

# **CCTF Working Group on Coordination of the Development of Advanced Time and Frequency Transfer Techniques (WG ATFT)**

## **Terms of Reference**

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- to review the status and projected evolution of the characteristics of frequency standards, time scales and time and frequency transfer techniques,
- to follow and assess the evolution of microwave links in current use, based on GNSS signals and TWSTFT,
- to follow and assess other technical possibilities, including optical fibre links, optical satellite links, and transportable optical frequency standards, which could be used for comparison of high performance frequency standards,
- to establish the relevant connections and facilitate consultations with other relevant bodies, such as IGS, IUGG, IVS, ITU, etc.
- together with BIPM, to foster the spread of information on technical achievements by suitable means, e.g. workshops, and
- to propose and organize novel comparison and calibration campaigns, including multiple techniques (such as GNSS, TWSTFT, ACES microwave link, T2L2, optical fibre links).

### **Membership** (at the time of launching the WG):

**Chair:** Dr Philip Tuckey (LNE-SYRTE)

### **Members:**

- one representative from the CCTF Working Group on TAI
- one representative from the CGGTTS
- one representative from the CCTF Working Group on TWSTFT
- one representative from the CCTF Working Group on Primary Frequency Standards
- two representatives from the CCL-CCTF Working Group on Frequency Standards
- one representative from the BIPM, who will serve as the WG executive secretary
- other experts from laboratories members of the CCTF
- experts from other relevant bodies such as ITU, IGS, IUGG, URSI

### **Operation:**

- The period of the chairship covers two consecutive meetings of the CCTF and may be renewed.
- The working group should work routinely by correspondence addressed to its Chair, and it should meet, if possible annually, at the request of its Chair.