Operation of the International Monitoring System Network

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The IMS is a globally distributed network of monitoring facilities using sensors from four technologies. It is designed to detect the seismic and acoustic waves produced by nuclear test explosions and the subsequently released radioactive isotopes. Monitoring stations transmit their data to the IDC in Vienna, Austria, over a global private network known as the Global Communications Infrastructure (GCI).

In order to satisfy the strict data and network availability requirements of the IMS Network, the operation of the facilities and the GCI are managed by IDC Operations. IDC Operations has three functions: the first is to ensure proper operation and functioning of the stations, the second to ensure proper operation and functioning of the GCI, and the third, handled by the IDC Operations Centre is to provide network oversight and incident management.

At the core of the IMS Network operations are a series of tools for: monitoring the stations' state of health and data quality, troubleshooting incidents, communicating with internal and external stakeholders, and reporting. An overview of the tools currently used by IDC Operations as well as those under development will be presented. This will include an outline of the IDC's strategy for operations and its dependence on entities both inside and outside the CTBTO.