# Meeting of the CCTF GNSS Working group York, April 5, 2016 13h30

Pascale Defraigne, chair of the WG, opened the meeting and presented the meeting's agenda.

# 1. Group 1-2 calibration for UTC: update on guidelines, results and implementation plans

G. Petit presented (see <u>slides</u>) an update of the work carried out since the last meeting of the WG (25 September 2015).

He indicated that, a new version 3.2 of the "BIPM guidelines for GNSS calibration" had been placed ftp://ftp2.bipm.org/pub/tai/publication/gnss-February 2016 (see calibration/guidelines/). The new version covers the evolution of a calibrated system between calibration exercises, especially when calibration must be transferred from the originally calibrated system to a new one. C. Lin questioned about the increase in uncertainty associated with such a transfer of calibration. By default, the BIPM plans to increase the uncertainty by 1 ns in quadrature. GP mentioned that the 2016 Group 1 trip had started with first visits to the Asia-Pacific region. Information planned calibration exercises on all may found the ftp://ftp2.bipm.org/pub/tai/publication/gnss-calibration/calib planned.pdf.

He announced that the BIPM plans to organize, within one year, a training course on calibrations. More details will be provided later.

#### 2. CGGTTS format V2E

- P. Defraigne reminded that the paper presenting the CGGTTS V2E format had been published in Metrologia. She announced that a new version of the R2CGGTTS software, to generate CGGTTS V2E files for GPS, GLONASS and GALILEO from Rinex V3 files, is under tests and will be distributed soon<sup>1</sup>.
- G. Petit indicated that an entry has been added for the format CGGTTS V2E in the web page of the Working group (<a href="http://www.bipm.org/wg/AllowedDocuments.jsp?wg=WGGNSS">http://www.bipm.org/wg/AllowedDocuments.jsp?wg=WGGNSS</a>) in order to keep track of typos, errors etc... discovered after the publication of the Metrologia paper. He also presented some plans with respect to the use of the V2E format in the context of UTC (see <a href="selides">slides</a>).

## 3. Any other business

- V. Zhang briefly presented (see <u>slides</u>) the work started in a task group "Long-term comparison between the time links GNSS and TWSTFT" of the CCTF working group on TWSTFT. More information can be found on the web page of the TWSTFT WG.
- P. Defraigne informed that a long-term study of P1-P2 hardware calibration was presented as a poster at the conference.

The meeting was closed at 14h05.

<sup>&</sup>lt;sup>1</sup> The software R2CGGTTS-V7.0 was sent to the WG on 12 April 2016.

### List of participants

Jerzy Nawrocki AOS Pawel Nogas AOS Zhiheng. Jiang BIPM

Gérard Petit BIPM (WG secretary)

Luc ErardLNEMiho FujiedaNICTYuko HanadoNICTVictor ZhangNISTPierre DubéNRC

Pascale Defraigne ORB (WG chair)

Franziska Riedel PTB
Hector Esteban ROA
Juan Manuel Gonzalez ROA
Huang-Tien (Calvin) Lin TL