



# Coordination between National Meteorological and Hydrological Services and National Radiocommunication Administrations/Regulators

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# Overview of Presentation

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# Introduction



# Introduction

Reliable access to the radio frequencies that are essential to operational meteorology and the monitoring of climate change is being threatened as the spectrum demands for new and existing applications increase.

National regulators are becoming under increasing pressure to provide spectrum to meet these new demands and to maximise the revenue obtained by using the spectrum.



# Introduction

The Meteorological and Hydrological services must therefore ensure that their national regulator takes their interests fully into account when determining spectrum management policy

The following is a summary of what the UK Met Office has done to try to ensure that this happens



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Background



# Background

Regulation of the use of the spectrum is carried out:

- Internationally through the ITU
- Regionally through organisations such as the CEPT in Europe, CITELE in the Americas and APT in Asia-Pacific
- Nationally through each country's Radio Regulator



# Background

Increasingly, decisions on positions to be adopted on major spectrum management issues are being made at a regional level

This can be a determining factor that affects the outcomes of the World Radiocommunications Conferences (WRCs)

National Regulators determine the spectrum management policies regionally and internationally

WMO and other organisations such as EUMETSAT and GEO can only try to persuade regulators at all levels - when permitted – they have no ‘vote’.





# Actions that should be taken by National Meteorological Services



# Actions

To help ensure that access to the spectrum for meteorological purposes is maintained it is essential that:

- The national regulator is aware of:
  - The spectrum that is used by the meteorological services
  - The value of the data and products that are obtained through the use of this spectrum to their economies and population
  - The consequences of failing to protect that spectrum
- The national meteorological service itself is also aware of the spectrum that it uses, including indirect usage in order to ensure that it is able to inform its national regulator.



# Actions

To try to achieve this is in the UK the Met Office has:

- Ensured that its senior management is aware of the importance of spectrum to its activities
- Created a Spectrum Manager role and post
- Resourced the person in that role:
  - Time (60% rising to 100%),
  - Travel costs etc)
- Identified that person as the principal contact point internally and externally for spectrum issues



# Actions

- Identified experts within the Met Office to assist the Spectrum Manager in specific areas –passive sensing, radar etc.
- Identified all the spectrum it uses, both directly and indirectly, and has informed the national regulator (Ofcom) and other Government departments that are involved in spectrum management of this.
- Holds regular liaison meetings with its Regulator (Ofcom) to discuss spectrum issues and to demonstrate the use and value of the spectrum it uses – and the consequences of failing to protect it.



# Actions

## The Met Office:

- Has carried out impact studies and produced reports to back up its position on issues
- Is an active member of and attends meetings of all relevant national Regulator and Government spectrum management groups.
- Liaises with other UK organisations which have common spectrum interests
- Is an active member of and attends meetings of WMO, EUMETNET and GEO spectrum management groups.
- Attends relevant European and ITU groups as a member of the UK Delegation
- Ensures that appropriate responses are provided to the national Regulator's public consultations.



Met Office



# Summary



# Summary

It is important that ALL national meteorological and hydrological services engage with their local regulators to help ensure that the Regulators support meteorological use of the spectrum nationally, regionally and internationally.

The national meteorological services cannot assume that their interests will be secured by relying on the active involvement of only a limited number of Meteorological and Hydrological services.



# Summary

WMO SG-RFC can provide some assistance to Services in their interaction with their national regulators.

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# Questions and answers



# Background

The main frequencies involved are those used for:

- Passive and Active Remote Sensing
- Weather Radar and Wind Profilers
- Radiosondes, Dropsondes
- Lightning Detection
- Downlink & uplink to/from meteorological and some EESS satellites
- Operational control of meteorological satellites
- Dissemination of meteorological data and products