CCTF
WGMRA Guideline 2
(Rev. 201209)
The estimation of uncertainties for T&F CMC entries

In the field of time and frequency metrology, the performance of the measurement system of an NMI

is estimated by daily time keeping procedures such as international time comparisons using GNSS CV, GNSS AV, TWSTFT, comparisons of individual atomic clocks and so on. The CCTF WGMRA has decided to accept the definition of Calibration Measurement Capability (CMC) (1) for the CMC table entries as the uncertainty level of NMI's measurement system. Therefore each NMI can claim the uncertainty of its calibration system in the hypothetical case of a nearly ideal Device Under Test (DUT) (2). The calibration certificates issued by NMIs, however, have to indicate the uncertainty of the calibration results including the influence of the DUT.

References:

(1) CIPM-MRA D-04 Calibration and Measurement Capabilities in the context of the CIPM MRA – Version 2 : "A CMC is a calibration and measurement capability available to customers under normal conditions"

(2) JCRB -8/9 Uncertainty contributions of the device under calibration or measurement

(3) CIPM/2007-11: Calibration and Measurement Capabilities – A paper by the joint BIPM/ILAC working group.