U.S. Naval War College PSI 2014 Game Report

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Postulated scenarios were formulated to generate useful analysis and discussion. The views expressed in this work and the game's scenarios should not be inferred to represent expected or desired future conditions and do not represent the policy or position of the Naval War College, Department of the Navy, Department of the Defense, or any agency in the U.S. government. This work was cleared for public release; distribution is unlimited.

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At the request of the Office of the Secretary of Defense, members of the Naval War College (NWC) Center for Naval Warfare Studies (CNWS), particularly from the War Gaming Department, Strategic Research Department, and Office of Naval Intelligence Detachment-Newport hosted the 2014 Proliferation Security Initiative (PSI) Operational Experts Group (OEG) Meeting and Game at the Naval War College in Newport, Rhode Island, 13-15 May 2014. This report was prepared by the War Gaming Department faculty and documents the findings of these efforts.

The War Gaming Department conducts high quality research, analysis, gaming, and education to support the Naval War College mission of preparing future maritime leaders and helping to shape key decisions on the future of the Navy. It strives to provide interested parties with intellectually honest analysis of complex problems using a wide range of research tools and analytical methodologies. The War Gaming Department is located within the Center for Naval Warfare Studies at the U.S. Naval War College in Newport, Rhode Island. It was first established in 1887 by Lieutenant William McCarty-Little.

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Executive Summary

OVERVIEW

In September 2013 Deputy Assistant Secretary of Defense for Countering Weapons of Mass Destruction Rebecca Hersman requested that the Naval War College conduct a PSI table top game in May 2014 in conjunction with a meeting of the PSI Operational Experts Group (OEG). It was specifically requested that the game explore critical challenges and opportunities in counter-proliferation interdiction, and identify capacity building tools that may be shared with the broader PSI community.

Members of the Naval War College (NWC) Center for Naval Warfare Studies (CNWS), particularly from the Strategic Research Department, War Gaming Department, and Office of Naval Intelligence Detachment, worked with Office of the Secretary of Defense (OSD) personnel and members of the U.S. interagency to design a game that would facilitate deeper comprehension of and actionable recommendations related to key interdiction trends, decisions, and practices among PSI member states. The PSI game was conducted during the PSI Operational Expert Group (OEG) meeting held 13-15 May 2014 at the Naval War College, Newport, Rhode Island. Delegations from the following PSI OEG states participated: Argentina, Australia, Canada, France, Germany, Japan, Netherlands, New Zealand, Norway, Poland, Portugal, the Republic of Korea, Singapore, Spain, Turkey, the United Kingdom, and the United States.

The four objectives for the PSI 14 table top game were:

- Build a shared appreciation for how ratification and eventual entry into force of the Beijing Convention on the Suppression of Unlawful Acts Relating to International Civil Aviation changes the status quo with respect to counter-proliferation laws, policies, practices, and obligations
- Build a shared understanding of international standards, national laws, policies, and terminology related to shipments in transit and transshipment among PSI member states.
- Build a shared understanding for the key issues and challenges related to disposition and liability aspects of PSI and how national laws, policies and procedures differ amongst PSI OEG member states.
- Identify changes to existing critical capabilities and procedure (CCP) tools or potential new CCP tools as it relates to the three above objectives.

DESIGN & STRUCTURE

PSI 2014 was designed as a two-move, one-sided, professionally-facilitated seminar style event played over two days. Participants examined multiple proliferation scenarios as both country teams and as functional groups. Functional groups were divided into the following areas of player expertise: law enforcement, military, legal, and diplomatic. Both country teams and functional

groups were slated to explore two scenarios consisting of three proliferation events over the course of two days, but time constraints forced many country teams to only focus on two of the three. The flexible nature of this game design enabled players to maximize opportunities for exploration, learning, and interaction while simultaneously playing multiple proliferation streams. Each move consisted of a scenario brief, a scenario update, generation of an initial assessment followed by a country or functional course of action, and finally, a moderated group plenary discussion for all players to present their respective courses of actions and discuss any issues associated with them. On the morning of the third day, all players participated in a combined super plenary session to discuss key issues and insights derived from game play.

FINDINGS & IMPLICATIONS

Players recognized the benefit of relying on existing international law and partnerships to conduct interdictions in international waters and airspace. Players advocated for initially leveraging existing national laws to interdict vessels or aircraft passing through their territories, where they have jurisdiction to act. In other game situations, players relied on UN Security Council Resolutions, the Beijing Convention (posited as in force in the second move of the game), the SUA Convention, and the Chemical Weapons Convention as authorization to interdict a ship or aircraft suspected of carrying items of proliferation concern. There was broad consensus that the Beijing Convention should be adopted and standardized internationally. One player said, "The Beijing Convention sets an international standard that everyone needs to reach. We need to aid other PSI endorsees on this standard." Conversely, players acknowledged that the Beijing Convention does not provide a method to interdict WM-related information transported on a person in transit.

Players recognized the need to develop a deeper understanding of which national and international laws and policies can be applied to counter proliferation events related to transit and transshipment. Understanding each country's definition and approach to transit and transshipment was characterized as a necessary step towards furthering cooperation. Tracking licenses of cargo traveling from origin to destination when a vessel or aircraft is in a place of transit or transshipment was also touted as an area of emphasis for civilian and military decision-makers.

The PSI critical capabilities and practices construct needs to be strengthened in order to help countries to better inform their leaders in time sensitive decision-making environments. PSI Operational Experts Group countries acknowledged the benefit of strengthening critical interdiction capabilities and practices of all PSI member states. Several countries suggested sharing a subset of CCP tools with non-PSI states as an incentive to join the PSI community and commit to the interdiction principles. Establishing common processes and technologies will help facilitate the sharing of information and knowledge by various departments and agencies within PSI member states. Players highlighted many challenges to developing best practices and focused on solutions that capture lessons learned and updating check lists in real-time, phrasing lessons in terms of generic, actionable recommendations or tasks, and proactively encouraging PSI-endorsing states to review and integrate CCP updates into national plans and policies. Such lessons should be both

positive and negative and acquired and documented quickly to avoid individuals forgetting the challenges faced during the course of a proliferation event.

Supporting the development and management of PSI CCP tools requires that organizations and agencies of PSI endorsing states encourage the sharing of lessons learned by establishing CCP programs, policies, and incentives. The global knowledge of countering WMD proliferation can be preserved and transformed by managing a lessons learned database for current and future PSI practitioners. To foster greater socialization of best practices, an online discussion feature would allow PSI users to interact with each other through online chatting or face-to-face discussions. The CCP tool website could also feature an application that allows users to search points of contacts by country, agency, name, or area of expertise. This would expedite decision-making and better position PSI states to standardize pre-decisional authorities within and across agencies. Being able to quickly identify the most appropriate CCP tool and assess its utility after the fact through a user rating system and feedback form would help publishers and consumers revise and reuse products for future decision-makers. Having gained a deeper appreciation for the complexities of individual proliferation events during game play, players advocated for CCP tools that are tailored to counter specific scenarios.

Leveraging the CCP Tool management process and characteristics discussed in this report, the PSI OEG should further formalize a dedicated CCP Working Group aimed to encourage and manage the further development of CCPs that show promise for improving PSI interdiction outcomes. Based on the game's findings, this group could begin by a conducting a thorough review of the literature and expert input to create a conceptual framework for planning and improving a PSI CCP tool framework that maximizes both the impact to WMD interdiction and the quality of information developed for CCPs. The working group should begin with developing a working, consensus definition of best practices, along with criteria and processes for classifying information that maximizes both impact and quality of the CCPs.

Several strategic-level impediments to interdiction highlighted by players include the unwillingness of nearby countries to take action to assist a state, the consequences of a country overreacting to an interdiction using military force, and the political and operational costs associated with not taking any action. Expanding bilateral boarding agreements between PSI member states was suggested as an effective way to secure expedited processes or pre-approval for stopping and searching ships at sea. An inspection in a country's port was preferred over interdiction in territorial waters or on the high seas. States may be less likely to cooperate in international waters where interdiction on the high seas requires additional jurisdiction and coordination, particularly in time-compressed environments. Determining violations for the transport of intellectual WMD material may be challenging when limited evidence on the person exists.

Persistent intelligence and CCP tool sharing between PSI member states prior to a real-world proliferation event will better position national security decision-makers to identify pre-decisional authorities and mission tailored force package responses. Information and intelligence sharing

through bi-lateral and multilateral agreements and CCP tools are critical enablers to rapidly making decisions related to authorities and capabilities in time-constrained environments. Due to the time sensitive nature of real-world PSI events, encouraging rapid decision making through interagency coordination bodies within a government is desirable prior to seeking outside assistance or coordination. Players highlighted that coordination between customs agencies and the military is critical to establishing greater awareness and prepositioning of assets in case the conveyance decides to attempt to escape into international waters or airspace.

The use of military assets as a way to deter or respond to any potential military reaction from a country of proliferation concern whose cargo is under investigation was also emphasized during game play. Any diversion of suspected cargo would be limited by the laws and the political will of the country allowing, for example, the ship into port. Capability and capacity limitations may also limit a PSI endorsing state's ability to conduct surveillance and interdiction missions. Fostering cooperation through PSI meetings, table-top exercises, and real-world exercises will strengthen relationships between PSI endorsing states, and create new relationships with non-PSI states to advance the global community's interest in preventing the proliferation of WMD.

A state's ability to respond to a proliferation event requires authorities and political will. Upon establishing the requisite authorities and nurturing the political will to prevent WMD or related material from reaching illegitimate end-users, states must enhance their awareness of threats and ways to respond to these threats through sharing of intelligence and best practices. Counter proliferation capabilities that reside on land, air, or sea are best applied when national organizations coordinate and cooperate prior to a real-world event. When a nation is limited in one or more of these areas, other PSI endorsing states can help that country build their capability to respond to future proliferation events. Authorities and political will, awareness, and capabilities can be used as a framework to support military and civilian decision-makers develop PSI engagement strategies. The amount of emphasis placed in one of these areas depends on the level of contribution and capacity a state has in these areas. Sustained cooperation between a state's Ministry of Foreign Affairs and their military and law enforcement is critical to understanding the strengths and limitations for a country to respond to WMD proliferation.

Finally, the illicit use of three-dimensional 3D printing technology as a means to digitally fabricate WMD or related material as physical objects was a focus of player discussions. Three-dimensional printing offers many potential advantages to proliferators of WMD. It could enable users to build objects from scratch more quickly, cheaply, and with less chance of interdiction than using imported items. A person or organization could create more complex objects, customize parts, and reverse engineer the manufacturing of material that may no longer be readily available at the time and place of their choosing. It did not appear to players that existing national and international laws sufficiently regulate the use of 3D printing for the purposes of limiting WMD related material to end-users of concern. Capabilities to detect the export and use of this technology and the formulation and sharing of intelligence and CCP tools are limited as well. The proliferation of this

technology, to include the printed items, the information, and the 3D printers should be examined at future PSI games or events.

Game Report

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I. Introduction

STATEMENT OF SPONSOR'S INTEREST IN THIS TOPIC

The variety of expert PSI meetings and field and tabletop exercises have explored and identified ways to strengthen PSI states' ability to more effectively impede and stop WMD, their delivery systems, and related items. However, certain issues, such as ratification of *The Convention on the Suppression of Unlawful Acts Relating to International Civil Aviation* (Beijing Convention), disposition and liability, and the application of critical capabilities and practices (CCPs) tools—were found to require additional exploration and work by the PSI Operational Experts Group (OEG). This realization—the need for continued improvement in a broad range of analytical tools to better understand and address changing proliferation issues— led to the consideration of an analytical game as a key part of the next, U.S.-hosted, Operational Experts Group meeting.

In September 2013 Deputy Assistant Secretary of Defense for Countering Weapons of Mass Destruction Rebecca Hersman requested that the Naval War College conduct a third PSI table top game in May 2014 as part of the OEG meeting. It was specifically requested that the game explore critical challenges and opportunities in counter-proliferation interdiction and identify capacity building tools that could be shared with the broader PSI community.

PROBLEM STATEMENT

The evolution of the proliferation environment and counter-proliferation regimes and practices create critical issues and challenges that could inhibit PSI endorsing nations to effectively carry out their roles as outlined in the PSI Statement of Interdiction Principles.

PURPOSE

The purpose of the 2014 PSI tabletop exercise was to build a shared understanding among participating states and examine current key proliferation interdiction challenges and solutions. The exercise was then to assist in examining how CCP tools could be modified, improved, or created to help address current challenges.

OBJECTIVES

Game objectives were determined based on a series of discussions with the game sponsor and individual scenarios, and the overall game design, was custom tailored to address the topics involved. Objectives were reviewed by the game sponsor to ensure compatibility and game-ability. Game objectives and associated research questions were used to drive game design and play.

The four objectives for PSI 14 were as follows:

- Build a shared appreciation for how ratification and eventual entry into force of the Beijing Convention on the Suppression of Unlawful Acts Relating to International Civil Aviation changes the status quo with respect to counter-proliferation laws, policies, practices, and obligations

- Build a shared understanding of international standards, national laws, policies, and terminology related to shipments in transit and transshipment among PSI member states.
- Build a shared understanding for the key issues and challenges related to disposition and liability aspects of PSI and how national laws, policies and procedures differ amongst PSI OEG member states.
- Identify changes to existing CCP tools or potential new CCP tools as it relates to the three above objectives.

RESEARCH QUESTIONS

Based on OSD-Policy's interest in exploring current proliferation interdiction challenges, and after performing a review of related literature, the NWC and OSD-Policy agreed upon the following four research questions to help address the game's objectives.

1. What are existing strategic and operational security, legal and diplomatic impediments to effective interdiction of prohibited materials during shipment and transshipment among PSI member states?
2. What security, legal, and diplomatic implications are associated with interdicting, inspecting, detaining, seizing, off-loading, and disposing cargo on the high seas and in port?
3. What are the strategic and operational security, legal, and diplomatic challenges as a result of ratification or non-ratification of the Beijing Convention?
4. How do national laws, policies and procedures differ amongst PSI OEG member states with regard to disposition and liability

IDENTIFICATION OF INDEPENDENT AND DEPENDENT VARIABLES

The independent variables in this game were the 12 proliferation events encountered by country and functional teams (x1), and ratification of the Beijing Convention (x2). The dependent variables were comprised of a country or functional teams ability to effectively impede and stop WMD, their delivery systems, and related items (y1(a),(b),(c)) using the myriad national and international diplomatic, legal, military, and law enforcement capabilities at their disposal.

DEFINITION OF KEY TERMS

Prior to game execution, players were provided a common set of definitions to frame their discussions during game play. It should be noted, that not all participants defined and applied these terms in the same manner throughout game play. Insights related to country team approaches to these terms can be located in section three of the report.

Transit: Cargo that enters and exits the territory of a country and in the process is transported from one port of entry to a different port of exit.

Transshipment: Cargo that enters and exits the territory of a country and in the process is moved from one conveyance to another within the same port.

The Convention on the Suppression of Unlawful Acts Relating to International Civil Aviation (Beijing Convention): Succeeds the Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation and further criminalizes the act of using civil aircraft as a weapon, and of using dangerous materials to attack aircraft or other targets.

Critical Capabilities and Practices (CCPs): Tools and resources developed and shared among PSI endorsing nations for interdicting the illicit transfer or transport of WMD, their delivery systems, and related material to and from states and non-state actors of proliferation concern.

II. Game Design

OVERVIEW OF GAME DESIGN AND MECHANICS

PSI 2014 was designed as both an educational and analytic game. The educational component provided players with a decision-making environment that illustrated teaching points and fostered multinational cooperation, while the analytic component acquired information and data to assist decision-makers counter WMD proliferation. This game was designed to help players organize information and improve their understanding of PSI, explain how and why events unfold, and identify new ideas through discovery learning.

PSI 2014 was designed as a two-move, one-sided, professionally-facilitated seminar style event played over two days. Participants examined two scenarios consisting of three proliferation events each as both country teams and functional groups. Functional groups were divided into the following areas of player expertise: customs and law enforcement, military, legal, and diplomatic. Both country teams and functional groups had the option of playing 6 proliferation events over the course of two days, but time constraints forced many country teams to only focus on two of them. The country teams from clusters A and B examined proliferation streams 1, 2, and 3 on day 1, and proliferation streams 7, 8, and 9 on day 2. The country teams from clusters C and D examined proliferation events 4, 5, and 6 on day 1, and proliferation events 10, 11, 12 on day 2. Each scenario contained information on a network of people, material, finance, and transportation that drove players to explore issues related to the objectives for that day. To best meet the objectives of the game, the proliferation scenarios the players faced got more complex as the TTX progressed. On both days there were maritime and air proliferation events occurring.

On day 1, there were two UN Security Council resolutions (UNSCRs) in play identifying the target countries as "countries of proliferation concern" and detailing a number of restrictions and actions in a multi-national effort to halt their illicit WMD and ballistic missile related activity. On day 2, the target countries changed, there were no UNSCRs in play, and the Beijing Convention had been ratified and considered "in-force" for all playing country teams. Both countries were essentially emergent countries of proliferation concern. This forced the players to look to other international and national legal frameworks outside of UNSCRs as a basis for taking interdiction actions. We acknowledged that amongst the countries participating there were likely varying levels of work that had been completed towards ratification and the development of national implementing legislation as regards the Beijing Convention. For some players, "projecting ahead" was a small step and for others it was going to be a larger leap. Regardless, playing with the Beijing Convention "in-force" required the players to think through the resultant implications before making – or not making a decision to take an interdiction action.

The flexible nature of this game design enabled players to maximize opportunities for exploration, learning, and interaction while simultaneously playing multiple proliferation events. Each move consisted of a scene setter brief, a scenario update which led to each country generating of an initial assessment and ultimately developing a course of action for each proliferation event within the scenario. Following the COA development activity, each of the four country clusters were led in a moderated plenary to discuss the variations to the COAs each country developed. In the next activity players were reorganized into functional teams according to their expertise within each country cluster to discuss key functional issues encountered while developing their COAs and what CCP tools were necessary to successfully prevent the proliferation events in the scenarios. This activity was a primer to prepare the functional teams from each of the country clusters to come together in a functional plenary to allow for collaborative international discussions within each area of expertise. Finally, all the players came together for a moderated group plenary discussion to further explore the themes that were initially derived from game play.

On Tuesday morning, players received general briefings related to transit- transshipment, the Beijing Convention, and CCP Tools, as well as disposition and liability. The game staff introduced players to the intent and mechanics of the game, and presented a notional scenario to set the scene for subsequent game play. Game play was conducted Tuesday afternoon through Wednesday afternoon. On Thursday morning, all players participated in a combined super plenary session to discuss key issues and insights derived from game play. The remainder of Thursday was used for participant surveys, a Heads of Delegation Meeting, and breakouts on the topics of military and exercise, legal, customs and law enforcement and CCP tools.

Based on that initial information, country teams were directed to complete an Initial Assessment Template (Annex A) to organize their thoughts and outline their initial understanding of the situation, possible laws and policies that could be applied during game play, and their general country position on the situation. Teams were provided fifteen minutes to complete the electronic template saved on the NWC game tool specifically designed for this game. Once the teams completed their Initial Assessment Template, cell facilitators provided the teams with additional information related to the scenario. After receiving this update, country teams completed their courses of action template related to the proliferation events presented in the scenario update. In addition to providing high-level details of their actions, this template captured supporting rationale and potential issues associated with their country's action or decision.

Once players submitted their courses of action, the game entered the collaborative phase where country teams presented and discussed issues with their approach. Using prepared questions and player template responses, country teams then engaged in a facilitated plenary discussion to discuss important issues related to game play. This plenary allowed for country cells to discuss and familiarize themselves with scenarios and issues unrelated to their own. It allowed for deeper exploration of paths not taken – branches and sequels, and a greater understanding of why decisions were made. The super combined plenary session conducted on the final day of game play allowed all participants to further discuss and explore issues from different country and functional perspectives.

GAME SCENARIOS

The following section provides an overview of the ground-truth storylines which became the basis for the scenarios used by each of the four country and functional cluster teams each day. Scenarios were developed using fictional countries and geography. For the Game, everyone played as Country Green but through the unique lens of their national laws, their national policies, their memberships in treaties and/or regimes, their capabilities, and finally, their risk calculus. For simplification, we coined the term GICWG which stood for the Green Interagency or Interministerial Counterproliferation Working Group (GICWG) and this represented whatever organizational structure each country had in place to deal with events like the ones we depict in our scenarios.

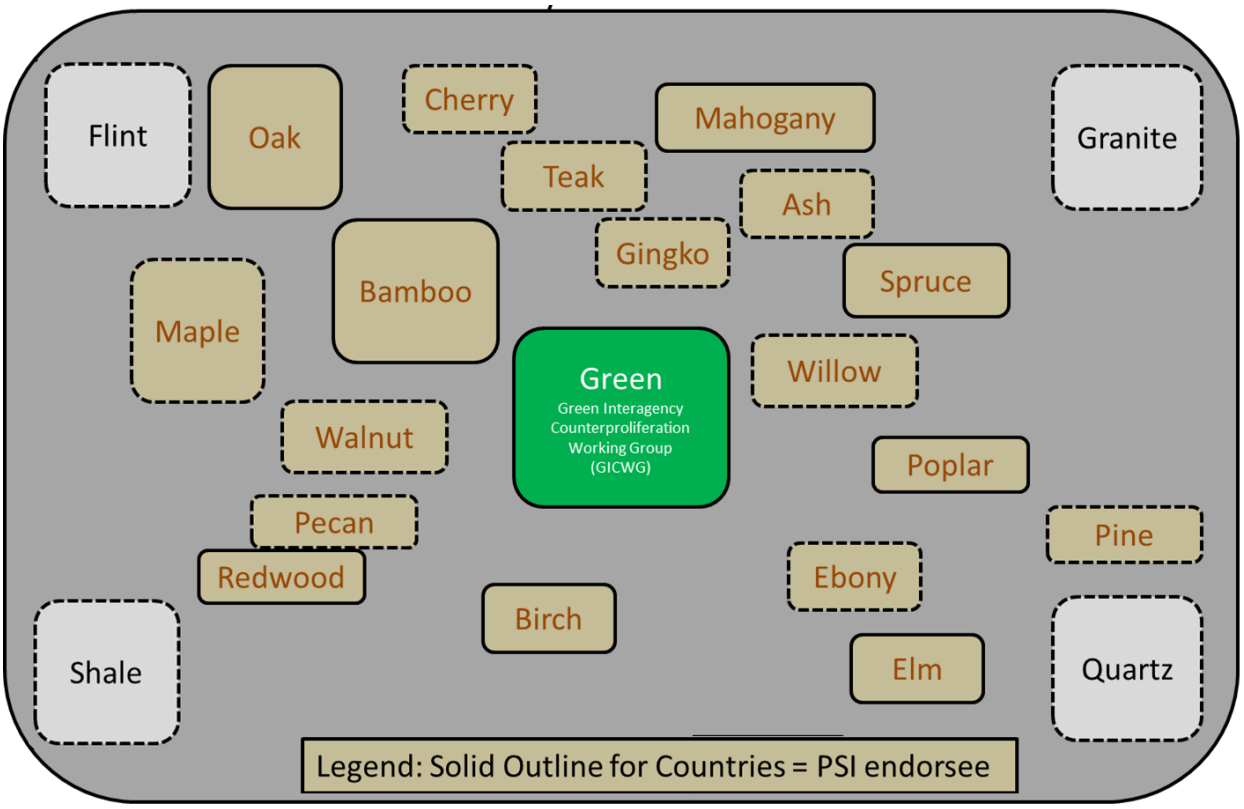

Figure 1. TTX Fictional World

Introduction to Game Day One Countries of Proliferation Concern

Country Granite

Granite is widely viewed as a country of proliferation concern and many believe their declared civil uranium enrichment program is a cover for an effort to secretly build nuclear weapons. Granite's response has been to stonewall and deceive the IAEA and be largely uncooperative. UNSCR 2904 was adopted in May 2013 to address these concerns. In contravention, Granite continues to enrich uranium for "peaceful purposes" and maintains an active research and development program. They have over the years developed a sophisticated global procurement program that manages to be moderately successful in bypassing sanctions, trade restrictions and other international efforts to encourage their compliance with UN and IAEA requests. Granite has been openly defiant of the

international community's efforts to limit its illicit programs and has directed hostile rhetoric toward countries that supported the UNSCR, including Green. Granite has limited economic and cultural connections with Green that fluctuate with the political relationship.
Granite's program to develop an indigenous ballistic missile production capability over the past decade has been met with moderate success. They have produced a relatively large number of both solid fueled and liquid fueled short and medium range ballistic missiles (SRBM/MRBM) that have proven to be somewhat unreliable and woefully inaccurate for their needs. To remediate these deficiencies, Granite has recently begun looking to outside sources for components that will increase both the reliability and accuracy of their SRBM/MRBM ballistic missile forces. According to sensitive intelligence, Granite is specifically looking for advanced gyroscopes, radiation hardened micro-circuits and military grade analog to digital convertors. They may also be looking to procure solid fuel rocket engines for their prototype intermediate range ballistic missile (IRBM).

Since being designated a country of proliferation concern, Granite has denied interdicted cargoes were destined for WMD end-uses, asserting legitimate industrial applications for dual-use commodities. Merchant vessels operated by Granite's state shipping company have exhibited mixed cooperation—at times responding with hostility—toward countries attempting to examine shipments of possible proliferation concern. In response to previous cargo seizures, Granite's procurement network has adopted increasingly complex logistics practices, including using routes that minimize or exclude transshipment and shipping with Granite's national carrier, suggesting future interdiction opportunities may be scant. Granite's response to previous interdiction efforts has been largely rhetorical, including threatening (but not carrying out) military action. Four years of international sanctions and general economic mismanagement have diminished Granite's ability to respond using economic levers, and Granite's diminished international clout/position also leaves few diplomatic options. Granite has the capacity to respond regionally through a range of military activities, ranging from limited conventional military anti-access and area-denial actions to ballistic missile / asymmetric operations aimed at interfering with the regional commercial and military activities of those who attempt to enforce the UNSCR, including Green.

Country Quartz
Quartz is a declared nuclear power and widely viewed as a country of proliferation concern. After conducting nuclear tests in 2010 and 2011, Quartz announced in 2012 that it had developed a nuclear weapon. Green intelligence assessments are in general agreement that Quartz possesses a small stockpile of relatively simple nuclear weapons. They also assess that Quartz has a large chemical weapons capability. Since 2010, Quartz is no longer a party to the Nuclear Non-Proliferation Treaty. UNSCR 2846 was adopted in June 2012 to address these concerns. In contravention, Quartz continues to enrich uranium and manufacture plutonium, and it maintains an active nuclear weapons research and development program. They have over the years developed a relatively unsophisticated global procurement program that manages to be minimally successful in bypassing sanctions, trade restrictions and other international efforts to encourage their compliance with UN and IAEA requests. Quartz has been openly defiant of the international community's efforts to limit its illicit programs and has directed hostile rhetoric toward countries that supported the UNSCR, including Green. Quartz has limited economic and cultural connections with Green that fluctuate with the political relationship.

Quartz is seeking to improve and expand its nuclear weapons capabilities, in particular its production of fissile material. It has recently begun exporting ballistic missile related materials and components in order to generate revenue to import fissile material processing related equipment.

Since the announcement of the UNSCR against Quartz's WMD program and related procurement efforts, Quartz has exhibited a heightened posture of hostility toward those who attempt to enforce it, including Green. Merchant vessels operated by Quartz's national fleet act in a belligerent fashion with the threat of retaliatory violence toward countries attempting to examine shipments of possible proliferation concern. However, Quartz has responded semi-positively to diplomatic outreach by third countries with relatively close relationships to Quartz, though such outreach is infrequent and rarely effective. In response to previous cargo seizures, procurement and supplier networks for Quartz have probably resorted to operating under further anonymity through using foreign intermodal shipping services vice Quartz's national carrier. Such measures include shipping from Quartz ports to major regional hub ports aboard Quartz-operated feeder services and transferring falsely declared cargoes to other foreign carriers for delivery to the ultimate end users. Future interdiction options may be more ample, but detection becomes more of a challenge.

Quartz typically seeks external support to lobby in favor of Quartz's own interests, but largely does not publically acknowledge any interdictions and would not be expected to threaten military action. International sanctions, domestic economic policies, and broader political corruption have crippled Quartz's economy, thus diminishing their ability to respond using economic levers. Additionally, Quartz has diplomatically alienated itself over years of internationally-defiant activity and has virtually no viable diplomatic options. Quartz has very limited capacity to strike far from its borders with its conventional military forces, but could threaten regional allies of GREEN. Quartz could also threaten further nuclear testing and use rhetoric to indicate its ability to strike at some distance with its ballistic missile force if Green or others continue to interfere in its military technology agreements with its customers.

Proliferation Event 1: Quartz attempt to obtain aluminum 7075

The Nuclear Development Program Office (NDPO) in Country QUARTZ is attempting to procure NSG-controlled 12.5 MT of Aluminum 7075 in order to build additional centrifuges to increase their capacity to enrich uranium. Acme Manufacturing in Country GREEN legitimately agrees to supply 7075 Aluminum to a Broker in Country PINE who routinely provides 7075 to legitimate businesses in PINE. Unbeknownst to Acme Manufacturing, the Broker siphons off 12.5 MT, changes the specifications and arranges for transport to QUARTZ via M/V BASS ELEVENASS ELEVEN, a Country QUARTZ-owned, -flagged and -crewed M/V. The voyage routing has the M/V PERCH THREE departing from Major Shipping port in Country GREEN with an intermediate stop in Country POPLAR to conduct cargo transloading operations before arrival in Country PINE. Upon arrival in Country PINE, the container is offloaded at Port Minor and ground transported to a warehouse at Port Major (both ports are in Country PINE) and subsequently re-exported via M/V BASS ELEVENASS ELEVEN to Country QUARTZ. The complicit and witting Broker in Country PINE is the primary actor in carrying out this proliferation transaction.

Proliferation Event 2: Granite attempt to obtain rocket engines

The Ballistic Missile Development Organization (BMDO) in Country GRANITE is attempting to procure rocket engines for their indigenously produced IRBM in order to increase the maximum range of their ballistic missile force. Ballistic Missile Industries Inc. in Country QUARTZ agrees to supply the rocket engines and arranges for transport via M/V HAMMERHEAD 7. The voyage routing has the M/V HAMMERHEAD 7 departing from Commercial Shipping Port, Country QUARTZ to Commercial Shipping Port, Country CHERRY. Enroute, the M/V will pass through

an area where Country GREEN, Country TEAK, and Country MAHOGANY have naval assets participating in multi-lateral counter-piracy activities. Country GRANITE and Country PINE have forces in the vicinity operating unilaterally to protect their shipping interests. After passing through the piracy area, M/V HAMMERHEAD 7 is expected to get bunkers at a Country GINGKO anchorage enroute to Country CHERRY for cargo transshipment and then aboard a TBD M/V to Country Granite. No front companies, no brokers, and no finance are identified.

Proliferation Event 3: Granite attempt to obtain radiation hardened microcircuits

The Ballistic Missile Development Organization (BMDO) in Country GRANITE is attempting to procure radiation hardened microcircuits in order to enhance the reliability of their ballistic missile forces. Country WALNUT-based company Walnut Electronics agrees to supply the radiation hardened microcircuits and arranges for transport via commercial air freight. Ace Broker Services in WALNUT ordered 500 radiation-hardened microcircuits from Walnut Electronics. 300 were shipped to an end-user in GREEN. Ace Broker services changed the specification on the remaining 200 microcircuits to ordinary computer printer boards (uncontrolled) and shipped them to GRANITE via commercial air freight. The voyage routing has the regularly scheduled mixed cargo (PAX/FREIGHT) civil aircraft departing from Major International Airport, Country WALNUT on its twice weekly flight to Country GRANITE. The aircraft conducts a technical stop in Country GREEN to refuel and swap crews, and then conducts a stop in Country WILLOW for cargo ops and PAX transfers. The aircraft overflies SPRUCE before arrival at Major International Airport, Country GRANITE.

Proliferation Event 4: Granite attempt to obtain military-grade analog to digital converters

The Ballistic Missile Development Organization (BMDO) in Country GRANITE is attempting to procure sophisticated circuit boards made with military-grade analog to digital converters to enhance the accuracy and reliability of their ballistic missiles. Proud Maple Manufacturers Inc. located in MAPLE agrees to supply the items to Granite Civilian Aviation Agency (GCAA) which it produces partly from component parts it has imported from a manufacturer located in Country OAK.

The military-grade analog to digital converters received from Oak Electronics in Country OAK are controlled items that were exported under license to Proud Maple Manufacturers. Proud Maple Mfg. Inc. and the Maple Shipping Company do not believe a requirement exists for them to obtain a re-export license from Country OAK prior to sending the analog to digital converters to Country GRANITE.

Country OAK believes that MAPLE does indeed require a (re-export) license from them and, moreover, Country OAK believes that the percentage of OAK-origin materials in the sophisticated circuit boards means that an existing UNSCR prohibits the delivery of these items to Country GRANITE. The voyage routing has the suspect container being loaded on M/V MAKO 3 in commercial shipping port Country MAPLE. M/V MAKO 3 stops in Country GREEN and then Country ASH where the container is to be transferred to another (TBD but likely GRANITE owned/flagged) M/V for transport to Country GRANITE Broker Silk in Granite acting on behalf of BMDO assists in the transaction by brokering the deal between Proud Maple Manufacturing and

Granite CAA (actually on behalf of BMDO; Granite Civil Aviation not listed in UNSCR, BMDO is listed)

Proliferation Event 5: Country Ebony attempt to obtain rocket fuel oxidizer

The Ballistic Missile Forces Organization (BMFO) in Country EBONY is attempting to procure rocket fuel oxidizer as a source of fuel for their ballistic missile forces. Ballistic Missile Industries in Country QUARTZ agrees to supply the rocket fuel oxidizer and arranges for transport via M/V BASS TWELVE – a Country QUARTZ-owned, Country PECAN-flagged M/V loaded with other general cargo destined for Country EBONY. The voyage routing has the conveyance departing from Port Major in Country QUARTZ and includes a stop in Country ELM territorial waters for bunkering before arrival at Port Major in Country EBONY. There are no front companies or brokers involved and the funds are transferred between National Banks in Country EBONY Capital and Country QUARTZ Capital.

Proliferation Event 6: Granite attempt to obtain advanced gyroscopes

The Ballistic Missile Development Organization (BMDO) in Country GRANITE is attempting to procure Advanced Gyroscopes to enhance the accuracy of their Ballistic Missile Force. Advanced Systems Incorporated (ASI) in Country GREEN agrees to supply the Gyroscopes to a non-existent end-user through a witting broker in Country GREEN. The broker changes the specifications, falsifies documents and arranges for transport to BMDO via commercial air freight. The voyage routing has a TEAK aircraft departing from Major International Airport in Country GREEN to Major International Airport Country GRANITE, overflying Country WILLOW, and conducting an intermediate stop for PAX transload in Country SPRUCE. A front company and broker in Country GREEN both assist in the transaction.

Introduction to Game Day Two Countries of Proliferation Interest/Concern

Country Flint

Flint was not previously viewed as a country of proliferation concern. They have procured a substantial short-range conventional ballistic force over the past decade and are considered moderately proficient as evidenced by their testing & exercising regimes. Until recently, they have had no identified WMD program.

While Flint has its fair share of internal disputes and discontent, they are generally considered stable. There is however a long-simmering regional dispute that has over the past few years elevated in its intensity. The UN Secretary General has issued a number of statements calling for all parties to work towards peaceful resolution of the regional disputes which include aspects of territory, economic and security.

Flint's relationship with Green is not characterized by either close political ties or open political/diplomatic hostility. Key points to the relationship include commercial trade, low-level military and cultural exchanges and events and even some limited sales of military equipment.

Recent intelligence acquired by Green suggests a regime desire for a chemical weapons capability to address what Flint perceives as a growing conventional imbalance with a regional antagonist and to serve as a deterrent against adventurism. Flint is assessed to have an on-going secretive program to develop, procure and import materials and equipment necessary to develop an offensive CW capability, and likely relies on their national shipping companies as well as foreign shipping lines to deliver CW-applicable materials that is cannot produce or develop indigenously. Some Green analysts believe the procurement effort is more mature than originally predicted and may indeed be close to break-out.

According to sensitive intelligence, Flint has recently begun looking to outside sources for what may be the final components necessary to achieve a limited CW production capability. Flint is specifically looking for corrosion resistant valves (CRV), Hydrogen Fluoride and Kynar Piping. Flint, if aware of interdiction activity, would likely respond with denial, asserting industrial applications for WMD-applicable commodities, and would likely protest through diplomatic channels and threaten opposition to Green political initiatives in international bodies. Flint procurement networks would likely respond to interdictions by adopting delivery mechanisms perceived to offer more security.

Country Shale

Shale is a country of proliferation concern and has a substantial ballistic missile program and a large chemical weapons program (gravity bombs, rockets, artillery, and other sub-BM delivery systems). Embroiled in sectarian violence Shale is in the midst of declining into civil war. The UNSC is monitoring the situation closely and has issued a number of resolutions calling for a peaceful resolution of the internal security situation but none are specifically focused on their WMD program and related proliferation concerns.

Recent intelligence acquired by Green suggests a regime desire for a chemical weapons capability to address what Shale perceives as shortcomings in their conventional ability to deter anti-regime forces from further sectarian violence. Specifically, Shale desires to develop a ballistic missile warhead capable of delivering a chemical weapon payload. Some Green analysts believe the Shale development effort has hit a significant roadblock and that Shale lacks the technical expertise to overcome this challenge.

According to sensitive intelligence, Shale has recently begun looking to outside sources for this technical expertise. They also are attempting to procure and import glass-lined reactor vessels (GLRV) and a gas monitoring system (GMS) to facilitate their ballistic missile chemical warhead research and development effort. The Shale military has an established relationship with Shale Research University (SRU) and periodically has used the University as a front for the procurement of controlled or particularly sensitive materials.

Shale has a moderately confrontational relationship with Green which occasionally includes openly hostile rhetoric and opposition to Green political initiatives in international bodies. Shale has limited economic and cultural connections with Green that fluctuate with the political relationship.

Any discernible response to interdictions by Shale would likely be limited to changes in practices by procurement networks, including the adoption of delivery methods perceived to offer more security and increased communications security. In contrast to Granite, Quartz and Flint, Shale has no national merchant fleet and must, in addition to their national air cargo service, rely on an array of foreign shipping lines for delivery of WMD-related procurements.

Proliferation Event 7: Country Flint attempt to obtain Hydrogen Fluoride

The newly established (and highly secretive) Flint Chemical Weapons Directorate (FCWD) in Country FLINT seeks a number of Items including Hydrogen Fluoride (HF). They have established a solid relationship with FLINT's Tangerine Industrial Cleaning Products (TICP) which now operates as a front for FCWD, procuring, receiving and storing the items necessary for breakout of a CW production capability. As a member of the CWC, FLINT is going to great lengths to keep this program hidden. The Hydrogen Fluoride is containerized and shipped aboard M/V TROUT SEVEN from Country PINE to GREEN where the container is transshipped to the M/V SALMON NINE for delivery to FLINT. Upon arrival in FLINT, the container will be trucked to a warehouse owned and operated by TICP.

Proliferation Event 8: Country Shale attempt to obtain technical assistance

The Ballistic Missile Development Organization (BMDO) in Country SHALE is attempting to procure the services of an experienced chemical engineer in order to further research and development efforts associated with their Chemical WMD effort. A chemical engineer with ties to Country ASH's (former) chemical weapons program agrees to provide the desired services and boards a flight originating out of Country ASH to Country SHALE through Green on regularly scheduled ASH and SHALE Civil Airlines flights. The first leg is on an ASH flagged and operated civil airline regularly scheduled flight. The route includes a stop in GREEN at which the engineer will transfer to a SHALE flagged and operated civil aircraft bound for SHALE. The chemical engineer has, in his (carry-on) possession, a laptop containing classified plans for developing chemical warheads for Ballistic Missile employment. He has also checked 2 bags.

Proliferation Event 9: Country Flint attempt to obtain Kynar piping

The newly established (and highly secretive) Flint Chemical Weapons Directorate (FCWD) in Country FLINT seeks a number of Items including Kynar piping. They have established a solid relationship with FLINT's Tangerine Industrial Cleaning Products (TICP) which now operates as a front for FCWD, procuring, receiving and storing the items necessary for breakout of a CW production capability. As a member of the CWC, FLINT is going to great lengths to keep this program hidden. Country ASH is one of a few producers of Kynar piping suited for Flint's requirements. Unwittingly, a company in ASH ships the Kynar piping via M/V SHARK 2 to TICP. The multi-modal route includes a stop in GREEN'S FTZ where it is repackaged into air cargo containers and then delivered via ground freight to GREEN's North Airport for transfer to FLINT Air for ultimate delivery via air freight to TICP.

Proliferation Event 10: Country Shale attempt to obtain Glass Lined Reactor Vessels

A Research University in Country SHALE places an order for Glass Lined Reactor Vessels (GLRV) from Science and Tech Company (STC) in Country WALNUT. STC believes that the GLRVs were

bound for SHALE Research University for legitimate purposes and arranges transport via WALNUT AIR CARGO (WAC). The voyage routing has the WAC aircraft departing Large International Airport in Country WALNUT overflying both Country PECAN and Country REDWOOD enroute Large International Airport, Country SHALE. The Research University in Country SHALE acts as a front-company for the SHALE BMDO and is a pass through for the transaction.

Proliferation Event 11: Country Flint attempt to obtain Corrosion Resistant Valves

Tangerine Industrial Cleaning Products in Country FLINT is a front company established by the Defense Department to procure and import the necessary equipment and materials for the CW program. Advanced Machining Inc. in Country PINE agrees to supply the corrosion-resistant valves to Tangerine Industrial Cleaning Products(ICP), a licensed and legitimate end user. TICP arranges transport via commercial air freight. The voyage routing has the regularly scheduled aircraft departing Major International Airport, Country PINE overflying GREEN before landing at Major International Airport Country FLINT. The aircraft likely has the fuel to return to Pine, but not to divert around Green and arrive safely in Flint.

Proliferation Event 12: Country Shale attempt to obtain a Gas Monitoring System

The Shale Ballistic Missile Development Organization (BMDO) is attempting to procure a gas monitoring system. Toxicology Associates in Country ASH agrees to supply the gas monitoring system and arranges transport via commercial air freight. The voyage routing normally has the regularly scheduled aircraft departing Major International Airport, Country ASH, landing in Country Green. The article is transported via truck to a secondary airport for cargo pickup on a SHALE-flagged civil cargo aircraft. Toxicology Associates ships globally and works closely with ASH-based Premier Broker Services (PBS) for global sales. PBS is a front company in the transaction

OVERARCHING METHODOLOGY AND ANALYTIC FRAMING

As an applied research and evaluation project, the game design for PSI 2014 focused on generating new knowledge to identify and develop a shared understanding of the critical challenges and opportunities in counter-proliferation interdiction. Consistent with Cherry Holmes (1992) and Morgan (2007), pragmatism provides a philosophical basis for this study. This approach is interested in identifying the 'what' and 'how' of potential solutions to real world problems (Patton, 1990), understanding different expert opinions (Creswell, 2009), and using different forms of data collection and analysis to corroborate results (Merriam, 2009).

A qualitative methods design was used to answer the four central research questions. Common in qualitative research, this study uses triangulation through two or more different data collection and analysis methods to integrate and confirm findings (Leedy & Ormrod, 2010). This approach commonly employs distinct quantitative and qualitative methods as a means to strengthen the use of one method with the weaknesses of another. Much of the strength of this approach comes with

being able to draw the same or similar conclusions using different datasets and methods (Creswell, 2009).

Two forms of data analysis were conducted to describe the qualitative and quantitative data collected in the study. Qualitative data collected from country and cluster templates, ethnographic notes, and open-ended survey responses relied on content analysis and grounded theory to discern underlying patterns and themes in the data. Selective, in-vivo, and serendipitous coding were conducted on these data using the ATLAS.ti software application. Using the co-occurrence function within the software allowed the game analysts to determine the correlation between terms. Descriptive analysis of quantitative data was used to describe the nominal and ordinal measures derived from the end-of-game individual player questionnaire. Statistical analyses of these questions were conducted using the Analysis ToolPak functions in Microsoft Excel 2010. Qualitative and quantitative data were analyzed concurrently and then integrated in the interpretation of the overall results.

PARTICIPANT DEMOGRAPHICS

U.S. and international participants from PSI member states were sought that work PSI in the areas of diplomacy, legal, customs and law enforcement, and military. No other criteria were enforced for PSI participant sampling. The subsequent demographic statistics were compiled from self-reported responses garnered from the online registration site and the individual player questionnaire administered at the end of the game. The 70 players who contributed demographic data consisted primarily of mid to senior-level military and civilian officials from 17 PSI OEG countries. 45 of the 70 players responded to the end of game questionnaire. This data was used to gain a better understanding of player experience with PSI and PSI related exercises. Each country and functional area of expertise was adequately represented during the game. Even though 50 percent of players reported to have less than one year of PSI experience and 51 percent of players reported no prior experience in PSI table top exercises, both the quality and quantity of players represented at the game generated relevant data to help answer the sponsor's research questions. Figures 1 through 4 depict the number of participants by country and functional expertise, as well as the percentage of participants with experience in PSI and exercises related to PSI.

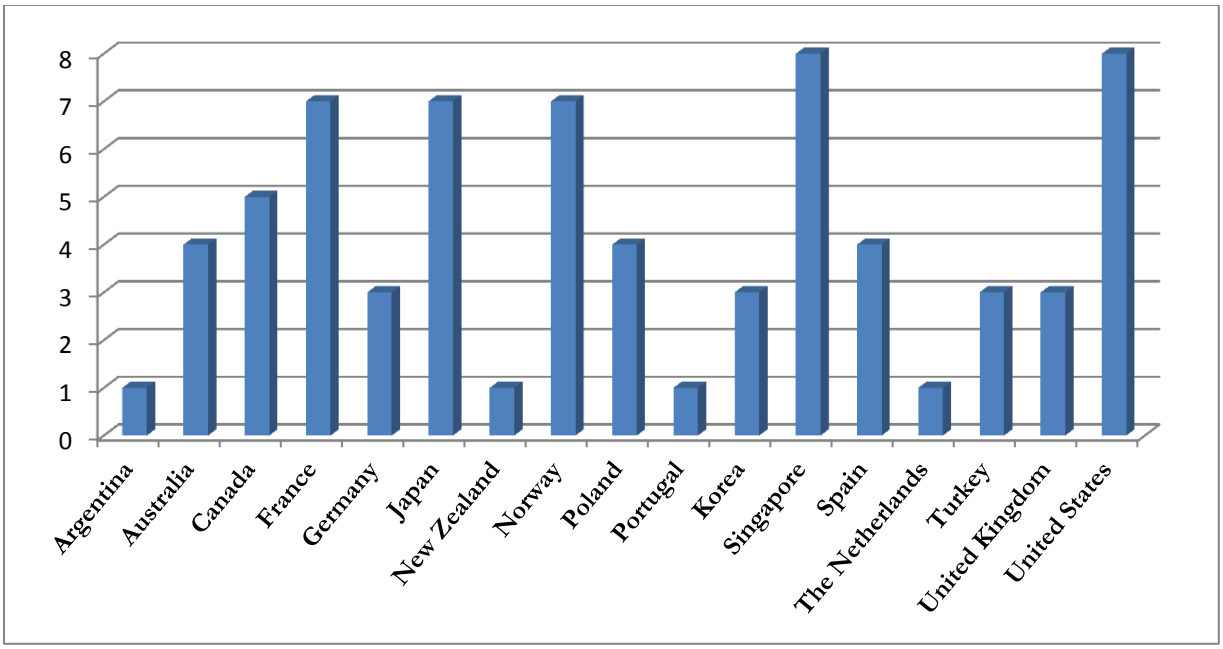

Figure 2. Number of Participants by Country

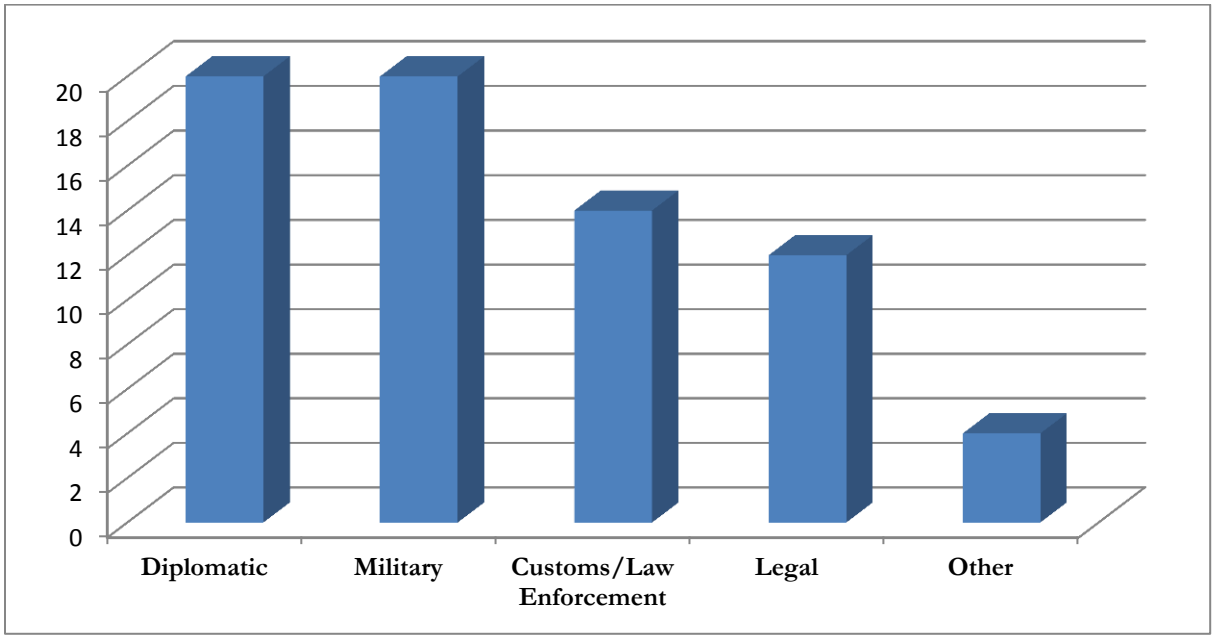

Figure 3. Total Number of Participants by Functional Expertise

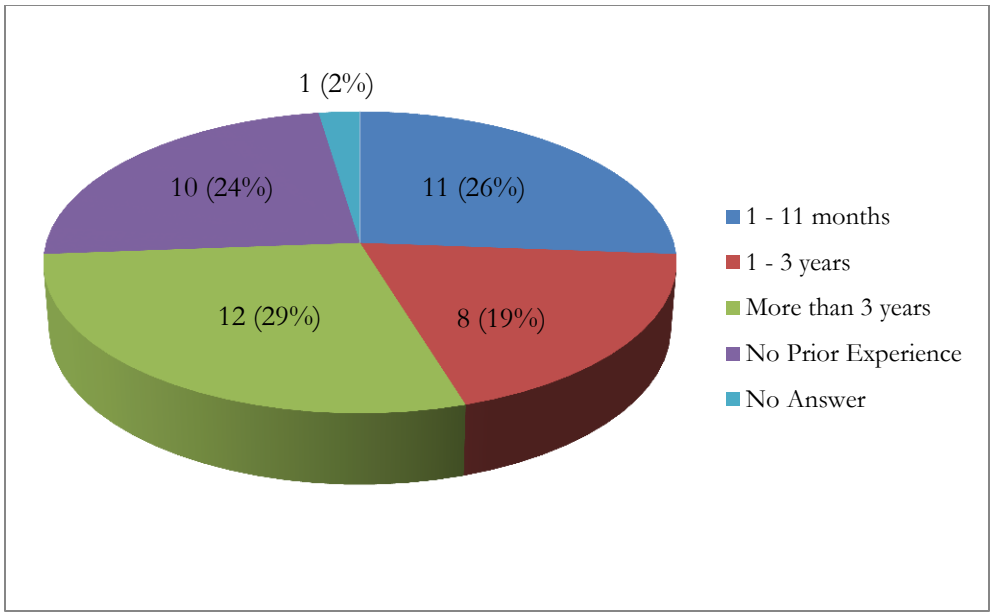

Figure 4. Percentage of Participants with PSI Experience

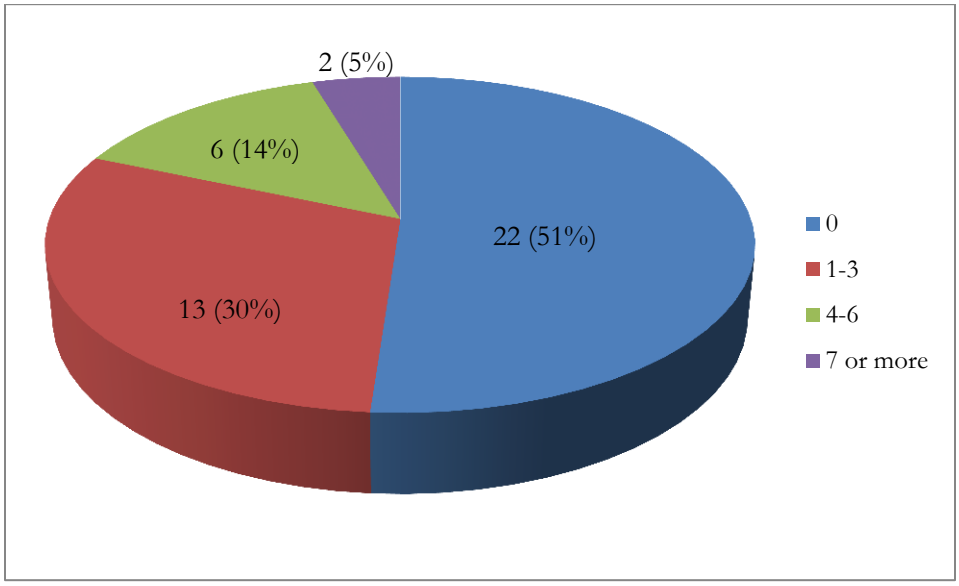

Figure 5. Percentage of Participants with PSI Exercise Experience

III. Analysis and Findings

OVERVIEW

PSI 14 tabletop exercise players successfully adapted their thinking while leveraging their experiences to identify and share capacity building tools with the broader PSI community. Players were charged with developing specific courses of action as both country teams and multinational functional groups to counter the 12 unique proliferation events provided in the game. During these activities, players discussed the various challenges in identifying, interdicting, and seizing proliferation items that travel via air and sea.

From the cell discussions and products identified as cell deliverables, the game analysts were able to conduct analysis on key co-occurring terms identified through ATLAS.ti. The game analysts used player derived observations and themes generated during gameplay and these co-occurrences to determine three distinct areas seen as important to the future of PSI. Players were also given an end of game individual survey to assess their understanding of international standards, national laws, policies, and terminology related to air interdiction, transit/transshipment, and liability and disposition as well as to identify the need to improve existing CCP tools or to create new CCP tools for the above topics. The response choices were based on a five-point Likert-scale (agree, somewhat agree, neither agree nor disagree, somewhat disagree, or disagree). 45 of the 70 players responded to the end of game questionnaire, which yields a 64 percent response rate. The subsequent sections, describe specific country and functional team results, summary of player derived themes, and limitation of game analysis.

REVIEW OF KEY CELL DELIVERABLES

In order to better understand the challenges and solutions associated with identifying, interdicting, and seizing WMD related material, each of the seventeen country teams developed a specific course of action to address one of three proliferation streams assigned to them. During this activity, players assumed the perspective of their country in their discussion of key diplomatic, legal, military, and law enforcement actions that are needed to stop trafficking of WMD, their delivery systems, and related materials to and from the fictional states and non-state actors of proliferation concern.

In an effort to uphold the non-attribution environment generated during game play, this section of the report will refer to each country as 'country teams'. Country team data is described in the following six categories under this section: interdiction actions; international coordination and cooperation; Course of Action rationale; impediments to executing Course of Action; compensation, ownership, and possession. Some country teams were not able to respond to questions related to compensation, ownership, and possession.

Similarly, comments from specific countries that participated in the multinational functional teams will not be attributed as well. Functional team data is broken out into separate legal, diplomatic, law enforcement, and military sections and looks across proliferation streams 7-12 from day two of the game. This data is summarized after the summary of country data at the end of this section.

Country Team Results

Proliferation Event 1: Quartz attempt to obtain aluminum 7075

Interdiction Actions

One country team determined that it was not legally in a position to interdict the shipment in question as it left its jurisdiction and was now in the jurisdiction of Poplar. However, to prevent further shipments of aluminum 7075 going to Pine, Green would cancel the export license and work with the exporting company to prevent future situations. Over the long-term, Green would reach out to Pine to explain Green's decision to prevent exports, and to understand their domestic processes for complying with international law.

Another country team noted that they would withdraw the license to export aluminum based on information that aluminum bound for Pine has been shipped to Quartz and the end-user. They would first request the government of Poplar to consider stopping the shipment and unloading the container containing the aluminum. They would also request the government of Cedar (flag state) to keep the container on board the ship and unload when the ship is back in Green. Country Green would request the government of Spruce to consider keeping the container on board the ship and unload the container containing the aluminum. Finally, they would request the government of Pine to hold back the shipment based on their international obligations in order for the end-user not to get their hands on the aluminum.

International Coordination and Cooperation

One country team suggested that they would consult with Birch on sharing the intelligence provided about the shipment with Poplar. In consultation with Birch, Green (Department of Foreign Affairs and Trade and Domestic Customs and Border Protection Service) would reach out to Poplar and inform their relevant authorities of the situation (i.e. that a shipment of aluminum 7075 is in the process of being shipped with export license to Pine and that the shipment is currently in port in Poplar).

Green would request that Poplar unload and inspect the relevant container. Pending the outcome of the inspection, if the container contains aluminum 7075, Poplar would seize the material. Poplar has authority and obligation to prevent the transfer of prohibited materials under UNSCR 2846 to Green and would draw Poplar's attention to this. If Poplar refuses cooperation, then Green would repeat the above process with Pine (assuming that the ship has left Poplar and has anchored in Pine). If Pine refuses cooperation, Green would also investigate options for interdiction at sea (either between Poplar and Pine or between Pine and Quartz), including by informing the UNSC and asking member states to use their assets to interdict the MV Perch on the high seas.

Conversely, another country suggested that as Green, they would also request Gingko to inspect the ship when it arrives at its port in accordance in accordance with UNSCR 2846. However, there is the risk of Gingko failing to comply with UNSCR because of the lack of the national legislation. They would also share intelligence with Poplar and Pine in accordance with bilateral relations. Green would also contact Birch regarding the ownership on the information in question (e.g., what intelligence may be distributed to relevant governments?).

Course of Action Rationale

The Export Control Act and regulations, UNSCRs, PSI and SUA protocol 5 all provide a strong rationale for interdiction. The policy and diplomatic rationale behind Green's proposed course of action is to preserve and maintain bilateral relations with the countries in question (particularly Birch and Poplar). Similarly, Green is likely to have the greatest chance of a positive resolution to the situation by relying on bilateral relationship with Birch and Poplar. Green is obliged to act to prevent the shipment reaching Quartz under UNSCR 2846. The legal rationale for Green's proposed course of action is that the shipment is currently in Poplar, and Green has no authority in a foreign sovereign nation. Green considers that relying on the obligations that UNSCR 2846 also places on Poplar and Pine to be a strong legal basis to encourage their support in preventing Quartz from obtaining aluminum 7075. Operationally, the above course of action is the most practical as Green does not have sufficient assets to ensure an effective interdiction on the high seas - cooperation with countries that are best placed to operationally assist will be crucial.

Impediments to Executing Course of Action

Restrictions manifest throughout both country teams' proposed course of action. Policy and diplomatic impediments include sharing of intelligence provided by allies and maintaining bilateral relationships. Governments must have the political will to implement international obligations. Legal issues include a lack of jurisdiction and obligation to act to prevent transfer of controlled materials. While UNSCRs provide a legal basis to interdict on the high seas, Green would still need to ensure the basis for believing the shipment contained aluminum 7075 was reasonable. From an operational perspective, Green suggested that it would be difficult to search and seize containerized goods at sea (or in another country's port) and interdict ships on the high seas given Green's naval assets and positioning and time constraints. Once materials are within Quartz jurisdiction either in the country or on a national shipping line or vessel flagged to Quartz, it would be operationally difficult to regain the materials (and legally difficult).

Proliferation Event 2: Granite attempt to obtain rocket engines

Interdiction Actions

A country team suggested that they would first determine the flag state of the vessel and then contact the country of Cedar with this information. They would also conduct a fly-over to confirm the flag of the ship and get imagery of cargo to be used in the demarche (unclassified information to confirmed intelligence). Next, if the registry is Cedar, they would ask for flag state consent to board and inspect cargo. If the registry is of a hostile country and if there is suspicion that the vessel is flying the Quartz flag, but is registered with Cedar, then reasonable grounds exists for 'statelessness', and country Green will board the ship. Similarly, another country team suggested that they will inspect the ship from Quartz with the consent of the flag country of Cedar before it arrives in Cherry. Maximum caution would be taken because the ship's captain is a Quartz national. If this approach fails, Green will retry the inspection seeking the consent from the new flag country. Green will request the assistance from other participating countries in Counter-Piracy.

Another country team selected to engage internationally to assess a COA, optimize information and intelligence collection and analysis, and verify the status and availability of domestic and international assets to interdict. This country team also identified the need to establish an agreed

COA to manage risk and integrate the communications networks required to command and control multinational forces in this effort. The final country team that confronted this proliferation event elected to leverage the piracy-operation mandate as a legal basis to inhibit the shipment. The country's Ministry of Justice will notify relevant governments about a potential boarding operation and will coordinate on the decision to act and agree upon the most suitable actions to undertake under a multinational operational framework.

International Coordination and Cooperation

As previously noted, several countries opted to request for flag state consent from Cedar to conduct an inspection. If a shipboarding agreement with Cedar was in position, country Green would request boarding authority under that agreement. If illicit cargo is confirmed, they could possibly request assistance to divert the ship into Cedar. In addition, when the ship stops to refuel in Gingko, country Green would request search and inspection assistance from Gingko. Similarly, another country team suggested that they would also request Gingko to inspect the ship when it arrives at its port in accordance with UNSCR 2846. However, country Green runs the risk of the country of Gingko failing to comply with UNSCR because of the lack of the national legislation. Another country team also said they would engage with Gingko to examine the 6 FTE's in question during bunkering stop over. Close coordination with engaged states, and engaging the United Nations regarding the potential breach of UNSCR 2904 and IMO boarding vessel in an international passage would have to occur. Country Green would also support and engage states to develop an ad-hoc multinational Task Force to interdict vessels at sea.

Course of Action Rationale

One country noted that the decision to act quickly is crucial. "There is only a certain amount of time before the ship will arrive in port, and in an effort to stop movement of goods." The legal basis would be the Law of the Sea principles, enforcement of UNSCRs and statelessness. Specifically, UNSCR 2846 and 2904, and Green national laws (Cargo Inspection Act, Foreign Trade Act) was particularly noted as way to prevent the ship from arriving in the country of Cherry.

Impediments to Executing Course of Action

The captain who is a national of Quartz might resist to the inspection despite the consent of the flag country. Similarly, limited intelligence owned by Green makes it difficult to share sensitive information with Cherry because of their adversarial relationship with Green. Another impediment would be the unwillingness of nearby countries to assist Green in executing their course of action. While Green domestic laws provide the ability to stop proliferation of illicit materials, such authority does not generally reach ships on the high seas. Operationally, any diversion of this suspect cargo would be limited by the laws and political will of the country allowing the ship into port. Country Green faces capability and capacity limitations to obtain surveillance and interdict along the high seas.

Proliferation Event 3: Granite attempt to obtain radiation hardened microcircuits

Interdiction Actions

Green, as a transit country, has the authority to control the delivery of these items under Article 6 European Union Regulation #428/09. After the cargo plane has landed in Green, the items have to be unloaded by Green's national customs administration for further inspection. Then items will be seized due to reasonable grounds for military end-use. The plane can then continue its flight as scheduled (no indications of involvement of the airline or its personnel in proliferation activities). In order to retain the plane and inspect the cargo, the additional information provided by Birch and other correlated evidences should constitute a solid base for a judicial order. Once the judicial order is issued, the inspection would be carried out by a joint law enforcement team led by Green's Aviation Customs Office. Once the airplane arrives in its territory, Green would have international obligations and broad Customs border search authorities to inspect the cargo, detain any merchandise and seize goods in violation of Green laws (either cargo or passenger baggage). If for some reason that Green was not in a position to inspect the cargo, it would enlist the help of Willow to inspect the goods when the airplane arrives in its territory. Green would then request redelivery of the goods.

International Coordination and Cooperation

After consultation with Birch, Walnut and Willow will be informed and asked about further information of this delivery. Once the situation is clear, Green will inform the MTCR/WA about the incident. The United Nations Security Council will also be informed. Country Birch may be asked to provide information about the shipment that would provide enough evidence for offensive operations. Walnut would be asked for custom information and documentation of the shipment (Bilateral Agreement) and export license documents (including payment information related with Green country). Green may submit a request to Walnut to inspect the merchandise and seek redelivery of the illicit cargo. Green would utilize information sharing agreements to obtain further information on the illicit cargo and actors.

Course of Action Rationale

Since the plane is landing in Green and will stay there substantially longer than in Willow (e.g., refueling, swapping crew etc.) there is a better window of opportunity to act. Furthermore, it is unknown whether Willow authorities will act as effectively because its export control and interdiction mechanisms, as well as its interagency process are still evolving. This requires significant information and evidence which would only further delay action. Green would act with international partners to avoid illicit traffic of control goods with a sanctioned country. Given the shortage of time, the operational rational should be based on the inconsistency of documentations by end user-broker.

Impediments to Executing Course of Action

Green could experience possible accusations of restricting the freedom of air transit and free trade resulting in legal actions. Green would require a judicial mandate to physically inspect the shipment. From an operational perspective interagency coordination and communication issues will likely exist between Custom officials and Law Enforcement officials.

Compensation, Ownership, and Possession

The question of any possible compensation has to be verified and determined by agencies involved. Green could also be sued by the exporter if it does not pursue the proper litigation processes involved with seizing the cargo of concern. Generally, customs officers are immune from liability for acts within the scope of their duties in inspecting and detaining merchandise. However, there are ways to compensate parties for delay or damages administratively. Another country team suggested that the state would be the civil subsidiary ultimate responsible.

The exporter would still maintain ownership of the cargo. Determining the true buyer of the merchandise would depend on a review of the shipping documents. While Green may have detained the merchandise, title to the merchandise has not changed at this point. Costs of the detention are borne by the importer or carrier under Green law. Once the merchandise is seized and forfeited, title would change to Green at that point. Another country team suggested that the shipment will be stored in an airport warehouse at judicial authority disposal.

All three country teams suggested that their respective customs law enforcement agencies would take initial possession of the goods pursuant to broad customs authority. In some cases, a judge would review the facts of the case and assign the responsibility of the case to a particular law enforcement agency. Several country teams also suggested that specific domestic and international laws allows them to seize the goods and then disposed of in a number of appropriate ways. The merchandise could also be abandoned. In one case, the shipment would remain in the airport cargo zone under the responsibility of judicial authorities.

Proliferation Event 4: Granite attempt to obtain military-grade analog to digital converters

Interdiction Actions

One country team suggested that they would leverage their customs, port authorities, and technical experts to immediately develop and execute a plan to interdict the shipment at Port Green. Similarly, another country team also said they would detain the ship, examine the cargo under the Customs Act, and seize the cargo if it was determined that they were prohibited by UNSCRs. Coordinating an urgent interagency collaboration meeting was common across all country teams. The final country team suggested that their Customs Office would unload the suspect container to the port and inspect it, while Coast Guard vessels are positioned outside the port to interdict the suspect M/V Mako 3 in case it attempts to flee. Coconut and Maple will get informed of the interdiction through a diplomatic channel and report it to UN.

International Coordination and Cooperation

Green would request information-such as export license, technical specifications-from Oak and Maple and seek advice from UN Panel of Experts. To minimize Granite's opposition and secure expertise in inspection and identification, an international investigation led by a UN Experts Panel team would be desirable. Any information concerning this shipment and the outcome of investigations would be provided to Maple and Oak.

Course of Action Rationale

There is reasonable cause to suspect an offence was committed under domestic laws and implementing UNSCR 2904. These items are controlled on SGCA control-list end-use. Green would prefer to inspect the shipment in instead of inspection in the territorial waters or high seas. Interdiction in the High Seas would require SUA with Coconut. Since Ash regularly rejects requests for cooperation on interdiction cases, Ash is less likely to cooperate on interdiction. The suspect container is due for transloading, which makes it easier to unload the suspect container in the process of this planned transloading.

Impediments to Executing Course of Action

Maple may not agree with Green's assessment which could create liability issues. Granite's potential provocations after interdicting the shipment and bringing it into port would also impede Green's efforts.

Compensation, Ownership, and Possession

Since there is reasonable cause for action, the government would not be liable for damages due to actions taken in good faith. Based on the Customs Act and decisions made at the Interagency Coordination Meeting, the Customs Office would likely be responsible for compensation. Ownership remains with the commercial entities involved, per their terms of transaction. Conversely, another country team suggested that based on the Customs Act and decisions made at the Interagency Coordination Meeting, the Customs Office would also be responsible for owning and possessing the cargo.

Proliferation Event 5: Country Ebony attempt to obtain rocket fuel oxidizer

Interdiction Actions

Green will inspect the ship from Quartz with the consent of the flag country of Cedar before it arrives in Cherry. Green will approach the situation with maximum caution because the captain is from Quartz. If this attempt fails, Green will retry the inspection seeking the consent from the new flag country. Green will request the assistance from other countries participating in Counter-Piracy. Another country team said they would approach Elm, arguing that they have an obligation to interdict the shipment under UNSCR 2846, and also have a commitment under the PSI. If Elm fails to interdict, Green will approach Pecan for permission to board, with reasonable belief that they would grant it on the basis of their agreement. Green could also request that Birch and Poplar request Pecan for flag state consent to board the ship, as they may have better relations with Pecan.

Intelligence suspects the loading of Ammonium perchlorate on M/V Bass 12 from country Quartz. This material is listed under 4.C.4.b of the MTCR control list. Under para 4(b) of UNSCR 2846 (2012), the exports of MTCR-related material from Quartz is not permitted and all countries are called upon to prevent such transfers through their territories or areas of jurisdiction. As the coordinating body for counter proliferation activities, Country Green's Ministry of Foreign Affairs will consult with their National Intelligence Agency on this matter and inform the political decision makers. While the M/V Bass 12 will not be travelling through Green's territory, it will pass through the territorial waters of Elm for refueling. Elm is a friendly country and is an endorsee of PSI

interdiction principles. Assuming Elm to be a UN member state, UNSCR 2846 is equally binding for Elm. Green will share this intelligence with Elm authorities and ask them to board M/V Bass 12 while docked in their port for inspection.

International Coordination and Cooperation

Green would share the intelligence concerning the BASS 12 and the shipment to both Pecan and Elm, requesting that Elm conduct an inspection of the shipment, as well as alerting Elm to the provisions concerning not being involved in the transfer of such items. If there is flag state consent, then Green would direct the vessel to Poplar or Birch for inspection. Similarly, another country team would encourage its intelligence service to share information with Elm, Pecan, Poplar and Birch. They would also encourage Poplar and especially Birch, as an OEG member, to share their information with Elm and Pecan. Country Green would strongly encourage Elm, Pecan, Poplar and Birch to take action, while Green elects to respond diplomatically to Ebony's breach of the UNSCR.

If the ship has already left Elm territorial waters on its way to Ebony, it shall have to pass through the Exercise Area. In this case, the ship may be prevented to continue on its route to Ebony through the Exercise Area. As relevant Navy assets of exercising nations are already in the area, the Flag State of Pecan will be contacted by Green's Ministry of Foreign Affairs on an urgent basis to ask for boarding permission. Simultaneously, the Green's Ministry of Foreign Affairs will, upon authorization from the political decision makers, contact the Navy Command to transmit all relevant information to the Navy for possible interdiction and boarding. The other states conducting the exercise (Birch, Elm and Poplar) shall also be informed of the situation and may be invited to assist in the boarding operation. If M/V Bass 12's captain permits boarding and inspection, obtaining Flag State's consent will not be necessary. If boarding is conducted and Ammonium perchlorate is discovered and verified, this finding will be duly reported to the UN Sanctions Committee by the State performing the boarding. If boarding cannot be conducted, the suspicions that the vessel was carrying prohibited material may also be shared with this Committee.

Course of Action Rationale

Green suggests that sufficient intelligence exist to determine that the ship owned by Quartz is transporting prohibited items in support of Quartz's WMD program and is a clear breach of UNSCR 2846. Green also has reason to believe that the ship is on its way (departed in last 24hrs) and Elm may have the strongest legal basis to act now, since the ship will be bunkered in its territorial waters shortly.

Impediments to Executing Course of Action

If the vessel has left Elm territorial waters, the refusal of country Pecan (Flag State) to grant boarding permission to M/V Bass 12 may derail Green's course of action. Should M/V Bass 12 turn from the Exercise Area, it is still possible for the vessel to circumnavigate the Exercise Area to reach country Ebony. Another country team suggested that no domestic jurisdiction exist to board, since the ship will not enter Green's territorial waters. If the conveyance changes the flag to Quartz, permission to board by Pecan may not be sufficient. Similarly, Elm territorial waters may be the only location to conduct an interdiction (Quartz has naval forces in the region). Elm does not have a history of being proactive on interdiction cases. There may be concerns with sharing intelligence with Elm, which might request a lot of information. The political willingness of regional partners to

interdict the M/V Bass 12 will limit alternative courses of action. Regional partners also risk military escalation by Quartz as a result of Green's decision to unilaterally interdict the M/V Bass 12.

Proliferation Event 6: Granite attempt to obtain advanced gyroscopes

Interdiction Actions

Green would initially identify possible connections to the broker himself. If the broker is considered a suspect, then Green would consider taking immediate direct actions to interdict the shipment. Green will not take any interdiction actions in the case of the aircraft carrying cargo, since it is not posing direct threat to its country. In Green's judgment, the customs agency of Spruce should control and verify broker's documents and luggage. Green will also try to influence Spruce to investigate the case using diplomatic tools and methods, which go far beyond the present case. In order to do so, Green will cooperate diplomatically with country Birch behind the scenes at the highest possible level using direct contacts. Similarly, another country team said that they would request country Spruce to interdict the cargo and order the plane to offload the cargo. They would then open up an investigation to the broker RBS and initiate a criminal action according to proliferation law 266 of 14 March 2011.

International Coordination and Cooperation

One country suggested that they would immediately send a diplomatic demarche to Spruce to request they interdict the cargo upon arrival. Simultaneously, Green would send a diplomatic demarche to Teak (registration flag of the plane) to ask for the offloading of the cargo upon arrival at Spruce airport. If it was determined that the broker broke national law, Green would ask Interpol for relevant assistance.

Course of Action Rationale

Green is obligated under UNSCR 2904 to first and foremost seize the broker, if necessary. Green seeks to reduce the risk of the proliferation and development of the missile program in accordance with UNSCRs and PSI. As a PSI partner, Spruce is asked to interdict the cargo to abide by the Security Council resolution and to avoid becoming involved in Granite illicit acquisition. Indeed, MBDO is a listed entity under UNSCR 2904 (the university is suspected to be linked with BMDO). As a flag state of the plane, Teak has a special responsibility to avoid being involved in Granite illicit acquisition and thus abide by the resolution. For both countries, working toward the interdiction of the cargo would avoid damages to their public image.

Impediments to Executing Course of Action

Green will do all that it can to influence Spruce to take action. The short window of opportunity in this proliferation event makes all instruments of national power and cooperation between PSI states vital.

Proliferation Event 7: Country Flint attempt to obtain Hydrogen Fluoride

Interdiction Actions

Hydrogen Fluoride is a dual use good under the Defense and Strategic Goods List. All three country teams selected to interdict M/V Trout to determine the exact nature of the goods in question. This intervention would occur on Board M/V Trout or following unloading pier side. Customs and technical experts seek to review and validate related documentation to determine if the goods are subject to a control regime. If they are, the goods would be immediately seized by customs authorities.

International Coordination and Cooperation

Green would seek information, technical assistance and influence Pine authorities to not fulfill the contract to supply and request return of the shipment to Pine. Following the interdiction, Green would speak to Pine, Flint and Coconut (as flag state) about the goods and their obligations under international agreements. Seizure of goods would then be reported to proper national and international authorities.

Course of Action Rationale

Green is strongly committed to leveraging the international regimes such as the CWC and the national groups. The acquisition of chemical weapons would negatively affect regional security and stability, and requires robust multinational cooperation and coordination. Several country teams noted that PSI principles of interdiction, import and export controls and national legislation provides enough legal reasoning to interdict the shipment of concern in Green's port.

Impediments to Executing Course of Action

Green international legal obligations have to be implemented in national legislation before being internally binding. Information sharing challenges also exist with Pine. From an operational perspective, one country team's decision to interdict the vessel at sea would require Green to sanitize intelligence received for information sharing purposes.

Proliferation Event 8: Country Shale attempt to obtain technical assistance

Interdiction Actions

Upon entering Green, all three country teams selected to employ law enforcement officials to interview the scientist regarding the purpose of his travels and inspect the two checked bags. Experts may be used to help evaluate the contents of the bags. The scientist would be detained by local customs authorities during the inspection. This suspicion violates Beijing Convention, Article 1 para 1. (i) (4) as well as numerous Green national laws. The inspection would be made from an inbound flight in Green airport to avoid delaying departure times. If evidences (e.g., plans, drawings, and laptop) are collected and those are of sensitive technology, the scientist will be charged on criminal offences and prosecuted under Green national laws. In the event a breach of Beijing Convention, Green would look to extract the scientist to ASH for due process by ASH authorities.

International Coordination and Cooperation

Green will contact Ash and inform them about detention of their scientist and request search and seizure of further potential evidence (e. g. search of research facilities, questioning of co-workers etc.) Green would remind Ash of its own obligations under the Beijing Convention, UNSCR 1540, and CWC if the scientist broke related Ash laws as well. Specific information that would be acquired includes detailed personal information of the engineer, flight information, and specific information on the proliferation technology (plans, drawings, and electronic devices), as well as information on the employment contract, possible foreign payments, and additional financial information of the service.

Course of Action Rationale

Under the Beijing Convention, it is a crime to transport material, including software and related technology that leads to the design of WMD. In addition, there may be national criminal violations for possession of WMD technology information. If Green finds such material on this person or his baggage, the individual may be subject to criminal charges that we adopted pursuant to the Beijing Convention and existing domestic laws. Green must act now as the entity and baggage will be within GREEN territorial control, jurisdiction and within a contained environment.

Impediments to Executing Course of Action

The investigation into the person of interest may take a substantial period of time as files may be encrypted or are just too complicated to evaluate within a few hours at the airport. Lack of intelligence and legal basis at the onset of the investigation may prove problematic in detaining the scientist and his belongings. If they did not find any information on his person or bags showing an intellectual transfer of WMD technology during a search, Green would likely let the individual continue on his scheduled flight, but continue to investigate. There could be diplomatic effects with the country of Ash if the scientist is detained and no criminal evidence is discovered. There must be physical evidences such as plans, drawings, and flow diagrams to demonstrate the transfer of technology.

Proliferation Event 9: Country Flint attempt to obtain Kynar piping

Interdiction Actions

The transit of Kynar Piping appears to be a violation of Green export control laws. Information would be passed to relevant Green law enforcement and intelligence agencies. Green would first determine whether the shipment is licensable. If no license is found, then Green customs officials would exercise border search authority to inspect the shipments in the FTZ or the port of export (depending upon the timing of when information was obtained). Green Customs would ask for relevant export documentation to determine whether information is false, and may also attempt to get more information from Superior Manufacturing. After confirmation that goods are in violation of Green law, the goods would be seized. Green would conduct further investigation to determine whether criminal violations exist. Another country team suggested that they would request the company to repackage in Green based on foreign trade act and prevent the company from exporting

the Kynar pining to Flint. Green will urge that company to transport to alternative destinations. The release of goods from the FTZ for onwards transportation to Flint requires a customs declaration including a valid export license (catch-all), based on product assessments. Another country team said they would intervene when the flight arrives at North Airport to check whether the Kynar piping is part of the cargo.

International Coordination and Cooperation

Green would likely coordinate with country Ash for further information and action under the CMAA or request that Ash obtain company information from Superior Manufacturing. Green could also attempt to obtain information from Superior Manufacturing directly. Green would attempt to put pressure on both Ash and Superior Manufacturing to cooperate and cease trade with Tangerine or face sanctions, such as denying further imports or exports through Green.

Course of Action Rationale

The illicit goods are in violation of Green export control laws and the international obligations, most notably the Chemical Weapons Convention, the Foreign Trade Act, and the Beijing Convention. Timing is very important because the goods are within Green's territory.

Impediments to Executing Course of Action

Several country teams noted no major impediments to their respective courses of action. However, one country team suggested that limited information exists to determine whether the scientist faces criminal violations. Investigations would be ongoing. Careful and creative cooperation with Flint is required because they are not a party to the Beijing Convention and SUA protocol.

Proliferation Event 10: Country Shale attempt to obtain Glass Lined Reactor Vessels

Interdiction Actions

Basing on justified suspicions regarding possible transit of WMD related materials onboard of the plane (flying over the Pecan territory) and in accordance with the Beijing Convention (Article 1 para. 1 p. (i)(4); Article 8a; Article 16), which has been also ratified by Pecan, Green would encourage Pecan to take all possible measures to stop the delivery. Before requesting actions, Green will ask Walnut to confirm that the suspected cargo is indeed on board of the plane. Because Walnut is a CWC Party, Green would request Walnut authorities to order the plane to return to the airport. Following the flight route, Green will initiate two simultaneous demarches to Redwood and Pecan informing them of our demarche toward Walnut and potentially notifying them on the opportunity to interdict the plane during its transit in their airspace territory.

International Coordination and Cooperation
Green will inform appropriate services of Pecan on suspicion of the illegal end-use of GLRV by the Shell Research University, with the possible intention to manufacture chemical weapons or its components (where the Article 2 para. (b)(ii)). 2. On the basis of reciprocity, Green will ask Pecan to take appropriate actions and share relevant data.

Course of Action Rationale

The Beijing Convention (Article 1 para. 1 p. (i)(4); Article 8a; Article 16) provides clear rationale for intervention.

Impediments to Executing Course of Action

Green cannot act on its own or involve Redwood, which also has not ratified the Beijing Convention. Disclosing information with non-PSI endorsing states remains problematic. Even though Redwood is a PSI partner, it lacks experience interdicting shipments of proliferation concern.

Proliferation Event 11: Country Flint attempt to obtain Corrosion Resistant Valves

Interdiction Actions

Green will explore prosecution of both Green Nationals by Pine and Ash, as the nationals are currently located and have presumably committed the offences in these jurisdictions, who are both signatories of the Beijing Convention. If Pine and Ash do not prosecute, Green will remind them of their obligations to extradite or prosecute, and as a last resort, would seek extradition of the Green Nationals to be prosecuted in Green. Another country team tasked their intelligence agency to scope HUMINT operations on the two Green nationals (in Ash and Pine) in order to better understand procurement networks and end users, and investigate future deals and wider financial network. Another country team instructed their transportation to land the aircraft in Green under the Beijing Convention. Once on the ground, Green customs would inspect the aircraft. If aircraft returns to Pine instead of landing in Green, Green will request that Pine inspect aircraft cargo under Beijing Convention and CWC. Follow up HUMINT operations will confirm information on shipments, which in turn, would be released to Pine and Ash.

International Coordination and Cooperation

Green will request that Pine investigate the export of the CRVs, and possibly revoke the export license previously granted. Green will demand that Pine fulfills their obligations under the Beijing Convention and CWC in respect of both this shipment and any future shipments. Green will build further regional support to dissuade Flint from developing a CW program and seek resolution. Over the long-term, Green will intensify efforts to encourage Pine and Ash to endorse the PSI principles.

Course of Action Rationale

The Beijing Convention provides a strong legal basis for Pine and Ash to prosecute the individuals involved, since the offence of arranging the transport took place in those territories and the aircraft is Pine-registered. Presumably, it will be easier for these countries to obtain the necessary evidence and mount the prosecution.

Impediments to Executing Course of Action

The Beijing Convention may not permit seizure of the CRVs if the aircraft is only present on Green territory due to Green forcing the aircraft to land. Sensitivity of intelligence sources will need to be protected. No UNSCRs provide legal rationale for intervention. Pine's previous lack of cooperation on interdiction cases and incomplete intelligence creates additional uncertainties. Given that Ash and Pine usually reject cooperation on interdiction cases, Green will not seek their assistance with gathering HUMINT on the Green national resident in their countries.

Proliferation Event 12: Country Shale attempt to obtain a Gas Monitoring System

Interdiction Actions

Green will leverage customs agency to detain and examine the item of proliferation concern to determine whether it breaches the Customs Act. If there are regulations against Shale under the Special Economic Measures Act, then Green would seize the item as a breach of the Customs Act, and dispose of it accordingly. Another country team suggested that they will first host an urgent interagency collaboration meeting and then put a hold on the chartered Shale Air Cargo flight. Green customs officials will then inspect the aircraft while Green Air Force assets are on stand to interdict the chartered Shale Air Cargo flight in case it attempts to escape. Green will also inform Ash, Shale, and Birch of the interdiction through a diplomatic channel and request continued cooperation on future similar cases.

International Coordination and Cooperation

Green will ask Birch for evidence on the financial relationship and the negotiations (contracts) between the broker (PBS) and Ballistic Missile Defence Organization (BMDO) in country Shale. Under Beijing Convention, Green will request extradition of the broker from Ash.

Course of Action Rationale

Green has the item in its territory for a short period of time and is increasingly concerned about Shale's proliferation activities and the threat posed to Green and their neighboring countries.

Impediments to Executing Course of Action

Ash, although a signatory of Beijing Convention, is confrontational with Green and may not cooperate. One country team noted that the goods in transit are exempted from some of its export control laws. Due to significant time constraints, rapid decision making is needed prior to seeking outside assistance or coordination. However, intelligence from Birch is based on preliminary assessments and insufficient evidence may hinder Green and other countries to prosecute Shale.

Functional Group Observations

Diplomatic

Issue for Discussion:

Players from Country Cluster A and B: Players deliberated on the role that interdiction plays in their country's counter proliferation strategy vis-à-vis Flint/Shale (emerging states of proliferation concern without any UNSCRs against them)

Players from Country Cluster C and D: From proliferation event 10, the approach to Redwood, Pecan, and Walnut to convince them to take action against the shipment of glass-lined reactor vessels as they overfly Redwood and Pecan. Specifically, players discussed the role that an in-force Beijing Convention played in their diplomatic approaches.

Commonalities and Differences

Members of diplomatic group B suggested that all states have a political and moral duty to take action, but had no legal grounds and means to take unilateral action. Diplomatic actions included a demarche to Walnut to inform and ask to take action and call back the plane to Walnut or order it to land in Pecan or, preferably, Redwood. All three states are CWC members and Redwood being a PSI endorsee is more likely to take action. Several countries also opted to send demarches to Pecan and Redwood to inform them about the cargo on board and about demarches sent to Walnut. Green diplomatic officials also choose to send demarches to Pecan and Redwood requesting that they make overflight conditional to technical landing if the plane does not return to Walnut and to interdict the listed goods on board on the basis of their CWC obligations. If the plane returns to Walnut, Green diplomats will ask Walnut authorities to cancel the export license and to take action to prevent further export to Shale. In the longer term Green will encourage Pecan and Walnut to become PSI endorsees.

Diplomatic Team C agreed to engage Pecan diplomatically using ratification of the Beijing Convention as a rationale for their action. Pecan's failure to act will likely be raised as a violation of the CWC since Pecan is a signatory and allowed this export transit to take place. Green diplomats will also discuss its concerns about Shale's CW program at the CWC. Even though Shale is not a signatory to CWC, they could still be the subject of sanctions from the UNSC, upon the recommendation of the OPCW. Team C agreed that given the time involved, it would be almost impossible to act in time for Pecan to force the plane to land. Most of the diplomatic efforts would likely take place after the fact and would be focused on preventing this type of event from occurring in the future. This incident could lead to greater information sharing and a formal agreement between Green and Pecan. Green will also approach Walnut after the fact to explain the connections between the Shale Research University and BMDO in Shale and encourage them to strengthen their export control regimes and consider joining relevant export control regimes. Team C also suggested

that encouraging Redwood to sign the Beijing Convention would help them identify existing legal authorities to force the plane to land and be inspected.

Diplomatic teams C and D cited no major differences in their national approaches to the proliferation events 7-12. Conversely, diplomatic team A relied heavily on diplomatic demarches to remind countries of their international obligations and relevant domestic laws. In most cases, one country had necessary domestic laws without any requirement for diplomatic engagement, while another had domestic laws, but used diplomacy to mitigate side effects and remind the supplier countries that they had similar obligations under international agreements. Team A agreed that information obtained via the interdiction and investigation will be used in international multilateral settings to remind Flint of its international obligations to participate in the CWC and to apply pressure to cease its assessed pursuit of a CW program. However, different countries will have different thresholds for doing so in a multilateral setting based on individual diplomatic and political considerations.

A country's foreign policy goals will affect exactly how it chooses to engage diplomatically during or following an interdiction. For instances, some countries recognize that they possess very strong domestic export control laws and have explicitly identified counter proliferation outside of its borders as a priority. This approach in turn drives regular diplomatic engagement to share information on proliferation and urges action even on cases outside domestic borders. Many countries do not have a similar emphasis on acting on proliferation events outside their borders.

CCP Tools

Existing CCP tools related to the proliferation events in the scenarios include Air Interdiction Transshipments Free Trade Zone Best Practices, Australia's Interdiction Checklist, and Singapore's Post-Interdiction Checklist. Several of these tools describe the legal rationales for air interdiction, beyond the Beijing Convention and could be useful when demarching Redwood. Green could also share legal authority papers with Walnut to help them strengthen their export control system and illustrate what legal frameworks are helpful for carrying out counter proliferation activities. Based on the various CCP tools related to these scenarios, it may be helpful to create one PSI checklist that consolidates the best practices offered by the various states to date. Existing tools may not be sufficient to deal with time sensitive situations, such as forcing Pecan to land the plane immediately.

A paper explaining what authorities could be granted by the Beijing Convention would provide greater support to PSI member states. OEG-sponsored workshops for signatories of Beijing Convention could draft a product to help states better understand existing legal authorities available under the Convention Model legislation. Specifically, this will help states understand how to implement the Beijing Convention Checklist and determine whether and which provide states the power to act in these situations, and identify points of contact to support rapid information sharing and decision-making. Lastly, a tool that discusses liability issues in the event a plane is forced to land for inspection and best practices for how to treat the passengers, crew, other cargo, would help political leaders make more informed decisions.

Legal

Issue for Discussion:

Players from Country Cluster A or B: From proliferation event 8, players examined the legal basis their country would use to stop, question, detain, or reroute the engineer connecting through their international airport and similarly the legal basis for inspecting or seizing the engineer's luggage. Specifically, players discussed how various international legal frameworks (i.e., the Beijing Convention or the CWC) would play in your legal support/justification for your actions.

Players from Country Cluster C or D: From proliferation event 11, players explored the legal basis in their country cluster to: (1) Deny overflight, interdict or take no action against the shipment of corrosive-resistant valves overflying your territory on the Pine-flagged passenger/cargo aircraft; and (2) Establish jurisdiction over offenses committed by Green Nationals 1 and 2 (or not) and pursue extradition (or not). Specifically, players discussed how international legal frameworks (i.e., the Beijing Convention, Chicago Convention or the CWC) would influence their legal support or justification for action.

<u>Commonalities and Differences</u>

Team A relied on domestic legislative implementation of the Chemical Weapons Convention. To stop the engineer from continuing his journey, the team relied on the fact that the engineer was on a watch list (presumably because of his CW proliferation activities). All three countries legal systems provide for the detention and questioning of suspected proliferators through legislation that has domestically implemented international obligations. All three countries also maintain lists of proliferators and lists of both entities and persons suspected of being involved with proliferation.

Team B relied on customs border authority to stop, detain, search and question the engineer. A court order or probable cause was deemed not required. Assuming the engineer had physical items (e.g., schematics, plans, software) and intent to transfer to Shale, both countries in Team B could pursue the case as a criminal violation of export control laws. Also, both could pursue a criminal prosecution under Beijing Convention implementing legislation based on fact that the aircraft landed in Green with the suspect on board the aircraft. Team B agreed that prosecution would be difficult if the engineer did not have physical items.

Team C suggested that the preferred approach is to deny overflight to force the plane to return to Pine. It was unclear whether all countries have jurisdiction over possible Beijing Convention offences. The use of actionable and reliable intelligence to identify and seize goods is essential when confronting issues relevant to the implementing the Beijing Convention. While Green would have jurisdiction over both Green Nationals for possible Beijing Convention offences, Pine and Ash would be the preferred jurisdiction to undertake prosecution.

Regarding international legal frameworks, all three countries represented in Team D are parties to the CWC and the Chicago Convention. At the national level, all there countries leveraged national laws and regulations, and incorporated Export Control Regimes Lists in order to examine the nature

of the dual use item in question. Regarding overflight denial, Team D agreed that the Chicago Convention can be applied to deny overflight of the plane. Team D would request Pine (flag state of the plane) to order the craft to return home and deny access to national airspace in order to disrupt the transfer. If the plane ignores the denial, Team D agreed to use coercion to escort the plane out of the airspace and force it to land.

Team A differed on the use of visas in the scenario. One country requires transit visas in most circumstances, while two other countries noted that they do not. Since the engineer was on a watch list, it is possible that he would not have been granted a visa to transit in country Green. The difference in transit visas is based on a number of factors, including how strict a state's immigration laws, and level of transit passengers a state experiences. Given that each country is a PSI OEG member, their approaches to countering proliferation may end up being quite similar.

CCP Tools

Existing CCP tools do not specifically deal with the transporting of intellectual property. While they deal with transporting materials and technology used in the fabrication or design of biological, chemical or nuclear weapons, the question of technical expertise is not as clear. This may be due to the fact that proliferation of expertise has largely been dealt with by the UNSC through specific targeting resolutions (for example, resolutions specifically targeting the Iranian and North Korean nuclear programs - UNSCR 1929 & 1874). However, *the Model National Response Plan, Counter proliferation through Air Interdiction: An Overview of Legal Principles,* and France's *Inspection And Assessment Methods*, as well as Australia's *Interdiction Checklist* may all prove useful in the scenarios examined over the course of game play.

In terms of model national legislation, 2 PSI countries have legislation dealing with the intangible transfer of technology and expertise which may provide a good 'catch-all' piece of legislation to perform the function of the more targeted UNSCRs. An updated national authorities matrix (e.g., border inspection, air interdiction, etc.) and best practices regarding the prosecution of nationals committing proliferation related offences abroad are two additional CCP tools that should be considered.

Customs and Law Enforcement

Issue for discussion:

Players from Country Cluster A or B: From proliferation event 9, players examined applicable national customs laws, policies, and capabilities to interdict the hydrogen fluoride and the Kynar piping as they undergo transshipment in their country. Players further compared and contrasted approaches between the item in the FTZ and the item not in the FTZ.

Players from Country Cluster C or D: From proliferation event 12, players explored the national customs laws, policies, and capabilities used to interdict the gas monitoring system as it transit your country

Commonalities and Differences

Team A agreed that Green is able to search and seize on the basis of national legislative authority and international controls (e. g. CWC, AG). Team B agreed to detain the goods using national authorities if the intelligence was deemed valid. The legal basis was common for all of the states in that once the goods entered Green, they were now subject to national export control laws regardless if it resides in a Free Trade Zone or in a country's port. Similarly, Team B agreed to evaluate the intelligence and make an assessment to act based on the confidence they had in the information and the source. Team C decided to enforce legislation by each countries respective customs agency to foster international law enforcement cooperation and share information related to the disposal of goods and licensing. All three countries in Team D applied the same international regulations for transit and transshipment.

Countries that have free trade zones have additional authorities to inspect. The licensing bodies of PSI member states differ in some ways, but all have national authorities to temporarily detain the goods for inspection and conduct a more comprehensive investigation. The detention process is similar to the decision to issue a license, although in some countries multiple agencies have to get together and have evidence presented. Not all customs agencies can make decisions to forfeit the goods and serve as the permit licensing agency. The definition and interpretation of transit and transshipment in the real-world provides some ambiguity when countering the proliferation of WMD that moves both at sea and air.

CCP Tools

The Australian Interdiction Checklist, Germany's Transit and Transshipment Paper, and the U.S Free Trade Zone Best Practice and Interdiction Disposition and Liability papers are existing CCP tools that provide relevant guidance to assist PSI member states during a real world proliferation event. Other notable law enforcement CCP tools discussed include: Germany's Contribution Paper on Critical Capabilities and Practices, Inspection and Identification and Transit and Transshipment; Poland's Basic Elements of an Export Control System; United States' Transit and Transshipment: A Common PSI Understanding?, and Guidelines for Advanced Cargo Data Requirements and Sharing; Singapore's Introductory Checklist addressing Post-Interdiction Issues; and Australia and New Zealand's Model National Response Plans (MNRP). Updating common guidelines a regular basis (at the same time in each country) and translated into national languages would strengthen the PSI communities CCP tool kit.

Military

Issue for discussion:

Players from Country Clusters C or D: From proliferation event 5, players identified, which, if any, military actions taken they would pursue to lead or assist in the interdiction of the rocket fuel oxidizer on M/V Bass Twelve.

Commonalities and Differences

Asking ELM to interdict M/V BASS12 in its territorial waters would be the most effective military action. This would minimize risk to both mission and forces and increase the probability of interdicting the shipment of concern. If Elm decides not to interdict, Green will ask Pecan to give a flag state consent in order to interdict on open waters. If Pecan denies this request, Green will ask Poplar and Birch-both PSI endorsing states- if either of them can ask PECAN for flag state consent. If there is a proof of changing flags, the ship becomes stateless and Green maritime forces will interdict the ship. Team D also agreed that a maritime solution to intercept the vessel was the most effective course of action. While Elm's maritime forces would be the preferred choice to lead this effort, Green forces will interdict the shipment in its own territorial waters or working with allied forces in in international waters. Team A agreed to consult with the other Task Force countries taking place in the Counter Piracy exercise and with the Flag country to inspect the ship. Sending an element of the task force to check the flag, and potentially board the vessel to verify the flag and documentation was the preferred military course of action. Air assets will conduct surveillance mission to inspect the shipment from the air.

Several countries navies are organized in a self-defense role and are limited to projecting maritime force far from its shores. However, Coast Guard assets can conduct maritime missions to assist in the interdiction of a ship in international waters. Several countries preferred to work in a coalition environment in order to take advantage of national laws and capabilities.

CCP Tools

Existing CCP tools related to countering WMD proliferation by military forces are limited. This may be due to classification restrictions, but creating an official unclassified version that can only be disseminated to PSI member states would help alleviate this barrier. Creating and sharing of best practices and checklists related to interdicting shipments at sea and disposing of goods would strengthen the PSI CCP tool kit.

INFORMING THE GAME OBJECTIVES

PSI 2014 served as both an educational and analytic game for the players and game sponsor. The educational component provided players with a decision-making experience that illustrated teaching points and fostered cooperation, while the analytic component acquired information and data to assist future decision-makers. This section of the report summarizes all player survey responses and qualitative data generated throughout game play in order to inform the four overarching game objectives.

Beijing Convention

Objective#1: Build a shared appreciation for how ratification and eventual entry into force of the Beijing Convention on the Suppression of Unlawful Acts Relating to International Civil Aviation changes the status quo with respect to counter-proliferation laws, policies, practices, and obligations.

Figure 5 illustrates that majority of players gained a greater appreciation of how the ratification and entry into force of the Beijing Convention will change the status quo with respect to counter-proliferation laws, policies, practices, and obligations.

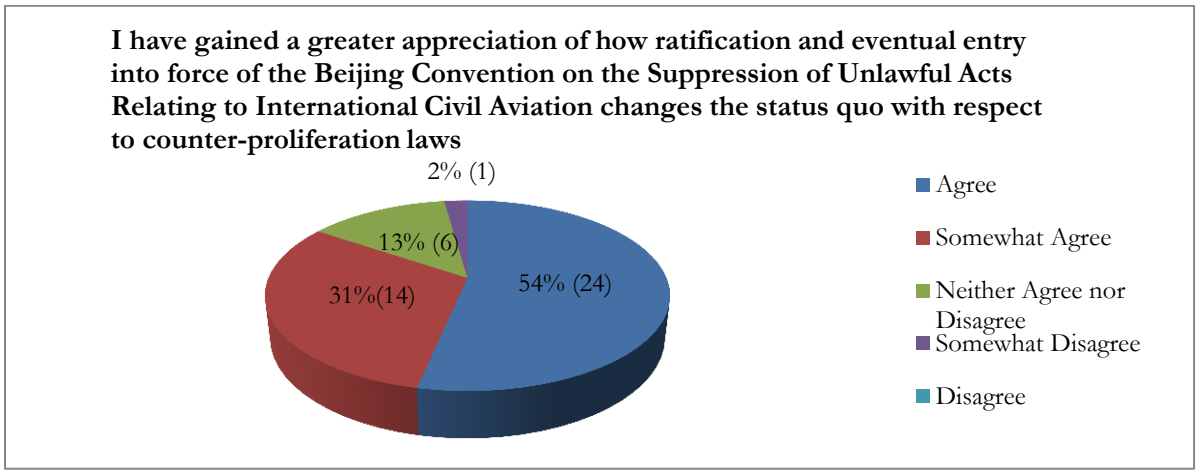

Figure 6. Appreciation of the ratification and entry into force of the Beijing Convention

There was broad consensus that the Beijing Convention should be adopted and standardized internationally. One player said, "The Beijing Convention sets an international standard that everyone needs to reach. We need to aid other PSI endorsees on this standard." There were several comments regarding improvements to the Beijing Convention and limitations for addressing specific threats. The practical application of the Beijing Convention remains a challenge and requires further attention. A CCP tool to "operationalize" the Beijing Convention is needed. By its very nature, air interdiction requires rapid decision making and little time to take action. In many cases, without a CCP tool, the Beijing Convention would be difficult to enforce due to the very short time frames there are to make decisions and take action. The Beijing Convention does not address interdiction of

intangible information, and would thus be in-effective against this threat. There is not a common understanding regarding rights of a state to make overflight contingent on landing and inspection (scheduled vs non-scheduled flights)

One player noted, "CCP (tools) to 'operationalize' the Beijing Convention should address time sensitivity of many issues the Beijing Convention attempts to resolve." Players widely agreed that these problems could be addressed by creating a new CCP tool to operationalize the Beijing Convention. Several players recommended an OEG sponsored workshop to develop this CCP tool. To be effective, players pointed out that the CCP should do the following:

- Explain precisely (standardize) what authorities are granted by the Beijing Convention.
- Include a tool to rapidly determine who is responsible to act in a situation
- Support time sensitive decision making
- Set an international standard for application of the Beijing Convention
- Allow states to understand and standardize what authorities are given (or not given) under the Beijing Convention.

Players discussed that the Beijing Convention does not cover interdiction on intangible information. One scenario included interdiction of a scientist carrying information in the form of knowledge. Players concluded that without tangible evidence, either on his person, luggage or digital information on his computer, it would be difficult to detain him. The Beijing Convention unfortunately does not provide a method to interdict this type of intangible transfer of information. Information and knowledge related to WMD transported via the internet does not apply to the Beijing Convention. In general, states did not have a common understanding of their rights and authorities under the Beijing Convention. This lack of understanding may make it more challenging and less likely for a nation to respond rapidly enough to counter a threat. For this reason standardized authorities are crucial to timely decision making and action.

Transit and Transshipment

Objective#2: Build a shared understanding of international standards, national laws, policies, and terminology related to shipments in transit and transshipment among PSI member states.

As depicted in figure 6, majority of players gained a better understanding of international standards, national laws, policies, and terminology related to shipments in transit transshipment among PSI member states.

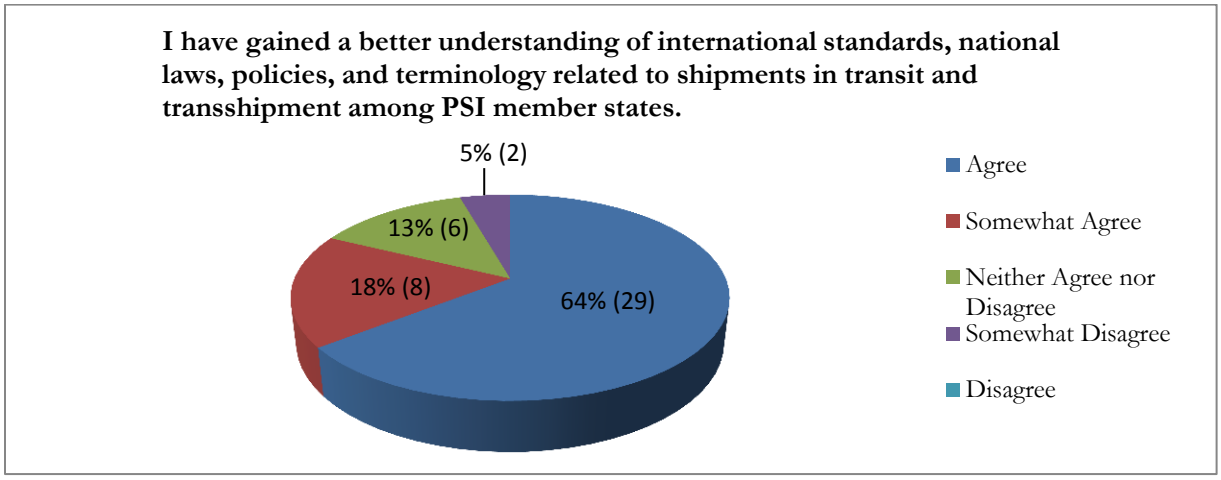

Figure 7. Better Understanding of Transit/Transshipment

Players recognized the need to develop a deeper understanding of which national and international laws and policies can be applied to counter proliferation events related to transit and transshipment. Understanding each country's definition and approach to transit and transshipment was characterized as a necessary step towards cooperation. Tracking licenses from origin to destination when a vessel or aircraft is in a place of transit or transshipment was also touted as an area of emphasis for decision-makers. Similarly, the difference in transit visas is based on a number of factors, including a state's immigration laws, and the level of transit passenger throughput in a given state.

Players acknowledged that obtaining the legal authority and capability to deter and stop any transfer to end-users of proliferation concern whether transiting your territory or not are critical to preventing state and non-state actors from acquiring weapons of mass destruction (WMD) and missile-related capabilities. Entry and exit information for transshipments should be thoroughly reviewed by state customs officials and national security agencies with technical knowledge of controlled items and the methods for evaluating its potential end use. Sharing of best practices related to how organizations perform this function was often discussed throughout game play.

Disposition and Liability

Objective #3: Build a shared understanding for the key issues and challenges related to disposition and liability aspects of PSI and how national laws, policies and procedures differ amongst PSI OEG member states.

Figure 7 illustrates that 76 percent of players either agreed or somewhat agreed to gaining a better understanding of key issues and challenges related to disposition and liability. Player understanding of disposition and liability was less compared to the previous two objectives. It is posited that this may be a result of scheduling and time constraints on day one, which prevented the players from examining disposition and liability in greater debt as functional groups.

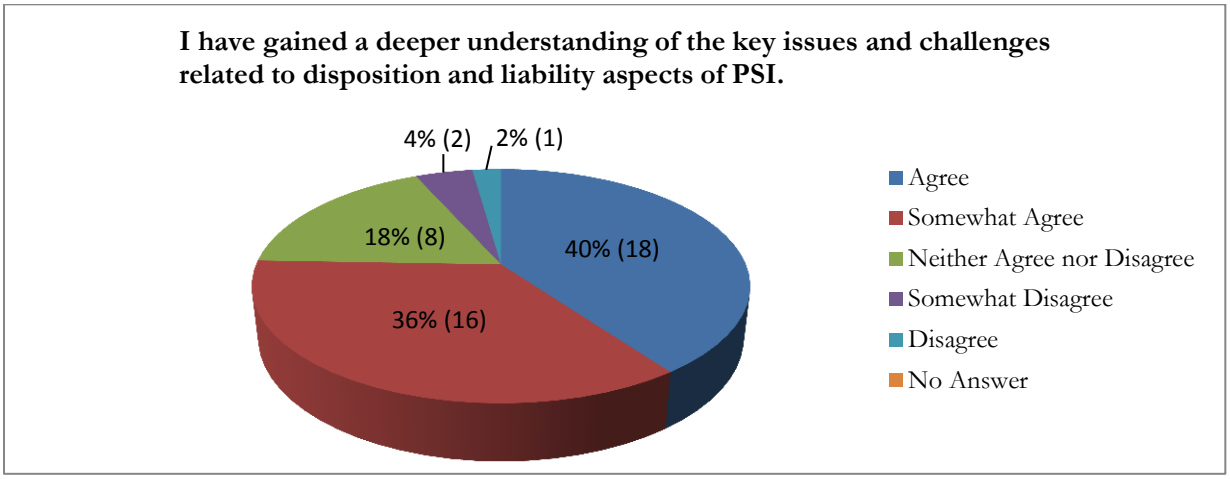

Figure 8. Better Understanding of Disposition and Liability

Determining the party responsible for compensating the ship, aircraft, owner or operator for any delays, as well as the policy and legal basis for this determination was a topic of discussion across several proliferation events. During proliferation event four, players assessed that sufficient reasonable cause allowed Green to take action to prevent Granite from attempting to procure sophisticated circuit boards made with military-grade analog to digital converters to enhance the accuracy and reliability of their ballistic missiles. The question of any possible compensation has to be verified and determined by agencies involved. One player team suggested that their government would not be liable for damages due to actions taken in good faith, while another country team held their customs office responsible for compensation under their national Customs Act. Ownership of the item of proliferation concern would either remain with commercial entities involved or the Green Customs Office, according to two country teams. Initial seizure of circuit boards made with military-grade analog to digital converters would remain with appropriate customs and law enforcement agencies for investigation. Once the courts have determined an offence and provided a forfeiture order, the item will remain under the custody of a state's customs and law enforcement agency to be properly disposed.

Players acknowledged that liability and compensation questions related to Quartz's attempt to obtain aluminum 7075 "need to be addressed, but not a show-stopper." Compensation issues discussed during the proliferation event related to radiation hardened microcircuits included identifying and

verifying the party responsible through interagency coordination meetings, and customs officers being immune from liability for acts within the scope of their duties in inspecting and detaining merchandise. However, players recognized that there are ways to compensate parties for delay or damages administratively through diplomatic channels. Ownership of the radiation hardened microcircuits will initially remain with the exporter. Costs of the detention are borne by the importer or carrier under several country laws, while several other country teams highlighted that specific laws require the exporter to bear costs related to fees and offloading handling materials. Several country teams highlighted that the state responsible for offloading the cargo is most likely responsible for compensation to the ship, aircraft, owner, or operator, while others deemed the flag state or shipping company responsible. If determined that laws are broken, then a PSI member state would seize and forfeit the title of the item from the owner to their country. The shipment could then be transferred to a secondary location or stored in a seaport or airport warehouse until further action is taken to properly dispose of the items.

Critical Capabilities and Practices

Objective#4: Identify changes to existing CCP tools or potential new CCP tools as it relates to challenges of air interdiction, transit and transshipment, and disposition and liability.

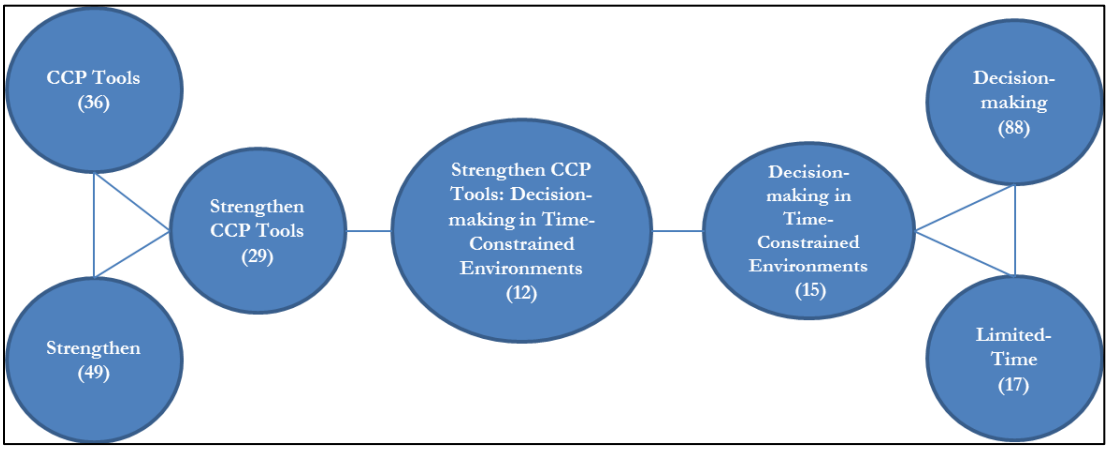

Figure 9. Data visualization based on in vivo grounded theory using i2 Text Chart

Player derived key themes and phrases from game play were coded to identify concepts. Researchers attempted to ground these concepts in the data according to grounded theory protocol (Glaser and Straus, 1967). In this way, emergent themes were "grounded both empirically (in the data) and conceptually (linked to the wider analytic context)" (Charmaz, 2000, p. 525). Using i2 TextChart (version 8) software application, the open-ended responses in the individual survey questionnaires and individual cell deliverables were searched for these concepts. Based on player-derived themes, critical capabilities and practices need to be strengthened in order to inform leaders during time sensitive decision-making environments. Repetitive searches yielded the nodal/link relationships depicted through data visualization in figure 9. Each parenthetical entry indicates the number of times a word or phrase appeared in the data collection.

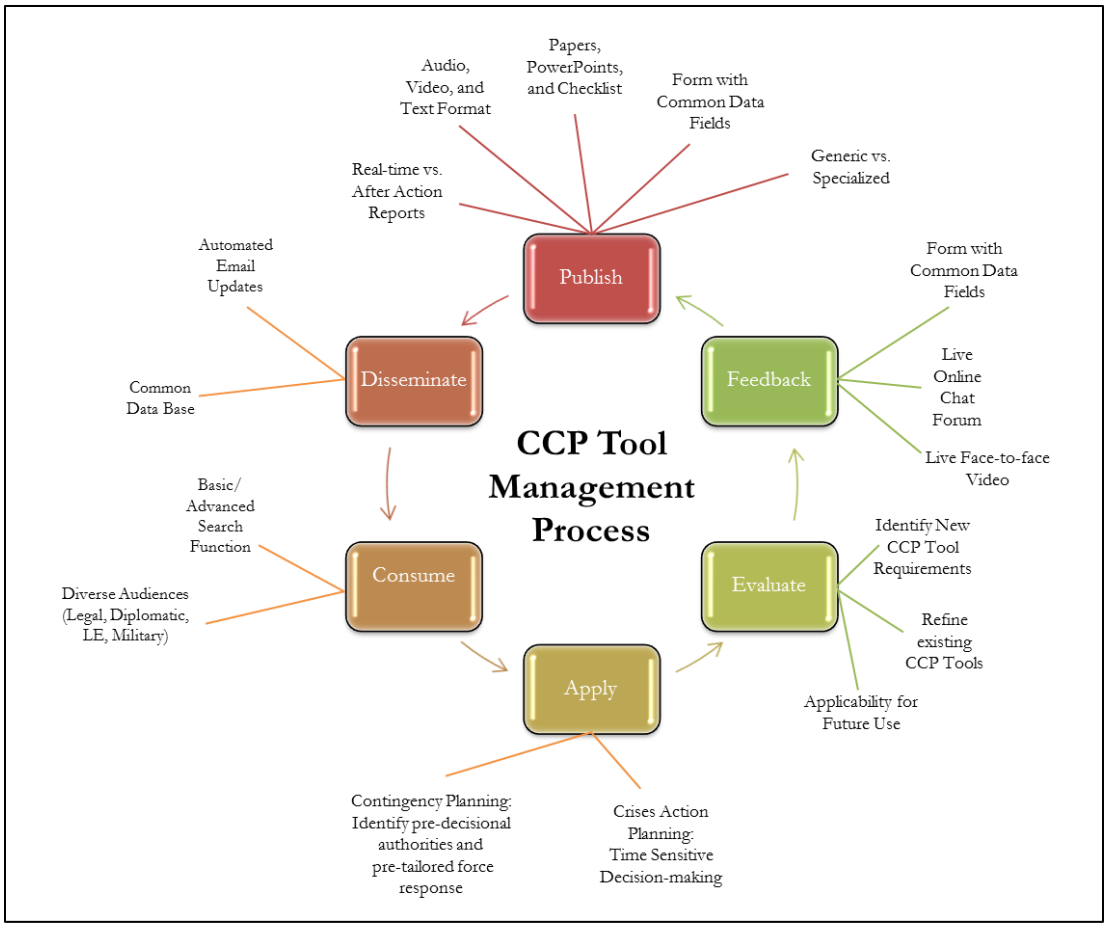

Figure 10. CCP Tool Management Process and Characteristics

Based on the player insights and themes derived during post-game analysis, figure 10 depicts CCP tool characteristics and processes and how it plays a role in PSI. PSI Operational Experts Group countries acknowledged the benefit of strengthening critical interdiction capabilities and practices of all PSI member states. Several countries suggested sharing a subset of CCP tools with non-PSI states as an incentive to join the PSI community and commit to the interdiction principles. Consistent with these principles, players recognized the need to evolve and improve methods to counter the threat of WMD proliferation by identifying and sharing tools and resources that support interdiction related activities. Players recognized the need to introduce common processes and technologies that aim to facilitate the sharing of information and knowledge by various departments and agencies within PSI member states.

Players highlighted many challenges to developing best practices and focused on solutions that capture lessons learned and updating check lists in real-time, phrasing lessons in terms of generic, actionable recommendations or tasks, and proactively encouraging PSI states to review and integrate CCP updates into national plans and policies. Such lessons should be both positive and negative and acquired quickly to avoid individuals forgetting the challenges faced during the course of a proliferation event. Players acknowledged that the knowledge acquired, shared, and applied through CCP tools are generated mainly from an experience or expert insight of a PSI member states.

Because some lessons learned are difficult to capture in writing, a feature that allows users to upload other materials such as video or audio files would allow for greater flexibility to share information. Disseminating lessons learned through automatic email notifications and key word or phrase searches would provide decision-makers a quick and effective way to apply these lessons to specific proliferation events and working environments. Email notifications could be further supported by alerting the right person or organization based on the specific data entered by the originator. Supporting the development and management of PSI CCP tools requires that organizations and agencies encourage the sharing of lessons learned by establishing "CCP" programs, policies, and incentives for contributors. The global knowledge of countering WMD proliferation can be preserved and transformed by managing a lessons learned database for current and future PSI practitioners.

The future management of PSI CCP tools should remained stored on an unclassified central repository that incorporates an electronic form, which includes the common fields of data (title, category, applicable to, recommendation, etc.), as a way to collect and distribute lessons learned. To foster greater socialization of best practices, an online discussion feature would allow PSI users to interact with each other through online chatting, or face-to-face discussions. The CCP tool website could also feature an application that allows users to search points of contacts by country, agency, name, or area of expertise. This will expedite decision-making and better position PSI states to standardize pre-decisional authorities within and across agencies. Being able to quickly identify the most appropriate CCP tool and assess its utility after the fact through a user rating system and feedback form will help publishers and consumers revise and reuse products for future decision-makers.

CCP tools are used to better understand what laws, policies, and capabilities can be applied across broad concepts (e.g., transit, transshipment, interdiction, etc.). Having gained a deeper appreciation for the complexities of individual proliferation events during game play, players advocated for CCP tools that are tailored to counter specific scenarios. Timely, actionable, and reliable information related to the sharing of best practices and intelligence was discussed as a way of supporting rapid decision-making during time sensitive situations. Players identified numerous knowledge gaps and proposed specific areas of information that could be developed and published as new CCP tools. They acknowledged that the application of existing national and international laws is better understood than courses of action or "how to approach specific situations" related to identifying, interdicting, seizing, and disposing of WMD and related material both. In addition to the CCP tools identified below, players focused on publishing CCP tools tailored for specific users or audiences (e.g., military, customs and law enforcement, legal, and diplomatic).

New CCP tools identified by players that focus on specific courses of action on land, air, and sea include the following: Law enforcement inspection of goods located in a warehouse; Understanding how to deal with transshipment; Authorities provided by the Beijing Convention; Familiarize customs, law enforcement, and military personnel of the operational implications related to the Beijing Convention; Tracking license from origin to destination when you are in a place of transit or transshipment; Intangible Technology Transfer; Free Trade Zone Guidance; All national laws and regulations incorporated Export Control Regimes Lists; Case law regarding the prosecutions of nationals committing proliferation related offences abroad; Inspection And Assessment Methods ; Maritime Interdiction: Boarding or Diversion of a Ship; Disposal of interdicted goods; Post interdiction care (costs, time, advice); Explore legal liability issues in the event a plane is forced to land for inspection - best practices for how to treat the passengers, crew, other cargo, etc.

Figure 10 illustrates that an overwhelming majority of players indicate that existing CCP tools need to be strengthened and new CCP tools must be developed in order to deal with the given challenges of air interdiction, transit and transshipment, and disposition and liability.

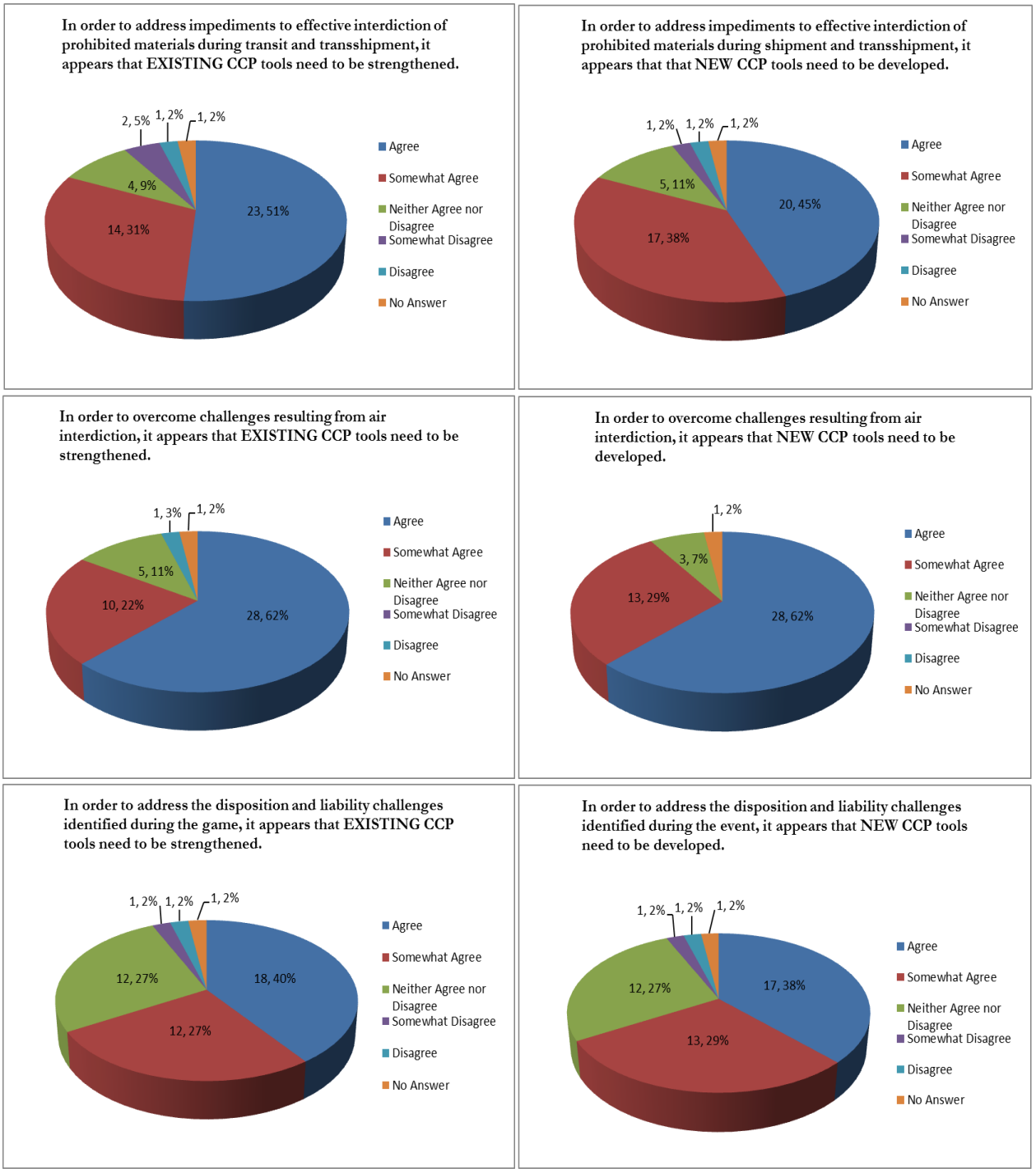

Figure 11. The Need to Strengthen Existing CCP Tools or Create New CCP Tools

IV. IMPLICATIONS AND RECOMMENDATIONS

In addition to informing the game objectives, the researchers explored the implications of the findings to PSI cooperation. This section proposes those implications as well as recommendations to inform the future of PSI. Based on player derived themes and insights during post-game analysis, figure 10 depicts how authorities and political will, awareness, and capabilities contribute towards PSI.

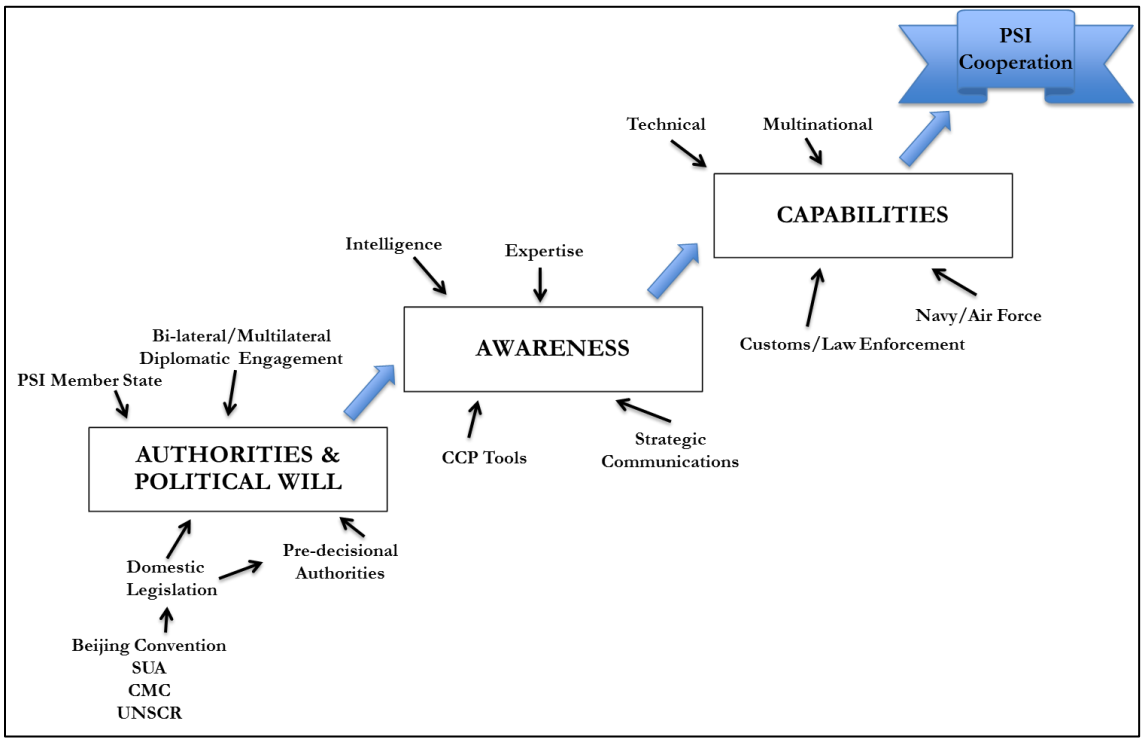

Figure 12. Influence of PSI on authorities, awareness, and capabilities

Authorities and Political Will

Players recognized the benefit of relying on existing international law and partnerships to conduct interdictions in international waters and airspace. Players advocated for initially leveraging existing national laws to interdict vessels or aircraft passing through its territories, where they have jurisdiction to act. In situations where the legal authority to act may be unclear or non-existent, players often relied on leveraging UN Security Council Resolutions, the Beijing Convention, the SUA Convention, and the Chemical Weapons Convention as authorization to interdict a ship or aircraft of proliferation concern. In addition to authorities, establishing the political will begins when a state endorses the PSI Interdiction Principles and continues PSI cooperation to advance a nation's ability to acquire authorities and political will, to gain and maintain awareness, and identify appropriate interdiction response and disposal capabilities.

Several strategic-level impediments to interdiction highlighted by players include the unwillingness of nearby countries to take action to assist a state, the consequences of a country over reacting to an interdiction using military force, and the political and operational costs associated with not taking any action. Expanding bilateral boarding agreements between PSI member states was suggested as an effective way to secure expedited processes or pre-approval for stopping and searching ships at sea. An inspection in a country's port was preferred over interdiction in territorial waters or along the high seas. States may be less likely to cooperation in international waters and interdiction along the high seas requires additional jurisdiction and coordination in time compressed environments. Determining violations for the transport of intellectual WMD material may be challenging when limited evidence on the person exists.

Awareness

Quick decision making can be further enhanced by persistent coordination and cooperation at the strategic (laws and policies) and operational level (customs, law enforcement, and military). Persistent intelligence and CCP tool sharing between PSI member states prior to a real-world proliferation event will better position national security decision-makers to identify pre-decisional authorities and mission tailored force package responses. Information and intelligence sharing through bi-lateral and multilateral agreements and CCP tools is a critical enabler to rapidly making decisions related to authorities and capabilities in time-constrained environments.

The interdiction of WMD while in transit or transshipment begins with sharing information and intelligence related, but not limited, to the people, cargo, and vessel of proliferation concern. Armed with this information, lawyers, diplomats, and military and law enforcement personnel can make informed decisions to stop the transit of WMD and related material from reaching the land, shore, or sky of a nation. Additional information was often sought to better understand whether a state has the authority to interdict under existing national and international laws. Players highlighted several impediments to intelligence sharing, including the lengthy process of acquiring and verifying intelligence in time sensitive situations and revealing sources and methods. Intelligence was often discussed as a necessary step towards establishing a legal basis for action, but as one player noted, it "might not meet the burden of proof."

A common vision among PSI member states that standardizes national processes and protocols for sharing of sensitive counter proliferation information will better position decision-makers to overcome intelligence sharing barriers and rapidly make decisions under time sensitive environments. Developing an international contact list of all relevant decision makers to help PSI member states acquire relevant intelligence to act quickly during a real-world proliferation event could further enhance this initiative.

Players highlighted myriad information and intelligence requirements necessary to conduct further analysis and planning.

They are as follows:

- Technical specification of cargo and end-use
- End-use paper of recipient, verify plausibility of civilian end-use, end-use history and information and intelligence involvement between countries or companies of proliferation concern
- Applicability of UNSCRs and Beijing Convention in similar cases
- Potential logistics providers, shipment time frame, port schedule and locations
- Flag of conveyance flown, cargo and crew manifest
- Operational risk associated with interdiction at sea and air
- Application of exporter and verification of exports made under granted licenses
- Course of action by other PSI nations and active information sharing agreements
- FTZ regulations, authorities and oversight/controls that may be used by Green to facilitate inspection detention.
- Historical trends in exports with regard to trans-shipment through Green to other countries involved.

Capabilities

Players emphasized that searching and seizing containerized goods in international waters or in another country's port can be difficult given time constraints and positioning of naval and air assets. Due to the time constraint, encouraging rapid decision making through interagency coordination bodies within a government is desirable prior to seeking outside assistance or coordination. Players highlighted that coordination between customs agencies and the military is critical to establishing greater awareness and prepositioning assets in case the ship or aircraft of proliferation concern attempts to escape into international waters or airspace. The use of military assets as a way to deter or respond to any potential military reaction from a country of proliferation concern who's cargo is under investigation was also emphasized during game play. Any diversion of suspected cargo would be limited by the laws and political will of the country allowing the ship into port. Capability and capacity limitations may also limit a PSI member state's ability to conduct surveillance and interdiction missions. Fostering cooperation through PSI meetings, table-top exercises, and real-world exercises will strengthen relationships between PSI member states, and create new relationships with non-PSI member states to advance the global community's interest in preventing the proliferation of WMD.

A state's ability to respond to a proliferation event requires authorities and political will. Upon establishing the requisite authorities and nurturing the political will to prevent WMD or related material from reaching illegitimate end-users, states must enhance their awareness of threats and ways to respond to these threats through sharing of intelligence and best practices. Counter proliferation capabilities that reside on land, air, or sea are best applied when national and international organizations coordinate and cooperate prior to a real-world event. When a nation is limited in one or more of these areas, other PSI member states can help that country build their

capability to bilaterally or multilaterally respond to future proliferation events. Authorities and political will, awareness, and capabilities can be used as framework to support military and civilian decision-makers develop PSI engagement strategies based on the level of contribution and capacity a state has in the areas of authorities, awareness, and capabilities. Sustained cooperation between a state's Ministry of Foreign Affairs and their military and law enforcement is critical to understanding the strengths and limitations for a country to respond to WMD proliferation.

PSI Capacity Building Framework

The framework just mentioned has myriad implications for the practice of capacity building among PSI nations. It suggests that advancing the state of PSI should be based on evaluating and enhancing the authorities, political will, awareness, and operational capabilities of both PSI and non-PSI states. Decision-makers should consider using this self-assessment framework to inform the development and implementation of future PSI cooperative engagement activities. Figure 13 is merely a graphical aid that will give governments a visual overview of how each individual 's self-assessment was scored, which can be helpful in determining priorities-if a government scores a lower on one area then another, it may include a weakness or need that should be addressed.

Country	**PSI Member State**	**National Authorities**	**Political Will**	**Awareness**	**Response Capabilities**
Country A					
Country B					
Country C					
Country D					

Figure 13. Example PSI Capacity Building Framework

Each area depicted can be further distilled into sub-categories that will further tailor a state's approach to building the capacity of another in one of these areas. For example, regarding awareness, a country may have numerous intelligence sharing agreements in place, but they may be not an active contributor to developing CCP tools. In this case a yellow bar would be depicted to show only partial contribution in this area. The scoring scale used in this tool is not an absolute measure of capacity and governments must be judicial and thoughtful when determining PSI capacity building priorities and the myriad political, financial, and security factors that extend well beyond the purview of this framework. This framework places a heavy emphasis on information sharing and coordination between interagency, military, and political decision-makers. Having these capacities would enhance a PSI state's ability to positively influence the outcome of an item of proliferation concern and would provide a general awareness of a country's contribution towards PSI. The most viable nations would develop plans and policies to maximize their own contribution to PSI in these five critical PSI areas and leverage their own strengths to build the capacities of other states in these areas. Rather than consumers

3D Printing and the Proliferation of WMD

The illicit use of 3D printing technology as a means to digitally fabricate WMD or related material as physical objects was a focus of player discussions. 3D printing offers many advantages to proliferators of WMD. It enables users to build objects from scratch quicker, easier, and cheaper than using commercial based manufacturing sources. A person or organization can create more complex objects, customize parts, and reverse engineer the manufacturing of material that may no longer be readily available at the time and place of their choosing.

Existing national and international laws do not regulate the use of 3D printing for the purposes of transiting WMD or related material to end-users of concern. Capabilities to detect this technology and the formulation and sharing of intelligence and CCP tools are limited as well. The proliferation of this technology, to include the printed items, the information, and the 3D printers should be further evaluated within the context of PSI. While it is extremely problematic to predict future outcomes, it is important to consider the likelihood and impact emerging 3D printing technology will have on the future proliferation of WMD. As 3D printing technology becomes easier to access and shared around the world, end-users may reduce their dependency on the proliferating WMD or related material, as such objects can be printed at the point of need with little to no assembly.

Over the long-term, this could reduce the need to manufacture, transport, store, and purchase WMD or related material. This has the potential to bolster a state or non-state actor's ability to acquire the requisite 3D printing technology to support the manufacturing WMD or related material. Research into the interplay between the illicit use of 3D printing technology and WMD will become increasingly salient. The effects of changes in identifying, interdicting, seizing, and disposing 3D technology should be carefully evaluated in future PSI events. Cooperation between national and international law enforcement, legal, and diplomatic communities is warranted to further investigate possible future outcomes of 3D printing and WMD proliferation.

Managing PSI Critical Capabilities and Practices

Decision makers and practitioners must have access to evidence-based programs and strategies to improve WMD proliferation interdiction. The CCP tool kit should allow decision-makers to select and adapt appropriate approaches for specific contexts. In reality, much work needs to be done to achieve this goal, and many persistent counter-proliferation problems exist where evidence is not yet fully recognized. Furthermore, governments at all levels face substantial fiscal constraints and challenges to improving their ability to deter, detect, and interdict WMD that transits with and across varying domains – land, sea, air, and cyberspace. Many agencies and organizations within PSI governments recognize such challenges and the need to identify and build evidence based CCP tools with insights and recommendations that can be applied in real world settings.

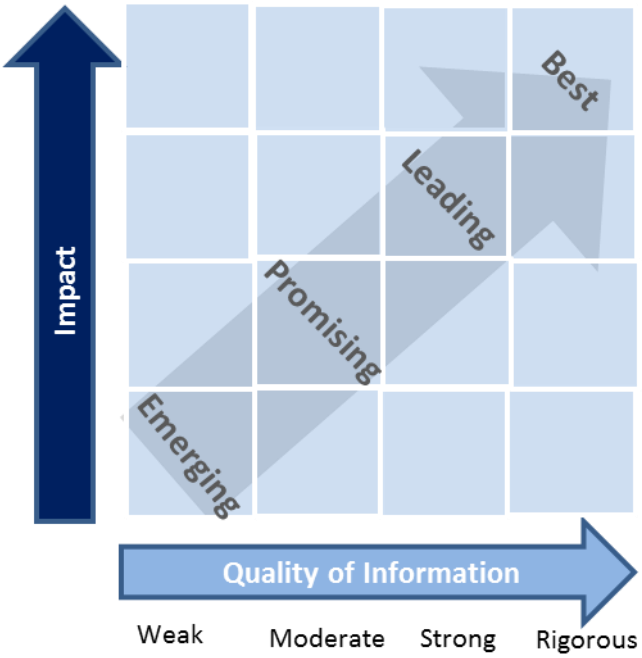

Figure 14. A Conceptual Framework for Planning and Improving PSI CCPs

Leveraging the CCP Tool management process and characteristics discussed in the previous section, the PSI OEG should develop and formalize a dedicated CCP Working Group aimed to encourage and manage the further development of CCPs that show promise for improving PSI interdiction outcomes. Based on the game's findings, this group could begin by a conducting a thorough review of the literature and expert input to create a conceptual framework for planning and improving a PSI CCP tool framework that maximizes both the impact to WMD interdiction and the quality of information developed for CCPs. The working group should begin with developing a working, consensus definition of best practices, along with criteria and processes for classifying information that maximizes both impact and quality of the CCPs.

LIMITATIONS OF DATA ANALYSIS

A major challenge for the War Gaming Department concerns development of a game that provides the robust insights into an issue or problem sought by the game's sponsor. Accordingly, managing stakeholder expectations about what the final game report will tell them with respect to broad-based implications is essential. Stakeholders often seek findings that will provide them with predictive conclusions for decision-making purposes. Unfortunately, gaming is a predominately descriptive process because games are not experiments. Even if a game is repeated, it lacks sufficient controls over player inputs and the central limit theorem for a distribution to ensure validity. In other words, sponsors should not attempt to draw inferences beyond what a specific group of players did in a particular game to yield generalizability (the ability to apply the findings observed for a small population to the broader world around us). The 2014 Proliferation Security Initiative Game is no exception to this premise.

It should be noted that both the quantitative and qualitative datasets analyzed in this game report lack generalizability due to the small sample sizes of participants—none of whom were randomly selected from a population known to be normally distributed. However, through triangulation and meta-analysis, researchers enhanced the reliability and validity of findings that should prove valuable to inform both the sponsor and players about the challenges associated with WMD proliferation.

This game was designed to be highly inductive in order to garner broad-based insights relative to the research questions. Inductive games leverage qualitative data to identify themes based on player decisions during game play. The qualitative nature of data can result in subjective findings. To control for the subjectivity and complexity of the research area, a number of design and analysis measures can be employed. Moreover, the participants in the game represented an accessible and purposeful sample to provide information-rich data. This purposeful sample does not necessarily represent the entire population from the organizations represented at the game. For this reason, meta-analysis should be used, whereby the findings from a single game could be combined or compared to findings from other similar games or studies to yield the greatest value in terms of implications to the research area.

Two threats to internal validity concern the quality of the data collected and the accuracy of the analytical techniques used to review these data. To ensure quality data collection, the post-game analysis team relied on player-created products, such as individual survey questionnaires and cell deliverables. Insights extracted from these data sources were subsequently cross-checked, or triangulated, with other data sets including ethnographer notes to ensure accuracy and conclusiveness. The accuracy of the analytical techniques was enhanced by using multiple methods, tools, and researchers to review the same data. Methods included content analysis, grounded theory, and descriptive statistics. Multiple research teams reviewed the same data sets using different approaches. Themes and insights derived from multiple researchers and approaches reflect more validity than a single researcher using a single approach.

To explore the degree of external validity, one must consider whether the data collected can be generalized across the population of subjects. The demographics of the participants provide some measure to assess this attribute. The game was designed to stimulate critical analysis and creative thinking skills. To identify the nature of PSI relationships, players were selected to represent a cross-section of legal, diplomatic, customs and law enforcement, and military perspectives. Although the game had a diverse group of participants, it proves to be cost-prohibitive and too complex to have every perspective represented from all stakeholders associated with PSI. Therefore, some gaps in perspectives can be assumed for any game.

Annex A: Game Templates

PROLIFERATION SECURITY INITIATIVE

NEWPORT 2014

Initial Assessment Template

Based on the initial intelligence information provided in the scenario, please answer the following questions in as much detail as possible given the time and information constraints:

- What are your national policies, national and international laws, and international commitments currently in place that would form the basis of your reaction should your country become involved in some way?

- What are your specific information requirements necessary to conduct further analysis and planning?

- Are there any other issues that are potentially relevant for your country?

PROLIFERATION SECURITY INITIATIVE

NEWPORT 2014

COURSE OF ACTION TEMPLATE

For each proliferation stream:

Considering all elements of national power, describe the interdiction action(s) your country will take (what, where, when, by whom – which government agency/department). A complete answer includes options to address potential contingencies.

- What supportive decisions or actions are you asking other countries or international organizations to take?
- What are the policy, diplomatic, legal, and operational rationales for this action or decision? In other words, why this decision and why now?
- What policy, diplomatic, legal, and operational issues restrict your actions in this situation?

Assuming Green has detained the item of proliferation concern…

1. Who owns the item interdicted? What is the legal and policy basis for this determination?

2. Who will take initial possession of the item when it is offloaded from the conveyance?

3. What is the policy and legal basis for this determination?

4. Who will take final possession of the interdicted item? What is the policy and legal basis for this determination?

5. Who is responsible for compensating the ship/aircraft owner/operator and/or any other claimants (container companies, other potential claimants with cargo on the ship) for any delay? What is the policy and legal basis for this determination?

6. What information is required to support actions against persons or companies involved in this proliferation stream? How will this information impact the storage, possession, and disposition of the item?

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FUNCTIONAL ISSUE TEMPLATE

Issue for discussion:

1. What elements were common in your approaches?
2. What elements were different in your approaches?
3. What accounts for differences, if any, in approaches to this issue?
4. Which approach, if any, may be more effective? Why?
5. For the following questions, please refer to CCP tool list on left.
6. Identify any existing CCP tools that relate to this issue.
7. Describe how these CCP tools could be strengthened.
8. If no tool exits, provide a description of a useful CCP tool. (e.g., model national legislation, checklist,…)

Annex B: Individual Player Questionnaire

Proliferation Security Initiative 2014

INTRODUCTION: The purpose of this survey is to provide timely and candid feedback regarding your experience over the last three days. Your feedback will inform post-game analysis and planning efforts for next year's Operational Experts Group meeting. Ultimately, your responses will greatly assist the PSI community counter the growing challenge posed by the proliferation of weapons of mass destruction (WMD), their delivery systems, and related materials worldwide. This survey should take no more than 10 minutes to complete. Your comments are not for attribution and will be analyzed in aggregate.

Demographics

Country:
Discipline: Diplomatic □ Military □ Customs/Law Enforcement □ Financial □ Legal □ Other (list):

PSI Experience	No prior experience	1 - 11 months	1-3 years	More than 3 years
The length of my experience with the PSI is:				

PSI Exercise Experience	None	1-3	4-6	7 or more
Before this event, the number of PSI exercises, games, or workshops I have attended (not including OEG meetings):				

For each of the questions listed below, please circle the value that most closely represents your perspective having now completed the event.

1 Strongly Disagree	2 Disagree	3 Uncertain	4 Agree	5 Strongly Agree	1. I have gained a greater appreciation of how ratification and eventual entry into force of the *Beijing Convention on the Suppression of Unlawful Acts Relating to International Civil Aviation* changes the status quo with respect to counter-proliferation laws, policies, practices, and obligations.

1 Strongly Disagree	2 Disagree	3 Uncertain	4 Agree	5 Strongly Agree	2. I have gained a better understanding of international standards, national laws, policies, and terminology related to shipments in transit and transshipment among PSI member states.
1 Strongly Disagree	2 Disagree	3 Uncertain	4 Agree	5 Strongly Agree	3. I have gained a deeper understanding of the key issues and challenges related to disposition and liability aspects of PSI.
1 Strongly Disagree	2 Disagree	3 Uncertain	4 Agree	5 Strongly Agree	4. I have gained a deeper understanding of how national laws, policies and procedures differ amongst PSI OEG member states.
1 Strongly Disagree	2 Disagree	3 Uncertain	4 Agree	5 Strongly Agree	5. In order to address impediments to effective interdiction of prohibited materials during shipment and transshipment, it appears that existing CCP tools need to be strengthened.
1 Strongly Disagree	2 Disagree	3 Uncertain	4 Agree	5 Strongly Agree	6. In order to address impediments to effective interdiction of prohibited materials during shipment and transshipment, it appears that that new CCP tools need to be developed.

1 Strongly Disagree	2 Disagree	3 Uncertain	4 Agree	5 Strongly Agree	7. In order to overcome challenges resulting from ratification or non-ratification of the Beijing Convention, it appears that existing CCP tools need to be strengthened.
1 Strongly Disagree	2 Disagree	3 Uncertain	4 Agree	5 Strongly Agree	8. In order to overcome challenges resulting from ratification or non-ratification of the Beijing Convention, it appears that new CCP tools need to be developed.
1 Strongly Disagree	2 Disagree	3 Uncertain	4 Agree	5 Strongly Agree	9. In order to address the disposition and liability challenges identified during the game, it appears that existing CCP tools need to be strengthened.
1 Strongly Disagree	2 Disagree	3 Uncertain	4 Agree	5 Strongly Agree	10. In order to address the disposition and liability challenges identified during the event, it appears that new CCP tools need to be developed.
1 Strongly Disagree	2 Disagree	3 Uncertain	4 Agree	5 Strongly Agree	11. Having subject matters experts present at the event helped inform my actions during the game.

12. Based on two days of game play and reflection, what key words or phrases summarize the major THEMES of this game?

13. Based on your experience over the last three days, what specific areas should the OEG further explore?

14. How could OEG meetings be improved?

15. How could the Tabletop Exercise have been improved?

Annex C: Facilitator Questions

Aluminum 7075

Section 11 Country Cluster Plenary Moderator Questions

- What if Country POPLAR is unwilling to take the risk, due to insufficient information, to take the interdiction action?
- In addition to interdiction actions, did the countries contact Country PINE regarding the network supporting this transaction?
- If Country POPLAR agrees to conduct the interdiction, who is financially responsible for the interdiction-related actions?
- If given the choice, would your government want to make this interdiction public? Why or why not? (Common to all short forms)

Section 12 Functional Plenary Moderator Questions

- Does your diplomatic approach cover just the suspect ship or does it attempt to begin to address the network? (ie. The suspect broker in Pine)

Analog to Digital Converters

Section 11 Country Cluster Plenary Moderator Questions

- What happens if Green doesn't take action? What are the risks if you don't take action?
- Who is responsible for paying for any port service fees for the offloading, handling, and temporary storage of the item at the venue for disposition?
- How, when, and under what circumstances (specific conveyance, who is paying, timing, security) will the item be sent to its location of final disposition?
- What other disposition issues arise in this case and what are the specific decisions and actions you are taking to resolve them?
- If given the choice, would your government want to make this interdiction public? Why or why not? (Common to all short forms)

Section 12 Functional Plenary Moderator Questions

- What are the key issues associated with disposition and liability?

Chemical Engineer

Section 11 Country Cluster Plenary Moderator Questions

- Who is responsible for paying for any port service fees for the offloading, handling, and temporary storage of the item at the venue for disposition?
- How, when, and under what circumstances (specific conveyance, who is paying, timing, security) will the item be sent to its location of final disposition?
- What other disposition issues arise in this case and what are the specific decisions and actions you are taking to resolve them?
- If given the choice, would your government want to make this interdiction public? Why or why not?
- What influence does the country which put the person of interest on the watch list have on the disposition?

Section 12 Functional Plenary Moderator Questions

- Diplomatic Discussion
    - How does interdiction relate to bilateral or multilateral initiatives you might pursue against these emerging countries of proliferation concern?
- Legal Discussion
    - What role, if any, does the fact that you are a Beijing signatory (and it is in force) play? Note that Ash is also a Beijing signatory.

Corrosion-Resistant Valves

Section 11 Country Cluster Plenary Moderator Questions

- Without a UNSCR, what authorities does the Beijing Convention offer to support interdiction actions?
- Is a chemical program in Flint significant enough for an interdiction against a neutral country in the absence of a UNSCR?
- If given the choice, would your government want to make this interdiction public? Why or why not? (Common to all short forms)
- If Green was in a collective defense agreement with a country neighboring Flint, does Green's collective defense obligation require it to take action?

Section 12 Functional Plenary Moderator Questions

- None

Gas Monitoring System

Section 11 Country Cluster Plenary Moderator Questions

- What if this situation included a person and an item?
- Who is responsible for paying for any port service fees for the offloading, handling, and temporary storage of the item at the venue for disposition?
- How, when, and under what circumstances (specific conveyance, who is paying, timing, security) will the item be sent to its location of final disposition?
- What other disposition issues arise in this case and what are the specific decisions and actions you are taking to resolve them?
- If given the choice, would your government want to make this interdiction public? Why or why not?
- What if this had not been a controlled item? Do you have a "catch all" provision in national legislation?

Section 12 Functional Plenary Moderator Questions

- Is this scenario a transit or a transshipment issue?
- If there is a difference, how does it matter in relation to authorities and the availability of information?

Glass-Lined Reactor Vessel

Section 11 Country Cluster Plenary Moderator Questions

- If WALNUT were a Beijing Convention signatory, how would that change your COA?
- If Green Intel nexus is not sufficient, what other connection to the proliferation event would cause you to act?
- If 4 hours is insufficient to demarche the other countries involved, what changes in Green interagency processes could make the system more responsive?
- If given the choice, would your government want to make this interdiction public? Why or why not? (Common to all short forms)

Section 12 Functional Plenary Moderator Questions

- None.

Gyroscopes

Section 11 Country Cluster Plenary Moderator Questions

- If given the choice, would your government want to make this interdiction public? Why or why not? (Common to all short forms)

Section 12 Functional Plenary Moderator Questions

- None.

Hydrogen Fluoride

Section 11 Country Cluster Plenary Moderator Questions

- Because there is no UNSCR, what legal authorities and political requirements guide your actions?
- How do economic risks affect Green's decision to take/not take interdiction actions?
- If given the choice, would your government want to make this interdiction public? Why or why not? (Common to all short forms)

Section 12 Functional Plenary Moderator Questions

- Is there a difference in authorities and information availability if the items are in transit vice transshipment (in and out of the free trade zone)?
- Diplomatic Discussion
    - How does interdiction relate to bilateral or multilateral initiatives you might pursue against these emerging countries of proliferation concern?

Kynar Piping

Section 11 Country Cluster Plenary Moderator Questions

- How does movement through a free trade zone affect the legal authorities to conduct interdiction actions?
- If given the choice, would your government want to make this interdiction public? Why or why not? (Common to all short forms)

Section 12 Functional Plenary Moderator Questions

- Is there a difference in authorities and information availability if the items are in transit vice transshipment (in and out of the free trade zone)?

- Diplomatic Discussion

    - How does interdiction relate to bilateral or multilateral initiatives you might pursue against these emerging countries of proliferation concern?

Radiation-Hardened Microcircuits

Section 11 Country Cluster Plenary Moderator Questions

- Who is responsible for paying for any port service fees for the offloading, handling, and temporary storage of the item at the venue for disposition?

- How, when, and under what circumstances (specific conveyance, who is paying, timing, security) will the item be sent to its location of final disposition?

- What other disposition issues arise in this case and what are the specific decisions and actions you are taking to resolve them?

- If given the choice, would your government want to make this interdiction public? Why or why not?

- Describe your risk calculation regarding the intelligence from a third party and your decision to conduct an interdiction action.

- What would change if this aircraft was conducting cargo operations (opening the cargo bay and handling the cargo) or if the item was being transshipped in your country?

- What cargo company does the ops? Who pays them?

- Does the manifest have to say circuit boards for printers? Or something that is closer?

- How long to do the ops take? Do any unscheduled cargo operations cause the airline to pay?

- Do Customs authorities allow ordering cargo operations when none were scheduled?

- Is there a customs liability issue if your customs guy doesn’t have sovereign immunity?

- Cost issue for the airline of delays? Who do I send the bill to?

- What if no crew swap: crew expires if takes long?

Section 12 Functional Plenary Moderator Questions

- What are the key issues associated with disposition and liability?

Rocket Engines

Section 11 Country Cluster Plenary Moderator Questions

- Disposition and liability questions WRT GINGKO involvement: Do countries have policies or resources to help GINGKO dispose of the rocket motors either by taking them or destroying them in place.
- How does Master verses Flag State consent impact any interdiction actions?
- What changes if M/V HAMMERHEAD 7 flies Country QUARTZ flag?
- What are Country GINKO's obligations in this scenario, and how did you convince them of these obligations?
- If given the choice, would your government want to make this interdiction public? Why or why not? (Common to all short forms)

Section 12 Functional Plenary Moderator Questions

- Military Discussion
    - What assumptions did you make about command and control and the rules of engagement (ROE)?
    - How realistic is it to make these ROE assumptions?

Rocket Fuel Oxidizer

Section 11 Country Cluster Plenary Moderator Questions

- Is the oxidizer considered military material?
- If Country ELM rejects taking action, what are the options for the vessels taking part in the exercise?
- If countries decide not to take action with their military forces, would a different end user (Granite) or a different item (nuclear weapons related) change your calculus?
- If given the choice, would your government want to make this interdiction public? Why or why not? (Common to all short forms)

Section 12 Functional Plenary Moderator Questions

- Diplomatic Discussion
    - Does your diplomatic approach cover just the suspect ship or does it attempt to begin to address the network (ie. The suspect broker in Pine)

- Legal Discussion
    - If the Lawyers focus on Elm's legal obligations under the UNSCR, follow with a question regarding the responsibilities under the UNSCR for countries with naval forces in the exercise area.
- Military Discussion
    - What assumptions did you make about command and control and the rules of engagement (ROE)?
    - How realistic is it to make these ROE assumptions?

Annex D. Participant List

COUNTRY:	MILITARY RANK / CIVILIAN POSITION	ORGANIZATION / COMMAND
Argentina	Prefecto	Prefectura Naval Argentina
Australia	Counsellor Americas	Australian Customs and Border Protection Service
	Legal Officer	Department of Foreign Affairs and Trade
	Executive Officer, Counter-Proliferation Section	Department of Foreign Affairs and Trade
	Assistant Secretary Arms Control (Acting)	Australian Defence Department
Canada	Policy Officer	Department of National Defence
	Senior Policy Officer	Department of Foreign Affairs, Trade, and Development Canada
	Deputy Director Proliferation Security Unit	Department of National Defence
	Counsel	Department of Justice, Canada Border Services Agency Legal Services Unit
	Policy Analyst	Public Safety Canada
France	General Secretariat for Defense	Ministry of Foreign Affairs
	MR	Ministry of foreign affairs
	Chargé de mission	SGDSN
	Legal adviser	Ministry of defense
	Customs Attache Deputy	french customs
	Political councellor	Foreign Affairs
	Counselor	MoFA
Germany	Counseler	German Embassy/Department of Homeland Security
	Senior Counsellor	Ministry of Defense

	Senior Expert	Ministry of Foreign Affairs
Japan	Major	Defense Policy Division, Ministry of Defense
	Commander	J3, Joint Staff Office, Japan Self Defense Force
	Senior Deputy Director	MOFA
	CDR	Japan Coast Guard
	Researcher	Japan International Transport Institute
	Joint Staff	Ministry of Defense
	Official	Non-Proliferation, Science and Nuclear Division
New Zealand		NZ Customs
Norway	Senior Adviser	Ministry of Justice
	Adviser	Norwegian Ministry of Trade and Industry
	Adviser	CUSTOMS ADMINISTRATION
	Senior adviser	NO Ministry of Foreign Affairs
	Senior Adviser	Norwegian Defense Command
	Police superintendent	Norwegian Police Service (PST)
	Director	MFA Norway
Poland	Head of Division	MFA of Poland
	CDR	Inspectorate of the Polish Navy
	Third Secretary	Permanent Mission of Poland to the UN in New York
	Customs Officer	MINISTRY OF FINANCE
Portugal	Lieutenant Colonel	PoAF / MoD
Republic of Korea		MoFA
	Policy Planner	MoFA
		MoD
Singapore	Deputy Director (Policy)	Ministry of Defense
	Assistant Head, Trade Strategy and Security Branch	Singapore Customs
	State Counsel	Attorney-General's Chambers

	Chief Counsel of Civil Division	Attorney-General's Chambers
	Deputy Senior State Counsel	Attorney-General's Chambers
	Assistant Director	Singapore Ministry of Foreign Affairs
	Policy Officer	Ministry of Defence
	Deputy Director (Policy)	Ministry of Defence
Spain	Head of Non-proliferation of CW	Ministry of Foreign Affairs
	Captain	Civil Guard
	Team Leader	Comisaria General De Informacion
	OF-5 (Navy)	Defence Policy Directorate
The Netherlands	CAPT(N)	MoD - The Netherlands
Turkey	Expert	Prime Ministry
	CDR (N)	Turkish General Staff
	Head of Department	Ministry of Foreign Affairs
UK	Counsellor, Deputy Head	Ministry of Foreign Affairs
	Desk Officer	Ministry of Foreign Affairs
	Desk Officer	Ministry of Foreign Affairs
USA	LCDR	USPACOM
	GS	OSD Policy/CWMD
	CWMD IA Coord. Specialist	DTRA/SCC-WMD
	Commander / USN	DTRA/SCC-WMD
	CIV GS-14	OSD-Policy
	DASD	OSD-Policy
	CIV GS-14	US Customs and Border Protection
	CIV GS-14	US Customs and Border Protection
	Assistant Deputy Director	ODNI/NCPC/ICPF
	CIV	USSOUTHCOM
	GS-15	U.S. Department of Defense
	Facilitator	DTRA
	LtCol	HQ USAF (AF/JAO)
	Foreign Affairs Specialist	DOE/NNSA Office
	SES	US Dept of State

	LCDR	State
	LtCol	Joint Staff/J5
	Supervisory Special Agent	FBI
	CIV	USCENTCOM
	CIV	Nat'l Security Council
	CIV / GS-14	OSD-Public Affairs

Annex E: Fictional Country Background Information

Country Granite

Granite is widely viewed as a country of proliferation concern and many believe their declared civil uranium enrichment program is a cover for an effort to secretly build nuclear weapons. Granite's response has been to stonewall and deceive the IAEA and be largely uncooperative. UNSCR 2904 was adopted in May 2013 to address these concerns. In contravention, Granite continues to enrich uranium for "peaceful purposes" and maintains an active research and development program. They have over the years developed a sophisticated global procurement program that manages to be moderately successful in bypassing sanctions, trade restrictions and other international efforts to encourage their compliance with UN and IAEA requests. Granite has been openly defiant of the international community's efforts to limit its illicit programs and has directed hostile rhetoric toward countries that supported the UNSCR, including Green. Granite has limited economic and cultural connections with Green that fluctuate with the political relationship.

Granite's program to develop an indigenous ballistic missile production capability over the past decade has been met with moderate success. They have produced a relatively large number of both solid fueled and liquid fueled short and medium range ballistic missiles (SRBM/MRBM) that have proven to be somewhat unreliable and woefully inaccurate for their needs. To remediate these deficiencies, Granite has recently begun looking to outside sources for components that will increase both the reliability and accuracy of their SRBM/MRBM ballistic missile forces. According to sensitive intelligence, Granite is specifically looking for advanced gyroscopes, radiation hardened micro-circuits and military grade analog to digital convertors. They may also be looking to procure solid fuel rocket engines for their prototype intermediate range ballistic missile (IRBM).

Since being designated a country of proliferation concern, Granite has denied interdicted cargoes were destined for WMD end-uses, asserting legitimate industrial applications for dual- use commodities. Merchant vessels operated by Granite's state shipping company have exhibited mixed cooperation—at times responding with hostility—toward countries attempting to examine shipments of possible proliferation concern. In response to previous cargo seizures, Granite's procurement network has adopted increasingly complex logistics practices, including using routes that minimize or exclude transshipment and shipping with Granite's national carrier, suggesting future interdiction opportunities may be scant. Granite's response to previous interdiction efforts has been largely rhetorical, including threatening (but not carrying out) military action. Four years of international sanctions and general economic mismanagement have diminished Granite's ability to respond using economic levers, and Granite's diminished international clout/position also leaves few diplomatic options. Granite has the capacity to respond regionally through a range of military activities, ranging from limited conventional military anti-access and area-denial actions to ballistic missile / asymmetric operations aimed at interfering with the regional commercial and military activities of those who attempt to enforce the UNSCR, including Green.

Country Quartz

Quartz is a declared nuclear power and widely viewed as a country of proliferation concern. After conducting nuclear tests in 2010 and 2011, Quartz announced in 2012 that it had developed a nuclear weapon. Green intelligence assessments are in general agreement that Quartz possesses a small stockpile of relatively simple nuclear weapons. They also assess that Quartz has a large chemical weapons capability. Since 2010, Quartz is no longer a party to the Nuclear Non-Proliferation Treaty. UNSCR 2846 was adopted in June 2012 to address these concerns. In contravention, Quartz continues to enrich uranium and manufacture plutonium, and it maintains an active nuclear weapons research and development program. They have over the years developed a relatively unsophisticated global procurement program that manages to be minimally successful in bypassing sanctions, trade restrictions and other international efforts to encourage their compliance with UN and IAEA requests. Quartz has been openly defiant of the international community's efforts to limit its illicit programs and has directed hostile rhetoric toward countries that supported the UNSCR, including Green. Quartz has limited economic and cultural connections with Green that fluctuate with the political relationship.

Quartz is seeking to improve and expand its nuclear weapons capabilities, in particular its production of fissile material. It has recently begun exporting ballistic missile related materials and components in order to generate revenue to import fissile material processing related equipment. Since the announcement of the UNSCR against Quartz's WMD program and related procurement efforts, Quartz has exhibited a heightened posture of hostility toward those who attempt to enforce it, including Green. Merchant vessels operated by Quartz's national fleet act in a belligerent fashion with the threat of retaliatory violence toward countries attempting to examine shipments of possible proliferation concern. However, Quartz has responded semi- positively to diplomatic outreach by third countries with relatively close relationships to Quartz, though such outreach is infrequent and rarely effective. In response to previous cargo seizures, procurement and supplier networks for Quartz have probably resorted to operating under further anonymity through using foreign intermodal shipping services vice Quartz's national carrier. Such measures include shipping from Quartz ports to major regional hub ports aboard Quartz-operated feeder services and transferring falsely declared cargoes to other foreign carriers for delivery to the ultimate end users. Future interdiction options may be more ample, but detection becomes more of a challenge.

Quartz typically seeks external support to lobby in favor of Quartz's own interests, but largely does not publically acknowledge any interdictions and would not be expected to threaten military action. International sanctions, domestic economic policies, and broader political corruption have crippled Quartz's economy, thus diminishing their ability to respond using economic levers. Additionally, Quartz has diplomatically alienated itself over years of internationally-defiant activity and has virtually no viable diplomatic options. Quartz has very limited capacity to strike far from its borders with its conventional military forces, but could threaten regional allies of GREEN. Quartz could also threaten further nuclear testing and use rhetoric to indicate its ability to strike at some distance with its ballistic missile force if Green or others continue to interfere in its military technology agreements with its customers.

Country Flint

Flint is not generally viewed as a country of proliferation concern. They have procured a substantial short-range conventional ballistic force over the past decade and are considered moderately proficient as evidenced by their testing & exercising regimes. Until recently, they have had no identified WMD program. While Flint has its fair share of internal disputes and discontent, they are generally considered stable. There is however a long-simmering regional dispute that has over the past few years elevated in its intensity. The UN Secretary General has issued a number of statements calling for all parties to work towards peaceful resolution of the regional disputes which include aspects of territory, economic and security.

Flint's relationship with Green is not characterized by either close political ties or open political/diplomatic hostility. Key points to the relationship include commercial trade, low-level military and cultural exchanges and events and even some limited sales of military equipment. Recent intelligence acquired by Green suggests a regime desire for a chemical weapons capability to address what Flint perceives as a growing conventional imbalance with a regional antagonist and to serve as a deterrent against adventurism. Flint is assessed to have an on- going secretive program to develop, procure and import materials and equipment necessary to develop an offensive CW capability, and likely relies on their national shipping companies as well as foreign shipping lines to deliver CW-applicable materials that is cannot produce or develop indigenously. Some Green analysts believe the procurement effort is more mature than originally predicted and may indeed be close to break-out.

According to sensitive intelligence, Flint has recently begun looking to outside sources for what may be the final components necessary to achieve a limited CW production capability. Flint is specifically looking for corrosion resistant valves (CRV), Hydrogen Fluoride and Kynar Piping. Flint, if aware of interdiction activity, would likely respond with denial, asserting industrial applications for WMD-applicable commodities, and would likely protest through diplomatic channels and threaten opposition to Green political initiatives in international bodies. Flint procurement networks would likely respond to interdictions by adopting delivery mechanisms perceived to offer more security.

Country Shale

Shale is a country of proliferation concern and has a substantial ballistic missile program and a large chemical weapons program (gravity bombs, rockets, artillery, and other sub-BM delivery systems). Embroiled in sectarian violence Shale is in the midst of declining into civil war. The UNSC is monitoring the situation closely and has issued a number of resolutions calling for a peaceful resolution of the internal security situation but none are specifically focused on their WMD program and related proliferation concerns.

Recent intelligence acquired by Green suggests a regime desire for a chemical weapons capability to address what Shale perceives as shortcomings in their conventional ability to deter anti-regime forces from further sectarian violence. Specifically, Shale desires to develop a ballistic missile

warhead capable of delivering a chemical weapon payload. Some Green analysts believe the Shale development effort has hit a significant roadblock and that Shale lacks the technical expertise to overcome this challenge.

According to sensitive intelligence, Shale has recently begun looking to outside sources for this technical expertise. They also are attempting to procure and import glass-lined reactor vessels (GLRV) and a gas monitoring system (GMS) to facilitate their ballistic missile chemical warhead research and development effort. The Shale military has an established relationship with Shale Research University (SRU) and periodically has used the University as a front for the procurement of controlled or particularly sensitive materials.

Shale has a moderately confrontational relationship with Green which occasionally includes openly hostile rhetoric and opposition to Green political initiatives in international bodies. Shale has limited economic and cultural connections with Green that fluctuate with the political relationship.

Any discernible response to interdictions by Shale would likely be limited to changes in practices by procurement networks, including the adoption of delivery methods perceived to offer more security and increased communications security. In contrast to Granite, Quartz and Flint, Shale has no national merchant fleet and must, in addition to their national air cargo service, rely on an array of foreign shipping lines for delivery of WMD-related procurements.

PSIOEG 2014 Game - Other Countries

ASH

This country has a moderately confrontational relationship with Green which occasionally includes heated rhetoric and opposition to Green political initiatives in international bodies. This country has limited economic and cultural connections with Green that fluctuate with the political relationship. This country regularly rejects requests for cooperation on interdiction cases. This country has an evolving interagency process, some implementing legislation, and participates sporadically in interdiction workshops and conferences. Its policies and procedures related to interdiction are evolving, and its capabilities to translate policy decisions in rapid action are untested and/or uncertain.

BAMBOO

This country's relationship with Green is not characterized by either close political ties or open political/diplomatic hostility. This country has traded and cooperated with Green on a sporadic and issue-by-issue basis. This country has not yet been asked to cooperate in interdiction cases. This country has a mature interagency process, implementing legislation and regularly practices/exercise its policies and procedures. The government has a good relationship with national industries involved in manufacture, exports, and shipping.

BIRCH

This country's relationship with Green is one of an ally or close partner that has positive diplomatic, economic, military, and cultural relations. This country has cooperated frequently, takes the lead in interdiction cases when national interests are potentially at risk, and has had an information threshold for action that has been reasonable in the past. This country has a mature interagency process, implementing legislation and regularly practices/exercise its policies and procedures. The government has a good relationship with national industries involved in manufacture, exports, and shipping.

CEDAR

This country's relationship with Green is not characterized by either close political ties or open political/diplomatic hostility. This country has traded and cooperated with Green on a sporadic and issue-by-issue basis. This country has not yet been asked to cooperate in interdiction cases. This country has an evolving interagency process, some implementing legislation, and participates sporadically in interdiction workshops and conferences. Its policies and procedures related to interdiction are evolving, and its capabilities to translate policy decisions in rapid action are untested and/or uncertain.

CHERRY

Major trading partner with Quartz. This country has an adversarial relationship with Green which includes openly hostile rhetoric and opposition to Green political initiatives in international bodies. This country has limited economic and cultural connections with Green that fluctuate with the political relationship. This country regularly rejects requests for cooperation on interdiction cases. This country has an evolving interagency process, some implementing legislation, and participates sporadically in interdiction workshops and conferences. Its policies and procedures related to interdiction are evolving, and its capabilities to translate policy decisions in rapid action are untested and/or uncertain.

COCONUT

Country COCONUT has a rich maritime history. They are known around the world as a leader in developing highly qualified mariners. This country's relationship with Green is not characterized by either close political ties or open political/diplomatic hostility. This country has traded and cooperated with Green on a sporadic and issue-by-issue basis. This country has cooperated sporadically with Green on interdiction cases, often requires significant information sharing/evidence, and rarely takes lead. It has been defensive of its own ability to control/monitor activities of its companies/nationals. This country has a very limited interagency process, lacks key implementing national legislation, and has a low level of knowledge of international counter-proliferation laws and norms. It has few existing policies and procedures, and it is unlikely to have the ability to translate policies and decisions into rapid action.

EBONY

Major trading partner with Quartz. They have regional security concerns and have developed a ballistic missile program that is reliant on imported technology and rocket fuel primarily from Quartz. This country has a moderately confrontational relationship with Green which occasionally includes openly hostile rhetoric and opposition to Green political initiatives in international bodies. This country has limited economic and cultural connections with Green that fluctuate with the political relationship. This country has not yet been asked to cooperate in interdiction cases. This country has a very limited interagency process, lacks key implementing national legislation, and has a low level of knowledge of international counter-proliferation laws and norms. It has few existing policies and procedures, and it is unlikely to have the ability to translate policies and decisions into rapid action.

ELM

Strategically located along a major SLOC, Elm is cognizant of their global reputation as a maritime hub, and it generates the majority of its income from maritime trade related sources. This country's relationship with Green is one of an ally or close partner that has positive diplomatic, economic, military, and cultural relations. This country has cooperated sporadically with Green on interdiction cases, often requires significant information sharing/evidence, and rarely takes lead. It has been defensive of its own ability to control/monitor activities of its companies/nationals. This country has a mature interagency process, implementing legislation and regularly practices/exercise its policies and procedures. The government has a good relationship with national industries involved in manufacture, exports, and shipping.

GINGKO

This country's relationship with Green is not characterized by either close political ties or open political/diplomatic hostility. This country has traded and cooperated with Green on a sporadic and issue-by-issue basis. This country has cooperated sporadically with Green on interdiction cases, often requires significant information sharing/evidence, and rarely takes lead. It has been defensive of its own ability to control/monitor activities of its companies/nationals. This country has an evolving interagency process, some implementing legislation, and participates sporadically in interdiction workshops and conferences. Its policies and procedures related to interdiction are evolving, and its capabilities to translate policy decisions in rapid action are untested and/or uncertain.

MAPLE

This country's relationship with Green is not characterized by either close political ties or open political/diplomatic hostility. This country has traded and cooperated with Green on a sporadic and issue-by-issue basis. This country has cooperated sporadically with Green on interdiction cases, often requires significant information sharing/evidence, and rarely takes lead. It has been defensive of its own ability to control/monitor activities of its companies/nationals. This country has an evolving interagency process, some implementing legislation, and participates sporadically in interdiction workshops and conferences. Its policies and procedures related to interdiction are

evolving, and its capabilities to translate policy decisions in rapid action are untested and/or uncertain.

MOHAGONY

This country's relationship with Green is one of an ally or close partner that has positive diplomatic, economic, military, and cultural relations. This country has cooperated frequently, takes the lead in interdiction cases when national interests are potentially at risk, and has had an information threshold for action that has been reasonable in the past. This country has a mature interagency process, implementing legislation and regularly practices/exercise its policies and procedures. The government has a good relationship with national industries involved in manufacture, exports, and shipping.

OAK

This country's relationship with Green is one of an ally or close partner that has positive diplomatic, economic, military, and cultural relations. This country has cooperated frequently, takes the lead in interdiction cases when national interests are potentially at risk, and has had an information threshold for action that has been reasonable in the past. This country has a mature interagency process, implementing legislation and regularly practices/exercise its policies and procedures. The government has a good relationship with national industries involved in manufacture, exports, and shipping.

PECAN

Pecan is a flag of convenience state. This country's relationship with Green is not characterized by either close political ties or open political/diplomatic hostility. This country has traded and cooperated with Green on a sporadic and issue-by-issue basis. This country has cooperated sporadically with Green on interdiction cases, often requires significant information sharing/evidence, and rarely takes lead. It has been defensive of its own ability to control/monitor activities of its companies/nationals. This country has a very limited interagency process, lacks key implementing national legislation, and has a low level of knowledge of international counter-proliferation laws and norms. It has few existing policies and procedures, and it is unlikely to have the ability to translate policies and decisions into rapid action.

PINE

This country's relationship with Green is not characterized by either close political ties or open political/diplomatic hostility. This country has strong economic connections with Green that fluctuate with the political relationship. This country regularly rejects requests for cooperation on interdiction cases. This country has an evolving interagency process, some implementing legislation, and participates sporadically in interdiction workshops and conferences. Its policies and procedures related to interdiction are evolving, and its capabilities to translate policy decisions in rapid action are untested and/or uncertain.

POPLAR

This country's relationship with Green is one of an ally or close partner that has positive diplomatic, economic, military, and cultural relations. This country has cooperated sporadically with Green on interdiction cases, often requires significant information sharing/evidence, and rarely takes lead. It has been defensive of its own ability to control/monitor activities of its companies/nationals. This country has a mature interagency process, implementing legislation and regularly practices/exercise its policies and procedures. The government has a good relationship with national industries involved in manufacture, exports, and shipping.

REDWOOD

This country's relationship with Green is not characterized by either close political ties or open political/diplomatic hostility. This country has traded and cooperated with Green on a sporadic and issue-by-issue basis. This country has not yet been asked to cooperate in interdiction cases. This country has an evolving interagency process, some implementing legislation, and participates sporadically in interdiction workshops and conferences. Its policies and procedures related to interdiction are evolving, and its capabilities to translate policy decisions in rapid action are untested and/or uncertain.

SPRUCE

This country's relationship with Green is not characterized by either close political ties or open political/diplomatic hostility. This country has traded and cooperated with Green on a sporadic and issue-by-issue basis. This country has cooperated sporadically with Green on interdiction cases, often requires significant information sharing/evidence, and rarely takes lead. It has been defensive of its own ability to control/monitor activities of its companies/nationals. This country has an evolving interagency process, some implementing legislation, and participates sporadically in interdiction workshops and conferences. Its policies and procedures related to interdiction are evolving, and its capabilities to translate policy decisions in rapid action are untested and/or uncertain.

TEAK

This country's relationship with Green is not characterized by either close political ties or open political/diplomatic hostility. This country has traded and cooperated with Green on a sporadic and issue-by-issue basis. This country has not yet been asked to cooperate in interdiction cases. This country has an evolving interagency process, some implementing legislation, and participates sporadically in interdiction workshops and conferences. Its policies and procedures related to interdiction are evolving, and its capabilities to translate policy decisions in rapid action are untested and/or uncertain.

WALNUT

This country's relationship with Green is not characterized by either close political ties or open political/diplomatic hostility. This country has traded and cooperated with Green on a sporadic and issue-by-issue basis. This country has cooperated sporadically with Green on interdiction cases, often requires significant information sharing/evidence, and rarely takes lead. Recently, Walnut has become increasingly litigious when cases have involved goods produced by Walnut manufacturers being delayed or seized. It has been defensive of its own ability to control/monitor activities of its companies/nationals. This country has an evolving interagency process, some implementing legislation, and participates sporadically in interdiction workshops and conferences. Its policies and procedures related to interdiction are evolving, and its capabilities to translate policy decisions in rapid action are untested and/or uncertain.

WILLOW

This country's relationship with Green is not characterized by either close political ties or open political/diplomatic hostility. This country has traded and cooperated with Green on a sporadic and issue-by-issue basis. This country has cooperated sporadically with Green on interdiction cases, often requires significant information sharing/evidence, and rarely takes lead. It has been defensive of its own ability to control/monitor activities of its companies/nationals. This country has an evolving interagency process, some implementing legislation, and participates sporadically in interdiction workshops and conferences. Its policies and procedures related to interdiction are evolving, and its capabilities to translate policy decisions in rapid action are untested and/or uncertain.

Annex F: Treaty and Regime Matrix

Country	Treaties								Regimes			PSI
	BEIJING Day 1/Day 2	MLAT w/GREEN	Extradition w/GREEN	CMAA w/GREEN	BTWC	CWC	NPT	SUA	AG	NSG	MTCR	
Ash	N / Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N
Bamboo	N / N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
Birch	N / Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	OEG
Cedar	N / N	Y	Y	Y	Y	Y	Y	N	N	N	N	N
Cherry	N / N	Y	Y	Y	Y	Y	Y	N	N	N	N	N
Coconut	N / N	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y
Ebony	N / N	N	N	N	Y	Y	Y	N	N	N	N	N
Elm	N / N	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y
Flint	N / N	N	N	N	Y	Y	Y	N	N	N	N	N
Gingko	N / N	Y	Y	Y	Y	Y	Y	N	N	N	N	N
Granite	N / N	N	N	N	Y	Y	Y	N	N	N	N	N
Maple	N / N	Y	Y	Y	Y	Y	Y	N	N	N	N	N
Mahogany	N / N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Oak	N / N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	OEG
Pecan	N / Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N
Pine	N / Y	N	N	Y	Y	Y	Y	N	N	Y	N	N
Poplar	N / N	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y
Quartz	N / N	N	N	N	Y	N	N	N	N	N	N	N
Redwood	N / N	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y
Shale	N / N	N	N	N	N	N	Y	N	N	N	N	N
Spruce	N / N	Y	Y	Y	Y	Y	Y	N	N	N	N	Y
Teak	N / N	Y	Y	Y	Y	Y	Y	N	N	N	N	N
Walnut	N / N	Y	Y	N	Y	Y	Y	N	N	N	N	N
Willow	N / N	Y	Y	Y	Y	Y	Y	Y	N	N	N	N

Legend

AG: Australia Group

Beijing: 2010 Convention on the Suppression of Unlawful Acts Relating to International Civil Aviation

BTWC: Biological and Toxin Weapons Convention

CMAA: A bilateral customs mutual assistance agreement between Green (or the appropriate supranational organization such as the EU) and the country listed. Also known as a mutual customs assistance agreement or mutual administrative assistance agreement. Assume your typical language for such an agreement.

CWC: Chemical Weapons Convention

Extradition: A bilateral extradition treaty between Green and the country listed. Assume your typical language for such an agreement.

MLAT: A bilateral mutual legal assistance treaty between Green and the country listed. Assume your typical language for such an agreement.

MTCR: Missile Technology Control Regime

NPT: The Treaty on the Non-Proliferation of Nuclear Weapons

NSG: Nuclear Suppliers Group

SUA: Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation

Annex G: Fictional United Nation Security Council Resolutions 2846 and 2904

United Nations S/RES/2846 (2012)

Security Council

Distr: General
1 June 2012

Resolution 2846 (2012)
Adopted by the Security Council at its 9031st meeting on 1 June 2012

The Security Council,

Noting with grave concern that Quartz is a declared nuclear power and possess a stockpile of indigenously produced nuclear and chemical weapons,

Also noting that Quartz withdrew from the Nuclear Non-Proliferation Treaty in 2010,

Recalling Quartz open defiance of the international community's efforts to limit its illicit programs and its hostile rhetoric directed toward countries that supported these efforts,

Affirms with serious concern that Quartz has, so far, failed to meet the requirements of the International Atomic Energy Agency (IAEA) Board of Governors and to comply with previous Board resolutions by continuing its activities related to the enrichment and reprocessing of both uranium and plutonium and maintains an active nuclear weapons research and development program,

Reiterating its determination to reinforce the authority of the IAEA, strongly supporting the role of the IAEA Board of Governors, and commending the IAEA for its efforts to resolve outstanding issues relating to Quartz nuclear programme,

Acting under Article 41 of Chapter VII of the Charter of the United Nations,

1. *Decides* that all States shall cease any provision of arms and related materiel of all types to Quartz;

2. *Calls upon* States to ban imports and exports of certain goods, technology, and services listed by the UN, including the prohibition on exports of luxury goods;

3. *Decides* that all States shall ban military exports from Quartz;

13-37669 (E)

Please recycle

4. *Decides* all States shall prevent the transfer of specified missile and WMD related technology and components to and from Quartz, its nationals, and brokers and other intermediaries acting on behalf of Quartz, as well as all arms and related material from Quartz through their territories, by their nationals or persons subject to their jurisdiction, or using their flag vessels or aircraft, namely;

(a) items, materials, equipment, goods and technology listed in the Nuclear Suppliers Group trigger list, Parts 1 and 2 and associated Annexes;

(b) items on the MTCR Equipment, Software, and Technology Annex; and,

(c) any other items not listed if the State determines that they would contribute to enrichment-related, reprocessing or heavy water-related activities, or to the development of nuclear weapon delivery systems.

5. *Calls for* "vigilance and restraint" regarding the transit of individuals associated with development and sale of arms and related materiel of all types on behalf of Quartz;

6. *Calls for* States to freeze all funds, financial assets and economic resources that are owned or controlled by designated persons associated with the development and sale of arms and related materiel of all types on behalf of Quartz;

7. *Expresses* a commitment to take cooperative action to prevent illicit trafficking in nuclear, chemical or biological weapons, ballistic missiles and their means of delivery, related materials and technology

8. *Calls upon* all States to inspect, in accordance with their national authorities and legislation and consistent with international law, all cargo to and from Quartz on conveyances owned by Quartz Air Cargo or Quartz Shipping Line;

9. *Decides* to remain seized of the matter.

Annex I

Entities involved in WMD proliferation activities

1. **Quartz Nuclear Development Program Office (NDPO):** NPDO is responsible for developing nuclear capabilities in Quartz. It may be attempting to procure material and technology to build additional centrifuges to increase Quartz capacity to enrich uranium.

Location: Quartz

United Nations S/RES/2904 (2013)

Security Council

Distr: General
12 May 2013

Resolution 2904 (2013)
Adopted by the Security Council at its 9031st meeting on 12 May 2013

The Security Council,

Affirms with serious concern that Granite has, so far, failed to meet the requirements of the International Atomic Energy Agency (IAEA) Board of Governors and to comply with previous Board resolutions by continuing its activities related to the enrichment and reprocessing of uranium,

Emphasizing the importance of political and diplomatic efforts to find a negotiated solution guaranteeing that Granite nuclear program is exclusively for peaceful purposes,

Reiterating its determination to reinforce the authority of the IAEA, strongly supporting the role of the IAEA Board of Governors, and commending the IAEA for its efforts to resolve outstanding issues relating to Granite nuclear programme,

Reiterating the willingness of the five permanent members of the UN Security Council to engage in diplomatic discussions aimed at ending the issue provided Granite suspends enrichment activities,

Acting under Article 40 of Chapter VII of the Charter of the United Nations,

1. *Calls upon* Granite to resolve outstanding issues with the IAEA;

2. *Demands* Granite suspend all enrichment-related and reprocessing activities, including research and development;

3. *Urges* the international community to reach a diplomatic, negotiated solution that guarantees Granite's nuclear programme is for exclusively peaceful purposes;

Acting under Article 41 of Chapter VII of the Charter of the United Nations,

1. *Decides* that all States shall ban the export to Granite of items on Parts 1 and 2 of the Nuclear Suppliers Group trigger list;

13-37669 (E)

Please recycle

2. *Decides* that all States shall ban technical cooperation related to the Granite nuclear program except where the IAEA deems such cooperation is necessary for humanitarian or medical purposes;

3. *Decides* all States shall prevent the transfer of specified missile and WMD related technology and components to and from Granite, its nationals, and brokers and other intermediaries acting on behalf of Granite, as well as all arms and related material from Granite through their territories, by their nationals or persons subject to their jurisdiction, or using their flag aircraft, namely;

(a) items, materials, equipment, goods and technology listed in the Nuclear Suppliers Group trigger list, Parts 1 and 2 and associated Annexes;

(b) items on the MTCR Equipment, Software, and Technology Annex; and,

(c) any other items not listed if the State determines that they would contribute to enrichment-related, reprocessing or heavy water-related activities, or to the development of nuclear weapon delivery systems.

4. Decides that all States shall ban military exports from Granite;

5. *Calls* upon all States to exercise vigilance and restraint in exporting military equipment to Granite;

6. *Calls upon* all States to exercise vigilance and restraint regarding the transit of individuals associated with the Granite nuclear or missile programs and other designated entities as referenced in Annex I of this resolution;

7. *Calls upon* States not to enter into new commitments for grants, financial assistance, and concessional loans to the government of Granite;

8. Calls upon all states to freeze the funds of people and entities designated in Annex I of this resolution as involved in "proliferation sensitive activity";

9. Calls upon all States to exercise vigilance over the activities of banks domiciled in Granite;

10. Calls for vigilance in entering into new commitments for trade with Granite including export credits, guarantees, and insurance;

11. *Calls upon* all States to inspect, in accordance with their national authorities and legislation and consistent with international law, all cargo to and from Granite on conveyances owned by Granite Air Cargo or Granite Shipping Line;

12. Decides to remain seized of the matter.

Annex I

Entities involved in WMD proliferation activities

1. **Granite Ballistic Missile Development Organization (BMDO):** Granite BMDO is attempting to procure technology to enhance the accuracy, range, and reliability of their ballistic missile force.

Location: Granite

INTENTIONALLY BLANK

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