



**ORGANIZACION DE LOS ESTADOS AMERICANOS**  
**ORGANIZATION OF AMERICAN STATES**

**Comisión Interamericana de Telecomunicaciones**  
**Inter-American Telecommunication Commission**

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**XX MEETING OF PERMANENT  
CONSULTATIVE COMMITTEE II:  
RADIOCOMMUNICATIONS  
INCLUDING BROADCASTING  
October 22 to 27, 2012  
Mexico, D.F., Mexico**

**OEA/Ser.L/XVII.4.2  
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27 October 2012  
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**FINAL REPORT**

**(Item on the Agenda: 7)**

**(Document submitted by the Drafting Group)**

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## **FINAL REPORT**

### **XX MEETING OF THE PERMANENT CONSULTATIVE COMMITTEE II: RADIOCOMMUNICATIONS INCLUDING BROADCASTING (PCC.II)**

The XX Meeting of the Permanent Consultative Committee II: Radiocommunications including Broadcasting was held in Mexico DF, Mexico, October 22 to 26, 2012.

#### **I. AGENDA**<sup>1</sup>

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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.
  - 3.3 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.
  - 3.6 Ad Hoc Group on the Strategic Plan of PCC.II.
  - 3.7 Ad Hoc Group on Allocation of the Digital Dividend Spectrum Resulting from the Transition to Digital Television and Opportunities for Convergent Applications.
4. Agenda, Venue and Date of the XXI Meeting of PCC.II.
5. Other matters.
6. Approval of the Final Report of the XX Meeting.

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<sup>1</sup> CCP.II-RADIO/doc. 2897/12 rev.1

## **II. AUTHORITIES OF THE MEETING**

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|  |  |
|--|--|
| <b>Alternate Chair of PCC.II:</b>      | Mr. Franklin Merchán Calderon (Colombia) |
| <b>Alternate Vice-Chair of PCC.II:</b> | Mr. Héctor Budé (Uruguay)                |
| <b>Executive Secretary of CITEL:</b>   | Mr. Clovis Baptista (OAS)                |

### **Drafting Group:**

|                |   |
|----------------|---|
| <b>Chair</b>   | Ms. Luisa Fernanda Caldas (Colombia)        |
| <b>Members</b> | Ms. Elisabeth Lander (Canada)               |
|                | Mr. Rafael Sánchez (Dominican Republic)     |
|                | Mr. Chris Hoffer (United States of America) |

### III. RESOLUTIONS

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#### PCC.II/RES. 85 (XX-12)<sup>2</sup>

##### SEMINAR ON FIXED AND MOBILE SATELLITE SERVICES

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

##### CONSIDERING:

- a) The goals set in the Strategic Plan 2010-2014, approved by Resolution CITEL/RES. 59 (V-10) of the Fifth Regular Meeting of the CITEL Assembly, directed to the Permanent Consultative Committee II and in particular the Working Group Relative to Satellite Systems to Provide Fixed and Mobile Services;
- b) That the evolution of satellite technology has the potential to complement the availability of services in countries throughout the Americas region, including developing and least developed countries, and achieve the goals of connectivity in the Organization of American States (OAS) Administrations;
- c) That satellite systems offer a variety of services to fixed and mobile sites, which are available today to meet the commercial and national needs of OAS/CITEL Administrations;
- d) That OAS/CITEL Administrations have expressed interest in additional information about the deployment of satellite services in the Americas region, including new and emerging applications and consideration of regulatory aspects,

##### RECOGNIZING:

- a) The efforts of OAS/CITEL Administrations to improve their policies and regulation with respect to satellite services, and facilitate the provision of such services in their national territories;
- b) The importance of satellite communications in support of national telecommunications and connectivity plans;
- c) The necessity to continue working on the application of the results of the 2012 World Radiocommunication Conference (WRC-12) on satellites services and progress on issues of the 2015 World Radiocommunication Conference (WRC-15) with respect to satellite regulation and technology;
- d) The ongoing work of the Working Group Relative to Satellite Systems to Provide Fixed and Mobile Services;
- e) The usefulness of seminars as an effective mechanism to focus attention on important current and emerging topics and to increase the level of understanding of OAS/CITEL Administrations;
- f) That it is advantageous to exchange information among OAS/CITEL's Administrations, CITEL Associate Members and Permanent Observers to the OAS;

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<sup>2</sup> CCP.II-RADIO/doc.3130/12

g) That information presented in seminars constitutes important background and a reference for other international and regional organizations,

**RESOLVES:**

1. To hold a Seminar on “Fixed and Mobile Satellite Services” at the XXI Meeting of PCC.II, to be held in early 2013, on activities related to satellite services in the Americas region.
2. That the seminar contemplate topics related to new satellite technologies, applications and services, such as new and emerging fixed-satellite services (FSS), mobile-satellite services (MSS), and satellite broadband applications, as well as regulatory considerations for use of satellite services to meet government and commercial requirements in the Americas region, as described in Annex 1 to this Resolution.
3. To set a maximum duration of one day for this seminar.
4. To hold the seminar pursuant to Resolution PCC.III/RES.86 (XII-99), entitled “Procedures for the Organization of Seminars,” noting in particular that the seminar would be held at no cost to CITEL.
5. To appoint Mr. Scott Gibson of Canada (email: [scott.gibson@cielsatellite.ca](mailto:scott.gibson@cielsatellite.ca) tel: +1 (416) 464-9264) as the coordinator of the seminar.

**INVITES:**

1. OAS/CITEL Administrations to participate in this seminar in order to share and exchange experiences, which will help ensure the success of the seminar;
2. Experts on satellite services and regulation to provide presentations during the seminar;
3. OAS/CITEL Member States and CITEL Associate Members of interested in participating in the seminar to contact the coordinator of the seminar.

**ANNEX TO RESOLUTION PCC.II/RES 85 (XX-12)**

**SEMINAR ON FIXED AND MOBILE SATELLITE SERVICES**

**OAS/CITEL PCC.II Spring 2013**

**List of Potential Seminar Topics**

**1. Overview of innovations in the satellite field**

The host country and industry associations will be invited to make general presentations concerning their experiences in and the future of the satellite field from their perspective, including examples of successful use of satellite technology in their country/market, and innovations in the satellite field.

**2. New generations of satellites for the Americas**

Satellite operators will present an overview of new satellite projects, including satellite design, frequency plans, coverage, terminals, regulatory aspects, and case studies.

**3. Satellite Service Providers and New Satellite Applications**

Service Providers will be invited to present an overview of new applications available and what the market is demanding.

**4. Satellites and National Broadband Connectivity programs**

Governments will be invited to share their experience and future plans for the use of satellites for national broadband connectivity programs and plans.

**5. WRC-15: Challenges to the satellite industry on technological convergence**

Focus on WRC-15 issues related to satellite and how those issues may impact the delivery of satellite services.



**FINANCIAL ALLOCATIONS OF THE OAS PROGRAM-BUDGET  
FOR CITEL IN 2013**

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

**CONSIDERING:**

- a) That the Organization of American States (OAS) Program-Budget for 2013 submitted by the OAS Secretary General to the Organization's Permanent Council this past August 22, 2012 does not envisage the allocation of financial resources from the OAS Regular Fund to CITEL;
- b) That CITEL was established by the OAS General Assembly in 1994 as the only entity of the Inter-American System whose mission is to facilitate and promote the comprehensive and sustainable development of telecommunications/ICTs in the Americas;
- c) That CITEL constitutes the main regional coordination mechanism for reaching a consensus and agreeing upon the inter-American positions that the region takes to various world forums such as the World Radiocommunication Conferences and the World Conferences on International Telecommunications of the International Telecommunication Union (ITU), forums where the future of telecommunications/Information and Communication Technologies (ICT) in the world are discussed and negotiated;
- d) That CITEL needs to continue benefiting from the support of resources from the OAS's Regular Fund to fully fulfill its mandates and duties;
- e) That it is crucial for the sector to uphold CITEL's intergovernmental character to guarantee that its decisions are taken for the region's public interest,

**TAKING INTO ACCOUNT:**

That Resolution CITEL/RES. 24 (II-98), adopted by the CITEL Assembly in March 1998, and according to what indicates Resolution COM/CITEL RES. 65 (VII-98), highlighted the need to ensure that the cumulative total of Associate Members of the Permanent Consultative Committees fees in any given fiscal year is not used as a pretext for lowering the proportional share for CITEL from the Regular Fund of the OAS at the annual meetings of the General Assembly,

**CONSIDERING FURTHER:**

- a) That the above-mentioned Draft Program-Budget is currently being reviewed, in the framework of the Committee on Administrative and Budgetary Affairs of the Permanent Council of the OAS (CAAP);
- b) That the final version of the above-mentioned Program-Budget shall be adopted at a Special Session of the General Assembly of the OAS scheduled for November 15, 2012;

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<sup>3</sup> CCP.II-RADIO/doc.3126 /12 rev.1

c) That CITEL requires a minimum contribution of US\$561,000 from the Regular Fund of the OAS in 2013 to fully carry out its duties (reference document CCP.II-RADIO/doc. 3125/12),

**RESOLVES:**

1. To urge the Administrations of OAS Member States to contact their respective Foreign Affairs Ministries/Permanent Missions to the OAS as quickly as possible to stress both the importance of CITEL's activities and the need to make sure that enough financial resources are allocated to CITEL from the OAS Regular Budget for 2013 for these activities.

2. To request the Chair of the Permanent Consultative Committee II: Radiocommunications including Broadcasting (PCC.II) to submit this Resolution to the XXVI Meeting of COM/CITEL, to be held in Washington, D.C., on November 13-14, 2012.

**INSTRUCTS THE EXECUTIVE SECRETARY OF CITEL:**

To immediately convey the present Resolution to the Administrations and the Associate Members of PCC.II, along with document CCP.II-RADIO/doc. 3125/12.

**PCC.II/RES. 87 (XX-12) <sup>4</sup>**

**AGENDA, VENUE AND DATE FOR THE XXI PCC.II MEETING**

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

**RESOLVES:**

1. To hold the XXI Meeting of PCC.II in venue to be confirmed during the week of 8 to 12 April, 2013.

2. To approve the draft agenda for the XXI Meeting, that is attached as an Annex.

**ANNEX TO RESOLUTION PCC.II/RES. 87 (XX-12)**

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.

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<sup>4</sup> CCP.II-RADIO/doc.3124/12 rev.2

- 3.2 Working Group on Terrestrial Fixed and Mobile Radiocommunication Services.
- 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.
- 3.6 Ad Hoc Group on Allocation of the Digital Dividend Spectrum Resulting from the Transition to Digital Television and Opportunities for Convergent Applications.
- 4. PCC.II Strategic Plan.
- 5. Agenda, Venue and Date of the XXII Meeting of PCC.II.
- 6. Other matters.
- 7. Approval of the Final Report of the XXI Meeting.

### **DRAFT AGENDAS OF WORKING GROUPS**

#### **3.1 Working Group on the preparation of CITEL 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 Service.
  - 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. Use of satellite systems for public protection and rescue operations (PPRO).
7. Use of Integrated Systems as an emerging element of Next Generation Networks (NGN).
8. Operation of satellite services with no authorization.
9. Work Plan.
10. 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.

### **3.5 Rapporteur Group on the Technical and Regulatory Aspects Related to the Effects of Electromagnetic Non-ionizing Emissions (NIR)**

1. Opening remarks and approval of the agenda.
2. Systems of measurements of NIR.
3. Report of the status of advance of the studies of the Rapporteur Group.
4. Work Plan.
5. Other business.

### **3.6 Ad Hoc Group on Allocation of the Digital Dividend Spectrum Resulting from the Transition to Digital Television and Opportunities for Convergent Applications.**

1. Approval of the agenda.
2. Presentation of advances of options considered for harmonizing and optimizing spectrum use resulting from the transition to digital television.
3. Proposed coordination mechanisms to facilitate the introduction of new services and applications.
4. Presentation and discussion of contributions received.
5. Review of the Work Plan.
6. Other business.

**THIRD INTERNATIONAL SPECTRUM CONFERENCE**

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

**CONSIDERING:**

- a) That it is important to disclose all matters relating to radio spectrum;
- b) That there is a need to support all initiatives aimed at training the population on spectrum-related issues, particularly the people involved in spectrum regulation, Administration, management, planning and efficient use;
- c) That the objectives of CITEL include the promotion, training, technical cooperation and transfer of technology through the ITU Center of Excellence for the Americas Region, CITEL Regional Training Centers and organizations with which CITEL has Cooperation Agreements,

**RECOGNIZING:**

- a) That the Administration of Colombia has created spaces for providing training in Spectrum management; more specifically, it has held the International Spectrum Congress since 2011, a forum all involved players in the sector are invited to attend and topical aspects are set out and discussed in different areas of spectrum management based around a central theme, with the active participation of international experts;
- b) That participation at the Congress is free, there is a streaming service during its development and the proceedings are published online which can be accessed by all stakeholders;
- c) That the Administration of Colombia has invited all members of CITEL to participate in its different activities promoting spectrum knowledge;
- d) That the Third International Spectrum Congress will take place in the third quarter of 2013,

**RESOLVES:**

1. To invite all member countries to attend and play an active and participative role in the Third International Spectrum Congress to be held in the third quarter of 2013.
2. To ask the Executive Secretary of CITEL to keep all member countries informed about the event and provide timely information regarding the topics, schedule, venue and date thereof.

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<sup>5</sup> CCP.II-RADIO/doc.3155/12

#### IV. RECOMMENDATIONS

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##### **PCC.II/REC. 34 (XX-12)<sup>6</sup>**

##### **COMPATIBLE FREQUENCY ARRANGEMENTS FOR TERRESTRIAL MOBILE SYSTEMS IN THE BANDS 1 710 – 2 025 MHZ AND 2 110 – 2 200 MHZ**

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

##### **CONSIDERING:**

a) That the bands 1 710 – 2 025 MHz and 2 110 – 2 200 MHz have been identified for International Mobile Telecommunications (IMT) in the International Telecommunication Union (ITU) Radio Regulations as follows:

| <b>Band (MHz)</b> | <b>Footnotes identifying the band for IMT</b> |
|-------------------|---|
| 1 710-2 025       | 5.384A, 5.388                                 |
| 2 110-2 200       | 5.388   |

b) That Recommendation PCC.II/REC. 8 (IV-04) “Frequency arrangements for IMT-2000 in the bands 806 to 960 MHz, 1 710 to 2 025 MHz, 2 110 to 2 200 MHz and 2 500 to 2 690 MHz” provides 4 frequency arrangements for the bands 1 710 – 2 025 MHz and 2 110 – 2 200 MHz, labelled #2, #3, #4 and #5;

c) That IMT, including IMT-2000 and IMT-Advanced, represents an opportunity for a major improvement in mobile or portable communication services for individuals or businesses which would be integrated into a variety of competing networks;

d) That spectrum arrangements should be defined which are technology neutral, i.e., any technologies, including IMT, can be used in the bands;

e) That the bands identified for IMT should be considered on a global basis as a set, to achieve a comprehensive, global solution that will ensure that there is an approach that meets all requirements and that a significant level of interoperability is achieved;

f) That not only the harmonization work in ITU but also the harmonization work in CEPT and APT need to be taken into consideration in defining frequency arrangements;

g) That Administrations should harmonize frequency arrangements to the greatest extent possible to facilitate worldwide compatibility, global roaming and create economies of scale; and

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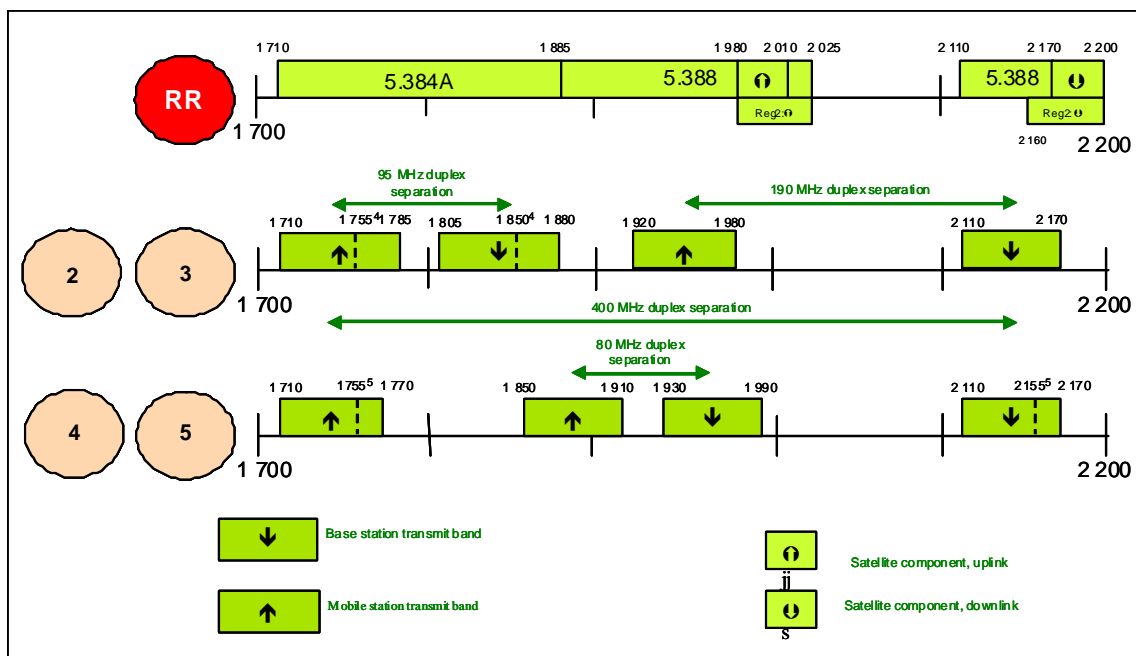
<sup>6</sup> CCP.II-RADIO/doc.3131/12 cor.1

h) That common frequency bands and duplex separation are desirable to enable economies of scale in the implementation of mobile broadband networks,

## RECOMMENDS:

That to encourage the harmonization of deployments worldwide and maximize the use of the available frequency spectrum, two options for compatible frequency arrangements for terrestrial mobile systems in the bands 1 710 – 2 025 MHz and 2 110 – 2 200 MHz are recommended:

- 1) CITEL #2 + CITEL #3.
- 2) CITEL #4 + CITEL #5.



**USE OF THE FREQUENCY RANGE 807-849 / 852-894 MHz FOR MOBILE CELLULAR SERVICES**

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

**CONSIDERING:**

- a) That the frequency range 698-960 MHz was identified for IMT in footnotes 5.313A and 5.317A of the International Telecommunication Union (ITU) Radio Regulations;
- b) That the 806-869 MHz band is contained in Resolution 646 (Rev. WRC-12);
- c) That Recommendation PCC.II / REC. 8 (IV-04) includes the array of frequencies for the band 806-960 MHz, specifically recommending an option of pairing of this spectrum band to the transmission of the mobile starting at 824 MHz, paired with the base station transmission starting at 869 MHz, with a duplex spacing of 45 MHz;
- d) That the allocation of larger and contiguous bandwidths facilitates the development of the service and systems, providing greater flexibility for more effective and efficient use of spectrum;
- e) It is demonstrated the need for additional spectrum to meet the requirements of mobile broadband technologies including IMT;
- f) That much of the band 806-824 / 851-869 MHz is used for Trunking systems in most American countries according to the Recommendation PCC.III / REC. 28 (VI-96).
- g) That the Specialized Mobile Radio systems (SMR for its acronym in English or ESMR) use parts of the band 806-824 / 851-869 MHz, and that some of these systems are used to provide a similar cellular service;
- h) It is beneficial to harmonize the use of the 800 MHz band in the region of the Americas to advantage of economies of scale, global roaming and facilitate the coordination of systems in border areas,

**NOTING:**

That 3GPP has defined the operating band 26 (814-849 MHz / 859-894 MHz) and the operating band 27 (807-824 MHz / 852-869 MHz), including their corresponding sets of technical requirements. Band 26 replaces and extends band 5 (824-849 MHz / 869-894 MHz) with 10+10 MHz more spectrum and band 27 is a new band adjacent to band 5 with 17+17 MHz;

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<sup>7</sup> CCP.II-RADIO/doc.3140/12 rev.1



## RECOGNIZING:

That the systems currently in operation in the 800 MHz band in accordance with Recommendation CCP III / REC. 28 (VI-96) must be protected from potential harmful interference from new services, which could eventually be convenient its spectral relocation,

## RECOMMENDS:

1. That CITEL Member Administrations planning to expand the range of frequencies for mobile broadband services in the 806-894 MHz band, do so according to the frequency arrangement shown in the following Figure 1.



Figure 1. Settlement of frequencies in the band 814-849/859-894 MHz

2. That OAS/CITEL Member Administrations planning to expand the range of frequencies for mobile broadband services in the 806-894 MHz band, do so according to the frequency arrangement shown in following Figure 2.

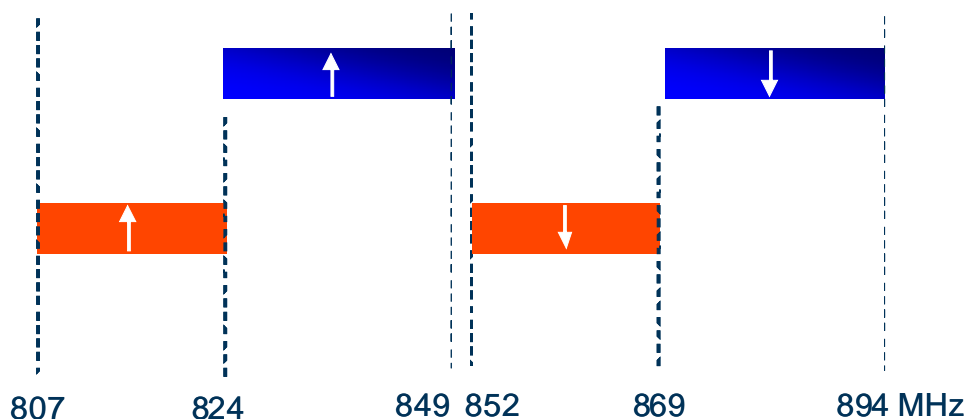


Figure 2. Settlement of frequencies in the band 807-849/852-894 MHz.

**FACILITATING THE INTRODUCTION OF BROADBAND FSS  
KA-BAND SYSTEMS IN THE AMERICAS**

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

**CONSIDERING:**

- a) That the 17.7-20.2 GHz (space-to-Earth) and 27.5-30.0 GHz bands (Earth-to-space) (the “Ka-band”) are allocated to the FSS in Region 2 in the International Telecommunication Union (ITU) Radio Regulations;
- b) That portions of Ka-band are planned to provide broadband services, through Fixed Satellite Services (FSS) networks;
- c) That the number of satellites operating in portions of Ka-band has increased since Recommendation PCC.III/REC. 62 (XVIII-01) was first adopted, and they can provide broadband services;
- d) That, due to spot beam technology greater frequency reuse is possible, thereby providing increased capacity needed for provision of broadband services through FSS networks;
- e) That a number of FSS systems with other types of earth stations and characteristics have already been brought into use or are planned to be brought into use in portions of the Ka-band;
- f) That frequency sharing between fixed-satellite and terrestrial services must be considered, and it is difficult for both types of services to operate in the same frequency band in the same geographic area when at least one of the services utilizes densely-deployed user terminals (See, e.g., Recommendation ITU-R SF.1719);
- g) That, as a result of considering f), national Administrations must make decisions on in which frequency bands they will deploy terrestrial services and in which frequency bands they will deploy HDFSS;
- h) That in certain portions of Ka-band, to facilitate provision of broadband services it is useful to facilitate the deployment of FSS earth stations, through class licensing;
- i) That a “class” earth station license is a single authorization covering a large number of earth stations associated with a given satellite system;
- j) That for Region 2, the ITU Radio Regulations, in No. 5.516B, identifies the following bands: 18.3-19.3 GHz (space-to-Earth), 19.7-20.2 GHz (space-to-Earth), and 28.35-28.6 GHz (Earth-to-space), 28.6-29.1 GHz (Earth-to-space), 29.25-29.5 GHz (Earth-to-space), and 29.5-30 GHz (Earth-to-space), for deployment of high density FSS earth stations; and

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<sup>8</sup> CCP.II-RADIO/doc.3158/12

k) That “gateway” or “hub” stations in Ka broadband system designs require very large amounts of dedicated bandwidth that cannot be shared with the system’s HDFSS user terminals in the same geographic service area,

#### **RECOGNIZING:**

a) That the Declaration of Mexico, adopted by the Fifth Ordinary Meeting of the CITEL Assembly, held March 8 to 11, 2010, recognized the provision of broadband access as a priority, thus the need to establish public policies to facilitate its introduction and the opening to new technologies;

b) That countries have the autonomy and sovereignty to regulate the commercial operation and use of telecommunications services and technologies in their territories; and

c) That, concerning the use of Ka-band, implementation of class licensing procedures does not eliminate the need for satellite network coordination in accordance with the ITU Radio Regulations, or compliance with other provisions of the Radio Regulations (e.g., epfd limits in Article 22) and the procedures for ITU coordination, and for those Administrations that require coordination at the national level, are conducted directly by Administrations, nor the need to ensure compatibility with and protection of other terrestrial services and space service networks allocated in Ka-band frequencies;

d) That coordination between GSO and non-GSO FSS systems is required in the 18.8-19.3 and 28.6-29.1 GHz bands pursuant to No. 9.11A of the ITU Radio Regulations, and that in 29.1-29.5 GHz and 19.3-19.7 GHz, No. 9.11A applies only to coordination of GSO FSS and Non-GSO MSS feeder links while other NGSO FSS systems must comply with Article 9 and No. 22.2,

#### **RECOMMENDS:**

1. That, in portions (*see* No. 5.516B) of frequency bands 17.7-20.2 GHz (space-to-Earth) and 27.5-30.0 GHz (Earth-to-space), OAS/CITEL Administrations consider implementing national provisions and procedures to facilitate the implementation of Ka-Band FSS systems intended to provide broadband services to ubiquitously deployed terminals;

2. That, in the portions of the bands referred to in considering a) where there is a co-primary allocation to the FSS, terrestrial and other space services, Administrations examine the impact of implementing HDFSS to provide satellite broadband services to the public;

3. That in the development of the national provisions described in recommends 2, Administrations consider provisions to facilitate deployment of fixed-satellite service broadband services and the associated ubiquitously deployed earth stations in the frequency bands identified for high density FSS Region 2 in ITU Radio Regulations 5.516B, specifically 18.3-19.3, 19.7-20.2, 28.35-29.1, 29.25-30 GHz, including class licensing;

4. That, taking into account *Recommends* 3 above, Administrations identify the bands 19.7-20.2 GHz (space-to-Earth) and 29.5-30.0 GHz (Earth-to-space) bands, which are not shared with the terrestrial services, for ubiquitous deployment of FSS earth stations, and develop national provisions and procedures for class licensing of earth stations;

5. That in the development of the national provisions described in recommends 3 and 4, earth station technical parameters be considered to avoid unacceptable interference between different satellite systems and the ubiquitously deployed FSS earth stations;

6. That Administrations also take into account the need for access to spectrum by hub or gateway FSS earth stations, including in bands shared with terrestrial services on a coordinated basis;

7. That Administrations take into account the need to share Ka-band spectrum between GSO and non-GSO FSS systems in order to bring the benefit of both types of satellite services to the countries of Region 2;

8. That in developing these national provisions and procedures, Administrations take into account existing and planned FSS systems with different types of earth stations and characteristics, where national class licensing provisions and procedures would not be applicable.

**RESOLVES:**

To derogate Recommendation PCC.III/REC. 62 (XVIII-01).

**PCC.II/REC. 37 (XX-12)<sup>9</sup>**

**ADOPTION OF THE PLAN FOR THE DIGITAL DIVIDEND BAND**

The XX Meeting of the Permanent Consultative Meeting II: Radiocommunications including Broadcasting (PCC.II),

**CONSIDERING:**

a) That the penetration of broadband services is imperative in the countries in the region, in particular in rural and remote populations, to maximize the social and economic benefits of the digital era;

b) That the digital dividend band has physical features which are conducive to the propagation of waves, providing broad coverage;

c) That the decisions of the national Administrations of countries in the Americas over the use of the spectrum stimulate the industry to accelerate the development of the technology ecosystem required for the region on this band;

d) That, during the analog television digitization process, a reorganization of the spectrum to facilitate the total or partial release of the digital dividend band may be considered in some geographic zones,

**RECOGNIZING:**

a) That the 2007 World Radiocommunication Conference (WRC-2007) allocated band 698 to 806 MHz to the mobile service on a primary basis for Region 2;

b) That, in Brazil, the allocation of band 698-806 MHz to the mobile service is on a secondary basis, in accordance with note 5.313B of Radio Regulations of the International Telecommunication Union

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<sup>9</sup> CCP.II-RADIO/doc.3141/12

(ITU) (5.313B *Different category of service: in Brazil, the allocation of the 698-806 MHz band to the mobile service is on a secondary basis (see No. 5.32). (CMR-07))*;

c) That Resolution 224 (WRC-07) recommended that national Administrations use bands below 1 GHz for the deployment of IMT;

d) That PCC.II adopted Recommendation PCC.II/REC.32(XIX-12), which recommended the provisions of frequencies for the bands identified for International Mobile Telecommunications in CMR-07, including the Digital dividend band of the Americas,

**RECOMMENDS:**

That OAS/CITEL Administrations planning to use band 698 to 806 MHz for terrestrial mobile services make official their decision to adopt a channeling arrangement for the Digital Dividend band publically.

## V. DECISIONS

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### PCC.II/DEC.140 (XX-12)<sup>10</sup>

#### QUESTIONNAIRE ON CURRENT AND PROJECTED SERVICES FOR THE 470-698 MHZ BAND IN THE AMERICAS

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

#### DECIDES:

To ask the Secretariat of CITEL to distribute the questionnaire in the Annex to the Member States and ask for their responses to support the studies on the 470-698 MHz band.

#### ANNEX TO DECISION PCC.II/DEC.140 (XX-12)

##### Questionnaire:

1. In your Administration, what services are allocated to the 470-698 MHz band on a primary and secondary basis?
2. Do you plan to include the allocation to mobile services on a primary basis in your Administration, and if so, how soon?
3. What is the status of the 470-698 MHz band allocation in your country? Please take the following table into account when providing your answers:

| Sub band (MHz) | Service | Number of licenses | % of territory covered | % of population served | Remarks |
|----------------|---------|--------------------|------------------------|------------------------|---------|
|                |         |                    |                        |                        |         |
|                |         |                    |                        |                        |         |
|                |         |                    |                        |                        |         |
|                |         |                    |                        |                        |         |
|                |         |                    |                        |                        |         |
|                |         |                    |                        |                        |         |

4. Are there any regulations in your country or plans to consider shared access to the spectrum so different service users are authorized to use the same frequency band under a “non-exclusive” model based on determined arrangements for sharing rights? Please give details.

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<sup>10</sup> CCP.II-RADIO/doc.3138/12 rev.1

4.1. If there are any of such regulations or plans for the shared model, please provide details on the relevant technical studies.

5. Considering the current work done in the region to obtain the first digital dividend (700 MHz band), does your Administration have ongoing studies or has it planned to explore the possibility of a second digital dividend? If so, please include information on viable frequency bands, expected deadlines or sources of additional information you find useful.

**PCC.II/DEC. 141 (XX-12)<sup>11</sup>**

**CONCLUSION OF CERTAIN ACTIVITIES OF THE WORKING GROUP RELATIVE TO  
SATELLITE SYSTEMS TO PROVIDE FIXED AND MOBILE SERVICES**

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

**DECIDES:**

1. To conclude the following activities of the Working Group Relative to Satellite Systems to provide Fixed and Mobile Services, in view of the fact that it has fulfilled its mandates as indicated in the document PCC.II-RADIO/doc. 2922/12 rev.2:

- Sub Working Group to Develop Common Procedures and Guidelines for Block or Generic Earth Station Licensing established by Decision PCC.II/DEC.19 (III-04);
- Sub Working Group relative to ESV Operations established by Decision PCC.II/DEC.22 (IV-04);
- Sub Working Group to Develop General Guidelines for the Licensing of GMPCS Services established by Decision PCC.II/DEC.26 (IV-04);
- Ad Hoc Group to Study Implementation of the FSS Plan in Appendix 30B established by Decision PCC.II/DEC.26 (IV-04);
- Ad Hoc Group Resolution PCC.II/RES.45 (X-07);

2. To instruct the Secretariat of CITEL to thank the Administrations that coordinated these activities and to update the structure and working plan documents accordingly.

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<sup>11</sup> CCP.II-RADIO/doc.3133/12 rev.1

**PCC.II/DEC. 142 (XX-12) <sup>12</sup>**

**REQUEST FOR COMMENTS ON PROPOSED DRAFT RECOMMENDATIONS CONSIDERED  
AT THE XX MEETING OF PCC.II**

The XX Meeting of the 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 Recommendations listed below:

- Document CCP.II-RADIO/doc. 3129/12 “DRAFT RECOMMENDATION PCC.II/REC. XXX (XX-12) – USE OF THE 1710-1780 / 2110-2180 MHz BANDS IN THE AMERICAS FOR BROADBAND MOBILE SERVICES”.
- Document CCP.II-RADIO/doc. 3132/12 rev.1 “DRAFT RECOMMENDATION PCC.II/REC. XXX (XIX-12) – DEVELOPMENT OF PRINCIPLES FOR THE RADICOMMUNICATION ASPECTS OF NATIONAL BROADBAND PLANS”

**PCC.II/DEC. 143 (XX-12) <sup>13</sup>**

**REQUEST FOR INFORMATION ON UNAUTHORIZED OPERATION OF SATELLITE  
SERVICES**

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

**DECIDES:**

To request OAS/CITEL Administrations to submit at the next PCC.II meeting information and contributions on their experiences and measures adopted with regard to satellite services that are or were provided without authorization in their territories.

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<sup>12</sup> CCP.II-RADIO/doc.3145/12 rev.1

<sup>13</sup> CCP.II-RADIO/doc.3146/12



**QUESTIONNAIRE ON ISSUES RELATED TO THE UPDATE AND REVIEW OF THE 1981  
AND 1988 RIO DE JANEIRO AGREEMENTS**

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

**DECIDES:**

To instruct the Executive Secretary of CITEL to send a letter to the Member States of the OAS/CITEL asking those that have not yet responded to the questionnaire approved by PCC.II /RES. 83 (XIX-12), to send them directly to Mr. Claudio Castro of the Administration of Argentina ([ccastro@cnc.gov.ar](mailto:ccastro@cnc.gov.ar)), before the next PCC.II meeting to maintain an ongoing discussion on the subject matter. Following is the approved questionnaire:

- a) Indicate whether they use criteria other than the criteria established in the “1981 and 1988 Rio Agreements” for their internal technical analysis;
- b) If so, describe such differences;
- c) Report if they have updated information on the ground conductivity maps;
- d) Report if they use the software platform of the International Telecommunication Union (ITU) developed in the early 1980s to perform technical analysis or if you use another platform (indicate which one and specify whether it includes analog/digital, digital/analog and digital/digital cases, if this was to be the case);
- e) Indicate and describe in detail any proposal deemed useful to review and update technical criteria such as levels of nominal usable field strength, the values of the protection ratios, flexibility margins in frequency coordination, etc.

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<sup>14</sup> CCP.II-RADIO/doc.3157/12

**PCC.II/DEC.145 (XX-12) <sup>15</sup>**

**CONCLUSION OF THE ACTIVITIES OF THE AD HOC GROUP ON THE STRATEGIC PLAN  
OF PCC.II**

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

**DECIDES:**

1. To conclude the activities of the Ad Hoc Group on the Strategic Plan of PCC.II, in view of the fact that it has fulfilled its mandate.
3. To instruct the Secretariat of CITEL to send a message to the Administrations of the Dominican Republic and Canada who served as President and Vice President of the group, thanking them for the work they did in leading this group.

**PCC.II/DEC. 146 (XX-12) <sup>16</sup>**

**COOPERATION AND CONVERGENCE BETWEEN BROADCASTING AND MOBILE  
SERVICES USING LTE NETWORKS**

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

**DECIDES:**

1. That the contents of the document CCP.II-RADIO/doc. 3071/12 “Cooperation And Convergence Between Broadcasting And Mobile Services Using LTE Networks” be included in the Technical Notebook on the digital television transition and opportunities for application convergence.
2. To invite contributions extending the scope of the document CCP.II-RADIO/doc. 3071/12 (that refers only to the North-American ATSC ) to the DVB-T and to the ISDB-T to be also included in the above mentioned Technical Notebook.

Such studies should be finished preferably to be presented at the XXI PCC.II meeting, or to the XXII PCC.II meeting, the latest.

In order to accomplish this within the proposed time, the virtual community on the Digital Dividend described in document CCP.II-RADIO/doc. 3116/12, should be used.

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<sup>15</sup> CCP.II-RADIO/doc.3134/12

<sup>16</sup> CCP.II-RADIO/doc.3142/12 rev.1

| <b>Group</b>     | <b>Address/Objective</b>   | <b>Coordinator</b>  |
|------------------|--|---|
| Digital dividend | <a href="http://community.oas.org/citel/ccpii/digital_dividend/default.aspx">http://community.oas.org/citel/ccpii/digital_dividend/default.aspx</a><br>Discussion group associated with the Ad Hoc Group to Address the Digital Dividend Spectrum Resulting from the Digital Television Transition and Opportunities for Application Convergence ( <a href="#">PCC.II/DEC. 118 (XVII-11)</a> ) | Mr. Claudio Castro<br>(Argentina)<br>Mr. José Costa<br>(Canada) |

**PCC.II/DEC. 147 (XX-12) <sup>17</sup>**

**CREATION OF A SUB-WORKING GROUP OF SPECTRUM MANAGEMENT OF THE WORKING GROUP ON TERRESTRIAL FIXED AND MOBILE RADIOCOMMUNICATION SERVICES**

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

**DECIDES:**

To create a Sub-Working Group of Spectrum Management of the Working Group on Terrestrial Fixed and Mobile Radiocommunication Services, for the study of issues concerning the formulation of guidelines, recommendations, criteria and strategies for spectrum management in the Member States.

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<sup>17</sup> CCP.II-RADIO/doc.3159/12

## VI. LIST OF BASIC DOCUMENTS

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|  |                                 |
|--|---------------------------------|
| Summary Minutes of the Inaugural Session:  | CCP.II-RADIO/doc. 3127/12 rev.2 |
| Summary Minutes of the First Plenary Session:  | CCP.II-RADIO/doc. 3127/12 rev.2 |
| Summary Minutes of the Second Plenary Session:   | CCP.II-RADIO/doc. 3147/12       |
| Summary Minutes of the Third Plenary Session<br>and Closing Session:   | CCP.II-RADIO/doc. 3154/12 rev.1 |
| Working Group on Preparation for Regional and World<br>Radiocommunication Conferences.   | CCP.II-RADIO/doc. 3148/12       |
| Working Group on Terrestrial Fixed and Mobile<br>Radiocommunication Services.  | CCP.II-RADIO/doc. 3149/12       |
| Working Group on Satellite Systems to Provide Fixed and Mobile<br>Services.  | CCP.II-RADIO/doc. 3150/12       |
| Working Group on Broadcasting.   | CCP.II-RADIO/doc. 3151/12       |
| Ad Hoc Group on the Strategic Plan of PCC.II.  | CCP.II-RADIO/doc. 3152/12       |
| Ad Hoc Group on Allocation of the Digital Dividend Spectrum<br>Resulting from the Transition to Digital Television and<br>Opportunities for Convergent Applications. | CCP.II-RADIO/doc. 3153/12       |
| List of Documents:   | CCP.II-RADIO/doc. 2995/12 rev.2 |
| List of Participants:  | CCP.II-RADIO/doc. 2996/12 rev.1 |
| Final Report for the Meeting:  | CCP.II-RADIO/doc. 3160/12 rev.1 |