

CCTF
WGMRA Guideline 7
(2015-04)

Participation in the ongoing key comparison in time
CCTF-K001.UTC

Introduction

The Consultative Committee for Time and Frequency (CCTF) has identified CCTF-K001.UTC as the unique key comparison in the field of time metrology, and through it the participating laboratories can obtain traceability to the SI for the various related quantities. The CCTF has given the BIPM the responsibility of organizing, running and publishing the results of key comparison CCTF-K001.UTC.

The aim of CCTF-K001.UTC is to

- (a) provide traceability to the international reference Coordinated Universal Time (UTC) through its local approximations UTC(*k*) maintained in national laboratories;
- (b) enable the broad dissemination of UTC by the participating laboratories located all around the world.

Participation in CCTF-K001.UTC

Time comparisons necessary for the formation of UTC existed before time activities started at the BIPM, and long before the creation of the CIPM MRA. Since one of the goals of this key comparison is to allow the broadest possible dissemination of UTC, it is desirable to include the participation of the largest possible number of laboratories well distributed around the world. The rules on eligibility for participation in key comparisons, as stated in section 6 of the CIPM MRA, mean that not all participants contributing to UTC are able to participate in the key comparison CCTF-K001.UTC.

Any laboratory wishing to participate to the key comparison CCTF-K001.UTC must fulfil the following conditions:

- (a) be in a National Metrology Institute (NMI) or a Designated Institute (DI) of a Member State of the BIPM or of an Associate of the CGPM;
- (b) be equipped with atomic standards;
- (c) operate equipment adapted for time transfer, producing data in a standard format as requested by the CCTF and the BIPM;
- (d) have the capacity to report data to the BIPM on a continuous basis.