

ASP



EUR

**ITU Cross Regional Seminar on
Broadband Access (Fixed, Wireless
including Mobile) for CIS,
ASP and EUR , Chişinău,
Moldova, 4 – 6 October 2011**

**Preparation for
WRC-12 and BWA
related agenda
items**

Presenter
David Botha
Prepared by
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Counsellors,
Study Group Department,
Radiocommunication Bureau



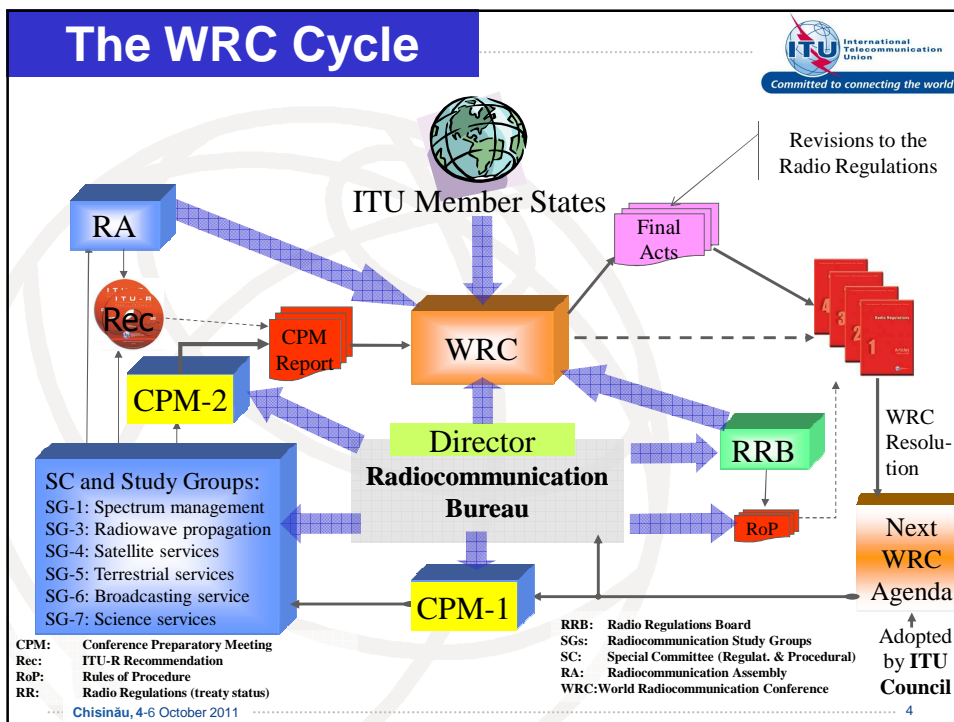
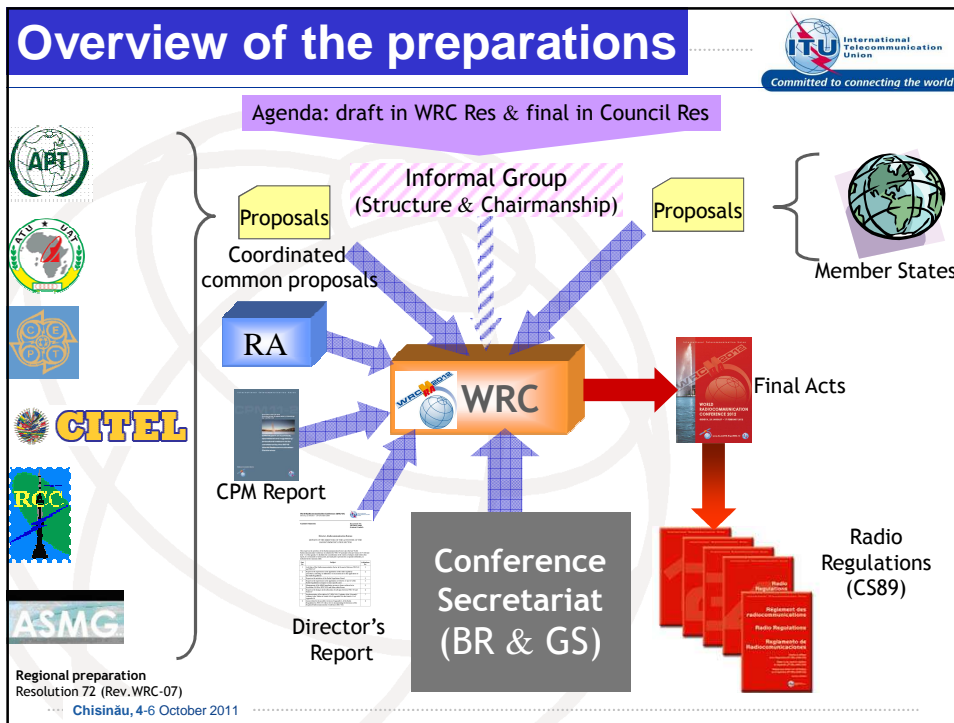
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WRC-12 Preparation



Contents

- Part I** – The WRC process and WRC cycle
- Part II** – ITU preparations for WRC-12
- Part IV** – Regional preparations for WRC-12
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WRC-12 Preparation



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Main Steps towards WRC-12



WRC-07: Draft Agenda (Resolution 805 (WRC-07))

Council-08: Agenda (C08 Resolution 1291 (MOD))

Conference Preparatory Meeting (CPM):

→ CPM11-1: 19 – 20 Nov. 2007 (Results in CA/171 of 20.12.07)

→ Meetings of ITU-R Working Parties/Joint Task Group

→ CPM11-2: 14 – 25 Feb. 2011 (Invitation in CA/191 of 01.06.10)

Final Meetings of regional groups

→ Member States' proposals to WRC-12

Scope of WRC-12 vs WRC-07



WRC-07 (22.10-16.11.2007)

- 30 agenda items, 3100 proposal, 2800 del.!
- almost all services (terrestrial: FS, MS, BS, Amat.S, RAS, RLS, space: FSS, BSS, MSS, EESS, SRS, SO, MetSat, Amat.Sat)
- several applications: IMT, HAPS, HF, GMDSS



WRC-12 (23 January - 17 February 2012)

- 33 agenda items,
- again almost all services (terrestrial: RLS, AM(R)S, passive services, FS, BS, MS, Maritime MS, Amat.S, space: AMS(R)S, SRS, BSS, MSS, MetAids, RDSS, MetSat) and other issues (Res.951, SRDs, Cognitive Radio)
- and many applications and systems :
UAS, ENG, HAPS, oceanographic radar, ...

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Purpose of CPM11-1

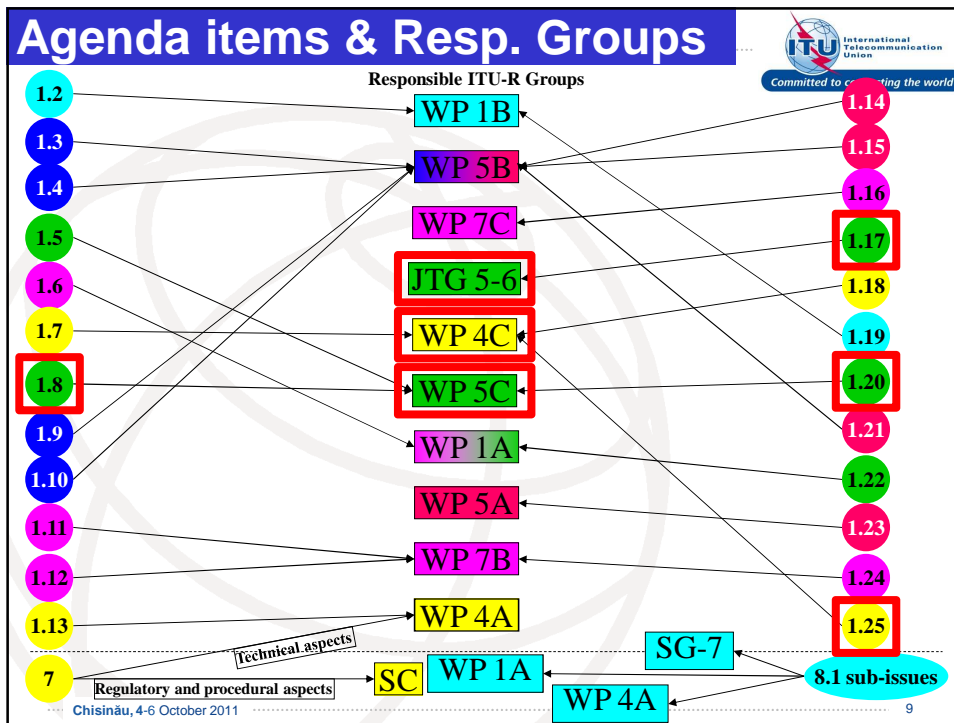


First session of the CPM (CPM11-1)

(in accordance with [Res. ITU-R 2-5](#))

- **Geneva, 19-20 November 2007**
⇒ results published in CA/171, dated 20 Dec. 2007
(<http://www.itu.int/md/meetingdoc.asp?type=sitems&lang=e&parent=R00-CA-CIR-0171>)
- **Define framework of preparatory studies and Structure of CPM Report (Chapter Rapporteurs)**
(proposed detailed structure at: <http://www.itu.int/oth/R0A0A000001>)
- **Nominate responsible ITU-R Groups**
for each WRC-11 Agenda Item, in addition to the SC
⇒ 9 existing Working Parties plus JTG 5-6 (ai1.17)
and concerned (contributing / interested) ITU-R groups
(see Annex 1 in Addendum 1 to CA/171 at:
<http://www.itu.int/md/meetingdoc.asp?type=sitems&lang=e&parent=R00-CA-CIR-0171>)

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Timetable towards WRC-12

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Nov. – Dec. 2007	January – December	January – December	January – December 2010	January – December 2011	Jan.-Feb. 2012
CPMI-1 19-20 Nov. 2007	~ 2.5 years of studies				
Study Group preparatory work 21 Nov. 2007					
CA/171 on CPMI-1 Results, 20 Dec. 2007			Deadline for draft texts 16 Jul. 2010		
	CPM-11 Steering Committee	CPM-11 Steering Committee	CPM-11 Management Team, 26-30 Jul. 2010		WRC-12
			Publication Draft CPM Report 3 Dec. 2010		
	C-08 (12-21 Nov. 08) adopt WRC-11 agenda			CPMI-2 14-25 Feb. 2011	
				Publication CPM Report April 2011	
				3rd Info Meeting on WRC-12 7-8 Nov 2011	

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Purpose of CPM11-2

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- **Second session of the CPM (CPM11-2)**
(see [Res. ITU-R 2-5](#), Web page at: <http://www.itu.int/ITU-R/go/rcpm>)
Geneva, 14 – 25 February 2011
(see CA/191 at: <http://www.itu.int/md/R00-CA-CIR-0191>)
- ⇒ **prepare the consolidated CPM Report to WRC-12, using:**
 - ✓ the draft CPM Report (available 2 months before)
 - ✓ the Report of the Special Committee
 - ✓ Contributions from ITU-R membership (deadline for submission on 31 January 2011)
- ⇒ **Consider the preliminary draft of BR Director's Report to WRC-12**
- ⇒ **Meeting structure would be based on the structure of the draft CPM Report**

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Contributions to CPM11-2

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- **CPM Web page** (www.itu.int/ITU-R/go/rcpm)
- **Draft CPM Report to WRC-12 as Doc. CPM11-2/1**
(<http://www.itu.int/md/R07-CPM11.02-C-0001>)
- **SC Report to CPM11-2 as Doc. CPM11-2/2**
(<http://www.itu.int/md/R07-CPM11.02-C-0002>)



GENEVA, 14 - 25 February 2011
www.itu.int/ITU-R/go/rcpm

All meetings
ITU-R Meetings schedule - Meeting sessions - Member Information and Delegate Registration

Second Session CPM11-2 (Geneva, 14-25 February 2011)

- **Contributions** [XML](#) [?](#)
 - [Guidelines for the preparation of contributions](#) English only
 - [Templates](#)
- [Information Documents \(INFO\)](#)
- [Administrative Documents \(ADM\)](#)
- [Temporary Documents \(DT\)](#)
- [Administrative Circulars \(CA\)](#) [XML](#) [?](#)
- [CPM - Archives](#)

Inter-session preparatory studies

The CPM shall prepare a consolidated report to be used in support of the work of World Radiocommunication Conferences, based on:

- contributions from administrations, the Special Committee, the Radiocommunication Study Groups (see also No. 156 of the Convention), and other sources (see Article 19 of the Convention) concerning the regulatory, technical, operational and procedural matters to be considered by such conferences;
- the inclusion, to the extent possible, of reconciled

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CPM-11 Chairman & Vice-Chairmen



Chairman, CPM

Mr. A. NALBANDIAN (ARM), E-mail: albert.nalbandian@ties.itu.int

Vice-Chairmen, CPM

Mr K. ABDELKADER (TUN),

E-mail: k.abdelkader@anf.tn

Mr A. JONSSON (S),

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Mr. V. GLUSHKO (RUS),

E-mail: glushko@geyser.ru

Mrs. S. TAYLOR (USA),

E-mail: shayla.taylor@itt.com

CPM Report to WRC-12



- **Contains methods to satisfy WRC-12 Agenda items**
see at: <http://www.itu.int/md/R07-CPM11.02-R-0001>
- **Also available as WRC-12 Document 3**



Click on the selected format and language to get the document

	Format	Size	Posted	
English	PDF (acrobat)	76338 bytes	2011-03-30	[1] Corr
	PDF (acrobat)	2834377 bytes	2011-02-25	[1]
	Zip (Document)	2485905 bytes	2011-02-25	[1]
...				
Russian	PDF (acrobat)	141679 bytes	2011-03-30	[1] Corr
	PDF (acrobat)	4938954 bytes	2011-02-25	[1]
	Zip (Document)	3145189 bytes	2011-02-25	[1]

CPM Report – Table of contents

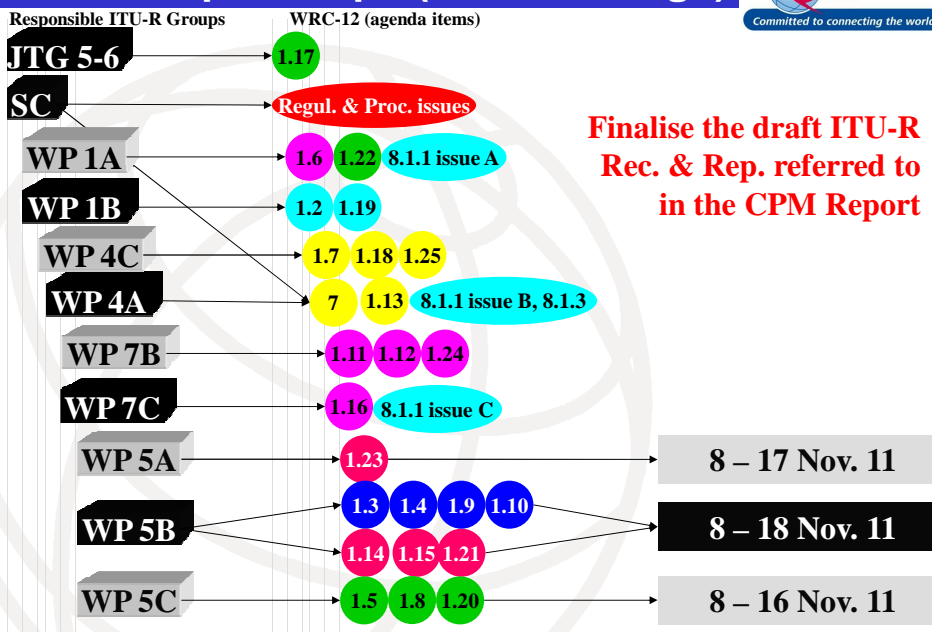


Chapters of CPM Report	WRC-12 Agenda items
<u>1.</u> Maritime and Aeronautical issues	1.3, 1.4, 1.9, 1.10
<u>2.</u> Radiolocation and Amateur issues	1.14, 1.15, 1.21, 1.23
<u>3.</u> Fixed, Mobile and Broadcasting issues	1.5, 1.8, 1.17, 1.20, 1.22
<u>4.</u> Science issues	1.6, 1.11, 1.12, 1.16, 1.24
<u>5.</u> Satellite issues	1.7, 1.13, 1.18, 1.25, 7
<u>6.</u> Future work programme and other issues	1.2, 1.19, 2, 4, 8.1, 8.2

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ITU-R Resp. Groups (next meetings)



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Preparation for RA-12



Web page at: www.itu.int/ITU-R/go/ra-12



- ⇒ **CS No. 91: Provide necessary technical bases for WRC-12 and respond to WRC requests (CV135)**
- ⇒ **CV No. 136: Report to WRC-12 on progress in matters that may be included on agenda of future WRCs**
- ⇒ **Election of Ch. & V-Ch. for SGs, (CV242), incl. RAG, CPM and SC**
- ⇒ **See also §§ 1 & 1.6 of Res. ITU-R 1-5**

➤ **Geneva, 16 – 20 January 2012, invitations:**

- ITU SG Circular Letter No. 24, DM-11/1002 and DM-11/1003 of 16 May 2011, at: www.itu.int/oth/R0C05000007 & www.itu.int/oth/R0C05000008.
 - BR CACE/543 of 22 June 2011, at: www.itu.int/md/R00-CACE-CIR-0543
- **BR CACE on Appointment of Chairmen and Vice-Chairmen of ITU-R Study Groups, SC, CPM and RAG, under preparation.**

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Preparation for WRC-12



Web page at: www.itu.int/ITU-R/go/wrc-12



- ⇒ **CS No. 89: A world radiocommunication conference may partially or, in exceptional cases, completely, revise the Radio Regulations and may deal with any question of a worldwide character within its competence and related to its agenda; its other duties are specified in the Convention. (i.e. CV Article 7)**
- ⇒ **Agenda in Council Resolution 1291(MOD)**

➤ **Geneva, 23 Jan. – 17 Feb. 2012, invitations:**

- SG Circular Letter No.11 and DM-11/1000 of 10 March 2011, at: www.itu.int/md/S11-SG-CIR-0011 & www.itu.int/md/S11-DM-CIR-01000
 - BR CA/196 of 6 April 2011, at: www.itu.int/md/R00-CA-CIR-0196
- **Credentials**, see SG Circular Letter No.19 of 20 April 2011 at: www.itu.int/md/S11-SG-CIR-0019

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Regional preparation for WRC-12




- ✓ **Resolution 80 (Rev. Marrakesh, 2002)**
“World radiocommunication conference process”
Administrations of ITU membership encouraged to:
 - Plan WRC preparations on the basis of 2 consecutive WRCs;
 - Harmonize regional common proposals for WRC;
 - Formally/informally collaborate with a view to resolving differences on WRC agenda items (a.i.);
 - Indicate for proposed WRC a.i., the possible financial implications on the BR (ITU-R studies and BR implementation).
- ✓ **Resolution 72 (Rev. WRC-07)**
“World and regional preparations for world radiocommunication conferences”
 - resolves to invite the regional groups to continue their preparations for WRCs, including the possible convening of joint meetings of regional groups formally and informally

Regional Group Web Pages







<http://www.itu.int/ITU-R/go/wrc-12-regional>

Home : ITU-R : Conferences and Meetings : Regional preparation for WRC-12

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Regional preparation for WRC-12

 European Conference of Postal and Telecommunications Administrations (CEPT)	 African Telecommunications Union (ATU)	 Regional Commonwealth in the Field of Communications (RCC)
 Arab Spectrum Management Group (ASMG)	 Inter-American Telecommunication Commission (CITEL)	 Asia-Pacific Telecommunity (APT)

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[▶ http://www.itu.int/ITU-R/go/wrc-12-apt](http://www.itu.int/ITU-R/go/wrc-12-apt)
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 [▶ http://www.itu.int/ITU-R/go/wrc-12-rcc](http://www.itu.int/ITU-R/go/wrc-12-rcc)

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WRC Regional Preparation

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✓ Regional group meetings:

 Asia Pacific Telecommunity	<ul style="list-style-type: none"> • APG2012-4, 13 – 18 December 2010, Hong Kong, China • APG2012-5, 29 Aug. – 3 Sep. 2011, Busan, Korea (Rep. of)
 Arab Spectrum Management Group	<ul style="list-style-type: none"> • 14th ASMG, 28 Nov. – 2 Dec. 2010, Beirut, Lebanon • 15th ASMG, 1-5 October 2011, Sharm-El-Sheikh, Egypt
 African Telecommunications Union	<ul style="list-style-type: none"> • 1st meeting, 1 – 3 Feb. 2011, Abuja, Nigeria • 2nd meeting, 11-14 July 2011, Algiers, Algeria • 3rd meeting, 9 Nov. 2011, Geneva, Switzerland
 European Conference of Postal and Telecommunications Administrations	<ul style="list-style-type: none"> • CPG12-7, 27 June – 1 July 2011, Oxford, United Kingdom • CPG12-8, 1 – 4 November 2011, Bucharest, Romania
 Inter-American Telecommunication Commission	<ul style="list-style-type: none"> • XVII PCC.II, 17 – 20 May 2011, Dominican Republic • XVIII PCC.II, 28 Nov. - 2 Dec. 2011, San Juan, Puerto Rico
 Regional Commonwealth in the field of Communications	<ul style="list-style-type: none"> • WG-7: 11 – 15 April 2011, Tashkent, Uzbekistan • COMs: 26 – 28 April 2011, Astana, Kazakhstan • WG-8: 19 - 21 / COMs: 22 – 23, Sep. 2011, Saransk, RUS


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Informal group on WRC-12 Preparation

<http://www.itu.int/ITU-R/go/wrc-12>



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World Radiocommunication Conference 2012 (WRC-12)
(Geneva, Switzerland, 23 January-17 February 2012)

[Agenda and References \(Resolutions and Recommendations\) TRES](#)

Collapse all

- General Information
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- Related Conferences
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- Publications
- Related activities**
 - Informal Group
 - ▶ [Contacts](#)
 - ▶ [Agenda for the WRC-12 Informal Group Meeting \(Geneva, 18 February 2010\)](#)
 - ▶ [Notes of the Informal Group Meeting of 5th February, 2009 English only](#)
 - ▶ [Proposed Structure TRES](#)
 - Regional preparation for WRC-12
 - ▶ [Resolution 72 \(Rev. WRC-07\)](#)
 - [ITU information meetings on WRC-12 Preparation](#)
- Other information

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Informal group on WRC-12 Preparation

Next meeting on 17 October 2011

(see: <http://www.itu.int/ITU-R/go/wrc-12&related-activities=1>)

Proposed WRC-12 structure, agreed at 4th meeting, 9 Jun'11


COM 1 Steering	COM 4	COM 5	COM 6
COM 2 Credentials	WG 4A (radiolocation issues): §§ 1.14, 1.15, 1.21, 3*, 5*	WG 5A (science issues): §§ 1.6, 1.11, 1.12, 1.16, 1.24, 8.1.1 (Issue C), 3*, 5*	WG 6A (general issues): §§ 1.2, 1.19, 1.22, 3*, 5*, 8.1(8.1.1 Issue A and other parts)
COM 3 Budget	WG 4B (aeronautical issues): §§ 1.3, 1.4, 1.7**, 3*, 5*	WG 5B (satellite issues): §§ 1.13, 1.18, 1.25**, 7, 8.1.1 (Issue B), 8.1.2 (satellite issues), 8.1.3, 3*, 5*	WG 6B (update regulations): §§ 1.1, 2, 3*, 4, 5*, 6, 8.1.2 (non-satellite issues)
COM 7 Editorial	WG 4C (maritime and amateur issues): §§ 1.9, 1.10, 1.23, 3*, 5*	WG 5C (fixed, mobile and broadcasting issues): §§ 1.5, 1.8, 1.17, 1.20, 3*, 5*	WG 6C (future work program): § 8.2

* relevant parts. ** meeting sessions of WG 4B and WG 5B and their respective SWGs dealing with §1.7 and §1.25 shall not be carried in parallel.


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Information Meetings Web Pages

<http://www.itu.int/ITU-R/go/wrc-12>




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World Radiocommunication Conference 2012 (WRC-12)

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[Agenda and References \(Resolutions and Recommendations\) TRES](#)

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ITU information meetings on WRC-12 Preparation



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 <p>1st Meeting 14-16 Sep 2009 WELCOMES WRC-12 PREPARATION IN COLLABORATION WITH ATU</p>	<ul style="list-style-type: none"> • ITU Headquarters, Geneva, Organized in collaboration with ATU ⇒ Presentation of the organization, preliminary views, priorities and positions of the 6 regional groups ⇒ Presentation and review of the ITU-R preparatory studies by some Chairmen of the responsible groups
 <p>2nd Meeting 24-25 Nov 2010</p>	<ul style="list-style-type: none"> • ITU Headquarters, Geneva ⇒ Presentation of the Draft CPM Report to WRC-12 (explanation of the draft Methods to satisfy the WRC-12 Agenda items) ⇒ Presentation and review of the regional groups' draft preliminary views, positions and common proposals
 <p>3rd Meeting 7-8 Nov 2011 ITU INFORMATION MEETING ON WRC-12 PREPARATION</p>	<ul style="list-style-type: none"> • ITU Headquarters, Geneva ⇒ Presentation of the CPM & Dir. Reports to WRC-12 ⇒ Presentation and review of the regional groups' draft views, positions and common proposals

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3rd ITU Information meeting (Geneva, ITU HQ, 7-8 Nov. 2011)

Web page at: www.itu.int/ITU-R/go/wrc-12-info-11

(see CA/197 at: www.itu.int/md/R00-CA-CIR-0197)

Hours	Day 1 (7.11.11)	Day 2 (8.11.11)
0900-1030	0930 hours: Opening Status of ITU preparation for WRC-12 and RA-12 BR Director's Report to WRC-12	Review of the WRC-12 agenda items related to the satellite issues (agenda items 1.13, 1.18, 1.25, 7)*
1045-1200	Review of the WRC-12 agenda items related to the radiolocation, maritime and amateur issues (agenda items 1.9, 1.10, 1.14, 1.15, 1.21, 1.23)*	Review of the WRC-12 agenda items related to the science issues (agenda items 1.6, 1.11, 1.12, 1.16, 1.24)*
1200-1400	Lunch Break	
1400-1530	Review of the WRC-12 agenda items related to the aeronautical issues (agenda items 1.3, 1.4, 1.7)*	Review of the WRC-12 agenda items related to the general and other issues (agenda items 1.2, 1.19, 1.22, 1.1, 2, 4, 8.2)*
1545-1700	Review of the WRC-12 agenda items related to the fixed, mobile and broadcasting issues (agenda items 1.5, 1.8, 1.17, 1.20)*	Conclusion and closing session

* The order of consideration of the WRC-12 agenda items is indicative at this stage and may be subsequently modified as deemed appropriate

- Representatives from regional groups are invited to participate to panel discussions on WRC-12 agenda items
- Supporting information could also be submitted (see CA/197)

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Agenda items relating to BWA

WRC-11 Agenda items

1.8, 1.17, 1.20, 1.25

- **1.17:** consider sharing studies between the MS and other services in **790-862 MHz** in Reg. 1 and 3, to ensure the adequate protection of services in this frequency band, and take appropriate action
- **1.8:** consider progress studies of technical and regulatory issues relative to the FS in the bands **between 71 GHz and 238 GHz**
- **1.20:** studies on spectrum identification for gateway links for HAPS in **range 5850-7075 MHz** to support operations in the FS&MS
- **1.25:** consider possible additional allocations to the MSS with particular focus on the bands **between 4 GHz and 16 GHz**

WRC-12 WBA agenda items (1/2)


Band or Service	Agenda item No. and possible solution(s)
760-862 MHz	<p>1.17: Several solutions proposed for sharing between MS and a) BS, b) ARNS and c) FS in Regions 1 and 3 (ref. to the GE-06 Agreement).</p>
71 – 238 GHz	<p>1.8: Studies on FS using these bands, may result in new Unwanted Emission Power Masks in 81-86 and 92-95 GHz bands to protect EESS at 86-92 GHz.</p>

WRC-12 WBA agenda items (2/2)	
Band or Service	Agenda item No. and possible solution(s)
5850 - 6724 MHz	1.20: For HAPS gateway links, use existing identified spectrum outside this band or identify 2 x 80 MHz channels in this range for countries listed in a new RR Article 5 footnote.
MSS:	1.25: For estimated needs for year 2020 of [240 to 335] MHz in each direction, possible new MSS allocations: 5150-5250 MHz (MSS s-E), 7055-7250 MHz (MSS s-E), 8400-8500 MHz (MSS E-s), 10.5-10.6 GHz (MSS s-E), 13.25-13.4 GHz (MSS s-E), 15.43-15.63 GHz (MSS E-s).


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Selected WRC-12 Agenda items


1.17: MS in the band 790 – 862 MHz in Regions 1 and 3 - sharing studies



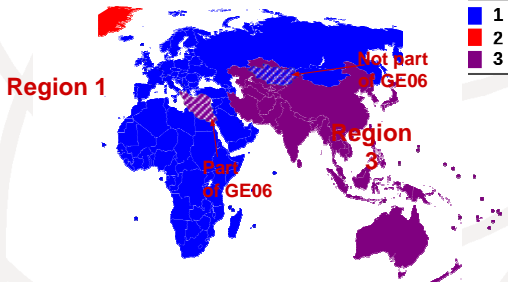
Broadcasting service



Aeronautical radionavigation service



Fixed service

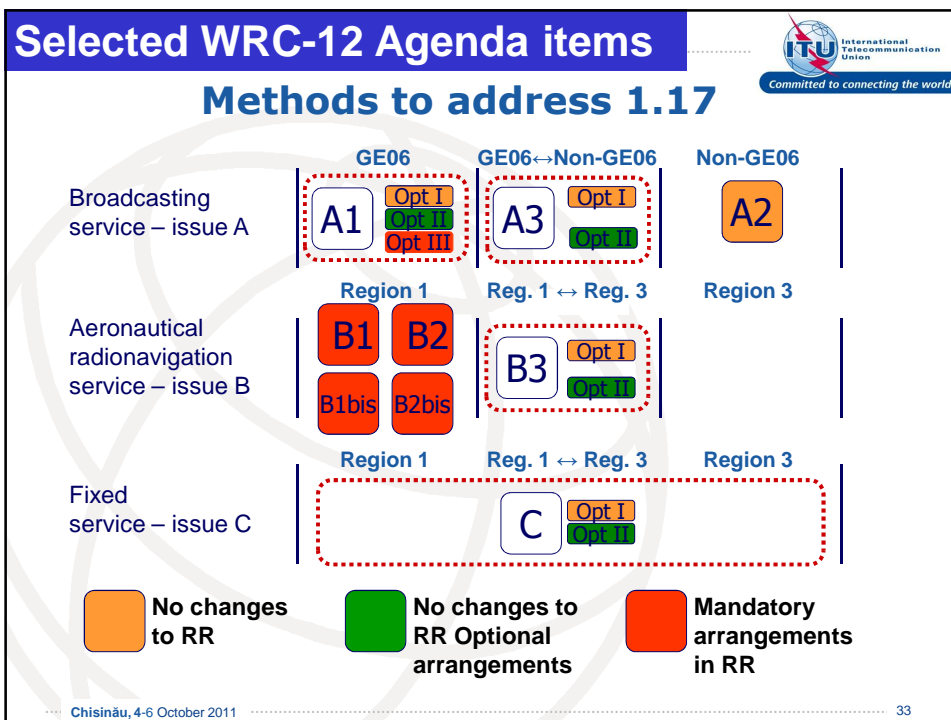


1 Multiple methods considered to resolve 1.17


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Selected WRC-12 Agenda items



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1.8: To consider the progress of ITU-R studies concerning the technical and regulatory issues relative to the FS in the bands between 71 GHz and 238 GHz, taking into account Resolutions 731 (WRC-2000) and 732 (WRC-2000);

Methods to satisfy the agenda item

- **A** - No change to RR now, but with 2 Approaches:
 - A1**- NOC Res. 731 and 732 (WRC-2000)
 - A2**- SUP Res. 731 and 732 (WRC-2000) and ADD a new Resolution in the future to allow continuation of studies on the subject & development of ITU-R Rec. & Rep., as appropriate
- **B** - Introducing unwanted emission power masks on the FS (through RR Article 5 footnotes) in the bands:
 - 81-86 GHz & 92-95 GHz** to protect EESS (86-92 GHz)
 - B1**- mandatory masks (imply some limitations on FS)
 - B2**- recommended masks (up to the countries to decide)

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Selected WRC-12 Agenda items



1.20 Consider results of ITU-R studies and spectrum identification for gateway links for HAPS in the range 5 850-7 075 MHz to support operations in the FS and MS, in accordance with Resolution 734 (Rev.WRC-07)

Methods to satisfy the agenda item:

➤ **Method A:** NOC to RR, HAPS gateway links may make use of the existing identified spectrum in bands: **47.2 - 47.5 GHz** and **47.9 - 48.2 GHz** as per 5.552A and **27.9 - 28.2 GHz** and **31.0 - 31.3 GHz** for countries in 5.537A and 5.543A.

➤ **Method B:** identify 2 channels of 80 MHz each for HAPS gateway links in the range **5 850 - 6 725 MHz** and within the territory of countries listed in an Art. 5 footnote, with operational conditions to protect existing services from co-ch. and adj-ch. interference in a Res., or on a non-interference non-protection basis.

➤ **In both methods, SUP Resolution 734 (Rev.WRC-07)**

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Selected WRC-12 Agenda items



WRC-12
(agenda items)

Chapter 5: Satellite Issues

- **1.25:** consider possible additional allocations to the MSS with particular focus on the bands between 4 GHz and 16 GHz

CPM Methods:

NOC or New primary MSS allocations

- ⇒ band **5150 – 5250 MHz:** **A1** or **A2** (downlink);
- ⇒ band **7055 – 7250 MHz:** **B1** or **B2** (downlink in sub-band(s));
- ⇒ band **8400 – 8500 MHz:** **C1** or **C2** (uplink) or **C3** (*);
- ⇒ band **10.5 – 10.6 GHz:** **D1** or **D2** (downlink);
- ⇒ band **13.25 – 13.4 GHz:** **E1** or **E2** (downlink);
- ⇒ band **15.43 – 15.63 GHz:** **F1** or **F2** (uplink) or **F3** (*);

* also new primary uplink allocation but subject to RR No. **9.21**

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WRC-12 Preparation



**Mulțumesc
Thank you
for
your
attention**
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Hope to see you on 23 January 2012 in Geneva!



Additional information

- Chapters of the Draft CPM Report and WRC-12 Agenda items
- List of radio service abbreviations

Chapter 1 of CPM Report



Maritime and Aeronautical Issues

Rapporteur:

Mr Christian Rissone (F)

WRC-11 Agenda items

1.3, 1.4, 1.9, 1.10

- **1.3:** spectrum requirements and possible regulatory actions, including allocations, for safe operation of unmanned aircraft systems (UAS)
- **1.4:** further regulatory measures for introduction of new AM(R)S systems at **112 – 117.975 MHz, 960 – 1 164 MHz and 5 000 – 5 030 MHz**
- **1.9:** revise frequencies and channelling arrangements of App. 17 in order to implement new digital technologies for the MMS
- **1.10:** frequency allocation requirements for operation of safety systems for ships and ports and associated regulatory provisions

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Chapter 2 of CPM Report



Radiolocation and Amateur Issues

Rapporteur:

Mr Timur Kadyrov (RUS)

WRC-11 Agenda items

1.14, 1.15, 1.21, 1.23

- **1.14:** consider requirements for new applications in the RLS and review allocations or regulatory provisions for implementation of RLS in the **range 30-300 MHz**
- **1.15:** consider possible allocations in the **range 3-50 MHz** to the RLS for oceanographic radar applications
- **1.21:** consider a primary allocation to the RLS in the **band 15.4 – 15.7 GHz**
- **1.23:** allocation of ~15 kHz in the **band 415-526.5 kHz** to the ARS on a 2^{ndary} basis, taking into account the need to protect existing services

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Chapter 4 of CPM Report



Science Issues

Rapporteur:

WRC-11 Agenda items

Mr John E. Zuzek (USA)

1.6, 1.11, 1.12, 1.16, 1.24

- **1.6:** update spectrum use by passive services **in 275 – 3000GHz**, and consider possible procedures for free-space optical-links
- **1.11:** consider a primary allocation to the SRS (Earth-to-space) within the **band 22.55 – 23.15 GHz**
- **1.12:** protect the primary services in the **band 37 – 38 GHz** from interference resulting from AMS operations
- **1.16:** needs of passive systems for lightning detection in MetAids, including possibility of an allocation in the **range below 20 kHz**
- **1.24** consider **extension to band 7850 – 7900 MHz of existing MetSat allocation at 7750 – 7850 MHz**, for non-GSO satellite (space-to-Earth)

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Chapter 5 of CPM Report



Satellite Issues

Rapporteur:

WRC-11 Agenda items

Mr Muneo Abe (J)

1.7, 1.13, 1.18, 1.25, 7

- **1.7:** meet requirements for AMS(R)S, while retaining unchanged generic MSS allocations **at 1525–1559 & 1626.5–1660.5 MHz**
- **1.13:** studies on spectrum **usage of the 21.4 – 22 GHz** band for the BSS and the associated feeder-link bands in Regions 1 and 3
- **1.18:** extending existing 1^{mary} and 2^{ndary} RDSS (space-to-Earth) allocations **at 2483.5 – 2500 MHz** to make global primary allocation
- **1.25:** consider possible additional allocations to the MSS with particular focus on the bands **between 4 GHz and 16 GHz**
- **7:** consider possible improvements to API, coordination, notification and recording procedures for satellite networks – Res. 86

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Chapter 6 of CPM Report

Future work programme and other Issues

Rapporteur:

WRC-11 Agenda items

Mr Albert Nalbandian (ARM)

1.2, 1.19, 2, 4, 8.1, 8.2

- **1.2:** take appropriate action with a view to enhancing the international regulatory framework – Res. 951 (Rev.WRC-07)
- **1.19:** consider regulatory measures in order to enable introduction of software-defined radio and cognitive radio systems
- **2:** Incorporation by reference – Res. 27 and 28 (Rev.WRC-2000)
- **4:** Review of Res./Rec. of previous W(A)RCs – Res.95(Rev.WRC-03)
- **8.1:** Activities of the ITU-R Sector as reported in BR Director's Report to WRC-11, in relation with Resolutions 63, 547 (Rev. WRC-07) and with Resolution 673 (WRC-07)
- **8.2:** Items to be included in WRC-15 Agenda (Res. 806 (WRC-07))

Additional information

- Chapters of the Draft CPM Report and WRC-12 Agenda items
- List of radio service abbreviations

List of radio service abbreviations (1)



Abbreviations	Radio services	RR definition
AMS	aeronautical mobile service	No. 1.32
AM(R)S	aeronautical mobile (route) service	No. 1.33
AMSS	aeronautical mobile-satellite service	No. 1.35
AMS(R)S	aeronautical mobile-satellite (route) service	No. 1.36
ARNS	aeronautical radionavigation service	No. 1.46
ARNSS	aeronautical radionavigation-satellite service	No. 1.47
ARS	amateur service	No. 1.56
ARSS	amateur-satellite service	No. 1.57
BS	broadcasting service	No. 1.38
BSS	broadcasting-satellite service	No. 1.39
EESS	Earth exploration-satellite service	No. 1.51
FS	fixed service	No. 1.20
FSS	fixed-satellite service	No. 1.21
ISS	inter-satellite service	No. 1.22
LMS	land mobile service	No. 1.26
LMSS	land mobile-satellite service	No. 1.27
MetAids	meteorological aids service	No. 1.50

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List of radio service abbreviations (2)



Abbreviations	Radio services	RR definition
MetSat	meteorological-satellite service	No. 1.52
MMS	maritime mobile service	No. 1.28
MMSS	maritime mobile-satellite service	No. 1.29
MRNS	maritime radionavigation service	No. 1.44
MRNSS	maritime radionavigation-satellite service	No. 1.45
MS	mobile service	No. 1.24
MSS	mobile-satellite service	No. 1.25
RAS	radio astronomy service	No. 1.58
RDS	radiodetermination service	No. 1.40
RDSS	radiodetermination-satellite service	No. 1.41
RLS	radiolocation service	No. 1.48
RLSS	radiolocation-satellite service	No. 1.49
RNS	radionavigation service	No. 1.42
RNSS	radionavigation-satellite service	No. 1.43
SOS	space operation service	No. 1.23
SRS	space research service	No. 1.55

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