Report From the Meeting of
CITEL PCC II WG-1 (WRC-07)

The fifth meeting of the CITEL Permanent Consultative Committee II: Radiocommunications including Broadcasting, Working Group for the Preparation for WRC-07 was held in Guatemala City, Guatemala on April 26 -29, 2005. The highlights/decisions of the meeting, for each WRC-07 agenda item, are provided below.

Agenda Item 1.2 - *consideration of allocations and regulatory issues related to the Earth exploration-satellite (passive) service, space research (passive) service and the meteorological satellite service in accordance with Resolutions 742 (WRC-03) and 746 (WRC-03).*

With regard to the extension of the current 18.1-18.3 GHz geostationary meteorological satellites allocation in the space-to-Earth direction to 300 MHz of contiguous spectrum in the 18.0-18.4 GHz band (Res. 746), Brazil joined Canada and US on some PVs. The new text of the PVs on this issue is as follows:

- Brazil and Canada believe that, to protect the fixed and mobile services, any expansion of the MetSat service (s-E) allocation beyond the band 18.1-18.3 GHz for geostationary applications will be required to conform to the existing pfd limits given in Table **21-4**.

- Brazil and Canada believe that any expansion of the MetSat allocation into the band 18.0-18.1 GHz should be governed by the same coordination conditions with the FS and MS as are currently applied in the band 18.1-18.3 GHz.

- The United States, Canada and Brazil support ongoing ITU-R studies on this issue in both the 18.0-18.1 GHz and the 18.3-18.4 GHz bands.

- The United States and Canada are not in favor of an extension of the MetSat allocation into the 18.3-18.4 GHz band in Region 2 if it necessitates imposition of additional constraints on the FSS in this band.

- The United States and Canada believe that, if an additional 100 MHz is allocated to the MetSat service in the 18 GHz band in Region 2, the lower sub-band at 18.0-18.1 GHz, could be favored under certain restrictions, due to the likelihood of sharing difficulties identified by WP4A between HDFSS GSO systems and MetSats in the upper sub-band at 18.3-18.4 GHz.

Agenda Item 1.3 - *in accordance with Resolution 747 (WRC-03), consider upgrading the radiolocation service to primary allocation status in the bands 9 000-9 200 MHz and 9 300-9 500 MHz, and extending by up to 200 MHz the existing primary allocations to the Earth exploration-satellite service (active) and the space research service (active) in the band 9 500-9 800 without placing undue constraint on the services to which the bands are allocated;*

Canada provided modifications to the existing PV under this agenda item. The new text of the PV is as follows:

On the issue of protection of existing primary aeronautical radionavigation and radionavigation service in the 9 000-9 200 MHz and 9 300-9 500 MHz bands respectively --- Canada and the United States have the point of view that while the bands 9 000-9 200 MHz and 9 300-9 500 MHz have a long history of successful co-band operations by the radionavigation and radiolocation services, new systems may not necessarily be compatible with existing systems. Therefore, Canada and the United States support measurement tests and ITU-R studies to verify the feasibility of sharing in these bands. If the outcome of these measurements and studies is favorable, Canada and the United States anticipate supporting the upgrading of radiolocation services to a primary status on the basis that the radiolocation service operating in the 9 000-9 200 MHz and 9 300-9 500 MHz bands should not constrain the use and development of the radionavigation service, operating in accordance with the Radio Regulations. This could be accomplished by an appropriate footnote to protect the aeronautical radionavigation and radionavigation systems.
The United States has the position that the footnote would be needed to protect aeronautical radionavigation and radionavigation systems regardless of the outcome of the ITU-R studies. Canada also believes that subject to the successful outcome of ITU-R studies the addition of the following footnotes could be considered;

ADD 5.XXX In the band 9 000-9 200 MHz stations in the radiolocation service shall not cause harmful interference to, or constrain the use and development of stations in the aeronautical radionavigation service.

ADD 5.YYY In the band 9 300-9 500 MHz stations in the radiolocation service shall not cause harmful interference to, or constrain the use and development of stations in the radionavigation service.

On the issue of possible allocations to the EESS (active) and SRS (active) in the 9 500-9 800 MHz band --- Canada and the United States have the point of view that ongoing ITU-R compatibility studies between the existing systems operating in the radiolocation and radionavigation services and the spaceborne radar systems operating under EESS (active) and SRS (active) are supported. Any expansion of the EESS (active) and SRS (active) allocation beyond the band 9 500-9 800 MHz should ensure that the incumbent services are protected. Should an expansion be granted to the EESS (active) and SRS (active) to operate spaceborne radar, it is considered at this time that the lower portion (9 300-9 500 MHz) may offer a good sharing environment. Sharing between EESS/SRS (active) designed in accordance with Recommendation ITU-R SA-1280 (Selection of active spaceborne sensor emission characteristics to mitigate the potential for interference to terrestrial radars operating in frequency bands 1-10 GHz) and radiolocation/radionavigation in other frequency bands below 10 GHz has proven feasible. If it is determined that equipment with similar characteristics as existing systems are planned to be used in the expansion band, it is likely that the same conclusion will apply. Some regulatory text in the form of one or more appropriate footnotes may be necessary to ensure protection to incumbent services.
The United States has the point of view that such an extension could be supported provided that there is a favorable outcome from the sharing studies and that the incumbent services are protected.

Canada also believes that subject to the successful outcome of ITU-R studies the following footnote amendments could be considered;

MOD 5.476A In the band 9 300-9 800 MHz, stations in the Earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, or constrain the use and development of, stations of the radionavigation and radiolocation services. (WRC-97)

Note: Canada is still assessing the relative priorities that should be afforded to the various services in these bands and the optimum regulatory language to achieve the intended objectives. The text provided above is to initiate discussion within CITEL.

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Agenda Item 1.4 - *frequency-related matters for the future development of IMT-2000 and systems beyond IMT-2000 taking into account the results of ITU-R studies in accordance with Resolution* ***228 (Rev.WRC-03)***

At the Spring '05 meeting, Brazil provided its preliminary view on this agenda item. The Brazil is of the view that it supports ongoing ITU-R studies. In particular, Brazil plans to participate in WP-8F activities related to determining the amount of spectrum that may be required for nomadic high data rate applications and high mobility broadband applications to be made available by future development of IMT-2000 and systems beyond IMT-2000, and when this new spectrum will be necessary. Brazil considers that any new spectrum for IMT-2000 and systems beyond IMT-2000 will be needed after 2015.

Agenda Item 1.5 - *spectrum requirements and possible additional spectrum allocations for aeronautical telecommand and high bit-rate aeronautical telemetry.*

Brazil, Canada and United States provided contributions on this agenda item to the Spring '05 meeting. The resultant PV is as follows:

Brazil, Canada and United States support further studies in order to determine how best to satisfy this agenda item while recognizing protection of incumbent services. Upon completion of these studies, these administrations will be in a position to make specific proposals.

The implications of the proposed CPM text should be studied further and developed.

It is noted that within the band 5 091-5 150 MHz, ARNS is primary in all Regions and is also allocated to the fixed-satellite service (Earth-to-space) on a primary basis in accordance with 5.444A. Any action by WRC-07 under Agenda Item 1.5 should permit the continued use of existing radiocommunication services and networks.

In addition to the joint views sets forth above, Brazil and Canada have the following additional views:

Brazil considers that it is worth studying the sharing of 4x12 MHz channels (≅ 50 MHz) required between 5 030-5 150 MHz. Additionally, for the Brazilian Administration it would not be possible to use the band 4.4-5 GHz by aeronautical telemetry and associated telecommand applications.

Canada further notes that from a traditional sense, uplink communications to an airborne station usually fall under the definition of telecommand, whereas downlink communications fall under the definition of telemetry. From this perspective, and taking into account the operation of airborne platforms using command and control functions

which may require use of (AM(R)S) spectrum, further analysis of the definitions may be necessary.
United States also proposed the following:

1. NOC to Article 1 (with regard to definitions for aeronautical telemetry and aeronautical telecommand pursuant to Agenda Item 1.5 (WRC-03)).
2. The operational command and control requirements of remotely-piloted aircraft (Unmanned Aerial Vehicles, UAVs) should not be considered under agenda item 1.5.

Agenda Item 1.6 - *additional allocations for the aeronautical mobile (R) service in parts of the bands between 108 MHz and 6 GHz, in accordance with Resolution 414 (WRC-03) and, to study current satellite frequency allocations, that will support the modernization of civil aviation telecommunication systems, taking into account Resolution 415 (WRC-03).*
No significant developments at spring '05 meeting on this agenda item.

Agenda Item 1.7 - *sharing between the mobile-satellite service and the space research service (passive) in the band 1 668-1 668.4 MHz, and between the mobile-satellite service and the mobile service in the band 1 668.4-1 675 MHz.*

Canada supported United States PV with minor modifications. This new text for the PV is as follows:
1. Canada and United States support the completion of studies demonstrating how:
(a) Radio astronomy and Space Research (passive) services, and
(b) Radio astronomy stations and MetAids earth stations can be protected from interference from mobile earth stations, in the bands 1 668 – 1 668.4 MHz and 1 668.4-1 670 MHz, respectively. Preliminary studies within the ITU-R show that co-frequency sharing between RAS stations and mobile earth stations (MES) is feasible, e.g. by employing coordination zones of radii of the order of 300 km, under worst case scenarios. To date, these studies considered only terrestrial MES; the airborne case was not considered. Interference by MES operating in the 1 670-1 675 MHz band can be prevented by much smaller coordination radii, of the order of 50 km.

2. Canada and the United States support the completion of sharing studies within the ITU-R between the mobile service and MSS in the band 1 668.4 – 1 675 MHz, recognizing that stations in the MSS shall not claim protection from fixed and mobile stations operating in the Canada and the United States (see the resolves of Resolution 744 with respect to United States), as stated in the *resolves* of Resolution **744**. These studies need to identify solutions so that the implementation of MSS networks in this band would not constrain the development of new/advanced applications in the mobile service that may be more susceptible to interference.

Agenda Item 1.8 - *studies on technical sharing and regulatory provisions for the application of high altitude platform stations operating in the bands 27.5-28.35 GHz and 31-31.3 GHz in response to Resolution 145 (WRC-03), and for high altitude platform*

stations operating in the bands 47.2-47.5 GHz and 47.9-48.2 GHz in response to Resolution 122 (rev. WRC-03).
No significant developments at spring ’05 meeting on this agenda item.

Agenda Item 1.9 - *technical, operational and regulatory provisions applicable to the use of the band 2 500-2 690 MHz by space services in order to facilitate sharing with current and future terrestrial services without placing undue constraint on the services to which the band is allocated*
A number of administrations adopted the preliminary view presented by the US at the previous meeting. The new CITEL PV is as follows:

- Argentina, Brazil, Chile, Dominican Republic, Honduras, Guatemala, and Uruguay support the review of technical, operational and regulatory provisions applicable to the use of the band 2 500-2 690 MHz by space services shall address full protection of current and future terrestrial services.
- Argentina, Brazil, Chile, Guatemala, Honduras, Dominican Republic, United States and Uruguay are of the view that:
    1. The scope of this agenda item is restricted to consideration of technical, operational and regulatory provisions applicable to the use of the band 2 500-2 690 MHz by space services in order to facilitate protection of the terrestrial services in the band.
    2. We support the ongoing studies being conducted at ITU-R with the view to establishing necessary regulatory protection for the terrestrial services in the 2 500-2 690 MHz band.
    3. Recognizing that implementations of satellite networks in Region 2 may negatively impact terrestrial services of several Region 2 countries and that Region 2 administrations are not planning to provide satellite services within the region, the United States is of the view that allocations to satellite services in the band 2 500 - 2 690 MHz in Region 2 may be unnecessary.
    4. In particular, since administrations in Region 2 have no plans for the implementation of the MSS systems in the band 2 500 – 2 690 MHz, there is a need to consider the removal of the primary allocations to MSS in the band 2 500 – 2 690 MHz in Region 2.
- The United States supports NOC to RR footnotes 5.417A and 5.418 as adopted by WRC-03 relating to non-GSO and GSO BSS (sound) systems in the band 2 605-2 655 MHz. (November 2004)
- Canada supports participation in the work being carried out in JTG 6-8-9 which is studying sharing between space services and current and future terrestrial services in the band 2500-2690 MHz.

Agenda Item 1.10 - *review of the regulatory procedures and associated technical criteria of Appendix 30B, without impact on existing allotments or assignments, Resolution 146 (WRC-03).*
No significant developments with regard to this agenda item at spring ’05 meeting.

Agenda Item 1.11 - *sharing criteria and regulatory provisions for the protection of terrestrial services, in particular terrestrial television broadcasting services, in the 620-790 MHz band from GSO BSS networks and non-GSO BSS satellite networks or systems.*
United States, Canada and Brazil developed the following preliminary view:

The Region 2 administrations have no plans to implement BSS systems in the band 620-790 MHz. The administrations in Region 2 are currently operating a large number of terrestrial analog and digital television broadcasting systems. In addition, some Region 2 administrations will be implementing mobile and fixed services, including public safety applications. Any constraints placed on the terrestrial services to protect BSS systems would not be acceptable.

Agenda Item 1.12 - *to consider possible changes in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference: "Advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks" in accordance with Resolution 86 (WRC-03);*
Input: 656 rev1 (US)
WRC-03 adopted a set of resolutions to address the issues under this agenda item: Resolution 88 which deals with the rationalization of Articles 9 and 11 of the Radio Regulations, Resolution 89 regarding the backlog of satellite network filings and Resolution 901 which concerns the extension of the coordination arc concept to new bands and services. WRC-03 also identified in Resolution **86 (WRC-03)** the scope and the criteria to be used for the implementation of Resolution **86 (Rev. Marrakesh, 2002)**. Resolves 1 of Resolution **86 (WRC-03)** specifically states that WRC-07 should "consider any proposals which deal with deficiencies in the advance publication, coordination, notification and recording procedures of the Radio Regulations for space services which have either been identified by the Board and included in the Rules of Procedure or which have been identified by administrations or by the Bureau as appropriate." WRC-03 also resolved that future WRCs consider any proposals that are intended to transform the content of the Rules of Procedure into regulatory text.
The status of these issues at CITEL after the Spring '05 is as follows:

Resolution 86 (WRC-03) – ***Scope and criteria to be used for the implementation of Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference***

a) ***Identification of Deficiencies in Selected Parts of the Radio Regulations and Transformation of Rules of Procedure into Radio Regulations***
Canada, Dominican Republic, and United States support the transformation of selected Rules of Procedure into Radio Regulations where doing so would alleviate known difficulties and consider this an ongoing activity for consideration by WRC-07 and subsequent WRCs. In view of the potentially broad scope of provisions that might be treated under agenda item 1.12, these administrations have the view that WRC-07 might transform some, but not all, of the current Rules of Procedures into Radio Regulations. When proposals are made to transform a Rule of Procedure into a Radio Regulation, it would be most important for proponents to identify the difficulties being addressed and any differences between the current Rule of Procedure and the proposed regulations to

facilitate their consideration. It is noted that additional Rules of Procedure are inevitable as a result of WRC decisions and that some rules are complicated, voluminous, and contain material that would not be appropriate for conversion into Radio Regulations.

b) ***Ensuring that procedures, characteristics and appendices reflect the latest technologies***
The Dominican Republic and the U.S. support modification of the Radio Regulations when the existing procedures, characteristics, and appendices are ineffective for the assessment and management of changes in the interference environment due to the introduction of new technologies.

c) Simplification of the Radio Regulations for space services
Canada, Dominican Republic, and United States support the continued simplification of the Radio Regulations procedures that would facilitate their understanding and minimize the need for associated Rules of Procedure.

d) Changes as a result of a Plenipotentiary Conference
The Dominican Republic and the U.S. are of the view that the decisions of past Plenipotentiary Conferences as well as the future Plenipotentiary Conferences in 2006 are within the scope of this activity. These administrations will focus their efforts on assessing the decisions of the 2006 Plenipotentiary Conference to identify any changes to the Radio Regulations that may be required.

Resolution 88 - *Rationalization of Articles 9 and 11 of the Radio Regulations*
Argentina, Brazil, Dominican Republic, and United States understand the term "rationalization" to mean clarification, simplification, and improvement of Articles 9 and 11 and not a complete replacement of Articles 9 and 11. The cascading effect on other Articles of the Radio Regulations, the inadvertent introduction of errors and inconsistencies requiring more Rules of Procedure, and the resultant state of uncertainty for the Bureau and Administrations are a few of the anticipated difficulties of extensive revisions to the Articles. These cascading effects, when combined with the wide-ranging treatment of the Radio Regulations under Resolution **86 (WRC-03)**, lead the U.S. to conclude that extensive revision and restructuring of Articles **9** and **11** should not be attempted. The U.S. supports selective modification of Articles **9** and **11** based on specific needs and opposes extensive revision and restructuring.

Resolution 89 - *Backlog in satellite filings*
Argentina, Brazil, Canada, Dominican Republic, and United States are interested and will actively participate in the review of Appendix 4 data requirements in the ITU-R and provide support to the Bureau when requested. These administrations support correcting inconsistencies and removing unnecessary data elements from Appendix 4. Unnecessary data is understood as data which is duplicative or not useful in the context of the coordination of satellite networks by Administrations.

Argentina and Canada also support the initiative to automate the examination of filings for compliance with the requirements of Article 5 to reduce processing time and the

backlog but do not view these automation initiatives by the Bureau or software for electronic filing as WRC matters.

Resolution 901 - *Determination of the orbital arc separation for which coordination would be required between two satellite networks operating in a space service not subject to a plan*

Argentina, Brazil, Canada, Dominican Republic, and United States support the coordination arc concept as currently reflected in the Radio Regulations as it facilitates the work of administrations and the Bureau. The extension of this concept to other frequency bands and other services need to be studied and these administrations will actively participate in the ITU-R activities in this area. Any extension of this concept to other frequency bands and other services or the confirmation or revision of the provisional values for the BSS and FSS for bands above 17.3 GHz should be based on technical studies taking into account that the coordination arc concept, if appropriate, may require different values for different services and frequency bands. As is currently provided for in Appendix **5** for GSO/GSO coordination under **No. 9.7**, administrations should retain the right to request to be included in coordination for networks outside the coordination arc, based on the value of $\Delta T/T$ exceeding 6%.

Agenda Item 1.13 - *Taking into account* **Resolutions 729 (WRC-97), 351 (WRC-03)** *and* **544 (WRC-03),** *to review the allocations to all services in the HF bands between 4 MHz and 10 MHz, excluding those allocations to services in the frequency range 7 000-7 200 kHz and those bands whose allotment plans are in* **Appendices 25, 26** *and* **27** *and whose channelling arrangements are in* **Appendix 17***, taking account of the impact of new modulation techniques, adaptive control techniques and the spectrum requirements for HF broadcasting;*

The administrations adopted the following preliminary views under this agenda item:

- Argentina, Brazil and Canada support continuing use of the HF bands by the fixed and mobile services due to its reliability and lower cost is a key point for the some administrations, where these systems are used in their territory. The allocation of additional spectrum for the broadcasting service in the HF bands called for in Resolution **544 (WRC-03)** is not a priority and the present allocations for the fixed and mobile services in the HF bands should be maintained. These administrations support the studies ongoing within ITU-R.

- Canada and United States are of the view that careful review should be given to each service's requirements prior to any changes to the HF channel plans. Actual usage, coordination, and deployment of HF systems by the subject services (Fixed, Land Mobile, Amateur, and Broadcasting) should be taken into account along with the technical solutions developed for each individual Resolution when proposing changes to the HF channel plans. There is a need for thorough and timely studies of the allocations to all services in the HF bands identified and the expected consequences to the current HF broadcasting mission based on projections of future HF broadcasting and fixed/mobile services use. There are number of ITU-R technical studies under Agenda Item 1.13 which should be completed by 2006. Revisions to Appendix 17 may be required to accommodate new digital technologies such as HF E-mail, web browsing, and real time video conferencing. It is premature to consider opening

Appendix 17 under ITU-R Resolution 351 as proposed by CEPT until the required feasibility studies are completed.

- United States also presented the following view:

The three issues under Agenda Item 1.13, although related, should be addressed separately in the ITU-R WPs assigned primary responsibility with cooperation and technical characteristics from the WPs of related services. Coordination should be achieved among the responsible groups through liaison statements and cross-participation from administration experts that attend contributing WPs and administration groups for each issue.

Resolution 729 (WRC-97). Before this resolution can be resolved; development of an ITU-R Recommendation for technical and operational characteristics for HF Frequency Adaptive systems is needed. In addition, review of the use of current and proposed future fixed HF operations is required. Once this has been accomplished within WP 9C, then the feasibility and need of modifying the HF channel plans to accommodate HF adaptive systems can be investigated and determined. This resolution is not limited to the 4-10 MHz band and could impact all fixed HF channel plans (3-30 MHz).

Resolution 351 (WRC-03). Given the vital nature of the safety systems listed in Appendix **17** of the **ITU-R Radio Regulations (RR),** that a thorough review of digital techniques for the HF/MF bands must be accomplished before any changes to Appendix **17** are made. An ITU-R Recommendation that details the technical and operational characteristics of digital systems and a review of Appendix **17** operations must be accomplished to fully determine the impact of any changes to existing services. This resolution is not limited to the 4-10 MHz band and could impact all of Appendix **17.**

Resolution 544 (WRC-03). This resolution deals with the possible addition of spectrum in the 4-10 MHz band for allocation to the HF broadcasting service and the effect on other services using the band. Initial investigation shows that the allocation of the entire spectrum identified as "preferred" bands is problematic for the United States given that vital government systems operate in all of these bands. In a proposal to WRC-03 the United States limited allocations to 250 kHz of spectrum for the HF broadcasters in the 4-10 MHz band. WRC-03 did not make the allocation to the HF broadcasting service that was requested. However, 50 kHz was allocated in Region 2 to the broadcasting service as a result of the realignment portions of the 7 MHz band under AI-1.23. The United States is investigating the current requirement that is needed to meet broadcasting needs.

Agenda Item 1.14 - *Operational procedures and requirements of the Global Maritime Distress and Safety System (GMDSS) and other related provisions of the Radio Regulations*

No significant developments with regard to this agenda item at spring '05 meeting.

Agenda Item 1.15 - *To consider a secondary allocation to the amateur service in the frequency band 135.7-137.8 kHz.* Brazil joined Canada, Argentina and Uruguay in support of a world-wide secondary allocation to the amateur service in the 135.7-137.8 kHz band with the necessary restrictions to protect existing services in the band.

Agenda Item 1.16 - *To consider the regulatory and operational provisions for Maritime Mobile Service Identities (MMSIs) for equipment other than shipborne mobile equipment, taking into account Resolutions 344 (Rev.WRC-03) and 353 (Rev.WRC-03)* -- Brazil joined United States and Canada in support of the review of Recommendation ITU-R M.585 prior to WRC-07. These administrations consider that ITU-R M.585 should take into account the potential exhaustion of maritime identification digits (MIDs) and MMSIs, and compatibility with current uses of MMSIs. This review may lead to recommendations for changes to the Radio Regulations. RR Article 19 should be modified to allow for assignment of MMSIs to aeronautical stations involved in maritime SAR.

Agenda Item 1.17 - *allocation to the FSS for feeder links for non-geostationary-satellite networks in the mobile-satellite service with service links below 1 GHz in the bands 1390-1392 MHz (Earth-to-space) and 1430-1432 MHz (space-to-Earth).* With regard to this agenda item, Brazil stated that the band 1429-1452 MHz is heavily used by the fixed service. As a consequence, Brazil seeks to ensure that all the incumbent services are adequately protected.
Canada noted that this issue was extensively discussed at WRC-03. Canada seeks to ensure the protection of the existing services in this and adjacent bands (fixed and radiolocation services in particular). Canada will participate in studies on this issue to ensure that any adopted sharing criteria adequately protect the incumbent services.

Agenda Item 1.18 - *pfd limits in the band 17.7-19.7 GHz for satellite systems using highly inclined orbits.*
With regard to this agenda item, Canada and the United States agreed to support no change to the pfd limits in Table **21-4**, Article **21.** The current pfd limits are adequate to protect the terrestrial services from non-GSO FSS satellites in highly-inclined elliptical orbits operating in the 17.7-19.3 GHz band.

United States is also of the following views:

1. That Agenda Item 1.18 and its associated resolution, although ambiguously worded so as to encompass some circular-orbit non-GSO systems that meet the apogee altitude and orbital inclination criteria in *considering g)* of Resolution **141 (WRC-03)**, was intended to apply to highly-inclined (i.e., between 35º and 145º) non-circular-orbit non-GSO FSS satellite systems with orbital apogee altitudes greater than 18,000 km ***and orbital perigee altitudes that are less than the orbital apogee altitudes***. Consequently, there is no need to review the limits that apply to those non-GSO satellite systems using circular orbits, such as medium earth orbits (MEO) that satisfy both the apogee altitude criterion and the inclination criterion.
2. Canada and United States support the ongoing studies within the ITU-R studies on sharing between non-GSO systems in the 17.7-19.7 GHz band using HIOs and FS networks in the same band should continue, in particular, the use of realistic assumptions both for the relevant characteristics of the fixed-satellite service – including the number of active HEO/HIO satellites in view of a particular fixed service station – and for the relevant characteristics of fixed service systems.

3. Studies will be improved by using realistic assumptions both for the relevant characteristics of the fixed-satellite service – including the number of active HEO/HIO satellites in view of a particular fixed service station – and for the relevant characteristics of fixed service systems.
4. Satellite networks using HIOs should continue to be considered as non-GSOs and have the same regulatory standing as other types of non-GSOs such as those in low and medium earth orbits. There is no need to modify the Radio Regulations in a way that categorizes HIO non-GSO operations separately from other non-GSO systems.

Under agenda item 1.18, the United Sates presented proposals for NOC to Articles 1 and 21 and for SUP of Resolution 141. Brazil objected to these proposals.

Agenda Item 1.19 - *spectrum requirements for global broadband satellite systems in order to identify possible global harmonized FSS frequency bands for the use of Internet applications, and consider the appropriate regulatory/technical provision*s.
At the December '04 meeting, United States, Brazil and Canada agreed on the following views:

1. There are many existing and planned systems in a number of different FSS frequency bands fully capable of providing broadband/Internet applications on a global basis. It would be counter-productive to identify any subset of frequencies, especially for Internet applications
2. The current Radio Regulations for access, coordination and notification of satellite networks fully accommodate the ability of FSS systems to provide Internet access.
3. The commercially available ground equipment suitable for broadband/Internet applications is frequency agile and is fully capable of operating with the existing and planned FSS satellite systems in the allocated frequency bands.
4. The identification of specific FSS frequency bands for Internet applications will not improve or facilitate the provision of these applications. No changes should be made to the Radio Regulations in connection with this agenda item.

Canada and United States adopted a draft proposal for NOC to the ITU Radio Regulations (Edition of 2004) under this agenda item.

Agenda Item 1.20 - *regulatory measures for the protection of the Earth exploration-satellite service (passive) from unwanted emissions of active services*.
No significant developments with regard to this agenda item at spring '05 meeting.

Agenda item 1.21 - *compatibility between radio astronomy service and active space services*.
No significant developments with regard to this agenda item at spring '05 meeting.

Other Issues –PCC II approved a US proposed resolution in support of the continued inclusion of the "No Change" option as a method to satisfy the agenda items, whenever relevant, along with the advantages and disadvantages in the CPM Report. This CITEL Secretariat will forward this resolution to the Director of the Radiocommunications Office, to the Chair of the CPM-07 and to the regional organizations that are preparing

WRC-07.

Next meeting
The next meeting of CITEL PCC II is scheduled for 25-28 October 2005, in Costa Rica.