

JOB DESCRIPTION

POST: Associate Seismoacoustic Operations Officer

(Junior Professional Officer)

ORGANIZATIONAL SETTING: International Data Centre Division

Operations Section

Monitoring Facilities Operations Unit

GRADE: P-2

RESPONSIBLE TO: Head, Monitoring Facilities Operations Unit

DUTIES AND RESPONSIBILITIES:

Under the supervision of the Head, Monitoring Facilities Operations Unit, the incumbent will be responsible for the following duties:

- Monitor daily operations of Seismic, Hydroacoustic and Infrasound (SHI) Stations of the International Monitoring System (IMS) stations including the incident troubleshooting, classification, escalation, and resolution. Evaluate station performances including identifying problems with data acquisition, data quality, and/or data authentication, and communicating with the station operators.
- Review, conduct preliminary evaluation, classify and update reports and ensure proper distribution and storage thereof. Assure the conformity with the IMS operational procedures. In coordination with the PTS maintenance and support staff and with IMS station operators, manage stations problems and provide assistance for first level maintenance at the IMS stations.
- Contribute to the establishment and renewal of Post Certification Activities (PCA) contracts. Evaluate the performance of station operators through the review of monthly and summary reports. Review and certify PCA contract deliverables.
- Collaborate with team members and support the calibration project, including communication with station operators for the planning and implementation of calibration at seismic and hydro-acoustic Tphase stations, review calibration results and take action in case of out of specification results received.
- Collaborate with team members and support the Operations Center activities, including taking duty shifts and the development of standard operating procedures.
- Participate as a team member in visits to IMS stations for training purposes, and to better evaluate local conditions in regard to PCA contract management.
- Perform other duties as assigned.

QUALIFICATIONS:

- University degree in geophysics, acoustics, engineering or a related field;
- At least two years of relevant working experience in at least one the following areas:
 - Analysis of geophysical time-series data;
 - Application of a wave-technology network development;
 - o Management of station of seismic, hydro-acoustic, or infrasound (SHI) technology.

• Relevant computer and programming skills (Windows MS Office, Unix, Linux, Perl, Python, SQL, JIRA), in particular the use of Object–Relational Database management Systems (Oracle, Postgres etc.) and database applications.

LANGUAGE

• Excellent written and oral communication skills in English are essential. Working knowledge of other official CTBTO languages is desirable.

COMPETENCIES:

- **Professionalism** Demonstrates professional competence and mastery of subject matter. Conscientious and efficient in meeting commitments, observing deadlines and achieving results.
- Planning and Organizing Develops clear goals that are consistent with agreed strategies; identifies priority activities and assignments; adjusts priorities as requested; allocates appropriate amount of time and resources for completing work; foresees risks and allows for contingencies when planning; monitors and adjusts plans and actions as necessary.
- Communication Very good skills in communicating with people from different backgrounds.
- **Teamwork** Proven interpersonal skills and the ability to listen and work in a multi-cultural, multi-ethnic environment with sensitivity and respect for diversity.
- **Technological Awareness** Ability to keep abreast of developments and relevant technologies applicable to the
- profession.
- **Client Orientation** Ability to identify clients' needs and establish and maintain effective relationships with internal and external stakeholders.

LEARNING ELEMENTS

At the end of the assignment, the Associate Seismoacoustic Operations Officer will have:

- Knowledge and understanding of the Commission's activities and the role of the Provisional Technical Secretariat (PTS) in the operation of the International Monitoring System (IMS).
- Thorough knowledge of and expertise in the operation of SHI IMS stations, including incident troubleshooting, classification, escalation, and problem resolution; evaluation of station performances including identifying problems with data acquisition, data quality, and/or data authentication, and communicating with the station operators.
- Knowledge of Post Certification Activities (PCA) contract management, including evaluation of the
 performance of station operators through the review of monthly and summary reports, and PCA
 contract deliverables.

BACKGROUND INFORMATION

The Comprehensive Nuclear-Test-Ban Treaty (CTBT) bans nuclear explosions by everyone, everywhere: on the Earth's surface, in the atmosphere, underwater and underground. The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization with its headquarters in Vienna, Austria is the international organization setting up the global verification system foreseen under the CTBT. The Treaty was established in 1996, has been signed by 187 states, and ratified by 178. The Treaty provides for a global verification regime, including a network of 337 stations worldwide, of which 302 are in operation, a communications system, an international data centre and on-site inspections to monitor compliance.

The International Monitoring System (IMS) will, when complete, consist of 337 facilities worldwide to monitor the planet for signs of nuclear explosions. Around 90 percent of the facilities are already up and running. The IMS uses the following four state-of-the-art technology: seismic, hydroacoustic, infrasound, and radionuclide.