

**SECOND EUROPEAN CONFERENCE ON EARTHQUAKE ENGINEERING
AND SEISMOLOGY, ISTANBUL AUG. 25-29, 2014**



TSUNAMI WARNING CENTER IN TURKEY: STATUS UPDATE 2014

Nurcan M. OZEL ¹, Ocal NECMIOGLU ², Ahmet Cevdet YALCINER ³, Dogan KALAFAT ⁴,
Ceren OZER SOZDINLER ⁵, Mehmet YILMAZER ⁶, Mustafa COMOGLU ⁷, Cemil GURBUZ ⁸,
Ali PINAR ⁹ and Mustafa ERDIK ¹⁰

Eastern Mediterranean and its connected Seas have been affected by tsunamis during the known human history. The possible occurrence of a tsunami in the region in present day may lead to considerable damage, especially considering the densely populated coastal areas, infrastructure and harbours. Coastal cities cover less than 5% of the total surface area of Turkey, but populated with over 30 million inhabitants under constant growth. Continued urbanization and tourist development are additional elements of the increased exposure to tsunami hazard. Turkey joined and contributed to the initiative of a Tsunami Warning System in the North-eastern Atlantic, the Mediterranean and connected seas region (ICG/NEAMTWS) at its very beginning in 2005 through a collaboration that includes national institutions and EC-JRC coordinated by the Kandilli Observatory and Earthquake Research Institute (KOERI) through the establishment of a 24/7 National Tsunami Warning System (NTWC-TR). NTWC-TR is officially an Interim Candidate Tsunami Watch Provider (CTWP) of ICG/NEAMTWS providing services to Eastern Mediterranean, Aegean, Marmara and Black Seas as of 1 July 2012. The system has been successfully utilized during the Communication Test Exercises (CTE) and the first Tsunami Exercise, NEAMWave12 in November 2012, of NEAMTWS and Tsunami Messages are being disseminated to the subscribers of the system. Duty officers of the NTWC-TR perform internal tests of the Tsunami Warning System on a daily basis based on pre-determined set of scenarios. In addition, regular CTEs with other CTWPs are conducted. KOERI will participate in the second Tsunami Exercise, NEAMWave14 in October 2014, with a scenario in the Black Sea as Message Provider. An updated Tsunami Scenario Database is currently being produced.

¹ PhD, Professor and Vice-Director, Kandilli Observatory and Earthquake Research Institute E-mail ozeln@boun.edu.tr

² PhD Candidate, Engineer, Kandilli Observatory and Earthquake Research Institute E-mail ocal.necmioglu@boun.edu.tr

³ PhD, Professor, Middle East Technical University, Civil Engineering Department, Ocean Engineering Research Center, E-mail yalciner@metu.edu.tr

⁴ PhD, Manager, National Earthquake Monitoring Centre at Kandilli Observatory and Earthquake Research Institute E-mail kalafato@boun.edu.tr

⁵ PhD, Expert, Kandilli Observatory and Earthquake Research Institute E-mail kalafato@boun.edu.tr

⁶ PhD, Vice-Manager, National Earthquake Monitoring Centre at Kandilli Observatory and Earthquake Research Institute E-mail mehmety@boun.edu.tr

⁷ BSc, Engineer, National Earthquake Monitoring Centre at Kandilli Observatory and Earthquake Research Institute E-mail comoglu@boun.edu.tr

⁸ PhD, Professor, Kandilli Observatory and Earthquake Research Institute E-mail pinara@boun.edu.tr

⁹ PhD, Professor Emeritus, Kandilli Observatory and Earthquake Research Institute E-mail gurbuz@boun.edu.tr

¹⁰ PhD, Professor and Director, Kandilli Observatory and Earthquake Research Institute E-mail erdik@boun.edu.tr