

WAC/008(01.10.12)

IWG-1/009 (20.09.12)

Ms. Mindel De La Torre
Chief of the International Bureau
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Dear Ms. De La Torre:

The National Telecommunications and Information Administration (NTIA) on behalf of the Executive Branch agencies, approves the release of the attached Executive Branch preliminary views for WRC-15. The enclosed draft preliminary views address agenda items 1.3 (public protection and disaster relief), 1.5 (unmanned aircraft systems in the fixed-satellite service), 1.6.1 (fixed-satellite service allocations for region 1 uplink/downlink at 10-17 GHz), 1.6.2 (fixed-satellite service allocations for region 2 and 3 uplink/downlink at 13-17 GHz), 1.9.1 (fixed-satellite service allocations uplink/downlink in the 7-8 GHz range), 1.9.2 (maritime-mobile satellite service allocation in the 7-8 GHz range), 1.14 (coordinated universal time), 1.17 (wireless avionics intra-communications), and 1.18 (automotive radiolocation applications in the 77.5-78.0 GHz band).

These draft preliminary views consider the federal agency inputs toward the development of U.S. proposals for WRC-15. NTIA forwards this package for your consideration and review by your WRC-15 Advisory Committee. Dr. Darlene Drazenovich is the primary contact from my staff.

Sincerely,

(Original Signed September 14, 2012)

Karl B. Nebbia
Associate Administrator
Office of Spectrum Management

Enclosures

UNITED STATES OF AMERICA

DRAFT PRELIMINARY VIEWS FOR WRC-15

Agenda Item 1.14: to consider the feasibility of achieving a continuous reference time-scale, whether by the modification of coordinated universal time (UTC) or some other method, and take appropriate action, in accordance with Resolution **653 (WRC-12)**

BACKGROUND: Coordinated Universal Time (UTC) is the international standard time scale for practical timekeeping in the modern world. The basic unit of measurement is the internationally accepted Système International (SI) second, which is realized in practice by atomic clocks in national laboratories throughout the world. The Bureau International des Poids et Mesures uses clock information from these laboratories to coordinate the various national realizations of UTC. This process provides time with a stability of better than a billionth of a second per day for the international infrastructure that requires accurate timing information, such as communications, computer networks, navigation, and air traffic control. The Radio Regulations define UTC in No. **1.14** through incorporation by reference of Recommendation ITU-R TF.460-6.

The International Radio Consultative Committee (CCIR) formally adopted the system for UTC in Recommendation 374 in 1963. The CCIR introduced leap seconds into the definition of UTC beginning on January 1, 1972. In its Recommendation 460, the CCIR stated that UTC is a timescale that uses the SI second. The CCIR also stated the accounting of those seconds will be adjusted, when necessary, in 1 second steps to compensate for the slowing of the Earth's rotation rate. This version of the UTC system remains in use today, defined by ITU-R (formerly CCIR) Recommendation ITU-R TF.460-6, leap seconds have been inserted into UTC at irregular intervals because the slowing of the Earth's rotation rate is not uniform.

Much of our international infrastructure relies on steady, accurate timing. Many of these systems view leap seconds as disruptions of the count in the time stream. Resolution **653 (WRC-12)**, considering e, states "that the occasional insertion of leap seconds into UTC may create difficulties for systems and applications that depend on accurate timing." Given that our reliance on many of these systems and applications is both critical and growing with time, WRC-12 adopted agenda item 1.14 in order to consider the feasibility of achieving a continuous reference time-scale, whether by the modification of UTC or some other method.

U.S. VIEW: The United States supports the adoption of UTC without leap seconds as the solution for achieving a continuous reference time-scale for dissemination by radiocommunication systems if the studies, in accordance with Resolution **653 (WRC-12)**, support this as a viable solution.