

# IGS Wuhan Workshop Recommendation Template

Name of Working Group and Chair: *(if Chair is absent, who is acting in their place)*

Rapporteur:

Oliver Montenbruck

## Session Highlights:

- Substantial evolution in GNSS constellations (QZSS completed, BDS-3 halfway, Galileo nearly complete)
- Lacking support of BDS-3 tracking in IGS network
- Persistent lack of GNSS receiver antenna calibrations for “new” signals
- Continuously increasing number and quality of multi-GNSS products
- No combination product, yet, but prototype combination and new combination s/w under study at GFZ
- Improved quality of combined multi-GNSS broadcast ephemeris products
- First releases of SINEX satellite metadata file

**Progress on Paris Workshop Recommendations:** *(indicate which recommendations have been resolved, which are still in progress, and what impediments there are to completion)*

Recommendation	Status
Adopt and implement new SINEX satellite metadata format	First files distributed by DLR; use by ACs pending
Explore attitude exchange format and conduct test campaign with selected ACs	Dormant
Update ANTEX model with full set of (satellite- and frequency-specific) PCOs and PVs of Galileo IOV as published by the EU	Done
Establish a quality controlled broadcast ephemeris product	Improved QC for BRDC; New DLR BRDM and GOP BRDM upcoming
Promote robot calibration of receiver antennas for new constellations and signals	Promoted, but no response
Promote revision of ANTEX format for improved transmit antenna handling and support of group delays	Work in progress
No splinter meetings in parallel to free beer	No beer at all ☹

**Recommendations:** *(Please also indicate who in your group is the point of contact/responsible person for each recommendation, and their contact information)*

- Move to long product file names for MGEX products (by 1 Jan 2019) and store the products in standard IGS directory tree
- Generate and host multi-GNSS ultra-rapid products
- Implement initial prototype of orbit & clock combination process
- IGS GB to take concrete action for multi-GNSS receiver antenna calibrations

**Does this WG actively plan to transition its work to multi-GNSS? If yes, when?**

**Not applicable**

**What impediments may prevent this WG from transitioning to multi-GNSS?**

**Not applicable**