THE FUTURE OF TRANSPORTATION SECURITY IN THE CARIBBEAN, CENTRAL AMERICA & MEXICO PARTICIPANT GUIDE 2022

This Participant Guide has been designed to familiarize participants with basic information that will guide conversations and discussions during the 2022 Transportation Security Symposium Session 5 panel discussion on: "The Future of Transportation Security in the Caribbean, Central America & Mexico".

The purpose of these Sessions is to explore international issues and requirements that many countries may encounter in the near future with respect to the safe and secure transportation of radiological and nuclear materials. **Session 5 will focus on four general topical areas. These are:**

- Malevolent Adversaries & Threats
- Emerging Trends affecting Future Transportation Operations
- Likely Impacts of Political Changes
- Resource Requirements in terms of Personnel & Technologies

Moderation and facilitation during the Sessions will be provided by Subject Matter Experts (SME) in their respective fields. While session participants are encouraged to familiarize themselves with the foundational information presented in this Participant Guide, participants are also encouraged to prepare for these sessions by building on this information and conducting their own research into these areas, especially as they pertain to participant's own countries.

The challenges to safe and secure transportation of radiological and nuclear materials both currently and in the near future are numerous. Many countries in The Caribbean, Central America and Mexico currently face these challenges and information from one country could benefit participants in another country. Just as the challenges themselves are international – as radiation and radiological particles respect no borders, and an incident in one country could endanger its neighbors – so also might solutions be international as well.

The overall goal of our Session 5 discussion is for ALL Session 5 participants to engage with one another and emerge at the conclusion better informed regarding all topical areas of focus, *not only as these pertain to their own country*, but **also** as they pertain to their neighbors & partners for secure transport of radiological and nuclear materials throughout this entire region.

For the purposes of these Sessions, we would like to invite all participants to adopt the professional perspective of "**Participant Analyst**". An "Analyst" is commonly defined as a person who reaches conclusions and makes decisions based on a review of all relevant information available. Each of us are uniquely qualified by our own experiences and professional knowledge to consider information from our own perspectives. Each of us are professionals in one respect or another. We are accustomed to analyzing information available to us on a daily basis. Therefore we are all individually qualified to look at basic information and draw informed conclusions, each of us using our own professional judgement and experience. For Session 5 we invite all participants to focus their attention on the general topical areas outlined above. These will serve as the foundation for our panel discussion.

TOPICAL AREA #1 -MALEVOLENT ADVERSARIES & THREATS

The intent of Topical Area #1 is to establish a baseline regarding threats to radiological and nuclear material in the Caribbean, Central America, and Mexico. *"Who might want to steal or compromise this material, and to what purpose? How might they do this?"* Having an in-depth understanding of the threats we collectively face currently provides a starting point to conduct our trend analysis of future threats we collectively may face.

Panelists will discuss examples of open source information that describes either specific malevolent trends, malevolent actors, or more general threats against radiological or nuclear material in the Caribbean, Central America, and Mexico. These reports concern events that have actually occurred or continue to occur – even if they did not occur in your country.

Personal Questions to Consider

As you review the information, begin to characterize various threats in terms of *the capabilities each potential adversary group appears to possess* in your own country. This will be important when discussion turns to 'providing security for radiological or nuclear material during transportation'.

This is because a radiological or nuclear target that is secure against two men with machetes is **not** secure against six men armed with rifles. A target secure against six men with rifles is **not** secure against twelve men with automatic weapons, armored vehicles, forklifts, and remotely-piloted drones.

It is **not** sufficient to merely ask "is this radiological or nuclear target in-transit secure?" The question must be "is this radiological or nuclear target in-transit secure <u>against X threat</u>?" Rather than prepare for what we believe an Adversary is *likely* to do, we must prepare for what an Adversary <u>is capable of</u>.

In your analysis of malevolent adversaries and threats in your country ask yourselves – "Has my country experienced an attack or an event of this type? Was it considered a terrorist attack?" Consider whether you know of any terrorist organizations currently active in your country. In your opinion, would any of these organizations or groups be capable of targeting a radiological or nuclear shipment inside your country? And if they were successful in seizing a target in-transit, would they be more inclined to use the material against individuals, groups, or governments; or sell that target on the global market?

TOPICAL AREA #2 -IMPACT OF POLITICAL CHANGES

Political changes are a fact of life in most countries, and while changes in administration can be upsetting, in most cases elections occur and transitions are relatively non-violent. At the level of most working class people, direct impacts to their lives are minimal. But sometimes political climates in any country can become intense due to events occurring that are not normally encountered. In extreme cases, political changes can be accompanied by acts of protest, civil disobedience, rioting, and anarchy. Even relatively peaceful changes of administrations may result in consequences that create challenges.

How do changes in the political environment in your country – even peaceful or uneventful changes – affect your job? These could include consequences such as management changes within various regulatory authorities or changes in regulations themselves; cuts in funding; or possibly other

administrative requirements. What if the political transition is not peaceful? Social disruption could result in increased threat levels. Too much change happening at once can result in negative consequences.

TOPICAL AREA #3 – EMERGING TRENDS AFFECTING FUTURE TRANSPORTATION SECURITY OPERATIONS

One of the more important roles we perform as professional analysts is that of looking at current data and drawing conclusions that are intended to define and describe the future. We study current developments and ask questions to illustrate how current developments will likely characterize future environments. This is known as "Trending". To anticipate the future – the challenges we will likely face– and to prepare now for what we will be forced to deal with then, we engage in the analytical process of Trending.

How does Trending work? Is it simply an educated guess, or can we base predictions on rational extrapolations from developments occurring in the present? For example, warfare recently occurred between Armenia and Azerbaijan over a province belonging to the latter but largely inhabited by people of the former. In this warfare, a recent article noted that the wide-spread use of many different types of armed drones, many supplied by Turkey, was responsible for the successful Azerbaijani victory over the Armenian forces.

https://www.forbes.com/sites/davidhambling/2020/11/10/the-magic-bullet-drones-behind-azerbaijans-victory-over-armenia/?sh=af980ac5e571

What trending conclusions might we be able to reach about the use of armed drones in future conflicts? These relatively inexpensive weapons systems, used in large applications of different types of drones, played an outsized role in the outcome of this conflict. It would not be unreasonable to conclude that future development and deployment of fleets of armed drone would enable otherwise less-well-prepared combatants to prevail over enemies who do not possess such capabilities. Moreover, such fleets are cheaper to build and maintain than fighter jets or large bombers – and in the future they may be even more efficient and effective.

It is important that we engage in such speculative or predictive activities. After the United States was attacked on September 11, 2001, the 9/11 Commission was formed to analyze why the US was caught so unprepared. Out of the many that were identified, one specific failure stands out as a key finding – it was a **"failure of imagination".** Those in the business of security, law enforcement, and intelligence services simply could not or did not imagine that such an act would or could be committed. What if we had considered the unimaginable??

Questions to Consider

As you review the information in the below open source excerpts, consider these questions: Does this information affect your country, or even parts of your country? Do such activities occurring in neighboring countries have impacts on or consequences for your own? If these activities are in fact true, do they constitute a trend? Are they likely to manifest into anything more threatening than intelligence reports? Do they offer the potential for organized criminal activity or terrorist attacks?

TOPICAL AREA #4 – RESOURCE REQUIREMENTS IN TERMS OF PERSONNEL & TECHNOLOGIES

It seems clear that scenarios could plausibly develop in the future offering the necessary mix of civil unrest, political transition, increasing adversarial capabilities, and growing geo-political friction to incorporate threats against radiological or nuclear material in-transit. Our final topical area likewise requires us to use our imaginations and creativity to analyze questions involving "what do we do *now* to prepare to meet such threats *in the future*, should they develop? What will our country's future needs look like?" Resource requirements to confront such actions are many. A few examples include –

- Intelligence and data-gathering are required to perhaps receive early warning of an attack under development.
- Training and technologies to use against new or untested threats, such as more sophisticated explosive devices, armed drones, adversaries armed with cyber-attack and artificial-intelligenceenabled capabilities.
- Communications capabilities that are sufficiently robust and resilient to survive efforts to deny communication and coordination to the responding units and personnel.
- Response management capabilities such as mobile cameras, camera-equipped drones, automated tracking systems, and other means of identifying the attacker and defender, and the status of the target being seized.
- Means of delay that can be incorporated into packaging, vehicles, and transportation protocols which will require adversaries to bring more equipment with them and take longer to overcome.
- Response Force Transportation capabilities that will allow the right responders to respond to the right locations within the right time limits to effectively engage and defeat the adversaries.
- We must also recognize that "first responders" to radiological or nuclear incidents do not only involve law enforcement, but fire-fighting personnel and emergency medical technicians as well. They may also involve environmental remediation experts and clean-up crews should radiological contamination be released. Response efforts may also involve federal police or military units if necessary to perform investigative functions.

Thus "resources" in this context encompasses all the various items that support the above categories, such as funding, staffing, personnel management, training, equipment, and other requirements – as well as the assets needed to securely transport radiological and nuclear materials from one location to another. In addition to vehicles there are budgets to adhere to, facilities to maintain, and salaries to pay. Some countries require 5-Year Plans in regulations to assist with forecasting the total funding required to plan for outyears. Considering ALL of these response resource requirements, the key questions are – for each country, and *in particular* for those theft scenarios you deem the most likely or most credible your country may face in the next five years – *what resources, training and assets might you logically need to meet the threats you determine your country may likely face in the foreseeable future?*