

TAI/12-34 CCTF/12-41

The CCTF Working Group on TAI

Report to the 19th CCTF

September 2012

Patrizia Tavella
Istituto Nazionale Ricerca Metrologica
Torino, Italy



The CCTF Working Group on TAI
aims at promoting the knowledge on TAI/UTC
and the communication among the BIPM time section
and the timing laboratories to improve mutual support

To this aim meetings of TAI/UTC laboratories are **SEPT 12, 2012** regularly held at the BIPM

and for the first time also a "training day" has been organized for new or possibly new laborationies SEPT 11, 2012

MEETING OF TAI/UTC LABORATORIES, SEPT 12, 2012



Report of the BIPM

UTC, Time links, algorithms, PFS
BIPM data base on time link equipment
Rapid UTC Pilot Project

Reports from the laboratories

"Real time" time scale monitoring

Major changes in time scales, time transfer equipment, clocks

2 New participants, 7 contributions in preparation, 2 withdrawals

MEETING OF TAI/UTC LABORATORIES, SEPT 12, 2012 2nd part

with attendance of representatives of contributing laboratories and of CCTF members

- 1. Revision of the definition of UTC at the ITU-R
 - 1.1. Report on last events
 - 1.2. Future actions, involvement of the CCTF/CGPM
 - 1.3. Possible re-allocation of responsibilities
 - 1.4. Recommendations

the majority of the attending laboratories is in favour of a continuous, unique, reference time scale;

only one half has been involved in national discussion with the ITU official body.

CCTF WG on TAI: training day

SEPT 11, 2012

Fundamentals for a time and frequency metrology laboratory

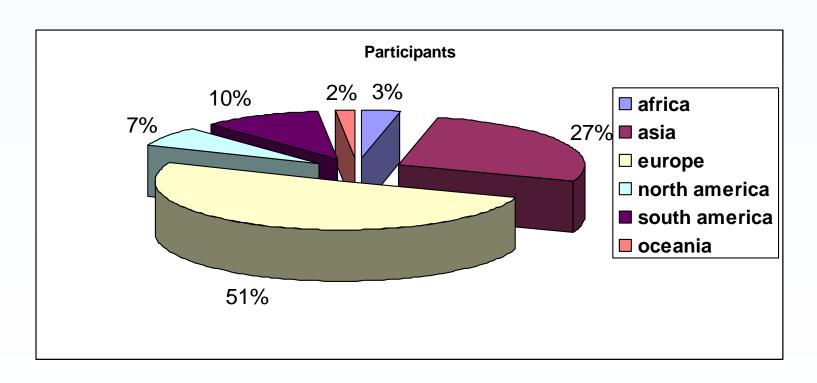
speaker

Welcome and introduction	o Tavella (10 m)
UTC at the BIPM time section	o Arias (15 m)
Laboratory equipment, generation of UTC, local and remote comparison systems, traceability to UTC GNSS time transfer	o Bauch (30 m) o Defraigne (30 m)
Joining the UTC community Rules and procedures for participation to UTC	o Arios (20 ms)
and UTCr Laboratories clock data and UTC(k): how do they enter in UTC	o Arias (30 m) o Panfilo (30 m)
Steering UTC(k) to UTC	o Matsakis (30 m)
Statistics to check clock and time scale behavior	o Tavella (30 m)
Dissemination of UTC(k)	o Levine (30 m)
Mutual Recognition Arrangement in TF	o Cordara (15 m)
The Regional Metrological Organizations	o Warrington (15 min)

SEPT 11, 2012

CCTF WG on TAI: training day

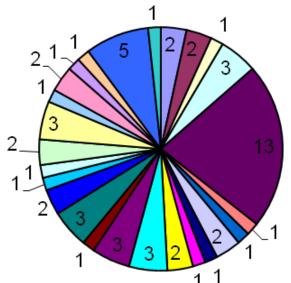
59 registered people: 5 continents, 26 countries only 46 took part



CCTF WG on TAI: training day

SEPT 11, 2012

59 registered people: 5 continents, 26 countries only 46 took part



The capacity to meet the expectations and the needs is to be assessed. The possibility to repeat the training can be harmonized with the RMO initiatives

■ Kenya ■ Macedonia ■ Austria □ Germany ■ France ■ Lithuania Serbia □ Netherlands *Thanks to the BIPM* ■ Norway ■ Finland team, the experts □ Italy acceptiong to give Belgium USA tutorials, and all the ■ Canada ■ Brazil ■ Colombia laboratories

□ Japan
□ Malaysia
□ Saudi Arabia
□ Thailand
□ Russia
□ China
□ Australia

Argentina

□ India □ Taiwan