

## ETRS89 WG status report Padova, October 13, 2009

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Martin Lidberg, EUREF TWG meeting, 2009-10-13, Padova, Italy



## Review of the tasks for our WG

Review the Charter:

- Document about the history of ETRS89
- Inventory of the use of ETRS89
- ETRS89 concept and user requirements
- Future development and implementation of ETRS89



## Last symposium resolution

### Resolution no. 6

*Considering* the need for a wider understanding of EUREF products and

*recognizing* the establishment of the "EUREF Working Group on the Future Development of ETRS89"

*requests* that the Working Group considers ways to foster the science and the methods employed by EUREF to a broader group of users.

Background is that things are getting too complicated and it is difficult for the user community to follow



# Meeting yesterday (9-15)

- Review the task for the WG (the charter)
- Resolution 6 from this years symposium
- Discussion on ETRS89 to understand each others slightly different view on the topic. Specifically:
  - Intraplate velocities, ETRS89 as a kinematic system, time-invariant coordinates, different circumstances in different parts of Europe
  - ETRS89 for scientific use
  - Way to realize ETRS89; connection to ITRF based on global or regional sites?
  - Geographical scope of ETRS89 (up to Ural seems sufficient for now)
- Document "history of ETRS89"
- Inventory of ETRS89 as National reference frame at NMAs
- Proceeding paper from EUREF 2009
- Possible training school NMAs primary target group



#### "PM: Some thoughts on ETRS89 and its Development" Opportunity for improvements?!

- It is now recommended to adopt ETRF2000 as the conventional frame for ETRS89 (by the way; how fixed is this recommendation it does not seem to be an explicit resolution on this topic). This measure may open up a possibility to use ETRF2000 as target for the transformation procedure, rather than explicitly using ITRF89 at epoch 1989.0.
- With the new procedure from EPN, coordinates and velocities of some 200 permanent GNSS-stations are derived and presented every 5 week. This increase the availability of reliable stations with ITRF and ETRF coordinates on the Eurasia tectonic plate considerably, compared to beginning of 1990's when the current methodology for realization of ETRS89 was developed.