## Recommendation 2.4(2)/1 (CBS-Ext.(2014))

## Radio Frequencies for Meteorological and Related Environmental Activities

THE COMMISSION FOR BASIC SYSTEMS,

**Recalling:**

(1) Resolution 4 (Cg-XV) – Radio Frequencies for Meteorological and Related Environmental Activities,

(2) Resolution 11 (EC-64) – Radio Frequencies for Meteorological and Related Environmental Activities,

(3) Resolution 9 (EC-65) – Preserving the radio-frequency spectrum for meteorological and related environmental activities at the World Radiocommunication Conference 2015,

**Noting:**

(1) EC-66 agreed to keep as a priority issue Resolution 9 (EC-65),

(2) That the WMO observing systems comprise a wide number of different radio-based systems/applications operating in different radio services on a global and regional basis,

(3) That the World Radiocommunication Conference of the International Telecommunication Union (ITU) is the decision-making forum for the regular review and revision of the Radio Regulations – an international treaty related to setting radio-frequency allocations and regulatory provisions applied to all global and regional radio services,

**Considering:**

(1) The increasing demand for meteorological and environmental data used by National Meteorological and Hydrological Services (NMHS) in weather forecasting, climate monitoring, protection of the environment, and detection and mitigation of negative effects of disasters,

(2) The important role of radio-based meteorological and environmental monitoring systems/applications in obtaining and disseminating meteorological data,

(3) The crucial importance of the allocation of radio frequency bands employed by space-based and surface-based WMO observing systems and the need for their protection from harmful interference,

**Recommends** that Resolution 4 (Cg-XV) be updated to reflect the continued importance of radio frequency coordination in the seventeenth financial period. A sample draft Resolution for consideration by the Seventeenth WMO Congress (Cg-17) based on Resolution 4 (Cg-XV) is provided in the Annex to this recommendation.

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### Annex to draft Recommendation 2.4(2)/1 (CBS-Ext.(2014)) - DRAFT REVISION OF RESOLUTION 4 (Cg-XV)

RESOLUTION ~~4~~X (Cg-17)

**RADIO FREQUENCIES FOR METEOROLOGICAL AND RELATED  
 ENVIRONMENTAL ACTIVITIES**

THE CONGRESS,

**Noting:**

1. The WMO Strategic and Operating Plans ~~and the United Nations Millennium Development Goals~~,
2. Resolution ~~3~~4 (Cg-X~~I~~V) – Radio-frequencies for meteorological and related environmental activities,
3. The current radio frequency allocations and regulatory provisions related to the meteorological aids, meteorological satellite, Earth exploration-satellite and radiolocation (weather and wind profiler radars) services in the Radio Regulations of ITU,
4. The outcome of the ITU World Radiocommunication Conferences (WRC)~~, especially WRC-2000 and WRC-03~~,
5. The agenda of the forthcoming ITU World Radiocommunication Conferences ~~(WRC 0715)~~ and related WMO positions submitted during the ITU preparatory process,

**Considering:**

1. The prime importance of the specific radiocommunication services for meteorological and related environmental activities required for the prevention, detection, early warning and mitigation of natural and technological (man-made) disasters, the safety of life and property, the protection of the environment, climate change studies and scientific research,
2. The importance of information provided by the Earth-exploration systems including meteorological systems for a wide range of economic activities such as agriculture, transportation, construction, tourism, etc,
3. The crucial importance of the allocation of suitable radio frequency bands for the operation of surface-based meteorological observing systems, including in particular radiosondes, weather radars, wind profiler radars,
4. The crucial importance of the allocation of suitable radio-frequency bands for the operation of Meteorological and R&D satellites, including remote sensing, data collection and data distribution links,

**Stressing** that some radio-frequency bands are a unique natural resource due to their special characteristics and natural radiation enabling spaceborne passive sensing of the atmosphere and the Earth surface, that deserve adequate allocation to the Earth exploration satellite service (passive) and absolute protection from interference,

**Expresses** its serious concern at the continuing threat to several frequency bands allocated to the meteorological aids, meteorological satellite, Earth exploration-satellite and radiolocation (weather and wind profiler radars) services posed by the development of other radiocommunication services,

**Requests** the Commission for Basic Systems to pursue the continuous review of regulatory and technical matters related to radio frequencies for operational and research meteorological and related environmental activities, and preparation of guidance and information for NMHSs, in coordination with other technical commissions, especially CIMO, and in liaison with other relevant international bodies, in particular the Coordination Group for Meteorological Satellites;

**Urges** all Members to do their utmost to ensure the availability and protection of suitable radio frequency bands required for meteorological and related environmental operations and research, and in particular:

1. To ensure that their national radiocommunication administrations are fully aware of the importance of and requirements for radio frequencies for meteorological and related activities, and to seek their support in the ITU World Radiocommunication Conferences and Radiocommunication Sector activities;
2. To participate actively in the national, regional and international activities on relevant radiocommunication regulatory issues and, in particular, to involve experts from their Services in the work of relevant regional radiocommunication organizations and of ITU-R, especially ITU-R Study Group 7 on Science Services;
3. To register adequately with their national radiocommunication administrations all radiocommunication stations and radio frequencies used for meteorological and related environmental operations and research;

**Appeals** to ITU and its Member Administrations:

1. To ensure the availability and absolute protection of the radio-frequency bands which, due to their special physical characteristics, are a unique natural resource for spaceborne passive sensing of the atmosphere and the Earth surface~~; in this regard, the exclusive 23.6–24 GHz passive band that is associated with a water vapour absorption line is~~ and are of crucial importance for weather, water and climate research and operations;
2. To give due consideration to the WMO requirements for radio frequency allocations and regulatory provisions for meteorological and related environmental operations and research;
3. To pay special attention to the WMO positions related to WRC~~-07~~ agenda, in the light of Appeals (1) and (2) above;

**Requests** the Secretary-General:

1. To bring this resolution to the attention of all concerned, including the International Telecommunication Union;
2. To pursue as a matter of high priority the coordination role of the Secretariat in radio frequency matters, especially with ITU-R, including participation of WMO in ITU-R Radiocommunication Study Groups, conference preparatory meetings and World Radiocommunication Conferences;
3. To facilitate the coordination between National Meteorological and Hydrological Services and their national radiocommunication administrations, particularly in preparing the ITU World Radiocommunication conferences, by providing appropriate information and documentation;
4. To assist the Commission for Basic Systems in the implementation of this resolution.

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NOTE: This resolution replaces Resolution 4(Cg-X~~I~~V), which is no longer in force