|  |  |
| --- | --- |
| **World Radiocommunication Conference (WRC-15) Geneva, 2–27 November 2015** |  |
| **INTERNATIONAL TELECOMMUNICATION UNION** |  |
|  |  |
| PLENARY MEETING | **Revision 1 to**  **Addendum 14 to Document 8-E** |
|  | **9 October 2015** |
|  | **Original: Russian** |
|  | |
| Regional Commonwealth in the field of Communications Common Proposals | |
| Proposals for the work of the conference | |
|  | |
| Agenda item 1.14 | |

1.14to 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)**;

Resolution **653 (WRC-12)**: Future of the Coordinated Universal Time time-scale.

Introduction

The RCC Administrations are in favour of retaining unchanged the definition of coordinated universal time (UTC) given in RR No. 1.14 and in Recommendation ITU‑R TF.460‑6.

Proposals

ARTICLE 1

Terms and definitions

Section I – General terms

NOC RCC/8A14/1

1.14 *Coordinated Universal Time (UTC):*Time scale, based on the second (SI), as defined in Recommendation ITU‑R TF.460-6.     (WRC-03)

For most practical purposes associated with the Radio Regulations, UTC is equivalent to mean solar time at the prime meridian (0° longitude), formerly expressed in GMT.

**Reasons:** The definition of coordinated universal time (UTC) given in RR No. 1.14 and in Recommendation ITU R TF.460-6 is kept unchanged.

MOD RCC/8A14/2

RESOLUTION 653 (WRC‑15)

Use of a continuous time-scale

The World Radiocommunication Conference (Geneva, 2015),

considering

*a)* that the procedures for maintaining the Coordinated Universal Time (UTC) time-scale are described by Recommendation ITU‑R TF.460‑6;

*b)* that UTC is the legal basis for time-keeping for most countries in the world, and *de facto* is the time-scale used in most others;

*c)* that Recommendation ITU‑R TF.460‑6 states that all standard-frequency and time signal emissions should conform as closely as possible to UTC;

*d)* that Recommendation ITU‑R TF.460‑6 describes the procedure for the occasional insertion of leap seconds into UTC to ensure that it does not differ by more than 0.9 seconds from the time determined by the rotation of the Earth (UT1);

*e)* that the occasional insertion of leap seconds into UTC may create difficulties for systems and applications that depend on accurate timing,

recognizing

*a)* that some organizations involved with space activities, global navigation satellite systems, metrology, telecommunications, network synchronization and electric power distribution have requested a continuous time-scale;

*b)* that some radiocommunication systems and, in particular, global navigation satellite systems reproduce internal time-scales for use in synchronization tasks and specialized tasks, and that such scales may be continuous and different from UTC;

*c)* that many radiocommunication systems are synchronized by means of signals from global navigation satellite systems;

*d)* that for local time-of-day and for other systems, there is a need for a time-scale reckoned with respect to the rotation of the Earth, such as the mean solar time at the prime meridian, formerly known as GMT;

*e)* that a change in the reference time-scale may have operational and therefore economic consequences,

noting

that No. **1.14** defines UTC as a time-scale based on the second (SI), as defined in Recommendation ITU‑R TF.460‑6,

resolves

1 to invite ITU‑R to revise Recommendation ITU‑R TF.460-6 to include additional definitions and/or materials relating to the feasibility of using continuous time-scales for radiocommunication systems;

2 not to change the definition of UTC set forth in Recommendation ITU‑R TF.460‑6 in the event of its possible revision,

invites administrations

to participate in the revision of Recommendation ITU‑R TF.460‑6 by submitting contributions to ITU‑R,

instructs the Director of the Radiocommunication Bureau

to bring this Resolution to the attention of ITU‑T,

instructs the Secretary-General

to bring this Resolution to the attention of relevant organizations such as the International Maritime Organization (IMO), the International Civil Aviation Organization (ICAO), the General Conference of Weights and Measures (CGPM), the Consultative Committee for Time and Frequency (CCTF), the Bureau International des Poids et Mesures (BIPM), the International Earth Rotation and Reference Systems Service (IERS), the International Union of Geodesy and Geophysics (IUGG), the International Union of Radio Science (URSI), the International Organization for Standardization (ISO), the World Meteorological Organization (WMO) and the International Astronomical Union (IAU).

**Reasons:** Recommendation ITU-R TF.460-6 can be amended to include additional definitions, corrections and/or materials with respect to the feasibility of using continuous system time-scales for radiocommunication systems. The need to make changes to Recommendation ITU-R TF.460-6 can be reflected in an existing Resolution.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_