Transnational Criminal Organizations, Terrorists and Radiological/Nuclear Materials: Exploring a Potential Central American Nexus (TCOTRN)

RESEARCH PROJECT OBJECTIVE

- Identify transnational criminal organizations (TCOs) and networks operating in the Central American Region (including the Caribbean) capable of engaging in radiological/nuclear (RN) smuggling.
- Determine existing or potential links between these TCOs and nuclear smuggling or terrorism.
- Analyze possible smuggling routes and methods that could be used by TCOs smuggling RN materials on behalf of terrorists.
- Explore vulnerabilities and suggest possible modifications to enhance the Global Nuclear Detection Architecture.

PROJECT OVERVIEW

The TCOTRN Project was conducted over a two-year period by a multi-institutional START research team consisting of scholars and specialists in the areas of organized crime, terrorism, nonproliferation and RN materials. While often perceived as a threat, the potential nexus that is the subject of this research had yet to be systematically and empirically explored. To address this research gap, the team undertook extensive research and analysis, including qualitative and automated open-source data collection, field research, model and tool construction and application, policy review and geospatial analysis.

PROJECT COMPONENTS

- Comprehensive review of the extant literature related to RN smuggling, organized crime and the regional dynamics of the 42 countries and territories making up the TCOTRN region, leading to the development of a conceptual model of the threat nexus.
- Identification of 155 regionally operative TCOs that meet basic feasibility criteria for engaging in RN smuggling on behalf of a terrorist group and construction of in-depth Organizational Profiles for each of these groups.
- Ranked ordering of the dangers posed by these groups, employing a specially developed Radiological and Nuclear Smuggling Threat Assessment Tool (RN-STAT).
- Network analysis of inter-organizational links between these TCOs, plus outside contacts.
- Overviews of all past RN smuggling attempts in the TCOTRN region together with illustrative global cases, as well as efforts to counter these activities.
- Detailed analyses of illicit, non-RN smuggling markets (i.e. antiquities, narcotics, human smuggling, and wildlife trafficking) and networks in the TCOTRN region in order to determine whether these networks could be utilized directly to smuggle RN materials into the U.S. and whether the routes or methods involved hold lessons for preventing illicit RN trafficking.
- Field research-based analysis of the current organized crime context in Mexico, Colombia, Panama and Costa Rica.
- Detailed examination, including field research, of three prominent regional TCOs: Los Zetas, La Familia Michoacana-Knights Templar and FARC.
- Overview of trafficking methods and associated vulnerabilities related with the region, from semi-submersibles and go-fast boats to border tunnels and ultralight aircraft.
- An innovative instantiation of the entire TCOTRN region in a large multi-modal geospatial network consisting of 13+ modes of transportation integrated with detailed data on each group’s behavioral characteristics, resulting in a dynamic and comprehensive model that can be used to investigate likely routes and methods under a variety of RN smuggling scenarios (see accompanying detailed fact sheet).

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