



Preparation process for WRC-19

Xingguo Zhou

Radiocommunication Bureau, ITU

**ICAO Preparatory Workshop to ITU World Radiocommunication
Conference 2019 (WRC-19)**

6 – 7 February 2018, Mexico City, Mexico

ITU

- Founded on 17 May 1865
- 193 Member States, >700 Sector Members , Associates & Academia
- HQ in Geneva, Switzerland; 4 regional offices and 8 area offices
- Three ITU Sectors: ITU-D, ITU-T and ITU-R

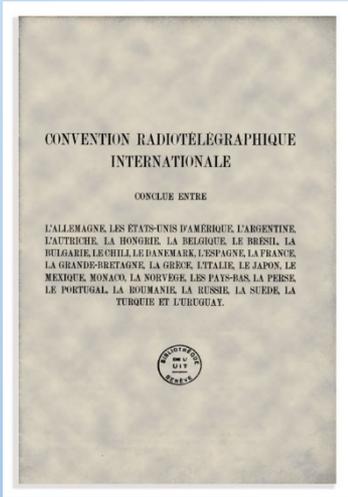


RÈGLEMENT DE SERVICE,
ANNEXE A LA
CONVENTION RADIOTELEGRAPHIQUE INTERNATIONALE

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Structure of ITU-R



From the first International Radiotelegraph Convention, **1906** to the Radio Regulations, **2016**

RR follow and anticipate technological advancements





Structure of ITU-R

The Radiocommunication Sector of ITU (ITU-R)

- **World Radiocommunication Conferences (WRC):** establish and amend the Radio Regulations (RR) - an important international treaty governing the use of radiocommunications;
- **Radio Regulation Board (RRB):** clarifies ambiguous and difficult provisions of the RR through adoption of Rules of Procedures;
- **Radiocommunication Assemblies (RA):** approve the ITU-R recommendations supporting the development and compatibility of radio system;
- **Study Groups (SG):** develop the technical bases for World Radiocommunication Conferences and develop global standards in the form of Recommendations;
- **Radiocommunication Bureau (BR):** is ITU-R secretariat responsible for daily work, e.g. registration of frequencies, resolving interference, etc.



Objectives:

- Allocate spectrum/orbit resource for emerging radio technologies and applications, while protecting the existing usage
- Maintain the right balance between the spectrum requirements of all radiocommunication services, including aeronautical services
- Achieve global spectrum harmonization for economies of scale and interoperability of the equipment
- Create regulatory certainty for users, regulators and industry in utilizing spectrum

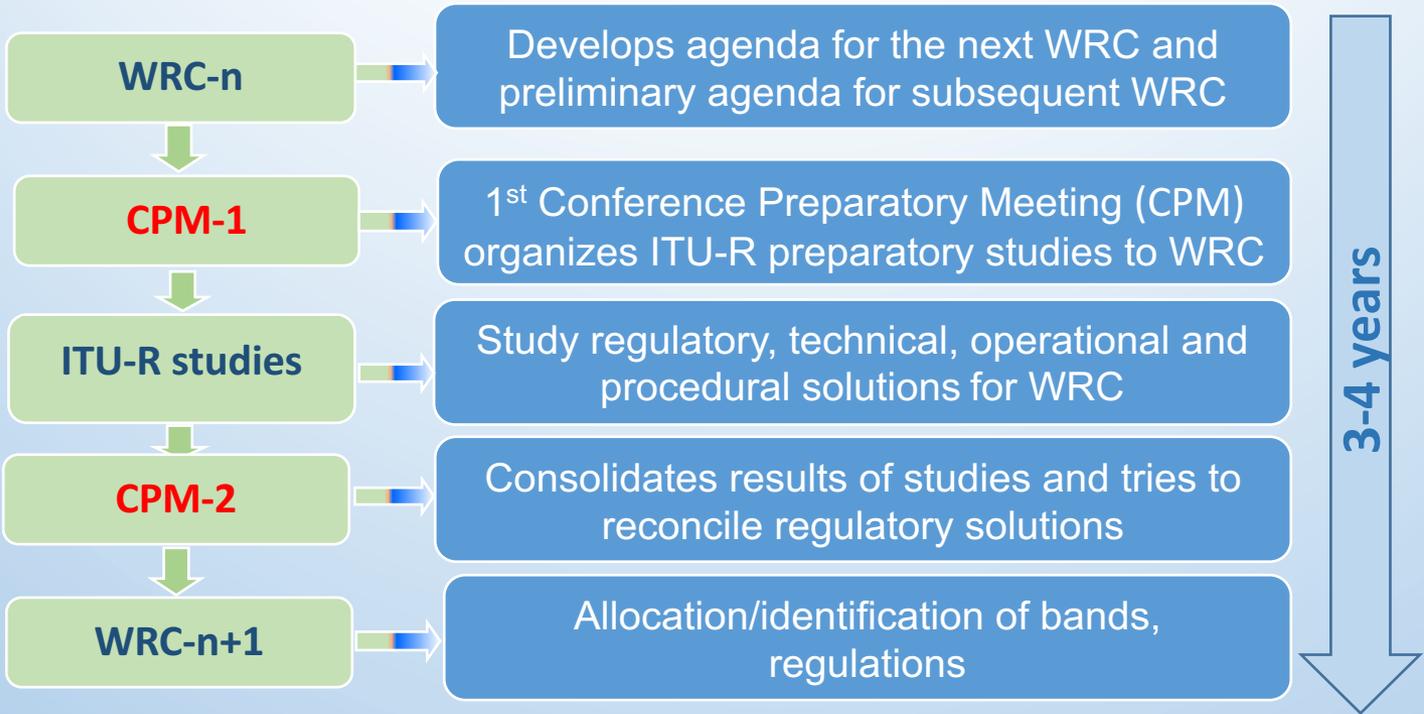
WRC

Main roles:

- To revise the Radio Regulations, **an international treaty** which is ratified by the ITU Member States and is mandatory for applications
 - Spectrum allocation
 - Frequency assignment and allotment Plans
 - Procedures of Coordination and Notification
 - Resolutions
 - Administrative and operational procedures
- To address any radiocommunication matter with worldwide nature, e.g. major cases of interference which cannot be solved by BR , RRB
- To determine questions for future study under the future WRCs' Agenda Items



WRC cycle





International level



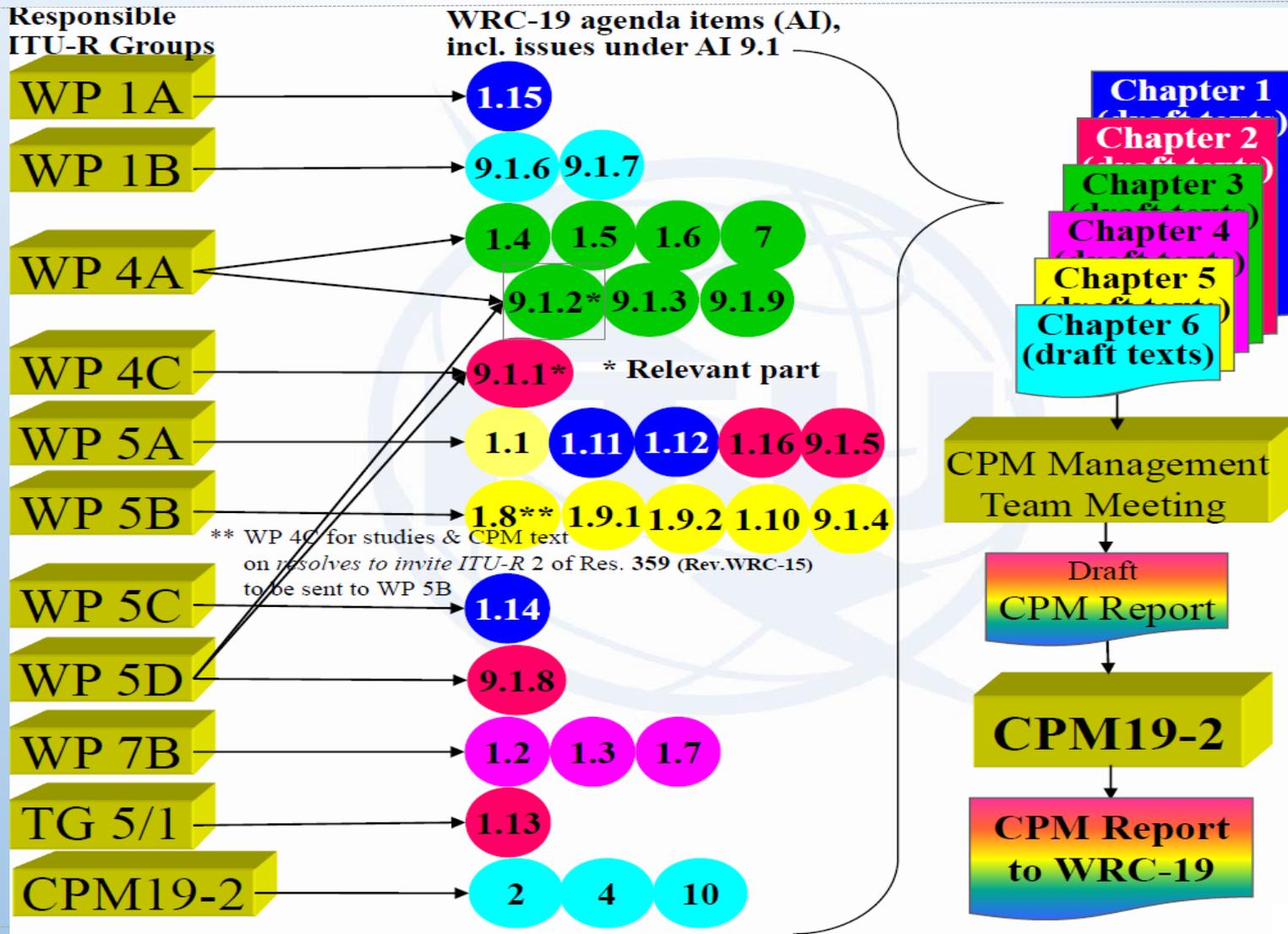
➤ **CPM-1:** immediately after WRC

- ✓ Organize preparations
- ✓ Open studies
- ✓ No more than two days

➤ **CPM-2:** at least 8 months before WRC

- ✓ Try to reconcile regulatory solutions
- ✓ Prepare the Final Report for the next WRC
- ✓ Ensure publication of the Final Report at least six months before the next WRC
- ✓ Not exceeding two weeks

ITU-R studies of WRC-19 Agenda Items





Chapters of the Report

- Chapter 1 - Land mobile and fixed services -Ms K. ZHU (CHN)
- Chapter 2 - Broadband applications in mobile service -Mr J Arias Franco (MEX)
- Chapter 3 - Satellite services – Mr N. Varlamov (RUS)
- Chapter 4 - Science services – Mr V. Meens (F)
- **Chapter 5 - Maritime, aeronautical and amateur services - Mr El Sayed (EGY)**
- Chapter 6 - General issues – Mr P.N. Ngige (KEN)

Structure of texts

- Executive summary
- Background
- Summary and analysis of ITU-R studies
- Methods to satisfy Agenda Item
- Regulatory and procedural considerations

Final CPM Report to WRC-19



- the draft CPM Report developed by the responsible groups, e.g. ITU-R WP 5B is the responsible group of Agenda Item 1.10
- Contributions from ITU-R memberships
- ICAO position is submitted as an informational document, but it has a great impact on the discussions of aeronautical service AIs.

*Up-to-date information online at: <http://www.itu.int/en/ITU-R/study-groups/rcpm/Pages/wrc-19-studies.aspx>

ITU-R study status of WRC-19 AIs

<http://www.itu.int/go/rcpm-wrc-19-studies>

ITU-R Preparatory Studies for WRC-19

YOU ARE HERE [HOME](#) > [ITU-R](#) > [STUDY GROUPS](#) > [CPM](#) > [ITU-R PREPARATORY STUDIES FOR WRC-19](#)

SHARE    

Resolution 809 (WRC-15) contains the WRC-19 agenda.

WRC-19 agenda Item (Chapter)	Issue	WRC Resolution (*)	Responsible Group(s)	Information from Responsible Group(s) 
1		-	-	-
1.1 (5)		Res. 658 (WRC-15)	WP 5A	Doc. 5A/169 Sections 3.3 & 4 and Annexes 4 (c), 5 (b) & 14 Doc. 5A/298 Annex 15
1.2 (4)		Res. 765 (WRC-15)	WP 7B	Doc. 7B/170 Section 3.3.1 and Annexes 1 (c), 2 (b), & 18
1.3 (4)		Res. 766 (WRC-15)	WP 7B	Doc. 7B/170 Section 3.3.2 and Annexes 3 (c), 4 (b), & 19
1.4 (3)		Res. 557 (WRC-15)	WP 4A	Doc. 4A/364 Section 4.1.1 and Annexes 7, 29 (b) and 30 (c)
1.5 (3)		Res. 158 (WRC-15)	WP 4A	Doc. 4A/364 Section 4.1.2 and Annexes 8 to 11, 19, 31 (b) & 32 (c)
1.6 (3)		Res. 159 (WRC-15)	WP 4A	Doc. 4A/364 Section 4.1.3 and Annexes 5, 12, 13, 33 (b) & 34 (c)
1.7 (4)		Res. 659 (WRC-15)	WP 7B	Doc. 7B/170 Section 3.1.6 and Annexes 5 (c), 6 (b), 7, 8, 9 & 20
1.8 (5)		Res. 359 (Rev.WRC-15)	WP 5B (1)	Doc. 5B/305 Sections 2.1.1 & 3.3.1.2 and Annexes 1 (c) & 2 (b) Doc. 4C/192 Sections 3.2.3 & 4.2 and Annexes 14, 15 (c), 17
1.9 / 1.9.1 (5)		Res. 362 (WRC-15)	WP 5B	Doc. 5B/305 Sections 2.1.1 & 3.3.1.3 and Annexes 3 (c), 5 (b), 22 & 23
1.9 / 1.9.2 (5)		Res. 360 (Rev. WRC-15)	WP 5B	Doc. 5B/305 Sections 2.1.1 & 3.3.1.4 and Annexes 5 (c), 6 (b) & 24
1.10 (5)		Res. 426 (WRC-15)	WP 5B	Doc. 5B/305 Sections 2.1.1 & 3.2.1.1 and Annex 7 (c) & 26

Agenda Item

WRC Resolution

ITU-R Responsible Group

Latest documents

Timetable towards WRC-19

Year	January – March	April – June	July – September	October – December
2018	TG 5/1 (4 th)	[TG 5/1 (5 th)]	[TG 5/1 (6 th)]	
	WP 5D (7 th)	[WPs 7B & 7C (5 th)]		[WPs 7B & 7C (6 th)]
	WP 4C+WP 4A (5 th)	[WPs 5A, 5B & 5C (5 th)]		[WP 5D (9 th)]
	RAG (25 th)	[WPs 1A & 1B (5 th)]		[WPs 5A, 5B & 5C (6 th)]
		[WP 5D (8 th)]		[WS on WRC-19]
		[WP 4C+WP 4A (6 th)]		CPM-19 Manag ^{nt} Team
2019	CPM19-2	[Last meetings of the Responsible Groups]		RA-19 WRC-19
			[WS on WRC-19]	

RA-19 and WRC-19 will take place in Sharm el-Sheikh by consulting ITU Member States.



Regional level

WRC Regional Preparation



•3rd APG-19: [12-16 March 2018, Australia]

Asia Pacific Telecommunity



•3rd ASMG: [tbd 2018]

Arab Spectrum Management Group



•3rd APM-19: [17-21 Sep. 2018, venue tbd]

African Telecommunications Union



•5th CPG-19: 8-11 Jan.2018, Budapest, Hungary

European Conference of Postal and Telecommunications Administrations



•30th PCC.II: 27 Nov.-1 Dec. 2017, Barranquilla, CLM

Inter-American Telecommunication Commission



•5th RCC WG: [tbd 2018]

Regional Commonwealth in the field of Communications

ITU Inter-regional Workshop on WRC-19 Preparation



1st Workshop on 21- 22 Nov. 2017, was held halfway through the preparatory cycle

-Presentation and review of the on-going preparatory studies of the ITU-R responsible groups for CPM-19

-Presentation of the organization, preliminary views, draft priorities and positions of the regional groups & the preliminary positions from international organizations like ICAO, IMO, WMO

2nd Work shop [21-23 Nov. 2018], to be scheduled few months prior to CPM19-2

-Presentation of the Draft CPM Report to WRC-19 (explanation of the draft Methods to satisfy the WRC-19 agenda items)

-Presentation and review of the regional groups' draft views, positions and common proposals & the draft positions from international organizations like ICAO, IMO, WMO

3rd Workshop [Q3 2019], To be scheduled few months prior to WRC-19

-Presentation of the finalized CPM & Dir. Reports to WRC-19

-Presentation and review of the regional groups' draft views, positions and common proposals & the draft positions from international organizations like ICAO, IMO, WMO



Proposals to WRC-19

- Discussions and decisions of WRC are based on the following documents:
 - ✓ Contributions from the ITU Member States: multi-countries proposals or individual country proposal.
 - ✓ Regional Common proposals of Regional Groups and groups of countries
- The following documents are taken into account into WRC discussions:
 - ✓ CPM Report - a reference document with technical basis for WRC-19 (3 years of studies);
 - ✓ Positions of the main UN partners, i.e. ICAO, IMO, WMO – informational but extremely important documents.



WRC-19 challenges

- WRC-19 will consider virtually all radiocommunication services.
- The main focus will be on broadband technologies provided by different platforms, e.g. GSO space, NGSO, IMT, HAPS, WiFi, etc.
- Several technologies target the same bands -> need for studies between them

1.6 – NGSO FSS Res. 159 (WRC-15)	1.13 – IMT Res. 238 (WRC-15)	1.14 – HAPS Res. 160 (WRC-15)	9.1 (9.1.9) – FSS Res. 162 (WRC-15)
	24.25-27.5	24.25-27.5 (Reg. 2)	
37.5-39.5 (s-E*)	37-40.5	38-39.5 (globally)	
39.5-42.5 (s-E*)	40.5-42.5		
47.2-50.2 (E-s*)	47.2-50.2		
50.4-51.4 (E-s*)	50.4-52.6		51.4-52.4 (E-s*)
* E-s: Earth-to-space; s-E: space-to-Earth.			

- ICAO has 2 principle aeronautical AIs and has several other to follow and ensure protection



- WRC-19 preparations are made at 3 levels
- ✓ **National:** the starting point in WRCs process of the country
- ✓ **Regional:** the position is further developed taking into account of interest of other countries
- ✓ **International:** ITU and stakeholders



***Thank you
for your attention!***

Q&A