

# GPS calibration of ESOC receiver at PTB (1101-2015)

## Summary

In May 2015, GNSS equipment owned by ESOC was installed at PTB and calibrated against PTB's permanently installed reference station PT02, a Group1 reference system. The method of calibration is the “golden system calibration” which comprises just one period of data taking at PTB.

The operation and report of measurements at PTB are described in the [report by PTB](#).

- **Final results for the calibrated systems**

The INTDLY values of the ESOC receiver given in Table 1 have been computed by PTB using INTDLY values of PT02 available at the time of the calibration. They should not be updated to reflect later changes in the conventional INTDLY values of PT02.

The uncertainty for a P3/PPP link involving ESOC is  $U_{CAL0} = 4.0$  ns at the time of calibration, as given conventionally to “golden system calibrations”.

Changes in the set-up of the receivers after the calibration must be accounted for as described in section A.3.6 of the Calibration guidelines v3.2 in <ftp://ftp2.bipm.org/pub/tai/publication/gnss-calibration/guidelines/>.

Table 1. Final P1/P2 INTDLY values from the 1101-2015 trip. Values of REFDLY and CABDLY during the calibration and the resulting P3 Total delay TOTDLY are also indicated for reference (all values in ns).

System	BIPM	Date	INTDLY P1	INTDLY P2	REFDLY	CABDLY	Note	TOTDLY P3
ESOC	ESOC	2015.3	57.6	57.6	215.9	164.7	(1)	6.4

Notes:

(1) The REFDLY value represents the set-up during the measurements at PTB.