

ASMG

Preliminary Positions on WRC-11 Agenda Items

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Outline

I. Overview of the ASMG

II. Preparation for WRC-11

III. Outlines of the Draft CPM Report and Preparatory Studies for WRC- 11

ASMG: Arab Spectrum Management Group

Purpose and Structure

Established by the Arab Ministerial Council for ICT to cooperate and collaborate in the field of Spectrum Management

The major activities for the twenty two Arab States :

- Cooperate in the field of Spectrum Management by sharing and exchanging views on the emerging radio communication aspects
- Negotiating to develop common Arab proposals for the agenda items of World Radio Conference (WRC)
- Assess the progress of the studies pertaining to the agenda items of World Radio Conferences
- Prepare common contributions for the meetings of Radiocommunication sector of ITU (ITU-R)
- Coordinate among member states on all issues related to the Spectrum Management

ASMG Organization Structure



Outline

I. Overview of the ASMG

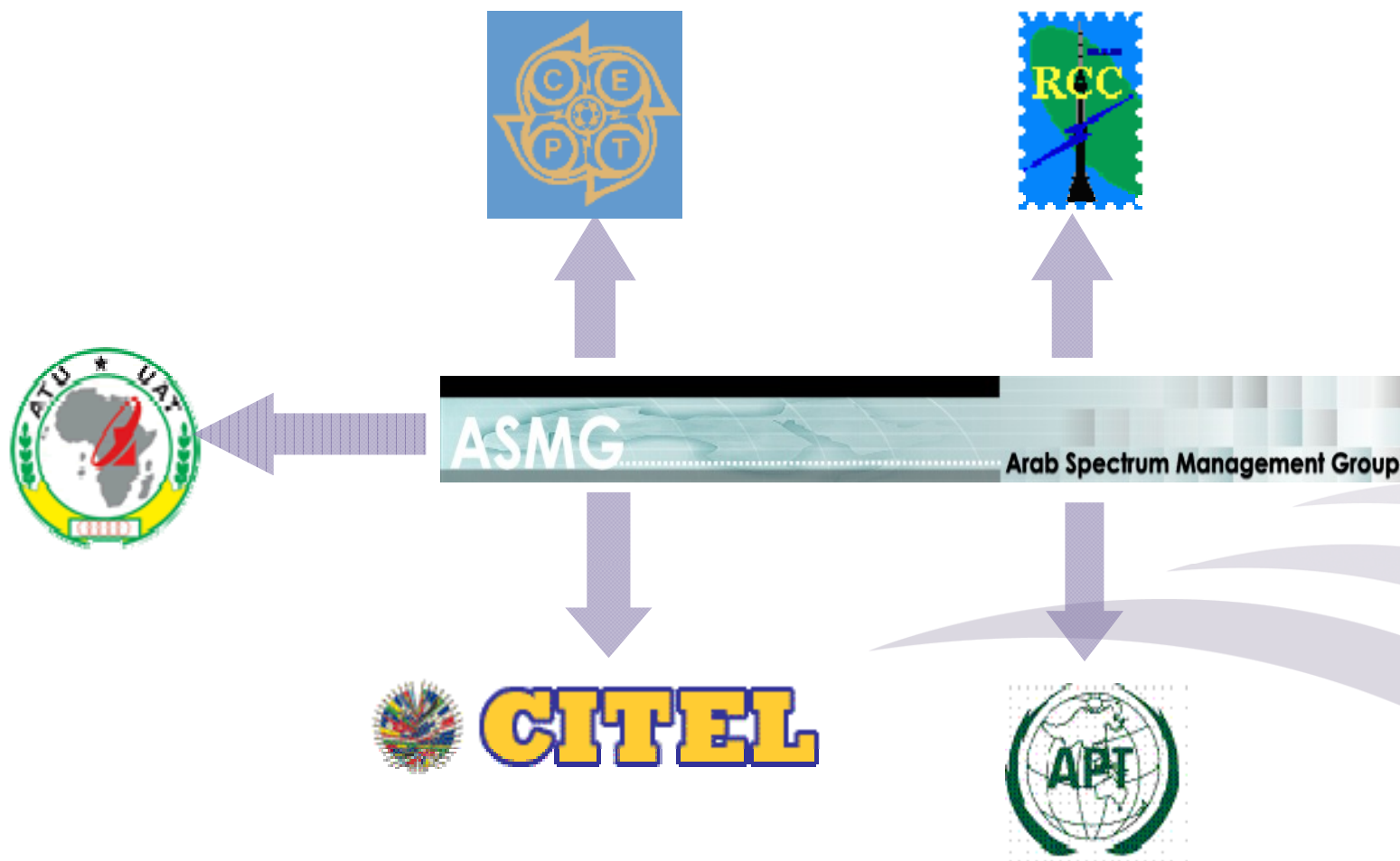
II. Preparation for WRC-11

III. Outlines of the Draft CPM Report and Preparatory Studies for WRC- 11

Chapters and Agenda Items

Chapter	Chapter Title	ASMG Chapter Rapporteur	ASMG Agenda Item Distribution
1	Maritime and Aeronautical Issues	Tunis	1.3 (Sudan); 1.4 (Tunis) 1.9 (Syria, Bahrain) 1.10 (Egypt)
2	Radiolocation and Amateur Issues	Lebanon	1.14 (UAE); 1.15 (UAE) 1.21(Jordan); 1.23 (Sudan)
3	Fixed, mobile and Broadcasting Issues	UAE	1.5 (Bahrain); 1.8 (Jordan, Bahrain); 1.17 (Arabia Saudi, Bahrain) 1.20; 1.22 (Tunis)
4	Science Services	Syria	1.6, 1.11 (Arabia Saudi), 1.12 (Jordan), 1.16 (Sudan), 1.24 (Syria)
5	Satellite Issues	Egypt	1.7 (Egypt), 1.13 (UAE), 1.18 (Lebanon), 1.25 (UAE), 7
6	Future Work Program and other issues	UAE, Sudan	1.2 (UAE,Bahrain), 1.19 (Egypt), 2 (UAE), 4 (Syria, UAE), 8.1 (Jordan), 8.2 (UAE)

Coordination with Regional Organizations for WRC Preparation



Outline

I. Overview of the ASMG

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III. Outlines of the Draft CPM Report and Preparatory Studies for WRC-11

Chapter 1

Maritime and Aeronautical Issues

(Agenda Items 1.3, 1.4, 1.9, 1.10)

Rapporteur:

Ms. Lelia El Soussi (Tunis)

CPM Report - Chapter 1

Maritime and Aeronautical Issues - A. I.: 1.3, 1.4

A.I	WRC-07 Resolution	Description	Conc. Group	ASMG Preliminary Position
	Subject			
1.3	421 [COM6/8]	<ul style="list-style-type: none"> Unmanned Aircraft Systems (UAS) are expected to increase significantly in the near future in the same environment as manned aircrafts, but also in specific environments not accessible to manned aircrafts 	WP 5B	Follow up the on-going studies to <ul style="list-style-type: none"> Support remote pilot in commanding and controlling UAS and in relaying the air traffic control communications Provide spectrum for advanced techniques to detect and track nearby aircraft, terrain and obstacles to navigation Protect existing services
	<i>Spectrum requirements and possible regulatory actions, including allocations, for safe operation of unmanned aircraft systems (UAS)</i>		4A,4C, 7B, 7C, 7D	
1.4	413 (Rev. WRC-07)	Aeronautical community needs for enhanced & new AM(R)S systems: <ul style="list-style-type: none"> using intensive & safety-critical radiocommunication data links to support new applications & concepts in air traffic management, relating to safety & regularity of flights 	WP 5B	Follow up the on-going studies to <ul style="list-style-type: none"> Study any compatibility issues between BS & AM(R)S (~108MHz), and Sharing solutions between ARNS or RNSS & AM(R)S systems (~1GHz)
	417 [COM 4/5]		4C, 6D, 3K	
	420 [COM 4/9]		4C	
	<i>Further regulatory measures for new AM(R)S systems at 112-117.975 , 960-1164 and 5000-5030 MHz</i>	AM(R)S systems may need ~ 60-100 MHz @~5 GHz for surface applications (Rep. ITU-R M.2120)	4C, 7D, 3M	

CPM Report - Chapter 1

Maritime and Aeronautical Issues - A. I.: 1.9, 1.10

A.I	WRC-07 Resolution	Description	Conc. Group	ASMG Preliminary Position
	Subject			
1.9	351 (Rev.WRC-07) <i>Revise frequencies and channelling arrangements of RR Appendix 17 to implement new digital technologies for MMS</i>	<p>Use of the HF bands</p> <ul style="list-style-type: none"> • Rapid growing need to use new digital technologies in MMS • Better respond to emerging demand for new services, new HF data exchange technologies capable of delivering maritime safety information 	WP 5B	<p>Follow up the on-going studies to:</p> <ul style="list-style-type: none"> • Support the necessary modifications to the RR App.17 frequency table in order to introduce the digital technologies for MMS. A transition period must be considered
1.10	357 [COM 6/10] <i>Frequency allocation requirements for operation of safety systems for ships and ports and associated regulatory provisions</i>	<ul style="list-style-type: none"> • Increasing need, on a global basis, to enhance ship and cargo identification, tracking, and surveillance as well as ship and port security and safety • New IMO ISPS Code requires long-range spectrum dependent systems • May need additional AIS channels in MSS for global ship tracking capabilities • May use advanced maritime HF data systems to deliver and receive security alerts and safety information and receive LRIT information 	WP 5B 5A, 5C, 7B, 7C, 7D	<p>Follow up the on-going studies</p> <ul style="list-style-type: none"> • Study the actual spectrum requirements for ship and port security below 1 GHz • Follow up sharing and compatibility issues with services already having allocations in those potential frequency bands without affecting the GMDSS

Chapter 2

Radiolocation an Amateur Issues

(Agenda Items 1.14, 1.15, 1.21, 1.23)

Rapporteur:

Jinane Karam (Lebanon)

CPM Report - Chapter 2

Radiolocation an Amateur Issues – A. I.: 1.14, 1.15

A.I	WRC-07 Resolution	Description	Group	ASMG Preliminary Position
	Subject			
	611 [COM6/14]		WP 5B	
1.14	<i>Consider requirements for new applications in the RLS and review allocations or regulatory provisions for implementation of RLS in the range 30-300 MHz</i>	<ul style="list-style-type: none"> Emerging requirements for increased resolution and range of radars operation Terrestrial-based RLS systems are needed to enable various space object detection applications (remote space sensing, asteroid detection), and for defining the position of natural and artificial Earth satellites 2003-07 Studies included in Rec. ITU-R M.1802 "Characteristics and protection criteria for radars operating in the band 30-300 MHz" 	3L, 5A, 5C, 7B, 7D	<ul style="list-style-type: none"> Follow up the on-going studies especially the studies for compatibility between RLS and the existing services Consider the importance of protecting services in this band when we assign additional spectrum for radiolocation Study the two bands suggested for this service 138-144 MHz and 154 – 156 MHz and provide suggestions to the next meeting
	612 [COM6/15]		WP 5B	
1.15	<i>Consider possible allocations in range 3-50 MHz to the RLS for oceanographic radar applications</i>	<ul style="list-style-type: none"> Increasing interest for global operation of HF ocean. radars for measurement of coastal sea surface conditions related to environmental, oceanographic, meteorological, climatologically, maritime and disaster mitigation operations HF oceanographic radars operate on a global basis through use of ground-wave propagation, but no RLS in 3-50 MHz 	5C, 6D, 5A, 7B, 7D	<ul style="list-style-type: none"> Follow up the on-going studies especially the compatibility between radiolocation and other services in this band

CPM Report - Chapter 2

Radiolocation an Amateur Issues – A. I.: 1.21, 1.23

A.I	WRC-07 Resolution	Description	Group	ASMG Preliminary Position
	Subject			
	614 [COM6/19]		WP 5B	
1.21	<i>Consider a primary allocation to the RLS in the band 15.4-15.7 GHz</i>	<ul style="list-style-type: none"> Provide adequate spectrum for emerging new radar systems necessitating wider emission bandwidths for increased resolution and range accuracy Worldwide allocation may be required to give regulatory assurance and confidence to developers, manufacturers and investors that RLS radar systems will operate globally 	4A, 3M, 7D	<ul style="list-style-type: none"> Follow up the studies for this item related to the identification of technical characteristics, protection criteria and other factors in order to ensure compatibly with the ARNS, FSS in same band, and RAS in lower-adjacent band Guarantee the protection of services 15.4 to 15.7 GHz in case more frequencies are assigned for radiolocation
1.23	<i>Allocation of ~15 kHz in the band 415-526.5 kHz to the Amateur Service on a secondary basis, and need to protect existing services</i>	<ul style="list-style-type: none"> Increasing call for the 500 kHz band to be allocated to and used by the amateur service in order to: <ul style="list-style-type: none"> Enable the Amateur radio Service to serve in cases of natural emergency situations as a backup to public communication channels Allow ultra-reliable regional ground wave communications Decreased use of this band due to introduction of GMDSS 	WP 5A 5B, 5C, 6D	<ul style="list-style-type: none"> continue following up the studies for this item in WP5A, taking in consideration other services available in the frequency table 2 different positions for the Arab administrations: <ul style="list-style-type: none"> NOC (No Change) Provide amateur radio with new allocation on secondary basis

Chapter 3

Fixed, Mobile and Broadcasting Issues (Agenda Items 1.5, 1.8, 1.17, 1.20, 1.22)

Rapporteur:

Mr Naser A. Eidha Alrashedi (UAE)

Chapter 3

Fixed, Mobile and Broadcasting Issues- A. I.: 1.5, 1.8

A.I	WRC-07 Resolution	Description	Group	ASMG Preliminary Position
	Subject			
1.5	954 [COM6/5]	<ul style="list-style-type: none"> • Use of ENG is an important element in the comprehensive coverage of a wide range of internationally noteworthy events, including emergencies, natural disasters, breaking news • Increasing portability of terrestrial ENG systems and trend towards cross-border operations of ENG equipment • Advanced digital technologies open new opportunities for fixed and mobile ENG operations - spectrum implications (see Report ITU-R BT.2069) • National spectrum allocations exist in some countries (see Recommendations ITU-R F.1777 and ITU-R M.1824) 	WP 5C	<ul style="list-style-type: none"> ▪ Follow up the on-going studies and invite Arab administrations to provide their views about the bands suggested for this service to the next meeting
	<i>Consider worldwide/regional harmonization of spectrum for Electronic News Gathering (ENG)</i>		5A, 6D, 6G, 6X (4A,4C,7B,7D)	
1.8	731 (WRC-2000)	<ul style="list-style-type: none"> • Under study for more than 7 years • Increasing interest for commercial use of spectrum above 70 GHz due to unique propagation characteristics and wide bandwidth available for carrying commercial fixed wireless applications - extremely high-speed data transmission 	WP 5C	<ul style="list-style-type: none"> ▪ Continue following up the studies insisting on the necessity of protecting services in the frequency table
	732 (WRC-2000)		7C 7D (1A, 4A)	
	<i>Consider progress studies of technical and regulatory issues relative to the FS in the bands between 71 GHz and 238 GHz</i>		7B, (1A, 4A)	

Chapter 3

Fixed, Mobile and Broadcasting Issues- A. I.: 1.17, 1.20

A.I	WRC-07 Resolution	Description	Group	ASMG Preliminary Position
	Subject			
	749 [COM4/13]		JTG 5-6	
1.17	<i>Consider sharing studies between the MS and other services at 790-862 MHz in Reg. 1 and 3, to ensure the protection of services in this frequency band, and take appropriate action</i>	<ul style="list-style-type: none"> Band currently used predominantly by BS (GE06 Agreement) Transition from analogue to digital television → digital dividend ⇒ Spectrum opportunities for new applications (IMT - Advanced, ...) Band providing favourable propagation characteristics, cost-effective solutions for coverage of large areas with low population density 		<ul style="list-style-type: none"> Follow up closely the studies with JTG 5-6 including sharing studies of the 790-862 MHz adjacent band allocated to BS and IMT between any two neighboring countries
	734 (Rev.WRC-07)		WP 5C	
1.20	<i>Studies on spectrum identification for gateway links for HAPS in the range 5850-7075 MHz to support operations in the FS and MS</i>	<ul style="list-style-type: none"> HAPS (high altitude platform stations) requirements: Need to facilitate implementation of systems using HAPS in the fixed and mobile services in bands above 3 GHz To provide gateway links for HAPS base stations as a complement to spectrum allocations already identified for HAPS provision of IMT-2000 services 	4A (3M, 5A, 5B, 7B,7C)	<ul style="list-style-type: none"> Continue following up the studies with WP5C working group with the necessity to protect the existing services in the 5850 – 7075 MHz band (fixed and mobile services) The view of some Arab administrations' is not to assign two channels of 80 MHz for this service due to the extensive existing use of the suggested band

Chapter 3

Fixed, Mobile and Broadcasting Issues- A. I. 1.22

A.I	WRC-07 Resolution	Description	Group	ASMG Preliminary Position
	Subject			
	953 [COM6/4]		WP 1A	
1.22	<i>Examine effect of emissions from Short-Range Radio Devices (SRD) on radiocommunication services</i>	<ul style="list-style-type: none"> Increasing amount of SRDs proliferating across various frequency bands, such as RFIDs or using UWB technologies In some cases RFIDs may radiate considerable energy Some radio services (e.g. those using low field strengths), may suffer harmful interference from SRDs (like RFIDs) SRDs (e.g. RFIDs) hold promise for new applications 	SG 3, SG 4, SG 5, SG 6, SG 7	<ul style="list-style-type: none"> Continue following up the studies with WP1A working group Support Resolution 54 of the RA2007 and Resolution 63 revised during WRC07

Chapter 4

Science Services

(Agenda Items 1.6, 1.11, 1.12, 1.16, 1.24)

Rapporteur:

Mr. Atef El Deiry (Syria)

Chapter 4

Science Services – A. I.: 1.6, 1.11

A.I	WRC-07 Resolution	Description	Group	ASMG Preliminary Position
	Subject			
1.6	950 (Rev.WRC-07)	<ul style="list-style-type: none">• Bands 275-3000 GHz not allocated, except for passive services for experimentation and development studies (EESS, SRS and RAS for climatological and meteorological purposes)• Band above 3000 GHz already used for various optical applications from telecommunication links to satellite remote sensing	WP 1A	<ul style="list-style-type: none">• Continue following up the studies with WP1A and WP7C• Address the two resolutions separately• Invite the Arab administrations to provide their views for the next group meeting
	955 [COM6/9]		7C, 7D (3M)	
	Update spectrum use by passive services in 275-3000GHz, and possible procedures for free-space optical-links		5C, 7B, (3M)	
1.11	753 [COM6/11]	<ul style="list-style-type: none">• Growing interest in comprehensive space exploration (particularly towards and around the Moon: examining the terrain, environment and potential landing sites) with both robotic and manned missions• Need for companion uplink (Earth-to-space) band to provide mission data, command and control links	WP 7B	<ul style="list-style-type: none">• Follow up the study with WP7B considering the importance to protect the existing services (FS and MS)• No restriction on the development of these services
	Consider a primary allocation to the SRS (Earth-to-space) within the band 22.55-23.15 GHz		4A, 5C (3M, 5A)	

Chapter 4

Science Services – A. I.: 1.12, 1.16

A.I	WRC-07 Resolution	Description	Group	ASMG Preliminary Position
	Subject			
1.12	754 [COM6/12]	<ul style="list-style-type: none"> Aeronautical Mobile Stations (AMS) can cause high interference to receivers in the FS (HDFS), other MS, FSS and the SRS With respect to SRS receivers, this may significantly exceed the permissible interference levels for extended periods of time, thus jeopardizing the success of a space mission This band is required to support increased data requirements of planned manned and scientific missions 	WP 7B	<ul style="list-style-type: none"> Follow up the on-going studies with a preliminary support except to the AMS due to incompatibility with other services
	<i>Protect primary services in the band 37-38 GHz from interference resulting from Aeronautical Mobile Service (AMS) operations</i>		4A, 5B, 5C (5A)	
1.16	671 [COM6/16]	<ul style="list-style-type: none"> VLF bands are used by systems that detect and locate lightning (existing systems require from 3 to 5 kHz bandwidth) Operational and safety-of-life services providing warnings of extreme weather events to organizations and customers including emergency services, aviation, defence, the utilities & public Need to avoid recent instances of interference 	WP 7C	<ul style="list-style-type: none"> Support the ongoing studies considering the necessity to protect services in this band Invite the Arab administrations to provide their views in the next group meeting
	<i>Needs of passive systems for lightning detection in Met Aid, including possibility of allocation in range below 20 kHz</i>		3L, 5B, 5C, 7A	

Chapter 4

Science Services – A. I.: 1.24

A.I	WRC-07 Resolution	Description	Group	ASMG Preliminary Position
	Subject			
1.24	672 [COM6/20]	<ul style="list-style-type: none"> Band 7.75-7.85GHz currently used by NGSO polar MetSat, transmitting typically in data dump modes to large earth stations High-resolution sensors in future NGSO MetSat (2017-2020) will require an extension of current allocation by 50 MHz Data obtained with these sensors are essential for global weather forecast, climate changes and hazard predictions Sharing situation with other services is same in both bands 	WP 7B	<ul style="list-style-type: none"> Follow up the studies considering the importance to protect the existing services without putting any additional restriction on these services
	<i>Consider extension to band 7850-7900 MHz of existing MetSat allocation at 7750-7850 MHz, for NGSO sat. (space-to-Earth)</i>		5C (5A, 5B)	

Chapter 5

Satellite Issues

(Agenda Items 1.7, 1.13, 1.18, 1.25, 7)

Rapporteur:

Mr Mohamad Suleiman (Egypt)

Chapter 5

Satellite Issues – A. I.: 1.7, 1.13

A.I	WRC-07 Resolution	Description	Group	ASMG Preliminary Position
	Subject			
1.7	222 (Rev.WRC-07)	<ul style="list-style-type: none"> High-priority AMS(R)S communications are essential for safety and regularity of flights in civil air transportation Expected increase of spectrum demand for current and future AMS(R)S systems Rep. ITU-R M.2073 concluded that use of prioritization and inter-system real-time pre-emptive access is not practical 	WP 4C	<ul style="list-style-type: none"> Follow up the on-going studies with the necessity to protect the primary services in the bands 1.5 and 1.6 GHz especially the primary MSS allocation
	<i>Meet requirements for AMS(R)S, while retaining the generic MSS allocation at 1525-1559 and 1626.5-1660.5 MHz</i>		5C (4B, 7B, 7C, 7D)	
1.13	551 [COM6/13]	<ul style="list-style-type: none"> Future BSS systems in this band may provide extremely high resolution imagery (EHRI) applications (see Rec. ITU-R BT.1201 and Rep. ITU-R BT.2042) Res.525 (Rev.WRC-07) governs the interim use of HDTV BSS systems in this band on a first-come-first-served basis a priori planning of this band is not necessary 	WP 4A	<ul style="list-style-type: none"> Follow up the on-going studies related to the technical and regulatory aspects to harmonize the long-term usage of this band, assessing various planning methodologies, coordination procedures or other procedures and BSS technologies Identify the advantages and disadvantages of each of the suggested methods in order to choose the most convenient for the Arab administrations
	<i>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</i>		5C, 6X (3M, 4B, 5A, 6D, 6G, 7D)	

Chapter 5

Satellite Issues – A. I.: 1.18, 1.25

A.I	WRC-07 Resolution	Description	Group	ASMG Preliminary Position
	Subject			
1.18	613 [COM6/17]		WP 4C	<ul style="list-style-type: none"> Follow up the on-going studies related to the technical, operational and regulatory aspects of the possible RDSS compatibility with other services in that band It is necessary to protect the existing services in this band
	<i>Extending existing primary and secondary RDSS (space-to-Earth) allocations at 2483.5-2500 MHz to make a global primary allocation</i>	<ul style="list-style-type: none"> Demand for position and time determination by means of satellite systems is expected to continue to grow since it offers great societal benefits Band already allocated on primary basis to RDSS and other services (FS, MS, MSS, RLS) in many countries 	5A, 5B, 5C (3L, 4A)	
1.25	231 [COM6/21]		WP 4C	<ul style="list-style-type: none"> Follow up the on-going studies related to the identification of new possible MSS allocations in both Earth-to-Space and Space-to-Earth directions, focusing on the 4-16 GHz band but without placing undue constraints on existing services Some Arab administrations see no need for additional spectrum for MSS due to the extensive use of the suggested band
	<i>Consider possible additional allocations to the MSS with particular focus on the bands between 4 GHz and 16 GHz</i>	<ul style="list-style-type: none"> Shortfall of spectrum available for the satellite component of IMT for the year 2020 (Report ITU-R M.2077) <ul style="list-style-type: none"> between 19 and 90 MHz (Earth-to-space direction) between 144 and 257 MHz (space-to-Earth direction) Other MSS systems may also require additional spectrum 	SG 1, SG 3, SG 5, SG 6, SG 7	

Chapter 5

Satellite Issues – A. I.: 7

A.I	WRC-07 Resolution	Description	Group	ASMG Preliminary Position
	Subject			
7	86 (Rev.WRC-07)	<ul style="list-style-type: none"> • Opportunity to review the RR procedures for satellite networks • To solve difficulties in application of RR provisions, • To correct deficiencies, simplify or update the procedures, • To transfer some Rules of Procedure into the RR • To ensure that RR procedures reflect latest technologies 	WP 4A (Technical)	<ul style="list-style-type: none"> • Follow up the on-going studies to provide WRC-11 with proposed solutions on how to deal with above-mentioned types of cases, yet to be identified
	<i>Consider possible improvements to API, coordination, notification and recording procedures for satellite networks - Res. 86</i>		SC (Regulatory) 7B, 7C (4C)	
				<ul style="list-style-type: none"> • Invite the Arab Administrations to participate in the SC meeting

Chapter 6

Future Work Program and other issues

(Agenda Items 1.2, 1.19, 2, 4, 8.1, 8.2)

Rapporteur:

*Mr Tariq Al-Awadhi (UAE), Mr. Mohamad Abdel Hafiz
(Sudan)*

Chapter 6

Future Work Program and other issues - A. I.: 1.2, 1.19

A.I	WRC-07 Resolution Subject	Description	Group	ASMG Preliminary Position
1.2	951 (Rev.WRC-07)	<ul style="list-style-type: none"> • Increase and evolution in demand and multiplicity of existing and future applications for radio communications • Convergence of radio technologies for some applications combining elements of different radio communication services • ITU-R SG-1 Report to WRC-07 (Doc. 24): Changes to accommodate converging services rely on a combination of service definitions, allocations and procedures → need for additional studies • 4 Options have so far been identified: i) current practices; ii) review service definitions, iii) enable service substitution; iv) composite services 	WP 1B	<ul style="list-style-type: none"> • Follow up the on-going studies, 3 steps <ul style="list-style-type: none"> ▪ Evaluate options ▪ Develop concepts and procedures including sharing studies on a band-by-band basis ▪ Prepare technical and regulatory solutions for WRC-11 consideration • Create an Arab WG to work by correspondence to study the suggested options, considering especially the second and fourth options • UAE will be responsible to prepare the contribution
	<i>Take appropriate action with a view to enhance the international regulatory framework</i>		SG 4, SG 5, SG 6, SG 7 (SG 3)	
1.19	956 [COM6/18]	<ul style="list-style-type: none"> • SDR and CR networks expected to provide more flexibility and improved efficiency to the overall spectrum use • This advanced radio technologies is already under study (see ITU-R Reports M.2064 (2005) and M.2117 (2007)) • CR systems covers many radio access techniques (RATs), incl. self-configuring networks in heterogeneous environment • Need information on location and characteristics of other RATs through access to a database supporting access and connectivity or by using a Cognition supporting Pilot Channel (CPC) 	WP 1B	<ul style="list-style-type: none"> • Follow up the on-going studies into the need for regulatory measures related to the application of SDR and CR system technologies
	<i>Consider regulatory measures in order to enable the introduction of software-defined radio (SDR) and cognitive radio systems</i>		SG 3, SG 4, SG 5, SG 6, SG 7	