

JOB DESCRIPTION

POST:	Associate Operation Data analysis and Software Support Officer (Junior Professional Officer)
ORGANIZATIONAL SETTING:	International Data Center (IDC), Operations Section
GRADE:	P2
RESPONSIBLE TO:	Operations Center Manager

DUTIES AND RESPONSIBILITIES

Under the guidance of the Director of the IDC Division, the overall supervision of the Chief of the Operations Section, and the direct supervision of the Operations Center Manager, the incumbent will be responsible for the following duties:

- Collating and analyzing station State of Health data and common issues from an operational perspective to support fault diagnosis and resolution;
- Coordinating the SO-Portal software development with project manager and senior users, prioritizing the tasks and releases;
- Managing, maintaining, and prioritizing the product backlog;
- Participating in software design and development, including software architecture and technology selection, ensuring that the software meets user needs and delivers value;
- Conducting tests using testing protocols to analyze and evaluate the functional properties of the software;
- Ensuring the maintenance of the user documentation, in order to keep it up-to-date.

QUALIFICATIONS

- University degree in a related science field, software engineering, or relevant similar field.
- At least 2 years of relevant work experience in the field of software development, data analytics/statistics and/or relevant working experience in the operation, maintenance of monitoring networks and systems, such as the International Monitoring Systems of the CTBTO.
- Work experience with either data extraction, data preprocessing and/or database management is essential.
- Knowledge of data analysis software and languages such as JAVA, R, QGIS, Jupyter Notebook, Python or similar is desirable.

LANGUAGES

- Excellent written and oral communication skills in English are essential. A working knowledge of one of the other official languages of the CTBTO Preparatory Commission is desirable.

COMPETENCIES

- **Professionalism** – Demonstrates professional competence and mastery of the subject matter. Conscientious and efficient in meeting commitments, observing deadlines, and achieving results.

- **Planning and Organizing** – Effectively implements goals that are consistent with agreed strategies; 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** – Speaks and writes clearly and effectively; listens to others, correctly interprets messages from others and responds appropriately; tailors language, tone, style and format to match the audience.
- **Teamwork** - Works collaboratively with colleagues to achieve organizational goals; possesses 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** - Keeps abreast of developments and relevant technologies applicable to the profession.
- **Client Orientation** – Identifies clients’ needs and establishes and maintains effective relationships with internal and external stakeholders.
- **Creativity** - Actively seeks to improve programmes or services; offers new and different options to solve problems or meet clients’ needs.

LEARNING ELEMENTS

At the end of the assignment, the Junior Professional Officer will have:

- Knowledge and understanding of the Comprehensive Nuclear-Test-Ban Treaty and the numerous activities undertaken to promote its entry into force, such as the important involvement of the Provisional Technical Secretariat in capacity-building;
- Knowledge of and expertise in the operation and maintenance of IMS facilities;
- Experience in collating and analyzing station SOH data;
- The ability to cultivate and manage relationships with target stakeholders, including station operators, PTS staff, State Signatories, and software providers.

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 306 are in operation; a communications system; an international data centre; and on-site inspections to monitor compliance.

The IDC Operations Section uses several software tools, often referred as OPS Tools, for monitoring and reporting purposes. It includes the IMS Reporting System (IRS), State of Health (SOH), the Calibration Activities Management Tool (CAMT), the Station Operator Performance Evaluation Tool (SOPET), the Radionuclide Operation Support System (ROSS), and Laboratory Operations (LABOPS). The SOH Tool shows the operating status of IMS Stations and allows monitoring of the station performance parameters, both at Station level and at the Global Communication Infrastructure (GCI) level. The SOH data analysis and preprocessing is crucial for station fault diagnosis.

A new project, the Station Operator Portal, has been initiated to support station operators in operating and maintaining the IMS stations. The SO-Portal will be a web-based and customizable platform that includes the currently available PTS tools (SOH, IRS, DOTS, PRTool, etc.), and additional functionalities that will facilitate routine operation and maintenance tasks. These will include: communicating with the PTS; accessing online training courses and documentations; and managing the services under PCA contracts, amongst others.

The SO-Portal will be accessible through single sign-on (SSO: one login for all tools), and the authorization is managed at the user role level (e.g. Station Manager, Local Operator, PCA Manager, etc.).