## Results of differential calibration of geodetic-type receivers at the NICT

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## 1. General description of the calibration

This report concerns the calibration of the hardware delays incurred by time signals for different geodetic-type GPS systems operated at the NICT in Koganei.

The systems (receiver+antenna) are designated by a 4-letter acronym.

The link between acronym and actual hardware references may be found here.

The results presented in Section 3 should be used for time transfer with other equipment calibrated using the same procedure. The standard uncertainty on such a link calibration is taken to be 5 ns (1  $\sigma$ ).

## 2. Calibration procedure

The calibration is a differential calibration with respect to a travelling receiver provided by the BIPM. The travelling receiver is referenced to the BIPM reference receiver, presently BPOC, an Ashtech Z12-T (see TM116 for the original calibration of the reference receiver).

The calibration operational procedure is available <u>here</u>. Note that different versions of the document were used, depending on the epoch of calibration; see the annex "Revision history" in the most recent version.

## 3. Calibration results

System	Period	Calib. dates	Travel	Results P1-P2/ns	Operations report
KGNO	2003/09-1	52915-52919	BP0C	<u>309.3 − 317.6</u>	Report2003 NICT.pdf
KGNO	2003/09-2	52926-52932	BP0C	<u>308.1 − 316.2</u>	Report2003 NICT.pdf
KGNO	2005/06	53523-53529	BP0C	<u>305.0 − 319.3</u>	Report2005 NICT.pdf