

## RECOMMENDATION ITU-R TF.582-2

**TIME AND FREQUENCY REFERENCE SIGNAL DISSEMINATION  
AND COORDINATION USING SATELLITE METHODS**

(Question ITU-R 152-1/7)

(1982-1990-1998)

The ITU Radiocommunication Assembly,

*considering*

- a) that applications for time and frequency reference signals in such areas as navigation, communications and space exploration require time and frequency services with improved coverage, accuracy, and reliability of reception;
- b) that substantial improvements in existing terrestrial time and frequency dissemination and coordination services are, in many cases, technically or economically impractical;
- c) that, because of such limitations, some HF services are being eliminated;
- d) that experiments performed to date using satellite-based techniques for time and frequency dissemination and synchronization have demonstrated significantly improved accuracy, precision, coverage, reliability, and operational convenience;
- e) that the number of satellite systems and vehicles that are potentially available to carry time and frequency signals is increasing rapidly;
- f) that a number of satellite systems or techniques for time and frequency dissemination and coordination are available offering many opportunities for participation by time and frequency laboratories;
- g) that following the Declaration S1 (1989) the Consultative Committee for the Definition of the Second (CCDS) has established a working group to coordinate the use of two-way satellite links for precise and accurate time transfer,

*recommends*

- 1** that organizations interested in, or responsible for, time and frequency reference signal dissemination and coordination participate to the maximum extent possible in experiments to evaluate the relative merits of various satellite-based techniques for improved time and frequency transfer;
  - 2** that time and frequency laboratories establish on-site satellite receiving (and transmitting, if appropriate) capabilities to the maximum extent possible;
  - 3** that satellite-based techniques be given serious consideration in the development of any new time and frequency dissemination and/or coordination services.
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