WEATHER CLIMATE WATER
TEMPS CLIMAT EAU

WMO OMM
World Meteorological Organization
Organisation météorologique mondiale
Organización Meteorológica Mundial
Всемирная метеорологическая организация
المنظمة العالمية للأرصاد الجوية
世界气象组织

1950-2025 SCIENCE for ACTION

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Our ref.: 03970/2025/I/SSU/RFC 16 May 2025

Subject: Preliminary 2026 edition of the WMO/ITU Handbook "Use of Radio Spectrum for Meteorology: Weather, Climate, Water and related Environmental Applications" (WMO-No. 1197)

Action required: To review the revised WMO/ITU Handbook and submit your feedback to the WMO Secretariat by **15 August 2025**

Dear Sir/Madam,

I am pleased to inform you that the revised edition of the WMO/International Telecommunication Union (ITU) Handbook, entitled "*Use of Radio Spectrum for Meteorology: Weather, Climate, Water and related Environmental Applications*" (formerly titled *Handbook on Use of Radio Spectrum for Meteorology: Weather, Water and Climate Monitoring and Prediction* (WMO-No. 1197)) has been jointly developed by experts of the WMO Expert Team on Radio-Frequency Coordination (ET-RFC) of the Commission for Observation, Infrastructure and Information Systems (INFCOM), and the Working Party 7C (WP 7C) - Remote sensing systems under the Radiocommunication Sector of the International Telecommunication Union (ITU-R) Study Group 7 (Science Services).

The handbook provides comprehensive technical and operational information on current observation applications and systems and on the use of radio frequencies by meteorological systems, including meteorological satellites, radiosondes, weather radars, wind-profiler radars and spaceborne remote sensing instruments. It is intended for the meteorological (i.e. weather, climate, water and related environmental applications) and radiocommunication communities, including governmental institutions, industry as well as the general public.

The handbook presents the overall structure of the WMO global infrastructure and its observing components as well as an overview and discussion of each meteorological and related environmental system's technical and operational characteristics. The description of each meteorological system includes: the radio-frequency bands used, the criteria for predicting harmful interference from competing radiocommunication systems; and the potential impact of harmful interference on weather, climate, water, and related environmental data, forecasts and warnings.

To assist in understanding this complex area, discussions have been divided into the following types of systems:

1. WMO global infrastructure;
2. Meteorological satellite service systems;

To: Permanent Representatives of Members of WMO

cc: National Focal Points on Radio Frequency matters
Mr Michel Jean, President of INFCOM
Ms Estelle Grueter, SC-ON Chair

3. Meteorological aids service systems, mainly radiosondes;

4. Ground-based meteorological radars, including weather radars and wind-profiler radars;

5. Passive and active spaceborne remote sensing for meteorological and related environmental activities;

6. Space weather sensor systems;

7. Other radiocommunication systems for meteorological and related environmental activities.

In this context, I should be grateful if you could examine the text of the preliminary 2026 edition of the WMO/ITU Handbook *Use of Radio Spectrum for Meteorology: Weather, Climate, Water and related Environmental Applications* and send your comments or suggestions to the WMO Secretariat (Mr Jesse Andries, jandries@wmo.int, and Ms Zoya Andreeva, zandreeva@wmo.int) at your earliest convenience, but not later than **15 August 2025**.

You are also encouraged to share this request with other relevant national institutions involved in various WMO Earth system disciplines, including weather, climate, hydrology, atmospheric composition, cryosphere, ocean, and space weather, so they may contribute to the review process. Your feedback will be instrumental in finalizing the 2026 edition, which is scheduled for submission to the ITU-R Working Party 7C in September 2025 and will subsequently be reviewed for adoption by the ITU-R Study Group in April 2026. Once adopted, the publication will be translated into all official United Nations languages.

I would like to take this opportunity to express my sincere appreciation to you and your service for your continued and valuable contributions to the work of the World Meteorological Organization.

Yours faithfully,

Ms Ko Barrett
for the Secretary-General