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| APTlogogreen3 | ASIA-PACIFIC TELECOMMUNITY |  | |  |
| **APT Conference Preparatory Group for WRC-15 (APG-15)** | |  | |
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Date: 24 November 2015

**APT Coordination Meetings during WRC-15**

**COMPILED REPORT OF THE AGENDA ITEM COORDINATORS**

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| **Agenda Item No.**: 1.1 |
| **Name of the Coordinator ( with Email)**:  Zhu Yutao ([zhuyutao@caict.ac.cn](mailto:zhuyutao@caict.ac.cn)) |
| **Issues:**  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 Proposals**:  [Addendum 1](https://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WRC15-C-0032!A1!MSW-E) to Document [R15-WRC15-C-0032](http://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WRC15-C-0032)  APT common proposals for WRC-15 agenda item 1.1 are as follows:  – 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. |
| **Status of the APT Proposals:**   |  |  |  |  | | --- | --- | --- | --- | | Frequency band | ACP | Agreement | Options under discussions | | 470-694/698 MHz | NOC |  | * NOC; * Country footnotes to allocate to MS and identify for IMT. | | 1 350-1 400 MHz | NOC | NOC |  | | 1 427-1 452 MHz | Additional identification of IMT and Revision of Resolution 750 |  | * NOC; * Identify the frequency band for IMT globally and Revision of Resolution 750 to provide unwanted emission requirements for stations of IMT. * Subject to agreement obtained under No. **9.21** from administrations using stations of the aeronautical mobile service. | | 1 452-1 492 MHz |  |  | * NOC; * Identify the frequency band for IMT globally and invite compatibility study between BSS sound and IMT in a new or revised WRC-15 Resolution * Subject to agreement obtained under No. **9.21** from administrations using stations of the aeronautical mobile service. | | 1 492-1 518 MHz | Additional identification of IMT |  | * NOC; * Identify the frequency band for IMT globally and revision of Resolution 223 to invite compatibility study between MSS and IMT. * Subject to agreement obtained under No. **9.21** from administrations using stations of the aeronautical mobile service. | | 1 518-1 525 MHz | NOC | NOC |  | | 1 695-1 710 MHz | NOC | NOC |  | | 2 700-2 900 MHz | NOC | NOC |  | | 3 300-3 400 MHz |  |  | * NOC; * Additional identification of IMT in a new country footnote and revision of Resolution 223 to invite compatibility study between Radiolocation Service and IMT. * Subject to agreement obtained under No. **9.21** and specify conditions such as pfd limit /separation distance. | | 3 400-3 600 MHz | NOC | * MS allocation to the ToA and identify the band for IMT for Region 1, except countries listed in a new footnote with the allocation of the band 3 400‑3 600 MHz to the mobile service is on a secondary basis. * MS allocation to the ToA and identify the band for IMT for Region 2; * Adding country names to Nos. 5.432B and 5.433A in Region 3. |  | | 3 600‑3 700 MHz | NOC | * Identify the band for IMT in a new country footnote for Region 2; | * NOC for Region 1 and 3; * MS allocation to the ToA and identify the band for IMT in a new country footnote for Region 1; * Identify the band for IMT in a new country footnote for Region 3. | | 3 700-3 800 MHz | NOC |  | * NOC; * MS allocation to the ToA and identify the band for IMT in a new country footnote for Region 1; * Identify the band for IMT in a new country footnote for Region 3. | | 3 800-4 200 MHz | NOC | NOC |  | | 4 400-4 500 MHz, |  |  | * NOC; * Additional identification of IMT in a new country footnote and revision of Resolution 223 to invite compatibility study between IMT and radio altimeter systems, WAIC. * Subject to agreement obtained under No. **9.21** and specify conditions such as pfd limit /separation distance. | | 4 500‑4 800 MHz | NOC | NOC |  | | 4 800-4 990 MHz |  |  | * NOC; * Additional identification of IMT in a new country footnote and revision of Resolution 223 to invite compatibility study between IMT and radio astronomy service, radionavigation satellite service. * Subject to agreement obtained under No. **9.21** and specify conditions such as pfd limit /separation distance. | | 5 350-5 470 MHz | NOC | NOC |  | | 5 725‑5 850 MHz | NOC | NOC |  | | 5 925‑6 425 MHz | NOC | NOC |  | |
| **Issues to be discussed at the Coordination Meeting:**  None |
| **Comments/Remarks by the Coordinator**:  During its ninth session, Plenary decided to establish one informal group to treat issues regarding the frequency band 3 600-3 800 MHz for region 1 and 3, 470-694/698 MHz, 3 300-3 400 MHz in relation to agenda item 1.1. The informal group will meet at 17:15 this afternoon. |

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| **Agenda Item No.**: 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; |
| **Name of the Coordinator ( with Email)**: Azim Fard (azimfard@cra.ir) |
| **Issues:**  Following issues in:  **Resolution 224 (WRC-12)**  **Frequency bands for the terrestrial component of International Mobile Telecommunications below 1 GHz)**  *First Issue*: Extending down the lower edge of frequency band 790-862 MHz to 694 MHz in *resolves* 2 for **Region 3;**  *Second Issue*: Removal of cross reference to **RR** **No.** **5.313A** at the end of *resolves* 2. |
| **APT Proposals**:  APT did not submit any input document to the Conference under Agenda Item **1.2**. Therefore, the mandate of APT coordinator is to keep situation of **Region 3** intact, that has been down until now. However, there is an request by some administration to do some changes that it may improve **Region 3** situation in **Resolution 224 (WRC-12)**, if agreeable in APT Coordination meeting. |
| **Status of the APT Proposals:**  Not raised, but discussed with some **Region 3** administrations offline. |
| **Issues to be discussed at the Coordination Meeting:**  **Current Situation for the First Issue:**  The *resolves* 2 in **Resolution 224 (WRC-12)**, provides the list of frequency bands for all three regions that shall to be coordinated with all neighboring administrations before use for IMT respect to other services, in accordance with *resolve* 4.  Initially in *resolves* 2, the frequency band 790-862 MHz was determined for both **Regions** **1** and **3** while 698-806 MHz for **Region** **2**. Based on CEPT proposal, **Region 1** extended the lower edge of frequency band down to 694 MHz from 790 MHz. The *resolves* section of **Resolution 224** **(WRC-12)** looks like below:  +++++++++++++++++++ For Information ONLY +++++++++++++++++++++++  *resolves*  1 that administrations which are implementing or planning to implement IMT consider the use of bands identified for IMT below 1 GHz and the possibility of cellular-based mobile network evolution to IMT, in the frequency band identified in Nos. **5.286AA** and **5.317A**, based on user demand and other considerations;  to encourage administrations to take into account the results of the relevant ITU‑R studies , when implementing IMT applications/systems in the frequency bands 694-862 MHz in Region 1, in the frequency band 698-806 MHz in Region 2, in the frequency band 790-862 MHz in Region 3,  3 that administrations should take into account the need to protect the existing and future broadcasting stations, both analogue and digital, except analogue in the GE06 planning area, in the 470-806/862 MHz band, as well as other primary terrestrial services;  4 that administrations planning to implement IMT in the bands mentioned in *resolves*2 shall effect coordination with all neighbouring administrations prior to implementation;  5 that in Region 1 (excluding Mongolia) and in the Islamic Republic of Iran the implementation of stations in the mobile service shall be subject to the applications of procedures contained in the GE06 Agreement. In so doing:  a)administrations which deploy stations in the mobile service for which coordination was not required, or without having obtained the prior consent of those administrations that may be affected, shall not cause unacceptable interference to, nor claim protection from, stations of the broadcasting service of administrations operating in conformity with the GE06 Agreement. This should include a signed commitment as required under § 5.2.6 of the GE06 Agreement;  b)administrations which deploy stations in the mobile service for which coordination was not required, or without having obtained the prior consent of those administrations that may be affected, shall not object nor prevent the entry into the GE06 plan or recording in the MIFR of additional future broadcasting allotments or assignments of any other administration in the GE06 Plan with reference to those stations;  6 that, in Region 2, implementation of IMT shall be subject to the decision of each administration on the transition from analogue to digital television,  +++++++++++++++++++++++++++++++++++++++++++++++++++++  **Current Situation for the Second Issue:**  There is a request in *resolves* 2 to take into account the results of the ITU‑R studies when implementing IMT applications/systems in those administrations mentioned in No. **5.313A**. The footnote is:  **5.313A** The band, or portions of the band 698-790 MHz, in Bangladesh, China, Korea (Rep. of), India, Japan, New Zealand, Pakistan, Papua New Guinea, Philippines and Singapore are identified for use by these administrations wishing to implement International Mobile Telecommunications (IMT). This identification does not preclude the use of these bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. In China, the use of IMT in this band will not start until 2015. (WRC-12) |
| **Comments/Remarks by the Coordinator**:   * Regarding to the **First Issue**:   To receive opinions of APT members for extending down lower edge of frequency band edge from 790 MHz to 694 MHz that modified frequency band into 694-862 MHz.   * Regarding to the **Second Issue**:   To receive opinions of APT members for deleting the phrase "and in those administrations mentioned in No. **5.313A**" from the end of *resolves* 2.  After these change the *resolves* 2, looks like following (Green Highlight):  to encourage administrations to take into account the results of the relevant ITU‑R studies , when implementing IMT applications/systems in the frequency bands 694-862 MHz in Region 1 and Region 3, in the frequency band 698-806 MHz in Region 2, ~~in the frequency band 790-862 MHz in Region 3,~~ |

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| **Agenda Item No.**:1.3 (PPDR) |
| **Name of the Coordinator ( with Email)**:Bharat Bhatia (Singapore) [bharat.bhatia@ties.itu.int](mailto:bharat.bhatia@ties.itu.int) |
| **Issues:**  **Review and Revise Resolution 646 to meet the needs of broadband PPDR** |
| **APT Proposals**:  APT common proposal in Document 32 A3 includes revision of Resolution 646 (Rev.WRC-12)   * Additions and modifications to *considerings* * Additions and modifications to *recognisings* * Additions and modifications to *notings* * Additions and modifications to *emphasing* * Additions and modifications to *resolves* * Additions and modifications to *invites ITU-R* * Proposal for a global tuning range of 698-894 MHz |
| **Status of the APT Proposals:**  Following the formation of the adhoc group to solve this issue which will meet two times to reach a consensus without any success. However after the adhoc adjourned yesterday, the regional coordinators ot together and were successful in reaching a compromise text for the revision of Resolution 646 that was satisfactory to all the parties concerned, in particular the Arab group. This compromise text was later approved by the WG4C and will now be considered by COM 4 today. The text is a very delicate compromise but does include all the elements of the APT proposal.  The main compromise to resolve the Arab issue was with respect to Region 1 and our earlier compromise footnote text is maintained as it is. |
| **Issues to be discussed at the Coordination Meeting:**  The final text of the Revised Resolution has been approved by the Plenary. (doc. 421) |
| **Comments/Remarks by the Coordinator**:  I would like thank all for good cooperation and understanding in completing this difficult agenda. |

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| **Agenda Item No.**1.4 |
| **Name of the Coordinator ( with Email)**:  Mr. Nguyen Anh Tuan ([natuan@rfd.gov.vn](mailto:natuan@rfd.gov.vn)) |
| **Issues:**  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 Proposals**: None |
| **Status of the APT Proposals:** |
| **Issues to be discussed at the Coordination Meeting:**  **None** |
| **Comments/Remarks by the Coordinator**:  Option A: NOC  Option B: new allocation  WG 4B submitted the option B which is allocation of frequency band 5351.5-5366.5 kHz to the amateur service on a secondary basis (see Doc 252-E)  Committee 4 has approved this Document |

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| **Agenda Item No.**: 1.6 |
| **Name of the Coordinator ( with Email)**:  Ms. Vicky, Wing Kei Wong (China) [vwong@asiasat.com](mailto:vwong@asiasat.com);  Ms. Onanong Petnim (Thailand) [onanongp@thaicom.net](mailto:onanongp@thaicom.net) |
| **Issues:**  to consider possible additional primary allocations:  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;  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 Resolutions **151 (WRC‑12)** and **152 (WRC‑12)**, respectively; |
| **APT Proposals**:  1.6.1:   * 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.   1.6.2:   * APT Members support the no change (NOC) method in the frequency bands 13.25-13.4 GHz and 14.8-17 GHz due to incompatibility with existing services. |
| **Status of the APT Proposals:**  The APT Proposal was presented on 4-Nov-2015.  1.6.1:   * 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.   **Status of the above three proposals: (Related APT proposals: ASP/32A6A1/1, 2, 3, 10, 11, 12)**  The proposals are in line with all other proposals submitted to the conference. The SWG5B1 chairman considered those bands as no support and will prepare the output for that accordingly.   * 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.   **Status of the above proposal: (Related APT proposals: ASP/32A6A1/4, 5, 6, 7, 8, 9, 13, 14, 15, 16)**  There is a lot of support and no opposition in making an additional allocation of 250MHz to the FSS (space-to-Earth) in Region 1 in the frequency band 13.4-13.65 GHz, the exact condition will be further discussed in the drafting group DG5B1a.  Report regarding the difference between the APT proposals and the latest work considered under SWG on additional allocation of 250 MHz to the FSS (space-to-Earth) in Region 1 in the frequency band 13.4-13.65 GHz (changes that is only editorial nature is not listed out.)  The latest documents are as attached (Status: Doc 247 has already approved by COM5, part of it has been converted to Doc 268 which part of it has already been approved by Plenary) :    (Last update 16-Nov-2015)  **ASP/32A6A1/6:** The changes compare to the APT proposal/CPM report is to make it clear on which type of SRS systems is being grandfathered and which type of SRS systems would be treated on an equal basis as the new FSS allocation. The idea was agreed in the DG level but editorial change may be needed after consultation with the BR to make sure the text is clear and implementable.  Coordinator comment: APT’s endorsement was seek on 9-Nov-2015 and there is no opposition from APT on the change of those idea and its editorial change after consultation with BR.  **ASP/32A6A1/14:** 1) The value of the PFD mask is updated with a view to find a compromised solution which take into account the protection of existing services (terrestrial services, EESS (active) and SRS) and the operational requirement of FSS.  2) The reference bandwidth is changed from 1MHz to 4kHz as recommended by the ITU BR and to be in line with the Recommendation ITU-R SF.675-4.  Coordinator comment: APT’s endorsement was seek on 9-Nov-2015 and there is no opposition from APT on those change.  **ASP/32A6A1/15:** Potential alignment of the value of orbital arc ±7˚with decision of Issue 9.1.2 regarding the potential coordination arc reduction for Ku-band.  Note: There is no APT common proposal on AI. 9.1.2.  Coordinator comment: APT’s endorsement was seek on 9-Nov-2015 and there is no opposition from APT on those change.  **ASP/32A6A1/16:** The value of +/-[24]° (the coordination arc w.r.t. SRS) is updated to 20° as a result of the updated PFD mask as reported under ASP/32A6A1/14, the change is based on the technical calculation on the required protection level of SRS using the updated PFD mask.  Coordinator comment: APT’s endorsement was seek on 9-Nov-2015 and there is no opposition from APT on those change.  1.6.2:   * APT Members support the no change (NOC) method in the frequency bands 13.25-13.4 GHz and 14.8-17 GHz due to incompatibility with existing services.   **Status of the above proposal: (Related APT proposals: ASP/32A6A2/1, 2, 3)**  The proposals are in line with all other proposals submitted to the conference. The SWG5B1 chairman considered those bands as no support and will prepare the output for that accordingly. |
| **Issues to be discussed at the Coordination Meeting:**  **N/A** |
| **Comments/Remarks by the Coordinator**:  Update on 4-Nov-2015 11AM: The first meeting for SWG5B1 (AI.1.6) will take place in the afternoon, some observations based on the input to the conference:  1.6.1:   * The APT proposals are highly in line with the proposal from other countries. * Regarding the APT proposal on additional allocation of 250 MHz to the FSS (space-to-Earth) in Region 1 in the frequency band 13.4-13.65 GHz, there is general consensus from the input contributions that such additional allocation could be made, but the exact condition would be further discussed in the meeting. * The major debate is expected to be in where there is no APT proposal, in particular the potential opening up 250 MHz in Region 1 for uplink FSS within the band 14.5-14.8 GHz.   1.6.2:   * The APT proposals are highly in line with the proposal from other countries, APT support the no change (NOC) method in the frequency bands 13.25-13.4 GHz and 14.8-17 GHz and there is simply no proposal to the conference which suggest to make changes on that two bands under AI 1.6.2. * The major debate is expected to be in where there is no APT proposal, in particular the potential opening up 250 MHz in Region 2 and 300 MHz in Region 3 for uplink FSS within the band 14.5-14.8 GHz.   Update on 5-Nov-2015 11AM: Two drafting groups (DG 5B1a and DG5B1b) were established:   * DG5B1a will discuss the band 13.4-13.65/13.75GHz, the first meeting is scheduled on 5-Nov-2015 15:40. The plan is to discuss the downlink allocation for Region 1 first. * DG5B1b will discuss the band 14.5-14.8GHz for FSS (Earth-to-space), the first meeting is expected to be scheduled on next Monday.   Update on 9-Nov-2015 AM:  DG5B1a: Status on 13.4-13.65GHz (space-to-Earth) allocation in Region 1   * It was agreed that such an allocation could be made, the group has agreed on the principle on the solution (e.g. the PFD mask/relevant footnotes) while noting there maybe editorial improvement on the exact text before the document is presented in the SWG level, the result will be discussed in the SWG level on 9AM 10-Nov-2015.   DG5B1a: Status on 13.4-13.75GHz (Earth-to-space) allocation   * It was agreed in DG level that there will be no additional allocation on the 13.4-13.75GHz (Earth-to-space) as there is major opposition due to the incompatibility of existing services   Update on 16-Nov-2015 AM:  The following two bands were under discussion while NOC were agreed for all other bands in DG/SWG level.   1. 13.4-13.65GHz (space-to-Earth) allocation in Region 1 (in line with APT proposal on AI 1.6.1)  * The proposal has already been approved by COM5 and part of it has already been approved by the Plenary. See the latest documents attached in the section “Status of the APT Proposals”. * It was agreed that the approval of this document will not have an impact to the discussion on 14.5-14.8GHz (Earth-to-space).  1. 14.5-14.8GHz (Earth-to-space) (there is no APT proposal in this band on AI 1.6.1 and AI 1.6.2)  * Discussion is still on-going, the group tried to address all the incumbent services (SRS, AMS, AP30A, FS) * The drafting group has reviewed the input documents allocated to it. * During the work in the drafting group, an updated and consolidated proposal was put forward by those administrations looking for a change in the Table of Allocation in the band 14.5-14.8 GHz. * However, no consensus was reached w.r.t. this proposal, and as a result two options are under consideration. * 2 views were expressed in the drafting group   Update on 18-Nov-2015 12:00 PM:  AI 1.6.1 and AI 1.6.2 concerning the additional uplink FSS spectrum in the 14.5-14.8GHz (where APT has no position)   * SWG 5B1 has finished its work on 17-Nov and has reported the two options to WG 5B. Option 1 is NOC and Option 2 is the proposal developed in the SWG level to propose change in the 14.5-14.8GHz band. W.r.t. option 2, there are still some elements in square bracket which has not been solved yet, those are planned to be discussed in WG5B. * WG5B has its meeting this morning, however, since the entire session has been devoted to the general discussion on whether changes could be made, the issue in square bracket has not been solved in WG5B.   Update on 23-Nov-2015 AM:  AI 1.6.1 and AI 1.6.2 concerning the additional uplink FSS spectrum in the 14.5-14.8GHz (where APT has no position)   * There was a discussion in COM-5 on 20-Nov-2015 on whether an ad-hoc group could be established to work on the remaining issue on AI 1.6, however, no consensus was reached on the Terms of Reference of that Ad Hoc group and therefore COM-5 was not able to established such Ad-hoc group. * With that, COM-5 has submitted the latest document (INP-424, as attached) which contains two options and two views to Plenary for further consideration.      * In the Plenary meeting on 23-Nov, it was proposed to establish an Ad-hoc group for AI 1.6, however, no consensus was reached. * The chairman encourage offline discussion on this matter to find an agreeable way forward and will consider whether or not to establish an ad-hoc group again in the next plenary meeting.   Update on 24-Nov-2015 AM:  AI 1.6.1 and AI 1.6.2 concerning the additional uplink FSS spectrum in the 14.5-14.8GHz (where APT has no position)   * There was an informal meeting on 23-Nov-2015 PM where the proponents have come up with an updated proposal with the intent to address the concern of the incumbent services. The proposal is as attached:      * There will be two informal meetings on AI 1.6 on 24-Nov-2015 at 1:00pm and 5:30pm. * APT Members are encouraged to have a look at the latest proposal to see if the concerned incumbent services are protected and consider whether the latest proposal is acceptable.   Highlight of the measures in the latest proposal to protect the incumbent services:   * In order to limit the deployment of FSS uplink terminals, FSS earth stations in the frequency band 14.5 – 14.8 GHz shall be notified and operate at specified fixed points with a minimum antenna diameter of 4.5 m. * In order to protect the Plan and the List even beyond the current level, FSS space stations in the band 14.5 – 14.8 GHz shall respect a PFD limit arriving at the receiving space station of a broadcasting-satellite service feeder link of another administration, which was calculated to protect the more sensitive networks considering an EPM degradation of 0.45 dB for the List and 0.25dB for the Plan. These PFD values will offer a better protection of the Plan between 3 and 33 dB greater than the current AP30A sharing criteria. Furthermore PFD limit will protect all assignments with similar level independently of their respective EPM margin and coordination will be mandatory with the Plan and the List (11.41 will not apply). * In order to protect present and future AMS and FS services in all other countries, FSS earth stations in the frequency band 14.5 – 14.8 GHz shall be deployed considering an exclusion zone of 500 km from the land border of any other country, unless an explicit agreement of the affected countries is obtained. * In order to protect AMS operations on water, FSS earth stations in the frequency band 14.5 – 14.8 GHz shall respect a maximum PFD hard limit of -109 dBW/(m2·MHz) at 50 km from the low water mark (maritime border as recognized by each coastal state) of any country. * To protect the SRS operations, even if they currently have secondary status, they will be considered as primary with regard FSS space stations in the band 14.5 – 14.8 GHz and both service will be protected based on standard Article 9 coordination mechanism. |

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| **Agenda Item No.**: 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); |
| **Name of the Coordinator ( with Email)**: Nguyen Huy Cuong cuongnh@rfd.gov.vn |
| **Issues:**  One method is outlined in the CPM Report to WRC-15. The Method proposes the suppression of the time limitations in footnote No.5.444A, while continuing to protect the operation of the international standard MLS as well as providing some improved flexibility for AM(R)S services in the band.  Modification: Table of Frequency Allocations, footnote No.5.444A with removal of time limitation for FSS  Modification: APPENDIX 7, RESOLUTION 114, RESOLUTION 748 |
| **APT Proposals**:  APT Members support the Method in the CPM Report to WRC-15 to fully satisfy this agenda item |
| **Status of the APT Proposals:**  There are 11 contributions to the meeting regarding AI 1.7.  APT Proposals was presented at the SUB-WORKING GROUP 5B2 (A.I. 1.7) meeting. |
| **Issues to be discussed at the Coordination Meeting:**  The SUB-WORKING GROUP meeting met twice.  There are two options for modification of footnote 5.444A. One is supported by Regionals as the same modified text in the CPM report and the other is proposed by Cuba. The SUB-WORKING GROUP meeting agreed to chose the option of the modification of footnote No. 5.444A as the same text in CPM report.  Regarding ANRS (note 2) in table 10 of annex 7 of Appendix 7, the final decision will decided after consultation with BR.  Other modifications are agreed as the same text in the CPM Report and updated revision ITU‑R P.526‑13 (the revised ITU-R Recommendations incorporated by reference) |
| **Comments/Remarks by the Coordinator**:  The SUB-WORKING GROUP meeting completed the task. The output document will be submitted to the working group 5B for its consideration. The output document will be uploaded on the share folder. |

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| **Agenda Item No.**: 1.8 (ESVs) |
| **Name of the Coordinator (with Email)**: AI 1.8 Mr. Paddy Costanzo (Australia)  [pc@cgpsols.com](mailto:pc@cgpsols.com) Mr. Iraj Mokarrami (Iran) [irajmokarrami@yahoo.com](mailto:irajmokarrami@yahoo.com) |
| **Issues:** to review the provisions relating to earth stations located on board vessels (ESVs), based on studies conducted in accordance with Resolution **909 (WRC‑12);**  Resolution **909 (WRC‑12)**: Provisions relating to earth stations located on board vessels which operate in fixed-satellite service networks in the uplink bands 5 925-6 425 MHz and 14-14.5 GHz |
| **APT Proposals**: APT Members support no change to the Radio Regulations, Resolution 902 (WRC-03) and the suppression of Resolution 909 (WRC-12). |
| **Status of the APT Proposals:**  The Ad-hoc group chaired by France on Tuesday 17 November arrived at a compromise. |
| **Issues to be discussed at the Coordination Meeting:**  For information only:  *NOC with minor amendments to C-band antenna size down to 1.2m from 2.4m and protection distance increased from 300km to* ***330km****.*  *All other provisions of Resolution 902 (WRC-03) remain unchanged.* |
| **Comments/Remarks by the Coordinator**: |

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| **Agenda Item No.**: 1.9.1 |
| **Name of the Coordinator (with Email)**: Park, Jong Min ([jongmin@etri.re.kr](mailto:jongmin@etri.re.kr)) |
| **Issues:** In accordance with Resolution **758 (WRC‑12)**, to consider possible new allocations to the fixed-satellite service in the frequency bands, subject to appropriate sharing conditions:  - 7 150-7 250 MHz (space-to-Earth);  - 8 400-8 500 MHz (Earth-to-space). |
| **APT Proposals**:  APT members support Method C, no changes to the Radio Regulations and suppression of Resolution **758 (WRC-12)**. |
| **Status of the APT Proposals:**   * Discussion is still ongoing. |
| **Issues to be discussed at the Coordination Meeting:**  After discussion at Ad-hoc group, there was no agreement from all Regional groups, so Ad-hoc group reported to Plenary meeting held this morning that no allocation should be made to the FSS (Earth-to-space) in the frequency band 8 400 MHz-8 500 MHz and Resolution **758 (WRC-12)** should be suppressed.  In addition, Ad-hoc group reported that work on the new Resolution for future agenda item to consider a possible allocation to the FSS (space-to-Earth) ceased when Ad-hoc group concluded no allocation should be made to the FSS (Earth-to-space) in the frequency band 8 400 MHz-8 500 MHz.  At Plenary meeting, without any observations, the conclusions made by Ad-hoc group were approved.  In conclusion, whole APT Proposals (NOC and SUP Res. **758 (WRC-12)**) are reflected on the final decision. |
| **Comments/Remarks by the Coordinator**:  The coordinator on WRC-15 agenda item 1.9.1 would like to express sincere gratitude to APT members for all their hard work and cooperative support. |

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| **Agenda Item No.**: 1.9.2 |
| **Name of the Coordinator ( with Email)**: DAE SUB OH (trap@etri.re.kr) |
| **Issues:**   * New allocation to MMSS (space-to-Earth) in the band 7 375 – 7 750 MHz. * New allocation to MMSS (Earth-to-Space) in the band 8 025 – 8 400 MHz. |
| **APT Proposals**:   * Opposition to new allocation to MMSS (Earth-to-space) in the band 8 025 – 8 400 MHz * Suppression of the Resolution 758 |
| **Status of the APT Proposals:**   * SWG 5B4 has finalized the work on this agenda item 1.9.2. * The APT Proposals were fully accepted in discussion of the SWG meeting * The participants had a consensus on MMSS downlink allocation in 7375-7750MHz band and this downlink allocation of MMSS ensures the protection of existing services taking into account the sharing studies * Therefore, the SWG 5B4 agreed on the new allocation to the MMSS downlink in the band 7375-7750 MHz and will submit the document to the WG5B. |
| **Issues to be discussed at the Coordination Meeting:**  N/A |
| **Comments/Remarks by the Coordinator**:  N/A |

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| **Agenda Item No.**: 1.10 |
| **Name of the Coordinator ( with Email)**:  Yuan Jun (castyuanjun@sina.com) |
| **Issues:**  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**:  APT common proposals for WRC-15 agenda item 1.10 are as follows:  – 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. |
| **Status of the APT Proposals:**  The contribution has been presented in the first meeting in 4th Nov, 2015. UAE and Russia support new allocations to MSS. Other administrations and organizations agree no change to the allocation, which is the method A in CPM report.  At the session hold in 10th Nov, 2015, the discussion focused on the compatibility study of MSS downlink interfering FS/MS system, which is included in RCC proposal. There is no agreement achieved at that session. According to the comments presented at COM 5 yesterday afternoon, there would be more discussion sessions arranged the following days.  There were 3 sessions held since last APT coordination meeting. The proposals from RCC and UAE have been detailed discussed. No any agreement is achieved.  There is an important issue for AI 1.10. At the first session this afternoon, RCC proposed a compromised proposal for considering. It is a different method comparing with the CPM report. The method could be download from the file folder “SWG 5B5 a.i. 1.10” in the share point, with the file name “RCC Proposal for Country Footnote”. The compromised proposal could be summarized as follows:   * An additional allocation is proposed by means of a footnote 5.A110, in the frequency band 24.25~24.5 GHz (DL) and 25.25~25.5 GHz (UL). The additional allocation include 8 countries Armenia, Belarus, Kazakhstan, Kyrgyzstan, the Russian Federation, Tajikistan, Turkmenistan and Uzbekistan. No global allocation is made. * The RESOLUTION 234 (WRC‑12) is suppressed.   The compromised proposal proposed by RCC was discussed last Friday. All the other regional groups kept the initial position, which is to suppress the Resolution 234 and make no change of the frequency allocations.  However, there was still no consensus at the meeting last Friday. RCC and UAE discussed with respective administrations and presented their final results at 5B yesterday afternoon. RCC and UAE were still on their initial positions.  The final suggestion made at 5B by chairman is that the report submitted to COM 5 will be in line with the majority countries’ position, which is to suppress the Resolution 234 and make no change of the frequency allocations. In addition to that, a footnote will be added to express that RCC and UAE have difficulty to the discussion result. It is the consensus achieved at 5B meeting.  A new proposal with new elements from RCC for new allocation within the frequency range from 22GHz to 26GHz was introduced and discussed last Saturday and Sunday in the AHG level. According to the consensus achieved before AHG meeting, if no agreement on the new proposal among all Regions, no allocation should be made in this frequency range.  The footnote allocation in RCC proposal is as follows:   * in Armenia, Belarus, Kazakhstan, Kyrgyzstan, the Russian Federation, Tajikistan, Turkmenistan and Uzbekistan the bands 24.4-24.65 GHz (space-to-Earth) and 25.25-25.5 GHz (Earth-to-space) are also allocated to the mobile-satellite service on a primary basis. * Mobile-satellite service is limited to geostationary systems. * In the bands 24.4-24.65 GHz (space-to-Earth) stations in the mobile-satellite service shall not claim protection from the stations in the fixed, mobile and radionavigation services in other countries, No. 5.43A does not apply. * In the band 25.25-25.5 GHz (Earth-to-space) stations in the mobile-satellite service shall not cause harmful interference to the stations in the fixed and mobile services in other countries. * To ensure protection of the existing and future deployment of fixed and mobile services, separation distance of at least 55 km and 500 km from the respective border(s) of neighboring countries shall be maintained by land mobile and aeronautical mobile earth stations accordingly. * The MSS stations is subject to agreement obtained under No. 9.21 with respect to the space stations in the inter-satellite service. * Stations in mobile-satellite service shall not cause harmful interference to, or claim protection from, existing or planned stations in the inter-satellite service. The use of mobile-satellite service is limited for operation within national boundaries.   During the two days’ AHG level discussion, CEPT and CITEL hold the very clear position of NOC and the result of the discussion will be communicated to the Plenary by chairman. |
| **Issues to be discussed at the Coordination Meeting:** |
| **Comments/Remarks by the Coordinator**:  Korea had already proposed NOC position at the AHG meeting. The other APT members need to discuss the latest proposal. The final APT position should be reported to AHG chairman by coordinator. |

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| **Agenda Item No.**: AI 1.11 |
| **Name of the Coordinator ( with Email)**:  Mr. YANG Huiqin (China) [yanghuiqin@bittt.cn](mailto:jian.jiao@huawei.com) |
| **Issues:**  1.11to 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**:  **MOD ASP/32A11/2**  **5.459** *Additional allocation:*in the Russian Federation, the frequency bands 7 100-7 155 MHz and 7 190-7 235 MHz are also allocated to the space operation service (Earth-to-space) on a primary basis, subject to agreement obtained under No. **9.21**. In the frequency band 7 190-7 235 MHz, No. **9.21** with respect to the Earth exploration-satellite service (Earth-to-space) does not apply. (WRC-15)  **MOD ASP/32A11/3**  **5.460** No emissions to spacecraft operating in deep space shall be effected in the frequency band 7 190-7 235 MHz. Geostationary satellites in the space research service operating in the frequency band 7 190-7 235 MHz shall not claim protection from existing and future stations of the fixed and mobile services and No. **5.43A** does not apply. (WRC-15)  **ADD ASP/32A11/4**  **5.A111** The use of the frequency band 7 190-7 250 MHz by the Earth exploration-satellite service shall be limited to tracking, telemetry and command for the operation of the spacecraft, and that Earth exploration-satellite service geostationary satellites in this frequency band shall not claim protection from existing and future stations of the fixed and mobile services, and No. **5.43A** does not apply. (WRC-15)  **ADD ASP/32A11/5**  **5.B111** Space stations in the Earth exploration-satellite service (Earth-to-space) operating in the geostationary-satellite orbit shall not claim protection from emissions from the space research service in the frequency band 7 190-7 235 MHz. (WRC-15) |
| **Status of the APT Proposals:**  **MOD**  **5.459** *Additional allocation:* in the Russian Federation, the frequency  bands 7 100-7 155 MHz and 7 190-7 235 MHz are also allocated to the  space operation service (Earth-to-space) on a primary basis, subject to  agreement obtained under No. **9.21**. In the frequency band 7 190-  7 235 MHz, with respect to the Earth exploration-satellite service (Earth-to-space), No. **9.21** does not apply. (WRC-15)  **MOD**  **5.460** No emissions from space research service (Earth-to-space) systems  intended for deep space shall be effected in the frequency band 7 190-  7 235 MHz. Geostationary satellites in the space research service operating  in the frequency band 7 190-7 235 MHz shall not claim protection from  existing and future stations of the fixed and mobile services and No. **5.43A**  does not apply. (WRC-15)  **ADD**  **5.A111** The use of the band 7 190-7 250 MHz (Earth-to-space) by the Earth exploration-satellite service shall be limited to tracking, telemetry and command for the operation of spacecraft. Space stations operating in the Earth exploration-satellite service (Earth-to-space) in the frequency band 7 190 7 250 MHz shall not claim protection from existing and future stations in the fixed and mobile services and No. 5.43A does not apply. No. **9.17** applies. Additionally, to ensure protection of the existing and future deployment of fixed and mobile services, the location of earth stations supporting spacecraft in the Earth exploration-satellite service in non-geostationary orbits or geostationary orbit shall maintain a separation distance of at least 10 km and 50 km, respectively, from the respective border(s) of neighbouring countries unless a shorter distance is otherwise agreed between the corresponding administrations.  (WRC-15)  **ADD**  **5.B111** Space stations on the geostationary orbit operating in the Earth  exploration-satellite service (Earth-to-space) in the frequency band 7 190-  7 235 MHz shall not claim protection from existing and future stations of the  space research service and No. **5.43A** does not apply. (WRC-15) |
| **Issues to be discussed at the Coordination Meeting:**  N/A |
| **Comments/Remarks by the Coordinator**:  The fifth meeting of SWG 5A1 was held in Tower A at 9:00. There were no objections to the text formed at the meeting on Monday. The last meeting of SWG 5A1 was closed.  The temporary file DT/61 about item 1.11 was adopted at the fourth meeting of COM5A today afternoon |

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| **Agenda Item No.**: 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)**; |
| **Name of the Coordinator (with Email)**:  Dave Kershaw ([dave.kershaw@dkconsulting.co.nz](mailto:dave.kershaw@dkconsulting.co.nz)) |
| **Issues:**  Four methods have been identified to address the agenda item. Contributions show a range of views, largely in relation to Methods A & B, with some support also for Method D. One contribution supports Method C as an alternative to the preferred Method D |
| **APT Proposals**:   * They 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.   APT Members support Method B2 of the CPM Report. |
| **Status of the APT Proposals:**  A consolidated document with the regulatory changes has been prepared for consideration.  Following a meeting of WG5A, a paper has been prepared that largely follows Method B2 of the CPM report.  This is completely in line with the APT common proposals presented to the WRC meeting. |
| **Issues to be discussed at the Coordination Meeting:**  None. |
| **Comments/Remarks by the Coordinator**:  Significant movement has been agreed by most other Regional Groups. This involves movement to Method B2 by RCC (A2), CEPT (B1), CITEL (A1) as well as sub-regional African Groups (ECOWAS, SADC & EACO) and individual countries.  The relaxation (by 3 dB) of the pfd limits sought in the last APT meeting has not been required as part of these negotiations.  ASMG (NOC) & Iran (NOC), are considering their positions and will advise the next meeting of COM5 whether they are prepared to move. |

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| **Agenda Item No.**: 1.13 |
| **Name of the Coordinator (with Email)**: Kevin Knights (Australia).  Kevin.Knights@csiro.au |
| **Issues:** *Review of RR No. 5.268 space research service*  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**:  APT Members agree with the single Method and propose that RR No. 5.268 be modified to remove the 5 km distance limitation and not solely limit the use of the band for extra-vehicular activities.  Suppression of Resolution 652 (WRC-12) - **Use of the band 410-420 MHz by the space research service (space-to-space)** - as it is no longer required |
| **Status of the APT Proposals:**  Agenda item 1.13 (under Committee 5) was assigned to Working Group 5A (Space Science) to be dealt with at WG 5A plenary level.  The 9 input contributions (including the APT input) all supported the single CPM method, and the text in all contained only minor variations from the CPM report to WRC-15. Based on the consensus in all of the input documents, the WG 5A Chairman (Mr. John Zuzek, USA) proposed at the first WG5A plenary meeting held at 5pm on Monday 2nd November that he would draft a final proposal for approval at Committee 5 level. No objections were received at the WG5A meeting to this proposal. The draft proposal containing the single method was presented for approval at the Committee 5 meeting that commenced at 10.40am on Wed 4th November. The Committee 5 meeting adopted the draft A.I. 1.13 Document (Doc #159) with minor editorial changes and it will next be submitted to WRC Plenary level for approval.  Update (9th November): Agenda item 1.13 was considered at Plenary last Friday 6th November (as part of Doc 187). The text containing the single method was approved at both 1st (Blue) reading and 2nd (Pink) reading, with only minor correction required to the Arabic text. This completes work on 1.13 at WRC-15. |
| **Issues to be discussed at the Coordination Meeting:**  Completion of work on Agenda item 1.13 should be noted. |
| **Comments/Remarks by the Coordinator**:  Thanks to all who have assisted with this Agenda Item during the WRC-15 cycle. |

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| **Agenda Item No.1.14**: |
| **Name of the Coordinator ( with Email)**:  Chunhao Han (hch203@163.com) |
| **Issues:**  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)**; |
| **APT Proposals**:  Position of APT on agenda item 1.14  – APT Members support Method A1 of the CPM Report to WRC-15.  – APT Members support the modifications to Radio Regulations in accordance with section 2/1.14/5.1.1 of the CPM Report corresponding to Method A1.  – 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. |
| **Status of the APT Proposals:**  The Contribution document No.313, regarding to the new Resolution for time-scale and the relevant modifications, got through its 1st read and 2nd read in the sixth plenary meeting，in 2015/11/18 Wednesday afternoon. |
| **Issues to be discussed at the Coordination Meeting:**  None |
| **Comments/Remarks by the Coordinator**:  None. |

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| **Agenda Item No.**: 1.15 |
| **Name of the Coordinator ( with Email)**: BUI Ha Long (email: longbh@rfd.gov.vn) |
| **Issues:**  to consider spectrum demands for on-board communication stations in the maritime mobile service in accordance with Resolution **358 (WRC‑12)**;  Resolution **358 (WRC‑12)**: Consideration of improvement and expansion of on-board communication stations in the maritime mobile service in the UHF bands |
| **APT Proposals**:  **Relevant documents:** C/32-Add15, C/156  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.  It is proposed that No. 5.287 be amended accordingly and that Resolution 358 (WRC-12) be abrogated, in accordance with the single Method in the CPM Report.  Proposal on modification of footnote 5.287:  5.287 Use of the frequency bands 457.5125-457.5875 MHz and 467.5125-467.5875 MHz by the maritime mobile service is limited to on-board communication stations. The characteristics of the equipment and the channelling arrangement shallbe in conformity withRecommendation ITU‑R M.1174‑3. The use of these frequency bands in territorial waters mayi also be subject to the national regulations of the administration concerned.     (WRC‑15) |
| **Status of the APT Proposals:**  The chairman of WG4B decided to consider AI 1.15 at his level, that mean no SWG for this AI, and it required only 1 session to introduce all the input documents as well as develop the output material. At the 2nd meeting of Committee 4 held today 4th Nov, document 156 which contained the output of AI 1.15 proposed by WG4B, was reviewed for approval.  It was approved with 2 modifications to the footnote 5.287 compare to the text from CPM report. The phrase “shall be in conformity with” is changed to “shall be in accordance with” and “may also be subject to” is changed to “is subject to” appear in 3rd and 4th sentences accordingly.  These changes could make the footnote 5.287 more beautiful and it seem that the text pleased all APT delegates who attend the meeting.  The AI 1.15 coordinator hopes that document 156 will be approved in the next plenary. |
| **Issues to be discussed at the Coordination Meeting:**  None |
| **Comments/Remarks by the Coordinator**:  The APT coordinator for AI 1.15 would like to express his appreciation to all the APT members who have cooperatively participated in the WG4B meeting. |

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| **Agenda Item No.**: 1.16 (Final) |
| **Name of the Coordinator ( with Email)**:  HUANG Jia (CHN), [ferrero.huang@srrc.org.cn](mailto:ferrero.huang@srrc.org.cn) |
| **Issues:**  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**: [Addendum 16](https://www.itu.int/md/dologin_md.asp?lang=en&id=R15-WRC15-C-0032!A16!MSW-E) to Document [R15-WRC15-C-0032](http://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WRC15-C-0032)  APT member states support methods A1, B1, C1-A and D of the CPM Report to introduce the VHF data exchange system (VDES) for the maritime community. |
| **Status of the APT Proposals:**  ISSUE A:  Part 1(ASM): Method A1, agreed;  Part 2(Protection of AIS and ASM from transmission by ship station in the higher frequencies in Appendix **18**): Method A3 with revision, agreed  ISSUE B (VDES terrestrial component): Method B1 + Proposed modification from JPN, agreed  ISSUE C (VDES satellite component): NOC to allocation table and Resolution 360 was modified to bring this issue to WRC-19. APT support such approach.  ISSUE D (Regional usage): Method D with revision, agreed |
| **Issues to be discussed at the Coordination Meeting:** |
| **Comments/Remarks by the Coordinator**:  This draft document will be submitted to WG 4B for further consideration. The APT common proposals were taken into account and agreed with amendments. APT member states are invited to support this document. |

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| **Agenda Item No.**: AI 1.17 (Final Report) |
| **Name of the Coordinator (with Email)**: Eddy D’Amico (AUS) (eddy.damico@airservicesaustralia.com) |
| **Issues:** to consider possible spectrum requirements and regulatory actions, including appropriate aeronautical allocations, to support wireless avionics intra-communications (WAIC), in accordance withResolution **423 (WRC‑12)** |
| **APT Proposals**:  **MOD** ASP/32A17/1  Support the single Method of CPM Report – add a primary AM(R)S allocation to the 4.2-4.4 GHz band. Relevant footnotes are modified and new footnotes are added to limit the use to WAIC systems.  **MOD** ASP/32A17/2  Modify 5.438 to maintain the use of the 4.2-4.4 GHz band by ARNS exclusively for radio altimeter.  **ADD** ASP/32A17/3  Add 5.A117 to limit the use of the 4.2-4.4 GHz band by AM(R)S to WAIC systems that operate in accordance with recognised international aeronautical standards and a new Res.  **ADD** ASP/32A17/4  Add 5.B117 to maintain the status of passive sensing in EESS and SRS in the 4.2-4.4 GHz band.  **SUP** ASP/32A17/5  Support suppression of Res 423.  **ADD** ASP/32A17/6  Support addition of new Res that provides relevant regulatory provisions. |
| **Status of the APT Proposals:**  Document C/168 on AI 1.17 was considered at the 3rd meeting of COM 4 – the WG4A chair noted a minor change to *Resolves 1* resulting from offline discussions.  The AI 1.17 regulatory proposals were considered in the 2nd series of texts submitted by COM 7 to the plenary meeting for the 1st reading (document C/196 B2) – the document was agreed with minor alignment of the language versions and a slight change to *considering a)* of the new Resolution on WAIC. As the modifications were considered minor, the plenary approved the document for both the 1st and 2nd readings. Therefore all of the APT proposals on AI 1.17 were incorporated by WRC-15. |
| **Issues to be discussed at the Coordination Meeting:**  Nil |
| **Comments/Remarks by the Coordinator**:  Nil |

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| **Agenda Item No.**:　1.18 |
| **Name of the Coordinator ( with Email)**:  Satoshi Oyama (s-oyama@arib.or.jp) |
| **Issues:**  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**:  Add a primary allocation to the RLS on a worldwide basis in the band 77.5 to 78 GHz, limited to radar applications with technical characteristics given in the most recent version of Recommendation ITU-R M.2057. |
| **Status of the APT Proposals:**  SWG4A3-a.i. 1.18: hold 7 meetings and completed the task on 10th November, 2015.  SWG4A3 considered 12 contributions including ACP (Add 18 to Doc. 32)  SWG4A3 considered the consolidated document which was created by the chairman.  There are 4 issues to resolve as follows:   1. ADD: 77.5-78 GHz for RADIOLOCATON service on Frequency Allocation Table. 2. ADD: Footnote of limitations of radar applications and technical specifications. 3. SUP: Res.654. 4. ADD: Draft new resolution proposed by CEPT.   Status:  All the issues have been resolved and chairman’s report on SWG4A3 (TD/59) is submitted to WG4A.  The ACP (Add 18 to Doc. 32) reflected to the Frequency Allocation Table and the Footnote.  The footnote is shown as below:  **5.A118** The use of the 77.5-78 GHz frequency band by the radiolocation service shall be limited to short-range radar for ground-based applications, including automotive radars. The technical characteristics of these radars are provided in the most recent version of Recommendation ITU‑R M.2057. When performing these applications in this frequency band, the radiolocation service is not considered as a safety service in accordance with No. **1.59**. Thus the provisions of No. **4.10** do not apply.     (WRC‑15)  Draft new resolution proposed by CEPT on ‘Technical studies on the coexistence of the radiolocation service and the amateur, amateur-satellite and radio astronomy services in the frequency band 76-81 GHz’ was considered. The modified draft is attached to the chairman’s report (TD/59). It was confirmed that this draft new resolution is not seeking for WRC-19 new agenda item.  The chairman’s report have approved by WG4A, COM4.  On 13 November 2015, Plenary meeting approved the texts on A.I. 1.18. (Doc.#260) |
| **Issues to be discussed at the Coordination Meeting:**  N/A |
| **Comments/Remarks by the Coordinator**:  The APT coordinator for AI 1.18 would like to express his appreciation to all the APT members who have cooperatively participated in the WG4A SWG4A3 meetings. |

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| **Agenda Item No.**: 2 |
| **Name of the Coordinator ( with Email)**:  Akira HASHIMOTO: [hashimoto@nttdocomo.com](mailto:hashimoto@nttdocomo.com)  Masayoshi TACHIKI (Acting coordinator): masayoshi.tachiki.zm@nttdocomo.com |
| **Issues:**  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**:  Document 32 (Addendum 19) |
| **Status of the APT Proposals:**  The APT proposals on this agenda item has been presented at the first meeting of WG 6A.  The proposals have been considered by Sub WG 6A1 chaired by Mr. Hashimoto, APT Coordinator on this agenda item. All of them have been reflected in the outputs of the SWG (Documents DT/41, DT/42, DT/43 and DT/47). |
| **Issues to be discussed at the Coordination Meeting:**  As suggested by APT, the updating of Recommendation M.1638 requires careful consideration, and it has been agreed by the SWG 6A1 to develop a new Resolution to consider the issue again at the WRC-19 based on the ITU-R studies to be conducted after this Conference. With that, the work on AI 2 within the SWG is competed. |
| **Comments/Remarks by the Coordinator**:  The Agenda item Coordinator wishes to express his thanks to the mailing list members for their cooperation and assist to the work of the SWG 6A1. |

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| **Agenda Item No.**: 4 |
| **Name of the Coordinator ( with Email)**:  Akira HASHIMOTO: [hashimoto@nttdocomo.com](mailto:hashimoto@nttdocomo.com)  Masayoshi TACHIKI (Acting coordinator): masayoshi.tachiki.zm@nttdocomo.com |
| **Issues:**  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**:  Document 32 (Addendum 20) |
| **Status of the APT Proposals:**  The APT proposals on this agenda item has been presented at the first meeting of WG 6A.  The substance of the proposals has been considered by Sub WG 6A1 chaired by Mr. Hashimoto, APT Coordinator on this agenda item.  APT proposals to modify Resolutions 28, 76, 207, 144, 148, 517, 535 and 553, and Recommendation 207 have been agreed and results are included in DTs/49, 54, and 56. Furthermore, our proposals to modify Resolutions 5, 34, 528 and 906 have been also agreed. |
| **Issues to be discussed at the Coordination Meeting:**  As proposed from APT, it has been agreed to retain Resolutions 33 and 555 with limited updating. For Resolution 755, if there is no objection raised from APT members, it would be proposed for deletion.  The work for AI 4 within the SWG 6A1 is approaching to the end by producing a number of the outputs to review the Resolutions/Recommendations in accordance with Resolution 95. |
| **Comments/Remarks by the Coordinator**:  The Agenda item Coordinator wishes to express his thanks to the mailing list members for their cooperation and assist to the work of the SWG 6A1. |

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| **Agenda Item No.**: **7 (a)** |
| **Name of the Coordinator ( with Email)**:  CHENG Fenhong, Email: [chengfenhong@chinasatcom.com](mailto:chengfenhong@chinasatcom.com)  Phung Nguyen Phuong Email: [phuongpn@rfd.gov.vn](mailto:phuongpn@rfd.gov.vn) |
| **Issues:**   1. Director’s Report Section 3.2.2.4.4 – NGSO BIU issue |
| **APT Proposals**: |
| **Status of the APT Proposals:**   1. With respect to NGSO BIU issue, the meeting agreed some text to be included in the minutes of Plenary, and the details is shown below:   WRC-15 invites ITU-R to examine, under the standing WRC Agenda Item 7, the possible development of regulatory provisions requiring additional milestones beyond those under Nos. **11.25** and **11.44** on the systems referred to in the paragraph above. This study may also consider the implications of the application of such milestones to non-GSO FSS/MSS systems brought into use after WRC-15. |
| **Issues to be discussed at the Coordination Meeting:**  None. |
| **Comments/Remarks by the Coordinator**:  SWG5C2 completed all work. |

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| **Agenda Item No.**: 7 (b) |
| **Name of the Coordinator ( with Email)**:  CHENG Fenhong, Email: [chengfenhong@chinasatcom.com](mailto:chengfenhong@chinasatcom.com)  Phung Nguyen Phuong Email: [phuongpn@rfd.gov.vn](mailto:phuongpn@rfd.gov.vn) |
| **Issues:**  7(A) Issue A – Informing the Bureau of a suspension under RR No. 11.49 beyond six months  7(B) Issue B – Publication of information on bringing into use of satellite networks at the ITU website  7(C) Issue C – Review or possible cancellation of the advance publication mechanism for satellite networks subject to coordination under section II of Article **9** of the Radio Regulations  7(D) Issue D – General use of modern electronic means of communications in coordination and notification procedures  7(E) Issue E – Failure of a satellite during the ninety-day bringing into use period  7(F) Issue F: Modifications to RR Appendix 30B in relation to the suspension of use of a frequency assignment recorded in the MIFR  7(G) Issue G: Clarification of bringing into use information provided under RR Nos.11.44/11.44B  7(H) Issue H – Using one space station to bring frequency assignments at different orbital locations into use within a short period of time  7(I) Issue I – Possible method to mitigate excessive satellite network filings issue  7(J) Issue J – Removal of the link between the date of receipt of the notification information and the date of bringing into use in RR No. **11.44B**  7(K) Issue K – Addition of a regulatory provision in RR Article **11** for the case of launch  7(L) Issue L – Modification of certain provisions of Article 4 of RR Appendices 30 and 30A for Regions 1 and 3 namely replacement of tacit agreement with explicit agreement or alignment of those provisions of RR Appendices 30 and 30A for Regions 1 and 3 with those of Appendix 30B  Issue X: Review of the orbital position limitations in Annex 7 to RR Appendix 30 |
| **APT Proposals**:  **Issue A:**  APT Members support the Method A2, Option A, with its proposed regulatory text, as it was added to the CPM15-2 Report**.**  APT Members do not support Method A2, Option B as contained in the CPM15-2 Report.  **Issue B**  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**  **Issue C:**  No PACP  **Issue D:**  APT Members support the single method as described in Section 5/7/4 of the Chapter 5 of the CPM Report.  APT Members are of the view that the modern electronic means can be used instead for traditional means for effective communications, as far as possible, but 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.  **Issue E:**  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 CPM Report.  APT Members do not support Methods E1, E2 and E4 as contained in the CPM Report.  **Issue F:**  APT Members support the single Method F, 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.  **Issue G:**  APT Members support the single Method G, with its proposed regulatory text, as it was added to the CPM Report.  **Issue H**  No PACP  **Issue I:**  APT Members support Method I1.4 as described in Section 5/7/9.6.1.4 of the Chapter 5 of the CPM Report.  APT Members are generally supportive of efforts aimed at mitigating excessive filings. But they also have many concerns, including:  1) 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.  2) further studies are needed with the above methods.  **Issue K:**  APT Members support the Method K2 with its proposed regulatory text, as it was added to the CPM Report**.**  **Issue J:**  No PACP  **Issue L:**  No PACP  **Issue X:** APT Members support no change to Appendix 30 of the Radio Regulations under this issue. |
| **Status of the APT Proposals:**  **Issue A – Informing the Bureau of a suspension under RR No. 11.49 beyond six months**  All documents from regional groups and administrations including APT common proposal have been presented.  Meeting discussed on this issue focusing on two methods.   * Method A1 and * Method A2, Option A,   In which, APT member proposal based on Method A2, Option A received supports from some regional group.  APT members are actively joint the discussion.  Further consultation is required  Method A2, Option A supported by APT has been Approved by 5C2, It will be submitted to 5C. CITEL may request for reconsideration the method.  **Issue B – Publication of information on bringing into use of satellite networks at the ITU** website  All documents have been presented.  APT members are actively joint the discussion.  Chairman proposed possible text for issue based on CITEL text, it is similar to APT common proposal, the different is text order, but meaning is the same except the word “as received”.  It seems that this word is not received support from other group.  **Meeting Agrees A1 Option A**  **Issue C – Review or possible cancellation of the advance publication mechanism for satellite networks subject to coordination under section II of Article 9 of the Radio Regulations**  Draft new resolution: Transitional measures for elimination of advance publication filings by administrations for frequency assignments to satellite networks and systems subject to Section II of Article 9.  **Issue D – General use of modern electronic means of communications in coordination and notification procedures**  **Issue E – Failure of a satellite during the ninety-day bringing into use period**  All documents have been presented.  It seems that it is appropriate to consider the situation on case-by-case basis. No conclusion on the first pass of this issue.  **NOC Agreed.**  **Issue F: Modifications to RR Appendix 30B in relation to the suspension of use of a frequency assignment recorded in the MIFR**  Most of administrations support the single method F as outlined in CPM report, APT proposal is agreed by SWG 5C2.  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.  **Completed**  **Issue G: Clarification of bringing into use information provided under RR Nos.11.44/11.44B**  Most of administrations support the single method G as outlined in CPM report, APT proposal is agreed by SWG 5C2.  **Completed**  **Issue H – Using one space station to bring frequency assignments at different orbital** locations into use within a short period of time  All documents have been presented.  No PACP on this issues  After long discussion, Chairman proposed to draft simple resolution to address this issue. The  Resolution may request the administration provide some useful information for publish in the website to minimize the case of using one space station to bring frequency assignments at different orbital locations into use within a short period of time  Draft New Resolution being developed  Draft new resolution has been developed and completed.   1. the last orbital location where the space station was used to bring into use, or resume use of, frequency assignments; 2. the ITU satellite network(s)with which the frequency assignments in 2a) above were associated; 3. c) the date on which the space station was no longer maintained at the orbital location in 2a) above;   …  **Issue I – Possible method to mitigate excessive satellite network filings issue**  **Issue J – Removal of the link between the date of receipt of the notification information and the date of bringing into use in RR No. 11.44B**  Method J1. Completed  **Issue K – Addition of a regulatory provision in RR Article 11 for the case of launch**  The meeting decided to handle this use by text of Plenary, It seems that the text is similar to the ideal of Method K2  In case of a satellite destruction during launch, or failure before completion of bringing into use or bringing back into use of intended frequency assignments under conditions of *force majeure*, the notifying administration may submit the case to the Board, within one month of the destruction or failure, for its consideration and careful investigation, taking into account all supporting materials, including details on the satellite that failed, to enable the Board to decide on the matter, as appropriate.  Approved by 5C  **Proposed text to be included in the Minutes of the Plenary**  In considering the issue of satellite launch failure, WRC-15 confirms the minutes of the WRC-12 that the Board may address requests for a time-limit extension based on either a co-passenger issue or *force majeure* so long as any extension is “limited and qualified” as described by WRC-12, and wishes to have that authority continued until otherwise decided by a future WRC.  **Issue L – Modification of certain provisions of Article 4 of RR Appendices 30 and 30A for Regions 1 and 3 namely replacement of tacit agreement with explicit agreement or alignment of those provisions of RR Appendices 30 and 30A for Regions 1 and 3 with those of Appendix 30B**  **Typical Earth stations**  Meeting is considered for possible Resolution, some countries object the Resolution and concerned about possible change to Article 9, 11 and Appendix 5 need further study. The meeting compromise on the proposal from French. BR will make available information on mast registration on ITU website.  In considering the issue of notification of typical earth stations in the fixed-satellite service (Document 4(Add.2)(Rev.1) §3.2.3.8), WRC-15 concluded that further ITU-R studies are needed before any regulatory decision can be made. WRC-15 agreed to instruct the Bureau to publish a Circular letter inviting administrations to submit to BR on a voluntary basis information on the typical earth stations deployed in their countries according to a common format contained in the Circular letter. The Bureau will then provide this information to the relevant ITU-R Study Groups.  **Frequency assignments used in space services with a direct or indirect reference to the provisions of Article 48 of the Constitution**  Result: In discussing the issues raised in this section, in conjunction with withthe questions raised in the RRB Report on Resolution 80 regarding these same issues(see section 4.4 of document 14), WRC-15 noted that Article 48 refers to “military radio installations” and not to stations used for governmental purposes in general and decided that the BR should not infer that an administration refers to Article 48 of the Constitution in its answer to an inquiry under No. 13.6, unless this administration has explicitly invoked Article 48. WRC-15 also decided that there should be no restriction in terms of class of station and nature of service for a station eligible to operate under Article 48.  **No. 13.6 of the Radio Regulations (partial reply)**  This section of the report raised the issue of whether partial evidence provided by an administration to support the use of frequency assignments across a frequency band may be considered as sufficient, in a reply to a No. **13.6** query, to demonstrate the use, or continuation of use, of frequency assignments in accordance with the notified characteristics recorded in the MIFR. In considering this issue, WRC-15 was of the view that administrations need to respond as completely as practicable to queries under No. **13.6**. If the Bureau receives what it considers to be a partial reply to a query, it is expected that the Bureau would further clarify the scope of its query for the administration or request additional or alternative information. In addition, it was recognized that WRC-15 agreed some revisions to No. **13.6** that are intended to ensure greater transparency in the application of this provision. These revisions should have the consequence of helping to address such issues.  **Issue 7X-2 accepting interference-r4**  “In response to the proposals contained in Addendum 13 to Addendum 21 to Document 9, WRC-15 decided that the concept described in Appendix 5#6Di of the Radio Regulations may be also requested by an Administration submitting a notification of a satellite network to the Bureau in order to be applied during the 11.32, 11.32A or 11.41 examination with respect to coordination requirements initially identified under provisions No.9.7 and No.9.41 associated with 9.7 of the Radio Regulations, and irrespectively of the applicable coordination criteria”.  **Steerable beam Appendix 4.**  Modify the item B.3.b.1, add new text “In addition, for a steerable beam, except for the case of Appendix **30B,**see also No. **21.16 (**and its associated RoP)”.  **MOD to No. 13.6**  Approved by 5C, ASMG need regional consultation and make comment at committee 5.  “The Bureau shall consult the notifying administration and request clarification as to whether the assignment was brought into use in accordance with the notified characteristics or continues to be in use in accordance with the notified characteristics. Such a request shall include the reason for the query.  “In the event of a response, the Bureau shall inform the notifying administration of the conclusion reached by the Bureau within three months of the administration’s response. When the Bureau is not in a position to comply with the three month deadline referred above, the Bureau shall so inform the notifying administration together with the reasons thereto.  “  The application of this provision shall not preclude the application of other provisions of the Radio Regulations.  **7X-2: 9A21-A13 (EUR): New No. 11.41.3**  Proposal from CEPT has been introduced. This issue concerning to 11.41. Some concerned have been raised. Further discussion is required.  **7X-4 61A21-A13 (IRN): MOD to 6.14 of AP30**  Document has been discussed. Ideal is seems to be acceptable, text needs to be refined.  7X-5 88A21 (ISR): Modification to AP30/30A recorded assignments  Agreement to prepare text to be read at Plenary acknowleding the issue and calling for ITU-R study  7X-6: Mod to AP4 C.11.a for number of AP30/30A/30B test points  **Change to 100 test points AGREED**  7X-7: Interrelationship between Nos. 11.44, 11.44B, 11.49, 11.49.1  Proposals introduction, offline discussions ongoing  **Issue X: Review of the orbital position limitations in Annex 7 to RR Appendix 30** |
| **Issues to be discussed at the Coordination Meeting:**  None. |
| **Comments/Remarks by the Coordinator**:  There are many new issues proposed by Regional group and administration this meeting and APT member are invited to consider these new issues.   * 7X-1: 8A21 (RCC) - MOD to No. 13.6 * 7X-2: 9A21-A13 (EUR): New No. 11.41.3 * 7X-4 61A21-A13 (IRN): MOD to 6.14 of AP30 * 7X-5 88A21 (ISR): Modification to AP30/30A recorded assignments * 7X-6 96 (TUR): Mod to AP4 C.11.a for number of AP30/30A/30B test points   **Change to 100 test points AGREED**   * 7X-7 109A1 (RUS): Interrelationship between Nos. 11.44, 11.44B, 11.49, 11.49.1 * Director’s Report-AI 7 aspects (Doc WRC15/4A1, A1-A1, A2R1, A2R1-A1, A3) * RRB Report on Resolution 80 (Doc WRC15/14) |

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| **Agenda Item No.**: 8 |
| **Name of the Coordinator ( with Email)**: Neil Meaney [neil.meaney@acma.gov.au](mailto:neil.meaney@acma.gov.au) |
| **Issues:**  Deletion of country names from RR Table of Frequency Allocations footnotes.  Standing agenda item. |
| **APT Proposals**:  No proposal |
| **Status of the APT Proposals:**  Not applicable |
| **Issues to be discussed at the Coordination Meeting:**  Numerous proposals to remove country names from footnotes, have been approved at COM 6 level. There are a number of proposals seeking to have country names added to footnotes, while not the intention of agenda item 8 it is being accommodated under the principles agreed for this meeting and detailed in Document [142 (Rev.1)](http://www.itu.int/md/meetingdoc.asp?lang=en&parent=R15-WRC15-C-0142). Requests to have country names added to footnotes have been discussed within affected administrations and now approved by COM 6. For these matters, some requests to have the addition of a country name to an existing footnote did not reach agreement and will not be dealt with by plenary, as concluded by COM 6.  Where variations to footnotes that might impact the work of agenda items outside the remit of Committee 6, these issues were referred to Com 4 or Com 5 as appropriate. |
| **Comments/Remarks by the Coordinator**:  Nil. |

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| **Agenda Item No.**:  9.1 Issue 9.1.2 |
| **Name of the Coordinator ( with Email)**:  Haruko S. TAKESHITA (J) ([h.takeshita@soumu.go.jp](mailto:h.takeshita@soumu.go.jp) ) |
| **Issues:**  1 to carry out studies to examine the effectiveness and appropriateness of the current criterion (Δ*T*/*T* > 6%) used in the application of RR No. **9.41** and consider any other possible alternatives (including the alternatives outlined in Annexes 1 and 2 to this Resolution), as appropriate, for the bands referred to in *recognizing e)*;  2 to study whether additional reductions in the coordination arcs in RR Appendix **5 (Rev.WRC-12)** are appropriate for the 6/4 GHz and 14/10/11/12 GHz frequency bands, and whether it is appropriate to reduce the coordination arc in the 30/20 GHz band,” |
| **APT Proposals**:  No APT common proposal. |
| **Status of the APT Proposals:**  N/A |
| **Issues to be discussed at the Coordination Meeting:**   * None. |
| **Comments/Remarks by the Coordinator**: [Updated]  WG5C agreed the followings;   * With respect to *resolves* 1 in Resolution **756**, Nos. **9.7** and **9.41** are not changed. For the application of No. **11.32A**, current criteria C/I is changed to pfd only outside the coordination arcs in C band (only for uplink) and Ku bands (uplink and downlink). * With respect to *resolves* 2 in Resolution **756**, the coordination arcs are reduced by one degree in C and Ku bands (±8 → ±7° in C band, ±7 → ±6° in Ku band), but not changed in Ka band (±8 is kept). * As a consequence, Resolution **756** is suppressed. |

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| **Agenda Item No.**:  Agenda Item 9.1 Issue 9.1.3 |
| **Name of the Coordinator ( with Email)**:  Haruko S. TAKESHITA (J) ([h.takeshita@soumu.go.jp](mailto:h.takeshita@soumu.go.jp) ) |
| **Issues:**   1. To collaborate with, and provide information when requested by, ITU-D, on satellite technologies and applications as defined in ITU-R Recommendations and Reports and on satellite regulatory procedures in the Radio Regulations that will help developing countries with development and implementation of satellite networks and services; 2. To determine whether it might be necessary to apply additional regulatory measures to enhance the availability of public international telecommunication services delivered through satellite technology. |
| **APT Proposals**:  No changes to the Radio Regulations and retention of Resolution **11 (WRC-12)**. |
| **Status of the APT Proposals:**   * No change to the RR was agreed at WG 5C level. * But, Resolutions **11** was agreed to be deleted.   (See “Comments/Remarks by the Coordinator” below.) |
| **Issues to be discussed at the Coordination Meeting:**   * None. |
| **Comments/Remarks by the Coordinator**: [Updated]   * WG5C’s proposal to suppress Resolution **11** was agreed (see [Doc. 176](http://www.itu.int/md/R15-WRC15-C-0176/en)) at COM 5 level. * It will be considered at Plenary (see [Doc. 194](http://www.itu.int/md/R15-WRC15-C-0194/en)). |

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| **Agenda Item No.**:  Agenda Item 9.1 Issue 9.1.5 |
| **Name of the Coordinator ( with Email)**:  Haruko S. TAKESHITA (J) ([h.takeshita@soumu.go.jp](mailto:h.takeshita@soumu.go.jp) ) |
| **Issues:**  To study possible technical and regulatory measures in some countries in Region 1 to support the existing and future FSS earth stations in the 3 400-4 200 MHz band used for satellite communications related to safe operation of aircraft and reliable distribution of meteorological information referred to in *considering* c). |
| **APT Proposals**:  No APT common proposal. |
| **Status of the APT Proposals:**  N/A |
| **Issues to be discussed at the Coordination Meeting:**  None. |
| **Comments/Remarks by the Coordinator**: [Updated]   * Proposed modification to Resolution **154** was agreed at WG 5C level. * It will be submitted to and reconsidered at COM 5.   NOTE: Proposed modification to Resolution **154** was considered at third meeting of COM 5 (Thursday, 5 November 2015) and sent back to WG 5C to reconsider. |

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| **Agenda Item No.**: **9.1.6** |
| **Name of the Coordinator ( with Email)**:  [NEIL.MEANEY@ACMA.GOV.AU](mailto:NEIL.MEANEY@ACMA.GOV.AU) |
| **Issues:**  Element of the Director’s Report to consider studies on definitions of the definitions of *fixed service*, *fixed station* and *mobile station.* |
| **APT Proposals**:  A23-A1-A6/1 and 2 – for NoC to the Radio Regulations |
| **Status of the APT Proposals:**  Successful. All proposals to the conference supported NoC. The matter was dealt with at Comm 6 – where it was agreed the matter could go forward as NoC to the Radio Regulations and suppression of Resolution **957 (WRC-12)**. Plenary has now approved the first reading of this matter suppressing Resolution **957 (WRC-12)**. |
| **Issues to be discussed at the Coordination Meeting:**  For noting only. |
| **Comments/Remarks by the Coordinator**:  Good result for the APT position. |

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| **Agenda Item No.**: **9.1 (Issue 9.1.7)** |
| **Name of the Coordinator ( with Email)**:  Yujiao Li ([janelee1031@hotmail.com](mailto:janelee1031@hotmail.com)) |
| **Issues:**  9.1.7 Resolution **647 (Rev. WRC-12)** − Spectrum management guidelines for emergency and disaster relief radiocommunication |
| **APT Proposals**:  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 under this issue as described in CPM Report, i.e. to keep Resolution 644 (Rev.WRC-12) and modify Resolution 647 (Rev.WRC-12) only.  MOD RESOLUTION 647 (Rev. WRC-12) |
| **Status of the APT Proposals:**  Resolution **647** **(Rev. WRC-15)** was approved at WG 4C meeting on 11 Nov;  COM 4 approved Resolution **647 (Rev. WRC-15)** on 12 Nov;  This resolution is likely to be approved at next plenary. |
| **Issues to be discussed at the Coordination Meeting:**  N/A |
| **Comments/Remarks by the Coordinator**:  N/A |

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| **Agenda Item No.**:  Agenda Item 9.1 Issue 9.1.8 |
| **Name of the Coordinator ( with Email)**:  Haruko S. TAKESHITA (J) ([h.takeshita@soumu.go.jp](mailto:h.takeshita@soumu.go.jp) ) |
| **Issues:**  To examine the procedures for notifying space networks and consider possible modifications to enable the deployment and operation of nanosatellites and picosatellites, taking into account the short development time, short mission time and unique orbital characteristics. |
| **APT Proposals**:  Retention of Resolution **757 (Rev.WRC-12)** with some modifications. |
| **Status of the APT Proposals:**   * Our proposal was not reflected to the result of the discussion at WG 5C level.   (See “Comments/Remarks by the Coordinator” below.) |
| **Issues to be discussed at the Coordination Meeting:**   * None. |
| **Comments/Remarks by the Coordinator**: [Updated]   * WG5C’s proposal to suppress Resolution **757** was agreed (see [Doc. 178](http://www.itu.int/md/R15-WRC15-C-0178/en)) at COM 5 level. * It will be considered at Plenary (see [Doc. 194](http://www.itu.int/md/R15-WRC15-C-0194/en)). |

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| Agenda Item No.:9.2 (Revision of 212) |
| Name of the Coordinator ( with Email):  Dr. DaeJung KIM (kdj@tta.or.kr) |
| Issues:  The review of Resolution 212 (Rev. WRC-07) based on the WRC-15 input contributions (Implementation of International Mobile Telecommunications in the bands 1 885-2 025 MHz and 2 110-2 200 MHz) |
| APT Proposals: None |
| Status of the APT Proposals: |
| Issues to be discussed at the Coordination Meeting:  None |
| Comments/Remarks by the Coordinator:   * This informal drafting discussed the remaining issues and prepared the modifications documents of Res. 212 and Res. 223 * Based on the consensus of the participants, this informal drafting group made efforts for the draft resolution to align with the results of M.1036. * Minimized and simplified draft Res212 and 223 based on the meeting results will be prepared by Mr. Michael Kraemer and will be forwarded to the 4C1/5C4 joint meeting tomorrow. Notwithstanding the best effort, a little uncompromised texts in Resolution is remained and a bit of debate in the joint meeting will be occurred. |

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| **Agenda Item No.**: 9.2. (ESOMPs) |
| **Name of the Coordinator ( with Email)**:  Oki Baskoro Rachmat |
| **Issues:**  Regulatory clarification for the operation of Earth Stations in motion. |
| **APT Proposals**:  Although APT has submitted the view on ESOMPs under document 29 to this conference, APT does not have specific proposals to address this issue except on raising some points that need to be considered during the conference for the operations of ESOMPs in term of regulatory and technical aspects. |
| **Status of the APT Proposals:**  During the meeting, a suggestion was raised on including points raised in document 29 (i.e. APT view) in some part of the output document of SWG 5C4 discussion. |
| **Issues to be discussed at the Coordination Meeting:**  Sub working group 5C4 that handled this issue met at least 9 times and it ends yesterday at around 9 PM in the evening. Introduction of the input documents from regional groups and some members have been done including APT view under document 29 during the first meeting. In summary, it was quite tough discussions during the meetings, but at last, we are reaching the compromised solution to provide regulatory and technical guidance for the operations of earth station in motion. The output document from SWG 5C4 will be brought up to the next WG 5C meeting for the consideration. |
| **Comments/Remarks by the Coordinator**: |

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| **Agenda Item No.**: 9.3 (Resolution 80) |
| **Name of the Coordinator ( with Email)**: Kyungjin YEO ([yeokj@msip.go.kr](mailto:yeokj@msip.go.kr)) on behalf of Ms. Keounghee Lee (ijunije@msip.go.kr) |
| **Issues:** to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention on action in response to [Resolution 80 (Rev.WRC‑07)](#RES_80_rev_WRC07) |
| **APT Proposals**: No proposal |
| **Status of the APT Proposals:** Not applicable |
| **Issues to be discussed at the Coordination Meeting:** SWG 5C4 and SWG 5C2 meeting reviewed and developed draft document for certain sections of the Report. WG 5C meeting at 9:00 16 Nov. approved proposed text to be included in the minutes of the Plenary (DT/91) as follows;  **The status of WRC decisions recorded in the minutes from a World Radiocommunication Conference**  WRC-15 instructed the Bureau to publish, after the end of WRC-15 and as soon as practically possible, a new Circular Letter containing all decisions made by WRC-15 included in its plenary minutes and to make them available on the ITU website. |
| **Comments/Remarks by the Coordinator**: Since there is no PACP, interested APT Members who are interested in the issues of the report are encouraged to participate the relating SWG meetings. |

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| **Agenda Item No.**: AI 10 |
| **Name of the Coordinator ( with Email)**:  ***Overall:*** Mr. Jiao Jian (China) [jian.jiao@huawei.com](mailto:jian.jiao@huawei.com)  ***IMT:*** Mr. Hyoungjin Choi (Rep. of Korea) [hj686.choi@samsung.com](mailto:hj686.choi@samsung.com)  ***275 GHz/ITS:*** Ms. Yumi Ueda (Japan) [ueda@nict.gp.jp](mailto:ueda@nict.gp.jp) |
| **Issues:**  10to 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**:  ASP/32A24/1 SUP RESOLUTION 806 (WRC-07)  ASP/32A24/2 SUP RESOLUTION 807 (WRC-12)  ASP/32A24/3 SUP RESOLUTION 808 (WRC-12)  ASP/32A24/4 Draft New Resolution [ASP-A10-WRC-19 AGENDA] (wrc-15) Agenda for the 2019 World Radiocommunication Conference  ASP/32A24/5 1.1 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 6 GHz] (WRC 15) (Attachment 1);  ASP/32A24/6 1.2 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);  ASP/32A24/7 1.3 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);  ASP/32A24/8 1.4 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);  ASP/32A24/9 1.5 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);  ASP/32A24/10 1.6 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);  ASP/32A24/11 1.7 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);  ASP/32A24/12 1.8 to consider spectrum-related matters and regulatory actions to support wireless power transmission (WPT)1 taking into account the results of ITU R studies in accordance with Resolution [ASP-H10-WPT] (WRC 15) (Attachment 8);  ASP/32A24/13 Agenda 2 – 10  ASP/32A24/14 Draft New Resolution [ASP-B10-IMT ABOVE 6 GHZ] (wrc-15) Studies on frequency-related matters for IMT identification including possible additional allocations to the mobile services on a primary basis in portion(s) of the frequency range between 25.25 and 86 GHz for the future development of IMT for 2020 and beyond  ASP/32A24/15 Draft New Resolution [ASP-C10-MS&FS ABOVE 275 GHZ] (wrc-15) Appropriate regulatory measures for the land mobile and fixed services operating in the frequency range 275-1 000 GHz  ASP/32A24/16 Draft New Resolution [ASP-D10-ITS] (wrc-15) Spectrum-related matters and possible regulatory actions for Intelligent Transport Systems applications  ASP/32A24/17 RESOLUTION 359 (REV.WRC-1215) Consideration of regulatory provisions for modernization of the Global Maritime Distress and Safety System and studies related to e-navigation  ASP/32A24/18 Draft New Resolution [ASP-E10-GADSS] (wrc-15) Aircraft tracking and distress communications  ASP/32A24/19 Draft New Resolution [ASP-F10-AIS] (wrc-15) Consideration of possible frequency requirement and regulatory procedures for protecting automatic identification system (AIS) and supporting  novel devices using AIS technology  ASP/32A24/20 Draft New Resolution [ASP-G10-TRAIN] (wrc-15) Consideration of spectrum related matters and possible regulatory actions to support the next-generation radiocommunication system between train and tracksides  ASP/32A24/21 Draft New Resolution [ASP-H10-WPT] (wrc-15) Studies on spectrum-related matters and regulatory actions to support Wireless Power Transmission (WPT) |
| **Status of the APT Proposals:**   * COM 6 met almost whole day up to midnight to consider the output documents one-by-one from WG 6B yesterday. COM6 finished considering all the documents and sent them to The Plenary.   + The below topics on possible WRC-23 AIs were reviewed at COM6 level and agreed to submit to COM 6 without any [].     - 2.1 [GMDSS AND E-NAV]     - 2.2 [RADAR SOUNDERS]( with [ ] around the frequency range [40-50]MHz)     - 2.3 [SW]   + The below topics were reviewed and agreed to be considered under AI 9 (instead of AI 6) at COM6 level and submitted to The Plenary.     - WPT for electric vehicles     - UNAUTHORIZED OPERATION     - MTC(machine type communication infrastructures, i.e. IoT)   + The below topics on possible WRC-19 AIs were reviewed at COM6 level and agreed to submit to The Plenary, even some of them with [] for further discussion at Plenary level.     - 1.1 [AMATEUR]     - 1.2 [MSS/METSS/EESS\_400MHZ]     - 1.3 [METEOSS-EESS]     - 1.4 [APP30 (Anx7)]     - 1.5 [ESOMP-ESIM-ESOA]     - 1.5.1 [ESIM]     - 1.5.2 [ESOA]     - 1.6 [QV FSS]     - 1.6.1 [QV FSS].1(with [ ] around all frequency bands, i.e. the frequency bands [32.3-33 GHz (space-to-Earth and Earth-to-space)], [37.5-39.5 GHz (Earth-to-space)] and [51.4-52.4 GHz (Earth-to-space)])     - 1.6.2 [QV FSS].2(with [ ] around all frequency bands, i.e. [32.3-33 GHz] and [37.5-39.5 GHz] (Earth-to-space and space-to-Earth), [39.5-42.5 GHz] (space-to-Earth), and [42.5-43.5 GHz], [47.2-50.2 GHz] and [50.4-52.4 GHz] (Earth-to-space) frequency bands)     - 1.7 [SHORT DURATION](with [ ] around the frequncy band [420-450 MHz])     - 1.8 [RES359]     - 1.9.1 [MARITIME DEVICES]     - 1.9.2 [VDES – from COM4]     - 1.10 [GADSS]     - 1.11 [RAILWAY]     - 1.12 [ITS]     - 1.15 [LAND FIXED]   + There was not enough time to conclude the discussion on HAPS and no time to consider IMT ABOVE 6 GHZ and RLAN 5GHZ at COM 6 level so they were just sent to the Plenary for further discussion, especially on those [] parts.     - 1.13 [IMT ABOVE 6 GHZ] (with [ ] around the frequency bands/ranges, [6-20GHz TBD] and [27.5-29.5])     - 1.14 [HAPS] (with [ ] around all frequency bands, i.e. [10.95-11.2 GHz, 11.45-11.7 GHz, [21.4-22 GHz] [for the ground-to-HAPS links], 24.25-27.5 GHz [for the HAPS-to-ground links], 27.5-28.35 GHz and 38‑39.5 GHz])     - 1.16 [RLAN 5GHZ] (with [ ] around 5850-5925 MHz and RCC will report if they consider this AI should be under AI 9 or 10.Majority support AI 10) * The Plenary will review all documents from COM 6 one-by-one today. |
| **Issues to be discussed at the Coordination Meeting:**   * ISSUE A: What’s the APT opinion on the candidate frequency ranges from IMT, especially on the frequency ranges in []?(Our original position is NO Position for those [] frequency ranges)   + [bands between 6 and 20 GHz-TBD], 24.25-27.5 GHz[[1]](#footnote-1)2, [27.5-29.5 GHz], 31.8-33.4 GHz, 37-43.5 GHz, 45.5-50.2 GHz, 50.4-52.6 GHz, 66-76 GHz and 81-86 GHz * ISSUE B: What’s the APT opinion on the candidate frequency ranges from HAPS? (Our original position is NO Position for those frequency ranges)   + 10.95-11.2 GHz, 11.45-11.7 GHz, 21.4-22 GHz, 24.25-28.35 GHz, and 37.5 39.5.   + For HAPS, CITEL decided, in its regional meeting, that the following bands could be agreed as a compromise: 21.4 - 22 GHz, 24.25 - 27.5 GHz, and 38 - 39.5 GHz. * ISSUE C: What’s the APT opinion on RLAN 5GHZ based on the following CITEL modification?(Our original position is NO Position for this topic)  * ISSUE D: What’s the APT opinion on QV FSS based on the following CITEL proposal?(Our original position is Objection for this topic)   + Limit NGSO studies in the V band to EPFD limits for consideration at WRC 2019   + On the Additional FSS FAI, eliminate 32.3-33 GHz from consideration. Consider 37.5-39.5 GHz in the reverse band for FSS gateways at 2023 (this band already has an FSS allocation). On the 50 GHz band, this is a CEPT proposal and we are talking with them if they want that considered at 2019 or 2023.   + Current contribution from COM 6 : * ISSUE E: What’s the APT opinion on SHORT DURATION, especially on the frequency range in []? (Our original position is No Position for this topic)   + 150.05-174 MHz, 400.15-420 MHz [and 420-450 MHz] |
| **Comments/Remarks by the Coordinator**:   * None |

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| **Agenda Item No.**: GFT |
| **Name of the Coordinator ( with Email)**: BUI Ha Long (email: longbh@rfd.gov.vn) |
| **Issues:**  Resolution **185** (Busan, 2014) Global flight tracking for civil aviation - The Plenipotentiary Conference of the International Telecommunication Union (Busan, 2014), resolves to instruct WRC-15, pursuant to No. 119 of the ITU Convention, to include in its agenda, 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, |
| **APT Proposals**:  **Relevant documents:** C/32-Add25  **Introduction**  APT Members are of the views that support the followings:  – consideration of global flight tracking for civil aviation in accordance with ITU Plenipotentiary Conference Resolution 185 (Busan, 2014) at WRC-15;  – studies relating to global flight tracking for civil aviation that are ongoing in the ITU Radiocommunication Sector (ITU-R) including Working Parties 5B and 4C while taking into account appropriate protection of existing services;  – any regulatory provision on GFT shall not constrain the systems operating in existing aeronautical safety services;  – consideration of any possible method, technologies or solution that can contribute to the global flight tracking purpose.  **Proposal**  In view of above, APT Members invites WRC-15 to recognize the importance and urgent treatment of global flight tracking for civil aviation, taking into account of the the result 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). |
| **Status of the APT Proposals:**  GFT issue is allocated to SWG4A-4 Chair by Madam Lisa Amirault from Canada. So far SWG4A-4 met 4 times.  All the input documents was introduced, including the report of Director of BR, as summarized in the embedded file. APT common proposal on this issue do not make specific proposal on the allocation while proposals from other regional groups or countries try to propose allocation of AMS(R)S via 2 approaches based on Option 2 and Option 3 provide in BR Director report. And China, in their country proposal proposes no change to the Radio Regulation and the issue of global flight tracking should be included on the agenda of the next WRC.    SWG4A-4 is now considering the possible output which include the proposals of:  a) allocate the band 1 087.7-1 092.3 MHz to the AMS(R)S (Earth-to-space) on a primary basis, limited to the reception of ADS-B emissions from aircraft which in accordance with ICAO standards, in condition of not claim protection from stations operating in the ARNS. New Resolution [ADS-B] is needed.  b) new WRC Resolution on Use of the frequency band 1 087.7- 1 092.3 MHz by the aeronautical mobile-satellite (R) service (Earth to space):  - provide the definition of ADS-B concept  - indicate a complex interference environment cause by using of ICAO and non-ICAO systems in the band  - there is a requirement that some administrations have to control all users to ensure proper operation of all terrestrial systems in the band  - 3 resolves are proposed to address the matters.  Draft materials, which were agreed by SWG4A-4, on above proposals can be found on share folder of SWG4A-4. |
| **Issues to be discussed at the Coordination Meeting:**  None |
| **Comments/Remarks by the Coordinator**:  SWG4A-4 will submit above results to consider at WG4A meeting tomorrow. |

1. 2 When conducting studies in the band 24.5-27.5 GHz, to take into account the need to ensure the protection of existing earth stations and the deployment of future receiving earth stations under the EESS (space-to-Earth) and SRS (space-to-Earth) allocation in the frequency band 25.5-27 GHz. [↑](#footnote-ref-1)