WMO Activities for the Global Exchange of Radar Data

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WMO has long regarded weather radar as an advanced and valuable observing system supporting the World Weather Watch Programme and many meteorological and other applications protecting lives and property affected by local severe weather phenomena. The WMO Commission for Basic Systems (CBS), Open Programme Area Group on Integrated Observing Systems (OPAG-IOS), Expert Team on Surface Based Observations (ET-SBO) has the responsibility to address weather radar operations and data exchange globally. One of the tasks of ET-SBO is to revisit and update WMO regulatory material on the Global Observing System (GOS).

In April 2013, a workshop was held in Exeter, United Kingdom, on weather radar data exchange, with 18 participants from around the world. The main driver was an emerging and increasingly urgent need to address requirements from Numerical Weather Prediction (NWP), hydrological and climate applications for wider international exchange of weather radar data and information. At the workshop, current and future requirements for various applications were collated, along with examples of how radar data are being used today in NWP. A global inventory of radar data exchange was initiated. Overall, it was made clear that meteorological data users and application areas would derive significant benefit from a wider and internationally standardized approach to radar data exchange and data management and availability. The workshop identified possible new pilot projects or studies as a way of promoting, furthering and improving international and regional exchange of weather radar data.

ET-SBO has also created a Task Team on Weather Radar Data Exchange (TT-WRDE) with the aim of continuing the activities initiated through the workshop. TT-WRDE is organized to coordinate, develop and finalize agreed and approved standards for the international exchange of weather radar data, considering the great progress achieved by EUMETNET OPERA and other WMO Members in harmonizing operationally, real-time exchanged weather radar data.