional and World Radiocommunication Conferences

1. Presentation and approval of the agenda.
2. Working methods.
3. Preparation for the Radiocommunications Assembly (RA-15) and the World Radiocommunication Conference (WRC-15).
4. Other matters.

3.2 Working Group on Terrestrial Fixed and Mobile Radiocommunication Services

1. Approval of the agenda.
2. Draft new Recommendations:
 - 2.1 Broadband Power Line Communications.
 - 2.2 White Space in broadcasting bands.
3. Update of PCC.II Recommendations.
 - 3.1 Recommendation on very low power devices.
4. Issues under discussion:
 - 4.1 IMT implementation in Region 2.
 - 4.2 Available frequencies for emergency situations.
 - 4.3 Implementation of digital divide in the 700 MHz band.
5. New issues:
 - 5.1 Broadband Wireless Access (BWA), including convergence between Fixed and Mobile Services.
 - 5.2 Allocation to Radiolocation Services.
 - 5.3 Analysis, revision and discussion of issues that appear as a result of technological development (UWB, cognitive radio, etc).
6. Work Plan.
7. Other issues.
 - 7.1 Introduction of new systems in the Aeronautical Mobile Service (R) – AMS(R).

3.3 Working Group on Satellite Systems to Provide Fixed and Mobile Services

1. Approval of the agenda.
2. Implementation of regulations that facilitate deployment of satellite services.
3. Harmful interference from unauthorized transmissions in satellite networks.
4. C and Ku band use, operation and applications.
5. Existing databases on satellite systems.
6. Operation of satellite services with no authorization.
7. Work Plan.
8. Other business.

3.4 Working Group on Broadcasting

1. Opening remarks.
2. Approval of the agenda.
3. Consideration of the inputs documents on:
 - 3.1 Digital Television.
 - 3.2 Digital Sound Broadcasting.
 - 3.3 Spectrum Usage and New Technologies for Broadcasting.
 - 3.4 Rio Janeiro 1981 Agreement.
4. Review of the Work Plan.
5. Other business.

IV. RECOMMENDATIONS

PCC.II/REC. 40 (XXII-13)⁷

TECHNICAL AND REGULATORY ASPECTS RELATED TO THE EFFECTS OF ELECTROMAGNETIC NON-IONIZING EMISSIONS

The XXII Meeting of Permanent Consultative Committee II: Radiocommunications including Broadcasting (PCC.II),

HAVING SEEN:

- a) That the constant evolution of technologies used in wireless communications has imperatively increased the need for the installation of antennas and associated elements, especially in densely populated areas, related to traffic increase; and
- b) That the general population has expressed concern on the possible health effects of non-ionizing emissions related to the proliferation of these antenna systems,

CONSIDERING:

- a) That in many locations, particularly in Latin America and the Caribbean, this concern drives to the prevention of the deployment of wireless communication systems, with foreseeable service quality problems;
- b) That this concern is globally widespread, which is why the International Telecommunication Union (ITU) has issued the following resolutions:
 - Resolution 72:** “Measurement concerns related to human exposure to electromagnetic fields”. (World Telecommunication Standardization Assembly (WTSA), Johannesburg 2008 and Dubai 2012).
 - Resolution 62:** “Measurement concerns related to human exposure to electromagnetic fields”. (World Telecommunication Development Conference (WTDC), Hyderabad 2010).
 - Resolution 176:** “Human exposure to and measurement of electromagnetic fields”. (Plenipotentiary Conference –(PP),Guadalajara 2010)
- c) That it is the duty of the national telecommunication authorities to ensure compliance with the regulations related to telecommunication and radio antenna systems with respect to their radio frequency (RF) exposure guidelines, as well as to ensure the quality of service;
- d) That it is important that the general population as a whole is adequately informed about the current regulations regarding non-ionizing radio emissions;
- e) That the administrations of the Americas have interest in and need of the scientific information available and many of them have developed their own regulations;

⁷ CCP.II-RADIO/doc. 3370/13

f) That CITELE has in Recommendation PCC.II/REC. 15 (VI-05) “Technical and regulatory aspects related to the effects of electromagnetic non ionizing emissions)” recommended “To the country members that have not yet developed an specific regulation about the topic, that when they perform the same, follow the recommendations of the Health World Organization, the International Telecommunication Union, in its recommendation ITU-T K-52, taking also into account the Recommendations of ICNIRP as appropriate”,

RECOGNIZING:

a) That in those countries of the Americas Region, which have already developed their regulations, there is a need to increase the dissemination of the same and further development;

b) That the Permanent Consultative Committee II (PCC.II) has found that in countries which have already developed standards regarding RF exposure establishing, inter alia, maximum radiation limits, there is still concern for demonstrating compliance with the limits established in areas where antenna systems have been installed;

c) That the general population requires more information on whether there is strict compliance with established standards regarding RF exposure;

d) That the PCC.II has deeply studied how other countries, outside the region, have reduced the public concern by using a control system consisting of on-the-spot measurements, dynamic maps of radiation levels and continuous monitoring systems;

e) That some countries, such as Germany, Canada, United States of America, France, Japan and the United Kingdom demonstrate their compliance with the maximum RF exposure limits by means of computational methods or direct instrumental measurements made by the entity that installs the antennas and the results are reported to the regulatory authority;

f) That among the countries studied in due course were Egypt, Spain, Greece, Italy, Switzerland, Portugal, Hungary, South Africa and others, which use Continuous Monitoring Systems;

g) That, additionally, results are massively disseminated through advertising campaigns or are available to the public via the Internet;

h) That based on these studies PCC.II issued Recommendation PCC.II/REC. 25 (XIII-09) “Technical and regulatory aspects relative to the effects of electromagnetic non-ionizing emissions” which stated: “That Member States that have developed RF exposure standards provide information on RF exposure levels and make this information available to the public by appropriate means, such as information on compliance of the equipment or antenna site as filed with the administration, on on-the-spot measurements performed at the installation, on dynamic mapping of radiation levels or information compiled from continuous monitoring systems.”,

TAKING INTO ACCOUNT:

a) That pursuant to the aforementioned Resolutions of the ITU, the ITU Standardization Sector developed Recommendation ITU-T K.83 “Monitoring of electromagnetic field levels”;

b) That in the summary of said Recommendation, the ITU states: “Recommendation ITU-T K.83 gives guidance on how to make long-term measurements for monitoring of electromagnetic fields (EMF)

in selected areas that are under public concern in order to show that EMF are under control and under the limits. The purpose of this Recommendation is to provide for the general public, clear and easily available data concerning electromagnetic field levels in the form of results of continuous measurement.”;

c) That, in turn, the ITU states in said Resolution: “This Recommendation sets the basis for the implementation of continuous measurement systems for electromagnetic emissions, so that they constitute a worldwide common practice for this type of measurements.”;

d) That with the support of the ITU some countries of the Region have developed Continuous Monitoring Systems and Radiation Maps, such as Argentina, Colombia, Brazil, Ecuador, El Salvador, and several other countries are in the process of implementing similar systems;

e) That the Regional Technical Commission of Telecommunications (COMTELCA) considered that the results of the pilot project on Continuous Monitoring Systems in El Salvador, have shown the advantages of implementing similar projects in other countries of the region. (Resolution 1, CXXVIII Regular Meeting of the Board of Directors.),

RECOMMENDS:

1. That Member States that have not yet adopted standards on exposure to RF, should consider to follow the Recommendations of the World Health Organization to develop such regulations, and to develop their legislation in harmony with international scientific limits, such as those established by the ICNIRP and IEEE and to assess compliance with exposure limits of the antennas pursuant to Recommendation ITU-T K.52 “Guidance on complying with limits for human exposure to electromagnetic fields”, or IEEE or IEC standards.

2. That Member States with difficulties in deploying antennas and associated infrastructure due to public aversion to NIR, should develop Radiation maps and Continuous Monitoring Systems based on Recommendation ITU-T K.83 “Monitoring of electromagnetic field levels” as a communication and management tool regarding the social acceptance of the deployment of antennas.

PCC.II/REC. 41 (XXII-13) 8

PUBLIC PROTECTION AND DISASTER RELIEF (PPDR) BASED ON INTERNATIONAL MOBILE TELECOMMUNICATIONS (IMT) SYSTEMS

The XXII Meeting of Permanent Consultative Committee II: Radiocommunications including Broadcasting (PCC.II),

CONSIDERING:

a) That Public Protection and Disaster Relief (PPDR) systems based on International Mobile Telecommunications (IMT) technology have a fundamental role to play to respond with efficacy and efficiency to public, national and international objectives for PPDR;

⁸ CCP.II-RADIO/doc. 3428/13 cor.1

b) That many administrations wish to promote inter-operability and inter-functioning among systems utilized for public protection and relief operations, both at the national level as well as for cross-border operations in situations of emergency and relief operations;

c) That the Radiocommunication Sector (ITU-R) is doing studies towards the possible revision of Resolution 646 (Rev. WRC-12) "Public protection and disaster relief" according to the World Radiocommunication Conference 2015 (WRC-15) agenda item 1.3;

d) That some administrations have made decisions to include broadband PPDR communications in 700 MHz and wish to promote harmonization given the inherent benefits,

RECOGNIZING:

a) The benefits of spectrum harmonization, such as a greater potential for interoperability, a broader industrial base and a larger volume of material resulting from economies of scale and greater availability of equipment; improved spectrum management and planning and greater cross-border coordination and circulation of equipment;

b) That there are administrations of OAS/CITEL which are considering implementation of PPDR broadband applications based on IMT systems, either in dedicated spectrum or shared spectrum with commercial networks,

TAKING NOTE:

a) Of the detailed requirements for PPDR networks described in the Report ITU-R M.2033 "Objectives and Requirements of Radiocommunications for Public Protection and Relief Operations";

b) Of the Asia Pacific Telecommunity Report N° APT/AWG/REP-27 "PPDR Applications using IMT-based Technologies and Networks", adopted during the 12th meeting of the APT Wireless Group in April, 2012, which establishes technical requirements for the use of technologies and networks based on IMT for PPDR applications, as well as the different approaches for use of IMT systems to respond to the broadband PPDR needs,

EMPHASIZING:

a) That it is the prerogative of each government to define the most adequate approach and mechanism for the concession of spectrum licenses for deployment of IMT networks to satisfy the broadband PPDR needs;

b) That the content of this Recommendation does not limit the evaluation of and probable CITEL recommendation on the harmonized use of other IMT frequency bands for PPDR purposes,

RECOMMENDS:

To OAS/CITEL administrations that wish to deploy broadband networks to meet Public Protection and Disaster Relief (PPDR) needs in the 700 MHz band, consider the following bands conforming the channel plan they have adopted for the 700 MHz band:

1.1. 703-748/758-803 MHz (A5 scheme of Recommendation ITU-R M.1036-4)

1.1.1. In administrations that wish to define a particular frequency range for PPDR, it is recommended to preferably use the lower portion of this band.

- 1.2. 758-768/788-798 MHz (A4 scheme of Recommendation ITU-R M.1036-4).

INVITES:

The administrations of the OAS/CITEL to follow the studies of the ITU-R regarding the amounts of spectrum necessary to satisfy the broadband PPDR needs according to their own particular conditions, and if required, submit for CITEL's consideration other options of frequency bands identified for IMT below 1 GHz in the possibility that in their administrations may not be possible to use the frequency band contained in this Recommendation.

PCC.II/REC. 42 (XXII-13)⁹

**LONG-RANGE PLANNING FOR BANDS IN THE MOBILE TERRESTRIAL SERVICE
INCLUDING THOSE IDENTIFIED FOR IMT**

The XXII Meeting of Permanent Consultative Committee II: Radiocommunications including Broadcasting (PCC.II),

CONSIDERING:

- a) That bands identified for IMT have existing users and [Recommendation ITU-R M.1036](#) "Frequency arrangements for implementation of the terrestrial component of International Mobile Telecommunications (IMT) in the bands identified for IMT in the Radio Regulations (RR)" provides frequency arrangements for implementation of the terrestrial component of International Mobile Telecommunications (IMT) in the bands identified for IMT in the Radio Regulations (RR);
- b) That guidance on harmonized frequency arrangements for various bands identified for IMT is provided in CITEL Recommendations [PCC.II/REC.7 \(III-04\)](#), [PCC.II / REC. 8 \(IV-04\)](#), [PCC.II/REC. 028 \(XV-10\)](#), [PCC.II/REC. 032 \(XIX-12\)](#), [PCC.II/REC. 033 \(XIX-12\)](#), [PCC.II/REC. 034 \(XX-12\)](#), and [PCC.II/REC.35 \(XX-12\)](#);
- c) That equipment for harmonized band plans should be readily available within the frequency ranges in the Recommendations noted in *considerings* a) and b);
- d) That 3GPP has developed and/or is studying the technical characteristics, including the center gap and the coexistence with adjacent bands, and is developing the specifications for some of the harmonized frequency bands;
- e) That [Report ITU-R M.2264](#) provides guidance for the development of band plans with contiguous bandwidths for mobile broadband applications for use in spectrum planning;
- f) That, as indicated in [Report ITU-R M.2264](#), within a harmonized band plan, smaller blocks or sub-bands could be tailored and designated to different individual uses such as commercial operators, public safety agencies, utilities, business or industrial companies, etc;

⁹ CCP.II-RADIO/doc. 3424/13

g) That the re-planning of a band is a long-term process that requires careful consideration of the uses of the band, harmonized frequency arrangements, standards, and equipment availability;

h) That long-range planning in general should benefit both incumbents and potential new users, as well as it would help in achieving harmonization and long-term solutions,

RECOMMENDS:

1. To carry out long-range planning for bands in the mobile terrestrial service, including those identified for use by IMT and other existing uses, while considering the possibility of deploying new, advanced systems as relevant.

2. That OAS/CITEL administrations continue to use frequency arrangements already harmonized for IMT to achieve economies of scale and facilitate roaming.

PCC.II/DEC. 159 (XXII-13)¹⁰

**INFORMATION SESSION ON THE TECHNICAL STUDIES AND THE SPECTRUM
REQUIREMENTS DEVELOPED BY THE ITU ON WRC-15 AGENDA ITEM 1.1**

The XXII Meeting of Permanent Consultative Committee II: Radiocommunications including Broadcasting (PCC.II),

DECIDES:

1. That at the XXIII Meeting of the Permanent Consultative Committee II (PCC.II), to be held in early 2014, the Working Group for the Preparation of CITELE for Regional and World Radiocommunication Conferences will dedicate a half-day (morning or afternoon) to have technical discussions on the ongoing work of the Radiocommunication Sector (ITU-R) Working Parties and Joint Task Group JTG 4-5-6-7 on World Radiocommunication Conference (WRC-15) agenda item 1.1.

2. That the information session shall cover agenda item 1.1, the methodologies used by ITU-R Working Parties to forecast the spectrum demand for the International Mobile Telecommunications (IMT) and mobile broadband towards the WRC-15, how JTG 4-5-6-7 will use input from the Radiocommunication Sector of the International Telecommunication Union (ITU-R) Working Parties, and the processes JTG 4-5-6-7 may use to identify candidate bands.

3. That the information session shall also cover technical matters addressed in JTG 4-5-6-7, including:

3.1. The current status of the activities of JTG 4-5-6-7 to date as well as issues expected to be addressed at the final JTG 4-5-6-7 meeting;

3.2. The sharing studies undertaken in the various frequency bands.

4. To designate the Coordinator of SGT-1 of the Working Group for the Preparation of CITELE for Regional and World Radiocommunication Conferences for WRC-15 as the coordinator of this information session, including the responsibility to work with the Executive Secretary of CITELE to invite technical experts from the ITU-R Groups and the Radiocommunication Bureau of the International Telecommunication Union (ITU) (BR) as appropriate.

¹⁰ CCP.II-RADIO/doc. 3438/13 cor.1

PCC.II/DEC 160 (XXII-13)¹¹

**APPOINTMENT OF A RAPPORTEUR FOR THE ITU-R JTG4-5-6-7 ON WRC-15 AGENDA
ITEMS 1.1 AND 1.2**

The XXII Meeting of Permanent Consultative Committee II: Radiocommunications including Broadcasting (PCC.II),

DECIDES:

1. To appoint a Rapporteur to report to the PCC.II Working Group for the Preparation of CITELE for Regional and World Radiocommunication Conferences on the activities carried out within the Radiocommunication Sector of the International Telecommunication Union (ITU-R) Joint Task Group JTG4-5-6-7.
2. To appoint Mr. Glenn Feldhake (Glenn.S.Feldhake@nasa.gov) from the administration of the United States of America as the Rapporteur referred to in *decides* 1.
3. To request the appointed Rapporteur to prepare reports on the activities of the Joint Task Group and submit them to the PCC.II Working Group above mentioned.

PCC.II/DEC. 161 (XXII-13)¹²

**RESPONSE TO CEPT REQUEST ON DEPLOYMENT OF MOBILE AND FIXED SYSTEMS
AROUND 400 MHZ QUESTIONNAIRE ON WRC-15 AI 9.1, ISSUE 9.1.1**

The XXII Meeting of Permanent Consultative Committee II: Radiocommunications including Broadcasting (PCC.II),

DECIDES:

1. In response to the CEPT request on deployment of mobile and fixed systems around 400 MHz questionnaire on World Radiocommunication Conference (WRC-15) agenda item 9.1, Issue 9.1.1, to ask OAS/CITEL Member States, that have not already done so via a Radiocommunication Sector of the International Telecommunication Union (ITU-R) Working Party or Study Group, to provide information about technical characteristics and actual deployment of systems operating in bands adjacent to the frequency band 406-406.1 MHz in OAS/CITEL countries if such characteristics are available.
2. To request OAS/CITEL Member States responding to this request to send their response to the CITEL Secretariat (citel@oas.org) with copy to the CEPT rapporteur for WRC-15 Agenda Item 9.1, Issue 9.1.1 Mr. Jean Pla (jean.pla@cnes.fr).

¹¹ CCP.II-RADIO/doc. 3447/13

¹² CCP.II-RADIO/doc. 3441/13 rev.1

REQUEST FOR INFORMATION ABOUT THE CURRENT AND PLANNED USE OF THE BANDS 1350-1400 MHZ AND 1427-1525 MHZ BY THE OAS/CITEL ADMINISTRATIONS FOR SATELLITE AND TERRESTRIAL SERVICES

The XXII Meeting of Permanent Consultative Committee II: Radiocommunications including Broadcasting (PCC.II),

DECIDES:

1. To request the Secretariat of CITEL to distribute to the Member State administrations the questionnaire annexed hereto in order to assess use of the bands 1350-1400 MHz and 1427-1525 MHz by the OAS/CITEL administrations for satellite and terrestrial services.
2. To design as the Rapporteur for this survey Ms. Veena Rawat (verawat@blackberry.com) who will provide the Secretariat of CITEL the support needed to implement *decides* 1.
3. To invite the OAS/CITEL administrations to forward, before March 1, 2014, their replies on the questionnaire to the Rapporteur for this survey with a copy to the Secretariat of CITEL (citel@oas.org).

ANNEX TO DECISION PCC.II/DEC. 162 (XXII-13)

SURVEY

USE OF THE BANDS 1 350-1 400 MHZ AND 1 427-1 525 MHZ BY THE OAS/CITEL ADMINISTRATIONS FOR SATELLITE AND TERRESTRIAL SERVICES

Introduction

This survey addresses the need to understand the use of the bands 1 350-1 400 MHz and 1 427-1 525 MHz by OAS/CITEL administrations for radiolocation, broadcasting-satellite (sound), mobile-satellite, broadcasting, space operation, fixed and mobile (including Aeronautical Mobile Telemetry (AMT)) services. In this regard, OAS/CITEL administrations are kindly requested to provide information about their current and planned use of the services allocated in these bands. This should also help in developing any proposals for WRC-15 for agenda item 1.1 addressing the need for additional spectrum for IMT and for improvement in spectrum planning for such use.

Background

The band 1 350-1 400 MHz is allocated to the radiolocation service on a primary basis in Region 2 and 3 while in Region 1 this band is allocated to the radiolocation, fixed and mobile services on a primary basis.

The band 1 427-1 525 MHz is allocated to the fixed service on a primary basis in all three Regions.

¹³ CCP.II-RADIO/doc. 3443/13

The band 1 427-1 525 MHz is allocated to mobile service on a co-primary basis with allocations to other services in parts of this band. Further as per No. **5.343**, the use of the band 1 435-1 535 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile service in Region 2.

The band 1 452-1 492 MHz was allocated to Broadcasting-satellite service (sound) and complementary terrestrial broadcasting service at [WARC-92](#) as per No. **5.345** of the ITU Radio Regulations stating that “Use of the band 1 452-1 492 MHz by the broadcasting-satellite service, and by the broadcasting service, is limited to digital audio broadcasting and is subject to the provisions of Resolution **528 (Rev.WRC-03)**”. While there are a large number of International Telecommunication Union (ITU) filings for broadcasting-satellite service (BSS) networks, there have been a limited number of notifications for bringing into use any of these networks.

Resolution **528 (Rev.WRC-03)** limited the use of the 1 452-1 492 MHz band by BSS (sound) to the upper 25 MHz with the expectation that this band will be planned for BSS use before 1998 and that appropriate sharing criteria with other co-primary services would be developed. BSS systems not part of any plan, and for which the advanced publication information (API) were received by the ITU before January 1, 1999 are subject to procedures described in Sections A to C of Resolution **33 (Rev.WRC-03)**. BSS (sound) systems for which APIs were received following the January 1, 1999 are subject to the coordination procedures of Article **9** for coordination of space systems above 1 GHz with terrestrial systems.

In addition, Resolution **703 (Rev.WRC-07)** invites administrations “to submit contributions to the Radiocommunication Study Groups, providing information on practical results and experience of sharing between terrestrial and space radiocommunication services or between space services, which help to bring about significant improvements in coordination procedures, calculation methods and harmful interference thresholds, and thereby to optimize the available orbit/spectrum resources”.

.Information on party surveyed:

Name of organization:	
Country:	
Party responsible for survey:	
E-mail address:	
Contact telephone:	

Questionnaire:

OAS/CITEL administrations are kindly requested to provide, by March 1, 2014 to the Rapporteur for this survey with a copy to the Secretariat of CITEL (citel@oas.org) information about:

1. the services listed in your national table of allocations for the bands 1350-1400 MHz and 1427-1525 MHz;
2. the current and planned use of these bands in your country.

As applicable, please provide any relevant information on your use of the band, such as what portions of the bands are being deployed for a specific service, as well as whether the services are provided on a national, regional or local basis. Such information will help in planning the future use of this band for mobile broadband applications

PCC.II/DEC. 163 (XXII-13)¹⁴

COOPERATION AND CONVERGENCE BETWEEN BROADCASTING AND MOBILE SERVICES USING LTE NETWORKS

The XXII Meeting of Permanent Consultative Committee II: Radiocommunications including Broadcasting (PCC.II),

DECIDES:

To instruct the Secretariat of CITEI to publish the Technical Notebook 22 “Cooperation and convergence between broadcasting and mobile services using LTE networks” ([CCP.II-RADIO/doc. 3339/13](https://www.citel.oas.org/en/)) on the public webpage of CITEI at <https://www.citel.oas.org/en/>.

PCC.II/DEC. 164 (XXII-13)¹⁵

REQUEST FOR COMMENTS ON A DRAFT RECOMMENDATION ON USE OF THE 1710-1780 / 2110-2180 MHZ BANDS IN THE AMERICAS FOR BROADBAND MOBILE SERVICES

The XXII Meeting of Permanent Consultative Committee II: Radiocommunications including Broadcasting (PCC.II),

DECIDES:

To instruct the Executive Secretary to send a communication to the Member States, requesting for the next meeting of PCC.II, comments and/or proposals with respect to the Draft Recommendation PCC.II/REC. XXX (XXII-13) - Use of the 1710-1780 / 2110-2180 MHz bands in the americas for broadband mobile services” (Annex 1 to document CCP.II-RADIO/doc. 3406/13) with the objective of finalizing the draft Recommendation at the XXIII meeting of PCC.II.

¹⁴ CCP.II-RADIO/doc. 3426/13

¹⁵ CCP.II-RADIO/doc. 3429/13

VI. LIST OF BASIC DOCUMENTS

Summary Minutes of the Inaugural Session:	CCP.II-RADIO/doc. 3418/13 rev.1
Summary Minutes of the First Plenary Session:	CCP.II-RADIO/doc. 3418/13 rev.1
Summary Minutes of the Second Plenary Session:	CCP.II-RADIO/doc. 3435/13 rev.1
Summary Minutes of the Third Plenary Session and Closing Session:	CCP.II-RADIO/doc. 3453/13 rev.1
Working Group on Preparation for Regional and World Radiocommunication Conferences.	CCP.II-RADIO/doc. 3454/13
Working Group on Terrestrial Fixed and Mobile Radiocommunication Services.	CCP.II-RADIO/doc. 3449/13 rev.1
Working Group on Satellite Systems to Provide Fixed and Mobile Services.	CCP.II-RADIO/doc. 3450/13
Working Group on Broadcasting.	CCP.II-RADIO/doc. 3451/13
Ad Hoc Group on the Strategic Plan of PCC.II.	CCP.II-RADIO/doc. 3452/13
List of Documents:	CCP.II-RADIO/doc. 3324/13 rev.3
List of Participants:	CCP.II-RADIO/doc. 3325/13 rev.2
Final Report for the Meeting:	CCP.II-RADIO/doc. 3455/13 rev.1