

## OPINION ITU-R 22-7\*

**Routine ionospheric sounding**

(1966-1970-1974-1978-1986-1990-1999-2006)

The ITU Radiocommunication Assembly,

*considering*

- a) that the routine observations from the existing ground-based ionosonde network together with satellite and oblique sounding programmes provide the bases for continuing improvements in both long- and short-term ionospheric predictions;
- b) that the prediction of channel characteristics for digital HF communication and broadcasting requires knowledge of frequency and time spread on oblique ionospheric paths;
- c) that the increasing importance of space research and Earth-space communications will require continued collection of such information, derived as a matter of routine, together with possible increases and changes in the quantity and nature of the information;
- d) that the International Union for Radio Science (URSI) Commission G has an Ionosonde Network Advisory Group (INAG) which is responsible for advising ionospheric sounding stations on scientific questions and for advising URSI on questions concerning the network as a whole,

*is of the opinion*

that administrations should make every effort:

- 1 to continue the operation of the ionosonde network, for both vertical and oblique incidence sounding, and the interchange, preferably in digital form, of basic data, for which there is much demand, through the World Data Centres;
- 2 to make such data available in near-real-time via the internet;
- 3 to establish new ionosondes at, or transfer existing ionosondes to, places recommended by the ITU-R or to support the organizations responsible for new and relocated ionosondes;
- 4 to consult URSI (INAG) on all questions relating to the establishment or closure of stations in the ionosonde network and proposed changes in the programme of operation or analysis of the ionograms;
- 5 to support the work concerning the use of ionospheric data from satellite programmes and to explore the use of such data as are now available at the World Data Centres, for ionospheric predictions;
- 6 to include Doppler spread measurements in the ionospheric sounding programmes, especially at low and high latitudes.

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\* The Director of the Radiocommunication Bureau is requested to bring this Opinion to the attention of URSI, the International Union for Geodesy and Geophysics (IUGG), the Special Committee for Solar-Terrestrial Physics (SCOSTEP), the Scientific Committee for Antarctic Research (SCAR) and the Committee for Space Research (COSPAR).