

## **WG NMSOP progress report 2011-2013 to CoSOI**

**by Peter Bormann**

There is no more functioning WG. Former members have either completed their task, or others remain inactive. The completion is mainly the task now for the Chairman, whose work has been greatly delayed by both his own thickness and undelivered contributions by other originally committed members. Nevertheless, in the past two years the following could be achieved:

- NMSOP-2 is since spring 2012 in its essential parts with more than 1500 pages, complementary animations and data on-line via <http://nmsop.gfz-potsdam.de>;
- During the second half of 2011 and 2012 the following items have been added:
- Dedication of NMSOP-2 to the 150<sup>th</sup> anniversaries of Emil Wiechert and B. B. Galitzin;
- Glossary by P. Bormann, K. Aki, W.H.K. Lee and J. Schweitzer, 196 pp;
- Essentially revised and amended Chapter 2, 7, 8-10, 13-14 and 16-17;
- New Chapters: Ch14 on investigation of local site effects, Ch16 on automated event and phase identification, and Ch17 on CTBTO issues;
- One essentially amended Data Sheet, three greatly expanded Exercises, 13 new Information Sheets (up to 45 pages long) on essentially new issues, including the IASPEI new standards for magnitude measurements, their testing and relationship to classical magnitudes, measurement of rotations etc.;
- One dozen educational animations.

A significantly expanded Chapter 4 on Seismic Signals and Noise by Bormann and Wielandt will be implemented on the Internet prior to the Gothenburg Assembly.

In the first three months of 2013 the largest NMSOP-2 Chapter 3 (P. Bormann et al., 245 pages) on seismic source parameters and their measurement could be completed as a draft and put on the Internet as a pre-review version, open to comments. Final review and revision have been scheduled for July 2013. This Chapter has been complemented by an Information Sheet about SEISAN interactive data processing which provides also guidance to the determination of all new IASPEI magnitude standards.

The Editor has essentially revised the Information Sheet IS 2.1 on seismic phase names (now expanded to a tutorial), still awaiting approval by the co-authors, as well IS 3.2 on a unique magnitude nomenclature, still awaiting the approval by the co-authors, respectively concerned agencies. There is hope to implement both IS on the NMSOP-2 website before the IASPEI meeting at Gothenburg.

A first draft of the still missing Chapter 6 on data acquisition systems and of an essentially updated IS 8.3 on Seismic data transmission links used in seismology have been promised to be

available by July 2013, with the final versions expected to be implemented on the NMSOP-2 website prior by fall 2013. The same is expected for two important new Information Sheets on local, regional and teleseismic moment tensor determinations and a related tutorial.

No draft or progress report is available from the author of the since long scheduled Chapter 15 (G. Gibson) on the contribution of seismology to seismic hazard assessment and risk mitigation.

For three more since long scheduled IS on seismic energy determination for local and regional events (G. Choy and J. Boatwright), on seismic waveform data retrieval (J. Saul) and on interactive and automatic picking and identification of teleseismic phases – state of the art. (C. Zeiler) completion is still uncertain.

Another promised and listed IS on self-organizing seismic early warning information networks (C. Milkereit, and M. Picozzi) had to be canceled definitely because of non-response of the authors.

The editor himself is still late with revising his own Chapters 1 and 11 and some related NMSOP-2 items (e.g., final editorial remarks) due to chronic illness and the not yet realized promised contributions by originally committed NMSOP-2 authors. He will, however, definitely complete his assignments by fall 2013 and finally give up the responsibility for the NMSOP-2 project by the end of this year.

CoSOI should keep the further qualification and updating of NMSOP-2 in keeping with developments as a permanent task on its agenda and nominate a new person in charge for this project. He should keep close contact with the editor as long as the latter is able to comment and contribute.

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Editor and Chairman of the NMSOP-2 WG

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