

**ASIA-PACIFIC TELECOMMUNITY**

**APT Wireless Group Work Plans**

*(as of AWG-14)*

Contents

[1. APT Wireless Group (AWG) Structure 3](#_Toc355345110)

[2. Work Scopes for AWG Working Groups 4](#_Toc355345111)

[3. AWG Office Bearers’ Contact Details (as of AWG-14) 5](#_Toc355345112)

[4. Terms of Reference of AWG Working Groups/ Sub-Working Groups/ Task Groups 8](#_Toc355345113)

[4.1 Working Group on Spectrum Aspects (WG-SPEC) 8](#_Toc355345114)

[4.1.1 Sub-Working Group on Spectrum arrangement and harmonization (SWG-SA&H) 8](#_Toc355345115)

[4.1.2 Sub-Working Group on Spectrum monitoring (SWG-SM) 8](#_Toc355345116)

[4.1.3 Task Group on sharing studies on IMT systems (TG-SSIMT) 9](#_Toc355345117)

[4.1.4 Task Group on Public Protection and Disaster Relief (TG-PPDR) 9](#_Toc355345118)

[4.1.5 Task Group on Broadband Wireless Access (TG-BWA) 9](#_Toc355345119)

[4.1.6 Task Group on FSS Spectrum in the 10-15 GHz Range (TG-FSS) 9](#_Toc355345120)

[4.2 Working Group on Technology Aspects (WG-TECH) 10](#_Toc355345121)

[4.2.1 Task Group on Cognitive Radio System and Software-Defined Radio (TG-CRS & SDR) 10](#_Toc355345122)

[4.2.2 Task Group on IMT (TG-IMT) 10](#_Toc355345123)

[4.2.3 Task Group on Intelligent Transport Systems (TG-ITS) 10](#_Toc355345124)

[4.2.4 Task Group on Short Range Devices (TG-SRD) 10](#_Toc355345125)

[4.2.5 Task Group on Wireless Power Transmission (TG-WPT) 11](#_Toc355345126)

[4.3 Working Group on Service and Applications (WG-S&A) 11](#_Toc355345127)

[4.3.1 Task Group on Fixed Mobile Convergence (TG-FMC) 11](#_Toc355345128)

[4.3.2 Task Group on Radiocommunication convergence (TG-RC) 11](#_Toc355345129)

[4.3.3 Task Group on Modern Satellite Applications (TG-MSA) 11](#_Toc355345130)

[4.3.4 Task Group on Aeronautical and maritime (TG-A&M) 11](#_Toc355345131)

[5. Micro Work Plans/ Deliverables 13](#_Toc355345132)

[5.1 Work Plans of Working Group on Spectrum Aspects (WG-SPEC) 13](#_Toc355345133)

[5.1.1 Work Plan for Sub-WG on Spectrum Arrangements and Harmonization (SWG-SA&H) 13](#_Toc355345134)

[5.1.2 Work Plan for Sub-WG on Spectrum Monitoring (SWG-SM) 15](#_Toc355345135)

[5.1.3 Work Plan for Task Group on IMT Sharing Studies (TG-SSIMT) 17](#_Toc355345136)

[5.1.4 Work Plan for Task Group on Public Protection and Disaster Relief (TG-PPDR) 19](#_Toc355345137)

[5.1.5 Work Plan for Task Group on Broadband Wireless Access (TG-BWA) 21](#_Toc355345138)

[5.1.6 Work Plan for Task Group on FSS Spectrum in 10-15 GHz Range (TG-FSS) 22](#_Toc355345139)

[5.2 Work Plans of Working Group on Technology Aspects (WG-TECH) 23](#_Toc355345140)

[5.2.1 Work Plan for Task Group on Cognitive Radio System and Software-Defined Radio (TG-CRS & SDR) 23](#_Toc355345141)

[5.2.2 Work Plan for Task Group on IMT (TG-IMT) 24](#_Toc355345142)

[5.2.3 Work Plan for Task Group on Intelligent Transport System (TG-ITS) 27](#_Toc355345143)

[5.2.4 Work Plan for Task Group on Short Range Device (TG-SRD) 30](#_Toc355345144)

[5.2.5 Work Plan for Task Group on Wireless Power Transmission (TG-WPT) 31](#_Toc355345145)

[5.3 Work Plans of Working Group on Service and Applications (WG-S&A) 32](#_Toc355345146)

[5.3.1 Work Plan for Task Group on Fixed Mobile Convergence (TG-FMC) 32](#_Toc355345147)

[5.3.2 Work Plan for Task Group on Radiocommunication Convergence (TG-RC) 34](#_Toc355345148)

[5.3.3 Work Plan for Task Group on Modern Satellite Applications (TG-MSA) 36](#_Toc355345149)

[5.3.4 Work Plan for Task Group on Aeronautical and Maritime (TG A&M) 39](#_Toc355345150)

# APT Wireless Group (AWG) Structure

**Plenary**

**Working Group on
Technology Aspects
(WG-TECH)**

**Task Groups**

**IMT**

**CRS and SDR**

**Intelligent Transport System**

**Short Range Device**

**Wireless Power Transmission**

**Working Group on
Service and Applications
(WG-S&A)**

**Task Groups**

**Fixed Mobile Convergence**

**Radiocommunication Convergence**

**Modern Satellite Applications**

**Aeronautical and Maritime**

**Working Group on
Spectrum Aspects
(WG-SPEC)**

**Sub Working Groups**

**Spectrum Arrangement
and Harmonization**

**Spectrum Monitoring**

**Task Groups**

**Sharing Studies on IMT Systems**

**Public Protection and Disaster Relief**

**Broadband Wireless Access**

**FSS Spectrum in the 10-15 GHz Range**

To significantly perform the objectives of AWG, coordination activities not only with APT internal forums but also with the external forums would be required. The relationships among other forums are shown below. A forum may be added or removed when a task of AWG is created, modified or completed.

#

**Inside APT:**

* APG
* ASTAP
* PRF, SATRC

**Outside APT:**

* ITU-R SGs
* CEPT, 3GPP etc.

**Inside APT:**

* APG
* ASTAP
* PRF, SATRC

**Outside APT:**

* ITU-R SGs
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**Inside APT:**

* APG
* ASTAP
* PRF, SATRC

**Outside APT:**

* ITU-R SGs
* CEPT, 3GPP etc.

# Work Scopes for AWG Working Groups

|  |  |
| --- | --- |
| **WG-SPEC** | * To identify the spectrum requirements for new radio technologies;
* To coordinate efforts to eliminate harmful interference between concerned countries, as appropriate;
* To develop plans for harmonized spectrum usage for radiocommunication systems in the region;
* To develop optimum sharing methodologies between radio services and methods ensuring compatibility between systems; and
* To investigate the impact of interference to Radiocommunication services from other sources.
 |
| **WG-TECH** | * To provide cost effective and timely radiocommunication solutions in technology aspects by developing Recommendations and Reports;
* To study advanced technologies for new wireless applications;
* To cooperate with relevant external research and standardization organizations; and
* To conduct technical consultation based upon the requests of APT administrations, ensuring that the requirements and needs of the developing countries are reflected in the work and deliverables of the WG.
 |
| **WG S&A** | * To study market and user requirements of radiocommunication service and applications;
* To develop and update Recommendations and Reports on service and applications of radiocommunication systems, convergence of services of fixed and mobile networks or telecommunications and broadcasting; and
* To ensure that the requirements and needs of the developing countries are reflected in the work and deliverables of the WG.
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# AWG Office Bearers’ Contact Details (as of AWG-14)

|  |  |
| --- | --- |
| **GROUP** | **Chairman/ Vice Chairmen** |
| **APT Wireless Group (AWG)** | **CHAIRMAN**Mr. Sun LIXINDirectorHuawei Technologies Co., LtdPeople’s Republic of Chinasunlixin@huawei.com**VICE CHAIRMAN**Dr. Kohei SATOHManaging DirectorAssociation of Radio Industries and Businesses (ARIB)Japansatoh@arib.or.jp**VICE CHAIR**Ms. Chris PERERASenior DirectorGSMA (Hong Kong)Hong Kong, Chinacperera@gsma.com |
| **Working Group on Spectrum Aspects (WG SPEC)** | Mr. John LEWISConsultant International Spectrum ManagementAdded Value Applications LimitedNew Zealandjohn.lewis@ties.itu.int |
| Sub WG 1: Spectrum Arrangement and Harmonization (SA&H) | Mrs. Keer ZHUDeputy DirectorMinistry of Industry and Information TechnologyPeople’s Republic of Chinazhukeer@miit.gov.cn |
| Sub WG 2: Spectrum Monitoring (SM) | Mr. Jia HUANGDeputy DirectorState Radio Monitoring CenterMinistry of Industry and Information TechnologyPeople’s Republic of ChinaFerrero.huang@srrc.org.cn. |

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| **GROUP** | **Chairman/ Vice Chairmen** |
| Task Group 1: Sharing Study on IMT Systems (SSIMT) | Ms. Julie WELCHSenior Director Government AffairsQualcomm International (Hong Kong)Hong Kong, Chinajgwelch@qualcomm.com |
| Task Group 2: Public Protection and Disaster Relief (PPDR) | Mr. Bharat BHATIARegional Director, Asia PacificMotorola India Pte Ltd.India bharat.bhatia@motorolasolutions.com |
| Task Group 3: Broadband Wireless Access (BWA) | Dr. Euntaek LIMDirectorSamsung Electronics Co., LtdRepublic of Koreaet.lim@samsung.com |
| Task Group 4: FSS Spectrum in the 10-15 GHz Range(FSS) | Ms. Ting Ling LEEManagerSES World SkiesSingaporetingling.lee@ses.com |
| **Working Group on Technology Aspects (WG TECH)** | Ms. Juyeon SONGSenior ResearcherSamsung Electronics Co. Ltd.Republic of KoreaEmail: jysong@samsung.com |
| Task Group 1: Short Range Devices (SRD) | Dr. Masayuki ARIYOSHISenior ResearcherATR Wave Engineering LaboratoriesJapanariyoshi@atr.jp |
| Task Group 2: Cognitive Radio System and Software Defined Radio (CRS&SDR) | Mr. Lang BAOZHEN Senior EngineerChina Academy of Telecommunication ResearchPeople's Republic of Chinalangbaozhen@ritt.cn |

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| **GROUP** | **Chairman/ Vice Chairmen** |
| Task Group 3: IMT (IMT) | Dr. Hiroyuki ATARASHIManagerNTT DoCoMo, Inc.Japanatarashi@nttdocomo.co.jp |
| Task Group 4: Intelligent Transportation System (ITS) | Mr. Satoshi OYAMASenior Researcher, ITS GroupAssociation of Radio Industries and BusinessesJapans-oyama@arib.or.jp |
| Task Group 5: Wireless Power Transmission (WPT) | Mr. Chan Hyung CHUNGResearch FellowKorea Radio Promotion AssociationRepublic of Koreabackbum@rapa.or.kr |
| **Working Group on Service & Applications (WG-S&A)** | Dr. Andri QIANTORISenior Officer IT Solutions & Strategic PortfolioPT Telekomunikasi Indonesia qiantori@telkom.co.id |
| Task Group 1: Fixed Mobile Convergence (FMC) | Dr. F.X. Ari WIBOWOResearcher Communication & VAS AnalysisPT Telekomunikasi Indonesiaari\_wibowo@telkom.co.id |
| Task Group 2: Radicommunication Convergence (RC) | Dr. Andri QIANTORISenior Officer IT Solutions & Strategic PortfolioPT Telekomunikasi Indonesia qiantori@telkom.co.id |
| Task Group 3: Modern Satellite Applications (MSA) | Ms. Geeetha Remy VINCENTManager-Spectrum ManagementMEASAT Satellite Systems Sdn. Bhd.Malaysiageetha@measat.com |

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| **GROUP** | **Chairman/ Vice Chairmen** |
| Task Group 4: Aeronautical and Maritime (A&M) | Dr. Jiaxin DINGDeputy DirectorState Radio Monitoring CenterMinistry of Industry and Information TechnologyPeople's Republic of Chinadingjiaxin@srrc.org.cn |

**APT Contacts**

Asia-Pacific Telecommunity (APT)

12/49, Soi 5, Chaengwattana Road

Bangkok 10210, Thailand

Email: aptawg@apt.int

# Terms of Reference of AWG Working Groups/ Sub-Working Groups/ Task Groups

## 4.1 Working Group on Spectrum Aspects (WG-SPEC)

### 4.1.1 Sub-Working Group on Spectrum arrangement and harmonization (SWG-SA&H)

* To review the availability of spectrum resulting from the introduction of new system technologies or revised spectrum allocations and the potential new or alternative uses of the spectrum thus made available for new applications;
* To develop recommended harmonized approaches for the introduction of new wireless technologies, services and application in such spectrum, including preferred frequency bands and associated technical characteristics;
* To undertake studies on APT Frequency Information System (AFIS); and
* To consider the any spectrum arrangement and/or harmonization draft, which may be developed in other relevant Task Groups of AWG, before the submission to WG-SPEC.

### 4.1.2 Sub-Working Group on Spectrum monitoring (SWG-SM)

* To share information on spectrum monitoring and analysis methods with spectrum monitoring systems and to set up programs such as frequency occupancy measurement;
* To share members’ case studies on harmful interference and its elimination;
* To exchange views and develop the methods for cooperation on preventing interference between neighboring countries; and
* To share information and good practices on the planning, operational, management and maintenance method of monitoring stations and other facilities and to develop related AWG documents.

### 4.1.3 Task Group on sharing studies on IMT systems (TG-SSIMT)

* To study on User Equipment (UE) out-of-band emission levels and implementation issues relating to usage of the band 698-806 MHz by the Mobile Service, including IMT;
* To develop and finalize a Draft New Report on “Implementation issues associated with use of the band 698-806 MHz by mobile services”; and
* To continue studies on the interference scenarios.

### 4.1.4 Task Group on Public Protection and Disaster Relief (TG-PPDR)

* To continue to work on the development of APT/AWG Reports and/or Recommendations concerning the harmonized frequency use of various bands listed in ITU-R Resolution 646 for PPDR applications including the development of technical parameters such as channeling plans and emission masks; and
* To study on the amount of spectrum needed by APT administrations for implementing specific newer technologies for narrowband, broadband and wideband PPDR applications based on the overall spectrum estimations included in ITU-R report M-2033.

### 4.1.5 Task Group on Broadband Wireless Access (TG-BWA)

* To investigate new technology facilitating BWA services;
* At the AWF-9 meeting, the revision to existing Recommendation APT/AWF/REC-02 on “Guidelines for the frequency coordination for the terrestrial services at the border areas between administrations” was discussed in order to include up-to-date results of ITU-R studies for the propagation model in Recommendation ITU-R M.1812;
* However, some administrations were concerned by the incompleteness of the revision; and
* It was agreed that the revision of the Recommendation should be discussed in future AWG meetings.
* To study co-existence between BWA and other services or between BWA technologies in the bands above 2.3 GHz, which are not covered by the WRC-12 Agenda Item;
* To study the technical and service requirements of BWA in order to ascertain harmonized views on the BWA deployment in APT member countries:
	+ - At the AWF-9 meeting, the revision of the Report on APT frequency arrangement (removing the flexible TDD/FDD option) in the 2300-2400 MHz band for IMT/BWA (Report No. APT/AWF/REP-12) was discussed; and
		- However, WP5D has not yet completed its work on the revision of the Recommendation ITU-R M.1036 which addresses frequency arrangements for the different bands identified for IMT; and
		- The revision of the APT Report would again be considered when WP5D has taken a decision on the flexible TDD/FDD option at one of its future meetings.
* To consider a new work item dealing with cross border coordination for terrestrial services.

### 4.1.6 Task Group on FSS Spectrum in the 10-15 GHz Range (TG-FSS)

* To consider potential new bands for use by the FSS (Earth-to-space), taking into account compatibility with existing services and allocations; and
* To study the possibility of removing or modifying regulatory restrictions on allocations to the FSS (Earth-to-space), taking into account compatibility with existing services and allocations.
	+ - To update a working document towards a draft new Report on studies in addressing the inefficiency associated with the asymmetry of existing unplanned FSS uplink/downlink spectrum in the 10-15 GHz band.

## 4.2 Working Group on Technology Aspects (WG-TECH)

### 4.2.1 Task Group on Cognitive Radio System and Software-Defined Radio (TG-CRS & SDR)

* To conduct surveys on regulation and possible spectrum use of CRS and SDR in Asia-Pacific countries;
* To study the possible harmonized frequency arrangement(s) for certain applications using CRS technologies in Asia-Pacific countries, taking into account of the studies in other regions;
* To conduct surveys on current status of the introduction and development of CRS and SD in Asia-Pacific countries;
* To conduct survey on possible deployment examples of CRS and SDS across different countries or operators in Asia-Pacific countries;
* To study and discuss the possible applications, deployment scenarios and/or standardization processes of CRS and SD in Asia-Pacific countries; and
* To study the key techniques, system characteristics and requirements of SDR and CRS.

### 4.2.2 Task Group on IMT (TG-IMT)

* To review activities on the future development of IMT-2000 and IMT-Advanced discussed in the ITU-R Working Party 5D(WP5D); and
* To study service and technology related aspects of the future development of IMT-2000 and IMT-Advanced as well as the requirements and needs of the developing countries.

### 4.2.3 Task Group on Intelligent Transport Systems (TG-ITS)

* To share information on current status of regulation and frequency use of ITS radio system;
* To study and identify spectrum on ITS radiocommunications;
* To study possible regional harmonization on ITS radio-communications spectrum, taking into account the trends and studies towards spectrum harmonization, applications and standards developments.
* To share information on current status of introduction and development of ITS radio system; and
* To study and discuss useful ITS applications and standardization in the Asia-Pacific region.
* To study possible regional harmonization on ITS radio-communications system requirements, taking into account the trends and studies towards spectrum harmonization, applications and standards developments; and
* To study the harmonization of ITS in the 5.9 GHz band.

### 4.2.4 Task Group on Short Range Devices (TG-SRD)

* To develop the material on the common frequency bands for operation of Short Range Radiocommunication Devices ;
* To enhance the existing APT Report on UWB and RFID; and
* To prepare APT Reports on the common frequency bands for operation of Short Range Radiocommunication Devices to the ITU-R Study Group 1.
* To study measures to resolve interference and noise problems with RF facilities, e.g. measuring noise level in the bands which are used for unlicensed devices.

### 4.2.5 Task Group on Wireless Power Transmission (TG-WPT)

* To gather following information
	+ Applications (by using inductive and resonant technologies)
	+ Potential market
	+ Relevant technical and operational characteristics for WPT
	+ Standardization efforts in the world
* To study following questions
	+ What category of spectrum usage should administrations consider? (e.g., ISM or others)
	+ What radio frequency bands are suitable for WPT?
	+ What steps are required to make sure radio services protected from the usage of WPT?
	+ What are impacts on human body from RF exposure of WPT?
* Based on the above studies, to develop the recommendation and/or report, as appropriate

## 4.3 Working Group on Service and Applications (WG-S&A)

### 4.3.1 Task Group on Fixed Mobile Convergence (TG-FMC)

* To study of the standardization road map for Fixed Mobile Convergence (FMC);
* To study the regulatory aspect of FMC;
* To study the business model of FMC; and
* To study the FMC Services.

### 4.3.2 Task Group on Radiocommunication convergence (TG-RC)

* To identify the wide range of current and future activities on the Radiocommunication convergence technologies, and also possible application scenarios including M2M;
* To review survey on economic issues such as business model of convergence service; and
* To review survey on regulatory issues to facilitate convergence service.

### 4.3.3 Task Group on Modern Satellite Applications (TG-MSA)

* To assist the requirements of the APT membership in putting into practice modern satellite applications in a national context;
* In this context, to develop reports on satellite applications in the Asia Pacific Region, such as satellite communication systems, satellite devices, key components, interfaces, interconnection and intercommunication, licensing, Ka-band applications and deployment, satellite broadband applications, new applications of mobile satellite, disaster relief applications etc., to serve the mutual interests inside the APT and outside, for instance in the ITU-R Study Group 4, without overlapping with the activities of APG; and
* To study and develop possible techniques that may be used to improve the compatibility between satellite and other services.

### 4.3.4 Task Group on Aeronautical and maritime (TG-A&M)

* To consider the following issues of the use of mobile phone as well as the use of other modern wireless technologies on-board the aircraft and vessels:

For the use of mobile phones on-board the aircraft and vessels:

* + - Licensing issues and possible ways to harmonize the approach to licensing by APT members such as mutual recognition while taking due account of national differences;
		- Spectrum matters noting that currently a number of different frequency bands and different mobile technologies are in use in the Asia-Pacific region; and
		- The preparation of an AWG Report on technical requirements especially in regard to the capability of the equipment on-board the aircraft and vessels as well as the technical and operational conditions of each country being over-flown.

For other wireless technologies:

* + - Spectrum harmonization issues including preferred frequency bands and associated technical characteristics;
		- Associated regulatory and licensing issues, when considered appropriate; and
		- To study and review future wireless communication technologies on aeronautical and maritime.

#  Micro Work Plans/ Deliverables

## 5.1 Work Plans of Working Group on Spectrum Aspects (WG-SPEC)

### 5.1.1 Work Plan for Sub-WG on Spectrum Arrangements and Harmonization  (SWG-SA&H)

**Work Plan on Survey of the Frequency Bands 1980-2010 MHz and 2170-2200 MHz
in the Asia Pacific Region**

|  |  |
| --- | --- |
| **Title** | **APT Report on Usage of the Frequency Bands 1980-2010 MHz and 2170-2200 MHz in Asia Pacific region**  |
| **Document Type** | Report |
| **Group/Chair** | WG-SPEC/Sub-WG SA&H/ Ms. Keer ZHU |
| **Editor(s)** | Mr. Daejung KIM |
| **Scope** | To collect information of current spectrum usage and future plan in the bands 1 980-2 010 MHz and 2 170-2 200 MHz in Asia Pacific region  |
| **Purpose** | To provide information on the usage status of the bands 1980-2010 MHz and 2170-2200 MHz in Asia Pacific region to administrations, operators and vendors. |
| **Related Documents** |  |
| **Related Organizations** | APT |
| **Timelines** | **AWG-13*** Initiate the discussion in AWG
* Draft the questionnaire
* Develop draft work plan and timeline

**AWG-14*** Further discussion on the questionnaire and circulate approved questionnaire to APT members
* Finalize the work plan

**AWG-15** * Prepare a working document towards a draft APT Report on usage of the bands 1 980-2 010 MHz and 2 170-2 200 MHz in Asia Pacific region based on the collected responses from APT members.

**AWG-16*** Finalize the draft APT Report for approval
 |

**5.1.1.2 Work Plan for Studying Suitable Frequency Ranges in relation to WRC-15 Agenda Item 1.1**

|  |  |
| --- | --- |
| **Title** | Apt Report on Study of Suitable Frequency Ranges in Relation to WRC-15 Agenda Item 1.1 |
| **Document Type** | APT/AWG Report and liaison statement to APG |
| **Group/Chair** | WG-SPEC/Sub-WG SA&H/ Ms. ZHU Keer |
| **Editor(s)** | Mr. ZHU Yutao |
| **Scope** | To study the suitable frequency ranges for IMT in Region 3. |
| **Purpose** | To study the suitable frequency ranges for IMT in Region 3 and develop an APT/AWG Report.To report study progress to APG15 by its second meeting and provide results of these studies to the APG15-3 for use in Region 3 preparations for WRC-15 Agenda item 1.1. |
| **Related Documents** | WRC Resolution 233 |
| **Related Organizations** | ITU-R |
| **Timelines** | **AWG-13 (2012)*** + Develop work plan and timeline.
	+ Review contributions on frequency ranges in relation to WRC-15 Agenda Item 1.1.
	+ Decide on document type to be developed.
	+ Prepare a circular letter to seek contributions from APT members to the AWG-14 meeting.
	+ Inform the initiation of this study to ITU-R WP5D

**AWG-14 (2013)*** + Evaluate contributions on suitable frequency ranges in relation to WRC-15 Agenda Item 1.1.
	+ Draft a report on suitable frequency ranges in relation to WRC-15 Agenda Item 1.1 based on the contributions from APT members and the meeting discussion, taking into consideration the study result on spectrum requirement estimate in Region 3.
	+ Send the Liaison Statement to APG2015-2 meeting to report study result/progress.
	+ Inform the study progress to WP5D if thought appropriate.

**AWG-15 (2014)*** + Evaluate contributions on suitable frequency ranges in relation to WRC-15 Agenda Item 1.1 if any,
	+ Revision to the draft APT Report on studying suitable frequency ranges in relation to WRC-15 Agenda Item 1.1 if necessary.
	+ Finalize the study and provide final documents to APG15-3.
 |

### 5.1.2 Work Plan for Sub-WG on Spectrum Monitoring (SWG-SM)

|  |  |
| --- | --- |
| **Title** | **APT Report on Grid Monitoring Network using TDOA Technology** |
| **Document Type** | Report |
| **Group/Acting Chair** | Spectrum sub-Working Group-Spectrum Monitoring / Mr. HUANG Jia |
| **Editor(s)** | Mr. HUANG Jia |
| **Scope** | To prepare an APT Report containing system key features, essential factors and experience in construction of monitoring network using TDOA technology to meet requirement to improve traditional spectrum monitoring network |
| **Purpose** | To provide guidance to APT member states in establishing new monitoring facilities to fulfil the goal of national spectrum monitoring |
| **Related Documents** | [AWG-14/INP-52](http://www.apt.int/sites/default/files/2013/03/AWG-14-INP-29_JPN-01.docx) |
| **Related Forums** |  |
| **Timelines** | **AWG-14/15 (2013)** * + sharing of detailed information preparation a first draft working document

**AWG-16/17 (2014)** * + To finalize the Report
 |

|  |  |
| --- | --- |
| **Title** | **APT Report on Application of Digital Signal Processing Technology in Spectrum Monitoring** |
| **Document Type** | Report |
| **Group/Acting Chair** | Spectrum sub-Working Group-Spectrum Monitoring / Mr. HUANG Jia |
| **Editor(s)** |  |
| **Scope** | To prepare an APT Report on application of digital signal processing technology in spectrum monitoring to reflect the trend in technology towards developing DSP-based spectrum monitoring equipment and systems |
| **Purpose** | To provide guidance to APT member states to meet their requirement to increase capabilities of spectrum monitoring systems |
| **Related Documents** | AWG-13/TMP-19, TMP-20 |
| **Related Forums** |  |
| **Timelines** | **AWG-14/15 (2013)** * + Restructure the existing documents and input contributions are required to contribute on this item, preparation a first draft working document

**AWG-16/17 (2014)** * + To finalize the Report
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|  |  |
| --- | --- |
| **Title** | **APT Report on Visualization Spectrum Monitoring and DF/Location System** |
| **Document Type** | Report |
| **Group/Acting Chair** | Spectrum sub-Working Group-Spectrum Monitoring / Mr. HUANG Jia |
| **Editor(s)** |  |
| **Scope** | To prepare an APT documentation on technical requirement and key feature to utilize visualization technology in spectrum monitoring and DF/location system |
| **Purpose** | To provide guidance to APT member states to meet their requirement to increase capabilities of spectrum monitoring systems |
| **Related Documents** | AWG-13/TMP-19 |
| **Related Forums** |  |
| **Timelines** | **AWG-14/15 (2013)** * + Restructure the existing documents and input contributions are required to contribute on this item, preparation a first draft working document

**AWG-16 (2014)** * To finalize the Report
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### 5.1.3 Work Plan for Task Group on IMT Sharing Studies (TG-SSIMT)

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| **Title** | **Coexistence Between Services at the Boundary of the 700 MHz and 800 MHz Bands** |
| **Document Type** | APT Report |
| **Group/Chair** | WG-SPEC/ Task Group SSIMT/ Ms. Julie WELCH  |
| **Editor(s)** |  |
| **Scope** | To study the compatibility between various radiocommunications services operating in the 800 MHz band and the APT 700 MHz band plan. |
| **Purpose** | To develop an APT/AWG Report on coexistence between services at the boundary of the 700 MHz and 800 MHz bands and identify services which could be deployed in the frequency bands above 803 MHz.To develop as necessary liaison documents to external organisations. |
| **Related Documents** | APT/AWF/REP-14 ‘Harmonised Frequency Arrangements for the band 698-806 MHz’APT/AWF/REP-24 ‘Implementation Issues Associated with Use of the Band 698-806 MHz by Mobile Services’ |
| **Related Organizations** |  |
| **Timelines** | **AWG-13 (2012)*** Develop work plan and timeline.
* Evaluate contributions that study coexistence between services operating according to the APT 700 MHz band plan and services operating above 803 MHz.
* Develop a working document towards a draft new Report on coexistence between services at the boundary of the 700 MHz and 800 MHz bands.
* Establish Correspondence Group to continue the studies, and propose further updates to the working document towards a draft new Report to the AWG-14 meeting.

**AWG-14 (2013)*** Review the output of the Correspondence Group and consider the need to continue the Correspondence Group.
* Evaluate contributions that study the coexistence between services operating according to the APT 700 MHz band plan and services operating above 803 MHz as well as contributions studying the appropriateness of protection criteria used in studies.
* Update working document towards a draft new Report on coexistence between services at the boundary of the 700 MHz and 800 MHz bands.

**AWG-15 (2014)*** Review the output of the Correspondence Group if appropriate.
* Evaluate contributions on all matters related to the finalisation of studies into coexistence between services at the boundary of the 700 MHz and 800 MHz bands.
* Finalise the draft new Report on coexistence between services at the boundary of the 700 MHz and 800 MHz bands.
 |

**Updates to APT Report 4 (Rev.1)**

|  |  |
| --- | --- |
| **Title** | **Studies on the Co-existence Between IMT-2000 Technologies and Between IMT-2000 Technologies and Other Wireless Access Technologies in Adjacent and Near-Adjacent Frequency Bands (***Updates to APT Report 4 (Rev.1))* |
| **Document Type** | APT Report |
| **Group/Chair** | WG-SPEC/Task Group SSIMT/ Ms. Julie WELCH |
| **Editor(s)** |  |
| **Scope** | To update APT Report 4 (Rev.1) |
| **Purpose** | To provide guidance on Studies on the Co-existence Between IMT-2000 Technologies and Between IMT-2000 Technologies and Other Wireless Access Technologies in Adjacent and Near-Adjacent Frequency BandsTo develop as necessary liaison documents to external organisations. |
| **Related Documents** |  |
| **Related Organizations** |  |
| **Timelines** | **AWG-14 (2013)*** Develop work plan and timeline.
* Invite contributions from APT members for updates to the report.
* Develop a working document towards a draft new Report.

**AWG-15 (2014)*** Consider input contributions to update the report.
* Update working document towards a draft new Report.
* Consider possibility to finalize the report at AWG-15.
 |

### 5.1.4 Work Plan for Task Group on Public Protection and Disaster Relief (TG-PPDR)

|  |  |
| --- | --- |
| **Title** | **New Report on the Mission Critical PPDR Broadband Requirements** |
| **Document Type** | APT Report |
| **Group/Chair** | WG-SPEC/TG-PPDR Mr. Bharat BHATIA |
| **Editor(s)** | Mr. Bill DEVERALL |
| **Scope** | The report provides technical requirements of mobile wireless broadband communications systems to meet the needs of PPDR agencies |
| **Purpose** | To encourage APT administrations to adopt common technology, technical features and functional capabilities, as well as harmonized spectrum arrangements as far as practicable .to maximize the potential for economies of scale, regional co-operation and cross-border inter-working |
| **Related Documents** | ITU Resolution 646, 648 ( Rev. WRC-12);  |
| **Related Forums and Organizations** | ITU-R Working Party 5A, APG  |
| **Timeli**n**es** | **AWG-12,13 (2012/ 2013)*** Woking draft developed
* Correspondence group created

**AWG-14 (2013)*** Continue Correspondence group activity
* Further develop the draft working document
* Send working document ( Pt. 1) to APG and WP5A
* Further work on Pt.1, Pt2, pt.3 in correspondence group
* Carry forward China document INP/81

**AWG-15 (2013)*** Approve Draft Report
* Send approved Report to APG and WP5A
 |

|  |  |
| --- | --- |
| **Title** | **Revision of APT Report on PPDR Applications Using IMT-Based Technologies and Networks** |
| **Document Type** | Updated APT Report |
| **Group/Chair** | WG-SPEC/TG-PPDR Mr. Bharat BHATIA |
| **Editor(s)** | Mr. Robert Crawford |
| **Scope** | To review and revise APT Report on “PPDR APPLICATIONS USING IMT-BASED TECHNOLOGIES AND NETWORKS” |
| **Purpose** | To update the APT-AWG Report 27 with new inputs  |
| **Related Documents** | APT-AWG Report APT/AWG/REP-27 on Report on "PPDR Applications Using IMT Based Technologies and Networks" |
| **Related Forums and Organizations** | ITU-R Working Party 5D |
| **Timelines** | **AWG-12,13 (2012)*** Working draft developed
* Correspondence group created

**AWG-14 (2013)*** Correspondence group activity continued

**AWG-15 (2013)*** Finalise working draft
* Ensure compatibility between the report on PPDR requirements
* Review possibility of merging multiple PPDR reports/recommendations (Carry forward Korean Document INP/62)
* Carry forward documents 85, 28 R1, 76, 83

**AWG-16 (2014)*** Approve final Report
* Send approved Report to APG and WP5D
 |

### 5.1.5 Work Plan for Task Group on Broadband Wireless Access (TG-BWA)

|  |  |
| --- | --- |
| **Title** | **Compatibility studies between IMT small cell network and FSS in the band 3 400-3 600 MHz for Asia-Pacific region** |
|  | Report |
| **Group/Chair** | WG-SPEC/TG on BWA/ Mr. Euntaek LIM |
| **Editor(s)** | Mr. JIAO JIAN |
| **Scope** | The report addresses compatibility studies in the band 3 400-3 600 MHz. It includes: * Deployment scenarios of IMT for the compatibility studies between IMT small cell network and FSS in the band 3400 -3600MHz
* Methodology and analysis for the compatibility studies
* Summary for the compatibility studies
 |
| **Purpose** | To provide technical information and compatibility studies results for the usage of the band 3 400-3 600 MHz in Asia-Pacific Region |
| **Related Documents** | * Draft APT Report on Frequency Usage of the Band 3400-3600MHz
* Report ITU-R M.2109, “ Sharing studies between IMT Advanced systems and geostationary satellite networks in the fixed-satellite service in the 3 400-4 200 and 4 500-4 800 MHz frequency bands”
 |
| **Related Organization** | APT, ITU-R |
| **Timelines** | **AWG-14 (2013)*** Develop and agree the work plan for the compatibility studies in the band 3 400-3 600 MHz

**AWG-15 (2013)*** + - Discuss and agree the structure of the draft Report
		- Discussion of deployment scenarios of IMT for the compatibility studies between IMT small cell network and FSS in the band 3400 -3600MHz
		- Collect and review the input contributions
		- Develop the working document of draft report on compatibility studies in the band 3 400-3 600 MHz based on the input contributions and related documents
		- Review and update the work plan if necessary

**AWG-16 (2014)*** + Collect and review the input contributions
	+ Further develop and update the working document of draft report based on the input contributions and related documents
	+ Review and update the work plan if necessary

**AWG-17 (2014)*** + - Collect and review the input contributions
		- Update and finalize the draft Report based on the input contributions and related documents
 |

### 5.1.6 Work Plan for Task Group on FSS Spectrum in 10-15 GHz Range (TG-FSS)

|  |  |
| --- | --- |
| **Title** | **Studies to address the inefficiency associated with the asymmetry of existing unplanned FSS uplink/downlink spectrum in the 10-15 GHz band.** |
| **Document Type** | Report – results of studies  |
| **Group/Chair** | WG-SPEC/TG on FSS/ Ms. Ting Ling LEE  |
| **Editor(s)** | Ms. Ting Ling LEE |
| **Scope** | To develop report(s) based on the results of the compatibility studies detailed in the Terms of Reference for the group  |
| **Purpose** | To identify possible bands to address the inefficiency associated with the asymmetry of the existing FSS (Earth-to-space) band allocations with respect to the 1.05 GHz of FSS (space-to-Earth) band allocations with which it is paired in the 10-15 GHz range |
| **Related Documents** |  |
| **Related Forums** |  |
| **Timelines** | **2009****AWF-7: September*** + Initiate task within AWF and seek contributions from APT members on this issue

**2010****AWF-8: March*** + Review contributions on potential bands and proposals
	+ Initiate compatibility studies

**AWF-9: September*** + Initiate report based on the results of compatibility studies

**2011****AWG-10: March*** + Continue development of report on the results of compatibility studies

**AWG-11: September*** + Continue development of report on the results of compatibility studies

**2012****AWG-12: April*** + Continue development of report on the results of compatibility studies

**AWG-13: September*** + Collect contribution and continue development of report on the results of compatibility studies

**2013****AWG-14: March*** + Collect contribution and continue development of report on the results of compatibility studies

**AWG-15: August*** + Collect contribution and continue development of report on the results of compatibility studies. Finalize report
	+ Liaise finalized report to APG 15
 |

## 5.2 Work Plans of Working Group on Technology Aspects (WG-TECH)

### 5.2.1 Work Plan for Task Group on Cognitive Radio System and Software-Defined Radio (TG-CRS & SDR)

|  |  |
| --- | --- |
| **Title** | **Report on CRS Deployment Scenarios and Associated Technologies** |
| **Document Type** | Report |
| **Group/Chair** | WG-TECH/TG CRS&SDR /Mr. Lang BAOZHEN |
| **Editor(s)** | Ms. Boya LU |
| **Scope** | To study CRS deployment scenarios in the APT region and associated key techniques, system characteristics and requirements. To identify the potential impact of exploiting CRS capabilities on existing radio services.This work may initiate further work in both TG-CRS&SDR and other working groups within the AWG. |
| **Purpose** | To develop APT Technical Report providing the results of studies on cognitive radio systems (CRS) deployment scenarios and identify potential impact of exploiting CRS capabilities on exisiting radio services. |
| **Related Documents** | ITU-R SM.2152Resolution ITU-R 58ITU-R Report M.2242ITU-R Report M.2225AWG-12/OUT-07 “Questionire Report on CRS & SDR” |
| **Related Organizations** | ITU-R, ETSI, IEEE |
| **Timelines** | **AWG-12 (2012)*** + - Develop workplan and timeline
		- Review and produce initial scope

**AWG-13 (2012)*** + - Review and refine scope if necessary.
		- Develop the document structure
		- Begin detailed text preparation

**AWG-14 & AWG-15 (2013)*** + - Detailed text preparation

**AWG-16 (2014)*** + - Completion
 |

### 5.2.2 Work Plan for Task Group on IMT (TG-IMT)

|  |  |
| --- | --- |
| **Title** | **Follow up activities in response to the Questionnaire on “Development of Future IMT technologies”** |
| **Document Type** | Reports |
| **Group/Chair** | WG-TECHNOLOGY/TG IMT/ Dr. Hiroyuki ATARASHI |
| **Editor(s)** | Ms. Boya LU and Mr. Bui Ha LONG |
| **Scope** | * To identify the technical challenges and requirements of deployment and evolution of IMT networks.
* To study on technologies addressing the technical challenges and requirements
* To study on the strategy of deployment and evolution of IMT networks, which includes, but not limited to “Network evolution of 2G bands (850MHz, 900 MHz and 1 800 MHz using CDMA/GSM) for IMT”. (Note: TG-IMT initiates the studies and will coordinate with other groups (i.e. SWG-SA&H, TG-SSIMT) within AWG to work on the study together, if the study demands support from spectrum aspects.)
* Unnecessary overlap with activities in external organization should be avoided.
 |
| **Purpose** | * To identify and study the technologies issues that are important to the deployment of future IMT system and to the services delivered through it.
* To assist the APT members to deploy and evolve the IMT networks which also includes evolution of 2G bands for IMT
 |
| **Related Documents** | TBD |
| **Related Organizations** | TBD |
| **Timelines** | **2011*** **AWG-10: March**
	+ Start of the project, proposal on topics
	+ Develop the workplan
* **AWG-11: September**
	+ Initiate to develop a questionnaire on future development of IMT technologies
	+ Initiate to develop summary of the responses of heterogeneous network

**2012*** **AWG-12: March**
	+ Review member contributions
	+ Finalize the questionnaire
* **AWG-13: September**
	+ Review member contributions and responses to the questionnaire
	+ Revise the work plan and setup two work streams:
		- Technologies addressing the technical challenges and requirements
		- IMT network evolution strategy initially focusing on re-farming 2G bands for IMT

**2013*** **AWG-14: March**
	+ Review member contributions and responses to the questionnaire.
	+ Summarize the responses and identify the technical challenges and requirements for further study, and develop the working document for the report on responses to questionnaire.
	+ Develop the structure of working document for the report on migration strategy for GSM to mobile broadband.
* **AWG-15: [September]**
	+ Review member contributions and responses to the questionnaire.
	+ Continue to develop the working document for the report on responses to questionnaire.
	+ Continue to develop the working documents for the report on migration strategy for GSM to mobile broadband.
	+ Develop the structure of working document for the report on technologies addressing the technical challenges and requirements.

**2014*** **AWG-16: [March]**
	+ Review member contributions and responses to the questionnaire.
	+ Finalize the draft new APT Reports on :
		- Responses to the questionnaire.
		- Migration strategy for GSM to mobile broadband
		- Technologies addressing the technical challenges and requirements
 |

|  |  |
| --- | --- |
| **Title** | **Estimation of regional spectrum bandwidth requirements in relation to WRC-15 Agenda item 1.1** |
| **Document Type** | Report  |
| **Group/Chair** | WG-TECHNOLOGY/TG IMT/ Dr. Hiroyuki ATARASHI  |
| **Editor(s)** | TBD |
| **Scope** | * To carry out the necessary studies to create an estimate of the spectrum bandwidth requirements for IMT and other terrestrial mobile broadband applications in Region 3 in relation to WRC-15 Agenda item 1.1
 |
| **Purpose** | * To assist APG in its consideration of WRC-15 Agenda item 1.1 so that APG may consider the results and provide appropriate input to ITU-R
 |
| **Related Documents** | Resolution **233 (WRC-12)**, Recommendation ITU-R M.1768, Report ITU-R M.2078 |
| **Related Organizations** | APG, ITU-R WP 5D, JTG 4-5-6-7 |
| **Timelines** | **2012*** **AWG-13: September**
	+ Initiate the studies
	+ Create a corresponding group (CG) and agree on its ToR

**2013*** **AWG-14: March**
	+ Review the output from CG and input contributions
	+ Develop a working document
	+ Send a liaison statement to APG to report the progress of the work
	+ Agree on continuation of the CG activities
* **AWG-15: [September]**
	+ Review the output from CG and input contributions
	+ Finalize the draft new APT Report
	+ Send a liaison statement to APG
 |

### 5.2.3 Work Plan for Task Group on Intelligent Transport System (TG-ITS)

|  |  |
| --- | --- |
| **Title** | **The usage of ITS in APT countries (Revision 2)** |
| **Document Type** | Report |
| **Group/Chair** | ITS TG/ Mr. Satoshi (Sam) OYAMA, Japan |
| **Editor(s)** | Ms. Elly Kim, TTA, Rep. of Korea |
| **Scope** | Provide up-date information on the currently used ITS technologies, frequency bands, status of commercialization service and others in APT member countries. |
| **Purpose** | Provide APT member countries with practical information on the currently used ITS technologies, frequency bands, status of commercialization service and others with the purpose of reaching harmonization to the greatest extent |
| **Related Documents** | Usage of ITS in APT countries (Document# APT/AWG/REP-18 (Revision 1)) |
| **Related Forums** |  |
| **Timelines** | **The 14th meeting (Bangkok) in March 2013*** collect the responses and finalize the Report (Revision 1)
* consideration of input contribution for ITU-R SG5 WP5A/WP5B and APG

**The 15th meeting (T.B.D.) in August 2013*** + - * collect information from APG and ITU-R SG5 WP5A/WP5B
			* create a new questionnaire and circulate to APT member countries and regions

**The 16th meeting (T.B.D.) in Spring 2014*** + - * collect the responses and reflect to the draft report
			* consideration of input contribution for ITU-R SG5 WP5A/WP5B

**The 17th meeting (T.B.D.) in Fall 2014*** + - * collect the responses and reflect to the draft report
			* consideration of input contribution for ITU-R SG5 WP5A/WP5B

**The 18th meeting (T.B.D.) in Spring 2015*** + - * collect the responses and reflect to the draft report
				+ consideration of input contribution for ITU-R SG5 WP5A/WP5B

**The 19th meeting (T.B.D.) in Fall 2015*** collect the responses and finalize the Report (Revision 2)
* consideration of input contribution for ITU-R SG5 WP5A/WP5B
 |

|  |  |
| --- | --- |
| **Title** | **79 GHz high-resolution radar (WRC-15 Agenda Item 1.18)** |
| **Document Type** | The usage of ITS in APT countries (Revision 2)  |
| **Group/Chair** | ITS TG/ Mr. Satoshi (Sam) OYAMA, Japan |
| **Editor(s)** | Ms. Elly KIM, TTA, Rep. of Korea |
| **Scope** | Provide up-date information on the 79 GHz high-resolution radar in APT member countries to APT Report “The usage of ITS in APT countries (Version 2)” . |
| **Purpose** | Regarding A.I. 1.18 on Allocation of the band 77.5-78 GHz to the radiolocation service to support automotive short-range high-resolution radar operations at 77 – 81 GHz band,　　TG-ITS will conduct support activities for APG toward WRC-15. |
| **Related Documents** | WRC-15 Agenda Item 1.18Usage of ITS in APT countries (Document# APT/AWG/REP-18) |
| **Related Forums** | APG, ITU-R SG5 WP5A & WP5B |
| **Timelines** | The 13th meeting (Da Nang) in September 2012* Review the status of ITU-R SG5 on Agenda Item 1.18

The 14th meeting (Bangkok) in March 2013* Collect the responses and finalize the Report on “The usage of ITS in APT countries (Revision 1)”
* Consideration of “The usage of ITS in APT countries (Revision 2)” as an input document to ITU-R SG5 WP5A and to APG2015-2
* Study on progress in WP 5A/WP 5B and take any necessary actions
* Update work plan as needed

The 15th meeting(TBD) in Fall 2013* Studies on progress in APG and ITU-R SG5 WP5A/WP5B, and take any necessary actions
* Update work plan as needed

The 16th meeting(TBD) in Spring 2014* Studies on progress in APG and ITU-R SG5 WP5A/WP5B, and take any necessary actions

Update work plan as neededThe 17th meeting(TBD) in Fall 2014* Studies on progress in APG and ITU-R SG5 WP5A/WP5B, and take any necessary actions
* Update work plan as needed

The 18th meeting(TBD) in Spring 2015* Studies on progress in APG and ITU-R SG5 WP 5A/WP 5B, and take any necessary actions
* Update work plan as needed

The 19th  meeting (TBD) in Fall 2015* Studies on progress in APG and ITU-R SG5 WP5A/WP5B, and take any necessary actions
* Prepare for WRC-15
 |

|  |  |
| --- | --- |
| **Title** | **Road Sensor Network** |
| **Document Type** | Report |
| **Group/Chair** | ITS TG/ Mr. Satoshi (Sam) OYAMA, Japan |
| **Editor(s)** | Dr. Hyun Seo OH, ETRI, Republic of Korea |
| **Scope** | Provide desired radio spectrum and applications for ITS applications in APT member countries.  |
| **Purpose** | Provide APT member countries with frequency bands and applications required for road sensor network with the purpose of reaching harmonization. |
| **Related Documents** |  |
| **Related Forums** |  |
| **Timelines** | **The 14th meeting (Bangkok) in March 2013*** Initiate the work item in TG-ITS

**The 15th meeting (T.B.D.) in August 2013*** create a questionnaire and circulate to APT member countries and regions

**The 16th meeting (T.B.D.) in Spring 2014*** collect the responses and crate a draft report

**The 17th meeting (T.B.D.) in Fall 2014*** collect the responses and finalize the Report
* consideration of input contribution for ITU-R SG5 WP5A
 |

### 5.2.4 Work Plan for Task Group on Short Range Device (TG-SRD)

|  |  |
| --- | --- |
| **Title** | **Revision of the APT Report on “Introduction, Application, Issues and Technology for Short Range Devices (SRDs)”**  |
| **Document Type** | APT Report |
| **Group/Chair** | WG-TECH/TG-SRD/ Dr. Masayuki ARIYOSHI |
| **Editor(s)** | Dr. Masayuki ARIYOSHI (Japan) |
| **Scope** | * To revise APT/AWG/REP-31 through complementary survey on detailed situation of SRD usages, requirements for SRD related applications, and technical issues of SRD radio communication systems in the APT member countries.
* To study and discuss new technologies to facilitate harmonised usage of frequency bands among wireless communication systems.
 |
| **Purpose** | To exchange the information among APT member countries regarding detailed situation of SRD usages, requirements for SRD related applications, and technical issues of SRD, for carrying out necessary studies of advanced technologies for harmonisation of SRD related systems. |
| **Related Documents** | APT Survey Report APT/AWG/REP-31 on “Introduction, Application, Issues and Technology for Short Range Devices (SRDs)”APT Report APT/AWF/REP-07(Rev.2) on “Operation of Short Range Devices (SRDs)”PDNR ITU-R SM.[SRD] (Annex 1 to Document 1B/267 of ITU-R WP 1B) on “Frequency bands regionally or globally identified for short-range devices (SRDs)” |
| **Related Forums**  | ITU-R Working Party 1B |
| **Timelines** | **2013 AWG-14*** Agree on the work plan and target deliverables
* Start to develop a questionnaire on the detailed situation of usage, requirements for applications, and technical issues of SRD systems to APT members

**2013 AWG-15*** Finalize the questionnaire on the detailed situation of usage, requirements for applications, and technical issues of SRD systems to APT members

**2014 AWG-16** * Collect the responses and develop an initial working document toward the revision of the APT REP-31

**2014 AWG-17*** Collect the responses and updated the working document toward the revision of the APT REP-31

**2015 AWG-18*** Collect the responses and finalize the revision of the APT REP-31
 |

### 5.2.5 Work Plan for Task Group on Wireless Power Transmission (TG-WPT)

|  |  |
| --- | --- |
| **Title** | **APT Survey Report on WPT in Asia Pacific Region** |
| **Document Type** | Report  |
| **Group/Chair** | WG-TECHNOLOGY/TG WPT/ Mr. Chan Hyung CHUNG (Rep. of Korea) |
| **Editor(s)** | Mr. Kazhito ISHIDA (Japan), Mr. Dinh Chi HIEU (Vietnam) |
| **Scope** | 1. To gather information on applications and technologies, potential market, technical and operational characteristics, standardization, frequency bands, and regulatory status of WPT based on the survey results 2. To study on spectrum and regulation issues (EMC, EMF, etc) |
| **Purpose** | To exchange information about WPT and study for harmonization of WPT in Asia Pacific region |
| **Related Documents** | TBD |
| **Related Organizations** | ITU-R SG1, WP1A |
| **Timelines** | **Apr. 2012 (AWG-12)*** **Finalize ToR**

**Sep. 2012 (AWG-13) ~ Mar. 2013** * Establish TG-WPT
* Initiate the task
* Develop the Work Plan and timeline
* Prepare the questionnaire and collect opinion
* Circulate the questionnaire to APT members3. Mar.. 2013 (AWG-14)
* Prepare working document towards a draft APT Survey Report
* Prepare and send Liaison statement to ITU-R SG1

**Apr. ~ Aug 2013*** Circulate again the WPT questionnaire among APT members and collect responses

**Aug. 2013(AWG-15)** * Improve working document towards a draft APT Survey Report

**Apr. 2014 (AWG-16)*** Finalize the draft APT Survey Report
* Prepare and send Liaison statement to ITU-R SG1
* Consider the future Work Plan taking into account the implication from the Report
 |

## 5.3 Work Plans of Working Group on Service and Applications (WG-S&A)

### 5.3.1 Work Plan for Task Group on Fixed Mobile Convergence (TG-FMC)

|  |  |
| --- | --- |
| **Title** | **Study of the FMC services**  |
| **Document Type** | Report  |
| **Group/Chair** | TG FMC / Mr. F.X. Ari WIBOWO(PT Telekomunikasi Indonesia)  |
| **Editor(s)** | Mr. F.X. Ari WIBOWO |
| **Scope** | 1. To provide information regarding the drivers and motivations of current FMC Services implementation among APT members
2. To provide information regarding some key success factors of current FMC Services implementation among APT members
3. To update and review of market trends related to FMC Services
4. To Identify potential new advanced FMC services
 |
| **Purpose** | Provide APT member countries with practical information and benchmark on FMC service and application. |
| **Related Documents** | Docs. AWF-7/INP-56, AWF-4/INP-38, AWF - 4/INP-39, AWF IM-4/INP-39, AWF-5/INP-57, AWF-9/INP-68, AWF-9/INP-69, AWF-9/TMP-30, AWF-9/OUT-06, AWG-10/TMP-01, AWG-11/INP-79, AWG-11/INP-80 |
| **Related Forums** | ITU-T, BBF, SMALLCELL FORUM |
| **Timelines** | **The 11th meeting in 2011** * develop a work plan

**The 12th meeting in 2012** * + collect the input documents and develop questionnaire and draft report-1/working document

**The 13th meeting in 2012*** compiling the questionnaire responses & inviting more responders

**The 14th meeting in 2013*** review and developing the report

**The 15th meeting in 2013*** finalize the report
 |

|  |  |
| --- | --- |
| **Title** | **Survey on FMC services**  |
| **Document Type** | Report  |
| **Group/Chair** | TG FMC / Mr. F.X. Ari WIBOWO(PT Telekomunikasi Indonesia)  |
| **Editor(s)** | Mr. F.X. Ari WIBOWO |
| **Scope** | Collect information from APT members the motivation and drivers of FMC deployment, market and competitive landscape related to FMC, view on advanced FMC Services and future of FMC. |
| **Purpose** | Provide APT member countries with FMC Services related information and as main source to develop the working document towards new Report on FMC Services. |
| **Related Documents** | Docs. AWF-7/INP-56, AWF-4/INP-38, AWF - 4/INP-39, AWF IM-4/INP-39, AWF-5/INP-57, AWF-9/INP-68, AWF-9/INP-69, AWF-9/TMP-30, AWF-9/OUT-06, AWG-10/TMP-01, AWG-11/INP-79, AWG-11/INP-80,AWG-12/TMP-XX |
| **Related Forums** | ITU-T, BBF, SMALL CELL FORUM |
| **Timelines** | **11th AWG meeting in 2011** * develop a work plan

**12th AWG meeting in 2012** * collect the input documents and develop questionnaire and draft report-1/working document

**13th AWG meeting in 2012*** compiling the questionnaire responses & inviting more responders

**14th AWG meeting in 2013*** developing working document of the report

**15th AWG meeting in 2013*** finalize the report
 |

### 5.3.2 Work Plan for Task Group on Radiocommunication Convergence (TG-RC)

|  |  |
| --- | --- |
| **Title** | **Studies on the telecommunication broadcasting convergence** |
| **Document Type** | Report |
| **Group/Chair** | WG Service and Applications/TG Radiocommunication Convergence/ Mr. LI Jianyu |
| **Editor(s)** | Mr. LI Jianyu (China Unicom) |
| **Scope** | Illustrate the telecommunication-broadcasting convergence based on several input documents and presentations which were received and presented in the Convergence WG, as well as some more other references.  |
| **Purpose** | To provide APT member countries with information, regarding the standardization，services，technology and regulatory issues that has to be addressed and resolved in the telecommunication broadcasting convergence. |
| **Related Documents** | AWG-13/INP-92,AWG-12/INP-92, AWG-12/INP-15, AWG-12/INP-55, AWG-12/INP-54, AWG-12/INP-53, AWG-11/INP-63, AWG-11/INP-74, AWG-11/INP-94, AWG-10/INP-26, AWG10/INP-28Rev.1, AWG10/INF-09, AWF-9/INP-75, AWF-9/INP-41, AWF-9/INP-42, AWF-8/INP-65, AWF-7/INP-54, AWF-6/INP-54 |
| **Related Forums** | BMCO Forum, OIPF, ETSI, ATIS, ITU-T  |
| **Timelines** | **2011****AWG-10 March*** + Content discussion and major structure of the report

**AWG-11 September*** + Content discussion and modification of the report
	+ Set up a Correspondence Group to finalize the draft report (detail in the following micro work plan.
	+ September to December: Discussions on drafting the report and work assignments

**2012****AWG-12 April*** + Collecting of inputs for the report

April to August* + CG Mail group discussion on the deliver version of the report

**AWG-13 September*** + Finalize the Report
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| **Title** | **Studies on the machine to machine communications applications and developments** |
| **Document Type** | Report  |
| **Group/Chair** | WG Service and Applications/TG Radiocommunication Convergence/ Mr. LI Jianyu |
| **Editor(s)** | Mr. LI Jianyu (China Unicom) |
| **Scope** | This report will promote and accelerate the M2M industry in Asia-Pacific area from following perspectives:- Study applications of machine to machine (M2M) communications, including innovation, standardization and successful examples in this domain as well as the business model aspect.- Identify any obstacle along with M2M industry development, and identify the issues that AWG is supposed to solve and launch the work. Responses to the AWG questionnaire should be considered in this study. |
| **Purpose** | To collect and summarize regional views on M2M.To identify and address the issues that can help to accelerate the development of M2M |
| **Related Documents** | AWF-9/INP-17, AWF-9/OUT-08, AWG-10/INP-17, AWG-10/INP-34, AWG-11/INP-33, AWG-11/INP-43,AWG-11/INP-69, AWG-12/INP-56, AWG-12/INP-57, AWG-12/INP-58, AWG-12/INP-79, AWG-12/INP-97, AWG-13/INP-33, AWG-13/INP-41, AWG-13/INP-78 |
| **Related Forums** | To be identified |
| **Timelines** | **2011****AWG-10: March*** + Start of the project
	+ Review feedback on questionnaire
	+ Table of Contents

**AWG-11: September** * + Review feedback on questionnaire
	+ Summary of questionnaire and feedbacks
	+ Content of the report

**2012****AWG-12: April*** + Discussion on Content of the report
	+ Review member contributions and draft contents of outputs
* AWG-13: September
	+ Review member contributions and draft contents of outputs

**2013****AWG-14*** + Review member contributions and draft contents of outputs

**AWG-15*** + Finalize the report
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### 5.3.3 Work Plan for Task Group on Modern Satellite Applications (TG-MSA)

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| **Title** | **Survey on:*** **the future needs of broadband communications for social, industrial and economic development which could be satisfied by satellite applications**
* **the characteristics, regulatory and technical requirements of broadband satellite implementation to satisfy these needs**
 |
| **Document Type** | Report |
| **Group/Chair** | TG-3/WG-S&A/Ms. Geetha Remy Vincent |
| **Editor(s)** | Ms. Geetha Remy Vincent |
| **Scope** | To assist the requirements of the APT membership in putting into practice modern satellite applications in a national context and to develop reports on satellite applications in the Asia Pacific Region  |
| **Purpose** | * To identify the future needs of broadband communications for social, industrial and economic development which could be satisfied by satellite applications
* To identify the characteristics, regulatory and technical requirements of broadband satellite implementation to satisfy these needs
 |
| **Related Documents** | - |
| **Related Forums** | - |
| **Timelines** | **2011:**AWG-10 🡪Develop Terms of ReferenceAWG-11 🡪 Finalize the questionnaires on broadband survey **2012:**AWG-12🡪 Compile the responses to the questionnaire and initiate the development of the survey report(s)AWG-13 🡪 Develop/finalize the survey report(s)**2013:**AWG-14 🡪Finalize the survey report(s)  |

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| **Title** | **Studies on technical and operational studies for the efficient interoperability between satellite and terrestrial services in the area of disaster mitigation and relief** |
| **Document Type** | Report |
| **Group/Chair** | TG-3/WG-S&A/Ms. Geetha Remy Vincent |
| **Editor(s)** | Ms. Geetha Remy Vincent |
| **Scope** | To assist the requirements of the APT membership in putting into practice modern satellite applications in a national context and to develop reports on satellite applications in the Asia Pacific Region  |
| **Purpose** | To perform technical and operational studies for the efficient interoperability between satellite and terrestrial services in the area of disaster mitigation and relief |
| **Related Documents** | - |
| **Related Forums** | - |
| **Timelines** | **2011:**AWG-10 🡪Develop Terms of ReferenceAWG-11 🡪 Review input contributions and initiate studies on the topic of disaster relief**2012:**AWG-12🡪 Initiate report based on the results of studiesAWG-13🡪 Continue development of report**2013:**AWG-14🡪 Finalize report  |

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| **Title** | **Studies within the architecture and performance of integrated MSS systems and hybrid satellite/terrestrial systems below the 3 GHz band**  |
| **Document Type** | Report |
| **Group/Chair** | TG-3/WG-S&A/Ms. Geetha Remy Vincent  |
| **Editor(s)** | Ms. Geetha Remy Vincent |
| **Scope** | To develop reports on satellite applications in the Asia-Pacific Region and to assist the APT membership in consideration of the implementation of modern satellite applications in a national context |
| **Purpose** | * To address the technical issues associated with the integrated MSS system and hybrid satellite/terrestrial system in the Asia-Pacific Region.
* To assess the performance of integrated MSS system and hybrid satellite/terrestrial system based on scenarios considered.
 |
| **Related Documents** | - |
| **Related Forums** | - |
| **Timelines** | **2013:**AWG-14 🡪 To add a Work Plan for the study and initiate the study AWG-15 🡪 To start development of the Report based on input contributions **2014:**AWG-16 🡪 To continue development of the Report AWG-17 🡪 To finalize and adopt the ReportThis report should be updated continuously, if necessary.  |

### 5.3.4 Work Plan for Task Group on Aeronautical and Maritime (TG A&M)

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| **Title** | **Study of possible services and applications for aircraft and vessels** |
| **Document Type** | Report  |
| **Group/Chair** | TG-Aeronautical and Maritime |
| **Editor(s)** | Chairman TG-Aeronautical and Maritime  |
| **Scope** | Provide information on various potential services and applications, and success factors to deliver services and applications for aircraft and vessels, market trend, service provider case studies and future challenges  |
| **Purpose** | To identify the future needs of special communications for social, industrial and economic development which could be satisfied by services and applications on aircraft and vessels |
| **Related Documents** | CEPT/ECC Decision (08) 08 and CEPT/ECC Report 122, AWG-11/OUT-07, AWG-11/OUT-08 |
| **Related Forums** | ITU WP 5B |
| **Timelines** | **2012:**AWG-12 🡪Initial revision of Terms of ReferenceAWG-13 🡪Review input contributions and initiate studies on the topic of service and application for aircraft and vessels, and review ToR**2013:**AWG-14🡪 Initiate report based on the results of studies. AWG-15🡪 Continue development of report**2014:**AWG-16🡪 Finalize report |

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| **Title** | **Report on maritime VHF band usage and consideration of new applications in the region of APT** |
| **Document Type** | Report  |
| **Group/Chair** | TG-Aeronautical and Maritime |
| **Editor(s)** | Chairman TG-Aeronautical and Maritime  |
| **Scope** | Provide information on maritime VHF band usage and consideration of new applications in the region of APT |
| **Purpose** | For the benefit of improving the relevant studies on maritime VHF band services carried out by regional members |
| **Related Document** | AWG-12/OUT-02, AWG-12/OUT-06 |
| **Related Forums** | ITU WP 5B |
| **Timelines** | **2012:**AWG-13🡪 Develop work plan and new questionnaire **2013:**AWG-14🡪 Collect the information from responses of the Questionnaire, initiate and discuss the preliminary draft report. AWG-15🡪 Collect the information, discuss and review the draft report.**2014:**AWG-16🡪 Collect the information, discuss and finalize report |