CGMS-XXXIV WMO WP-30 Prepared by WMO Agenda item: D.1

## COOPERATION ON RADIO-OCCULTATION GROUND SEGMENT

(Submitted by WMO)

## **Summary and Purpose of Document**

Following recommendation S12 of the Implementation Plan for Evolution of Space and Surface Sub-systems of the GOS approved by CBS, it is suggested to explore opportunities for cooperation among CGMS Members to share ground facilities in support of radio-occultation missions.

It is proposed to establish a Task Force of CGMS Members, involving if appropriate other entities having interest in Radio-Occultation missions, to explore possibilities in this respect and report to CGMS XXXV with proposals for cooperation.

## DISCUSSION

- 1. Following recommendation S12 of the Implementation Plan for Evolution of Space and Surface Sub-systems of the GOS approved by CBS, (See CGMS XXXIV/WMO WP-06, Appendix), it is suggested to explore opportunities for cooperation among CGMS Members to share ground facilities in support of radio-occultation missions.
- 2. Recommendation S12 states: "The opportunities for a constellation of radio occultation sounders should be explored and operational implementation planned. *International sharing of ground support network systems (necessary for accurate positioning in real time) should be achieved to minimize development and running costs."*
- 3. It is proposed to establish a Task Force of CGMS Members, involving if appropriate other entities having interest in Radio-Occultation missions, with the following objectives:
  - to analyze the ground facilities needed for GPS radio-occultation missions;
  - to assess to what extent there are commonalities among these missions and scope for sharing some facilities (e.g. precise time-referencing needed for accurate signal processing);
  - to identify the practical implications of sharing such facilities; and,
  - to report to CGMS-XXXV with proposals for cooperation.