



Our ref.: 27883/2018/OBS/WIS/WRC-19

26 October 2018

Subject: WMO preparation and coordination of the World Radiocommunications Conference in 2019 (WRC-19)

Action required: National regulation authority to explain the high importance of frequency bands operated for Earth observation and the essential needs for their long term protection

Dear Sir/Madam,

I wish to inform you that many agenda items of the forthcoming World Radiocommunications Conference in 2019 (WRC-19) are of prime interests for meteorological and scientific communities. For information, you will find the preliminary WMO positions related to the agenda items of WRC-19, of particular interest for WMO, elaborated by the WMO Steering Group on Radiofrequency Coordination (SG-RFC) at <http://wis.wmo.int/file=3379>.

Among these WRC-19 agenda items, the most critical is the one related to the consideration of possible new spectrum allocations suitable for the future development of International Mobile Telecommunications (IMT) in the frequency range between 24.25 GHz and 86 GHz.

As far as Earth exploration satellite service (EESS) (passive) is concerned, all International Telecommunication Union Radiocommunication Sector (ITU-R) studies, in all frequency bands and in particular in the 23.6-24 GHz frequency band, show that the current specifications for IMT are largely insufficient to comply with the required unwanted emission limits to ensure protection of EESS (passive) sensors. Despite these results, some administrations proposed, during the last ITU-R meeting dealing with the preparation of WRC-19, not to impose any limit to IMT unwanted emissions falling in the EESS (passive) frequency band.

This option is a potential high risk on the future operation of all Earth observation satellites in the 23.6-24 GHz.

Final discussions before WRC-19 will be held during the conference preparatory meeting (CPM) scheduled in February 2019 where the final CPM report to WRC-19 will be approved. In order to avoid losing the usage of the 23.6-24 GHz in a near future, frequency bands which cannot be replaced by other part of microwave spectrum due to their physical and radiation characteristics, it is crucial to reflect our concerns to your respective national regulation authority in order to obtain firstly the withdrawal of this option in the CPM report and secondly the most appropriate level value of the IMT out of band emission to ensure the full protection of EESS passive in the 23,6-24 GHz at WRC-19.

To: Permanent Representatives (or Directors of Meteorological or Hydrometeorological Services) of Members of WMO

cc: President of Technical Commissions
Secretary-General of ITU


I should be grateful if you could contact your national spectrum regulator to ensure they understand the importance of passive sensing operations, in all frequency bands used, to your country's meteorological operations. In particular, national regulators need to understand that while passive sensors are operated by a limited number of meteorological satellite operators, all countries benefit from the data since it is distributed globally for numerical weather prediction.

I also encourage you to take the opportunity of this exchange with your national regulation authority to present the WMO preliminary position for all WRC-19 agenda items of prime interest for our community.

To succeed on these issues, your action is of the most importance.

I would like to express my appreciation for your continued support in promoting the Programmes and activities of WMO.

Yours faithfully,



(W. Zhang)

for the Secretary-General