

ACTIVITIES AND NEW INITIATIVES OF THE EUREF TECHNICAL WORKING GROUP

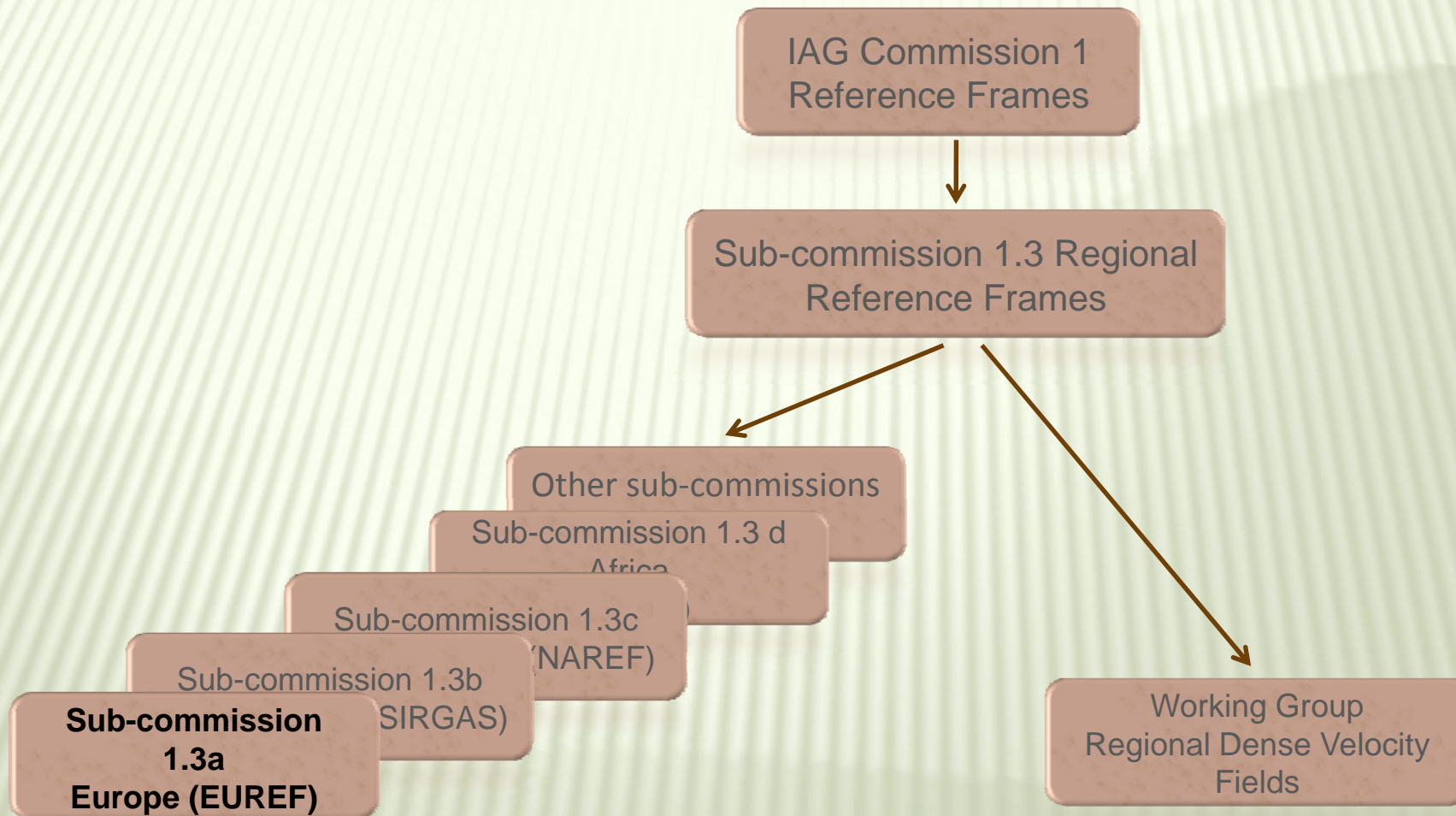


EUREF 2009 symposium
Florence, Italy
May 26-30, 2009

C. Bruyninx

For more info . . .
<http://www.euref.eu/html/twg.html>

INTERNATIONAL ASSOCIATION OF GEODESY (IAG)





CURRENT MEMBER LIST EUREF TWG

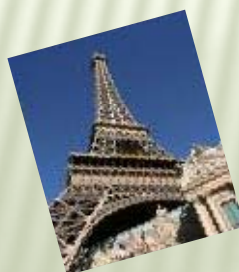
- ✕ Zuheir Altamimi, France
- ✕ Elmar Brockmann, Switzerland
- ✕ Carine Bruyninx, Belgium (TWG chair)
- ✕ Alessandro Caporali, Italy
- ✕ Jan Dousa, Czech Republic
- ✕ Rui Fernandes, Portugal
- ✕ Heinz Habrich, Germany
- ✕ Helmut Hornik, Germany (EUREF secretary)
- ✕ Johannes Ihde, Germany (EUREF chair)
- ✕ Ambrus Kenyeres, Hungary
- ✕ Martin Lidberg, Sweden
- ✕ Jaakko Mäkinen, Finland
- ✕ Markku Poutanen, Finland
- ✕ Wolfgang Söhne, Germany
- ✕ Guenter Stangl, Austria
- ✕ João Torres, Portugal

Honorary members:

- ✕ Claude Boucher, France
- ✕ Erich Gubler, Switzerland
- ✕ Werner Gurtner, Switzerland
- ✕ Herman Seeger, Germany
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- ✕ Herman Seeger, Germany
- ✕ Knud Poder, Denmark

TWG MEETINGS 2006 - 2009

50	Florence	26/5/2009
49	Budapest	26-27/2/2009
48	Munich	3-4/11/2008
47	Brussels	17/6/2008
46	Helsinki	3/3 – 1/4/2008
45	Paris	29-30/11/2007
44	London	5/06/2007
43	Lisboa	5-6/03/2007
42	Frankfurt	6-7/11/2006
41	Riga	13/6/2006



COOPERATIONS



EuroGeographics

- MOU signed August 2007
- Mutual projects, e.g. INSPIRE
- Presentation by J. Torres



EUMETNET

- MOU signed June 2007
- Mutual exchange of data

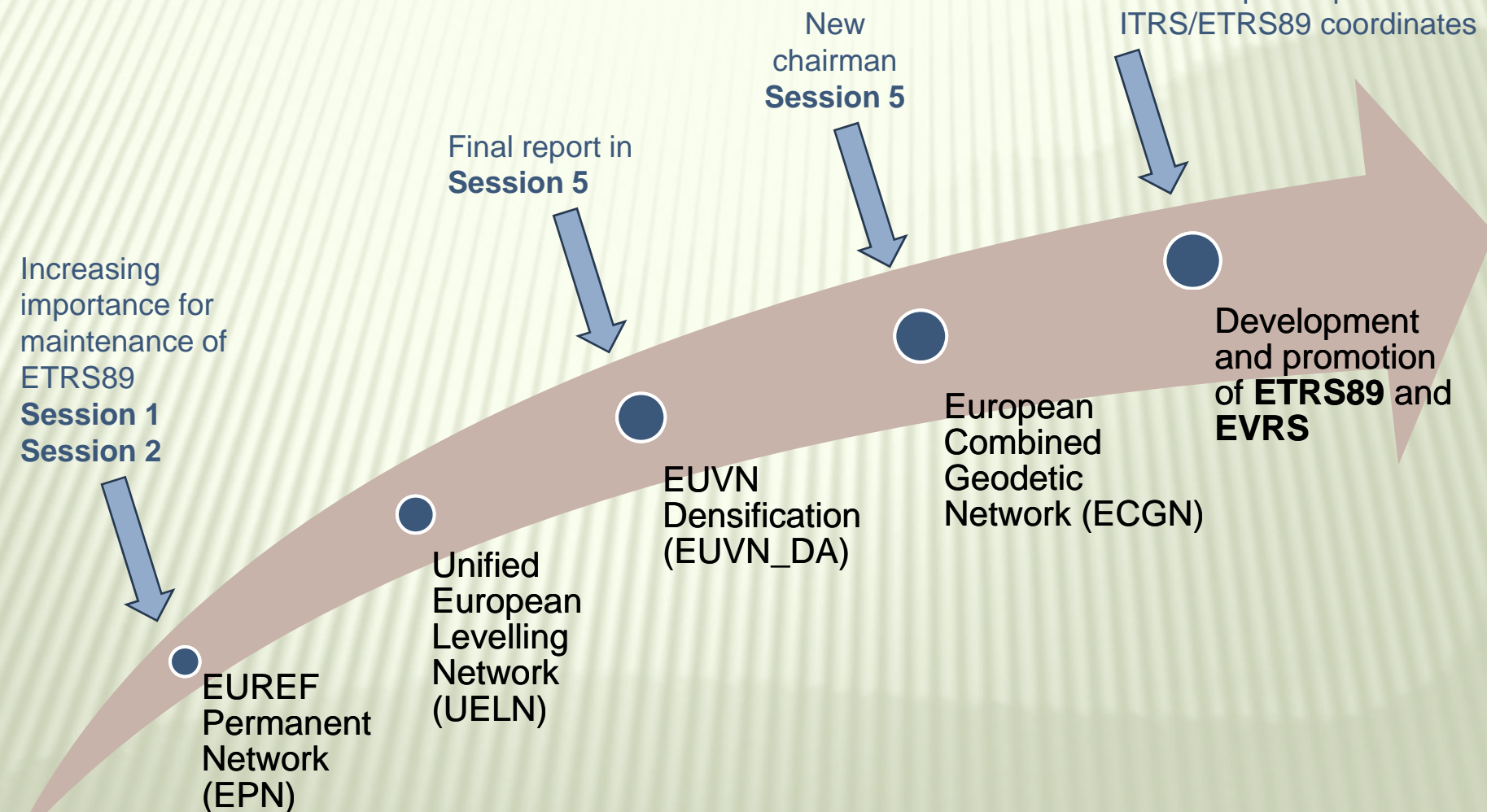


International GNSS Service

- Common standards
- Cross-fertilization
- EUREF involved in IGS real-time, antenna calibration WG and Infrastructure committee

PROJECTS AND GOALS

- EVRF2007 distributed
- **Session 1:** New ETRS89 WG, more frequent updates of ITRS/ETRS89 coordinates



RECENT ACTIVITIES

ETRS89

- ✖ ETRS89
 - ✖ ITRFyyyy \rightarrow ETRFyyyy (Memo Boucher and Altamimi)
 - ✖ ITRF2005 introduced Nov. 2006 in EPN
 - ✖ Conversion ITRF2005 \rightarrow ETRF2005 coordinate jump up to 2 cm wrt ITRF2000 \rightarrow ETRF2000
- ✖ Avoid jumps by using ETRF2000 as conventional frame for ETRS89
- ✖ ITRF2005 \rightarrow ITRF2000 \rightarrow ETRF2000
- ✖ ITRF2008 \rightarrow ITRF2000 \rightarrow ETRF2000



RECENT ACTIVITIES

ETRS89

- ✖ Memo on conversion from ITRS to ETRS89 (Boucher and Altamimi) has been updated, Nov. 24, 2008
 - ✖ <http://etrs89.ensg.ign.fr/memo-V7.pdf>
- ✖ Creation of new Working Group “Development of the ETRS89”, chaired by M. Lidberg (session 1)
 - ✖ Education, outreach, future development
- ✖ Guidelines for EUREF Densifications, C. Bruyninx (session 1)
- ✖ Survey on official ETRS89 coordinates of EPN stations in NMCA, E. Brockmann (session 1)



RECENT ACTIVITIES

ETRS89

× Need for more up-to-date coordinates of EPN stations

- + Updates following the ITRFyy updates: ITRF2000, ITRF2005, ITRF2008
- + Initial step, Dec. 2008: EUREF densification of the ITRF2005 (using EPN data up to Dec. 2005), A. Kenyeres
 - × EUREF mail 4142 (Dec. 12, 2008)
- + Follow up, since May 2009: EUREF densification of ITRF2005 is updated each 15 weeks, using the most recent EPN data, A. Kenyeres (session 1)
 - × Class A stations → to be used for EUREF densifications
- + Coordinates available from http://epncb.oma.be/_trackingnetwork/coordinates/



RECENT ACTIVITIES

EPN

- ✖ New EPN Special Project “**Real-time Analysis**”, chaired by W. Söhne (session 2)
 - + 47% EPN stations stream real-time GNSS data
 - + Processing of the real-time data to derive and disseminate new (or extended) real-time GNSS products
 - + Increase reliability and decreasing workload of today's broadcasters
 - + Contribution to the IGS RT Pilot Project

- ✖ New EPN Special Project “**Reprocessing**”, chaired by C. Völksen (session 2)
 - + Pilot reprocessing done in 2007/08 by MUT and ROB: improvement of EPN time series
 - + Official EUREF reprocessing following IGS schedule
 - + Continuous reprocessing ?
 - + Global stations



RECENT ACTIVITIES

EPN

- ✖ Increased effort to quickly monitor EPN coordinates and generate alarms
 - + LAC coordinator, H. Habrich (session 1)
 - + Rapid daily solutions from the EPN analysis centers
 - + Stations are missing, need to more AC to get involved.

RECENT/FUTURE ACTIVITIES

- ✕ EUREF associate member of International Committee on GNSS (United Nations Office for Outer Space Affairs)
 - ✕ to promote the use of GNSS infrastructure on a global basis and to facilitate exchange of information <http://www.oosa.unvienna.org/oosa/en/SAP/gnss/icg.html>
 - ✕ Working Group D: Interaction with national and regional authorities and relevant international organizations
- ✕ EUREF Web site
- ✕ EUREF campaign database
- ✕ ITRS-ETRS89 transformation programs on-line