



## **Minutes of the 2020 CE3RN online meeting**

The minutes of the 2019 CE3RN meeting in Budapest are approved.

Issues remained from the 2019 minutes:

- Macroseismicity: N. Horn will distribute a "schema", i.e. a list of questions and possible answers. Each institute will add missing questions or answers. In the reply, all participants add links to their questionnaires in all languages available.
- CE3RN website: CE3RN station list must be updated: stations list and map done inside CE3RN (N. Horn). Send updated station list to N. Horn.
- We did submit a session proposal for the ESC meeting, but the meeting was postponed due to the epidemic: hopefully next year the ESC comes together.

1. I. Bondár, short introduction of the meeting. CE3RN new members, CE3RN paper accepted to SRL special issue on seismic networks.

2. D. Pesaresi, CE3RN website. Real time seismicity temporarily out of order (N. Horn). Add statement on citation policy of CE3RN data (citing single DOIs of CE3RN members). Metadata of stations/networks need updating (N. Horn). New members info to be updated (D. Pesaresi).

3. S. Parolai, Central Europe Initiative (CEI). Recently there was a meeting for the expansion of EPOS in Central Europe through CEI, attended both by diplomats and scientists, D. Pesaresi to circulate info. CEI can support traveling and meetings but not instrumentation.

4. D. Malytskyy illustrated the Carpathian Seismological Network (CSN). The network is operated and maintained by the Department of Seismicity of the Carpathian Branch of the Subbotin Institute of Geophysics, National Academy of Sciences of Ukraine. D. Malytskyy to give details on instrumentation.

5. W. Lenhardt, landslides, quarry blasts, induced seismicity. Station coverage not uniform in CE3RN, needed to monitor induced seismicity with alarms. S. Parolai reports on OGS experience with 2 dedicated seismic networks for detecting induced seismicity in 2 industrial premises (gas storage): OGS contributed to the definition of the Guidelines for monitoring induced seismicity in Italy.
6. S. Parolai quarry blasts to improve locations, many papers in literature. I. Bondár: establish a CE3RN internal web page with database of quarry blasts.
7. W. Lenhardt, many landslides in Austria. D. Pesaresi reports on the successful usage of infrasound sensors to monitor avalanches and landslides: University of Florence, Alpine Space application. S. Parolai, need to monitor landslides for Civil Protection.
8. S. Parolai, need to find common tools and methods to recognize non tectonic events and their origin. T. László, sharing of real time data inside CE3RN can help.
9. S. Parolai, CE3RN and AdriaArray. An important issue is to find a way of scientific group cooperation / upgrade the scientific cooperation of AlpArray; open data access for all. I. Bondár report on PACASE experience in AlpArray (need to advertise CE3RN). CE3RN members decide to take a common approach to AdriaArray. Invite other countries in the region – Serbia, North Macedonia - to join CE3RN, W. Lenhardt and I. Bondár to draft an invitation.
10. W. Lenhardt and S. Parolai, macroseismic questionnaires in ARMONIA: trained volunteers vs. citizen seismology. CE3RN macroseismic Did You Feel It? website? Please refer to the discussion last year at the meeting in Budapest (minutes on CE3RN website).
11. D. Pesaresi, new opportunities for fundings. Interesting EU programs for CE3RN are Horizon Europe, Interreg Central Europe, NATO programs and COST actions. Be ready with institutional documents and check in advance your national POCs for European programs. Recent EU programs focus on supporting the development of society / green society / sharing the technology: harmonizing our network technologies could fall into this last item. Each CE3RN member finds out what's possible in its own country. D. Pesaresi will circulate links.

12. D. Pesaresi, CE3RN paper accepted to SRL special issue on seismic networks: need to upload final files to SRL. W. Lenhardt, L. Duni, P. Spacek, L. Dimitrova, K. Csicsay, and L. Fojtikova to confirm their authorship in SRL, D. Pesaresi to assist. Lack of authorship confirmation will lead to author deletion.

13. K. Csicsay, CE3RN next meeting will be in Autumn 2021 in Bratislava (Slovakia), hopefully in attendance.