



Radiocommunication Bureau (BR)

Administrative Circular **CA/234**

24 May 2017

To Administrations of Member States of the ITU, Radiocommunication Sector Members, ITU-R Associates and ITU Academia

Subject: Second Seminar of the International Telecommunication Union (ITU) and the World Meteorological Organization (WMO) "Use of Radio Spectrum for Meteorology: Weather, Water and Climate Monitoring and Prediction", 23-24 October, 2017, ITU, Geneva, Switzerland

1 Introduction

Following the success of the first ITU/WMO joint seminar in 2009, I am pleased to invite you to participate in our second seminar "Use of Radio Spectrum for Meteorology: Weather, Water and Climate Monitoring and Prediction", scheduled to take place in the ITU Headquarters in Geneva from 23 to 24 October 2017. The registration desk is located in the entrance of the ITU Montbrillant (M) building at 2 rue de Varembé, Geneva. A provisional programme is attached for your information.

This seminar is organized by ITU and WMO with the objective of providing information on the use and further development of radio-based space and terrestrial systems and applications employed for weather, water and climate monitoring and relevant radio-frequency spectrum management activities. The seminar aims to increase awareness of national meteorological or hydrological services (NMHS) of the importance of meteorological related spectrum protection and the growing need for their participation in national and international spectrum management activities.

The seminar will provide spectrum managers and state telecom administrators with an overview of contemporary meteorological applications' use of radio spectrum and their future development and will illustrate the socio-economic importance of these services within the context of the SDGs. The seminar will also highlight a new edition of the WMO/ITU Handbook on the "Use of Radio Spectrum for Meteorology".

2 Programme of the seminar

Background information and the draft programme are presented in the Annex.

A webpage for participants is to be found at:

ITU Web page at: http://itu.int/go/ITU-R/sg7-itu-wmo-rsm-17

WMO Web page at: <u>http://wis.wmo.int/page=ITU-WMO2017</u>.

Further detailed information will be posted as soon as possible, together with a detailed programme and the presentations.

Points of contact:

in ITU	Mr. Vadim Nozdrin, Counsellor, ITU-R Study Groups Department, Radiocommunication Bureau
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	Tel: +41 22 730 60 16
in WMO	David Thomas, Chief, Information and Telecommunication System Division email: <u>dthomas@wmo.int</u>
	Tel: + 41 22 730 82 41

The seminar will be conducted in English only.

3 Participation/Visa requirements/Accommodation

Registration for ITU-R events is mandatory and carried out exclusively online through Designated Focal Points (DFPs). Each ITU-R Member has been requested to designate a DFP responsible for the handling of all registration formalities, including visa support requests that should also be submitted by the DFP during the on-line registration process. Individuals wishing to be registered for an ITU-R event should directly contact the DFP for their entity. The list of ITU-R DFPs (TIES protected) as well as detailed information on event registration, visa support requirements, hotel accommodation, etc. can be found at:

www.itu.int/en/ITU-R/information/events

For WMO National Meteorological and Hydrological Services (NMHS) registration please contact David Thomas (see above).

4 Fellowships

Recognizing the difficulties faced by low income countries, the ITU offers one partial fellowship per eligible country, with priority given to requests coming from least developed countries (LDCs). The procedure for requesting fellowships is as follows:

http://www.itu.int/en/ITU-R/information/events/Pages/Fellowships.aspx

F ellowships should be requested by designated focal points during the online registration process (see above) and must be submitted before **10 September 2017.** Accommodation will be arranged and paid for by the ITU.

François Rancy Director

Distribution:

- Administrations of Member States of the ITU
- Radiocommunication Sector Members
- ITU Academia
- Chairmen and Vice-Chairmen of Radiocommunication Study Groups
- Chairman and Vice-Chairmen of the Radiocommunication Advisory Group
- Chairman and Vice-Chairmen of the Conference Preparatory Meeting
- Members of the Radio Regulations Board
- Secretary-General of the ITU, Director of the Telecommunication Standardization Bureau, Director of the Telecommunication Development Bureau
- Secretary-General of the WMO
- Secretariat Director of the Intergovernmental Group on Earth Observations (GEO)
- Director of the UNOOSA

ANNEX

Background paper

The recent worldwide economic crisis shows the crucial role of efficient and productive use of limited natural resources, such as biomass, biosphere, mineral resources, and water to stimulate sustainable economic development. Climate change has been labelled as the "defining challenge of our time". Its impact is already evident and will intensify over time if left unaddressed. There is overwhelming scientific evidence, that climate change will threaten economic growth, long-term prosperity and social welfare of practically all countries, as well as the very survival of the most vulnerable populations.

ICTs and radiocommunications in particular are essential tools in the combat against climate change. Areas foreseen in this context include: continued observations and long-term monitoring of solar activity to improve our knowledge and understanding of the influence of the electromagnetic radiation from the sun on Earth's environment, including climate; continued observations to characterize changes in the atmosphere, oceans, and land surface, and the use of such information for climate change modelling; and continued observations of the change in the ozone layer and its effects on the environment and human health. Land cover change assessment and understanding of its dynamics are recognized as essential requirements for sustainable management of natural resources, environmental protection, food security, climate change and humanitarian programmes. Terrestrial and satellite radiocommunication systems contribute to the monitoring of carbon emissions, the changing of ice in polar caps and glaciers, and temperature changes.

For more than 140 years, starting with the International Telegraph Union and the International Meteorological Organization in the late 1800s, to respectively become the ITU and WMO in the 1950s, there has been fruitful collaboration and partnership between the global meteorological and telecommunication agencies. Whilst WMO focuses its efforts on meeting the needs for environmental information and the corresponding radio frequency spectrum for standardized weather, climate and hydrological applications, ITU, as international steward of the radio spectrum, allocates the necessary radio frequencies to allow the interference-free operation of radio-based applications and radiocommunication systems (terrestrial and space) used for climate monitoring and prediction, weather forecasting and disaster early warning and detection.

Successive ITU World Radiocommunication Conferences have taken into account the needs of WMO to ensure the availability and protection of radio-frequency bands for such atmospheric and other environmental observation tools as radiosondes, weather and wind profiler radars and spaceborne infrared and microwave sounders.

Draft Programme

Time	Subject	
23 October 2017		
9.30-10.00	Opening	
	ITU	
	WMO	
10.30-12.00	ITU - international spectrum management system	
	Main principles of spectrum management:	
	WRC, ITU-R activities, RR, registration principles, ITU-R Study groups	
	ITU-R SG 7 activities	
14.00-15.30	WMO - Integrated global observing system, societal economic value	
	Essential role of radio frequencies	
16.00-17.30	Meteorological satellite	
	Data collection platforms	
	Modern applications outlook	
	24 October 2017	
09.00-10.30	Active and passive sensing	
	Future development	
11.00-12.30	Meteorological radars	
	Current threats	
	Future development	
14.00-15.30	Met aids	
	Lightning	
	Radiosondes	
	Space weather	
16.00-17.30	World Radiocommunication Conference 2019 and 2023 issues	
17.30-18.00	Closing	