Djibouti and the United States Forging a Strong Partnership in Sustaining a Nuclear Security Regime

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Initial Deployment

From day one, Djibouti took ownership in sustaining a radiation detection architecture. Born from the US Department of Energy – National Nuclear Security Administration – Office of Nuclear Smuggling Detection and Deterrence (DOE/NNSA/NSDD) program, formerly known as the Second Line of Defense Megaports program, radiation detection equipment was stood up to scan all imports and exports into and out of Djibouti. This installation included ancillary equipment including handhelds and identification measures for alarming conveyances.

Growth of Radiation Detection Systems

From one site at one location, Djibouti has experienced exponential growth in detection capabilities. Now various points of entry into Djibouti have radiation detection capabilities including at multiple sea ports and border crossings. Djibouti has also implemented a mobile detection system (MDS) that uses indigenously sourced parts that can be transportable to key areas within the borders. One site was a cost-share with Djibouti National Security managing and funding design, construction and installation. Djibouti also undertook a pilot project equipping radiation detection through maritime vectors.

Operations of Radiation Detection Systems

Through a successful partnership of Djibouti National Security and Djibouti Customs, operations of the radiation detection systems are conducted according to International Atomic Energy Agency (IAEA) and DOE/NNSA/NSDD guidelines. Djibouti Customs performs Front Line Officer (FLO) duties including manning the Central Alarm Stations (CAS). Customs also provides the training center and IT support. Djibouti National Security performs management oversight of operations and are the main interface with its US counterparts.

Maintenance of Radiation Detection Systems

Djibouti National Security performs a majority of the maintenance activities associated with the radiation detection systems. The status of the radiation portal monitors (RPMs) and ancillary equipment such as cameras and communications systems is reviewed regularly by maintenance leadership within the organization. National Security management wants reports created by the site supervisors to identify trends, make sure maintenance issues are addresses, and identify re-training requirements. When large-scale issues arise, Djibouti informs US DOE counterparts on the problems and the teams gather to fix them collectively.

Combined Djibouti/US Teamwork

Issues have arisen that take large-scale project planning from both partners. Sometimes resources such as a new RPM or a suitable IP camera are not attainable in Djibouti, so they work with DOE/NNSA/NSDD counterparts to source them according to programmatic requirements. Djibouti contributes to project success providing duty free logistics pertaining to equipment shipments once they have arrived in-country, the man-lifts, communications technicians, and heavy lifting equipment to bring the radiation detection systems to full functionality.

Djibouti IAEA Engagements

- Agreement between Djibouti and IAEA for the application of safeguards in connection with the treaty on the Non-Proliferation of Nuclear Weapons.
- African Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology

Successes of the Program / Partnership

From the growth of the radiation detection architecture across Djibouti, a majority of all containers are scanned into and out of the country. Operators adjudicate alarms on all conveyances that are suspected to have radiation. Djibouti also has the ability to perform secondary inspections using radio isotopic identification devices (RIIDs). Djibouti has also implemented many maintenance related resources on the system such as Handheld Assessment Tool (HATS) on the RIIDs, Communications Monitoring Software (COMMON) on the hardware/software and Desktop Analysis Reporting Tool (DART) on the radiation portal monitors (RPMs). Djibouti is viewed within the region as a leader with the most experience in radiation detection operations.

Challenges in Instituting a Radiation Detection Program

- Integrating maritime Vectors Partnerships has proved to be challenging to implement.
- Creating a suitable assessment program that is scalable to Djibouti.
- Configuration management between the multiple sites is proving to be a test as the necessary spare parts are not always attainable at each site.