

**3rd ITU INTER-REGIONAL WORKSHOP
ON WRC-15 PREPARATION
(Geneva, 1 – 3 September 2015)**

**Preparation of APT
for WRC-15**

***ASIA PACIFIC
TELECOMMUNITY***

**3rd ITU INTER-REGIONAL
WORKSHOP ON WRC-15
PREPARATION**

**GENEVA, SWITZERLAND
1-3 SEPTEMBER 2015**

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PREPARATION OF APT FOR WRC-15



ASIA PACIFIC TELECOMMUNITY



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 - **APT Conference Preparatory Group for WRC-15**
 - **Process of Developing APT Common Proposals**
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Part 1:

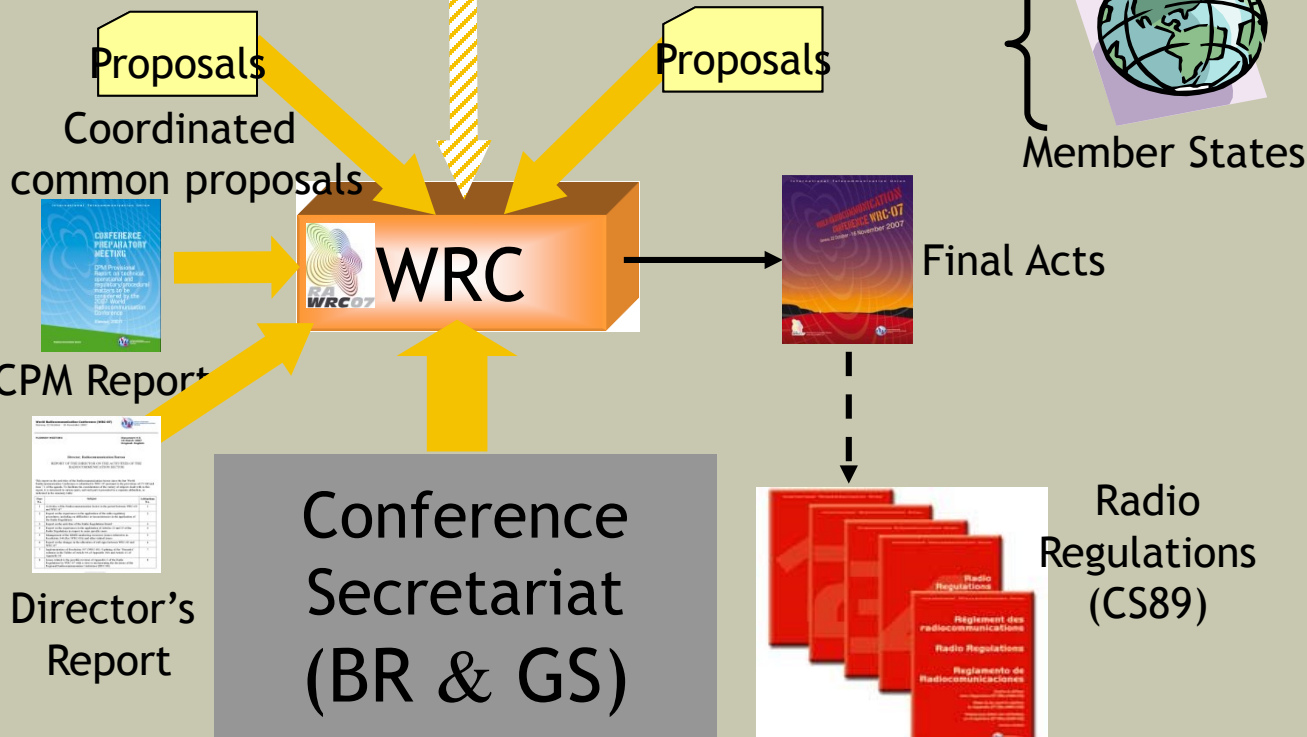
- **APT Conference Preparatory Group for WRC-15**
- **Process of Developing APT Common Proposals**

APT Conference Preparatory Group for WRC-15



Agenda: draft in WRC Res & final in Council Res

Informal Group
(Structure & Chairmanship)



APT CONFERENCE PREPARATORY GROUP WRC-15 (APG-15)



- APT's preparatory activities for WRC-15 was started in September 2012 by the 1st Meeting of APT Conference Preparatory Group for WRC-15 (APG15-1) in Da Nang, Socialist Republic of Vietnam
- Chairman: Dr. Alan Jamieson (New Zealand)
- Vice Chairs:
 - Mr. Kavouss Arasteh (Islamic Republic of Iran)
 - Dr. Kyu-Jin Wee (Republic of Korea)
- Editorial Chair: Mr. John Lewis

APT Conference Preparatory Group for WRC-15 (APG-15)



- APG Structure is same as CPM Chapter Structure

WP1:

- Mobile and Amateur Issues: 1.1, 1.2, 1.3 & 1.4
- Chair: Dr. Kyung-Mee Kim (Republic of Korea)

WP2:

- Science Issues: 1.11, 1.12, 1.13 & 1.14
- Chair: Ms. Zhu Keer (People's Republic of China)

WP3:

- Aeronautical, Maritime and Radiolocation Issues: 1.5, 1.15, 1.16, 1.17 & 1.18
- Chair: Mr. Neil Meaney (Australia)

WP4:

- Satellite Services: 1.6, 1.7, 1.8, 1.9.1, 1.9.2 and 1.10
- Chair: Mr. Gao Xiaoyang (People's Republic of China)

WP5:

- Satellite Regulatory Issues: 7, 9.1.1, 9.1.2, 9.1.3; 9.1.5; 9.1.8 & 9.3
- Chair: Mr. Muneo Abe (Japan)

WP6:

- General Issues: 2, 4, 8, 9.1.4, 9.1.6, 9.1.7 & 10
- Mr. Taghi Shafiee (Islamic Republic of Iran)

APT Conference Preparatory Group for WRC-15 (APG-15)



• APG-15 Meeting Schedule and Workplan

Meeting	When & Where	Outputs
APG15-1	10-11 September 2012 Da Nang, Socialist Republic of Vietnam	<ul style="list-style-type: none">• Elected APG-15 Chairman and Vice-Chairmen• Formed the APG-15 Working Parties based on CPM-15 Structure• Appoints of Chairmen for Working Parties• Adoption of Document Approval Procedure• Adoption of the Workplan
APG15-2	01-05 July 2013 Bangkok, Thailand	<ul style="list-style-type: none">• Review the progress of studies in ITU-R Study Groups on WRC-15 Agenda items• Formation of Drafting Groups on WRC-15 Agenda Items• Develop APT's Preliminary Views on WRC-15 Agenda Items based on Member's contribution and study result available at ITU-R Study Groups

APT Conference Preparatory Group for WRC-15 (APG-15)



• APG-15 Meeting Schedule and Workplan

Meeting	When & Where	Outputs
APG15-3	09-13 June 2014 Brisbane, Australia	<ul style="list-style-type: none">• Review the progress of studies in ITU-R Study Groups on WRC-15 Agenda items• Review and update APT's Preliminary Views on WRC-15 Agenda Items based on result of the outcomes of APG15-2, Member's contribution and study result available at ITU-R Study Groups• Develop APT's view on RA-15 related issues
APG15-4	09-14 February 2015 Bangkok, Thailand	<ul style="list-style-type: none">• Develop APT's contribution to CPM15-2• Review the progress of studies in ITU-R Study Groups on WRC-15 Agenda items• Review and update APT's Preliminary Views on WRC-15 Agenda Items based on result of the outcomes of APG15-2, Member's contribution and study result available at ITU-R Study Groups• Develop APT's view on RA-15 related issues

APT Conference Preparatory Group for WRC-15 (APG-15)



- APG-15 Meeting Schedule and Workplan

Meeting	When & Where	Outputs
APG15-5	27 July – 01 August 2015 Seoul, Republic of Korea	<ul style="list-style-type: none">• Development of Preliminary APT Common Proposals for RA-15 and WRC-15• Making the arrangements for coordination among APT member countries attending WRC-15

APT Conference Preparatory Group for WRC-15 (APG-15)



- **PROCESS OF DEVELOPING APT COMMON PROPOSALS**
 - In general, for a WRC Preparatory Cycle APT organizes five APG Meetings
 - The meetings developed and updated APT Preliminary Views on WRC Agenda items based on the ITU-R studies available and input contributions from Members
 - At the final preparatory meeting, Preliminary APT Common Proposals (PACP) are developed
 - Two Stage procedures are followed for developing APT Common Proposals

APT Conference Preparatory Group for WRC-15 (APG-15)



- **PROCESS OF DEVELOPING APT COMMON PROPOSALS**
 - **Stage One:**
 - ✦ Based on the APT Preliminary Views on Agenda Items Proposals are developed by the WPs at the 5th APG meeting
 - ✦ If there is consensus at the Plenary, a proposal becomes a PACP
 - **Stage Two:**
 - ✦ All APT Members will be asked to consider inclusion of their country name as a signatory to each PACP
 - ✦ A PACP becomes ACP if it is
 - Supported by at least 25% of the APT Members (Administrations)
 - And not opposed by the 50% of the number of Members who support it



Part 2: Preliminary APT Common Proposals on WRC-15

Agenda Items

(Organized in the order of CPM Report Chapters)

Preliminary APT Common Proposals on WRC-15 Agenda Items



Working Party 1 CPM Chapter 1: Mobile and Amateur Issues Agenda Items: 1.1, 1.2, 1.3 & 1.4

Website: <http://www.apr.int/APG-WP1>

AGENDA ITEM 1.1



- *"to consider additional spectrum allocations to the mobile service on a primary basis and identification of additional frequency bands for International Mobile Telecommunications (IMT) and related regulatory provisions, to facilitate the development of terrestrial mobile broadband applications, in accordance with **Resolution 233 (WRC-12)**"*

- **APT Proposal (as PACP):**
 - APT supports additional identification of IMT for the following frequency bands under this agenda item:
 - 1 427-1 452 MHz, and 1 492-1 518 MHz
 - APT supports Method A (NOC to the ITU Radio Regulations) for the following frequency bands under this agenda item:
 - ✦ 470-694/698 MHz, 1 350-1 400 MHz, 1 518-1 525 MHz, 1 695-1 710 MHz, 2 700-2 900 MHz, 3 400-3 600 MHz, 3 600-3 700 MHz, 3 700-3 800 MHz, 3 800-4 200 MHz, 4 500-4 800 MHz, 5 350-5 470 MHz, 5 725-5 850 MHz, and 5 925-6 425 MHz
 - APT does not provide common proposals for the following frequency bands under this agenda item:
 - ✦ 1 452-1 492 MHz, 3 300-3 400 MHz, 4 400-4 500 MHz, and 4 800-4 990 MHz

AGENDA ITEM 1.1



- **Relevant Preliminary APT Common Proposals are attached:**



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AGENDA ITEM 1.2:

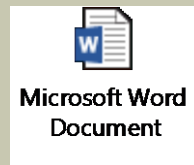


- *“to examine the results of ITU-R studies, in accordance with Resolution 232 (WRC-12), on the use of the frequency band 694-790 MHz by the mobile, except aeronautical mobile, service in Region 1 and take the appropriate measures;”*
- **APT Views and Position:**
 - Any possible regulatory and/or technical decisions under WRC-15 Agenda Item 1.2, based on ITU-R studies, should be limited to Region 1 and the Islamic Republic of Iran (which is party to GE06 Agreement) and cannot be extended to other ITU-R Regions. Such decisions should not impact the use of incumbent and future services in Region 3 administrations that are not signatory to the GE06 Agreement;
 - There is no need to develop Preliminary APT Common Proposal (PACP) for Agenda item 1.2.

AGENDA ITEM 1.3



- *“to review and revise Resolution **646 (Rev.WRC-12)** for broadband public protection and disaster relief (PPDR), in accordance with Resolution **648 (WRC-12).**”*
- **APT Proposal (as PACP):**
 - **APT common proposals for WRC-15 agenda item 1.3 are as follows:**
 - ✦ APT supports modification of **Resolution 646 (Rev. WRC-12)** under this agenda item as enclosed
 - ✦ as a consequence APT supports suppression of **Resolution 648 (WRC-12)**
 - **Relevant proposals are attached**



AGENDA ITEM 1.4



- *to consider possible new allocation to the amateur service on a secondary basis within the band 5 250-5 450 kHz in accordance with Resolution 649 (WRC-12);*

- **APT Views and Positions:**
 - **Taking into account the ITU-R studies:**
 - ✦ APT Members fully support the protection of incumbent services within the band 5 250 – 5 450 kHz;
 - ✦ No compromised solution was reached. APT decided to not develop Preliminary APT Common Proposal (PACP) for Agenda item 1.4.

Preliminary APT Common Proposals on WRC-15 Agenda Items



Working Party 2

CPM Chapter 2: Science Issues

Agenda Items: 1.11, 1.12, 1.13, 1.14

Website: <http://www.apr.int/APG-WP2>

AGENDA ITEM 1.11



- *“to consider a primary allocation for the Earth exploration-satellite service (Earth-to-space) in the 7-8 GHz range, in accordance with **Resolution 650 (WRC-12)**;*
- **APT Proposals (as PACP):**
 - **APT Members support the modified Method A of agenda item 1.11**
 - **Relevant proposals are attached**



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AGENDA ITEM 1.12



- *“to consider an extension of the current worldwide allocation to the Earth exploration-satellite (active) service in the frequency band 9 300-9 900 MHz by up to 600 MHz within the frequency bands 8 700-9 300 MHz and/or 9 900-10 500 MHz, in accordance with Resolution **651 (WRC-12)**;”*

- **APT Proposals (as PACP):**
 - **APT Member's views and positions are that**
 - ✦ Support an extension of EESS (active) by up to 600 MHz within the frequency ranges 9 200-9 300 MHz and 9 900-10 400 MHz preferably on a primary basis.
 - ✦ Extension bands may only be used for those EESS (active) systems requiring more than 600 MHz where their operation that cannot be accommodated in the existing frequency band 9 300-9 900 MHz.
 - ✦ Appropriate protection of the existing services currently allocated in the same frequency bands, especially the radiodetermination service and the fixed service, should be ensured according to the Radio Regulations.
 - ✦ No harmful interference should be caused to the SRS in the adjacent frequency band 8 400-8 500 MHz and the RAS and EESS (passive) in the frequency band 10.6-10.7 GHz.
 - ✦ Development of existing services should not be constrained by the EESS (active) allocation.
 - ✦ The protection of FS stations should be ensured through a provision in the RR with a pfd hard limit.

AGENDA ITEM 1.12



- APT Members support Method B2 of the CPM Report
- Relevant APT Proposals are attached



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AGENDA ITEM 1.13



- *“to review No. 5.268 with a view to examining the possibility for increasing the 5 km distance limitation and allowing space research service (space-to-space) use for proximity operations by space vehicles communicating with an orbiting manned space vehicle, in accordance with Resolution 652 (WRC-12);”*
- **APT Proposals (as PACP):**
 - APT Members support the single Method in the CPM Report for agenda item 1.13 and a Preliminary APT Common Proposal (PACP) is accordingly provided below.



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AGENDA ITEM 1.14



- *“to consider the feasibility of achieving a continuous reference time-scale, whether by the modification of coordinated universal time (UTC) or some other method, and take appropriate action, in accordance with Resolution **653 (WRC-12)**”*
- **APR Proposals (as PACP):**
 - APR Members are supportive of the studies undertaken by ITU-R WP 7A on the feasibility of achieving a continuous reference time-scale.
 - A continuous international reference time-scale proposed by Method A1/A2 of the CPM Report is beneficial for most users, and an appropriate implementation of continuous international time-scale should be developed and agreed by relevant international organizations.
 - A continuous international reference time-scale can be achieved, proposed by Method A1/A2 of the CPM Report, by stopping the insertion of leap seconds in UTC.

AGENDA ITEM 1.14



- Suppression of leap seconds proposed by Method A1/A2 of the CPM Report reduces the risk of operator error and increases the reliability of systems that depend upon time.
- The dissemination of two “standard” time-scales proposed by Method B of the CPM Report might bring significant risks of confusion, and it would be critical for the two scales to be differentiated in a truly fail-safe manner.
- Considering its wide applications, the change of the name of UTC proposed by Method A2 of the CPM Report must be treated with worldwide caution on both the international and national levels.
- To allow for an adequate period of time for legacy systems reliant on the use of leap seconds to adapt to the change in UTC, the application of the suppression of leap second adjustments to UTC will be effective no less than five years after the date of entry into force of the Final Acts of the WRC-15
- APT Members support Method A1 of the CPM Report to WRC-15, which is to achieve a continuous time-scale by stopping the insertion of leap seconds in UTC and to retain the name of UTC



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Preliminary APT Common Proposals on WRC-15 Agenda Items



Working Party 3

CPM Chapter 3: Aeronautical, Maritime and Radiolocation Issues

Agenda Items: 1.5, 1.15, 1.16, 1.17 & 1.18

Website: <http://www.apr.int/APG-WP3>

AGENDA ITEM 1.5



- *“to consider the use of frequency bands allocated to the fixed-satellite service not subject to Appendices **30**, **30A** and **30B** for the control and non-payload communications of unmanned aircraft systems (UAS) in non-segregated airspaces, in accordance with Resolution **153 (WRC-12)**”*
- **APT Proposals (as PACP):**
 - APT Members are of the view that the studies in ITU-R have not been finalized in this study cycle; therefore sharing/compatibility with existing services (including the other applications of the FSS) is still uncertain. Also, studies relating to crucial aspects (e.g. protection criteria, performance availability, service availability, safety margin and interference environment) with regards to usage of FSS frequency bands not subject to Appendices **30**, **30A** and **30B** for the UAS CNPC links in non-segregated airspaces are yet to be completed and finalized



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AGENDA ITEM 1.15



- *“to consider spectrum demands for on-board communication stations in the maritime mobile service in accordance with Resolution 358 (WRC-12)”*
- **APT Proposals (as PACP):**
 - The APT Members support the single method to satisfy the Agenda item 1.15 of the CPM Report to the WRC-15.
 - The APT Members support the incorporation in the Radio Regulations of provisions to enable more effective use of the existing allocation for on-board communication stations in the maritime mobile service.
 - The APT Members consider that the application of efficient spectrum utilization methods, such as 12.5 kHz and/or 6.25 kHz channel spacing, and use of digital modulation techniques are sufficient to avoid the possible congestion of on-board communication channels, in which case the technical characteristics of on-board communication equipment with differing channel spacing, and the channel numbering, must be in conformity with Recommendation ITU-R M.1174-3.

AGENDA ITEM 1.15



- It is proposed that RR No. **5.287** be amended accordingly and that Resolution **358 (WRC-12)** be abrogated, in accordance with the single Method in the CPM Report.



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AGENDA ITEM 1.16



- *“to consider regulatory provisions and spectrum allocations to enable possible new Automatic Identification System (AIS) technology applications and possible new applications to improve maritime radiocommunication in accordance with Resolution **360 (WRC-12)**”*
- **APT Proposals (as PACP):**
 - Supports ITU-R studies towards new applications using the AIS and enhanced maritime radiocommunication in the maritime mobile service in accordance with Resolution **360 (WRC-12)**.
 - The implementation of the concept of the VDES which contains the VDE terrestrial component, the satellite component and the ASM component would enhance maritime radio communications.
 - Modifications should not be required to existing AIS equipment on board existing vessels. New applications using AIS technology should be allowed to evolve, supported by communication primarily on the new frequencies identified by WRC-12, while protecting the integrity of the original operational purpose of AIS as the primary function on the existing AIS frequencies.
 - That the frequency band identified for VDES should accommodate the expected future AIS VDL loading.

AGENDA ITEM 1.16



- Any change to the regulatory provisions and spectrum allocations resulting from this agenda item should not adversely impact on the capability of search and rescue aircraft to effectively communicate with vessels during disaster relief operations.
- It is needed to take full account of the outcomes of WRC-12 on digital communication channel arrangements in RR Appendix **18** for the global and regional channel allocation for VDES. Different types of VDES applications and equipment in different scenarios and operating in different frequency arrangement plan could be considered.
- Any new allocation for the future applications, including satellite application, to the frequency bands listed in the RR Appendix **18** should be based on issued ITU-R Recommendation.
- Transitional arrangements are required to minimize the impact of use of new applications on the existing services using frequencies listed in the RR Appendix **18**. The VDES equipment should provide backwards compatibility for existing AIS, the installation costs should be minimized and the proper transitional period should be considered.
- New VDES should not adversely impact VHF radiotelephony channels used for maritime safety at sea and ports.
- Operation of designated ASM channels should not adversely impact AIS 1 and AIS 2 channels.
- VDE Satellite downlinks should not adversely impact AIS 1 and AIS 2 channels, and terrestrial component of VDE, and incumbent services in the same frequency band.
- It is desirable to consider the possibility of VDES involvement in the future modernized GMDSS.
- The two safety-of-navigation channels, AIS 1 and AIS 2, should be protected from harmful interference and blocking.
- The two channels 2027 and 2028 should be used for new AIS applications as ASM channels, the usage of remaining channels 1027 and 1028 should be taken into account.

AGENDA ITEM 1.16



- APT Members support the Method A1 for Issue A, Method B1 for Issue B, Method C1-A for Issue C and Method D for Issue D. The resulting proposals are shown in the attached document



AGENDA ITEM 1.17



- *“to consider possible spectrum requirements and regulatory actions, including appropriate aeronautical allocations, to support wireless avionics intra-communications (WAIC), in accordance with Resolution **423 (WRC-12)**”*
- **APT Proposals (as PACP):**
 - APT Members support a primary allocation to AM(R)S in the frequency band 4 200-4 400 MHz, limited to WAIC systems
 - APT Members note that studies show that the introduction of WAIC systems do not constrain the incumbent services having primary allocation in the frequency band 4 200-4 400 MHz
 - APT Members support the single method, included in the CPM 15-2 Report
 - Relevant proposals:



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AGENDA ITEM 1.18



- *“to consider a primary allocation to the radiolocation service for automotive applications in the 77.5-78.0 GHz frequency band in accordance with Resolution 654 (WRC-12)”*
- **APT Proposals (as PACP):**
 - APT Members support a primary allocation to the radiolocation service for automotive applications in the 77.5-78.0 GHz frequency band, and the use of the band by the radiolocation service is limited to radar systems in accordance with the most recent version of Recommendation ITU-R M.2057.



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Preliminary APT Common Proposals on WRC-15 Agenda Items



Working Party 4

CPM Chapter 4: Satellite Services

Agenda Items: 1.6, 1.7, 1.8, 1.9.1, 1.9.2 & 1.10

Website: <http://www.apr.int/APG-WP4>

AGENDA ITEM 1.6 (1.6.1)



- **Agenda Item 1.6.1:** *“to the fixed-satellite service (Earth-to-space and space-to-Earth) of 250 MHz in the range between 10 GHz and 17 GHz in Region 1; and review the regulatory provisions on the current allocations to the fixed-satellite service within each range, taking into account the results of ITU-R studies, in accordance with Resolution **151 (WRC-12)**”*
- **APT Proposals (as PACP):**
 - APT Members support no change (NOC) method in the frequency bands 10-10.68 GHz, 13.25-13.4 and 14.8-17 GHz due to incompatibility with existing services.
 - APT Members do not support the additional allocation to the FSS (Earth-to-space) in Region 1 in the frequency band 13.4-13.75 GHz due to incompatibility with existing services.
 - APT Members do not support the additional allocation to the FSS (space-to-Earth) in Region 1 in the frequency band 14.5-14.8 GHz due to incompatibility with existing services.
 - APT Members support to make an additional allocation of 250 MHz to the FSS (space-to-Earth) in Region 1 in the frequency band 13.4-13.65 GHz.



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AGENDA ITEM 1.6 (1.6.2)



- **Agenda Item 1.6.2:** *“to the fixed-satellite service (Earth-to-space) of 250 MHz in Region 2 and 300 MHz in Region 3 within the range 13-17 GHz; and review the regulatory provisions on the current allocations to the fixed-satellite service within each range, taking into account the results of ITU-R studies, in accordance with Resolution 152 (WRC-12)”*
- **APT Proposals (as PACP):**
 - APT Members support the no change (NOC) method in the frequency bands 13.25-13.4GHz and 14.8-17GHz due to incompatibility with existing services
 - Views were diverging and no consensus was reached, and it was decided not to develop PACP in the 13.4-13.75GHz band and 14.5-14.8GHz band.



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AGENDA ITEM 1.7



- *“to review the use of the band 5 091-5 150 MHz by the fixed-satellite service (Earth-to-space) (limited to feeder links of the non-geostationary mobile-satellite systems in the mobile-satellite service) in accordance with Resolution 114 (Rev.WRC-12)”*
- **APT Proposals (as PACP):**
 - APT Members support the single Method in the CPM Report to fully satisfy this agenda item. APT Members also noted that the operation of the international standard MLS will be protected with this Method as well as providing some improved flexibility for AM(R)S services in the band.



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AGENDA ITEM 1.8



- *“to review the provisions relating to Earth Stations located on board Vessels (ESVs), based on studies conducted in accordance with Resolution 909 (WRC-12);”*
- **APT Proposals (as PACP)**
 - **APT Members support no change to the Radio Regulations, Resolution 902(WRC-03) and the suppression of the Resolution 909(WRC-12)**



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AGENDA ITEM 1.9.1



- *“to consider, in accordance with Resolution **758 (WRC-12)**, possible new allocations to the fixed-satellite service in the frequency bands 7 150-7 250 MHz (space-to-Earth) and 8 400-8 500 MHz (Earth-to-space), subject to appropriate sharing conditions;”*
- **APT Proposals (as PACP):**
 - APT members support Method C, no change to the Radio Regulations, in the CPM Report to WRC-15, concerning possible new allocations to the fixed-satellite service in the frequency bands 7 150-7 250 MHz (space-to-Earth) and 8 400-8 500 MHz (Earth-to-space) in accordance with Resolution **758 (WRC-12)**



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AGENDA ITEM 1.9.2



- *“to consider, in accordance with Resolution **758 (WRC12)**: the possibility of allocating the bands 7 375-7 750 MHz and 8 025-8 400 MHz to the maritime-mobile satellite service and additional regulatory measures, depending on the results of appropriate studies”*
- **APT Proposals (as PACP):**
 - APT Members oppose the new allocation to MMSS (Earth-to-space) in the band 8 025-8 400 MHz. In addition, suppression of the Resolution **758 (WRC-12)** is proposed



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AGENDA ITEM 1.10



- *“to consider spectrum requirements and possible additional spectrum allocations for the mobile-satellite service in the Earth-to-space and space-to-Earth directions, including the satellite component for broadband applications, including International Mobile Telecommunications (IMT), within the frequency range from 22 GHz to 26 GHz, in accordance with Resolution **234 (WRC-12)**”*
- **APT Proposals (as PACP):**
 - APT Members support Method A of the CPM Report (i.e. No Change), which also includes the suppression of Resolution 234 (WRC-12) as a consequence.



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Preliminary APT Common Proposals on WRC-15 Agenda Items



Working Party 5

CPM Chapter 5: Satellite Regulatory Issues

Agenda Items: 7, 9.1.1, 9.1.2, 9.1.3, 9.1.5, 9.1.8 & 9.3

Website: <http://www.apr.int/APG-WP5>

AGENDA ITEM 7



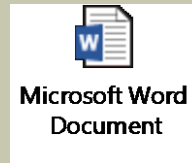
- *“to consider possible changes, and other options, in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, an advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks, in accordance with Resolution 86 (Rev.WRC-07) to facilitate rational, efficient, and economical use of radio frequencies and any associated orbits, including the geostationary-satellite orbit;”*
- **APT Proposal (as PACP):**

AGENDA ITEM 7



- **Issue A: Informing the BR of a suspension under RR No. 11.49 beyond six months**

- ✦ Some APT Members support Method A1 (NOC). Some other APT Members support the Method A2, Option A, with its proposed regulatory text, as it was added to the CPM15-2 Report.
- ✦ Members do not support Method A2, Option B as contained in the CPM15-2 Report. In conclusion, APT Members support the Method A2, Option A.



- **Issue B: Publication of information on bringing into use of satellite networks at the ITU website**

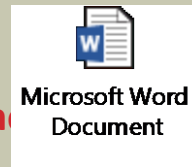
- APT Members are of the view that it is necessary to make available the information on bringing into use and suspension of satellite networks on the ITU website and publish it in the BR IFIC
- In view of the linkage between the information about BIU and Resolution **49 (Rev. WRC-12)** is not appropriate and may have unintended adverse impacts, APT Members support Method B1, Option B as contained in the CPM15-2 Report, with modification, which is identical to Method B2 without relation to Resolution 49
- Some APT Members support Method B3



AGENDA ITEM 7



- **Issue D: General use of modern electronic means of communications in coordination and notification procedures**
 - APT Members support the use of modern electronic as communication methods without replacing “telegram”, “telex” or “fax” since telefax is still used in many administrations as the most reliable means of communication due to the fact that, in some instances, in particular in some developing countries, Internet may not be always available. Hence, they support Method D which proposes the amendments to Resolutions 907 (WRC-12) and 908 (WRC-12). In addition, effort to improve the integrity of the contact details is supported and encouraged



- **Issue E: Failure of a satellite during the transition period by bringing into use period**
 - APT Members have a view that it is appropriate to consider the situation on case-by-case basis
 - APT Members support the Method E3 as contained in the CPM15-2 Report
 - APT Members do not support Method E1, E2 and E4 as contained in the CPM15-2 Report



AGENDA ITEM 7



- **Issue F: Modifications to RR Appendix 30B in relation to the suspension of use of a frequency assignment recorded in the MIFR**
 - APT Members support the single Method F, as outlined in the CPM15-2 Report, which an alignment between RR Appendix 30B, RR Article 11 and RR Appendices 30 and 30A in relation to the suspension of use of a frequency assignment is required
 - Should WRC-15 adopt additional modifications to RR No. 11.49 and section 5.2.10 of RR Appendices 30 and 30A, WRC-15 is invited to consider the alignment of provisions pertaining to suspension of a frequency assignment in RR Appendix 30B with those modifications



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- **Issue G: Clarification of bringing into use information provided under RR No. 11.44/11.44B**
 - APT Members support the single Method G, with its proposed regulatory text, as it was added to the CPM15-2 Report

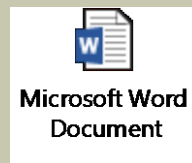


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AGENDA ITEM 7



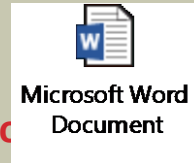
- **Issue H: Using one space station to bring frequency assignments at different orbital locations into use within a short period of time**
 - During the APG15-5 meeting, different views were expressed on the Methods as contained in the CPM15-2 Report. APT Members did not reach an agreement on PACP
- **Issue I: Possible method to mitigate excessive satellite network filings issue**
 - APT Members are generally supportive of efforts aimed at mitigating excessive filings. But they also have many concerns, including:
 - that the addition of a new initial notification step proposed in Methods I1.1 to I1.3 will not result in smaller numbers of future filings because there is not any new requirement or incentive in the methods that will cause an administration to suppress satellite networks filings that are undergoing coordination and for which cost recovery charges have been paid. The information required by the new initial notification notices can easily be filled out by the administration but the addition of this new step will increase the administrative efforts for the administrations and the BR
 - further studies are needed with the above methods



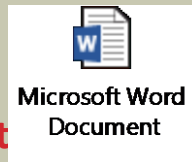
AGENDA ITEM 7



- **Issue K: Addition of a regulatory provision in Article 11 for the case of launch failure**
 - APT Members support the Method K2 with its proposed regulatory text, as it was added to the CPM15-2 Report



- **Issue [X]: Review of the orbital position assignments in Annex 7 to RR Appendix 30**
 - APT Members support no change to the Radio Regulations under this issue



- **Issue [Y]: Steerable beams and antenna contour covering area beyond Submitted service area (Annex 2 to Appendix 4 of the RR)**
 - ✦ APT members support the need of consideration of this issue which would require further study on technical and regulatory aspects

AGENDA ITEM 7



- **Issue [Z]: Harmonization of regulatory texts in Appendix 30 and Appendix 30B in regard with exclusion of the territory of an administration from the service area of a satellite network subject to these appendices**
 - APT Members are encouraged to submit the contribution on Harmonization of regulatory texts in Appendix 30 and Appendix 30B in regard with exclusion of the territory of an administration from the service area of a satellite network subject to these appendices, to WRC-15

AGENDA ITEM 9.1



- *“to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention on the activities of the Radiocommunication Sector since WRC-12;”*
- **APT Proposals (as PACP):**
 - **Issue 9.1.1: Resolution 205 (Rev.WRC-12) - Protection of the systems operating in the mobile-satellite service in the band 406-406.1 MHz**
 - APT Members support appropriate regulatory, technical and operational studies in ITU-R with a view to ensuring the adequate protection of MSS systems in the frequency band 406-406.1 MHz from any emissions that could cause harmful interference. Meanwhile, all incumbent services to which the relevant bands are allocated should be protected for existing and planned assignments and undue constraints should not be imposed on such assignments
 - APT Members support the sole Method described in the CPM Report to the WRC-15. Resolution **205 (Rev.WRC-12)** could be revised with a view of having an adequate protection of the MSS in the frequency band 406-406.1 MHz in order to detect and successfully process 406 MHz distress signals, taking into account the current and future deployment of services in adjacent frequency bands



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AGENDA ITEM 9.1



- **APT Proposals (as PACP):**
 - **Issue 9.1.2:** *Resolution 756 (WRC-12) - Studies on possible reduction of the coordination arc and technical criteria used in application of No. 9.41 in respect of coordination under No. 9.7*
 - ❖ APT Members did not reach an agreement on a PACP for the Agenda Item 9.1 Issue 9.1.2

AGENDA ITEM 9.1



- **APT Proposals (as PACP):**

- **Issue 9.1.3: Resolution 11 (WRC-12) - Use of satellite orbital positions and associated frequency spectrum to deliver international public telecommunication services in developing countries**
 - APT Members are of the view that the satellite network filings should be treated in the same manner and equal basis
 - APT supports no change to the Radio Regulations and retention of Resolution **11 (WRC-12)**



AGENDA ITEM 9.1



- **APT Proposals (as PACP):**
 - **Issue 9.1.5: Resolution 154 (WRC-12)** - *Consideration of technical and regulatory actions in order to support existing and future operation of fixed-satellite service earth stations within the band 3 400-4 200 MHz, as an aid to the safe operation of aircraft and reliable distribution of meteorological information in some countries in Region 1 (WP 4A (technical and regulatory aspects), SC (regulatory and procedural aspects)).*
 - APT Members recognize that this issue is restricted to some countries in Region 1 and APT Members do not support any aspects of this issue being applied to Region 3 (No PACP).

AGENDA ITEM 9.1



- **APT Proposals (as PACP):**

- **Issue 9.1.8:** *Resolution 757 (WRC-12) - Regulatory aspects for nano- and picosatellites*

- ✦ Members support the study to examine the necessary procedures for notifying nano- and picosatellites taking into account their unique characteristics while any unacceptable impact on existing services and radio stations in operation or of planned operation in conformity with the RR is avoided.
 - ✦ Members support that the issue related with nano- and picosatellites should be carried out under a certain Agenda Item deals with satellite regulatory issue of a future WRC for the consideration of regulatory procedures for notifying these satellite networks
 - ✦ APT Members also support retention of Resolution **757 (Rev.WRC-12)** with some modifications, as appropriate



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Preliminary APT Common Proposals on WRC-15 Agenda Items



Working Party 6

CPM Chapter 6: General Issues

Agenda Items: 2, 4, 8, 9.1.4, 9.1.6, 9.1.7, 10

Website: <http://www.apr.int/APG-WP6>

AGENDA ITEM 2



- *“to examine the revised ITU-R Recommendations incorporated by reference in the Radio Regulations communicated by the Radiocommunication Assembly, in accordance with Resolution **28 (Rev.WRC-03)**, and to decide whether or not to update the corresponding references in the Radio Regulations, in accordance with the principles contained in Annex 1 to Resolution **27 (Rev.WRC-12)**;”*
- **APT Proposals (as PACP):**
 - **Issue 1 - Consideration on the ITU-R Recommendations incorporated by reference in the Radio Regulations which have been revised and approved since WRC-12**
 - ✦ APT Members propose updating the references to the following ITU-R Recommendations in Table A1 which are contained in Volume 4 of the Radio Regulations to the most recent version. The relevant texts in the RR footnotes, provisions and WRC Resolutions incorporating these Recommendations by reference, as identified in the cross-reference Table in Volume 4 of the Radio Regulations, need to be updated accordingly

AGENDA ITEM 2



- **Issue 2 - Addition of “-0” to the first version of the Recommendations incorporated by reference in the Radio Regulations**
 - ✦ APT Members propose updating the references to the first version of the following ITU-R Recommendations contained in Volume 4 of the Radio Regulations to be completed with the version number “-0”. The relevant texts in the RR footnotes, provisions and WRC Resolutions incorporating these Recommendations by reference, as identified in the cross-reference Table in Volume 4 of the Radio Regulations, need to be updated accordingly



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AGENDA ITEM 4



- *“in accordance with Resolution 95 (Rev.WRC-07), to review the resolutions and recommendations of previous conferences with a view to their possible revision, replacement or abrogation;”*
- **APT Proposals (as PACP) :**
 - In accordance with Resolution 95 (Rev.WRC-07), APT Members made a general review of Resolutions and Recommendations of previous conferences and submit the possible course of action for consideration by WRC-15 as provided in the table that follows.



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AGENDA ITEM 9.1



- *“to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention on the activities of the Radiocommunication Sector since WRC-12;”*
- **APT Proposals (as PACP)**
 - **Issue 9.1.4: *Updating and rearrangement of the Radio Regulations***
 - ✦ APT Members support Option A2 of Issue A and Option B2 of Issue B as described in the CPM Report



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AGENDA ITEM 9.1



- **APT Proposal (as PACP)**

- **Issue 9.1.6: Resolution 957 (WRC-12): Studies towards review of the definitions of fixed service, fixed station and mobile station**

- ✦ APT Members fully support the ITU-R conclusions under Agenda Item 9.1, Issue 9.1.6, i.e. No change to the Radio Regulations apart from the suppression of Resolution **957 (WRC-12)** due to the fact that the responsible working parties for satellite and terrestrial services have indicated that modifications to the definitions of fixed service, fixed station or mobile station would have adverse impact on the operation of various satellite radiocommunication services/systems

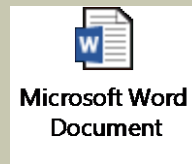


AGENDA ITEM 9.1



- **APT Proposals (as PACP)**

- **Issue 9.1.7: Resolution 647 (Rev.WRC-12): Spectrum management guidelines for emergency and disaster relief radiocommunication**
 - ✦ APT Members support to continue the ITU-R studies related to spectrum management guidelines for emergency and disaster relief Radiocommunication
 - ✦ APT Members support Option B as described in the CPM Report for this agenda item, i.e. to keep Resolution **644 (Rev. WRC-12)** and modify Resolution **647 (Rev. WRC-12)** due to the fact that this option encourages administrations to provide relevant up-to-date focal point information to be included in the database, and maintains the internal and external references (Resolution **647 (Rev. WRC-12)** is referenced within and outside ITU-R (e.g. ITU-R website, UN specialized agencies on emergency and disaster relief) and Resolution **644 (Rev. WRC-12)** is explicitly referenced in the Tampere Convention (Tampere, 1998))



AGENDA ITEM 10



- *“to recommend to the Council items for inclusion in the agenda for the next WRC, and to give its views on the preliminary agenda for the subsequent conference and on possible agenda items for future conferences, in accordance with Article 7 of the Convention;”*
- **APT Proposals (as PACP)**
 - In developing new WRC Agenda items, APT Members supports the ‘Principles for establishing agendas for WRCs’ as detailed in Annex 1 to Resolution **804 (Rev.WRC-12)** and encourages the use of the *Template for the submission of proposals for agenda items* (Annex 2 of the Resolution)
 - APT Members are of the view that the volume of the agenda of a WRC and the workload of the preparatory work needed to be kept at a manageable level and that issues that can be resolved under the standing agenda items of WRCs or through the regular activities of ITU-R should not be converted into separate agenda items of WRCs

AGENDA ITEM 10

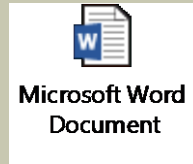


- APT Members carefully examined the proposed new items for inclusion in the agenda of a future conference together with the preliminary agenda items for WRC-19 within Resolution **808 (WRC-12)** and reached the following proposals on WRC-15 Agenda item 10
- APT Members propose the following agenda items:
 - ✦ to consider identification of frequency bands for IMT including possible additional allocations to the mobile service on a primary basis in accordance with Resolution **[ASP-B10- IMT_ABOVE_6GHz] (WRC-15) (Attachment 1)**
 - ✦ to consider the appropriate regulatory measures to identify the land mobile and fixed services operating in the frequency range 275-1 000 GHz in accordance with Resolution **[ASP-C10-MS&FS_ABOVE_275GHz] (WRC-15) (Attachment 2)**
 - ✦ to consider spectrum related matters and possible regulatory actions for Intelligent Transport Systems (ITS) applications, taking into account the results of ITU-R studies, in accordance with Resolution **[ASP-D10-ITS] (WRC-15) (Attachment 3)**
 - ✦ to consider regulatory actions, including spectrum allocations, to support GMDSS modernization and implementation of e-navigation in accordance with Resolution **359 (Rev. WRC-15) (Attachment 4)**
 - ✦ to consider regulatory provisions to facilitate the introduction of GADSS in aeronautical services bands in accordance with Resolution **[ASP-E10-GADSS] (WRC-15) (Attachment 5)**
 - ✦ to consider possible frequency requirement and regulatory procedures for protecting the automatic identification system (AIS) and supporting novel devices using AIS technology, in accordance with Resolution **[ASP-F10-AIS] (WRC-15) (Attachment 6)**;
 - ✦ to consider spectrum related matters and possible regulatory actions to support the next generation radiocommunication systems between train and tracksides, in accordance with Resolution **[ASP-G10-TRAIN] (WRC-15) (Attachment 7)**;
 - ✦ to consider spectrum related matters and regulatory actions to support wireless power transmission (WPT) taking into account the results of ITU-R studies in accordance with Resolution **[ASP-H10-WPT] (WRC-15) (Attachment 8)** It refers to non-beam Wireless Power Transmission technologies.

AGENDA ITEM 10



- **APT Proposals (as PACP)**
 - Relevant proposals:



AGENDA ITEM GFT (PP-14)



- **Global Flight Tracking for Civil Aviation matter:** *as a matter of urgency, the consideration of global flight tracking, including, if appropriate, and consistent with ITU practices, various aspects of the matter, taking into account ITU-R studies, in accordance with Plenipotentiary Conference Resolution 185 (Busan, 2014)*
- **APT Proposals (as PACP):**
 - APT Members invites WRC-15 to recognize the importance and urgent treatment of Global Flight Tracking for Civil Aviation, taking into account the result of the studies so far available and the report of the Director of BR in order to respond to the instruction given in PP-14 Resolution 185 (Busan, 2014)



CONTACT FOR APG



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 - APG Webpage: <http://www.apt.int/APTAPG>
 - Proposals and relevant documents are available on the webpage



APG Documents and Preliminary views are available at: www.apg.int/APTAPG

THANK YOU!