



EQUIPMENT SUPPORT FOR THE IMPLEMENTATION OF SAFEGUARDS

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The provision of effective, reliable, and user-friendly equipment needed for the implementation of safeguards is one of the main objectives of the Division of Technical Services (SGTS) in the Department of Safeguards. As an outcome of a review by an independent external consultant firm, the instrumentation sections of the SGTS were reorganized in January 2001 into two new sections, the Section for NDA Systems and Seals (TNS) and Section for Installed Systems (TIE). Each section has “cradle-to-grave” responsibilities for development, implementation, maintenance, and decommissioning of safeguards instruments and measurement systems. Unattended assay, monitoring and surveillance instruments are the responsibility of TIE while attended nondestructive assay (NDA) instruments and seals are handled by TNS. The principal goals of both sections are to define equipment requirements based on Departmental needs, to coordinate Support Programme tasks concerning development and implementation activities, to provide system engineering of commercial components, manage laboratory and to do field testing and prove system suitability for defined safeguards applications. In addition both sections coordinate equipment and supply needs for the Department, including acquisition, preparation, servicing, installation, commissioning, troubleshooting, maintenance and repair, ensuring their availability when needed. As required, TIE and TNS provide specialized field support to the Operations Divisions.

Each section is working to standardize equipment as much as possible and reduce the number of instruments performing the same function. This reduces both inspector and technician training, required parts inventories, and overall life-cycle costs. Development based on User Needs from the Operations Divisions follows a strict quality control program that includes a thorough qualification testing procedure with the last phase being field-testing under actual facility conditions. A procedure for authorization of equipment systems and instrumentation software has been implemented to streamline and simplify the process. Project Managers for specific technology areas have been appointed to oversee the equipment lifecycles.

The IAEA inspection instruments and systems currently approved for routine use and under development are described in this paper.

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