

WG-D Task Force on Timing References Review of “Time recommendations”

G. Petit

11th ICG Meeting



Bureau
International des
Poids et
Mesures

Review of WG-D « Time Recommendations » (1/2)

- ◆ Recommendation 11, « Finalization and publication of templates on geodetic and timing references »
 - BeiDou Time Template see report (4.4)
 - See also short report by G. Petit (4.2.3)
- ◆ Recommendation 16-A, « Information on the works related to the proposed redefinition of UTC »
 - Should be updated following WRC-15, See short report by G. Petit (4.2.4)
- ◆ Recommendation 19, « Official provision of a rapid UTC (UTC_r) by the BIPM »
 - Official weekly publication. See short report by G. Petit (4.2.1)

Review of WG-D « Time Recommendations » (2/2)

- ◆ Recommendation 20, « BIPM publication of [*UTC-GNSS times*] and [*UTC-UTC(k)_{GNSS}*] »
 - Evolution of Circular T implies small change to the text
 - See report (4.2)

- ◆ Recommendation 21, « Monitoring offsets between GNSS System Times »
 - See report 4.5
 - May be complemented by a fourth Recommend to foster comparison of offsets computed by the different GNSS

Recommendation 20

- ◆ Simple adjustment to account for obvious change

Discussion/Analyses:

The monitoring of the values of $[UTC - GNSS\ times]$ and $[UTC - UTC(k)_{GNSS}]$ serves to a better coordination of the various GNSS and to provide a better time service to users.

The procedure for calculation of these values is provided in the explanatory supplement of BIPM Circular T, available at ftp://ftp2.bipm.org/pub/tai/publication/notes/explanatory_supplement_v0.1.pdf.

Recommendation of Committee Action:

The ICG WG-D recommends that the BIPM continues the regular provision of the values of $[UTC - GNSS\ times]$ and $[UTC - UTC(k)_{GNSS}]$ and extends them to other GNSS, in particular Galileo and BeiDou.

Members Consensus Reached _____; No Consensus Reached _____

Recommendation 16

- ◆ Account for WRC-15 conclusions

of achieving a continuous reference time-scale, whether by the modification of UTC or some other method, and take appropriate action, taking into account ITU-R studies, ¶

- → WRC-15 recognized the roles of the BIPM and ITU concerning time scales definition and maintenance and their dissemination, invited the various organizations to cooperate for developing studies on the present and potential future reference time scales and submit contributions to WRC-23 and decided that until WRC-23 Rec. 460-6 will continue to apply. ¶

¶

¶

Recommendation of Committee Action: ¶

¶

It is recommended that the ICG monitors the ongoing development of the proposed redefinition of UTC and that reports be presented until a decision is made at WRC-1523. ¶

¶

¶

Recommendation 21

- ◆ Add fourth Recommend

3.4. → In order to promote GNSS compatibility and interoperability, GNSS time relevant organizations actively develop methods to monitor the offsets between GNSS times and share the monitoring data and relevant research results.

