Tsunami Warning Center in Turkey : Status Update 2012

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This is an update to EGU2011-3094 informing on the progress of the establishment of a National Tsunami Warning Center in Turkey (NTWC-TR) under the UNESCO Intergovernmental Oceanographic Commission - Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North-eastern Atlantic, the Mediterranean and connected seas (IOC-ICG/NEAMTWS) initiative.

NTWC-TR is integrated into the 24/7 operational National Earthquake Monitoring Center (NEMC) of KOERI comprising 129 BB and 61 strong motion sensors. Based on an agreement with the Disaster and Emergency Management Presidency (DEMP), data from 10 BB stations located in the Aegean and Mediterranean Coast is now transmitted in real time to KOERI. Real-time data transmission from 6 primary and 10 auxiliary stations from the International Monitoring System will be in place in the very near future based on an agreement concluded with the Comprehensive Nuclear Test Ban Treaty Organization (CTBTO) in 2011. In an agreement with a major Turkish GSM company, KOERI is enlarging its strong-motion network to promote real-time seismology and to extend Earthquake Early Warning system countrywide. 25 accelerometers (included in the number given above) have been purchased and installed at Base Transceiver Station Sites in coastal regions within the scope of this initiative. Data from 3 tide gauge stations operated by General Command of Mapping (GCM) is being transmitted to KOERI via satellite connection and the aim is to integrate all tide-gauge stations operated by GCM into NTWC-TR.

A collaborative agreement has been signed with the European Commission - Joint Research Centre (EC-JRC) and MOD1 Tsunami Scenario Database and TAT (Tsunami Analysis Tool) are received by KOERI and user training was provided. The database and the tool are linked to SeisComp3 and currently operational. In addition KOERI is continuing the work towards providing contributions to JRC in order to develop an improved database (MOD2), and also continuing work related to the development of its own scenario database using NAMI DANCE Tsunami Simulation and Visualization Software. Further improvement of the Tsunami Warning System at the NTWC-TR will be accomplished through KOERI's participation in the FP-7 Project TRIDEC focusing on new technologies for real-time intelligent earth information management to be used in Tsunami Early Warning Systems.

In cooperation with Turkish State Meteorological Service (TSMS), KOERI has its own GTS system now and connected to GTS via its own satellite hub. The system has been successfully utilized during the First Enlarged Communication Test Exercise (NEAMTWS/ECTE1), where KOERI acted as the message provider. KOERI is providing guidance and assistance to a working group established within the DEMP on issues such as Communication and Tsunami Exercises, National Procedures and National Tsunami Response Plan. KOERI is also participating in NEAMTIC (North-Eastern Atlantic and Mediterranean Tsunami Information Centre) Project. Finally, during the 8th Session of NEAMTWS in November 2011, KOERI has announced that NTWC-TR is operational as of January 2012 covering Eastern Mediterranean, Aegean, Marmara and Black Seas and KOERI is also ready to operate as an Interim Candidate Tsunami Watch Provider.