

18 May 2018

To: Members and invited experts of the CCTF Working Group (WG) on TWSTFT

Dear colleagues,

This is the third and last announcement for the 26th Meeting of the CCTF WG on TWSTFT. The meeting will be held on 7-8 June 2018 at the Central Office of Measures (GUM), Warsaw, the capital of Poland. The local organizers are: Dr. Albin CZUBLA (<u>a.czubla@gum.gov.pl</u>) and Maciej GRUSZCZYŃSKI (<u>maciej.gruszczynski@gum.gov.pl</u>). We sincerely thank them for their great efforts in organizing the meeting! The meeting agenda is shown below for your reference.

We are looking forward to meeting you in Warsaw.

Victor ZHANG and Zhiheng JIANG

Visor Shang

Chair and Secretary of the CCTF WG on TWSTFT



Agenda of the 26th Meeting of the CCTF Working Group on TWSTFT

7-8 June 2018 at the Central Office of Measures (GUM) Elektoralna 2 Str., Warsaw, Poland

Venue Meeting: room 105, first floor

Chairman: Victor ZHANG (NIST)

Executive Secretary: Zhiheng JIANG (BIPM) Reporter: Erik DIERIKX (VSL) (TBD)

Local Organizer: Albin CZUBLA, Maciej GRUSZCZYŃSKI

Session I 8h00-13h00 and 14h00-17h50, 7 June (Thursday)

Opening ceremony: 8h00-8h30

Welcome speech Dr. W. Lewandowski, Director of GUM

- Registration
- Designation of reporter
- Approval of the agenda

Opening presentation: Dr. Patrizia Tavella, Director of Time Department BIPM on behalf of CCTF

News from the BIPM, the CIPM, and the CGPM (15 minutes)

1.1 Laboratory reports* (about 10 minutes) (8h30-10h00 and continue after coffee break)

- 1) AOS (Jerzy NAWROCKI)
- 2) BIRMM (Shengkang ZHANG)
- 3) CH (Christian SCHLUNEGGER)
- 4) GUM (Albin CZUBLA/Michał MARSZALEC)
- 5) IT (Ilaria SESIA)
- 6) KRISS (Sung-hoon YANG)
- 7) NICT (Miho FUJIEDA)
- 8) NIM (Zhiqiang YANG)
- 9) NIST (Victor ZHANG)
- 10) NPL (TBD)
- 11) NTSC (Wenjun WU/Hong ZHANG)
- 12) OP (Joseph ACHKAR)
- 13) PTB (Dirk PIESTER)
- 14) ROA (Hector ESTEBAN)
- 15) SP (Carsten RIECK)
- 16) SU (Andrey NAUMOV)
- 17) TL (Calvin S.Y. LIN)
- 18) USNO (Russell BUMGARNER/Jay HANSSEN)

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Bureau International des Poids et Mesures 19) VSL (Erik Dierikx) 20) IPQ (Reported by Hector ESTEBAN)

* Please include change(s) in TWSTFT setup and equipment, as well as new calibrations in the report. For those colleagues who would like to make a laboratory report but are not able to attend the meeting, please prepare the report and ask a colleague to present the report during the meeting. All the reports, presented or not, will be published in the BIPM TWSTFT WG web site as documentary.

Coffee break 10h00-10h30

1.2 Network status (about 5-10 minutes) (10h30-11h50)

- 1) Status of the Europe-Europe and Europe-USA links (Victor ZHANG/Dirk PIESTER)
- 2) Status of the Europe-Asia link (Andrey NAUMOV/Dirk PIESTER)
- 3) Status of the Asia-Asia links (Miho FUJIEDA/Calvin S.Y. LIN)

1.3 Updating the TWSTFT calibration guidelines (about 10-15 minutes) (12h00-13h00)

- 1) Definition of the RefDelay (Joseph ACHKAR)
- 2) Discussions

Lunch 13h00-14h00

1.4 Development (about 10-15 minutes) (14h00-15h00)

- 1) On the redundancy in the UTC time transfer network (Zhiheng JIANG, Victor ZHANG, Tom PARKE R, Gérard PETIT and Yi-Jiun HUANG)
- 2) News and developments on TWSTFT equipment and calibration (Wolfgang SCHAEFER TBD)
- 3) Development of digital TWSTFT modems (Miho FUJIEDA, Shengkang ZHANG TBD)
- 4) 1 PPS timing impact in TWCP (Miho FUJIEDA)
- 5) Others

Coffee break 15h00-15h30

1.5 TWSTFT SDR installation and operation (about 5-10 minutes) (15h30-17h50)

- 1) Ongoing SDR development to further reduce the diurnal impact and improve time link uncertainty (Yi-Jiun HUANG and Joseph ACHKAR)
- 2) Reports* and discussions of SDR TWSTFT operation by (AOS, IT, KRISS, NICT, NIM, NIST, NTSC, OP, PTB and VNIIFTRI etc.)

Guided walking tour around the Old Town: 18h00-19h45

Dinner in the Old Town starting about 20h00

Session II 8h30-11h30 and 13h00-14h30, 8 June (Friday):

2.1 The pilot study on the TWSTFT SDR for UTC computation (8h30-9h30)

- 1) SDR for UTC Status and future work (Zhiheng JIANG and Victor ZHANG)
- 2) Discussion:

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^{*} Those who intent to give a report, please contact Victor ZHANG/Zhiheng JIANG before 15 May.

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- Mesures
 - List of the SDR labs ready to submit the data regularly to BIPM from Oct. 2018. If not, from when?
 - Schedule of implementing SDR in backup and official UTC computations;
 - Needs to update the Calibration Guidelines 2016 due to the use of SDR?
 - Others.

Coffee break 10h00-10h30

2.2 Other issues (10h30-11h00)

- 1) TWOTFT in Europe (Jerzy NAWROCKI)
- 2) Report meteorological data to BIPM (Victor ZHANG)
- 3) On the TWSTFT 27thAnnual Working Group Meeting 2019 (Miho FUJIEDA)

2.3 Discussions (11h00-11h20)

Virtual visit at NIT (location of NIT/GUM TW station) – 15 min

Lunch 12h00-13h00

2.4 Lab tour (13h00–14h30) – two groups

- 1) Time and frequency laboratory
- 2) Length laboratory
- 3) Electricity laboratory