# CONCLUSIONS EPN LOCAL ANALYSIS CENTERS (LAC) WORKSHOP

# BRUSSELS, MAY 15-16, 2013

#### 1. ANALYSIS COORDINATION

- 1.1 The LACs note that H. Habrich retires from his position as ACC and would like to thank him and BKG for many years of excellent work!
- 1.2 The LACs recommend to the EUREF TWG to accept the proposal of the MUT WUT consortium to act as new Analysis Coordinator (AC) from June 1, 2013 on. A transition period of a few months is agreed with BKG before the generation of the routine EPN products will be completely switched to the new AC (expected Fall 2013).

#### 2. ROUTINE EPN ANALYSIS

- 2.1Noting that 70% of EPN stations track GLONASS in addition to GPS, the LACs are urged to include GLONASS observations in their routine analysis.
- 2.2 Noting that several improved modeling options have recently become available to all LACs, the LACs ask the new EPN AC to review and update the "EPN Analysis Guidelines" (for June 2013). A first set of recommended modeling options is already listed in 3.1.
- 2.3 The AC will, together with the LACs, determine a date at which LAC should switch their routine EPN submission to the new modeling options (proposed period is October 2013).
- 2.4 Some LAC forms available from the EPN CB, describing the LAC analysis options are not up to date. The LACs are urged to send updated forms to the EPN CB and AC.
- 2.5 LACs are invited to contact EPN CB and ACC to discuss a possible re-orientation of their contribution to the EPN.

- 2.6 The LACs are re-invited to submit the results of the stacking of their rapid solutions to EPN CB for a quick monitoring of the station coordinates. The EPN CB will send a reminder email.
- 2.7 Noting that there are arguments in support of a global EPN solution, the LACs are invited to contact the EPN CB and AC to express their willingness to process a global network.

#### 3. NEW MODELING OPTIONS

- 3.1The following list of recommended modeling options is agreed upon by the LACs:
  - General: consistent with IGS REPRO2
  - Inclusion of GPS and GLONASS observations
  - Apply GPS+GLONASS PCV, if available
  - Troposphere: GMF or VMF + gradient estimation (Chen Herring is recommended)
  - Atmospheric tidal loading is optional
  - IERS2010 conventions
  - Second order ionospheric correction + ray bending
  - Elevation cut off: 3°-5°
  - LACs working with Bernese should submit NEQ-SINEX, MC solution, and are recommended to use CODE orbits/clocks.

#### 4. REPROCESSING

- 4.1A new reprocessing of the EPN is necessary. The chairman of the EPN reprocessing project is asked to get this initiative started (not to wait for IGS-REPRO2 results). A first step is to send out asap a questionnaire to the LACs asking for contributions.
- 4.2The EPN-REPRO2 analysis should be done in agreement with the updated guidelines (modeling options) for the routine EPN products.

- 4.3The validity and usefulness of the historical EPN CB data base for reprocessing activities should be checked for (taking QC and REPRO1 results into account). If positive,
  - The EPN CB and coordinator of the reprocessing project are requested to prepare the historical data base for REPRO2
  - the LACs contributing to REPRO2 are requested to use this data base for all contributions to REPRO2.

## 5. OPEN QUESTIONS (TO BE DISCUSSED AT TWG)

5.1Should the EPN follow the IGS and move to daily submissions (for REPRO2 and final routine solution)?

## 5.2 Calibrations:

- Should we drop individual calibrations for more consistency with IGS?
- If not, then GLONASS PCV are missing for some individual antenna calibrations. What actions will be taken to improve this situation?