



ITRF2005 Densification

Heinz Habrich

EPN Analysis Coordinator

Federal Agency for Cartography and
Geodesy, Frankfurt, Germany

Activity since last TWG

- Definition of discontinuities (solution numbers) and outliers primarily according to ITRF2005
- Realization of reference frame through ITRF2005
- Long computing time of MCC solution (> 3 h) avoided by intermediate combined free network solution
- All outstanding residual and singularities in multi-year solution removed
- New problem:
 - During process of manual editing of discontinuities and outliers output of SINEX failed with error in “SINSTORE” !

- ALL_ITRF2005_060920.snrx (*IGS offsets*)
- outliers.snrx (*IGS outliers*)
- EPN_offsets.snrx (*EPN SP offsets*)
- EPN_outliers.snrx (*EPN outliers*)
- ITRF2005_GPS.SSC (*coordinates and velocities*)

Priority Offsets:

1. ITRF2005
2. EPN SP Time Series
3. EPN Multiyear Solution

Priority Outlier Definition:

1. EPN Multiyear Solution
2. EPN SP Time Series

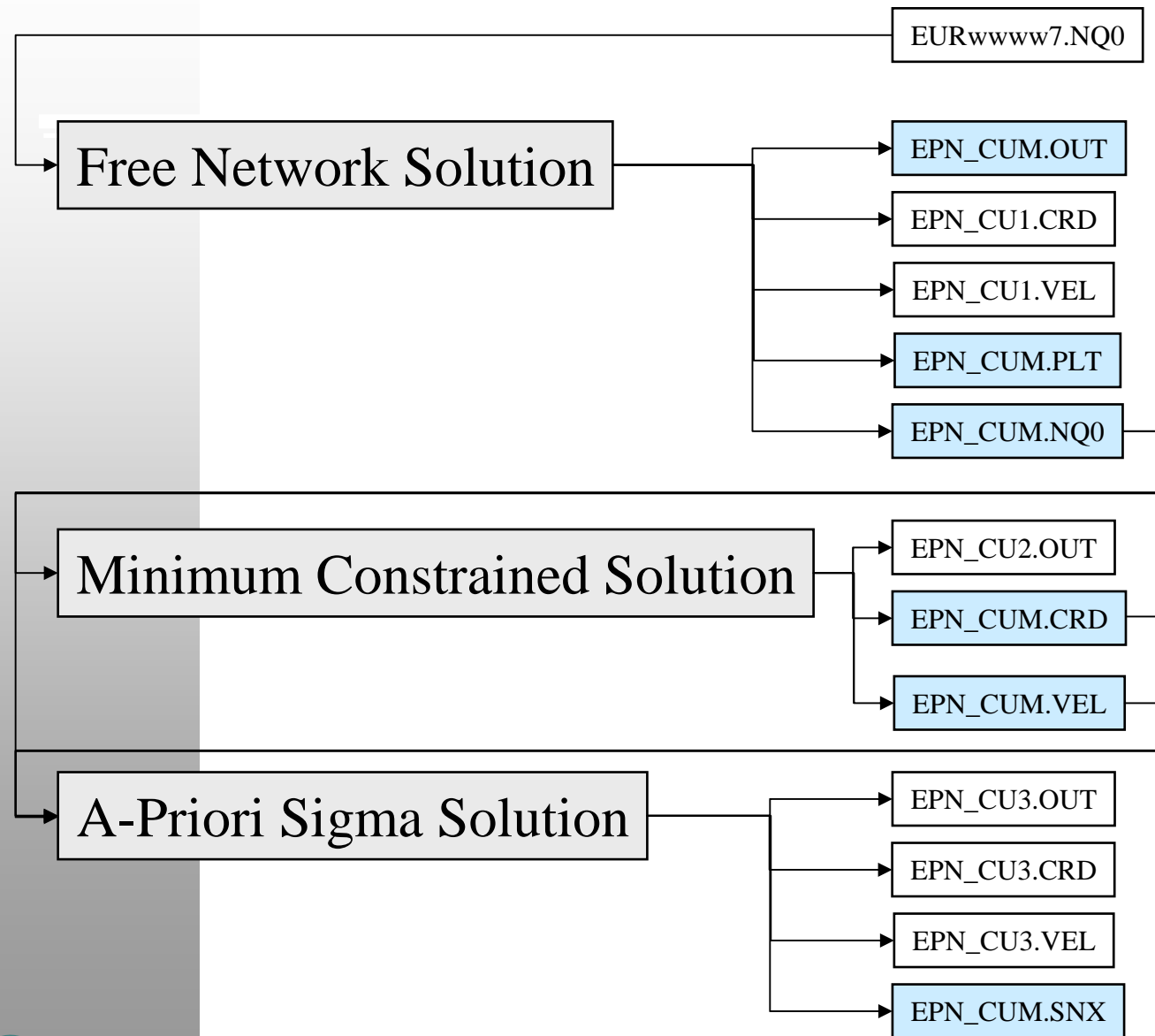
Priority Coordinates/Vel.:

1. ITRF2005 (Flag I)
2. EPN Weekly (Flag E)

Many, many ...
manual editing

EPNC.STA
EURF05.CRD
EURF05.VEL

EPN Multiyear Solution Strategy



Next

- “cleaned” solution available since 22 December 2006
- Write SINEX file with help of AIUB
 - SINEX file is correct for weekly EPN combination at the computer used for multi-year combination
 - The problem has been validated on different hardware