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Italian CTBTO CNF: readiness status

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The CTBTO PrepCom and the Government of Italy agreed that the seismic station located in Cludinico (CLUD) may participate as a prototype Cooperating National Facility (CNF) in experiment conducted by the Commission. The Government of Italy designed the National Institute of Oceanography and Applied Geophysics – OGS (Italy) as responsible for the management of the station. This station can contribute to further refine the CTBTO location capabilities in the Europe/Middle East area of about 21% as shown in Pesaresi and Horn (2015).

In this presentation, we will illustrate the technical details of the solutions adopted to incorporate the Italian CNF into the CTBTO International Monitoring System (IMS). We considered a CTBTO specific seismic data acquisition system, but we then opted to keep the available standard one with the addition of the CTBTO Standard Station Interface (SSI). For the SSI we had to go through hardware and software procurement: we then experienced some difficulties in installing the SSI software and its required Operating System, solved with the help of the PTS. We will also illustrate the other required technicalities like the upgrade of the UPS, the anti-tamper device operations, the establishment of data communication link and the security measures adopted.

Promotional text

The CTBT verification system includes the possible use of other data for expert technical analysis. PrepCom and Italy agreed to designate OGS seismic station CLUD as a CNF. This can contribute to refine CTBTO locations in the Europe/Middle East of about 21%.

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