# Strategic Trade Review

**07**

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# Letter from the Editor

After decades of strategic trade capacity-building, what has the international community learned about what works and what doesn't? This special journal issue seeks to answer that question, bringing in some of the most experienced experts in the field to discuss their analysis, insights, and recommendations on this important topic.

Engaging in this reflective process is key to ensuring that new or continuing capacity-building projects yield meaningful impacts that are sustainable in the long term. It involves asking important, often self-critical questions and being open to innovation. Just some of the factors involved include which countries receive and provide capacity-building, how engagement is conceived and implemented, and how national partners in donor-recipient as well as peer-to-peer relationships communicate and coordinate with one another.

A focus on capacity-building has broader implications as well. The following articles launch a broad and necessary debate regarding which kinds of national and international institutions best support the development and sustainability of countries' strategic trade capacities. This topic therefore impacts not just donors, implementers, and recipients, but also the strategic trade community at large, since questions surrounding institutional support for effective controls have universal applications. All stakeholders – governments, exporters, researchers, and the various multilateral organizations that seek to facilitate safe and secure trade – have a role to play in nonproliferation. This special issue seeks to enhance the strategic trade community's understanding of these roles in the capacity-building space and thus provide a stepping stone for readers interested in answering the call for effective and sustained implementation.

ANDREA VISKI

# Reducing Proliferation Risk Through Export Control Outreach: Assistance Providers' Use of Maturity Model-Based Approaches

TODD PERRY[1]

## Abstract

*Export control capacity-building programs have evolved to take into account proliferation risks as well as a partner's ability to effectively absorb assistance when deciding how to allocate limited outreach resources. To this end, the United States Department of Energy's International Nonproliferation Export Control Program (INECP) and the European Commission's Partner-to-Partner (P2P) export control outreach program have adopted a maturity model-based approach to system development similar to the one in the World Customs Organization's (WCO's) 2015 Strategic Trade Control Enforcement (STCE) Guide. This approach takes into account national institutions' ability to make effective use of export control training and other resources and gives assistance providers the means to tailor and cadence delivery of these resources accordingly. Since there is no single standard for export control system development, this article begins by reviewing which export control elements, like licensing and enforcement, might be deemed essential to system functionality in the face of known proliferation procurement methods. The article then describes and supplements the WCO STCE maturity model to demonstrate which levels of enforcement and licensing support are appropriate at each level of maturity, while demonstrating how interagency information-sharing must be "baked in" to the maturation process at all stages of system development. The article concludes with a list of lessons learned from the U.S. and EU programs' adoption of this maturity model approach.*

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## Keywords

Export controls, capacity-building, International Nonproliferation Export Control Program (INECP), United States Department of Energy, European Commission, EUP2P, World Customs Organization, Strategic Trade Control Enforcement

## Introduction

Over the past two decades, export control-oriented governmental organizations from leading supplier states of goods and technology with potential Weapons of Mass Destruction (WMD) application have sponsored a wide range of ad hoc and formalized export control outreach activities to other supplier and transshipment countries seeking to establish or strengthen their national systems of control. This outreach has generally conformed to norms promoted by the multilateral supplier regimes like the Nuclear Suppliers Group as well as by United Nations Security Council resolution (UNSCR) 1540.[2] The results have been favorable overall, albeit with substantial variation with regards to long-term impact. On the positive side, new systems have emerged and extant systems have become stronger and more effective than before through assistance and peer-to-peer exchanges.[3] On the negative side, some countries have received substantial amounts of assistance and have yet failed to establish systems of control. Still others have adopted legal-regulatory export control norms in line with supplier regime recommendations and UNSCR 1540 requirements but have failed to implement and enforce controls that match them. Of potentially graver concern, assistance recipients and major suppliers alike continue to face challenges in the financing of national export control implementation. This threatens to erode the important implementation gains made to date, even as proliferation threats grow within the context of rapid geopolitical and technological change.[4]

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[2]    With respect to the materials, equipment, and technology needed to manufacture WMD, United Nations Security Council resolution 1540 (2004) Paragraph 3(c) calls on countries to "Develop and maintain appropriate effective border control and law enforcement efforts to detect, deter, prevent and combat, including through international cooperation when necessary, illicit trafficking and brokering in such items in accordance with their national legal authorities and legislation and consistent with international law." United Nations Security Council Resolution 1540, S/RES/1540, New York, April 2004. Supplier regime guidelines are generally considered to be the most proximate expression of UNSCR 1540 export control-related requirements.

[3]    In their report, the authors of the "Peddling Peril" index identify a bimodal distribution of export control and especially export enforcement capabilities worldwide, with progress most evident in two categories: countries in the process of constructing systems that demonstrate limited but important capacities and more advanced established systems that demonstrate an ability to update measures to address evolving proliferation threats. See Figure 7.1, p. 67, in David Albright, Sarah Burkhard, Allison Lach, and Andrea Stricker, "Peddling Peril Index (PPI) for 2017," Institute for Science and International Security, January 31, 2018, <http://isis-online.org/isis-reports/detail/peddling-peril-index-ppi-for-2017>.

[4]    On technological change and the challenges it poses for export controls, see Matthew Bunn and William C. Potter, "Introduction: The Problem of Black-Market Nuclear Technology Networks," in Matther Bunn, Martin B. Malin, William C. Potter, and Leonard Spector, eds., *Preventing Black-Market Trade in Nuclear Technology* (Cambridge: Cambridge University Press, 2018), pp. 1–22. See also European Commission, "Report on EU Export Control Policy," December 2018, <http://ec.europa.eu/trade/import-and-export-rules/export-from-eu/dual-use-controls/>. Sections 1.1.1-2 discuss the risk that export controls might not keep pace with threats and technological developments.

In light of these circumstances, a key question arises for providers of export control assistance and peer-to-peer exchanges: When faced with a wide range of export control system performance challenges within an equally wide range of partner countries, how can assistance providers best allocate limited resources to maximize impact and thus optimally reduce proliferation risks? For the purpose of this article, this question takes as a given that governmentally sponsored assistance programs are directed by their governments' lead diplomatic and export control agencies to engage specific partners based upon a wide range of economic and security considerations. The governmental organizations supporting or directly responsible for providing assistance then typically assess the proliferation risk associated with each selected partner in relation to their ability to produce or transship controlled goods.[5] These assessments can help assistance providers prioritize and tailor assistance but have little bearing on whether or not a given partner possesses the institutional wherewithal to absorb assistance and to sustain effective export control practices.

To address the central dilemma of how to best allocate outreach resources to optimize risk reduction, assistance providers must answer two subsidiary questions. First, what are the baseline export control functional requirements for any system to reduce proliferation risk? Second, which institutional capacities within assistance recipient countries are most likely to ensure the effective absorption and implementation of knowledge provided by assistance programs in order to satisfy these functional requirements?

In order to answer the first question, this article briefly describes the challenges that emerging and advanced systems of control alike have faced since the early 2000s in broadening export control norms to include not only the regulation and licensing of controlled goods and know-how, but also the detection of exports of WMD-related goods that have fallen outside of regulatory control. Since there is no agreed upon international standard for national export control implementation, understanding the 21st century evolution of governments' approach to strategic trade controls is vital to establishing an illustrative set of functional requirements for countries seeking to implement controls in ways that can defeat known proliferation procurement techniques.[6]

Once an illustrative set of export control system requirements is described, this article then answers the second question by plugging these functional requirements into the maturity-model approach to system development outlined in the World Customs Organization's (WCO's)

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5   For one approach to country assessments focusing on countries' ability to implement systems of control in relation to the potential proliferation risk posed by their industrial base see U.S. Department of Energy, Office on Nonproliferation and Arms Control, "FY2016-FY2020 Strategic Implementation Plan," <https://www.energy.gov/sites/prod/files/2017/10/f37/npac_strat-plan_2016_to_2020%5B1%5D.pdf>.

6   The terms "export controls" and "strategic trade controls" are used interchangeably in this article even though they are interpreted differently from one country and institution to the next. For the purposes of this article, references to both terms are intended to connote law-based systems of national authorities charged with the regulation of supplier regime-listed goods and the detection of these goods when they have fallen outside of regulatory control.

Strategic Trade Control Enforcement (STCE) Guide.[7,8] Maturity models can "…facilitate internal and/or external benchmarking while…providing guidelines through the evolutionary process of organizational development and growth."[9] In other words, the maturity model approach provides a framework to answer the article's second question about institutional prerequisites for effective export control implementation.

The final section of this article provides anecdotal evidence from two assistance providers' experiences to further validate the maturity model approach to assessing partner countries' levels of export control development.[10] These two assistance providers -- the U.S. Department of Energy's International Nonproliferation Export Control Program (INECP) and the European Union's Partner-to-Partner (P2P) Program – recently adopted this approach and have started using it to adjust the scope and timing of assistance so as to increase the likelihood that partner countries are able to effectively absorb assistance, with the goal of moving countries from one level of maturity to the next.[11]

Questions surrounding the wise use of export control outreach resources matter not just to the larger assistance programs in Europe, Japan, and the United States, but also to a number of other governments. Canada, the Republic of Korea, and individual European Union Member States, among others, make in-kind financial and personnel contributions to U.S. and European Union export control outreach programs, support World Customs Organization (WCO) training programs, and undertake limited but important outreach of their own. Dozens of other countries and companies lend their expertise to the larger U.S. and European export control programs on

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7    This article focuses on two aspects of export control: the regulation of strategic goods and the detection of sensitive goods that have fallen outside of regulatory control. The sharing of information between these system functions is highlighted for illustrative purposes but there are any number of other accepted export control baseline requirements, including, as noted briefly below, the ability of regulators and enforcement authorities alike to effectively engage industry (e.g. all holders of sensitive goods and technology). This and other system elements are not reviewed here but could nevertheless be fruitfully included within the confines of this article's focus on enabling assistance programs to calibrate outreach on the basis of governments' institutional capacities.

8    World Customs Organization, "WCO Strategic Trade Control Enforcement Implementation Guide," <http://www.wcoomd.org/en/topics/enforcement-and-compliance/instruments-and-tools/guidelines/wco-strategic-trade-control-enforcement-implementation-guide.aspx>.

9    Lester A. Lasrado, Ravi Vatrapu, and Kim Normann Andersen, "Maturity Models Development in IS Research: A Literature Review," *Association for Information Systems Electronic Library*, No. 6 (2015), pp. 1-65.

10   The author uses interview data and his own experiences to summarize implementation trends observed by assistance programs in countries that receive assistance. This summation is necessarily anecdotal since these trends are based upon information that has been shared in confidence with assistance providers. It is nevertheless noteworthy that the two programs reached similar conclusions about these trends independently of each other before sharing their respective observations under formal inter-governmental auspices.

11   It is important to note that, just as this article does not address the factors that go into a government's selection of countries targeted for outreach, it also does not review the security and economic incentives used by governments to prompt acceptance of assistance. For an example of the use of economic incentives, see: Richard T. Cupitt, Suzette Grillot, and Yuzo Murayama, "The Determinants of Nonproliferation Export Controls: A Membership-fee Explanation," *The Nonproliferation Review* Vol. 8, No. 2 (Summer 2001), pp. 69-80.

an ad hoc basis. The combined experiences of INECP and P2P, as well as those of the WCO's STCE Outreach Program, provide important clues as to how other outreach programs might also effectively target their limited resources.[12]

## Functional Requirements Needed to Regulate and Detect Strategic Goods

The past two decades have witnessed substantial growth in the resources devoted by governments to assist partner countries seeking to strengthen their capacity to regulate and detect WMD-related commodities and know-how.[13] Dedicated and ongoing export control assistance programs emerged soon after the creation of the voluntary WMD dual-use supplier regimes starting in the late 1990s as part of U.S. effort to assist the Russian Federation and other countries emerging from the break-up of the Soviet Union with the development of so-called preventative defense measures, including export controls.[14,15]

The importance of globalizing this effort to keep pace with the growing ability of developing countries to supply and transship dual-use goods was subsequently highlighted by proliferation scandals resulting in two lessons learned for the export control assistance community. First, in the wake of 2004, revelations surrounding the A.Q. Khan global nuclear smuggling ring made evident that countries without national systems of export control could not be expected to detect the manufacture and transfer of WMD-related goods.[16,17] Second, it became equally clear based on the ways that the Khan network operated that national adherence to regime

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12    World Customs Organization, "WCO Strategic Trade Control Enforcement Implementation Guide," <http://www.wcoomd.org/en/topics/enforcement-and-compliance/instruments-and-tools/guidelines/wco-strategic-trade-control-enforcement-implementation-guide.aspx>, p. 23. See also, in this journal issue, William McComb et al., "Where There's a Way, There's a Will: The World Customs Organization's Capacity-Building in the Field of Strategic Trade Enforcement," *Strategic Trade Review*, Vol. 5, No. 7 (Winter 2019).

13    For example, in 2016, the largest single export control assistance program, the U.S. Department of State's Export Control and Related Border Security Program (EXBS), spent $58.7 million USD in more than 60 partner countries. U.S. Department of State, "Export Control and Related Border Security Program," <www.state.gov/t/isn/ecc/>.

14    Namely, the Nuclear Suppliers Group, the Missile Technology Control Regime, the Australia Group, and the Wassenaar Arrangement.

15    Jason Ellis and Todd Perry, "Nunn-Lugar's Unfinished Agenda," *Arms Control Today*, Vol. 27, No. 7 (October 1997), <https://www.belfercenter.org/publication/nunn-lugars-unfinished-agenda>, pp. 14-22.

16    "Bush's Speech on the Spread of Nuclear Weapons," *The New York Times*, February 11, 2004.

17    Perhaps the most well-known expression of this perspective from this time period came from a published Royal Malaysian Police Report, in which it explained that centrifuge components manufactured in Malaysia used for uranium enrichment were originally labeled as air conditioning parts. Malaysian officials used the Report as the basis for declaring that they would have stopped the production of machinery capable of manufacturing explosive nuclear materials in their country had they known what to look for. "Press Release by Inspector-General of Police In Relation To Investigation On The Alleged Production Of Components For Libya's Uranium Enrichment Programme," February 20, 2004, <http://isis-online.org/uploads/iaea-reports/documents/Malaysian_Police_Report.pdf>. Malaysia did not have an export control system at the time but has since put a comprehensive system in place drawing upon U.S., European, and Japanese assistance programs.

guidelines like those of the Nuclear Supplier Group (NSG) was an important but insufficient first step to the goal of detecting unregulated transfers of WMD-usable goods and know-how. Yet, while most supplier regime Participating Governments (PGs) responsible for supporting export control outreach realized that enforcement agencies needed to be enlisted to help detect the smuggling of WMD-related components, they had not for the most part systematically engaged their customs and other law enforcement agencies on the subject and thus could not explain to outreach partners how to do so.

This failure arose to a large degree from the complexity of the task at hand. Most WMD-related items are commonly traded dual-use goods with legitimate commercial applications that are often indistinguishable to the untrained eye from similar goods with military applications. To add to the complexity of detecting unlicensed, WMD-related transfers, and as the A.Q. Khan scandal revealed, even PGs with advanced export control systems where companies have strong export control compliance programs in place had been unable to prevent insiders from diverting illicit dual-use transfers. In sum, as of 2004, when UNSCR 1540 established a global requirement that countries prevent the unregulated transfer of WMD-related commodities, most PGs, not to mention other countries with nascent systems of control, were generally unable to do so if these goods were intentionally routed around national licensing authorities.[18]

## The Evolving Status of Detection Subsequent to the Passage of UNSCR 1540

The urgency of effectively regulating and facilitating legitimate trade while at the same time detecting potentially illicit shipments placed export control assistance providers in a difficult position as outreach programs expanded during the mid-2000s onward. Capacity-building programs would need to provide licensing and government-industry outreach trainings in a growing number of countries while also enhancing partners' enforcement capabilities by providing training on how to detect illicit shipments of potentially controlled goods. However, as noted above, assistance providers had very little experience upon which to base the development of export enforcement training.[19] This prompted a decade-long effort by governments of leading supplier countries to develop and integrate the methods and capabilities needed for detection into assistance providers' training programs.[20] Although not an outreach program in its own right, the Proliferation Security Initiative (PSI) also helped underscore the importance of developing these methods during this time period by raising awareness as to the

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18      Gordon Corera, *Shopping for Bombs: Nuclear Proliferation, Global Insecurity, and the Rise and Fall of the A.Q. Kahn Network* (Oxford: Oxford University Press, 2008).

19      The Netherlands was one of the few countries that already had some level of WMD commodity detection capability in place beginning in the 1980s in the form of a specialized interagency team of customs and licensing officers responsible for the enforcement of strategic trade controls and sanctions under the Dutch Ministry of Economic Affairs. This capability was transferred in 2007 to Dutch customs. Knowledge about WMD-sensitive goods is still regularly made available to Dutch customs officers as is a means to seek technical advice in the event that suspect goods are detected. (November 2019 Interviews with Dutch Government Officials).

20      For information on the progress made by 2011, see Todd E. Perry, "The Growing Role of Customs Organizations in International Strategic Trade Controls" in James Doyle ed., *Nuclear Safeguards, Security and Nonproliferation: Achieving Security with Technology and Policy*, (Amsterdam: Elsevier, 2011).

importance of detection capabilities as a complement to licensing and government-industry outreach capabilities in line with UNSCR 1540 requirements.[21]

*The Integration of Detection into Contemporary Systems of Control*

Ongoing efforts on the part of assistance organizations to develop export enforcement training for their partners created a body of effective enforcement practices focused on how customs detect and interdict WMD-related goods. Customs experts subsequently worked together to assist the WCO in the creation of its 2015 Strategic Trade Control Enforcement (STCE) Implementation Guide. The STCE Implementation Guide, divided into sections for both senior- and working-level officials, explains how customs functions, such as risk management, targeting, physical inspections, audits, and investigations, can be used to thwart illicit cross-border movements of controlled goods outside of regulatory control.[22] Most importantly for those in the export control assistance community seeking to establish an overarching model for system effectiveness, the STCE Implementation Guide identifies what kind of information must be shared between customs administrations and counterpart licensing agencies in order to optimize these respective export control functions.[23]

The WCO STCE Implementation Guide also shows that detection is only the first step toward full customs functionality with respect to strategic trade control enforcement. For example, once frontline officers detect potentially illicit shipments, and once it is determined that suspect shipments contain goods of potential use to a weapons program, the Guide underscores how investigative and prosecutorial agencies must also be prepared for the very difficult task of establishing how or if a company intended to provide assistance to a weapons program. Doing so is especially difficult, since, again, most export controlled goods are inherently dual-use, with both military and civilian applications. Assessing the potential weapons use of a given shipment therefore requires strong coordination with cognizant licensing and supporting technical and/or intelligence organizations since enforcement agencies do not typically possess an in-depth

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21    Tracey-Ann Wellington, "The Impact of the Proliferation Security Initiative on the Interdiction of Weapons of Mass Destruction," in Mark Cancian ed., *Project on Nuclear Issues: A Collection of Papers from the 2016 Nuclear Scholars Initiative and PONI Conference Series* (Lanham: Rowman and Littlefield, 2017), pp. 126-35 and United Nations, "1540 Committee," <https://www.un.org/en/sc/1540/about-1540-committee/general-information.shtml>.

22    Shipments of regime-listed goods from countries without national laws in place to control them are not illegal *per se* within a national context. However, if non-state actors like companies or procurement agents are involved, a supplier's failure to regulate them contravenes the UNSCR 1540 Operative Paragraph (OP) 3(c) requirement that countries "Develop and maintain appropriate…efforts to detect, deter, prevent and combat…the illicit trafficking and brokering…" United Nations Security Council Resolution 1540, S/RES/1540, New York, April 2004.

23    "For effective enforcement, sharing information with and by Customs is often essential, and regulatory or administrative accommodation may be needed to permit it." World Customs Organization, "WCO Strategic Trade Control Enforcement Implementation Guide," <http://www.wcoomd.org/en/topics/enforcement-and-compliance/instruments-and-tools/guidelines/wco-strategic-trade-control-enforcement-implementation-guide.aspx>, p. 18.

understanding of export controlled goods.[24] As it turns out, this very same ability to understand an item's potential WMD application is immensely helpful on the front end of the detection spectrum too, since it is only through custom's interactions with national licensing officials and industry that they can come to understand legitimate flows of exported or transshipped dual-use goods by the industrial sector in ways that enable them to detect anomalous – and therefore potentially suspect – shipments.[25]

*Consequences for Assistance Providers of Integrating the Detection Element of Controls*

As noted above, developing export control capacity-building tools in support of these enforcement functions proved challenging for assistance providers. Their countries were in the process themselves of creating the means to detect and investigate illicit exports of goods outside of regulatory control.[26] Even when assistance providers were able to take into account internal advances in the detection field to strengthen their externally focused export enforcement assistance efforts, accompanying interagency patterns of information-sharing had not for the most part been routinized. Without these capabilities in place domestically, it was difficult for assistance programs to paint a cogent picture for partner countries about things like the imperative of collaboration between cognizant regulatory and enforcement organizations in order to maximize a country's detection potential.

In this context, the WCO's ability to outline the functional prerequisites to establishing detection and related capabilities like investigations in its STCE Implementation Guide and to cast these prerequisites as essential complements to national licensing functions marked a watershed moment in the development of effective approaches to export enforcement and thus

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24    With regards to the importance of intra-enforcement collaboration an "…investigation[s] can develop information identifying broader involvement, gaps in security, source funding and other important information to further enhance enforcement efforts by improving risk assessment and profiling." in World Customs Organization, "WCO Strategic Trade Control Enforcement Implementation Guide," <http://www.wcoomd.org/en/topics/enforcement-and-compliance/instruments-and-tools/guidelines/wco-strategic-trade-control-enforcement-implementation-guide.aspx>, p. 28. In the United States, efforts to this end through the Enhanced Export Control Reform Initiative (ECRI) strengthened coordination among investigatory agencies. For example, in 2010, the Obama administration signed an Executive Order that established the Export Enforcement Coordination Center (E2C2)." For more information on ECRI, see Ian F. Fergusson and Paul K. Kerr, "The U.S. Export Control System and the Export Control Reform Initiative," Congressional Research Service, October 20, 2018, <https://crsreports.congress.gov/product/pdf/R/R41916>.

25    For example, due to the U.S. Department of Energy National Nuclear Security Administration's support to the United States' dual-use licensing process, DOE and its national laboratories have developed technical resources that enable customs administrations to distinguish between controlled and uncontrolled versions of similar commodities using the so-called "commodity fingerprints" approach. See Department of Energy, "NNSA Develops 'Fingerprinting' Technique for Exports to Keep WMD Building Blocks out of the Wrong Hands," September 24, 2018, <https://www.energy.gov/nnsa/articles/nnsa-develops-fingerprinting-technique-exports-keep-wmd-building-blocks-out-wrong>.

26    European Commission, "Report on EU Export Control Policy," December 2018, <http://ec.europa.eu/trade/import-and-export-rules/export-from-eu/dual-use-controls/>, Section 1.1.1.7.

to the export control assistance effort writ large.[27] In other words, by virtue of the WCO's status as a nearly universal multilateral institution, the STCE Implementation Guide establishes a multilateral level norm that reinforces the imperative of detection and other enforcement-related sub-functions while simultaneously describing concrete steps that any country can take to implement detection strategies with support to and from national export control licensing and related technical organizations.

From the vantage point of enabling assistance providers to explain the prerequisites to establishing a comprehensive licensing and detection focus to export control system development, the Implementation Guide makes it clear to assistance providers that the two aspects of this approach must be co-dependent if either are to be truly effective. The corollary to this from an assistance provider's perspective when establishing the necessary conditions for a training program is that national regulatory and enforcement functions should no longer be represented as independent pillars but instead should be seen as interdependent.

It still is important for assistance providers to impart specific skill sets to specific audiences on both sides of the regulatory and detection spectrum. However, higher level discussions with export control agency leaders must portray export control development as a necessarily holistic enterprise in which an emphasis on information-sharing between these and other export control elements is a prerequisite to the successful development of each system component.

Ensuring effective interagency cooperation is not a panacea for assistance providers or recipients alike. There is far more to system effectiveness and sustainability than the basic first step of establishing expectations as to what the functional elements of an effective system should resemble and how these elements might relate to one another. But it seems clear that effective practices leading to comprehensive system development would include ensuring that information flows between cognizant agencies on both the licensing and enforcement sides of the equation. Comprehensive maturity model-based approaches to national system development would then likewise need to fully capture essential information-sharing processes amongst and between licensing and enforcement agencies and other agencies as well. If this approach can be used to capture the basic stages of export control system advancement, assistance providers can then take account of measures of export control performance that transcend system elements in favor of a holistic approach to system development that directly connects interagency cooperation to risk reduction.

## Maturity Models' Impacts on the Pace and Focus of Assistance

Given the context provided in the previous section about the development and subsequent expansion of the enforcement elements of overall export control-related practices during the mid-2000s onward, the first of the two earlier questions arise: What are the main essential outlines of an export control maturity model that can be used to track a country's export

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27    The STCE effort outlined in the Implementation Guide was subsequently reinforced at senior levels within the WCO in the Punta Cana Resolution of the Policy Commission of the World Customs Organization. See World Customs Organization, "WCO Issues the Punta Cana Resolution," December 10, 2015, <http://www.wcoomd.org/en/media/newsroom/2015/december/wco-issues-the-punta-cana-resolution.aspx>.

control development? As the WCO STCE Implementation Guide indicates, "…a maturity model is a set of structured levels that describe how well behaviors, practices, and processes of an organization can reliably and sustainably produce required outcomes."[28] For the purpose of evaluating national export control systems involving multiple export control-related governmental organizations, an export control maturity model needs to be specific enough to capture the behaviors of single organizations and broad enough to capture the behaviors and interactions between organizations within potentially complex, multi-organizational systems.

Again, since there is no international treaty-based norm as to how the export control-related aspects of UNSCR 1540 requirements should be implemented, any fully developed export control maturity model is bound to be subjective with regards to its scope and content. This said, some important guideposts as to what a fully functional system might look like have been developed through the compilation of "effective practices" by the UNSCR 1540 Group of Experts, which are publically available on the UNSCR 1540 Committee website or in UNSCR 1540-related academic literature.[29] This includes those practices promoted by international organizations (IOs) like the International Atomic Energy Agency (IAEA), the Organization for the Prohibition of Chemical Warfare (OPCW), the WCO, supplier regime-recommended practices, and specific legislative practices championed by individual countries.[30,31] In other words, through these and related resources, enough information is publicly available for countries to benchmark their export control development in line with generally known effective practices. The WCO maturity model provides a useful framework for these benchmarks. Its four customs-focused stages are described below in relation to complementary licensing and other export control-related practices. Per the STCE Implementation Guide, these elements are needed to ensure adequate information-sharing within a system of control to address evolving proliferation threats.

*The WCO STCE Maturity Model: Implications for Assistance Providers*

The WCO STCE Implementation Guide's maturity model contains four levels of STCE maturity: *unsupported*, *nascent*, *established*, and *enabled*. At the first and lowest *unsupported* level, the foundations for STCE such as a legal framework and mandate do not exist and

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28    World Customs Organization, "WCO Strategic Trade Control Enforcement Implementation Guide," <http://www.wcoomd.org/en/topics/enforcement-and-compliance/instruments-and-tools/guidelines/wco-strategic-trade-control-enforcement-implementation-guide.aspx>, p. 18.

29    An early example of how this data might eventually be used by the UNSCR 1540 Committee Group of Experts can be found in Richard T. Cupitt, "Export Controls and Implementing UNSC Resolution 1540 (2004)," Carnegie Conference on Nonproliferation, Washington, DC., November 7, 2005, <www.carnegieendowment.org/static/npp/2005conference/presentations/cupitt_export_controls.pdf>. For a comprehensive review of information and approaches available as of the 2016 UNSCR 1540 Review Conference, see Olivia Bosch, "UNSC Resolution 1540: Effective Practices to Facilitate States' Implementation and Assistance" in "Towards the 2016 Comprehensive Review: Former Experts Assess UNSC Resolution 1540," Institute for Security Studies, September 2015, <https://issafrica.s3.amazonaws.com/site/uploads/Mono191.pdf>.

30    See The Wassenaar Arrangement, "Best Practices for Effective Enforcement," September 7, 2017, <https://www.wassenaar.org/best-practices-effective-export-control-enforcement/>.

31    See 1540 Committee, "List of Legislative Documents," United Nations, <www.un.org/en/sc/1540/national-implementation/legislative-database/list-of-legislative-documents.shtml>

efforts to implement STCE measures (and by extension, any form of export controls at all), are unsupported. Little can be done by assistance programs at this stage beyond providing basic awareness raising to advance the development of customs and other STCE capabilities. Under these circumstances, the STCE Implementation Guide notes that senior customs managers must be engaged by assistance program personnel to secure high-level commitments and to map a pathway towards the reform of customs practices and ultimately the passage of an export control law. The same can be said for export controls overall at the unsupported stage: senior officials from across a government's relevant agencies must be engaged with the aim of creating a national-level plan for export control development.[32]

At the second stage of development, the WCO STCE Implementation Guide notes how, following the engagement of senior level leaders, a customs commitment to enforcement can be generated "…but the implementation is nascent or just starting to take hold." At this juncture, a few key individuals may champion the effort, but they also may be isolated and lack standard mechanisms and procedures for carrying out controls. The same can be said at this stage for export controls writ large: licensing and other technical expert champions from governmental agencies may have emerged as a consequence of assistance-related engagements, or due to interventions by other supplier state governmental representatives, either on their own behalf on or behalf of one or more supplier regimes. As the STCE Implementation Guide suggests, implementation efforts at the *nascent* stage "...should focus on establishing the STC program, including the mechanisms for coordinating the role of Customs [or other relevant organizations] in the larger whole-of-government STCE process."[33] Importantly for the broader task of establishing an export control-focused maturity model, the STCE Implementation Guide's language indicates how, even prior to the development of an export control law and related regulations, introducing the concept of interagency coordination amongst supporters of an emerging system of control is imperative to its eventual effective implementation.

The Guide notes that the next stage of maturity is an *established* capability, which means that "…an institutional framework for all necessary aspects of control is in place, so that the organizational capability and the overall system stands the chance of achieving [the fourth enabled stage for controls] to function effectively." It is notable that only at this final *enabled* stage is a customs administration capable of not just establishing but also fully implementing vital strategic trade control-related internal procedures, not to mention those external to its organization, such as the sharing of information with licensing agencies. For customs, this means implementing the inherently enforcement-related aspect of the STCE mission such as: (1) the establishment of outbound enforcement teams capable of targeting and inspections, (2) the establishment of national risk management (targeting) centers, capable of collecting and processing data in a timely fashion and (3) the training of front line inspectors so that, especially based on tips from their targeting center or national intelligence communities, suspect goods

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32    As noted earlier, engaging senior leaders in this way is often beyond the reach of assistance implementers. However, at the behest of sponsoring governments and within the confines of working level awareness raising engagements, assistance providers will often encourage partners to initiate planning by providing lists of key decisions requiring attention within a partner's overall planning process.

33    World Customs Organization, "WCO Strategic Trade Control Enforcement Implementation Guide," <http://www.wcoomd.org/en/topics/enforcement-and-compliance/instruments-and-tools/guidelines/wco-strategic-trade-control-enforcement-implementation-guide.aspx>, p. 23

can be inspected and, if necessary, detained.[34]

For other export control elements like licensing at the established level of development, this would mean ensuring that a licensing body has been created and is being staffed by technical experts needed to support them. At this level and subsequently at the enabled level, these experts would not only be able to apply regime-recommended risk analysis methods to the licensing process, but also be able to share and use all available information for the complex set of considerations that go into applying so-called catch-all controls to items not included on national control lists, but of potential use to WMD programs.

Export enforcement and licensing capabilities at the highest enabled level of maturity must, per the STCE Implementation Guide, involve actors within a national system of control like customs and licensing agencies, and ensure that information-sharing mechanisms are established between them. For example, a key capability at this level includes "timely and regular [technical] reachback mechanism[s]," which are needed to assess whether or not a suspect shipment is worthy of further scrutiny due the possibility that it could contribute to a WMD program. Basic reachback capabilities of this kind sometimes reside within a customs administration, but more sophisticated layers of reachback capability typically reside within licensing bodies or are resident in technical organizations that support the system as a whole.[35]

*Information-sharing as a Central Element of System Maturity*

As noted above, a central capability of the WCO Implementation Guide's enabled category has broad, export control system-level implications: the existence of "regular interagency coordination mechanisms and information-sharing protocols." Typically, within the confines of an advanced system capable of licensing WMD-related goods and of detecting those that have fallen outside of regulatory control, these mechanisms would include customs coordination with licensing and other technical organizations in the sharing of at least two basic kinds of information. The first involves making sure that as customs conducts its targeting and risk management analysis of outbound goods, it has a list of destinations provided by the national licensing authority that require a license under national regulations and in relation in UNSCR sanctions resolutions.[36] Some of the most enabled systems of control also find ways to ensure

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34      Ibid, p. 24.

35      In the most advanced supplier states, the first layer of reachback allows regulatory and enforcement agencies to determine if an item could possibly contribute to a WMD program. Only after this, at a more sophisticated technical and legal level of analysis, are export control analysts within licensing authorities able to determine whether or not an item is or should be controlled under national law, either by virtue of its inclusion on a national control list, or by virtue of the fact that, from a catch-all licensing perspective, there is a diversion risk that policy makers are unwilling to endure. This said, even within the most sophisticated Asian, North American, and European systems, the application of catch-all controls is made exclusively at the discretion of a government's regulatory authority, that is unless an item that is not included on a national control list is nevertheless contained within a United Nation's Security Council sanctions resolution.

36      One of the most important sources of information for risk profiling and targeting are screening lists of proscribed entities. The United Nations Security Council Sanctions Committees maintain an online compendium of sanctions lists. World Customs Organization, "WCO Strategic Trade Control Enforcement Implementation Guide," <http://www.wcoomd.org/en/topics/enforcement-and-compliance/instruments-and-tools/guidelines/wco-strategic-trade-control-enforcement-implementation-guide.aspx>, p. 25.

that customs officers responsible for targeting have access to information provided by their national licensing agency related to licensing requests that have been denied. This allows customs to be aware of instances when a company attempts to export a controlled item despite having been previously denied a license for the export. It is also key to establishing a level playing field for exporters so that compliant companies are not the only ones prevented from exporting to risky destinations.

The second kind of information-sharing at the enabled level takes place in the opposite direction from the first and involves customs' role in sharing information with licensing authorities. Customs administrations log all declared shipments. Data from shippers' customs declarations, if shared, can allow licensing organizations to identify companies that may be exporting controlled goods without required licenses. This data may also reveal shipments that do not appear risky from a proliferation perspective on their own, but which may come to be seen as risky by the licensing body when seen through the lens of a compilation of export control licenses and applications processed to date. Detection under these circumstances takes place well after exports have left a country. However, many countries' bilateral law enforcement arrangements enable the country of origin to recall suspect transfers.[37] Longer term, some countries' statute of limitations allow penalties to be assessed should it be discovered that an exporter has shipped goods in a way that violates the terms of their license.[38]

Assistance providers and sponsors of peer-to-peer exchanges cannot necessarily train licensing and customs organizations to undertake these kinds of information-sharing protocols. But case studies, exercises, and tailored assistance such as customized IT systems can highlight the importance of establishing them. At all stages of export control development, governments ultimately have to decide for themselves how to manage their systems of control. However, national export control managers and regulators can be encouraged both at the onset of nascent export control development and then especially as systems are becoming established to consider the value of doing so. Information-sharing decisions taken by a country at the established stage are a signal indicator of a country moving towards an enabled level of maturity. Proactive efforts of this kind show that a partner is becoming sufficiently aware of its own implementation gaps that it is able to take steps on its own to request customized support either in the form of training or peer-to-peer information exchanges.

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37    For a list of U.S. Governmental requirements that pertain to the return or unloading of cargo at the direction of the U.S. Department's Bureau of International Security's Office of Export Enforcement or the U.S. Department of Homeland Security, see "Return or Unloading of Cargo at Direction of BIS, the Office of Export Enforcement or Customs Service," Code of Federal Regulations, Title 15, Chapter VII, Subchapter C, Part 758.8 (2012), <https://www.govinfo.gov/content/pkg/CFR-2012-title15-vol2/pdf/CFR-2012-title15-vol2-sec758-8.pdf>, pp. 510-511.

38    Matthew Bunn, Martin B. Malin, William C. Potter, and Leonard Spector, eds., *Preventing Black-Market Trade in Nuclear Technology* (Cambridge: Cambridge University Press, 2018). In the United States, the statute of limitations on export control offenses falls under the general guidelines of the U.S. Criminal Code: Title 18 - Crimes and Criminal Procedure, 620-621 § 213-3282 (2005), <https://www.govinfo.gov/content/pkg/USCODE-2005-title18/pdf/USCODE-2005-title18-partII-chap213-sec3282.pdf>. While 18 USC 3282 is not specific to export control offenses, it sets the standard that unless specifically enumerated under separate regulations, a violation must be indicted within five years of the act.

The sharing of information by licensing and other export control technical specialists with customs serves another analytically subsidiary and yet vital awareness-raising purpose from an export control assistance provider's perspective: licensing officials generally understand the commodity control lists, have previously analyzed a given export destination's overall nonproliferation credentials, and will usually have developed, either through a review of their own records or by combining these records with other countries' open source denied entities lists, a good understanding of the proliferation risks associated with certain kinds of export license requests. By contrast, if unguided, customs administrations are often hard pressed to understand the technological- or end use-related proliferation risk associated with a given export, and have difficulty winnowing down massive volumes of customs declaration data so that targeting queries and targeting-based inspections can be conducted.[39]

Finally, information-sharing between licensing and customs authorities can also be useful from a risk management standpoint with respect to industry outreach. Within the confines of a fully functional, enabled system of control, customs and licensing officials should ideally engage industry in a coordinated way to make compliance officers aware not only of their export control obligations but also of the specific ways in which goods and technology manufactured and held by industry might be of use to foreign weapons programs.[40] With these sorts of coordinated inputs, industry is far more likely not just to comply with national export control requirements, but to also report suspicious procurement attempts or inquiries to appropriate governmental authorities.

## Assistance Providers' Use of Maturity Models

Two assistance programs, the European Union's Partner-to-Partner (P2P) Program, and the U.S. Department of Energy/National Nuclear Security Administration's International Nonproliferation Export Control Program (INECP), have adapted maturity model approaches to their analysis of partners' institutional capabilities.[41] Both programs' maturity model approaches take account of the aforementioned information-sharing pre-requisites for partners' export control system development. INECP's assistance-related activities are implemented and overseen by its parent DOE/NNSA's Office of Nonproliferation and Arms Control, which closely coordinates all of its export control activities with relevant U.S. Governmental agencies.

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39    As noted in the WCO STCE Implementation Guide, "This is generally the case for STCE, where the international movement of strategic goods is typically subject to the authorization of a licensing or permitting agency. This highlights a key dependency for Customs in STCE, with the need for the licensing or permitting agency to confirm to Customs whether [or not] a violation exists." World Customs Organization, "WCO Strategic Trade Control Enforcement Implementation Guide," <http://www.wcoomd.org/en/topics/enforcement-and-compliance/instruments-and-tools/guidelines/wco-strategic-trade-control-enforcement-implementation-guide.aspx>, p. 23.

40    "Where STC is a collective effort of multiple agencies (including Customs, a licensing or permitting agency, and investigative agencies), joint outreach demonstrates coordination, ensures consistency, and fosters collaboration. It can also promote understanding of the process (and associated delay) that ensues when Customs detains a suspect shipment, serving both to encourage compliance to avoid such delays and to improve the Customs-trade relationship in the event of such delays." Ibid, p. 24.

41    The information in this section about P2P come from the author's interviews with P2P staff. Information about INECP comes from the author's 18 years of experience in his oversight of that program.

In addition, some INECP activities are funded by the U.S Department of State's Export Control and Related Border Security (EXBS) Program and overseen by the Department of State's Office of Export Control Cooperation. The P2P is funded and overseen by the European Commission under the auspices of DG DEVCO and its activities are implemented by a consortium led by Expertise France, along with the German Federal Office for Economic Affairs and Export Control (BAFA), as well as experts from Kings College London, Dutch Customs, and Belgium's University of Liege.[42,43,44,45]

For both the U.S. and EU programs, the selection of outreach partners is consistent with their governments' respective trade and security policies and interests, often in consultation with the assistance programs themselves. And both use a partner country's ability to supply and transfer controlled goods and know-how as a means to assess the kinds of proliferation risk associated with assistance recipient countries.[46] Then, using a combination of assessment visits alongside information from prior engagements, a "roadmap" (P2P) or "country engagement plan" is created that governs upcoming implementation in one- to two-year increments, before the process is revisited by donor country sponsors and related advisory organizations. For each assistance program, the roadmap or engagement plan includes an assessment of each country's level of export control development so that it can be placed into a maturity model category. Then, for each category, the programs maintain corresponding sets of trainings, developmental approaches, and technical tools that can be offered to assistance recipients based upon their ability to effectively use and absorb these resources. Common outreach implementation tactics

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42    The use of the term "overseen" means similar things in each of these instances. The European Commission and the U.S. Department of State both drive the selection of countries engaged, in a manner consistent with their respective foreign policy processes, with the cognizant outreach organizations. EXBS and P2P determine the overall parameters of engagement. In addition, INECP has U.S. Department of Energy National Nuclear Security Administration (DOE/NNSA) funding which is used to independently oversee and support additional outreach activities, but these activities too are coordinated with EXBS and the broader U.S. interagency export control community.

43    DEVCO is the European Union's Directorate General for Development and Cooperation. See European Commission, "About International Cooperation and Development: DG DEVCO," June 10, 2016, <https://ec.europa.eu/europeaid/general_en>.

44    "BAFA" stands for Bundesamt für Wirtschaft und Ausfuhrkontrolle, or Federal Office for Economic Affairs and Export Control.

45    For an overall comparison of these export control outreach programs and others, see Andrea Viski, "United States and European Union Strategic Trade Assistance: A Comparative Analysis," Strategic Trade Review, Vol. 5, No. 5 (Autumn 2017), pp. 93-110.

46    Both programs also use information about target countries' ability to supply and transfer goods to help implementers calibrate partners' developmental strategies with the aim of reducing proliferation risks associated with each country's ability to manufacture or transfer strategic goods. To do this, the European Commission draws upon the export control expertise of the Joint Research Center (JRC) to establish the overall framework for P2P engagement consistent with EU-wide trade- and security-based export control policies as summarized in its rating tool (January and November 2018 research interviews of JRC and P2P staff). By contrast, INECP decides who and why to engage in line with DOE/NNSA policy guidance and within the aforementioned general trade and security-focused policy parameters set by the Department of State. The bottom line is that both P2P and INECP have one process for determining which countries to engage and why, and yet another, once assistance targets are selected, to assess counterparts' systems of control. A final level of evaluation, as reflected in each program's use of maturity models, is developed and implemented by the outreach programs themselves.

used by both programs within the confines of their nearly identical maturity model approaches are described below.

*Implementation Tactics: From Unsupported to Nascent Levels of Maturity*

For both programs, governmental officials from unsupported systems are exposed to awareness raising workshops and consultations. Formalized training is rarely proposed by either program at this stage of maturity since audiences in need of skills development have not as of yet been identified or empowered. By contrast, nascent systems, in which some export control system-related tasks have been assigned, receive both basic export control awareness and skills development training. If these interventions alongside encouragement by relevant U.S., EU, or other diplomatic, security, and trade-related governmental organizations do not foster the kinds of political support for the passage of laws and development of agency capabilities needed to establish systems of control, INECP and P2P will tend to recommend to their governments a slower pace of engagement targeted only at those national audiences with specific export control functional assignments.[47] This said, both programs will from time to time continue providing assistance to countries that are clearly not institutionally prepared to adopt export controls. This is because it has been shown in some instances that repeated engagement when accompanied by higher level political encouragement can help countries develop the political will to move towards established status.

The primary hurdle to advancement when assistance recipients occupy a space between the unsupported and nascent stages of development is not so much insufficient political will as insufficient institutional capability. In other words, national leaders may understand the trade and security benefits of having a system of control in place, but might nevertheless be unable to motivate or otherwise inculcate its public and private sector institutions about the importance of doing so.[48] In fact, in instances where the political leadership on both sides of the assistance provider-recipient relationship have been unable to identify institutions with the ability to establish systems of control, recipients have been asked by donor countries to identify new national organizations to lead the export control development effort in the belief that, by dint of some combination of newly-selected organizations' legal authorities and institutional capabilities, they might stand a better chance than the prior ones at success. For INECP, this shift in target agencies is a leading cause for the repeated provision of awareness raising and basic training in countries where initially engaged institutions have proven unable or unwilling

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47    The P2P implements legal regulatory assistance on behalf of the European Union. By contrast, INECP does not provide legal-regulatory assistance. Instead, in the U.S. context, EXBS coordinates this level of assistance on behalf of the U.S. Government through the deployment of governmental and/or academic expertise.

48    In a study conducted in 2007 on why countries implement export control norms (or not), a group of researchers compared implementation-related data from dozens of countries and concluded that even when national leaders understood the strategic value to their country of export controls, they might not necessarily be able to engender institutional compliance, and thus concluded that institutional factors more than leadership variables were at the heart of countries' failure to adopt controls. Douglas M. Stinnett, Bryan R. Early, Cale Horne, and Johannes Karreth, "Complying by Denying: Explaining Why States Develop Nonproliferation Export Controls," *International Studies Perspectives,* Vol. 12, No. 3 (2011), pp. 308-26.

to champion the cause of export control system development on their own.[49]

For both programs, it is important to distinguish between countries that appear incapable of ever passing an export control law and establishing a licensing system, and those where, at some level, export control champions are in favor of establishing a system of control. Under the latter circumstances, EXBS has repeatedly enlisted INECP to engage customs or other enforcement agencies to enhance awareness in the enforcement realm on an introductory basis, with the aim that interagency discussions between, for example, a customs administration on the one hand, and a foreign or trade ministry on the other, might sufficiently raise awareness and demonstrate a country's self-interested rationale to establish a system of controls. This appeal too often involves overcoming resistance from some combination of other agencies, other branches of government, or the private sector, one or more of which may see controls as more economically burdensome than beneficial. Here again, the repetition of basic awareness-raising and training has in some instances proven useful in the long run, if only so that institutions not initially engaged might gain exposure to export control fundamentals and thus to the potential trade and security benefits of controls.[50] There is some evidence that the EU P2P Program has considered this approach as well, now that it is moving more comprehensively than before to address the enforcement aspects of export control system development through sponsorship of WCO trainings and through the creation of tailored enforcement-related curricula for foreign partners.[51]

However, even when these approaches succeed, situations arise where the subsequent buy-in of organizations needed to implement an export control law cannot be achieved and a country fails to attain an established maturity status. This critical failure point is not always foreseen by assistance providers, since the passage of a law is understandably taken as a sign of a country's willingness and ability to publish regulations, establish licensing organizations, and adapt enforcement agencies to the task of helping detect WMD-related goods that have fallen outside of regulatory control. This false positive results from the fact that, for some partner countries, it is far easier for organizations responsible for national governance of export controls to put a law in place than to establish the institutional means to implement them.

One warning sign that export control-related legal developments might not easily lead to effective implementation is, ironically, the similarity between an assistance providers' national export control system, and systems put in place by assistance recipients. As noted elsewhere in

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49   Since 2001, in at least half of INECP's activities focused on countries that originally did not (or still do not) have national systems of control, one or more of the organizations originally designated by national governments to take a lead or supporting role in the establishment of controls were replaced or took on different roles, with organizations not previously involved in the effort taking on supporting if not leading roles subsequently.

50   This means that, to increase the likelihood of success, assistance providers must identify all potentially impacted national agencies. To this end, for example, every five to seven years, EXBS conducts routine assessments of all partner countries' export control systems. The purpose of these assessments is to identify and help prioritize areas in which the EXBS program can most effectively work with the partner governments to advance mutual strategic trade controls and border security objectives and to help measure the effectiveness of EXBS's efforts over time. Author's interviews with EXBS staff, December 2018.

51   Author's interviews conducted with P2P and Dutch Customs STCE specialists in January, September, and November 2018.

economic development literature, outcomes designed to satisfy assistance providers' demands for institutional development can sometime take the form of mimicry rather than functional equivalence.[52] Developments like this make it all the more imperative that assistance providers establish baseline expectations with recipients from the outset as to the intended shape and content of assistance-prompted outcomes. This means that assistance providers must not only help partners establish the components of a system of control, but also share the kinds of criteria for system functionality with these partners that the assistance community applies when evaluating levels of export control system maturity. For example, recipients should be made aware that establishing specific export control-related capabilities within agencies and establishing requirements for information-sharing between them are key outward signs of effective implementation that demonstrate a willingness to continue maturing their systems of control after a legal-regulatory export control framework is put in place.

*Implementation Tactics: From Established to Enabled Levels of Maturity*

The U.S. INECP and the EU P2P spend the bulk of their resources providing training and other resources to countries at the established level. This is a function not only of assistance programs' desire to have the largest possible impact on risk reduction, but also of the fact that established partners tend to be the most receptive to receiving assistance in the first place. The receptivity to engagement on the part of these recipients means that assistance providers can build upon long-term partnerships and that the two sides can form expert teams capable of assessing where, how, and at what pace to deliver resources to an emerging system of control. A key aspect of this partnership is ensuring that the recipient takes on a growing share of the burden for identifying its own gaps and ensuring that the correct personnel are available and prepared to not only absorb new skill sets and procedures, but also to serve as trainers in train-the-trainer settings, so that acquired knowledge is replicated and sustained.

Ensuring that a true partnership is emerging between assistance providers and recipients is a key priority for INECP and P2P to ensure that governmental functions within recipient countries do not remain indefinitely dependent upon ongoing, outside assistance. One way to avoid this is to remain engaged with national export control champions whose relationships with erstwhile assistance providers and experts from other supplier states provide a sense of empowerment as to the importance of their newly developed systems. These relationships can, in turn, prompt champions to reinforce to their senior leadership that sustainable system development must remain a priority. It is therefore key, while jointly planning the eventual sun-setting of formalized bilateral assistance, for assistance providers to signal their willingness to continue engagement once formal assistance ceases. Ongoing interactions through exchanges and through champions' participation in third country assistance where possible provide internal validation as to the importance of effective system implementation. In other words, helping partners maintain national and international communities of experts capable of exchanging lessons learned from ever-evolving aspects of export control implementation is vital to the

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52      Lant Pritchett, Michael Woolcock, and Matt Andrews, "Looking Like a State: Techniques of Persistent Failure in State Capability for Implementation," *Journal of Development Studies,* Vol. 49, No. 1 (2013), pp. 1-18.

sustainment of emerging systems of control.[53]

Along these same lines, participation in regional and global export control workshops and conferences as well as in third country trainings led by INECP, P2P, and others provide a way for these programs, with support from EXBS and the European Commission, for individual export control champions to maintain standing amongst their peers and senior officials. Both programs will often advocate that all lead export control organizations within a country be invited to these sorts of activities to underscore the importance that assistance implementers and their sponsors attach to interagency coordination. The stakes in this are higher than often believed since, at this established level – one characterized as a steppingstone towards enablement status – a failure of interagency cooperation can stop further system maturation in its tracks and even result in substantial backsliding.

Another key tool deployed by assistance providers to highlight the work of export control champions and to highlight the imperative of higher level support is the so-called scenario-based exercise approach to engagement. Whereas training-based engagements at lower levels of system maturity emphasize transfer of specific knowledge, skills, and attitudes, these exercise-based engagements instead focus on exploring and strengthening partners' ability to implement their established systems, while underscoring for senior-level participants their countries' remaining implementation gaps. The participation of export control organizational leaders in these exercises and in their highly formalized "table top exercise" variant can be enormously helpful in ensuring continued system maturation, especially when organizational leaders are looking for ways to demonstrate to their senior leaders the importance of interagency information-sharing. As both programs have found, well-written scenarios that highlight specific licensing and enforcement gaps that might be resolved through stronger coordination can result in consensus-based commitments that address these gaps and underscore the imperative of reducing proliferation risks.

## Conclusions

Nearly two decades of export control outreach by the United States and the European Union combined with other outreach initiatives supported by Canada, Japan, South Korea, and individual European Union Member States have provided the experience needed to develop comprehensive export control maturity models. These models cannot and need not be identical to one another, both because outreach programs' competencies vary, and because, as noted above, there is no single "one-size-fits-all" way to develop systems of control from either an assistance provider or recipient perspective.

However, experience suggests that there is consistency regarding the kinds of assistance and other engagement appropriate at each level of maturity, regardless of which capabilities a given maturity model might contain. Namely, with respect to the aforementioned categories, it would

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53    This dynamic has proven vital to the group of countries that joined the NSG in the 1990s. Regular regime plenaries and technical meetings along with participation in peer-to-peer activities with INECP, P2P, and others continue to provide the rationale for working level PG staff to obtain export control funding and political support from their national leadership.

appear that:

- Unsupported to Nascent systems require awareness raising, the development of national export control champions, and a push (or an assistance provider's willingness to wait for) adequate legal-regulatory development;

- Nascent to Established systems should focus on training to develop knowledge, skills, and attitudes as well as the development of implementation plans and procedures. Work at this level can be within the various export control pillars as needed but must anticipate regularized interagency information-sharing; and,

- Established to Enabled systems should focus on train-the-trainer programs, advanced training, and scenario-based exercises to promote interagency coordination and information-sharing with the aim of revealing and filling in remaining implementation gaps. Work at this level must transcend the pillars, with export control leaders seeking constant system improvement in order to address evolving proliferation-related challenges.

There are many reasons why countries do or do not advance on a forward trajectory towards increasingly complete export control system development and implementation. Assistance programs are not generally in a position to impact the broad economic and security-related drivers that determine whether or not a country will accept assistance or whether or not it will be willing to implement increasingly effective controls over time. However, as the WCO STCE maturity model shows, and as INECP's and P2P's recent adoption of the maturity model approach illustrates, their use can give assistance providers the means to work with willing partners to establish shared developmental objectives and to then systematically shape assistance and peer-to-peer resources that align with partner needs. If cooperation stalls, these programs are now, after many years of experience, also able to identify the proximate institutional reasons why a country is not able to make anticipated advances and to adopt tactics designed to encourage renewed progress. In other words, assistance programs are now better positioned than ever to identify approaches to implementation that maximize risk reduction opportunities when they arise while conserving resources that can be used for more promising possibilities when they do not.

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## Acknowledgements

# Match or Mismatch?: Comparing Formal Requests and Offers for Assistance in Border and Export Controls

RICHARD CUPITT AND MARY VECELLIO[1]

## Abstract

*This study assesses how well formal requests to the 1540 Committee for border and export control assistance match with assistance projects and programs.[2] The article begins by reviewing typical challenges in effectively creating partnerships between states seeking assistance with states, IGOs, and NGOs offering it. Next, the authors outline key collections of assistance information and how they are insufficient in delivering a comprehensive picture of the assistance process. Thereafter, this study examines a current project called the Assistance Support Initiative and explains how it is a unique and valuable tool to the process of assistance. After outlining its methodology for collecting and analyzing data, this study compares data on border and export control assistance projects and programs with data on formal requests to the 1540 Committee for such assistance. To explore this relationship, data has been collected from two assistance sources—the 1540 Committee's Requests for Assistance website and the Henry L. Stimson Center's Assistance Support Initiative (ASI) database. In closing, this study provides some lessons learned on what data may reveal about the border and export control assistance process.*

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1  Dr. Richard T. Cupitt is a Senior Fellow and Director of the Partnerships in Proliferation Prevention Program at the Stimson Center where he oversees the 1540 Assistance Support Initiative among other projects. He has held posts at the United Nations Security Council's 1540 Committee, in the U.S. government, and in academia, as well as a serving as a consultant to governments, international organizations, and other entities. Mary C. Vecellio is a Research Associate with the Partnerships in Proliferation Prevention Program at the Stimson Center. Her research focuses on WMD nonproliferation with specific focus on radiological source security, the United Nations Security Council Resolution 1540 assistance processes, and chemical weapons-related material security.

2  Aspects of this study's analysis and methodological approach are based upon Richard T. Cupitt's paper titled "Assistance for Preventing WMD Proliferation: The Challenge of Effectively Matching Offers and Requests for Assistance" presented at the Joint Meeting of the International Security Studies Section of the International Studies Association and the International Security and Arms Control Division of the American Political Science Association from October 13-14, 2017 at American University in Washington D.C.

## Keywords

Assistance Partnerships, Border and Export Controls, United National Security Council Resolution 1540, Nonproliferation, Assistance Challenges, Weapons of Mass Destruction (WMD)

## Introduction

What happens when dozens of states request assistance in implementing border and export control obligations to prevent the proliferation of Weapons of Mass Destruction (WMD) and dozens of states and international organizations (IGOs) offer to provide such assistance?[3] Almost nothing in the eyes of the United Nations Security Council. Between 2004 and 2018, the Committee established pursuant of United Nations Security Council resolution 1540 (2004)—commonly known as the 1540 Committee—received requests for border and export control assistance from 36 States and 25 positive responses from states and IGOs.[4] Despite these positive responses to specific requests for border and export control assistance, the 1540 Committee neither received notification nor could identify the delivery of more than a handful of assistance actions. Although the experts supporting the 1540 Committee knew informally and anecdotally of states and IGOs providing directly relevant assistance, the shortcomings of the formal assistance process reverberated throughout statements made by states, IGOs, and non-governmental organizations (NGOs) during the 2016 Comprehensive Review of the resolution. Most notably, the then Chair of the 1540 Committee, Ambassador Oyarzun of Spain, stated:

> …*We need to admit that a significant number of requests are not specific enough or technically sound enough to be adequately considered. Ways should be found to meet this challenge, and thereby enhance the Committee's ability to facilitate assistance*.[5]

In other words, the processes to request and provide international assistance, including for

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3     WMD typically refer to nuclear, chemical and biological weapons and their means of delivery. In this paper, the authors include radiological devices under the rubric of WMD. Although the obligations under United Nations Security Council resolution 1540 (2004) refer only to nuclear, chemical and biological weapons, their means of delivery, and related materials, the resolution also refers to the importance of measures taken under other nonproliferation instruments, including a specific reference to protecting materials relevant to the International Atomic Energy Agency (IAEA) Code of Conduct on the Safety and Security of Radioactive Sources. Further, the International Convention for the Suppression of Terrorist Bombings also places use of a radiological weapon in the same category as a nuclear, chemical, or biological weapon. Finally, most States have submitted information to the 1540 Committee on efforts to prevent the proliferation of radiological weapons.

4     1540 Committee, "Summary Requests for Assistance from Member States Since 2010," Requests for Assistance, United Nations, <http://www.un.org/en/sc/1540/assistance/request-for-assistance/current-requests-from-member-states.shtml>; 1540 Committee, "Previous Requests for Assistance from Member States Received Before 2010," Previous Requests from Member States, United Nations, <http://www.un.org/en/sc/1540/assistance/request-for-assistance/previous-requests-from-member-states.shtml>; and 1540 Committee, "Offers of Assistance," United Nations, <http://www.un.org/en/sc/1540/assistance/offers-of-assistance/offers-from-member-states.shtml>.

5     Román Oyarzun Marchesi, "Two Years before the Mast," *1540 Compass*, No. 11 (Winter 2016), pp. 11-12, <http://spia.uga.edu/wp-content/uploads/2016/12/Compass_11-Winter2016.pdf>.

border and export controls, have fallen short of their promises. Developing assistance proposals requires a range of skills, resources, and time that many national and international actors, especially officials in low-capacity states, simply do not have. At the same time, potential assistance partners have no common application process or requirements for WMD nonproliferation assistance, and these differing requirements often remain opaque to those seeking such assistance. Essentially, mere willingness to form assistance partnerships—though necessary within the assistance process—has proven insufficient. States need help in requesting (and delivering) assistance.

Ultimately, these implementation gaps need to be addressed. If left unresolved, many states will remain vulnerable to proliferators exploiting uneven levels of border and export controls within states and across regions. As noted in the Final Document of the second Comprehensive Review of resolution 1540, a significant challenge the international community faces is an increasing risk of proliferation to and use of such weapons by non-state actors, "arising from developments in terrorism and in relation to the potential for misuse arising from rapid advances in science, technology and international commerce."[6] These vulnerabilities give improving the border and export control assistance process a greater sense of urgency. Also, failing to meet this demand for assistance not only leaves many states more susceptible to exploitation by terrorists, criminals, and other proliferators, it undermines the legitimacy of the resolution, the UN Security Council, and nonproliferation efforts of the international community more generally.

In this article, the authors aim to assess how well formal requests for border and export control assistance correlate with available assistance projects and programs. The article begins with a review of some of the typical challenges in effectively creating partnerships between states seeking assistance with states, IGOs, and the NGOs offering it. Next, the authors outline key collections of assistance information and how they are insufficient in delivering a comprehensive picture of the assistance process. Thereafter, the authors examine a current project called the Assistance Support Initiative and explain how it is a unique and valuable tool to the process of assistance. The authors then describe their methodology for collecting and comparing data on border and export control assistance projects and programs with formal assistance requests related to border and export controls. Following this, to explore trends and challenges specifically related to border and export control assistance for nonproliferation efforts, the authors assess data on assistance projects and programs and compare it with data on formal requests to the 1540 Committee for such assistance. In closing, the authors provide lessons learned on what their data may reveal about the border and export control assistance process and why this study's findings are important.

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6    1540 Committee, "Final Document on the 2016 Comprehensive Review of the Status of Implementation of Resolution 1540," United Nations, 2016, <https://undocs.org/S/2016/1038>, p. 3.

## General Challenges in Creating Assistance Partnerships

Extensive literature documents the many challenges–and frequent failures–of assistance projects.[7] These challenges can be divided into several categories, both internal and external, that can impede assistance partnerships. External factors include election cycles and changes in government, general governance capacity and effectiveness, the safety and security of stakeholders and partners, corruption, civil tensions and disturbances, among others.[8] Potential assistance partners have little control over these factors other than making decisions to cooperate or not cooperate based on larger evaluations of political and other risks. Internal challenges, however, stem from decisions one or both prospective partners make within an assistance partnership. These decisions include allocation constraints, approaches to planning, selecting domestic stakeholders, selecting foreign partners, and the interactive effects of these factors.

Allocation constraints refer to the limits that those entities who offer aid place on their largess. The providers of aid, for example, may require recipients to use, purchase, or otherwise favor goods or services specified by the provider.[9] This "tied" form of aid can prevent recipients from obtaining less expensive or higher quality goods and services sourced elsewhere, including items produced domestically that could have a greater positive multiplier effect. Perhaps more commonly, entities place a range of general conditions on their aid.[10] States offering aid bilaterally, for example, may limit their programs to assisting countries in specific (usually neighboring) regions or prohibit aid going to governments with a record of human rights abuses. Finally, donors may further restrict the use of aid or capacity-building to specific end-users for unique purposes, limiting the fungible nature of the aid.[11] For instance, states may provide advanced heat sensing equipment, but only for use in airports to screen passengers for fever-causing illnesses and not for use by firefighters to evaluate the differing intensity of heat inside buildings, fearing diversion to other ends. Those offering aid usually make these

7    See, for example, William Easterly, *The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good* (New York: Oxford University Press, 2009); Jeffrey Monaghan, *Security Aid: Canada and the Development Regime of Security (*Toronto: University of Toronto Press, 2017); and Jennifer D.P. Moroney and Joe Hogler, *Building Partner Capacity to Combat Weapons of Mass Destruction* (Santa Monica: RAND Corporation, 2009).

8    Patrick Marren, "Overseas Development Aid: Is It Working?" in Gerard McCann and Stephen McCloskey, eds., *From the Local to the Global: Key Issues in Development Studies* (London: Pluto Press, 2015), pp. 59-77; Dierk Herzer and Oliver Morrissey, "Foreign Aid and Domestic Output in the Long Run," *Review of World Economics*, Vol. 149, No. 4 (2013), pp. 723-748; and Jennifer D. P. Moroney and Joe Hogler*, Building Partner Capacity to Combat Weapons of Mass Destruction* (Arlington, VA: RAND Corporation, 2009).

9    Davis Bobrow and Mark Boyer, *Defensive Internationalism: Providing Public Goods in an Uncertain World (*Ann Arbor: University of Michigan Press, 2005) and Ferdinand Bakoup, *Africa and Economic Policy: Developing a Framework for Policy Makers* (New York: Anthem Press, 2014).

10   Ibid., Bakoup. Also see William J. Long, "Nonproliferation as a Goal of Japanese Foreign Assistance," *Asian Survey*, Vol. 39, No. 2 (Mar-Apr 1999), pp. 328-347.

11   Sanjeev K. Sobhee and Shyam Nath, "Is Donor's Concern about the Fungibility of Foreign Aid Justified?: A Panel," *The Journal of Developing Areas*, Vol. 3, No. 2 (Spring 2010), pp. 299-311; Nina M. Serafino, "Foreign Assistance in Camouflage? Measuring the Military Security and Cooperation Role," in Gordon Adams and Shoon Murray, eds., *Mission Creep: The Militarization of US Foreign Policy* (Washington, DC: Georgetown University Press, 2014), pp. 120-144.

decisions well before entering an assistance partnership, while those seeking aid must decide to accept these constraints or forego the aid (unless the partners can negotiate an exception).[12]

Assistance partners also face decisions for planning aid programs. Typically, the design of capacity-building programs fits somewhere on a continuum from a "Planners" model to a "Seekers" model.[13] Planners tend to design projects based on relevant principles, norms, or best practices identified by the international community. In contrast, Seekers design projects primarily by listening to the desires expressed by the targeted recipients of the aid, and with less regard to international principles, norms, and best practices linked to the stated objectives of the partnership. Potential partners must agree where on this continuum their planning will reside. The potential partners also need to decide whether to make the assistance more activity-based (e.g., training a certain number of persons or transferring an amount of knowledge, skills, or abilities) or more outcome-based (e.g., reduction in illicit diversion of WMD related materials risks or improvements in public health agencies pathogen detection capabilities).[14] Also, one can classify partnerships as either more systematic, such as a comprehensive and phased program to address interrelated vulnerabilities, or more *ad hoc*, often one-off projects to address a singular problem.[15]

Furthermore, deciding which set of actors constitutes the stakeholders poses a major challenge for an assistance partnership, especially when deciding which stakeholders will have ownership over the aid within the recipient state. Research suggests that without one or more domestic stakeholders exerting ownership, including finding individuals who can act as local champions for the project and the partnership, assistance efforts will generate only short-term benefits that will quickly fade.[16] At the same time, potential partners need to understand the motivations of the domestic stakeholders and what effect the reputation of these stakeholders will have on the project. For example, a key stakeholder with a reputation for incompetence may cause other important stakeholders to withhold critical resources or dampen commitment to the success of a project. Similarly, stakeholders may have divergent and conflicting motives for participating in aid projects that will likely reduce the odds of project success.[17]

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12    For examples of partners negotiating assistance see Lindsay Whitfield and Alastair Fraser, "Negotiating Aid: The Structural Conditions Shaping the Negotiating Strategies of African Governments," *International Negotiation,* Vol. 15 (2010), pp. 341-366.

13    William Easterly, *The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good* (New York: Oxford University Press, 2009) and Ferdinand Bakoup, *Africa and Economic Policy: Developing a Framework for Policy Makers* (New York: Anthem Press, 2014).

14    Ibid., Bakoup. Also see Julia Cagé, "Measuring Policy Performance: Can We Do Better Than The World Bank?" in Akbar Norman and Joseph E. Stiglitz, eds., *Industrial Policy and Economic Transformation in Africa (*New York: Columbia University Press, 2015), pp. 268-292.

15    Sanjeev K. Sobhee and Shyam Nath, "Is Donor's Concern about the Fungibility of Foreign Aid Justified?: A Panel," *The Journal of Developing Areas*, Vol. 3, No. 2 (Spring 2010).

16    Akio Hosono, Shunichiro Honda, Mine Sato, and Mai Ono, "Inside the Black Box of Capacity Development," in Homi Kharas, Koji Makino, and Woojin Jung, eds., *Catalyzing Development: A New Vision for Aid* (Washington, DC: Brookings Institution Press, 2011), pp. 179-201.

17    Ibid.

Even where national and local government agencies operate as the primary stakeholders, the partners will still need to decide what role, if any, exists for non-State actors.[18] States and IGOs offering assistance projects and programs, for example, often rely on NGOs or private companies to deliver the assistance, from technical experts to conference organizers to equipment manufacturers.[19] Several important WMD nonproliferation capacities, such as having effective export controls, may also inherently require close cooperation with industry and/or academia for success.

Finally, even a small set of stakeholders will likely require considerable attention to issues of information sharing, such as what information to share, when, and with whom, and the integrative requirements of the project across stakeholders with different integrative capacities. The interdisciplinary nature of most WMD nonproliferation projects also suggests that one or more key stakeholders need system engineering skills, especially in the case of very large projects, to ensure project success.[20]

The challenges noted above generally factor into a decision to *establish* an assistance partnership, such as decisions on which stakeholders and partners to include in the project, and in planning, designing, and executing projects. In the case of the formal requests before the 1540 Committee, however, it appears that some critical obstacle or obstacles emerge at an even earlier stage in the process, in *identifying or initially engaging* potential partners.

Not least, of course, those seeking aid need to engage with appropriate assistance partners. Sometimes potential assistance partners will come to them unbidden, as when the secretariat of a nonproliferation IGO reaches out to its members to offer aid and prompt requests that further the mandate and objectives of the IGO. At other times, those seeking aid will initiate a request independently, either to the broad international community or to specific potential partners. In either instance, those seeking assistance must consider the motives, reputation, and capabilities of the potential partners.

Equally as important, states requesting assistance need to have sufficient information on the assistance offered, and entities offering aid need to have sufficient information in the requests before they can evaluate if they should engage and seek to negotiate a partnership in the first place. For requesters to develop more detailed requests and for providers to have a better understanding of the need a state has, information on assistance actions should be easily accessible. This raises an interesting question about the assistance process: what sources of information are actually available to show what assistance projects and programs are being offered?

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18    Jane Nelson, *"*The Private Sector and Aid Effectiveness," in Homi Kharas, Koji Makino, and Woojin Jung, eds., *Catalyzing Development: A New Vision for Aid* (Washington, DC: Brookings Institution Press, 2011), pp. 83-111.

19    Galia Chimiak, "The Rise and Stall of Non-Governmental Organizations in Development," *Polish Sociological Review*, Vol. 185, 2014, pp. 25-44.

20    Sonia Ben Ouagrham-Gormley, *Barriers to Bioweapons: The Challenges of Expertise and Organization for Weapons Development* (Ithaca, NY: Cornell University Press, 2014).

## What Collections of Assistance Information are Available?

In UNSC resolution 1673 (2006), the Security Council expanded the 1540 Committee's assistance mandate to encourage a dialogue with states and international, regional, and sub-regional organizations about the availability of programs to support implementation of UNSC resolution 1540. This call for more information on assistance projects and programs was reiterated again two years later in UNSC resolution 1810 (2008).[21] Evidently, the UN Security Council views making assistance information readily available as integral to the success of the assistance process.

Consequently, there are currently several different collections of assistance information. One collection is the publicly available 2012 Annex compiled by G7 Global Partnership Against the Spread of WMD which was partially updated in 2013. This Annex marks an important starting point for understanding the extent and quality of information available to states seeking assistance.[22] It also created more opportunities for members of the Global Partnership that offer aid—members that undoubtedly control a substantial majority of the total supply of WMD nonproliferation assistance—to coordinate and collaborate and use scarce resources more efficiently and effectively. The Global Partnership, however, did not make a new Annex available until late 2018, after this article's research was completed. Prior to December 2018, the 2012 Annex did not incorporate assistance information from its partners for the last five years.[23]

Another source of assistance information is the Biological Weapons Convention Implementation Support Unit (BWC-ISU) Article X Submissions database. This database was established to help State Parties exchange information on requests for and offers of assistance in implementing Article X of the BWC.[24] However, only offers of assistance are publicly accessible on the database; requests for assistance can only be viewed in the restricted area of the BWC website which requires personalized log-in data and passwords.[25] Because this assistance information is

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21   United Nations Security Council Resolution 1673, S/RES/1673, New York, April 2006, Operative Paragraph 5 (b); United Nations Security Council Resolution 1810, S/RES/1810, New York, April 2008, UNSCR 1810, Operative Paragraphs 5 and 11 (c).

22   United States Department of State, Global Partnership Working Group, *GPWG Annual Report Consolidated Report Data 2012 Annex* (Washington DC: US Department of State, 2012).

23   The 2018 Annex can be found here: <https://www.dropbox.com/s/wp4slrrmm4hxwop/GP%20Project%20Annex%20%282018%29%20.pdf?dl=0>.

24   Article X of the Biological Weapons Convention, "The State Parties to the Convention undertake to facilitate, and have the right to participate in, the ful lest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes. Parties to the Convention in a position to do so shall also co-operate in contributing individually or together with other States or international organisations to the further development and application of scientific discoveries in the field of bacteriology (biology) for the prevention of disease, or for other peaceful purposes." Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, United Nations Office of Disarmament Affairs, 1975, <http://disarmament.un.org/treaties/t/bwc/text>.

25   "Assistance and Cooperation Database," United Nations Office of Geneva,<https://www.unog.ch/bwc/database>.

not readily or easily accessible, utilization of this database by State Parties has been reportedly low.[26]

A third source of assistance information is the 1540 Committee's Offers of Assistance website.[27] This site provides information on states and international organizations that have offered or are currently offering assistance. Additionally, the site includes a list of these providers' assistance programs. As of April 2011, 46 states and 12 international organizations have made their assistance programs readily available through this platform.[28] And yet, as mentioned previously, one of the main challenges the Committee currently faces is a lack of reporting from states and international organizations when assistance is provided informally (i.e. outside of the Committee itself):

> *The Committee and its experts are aware of several ongoing assistance programmes, including in those States that have made requests for assistance to the Committee, even though, in most instances, the existence of the programmes has not been officially communicated to the Committee.*[29]

Furthermore, the 1540 Committee does not recognize NGOs as assistance providers and, therefore, forgoes sharing a significant amount of assistance information. Ultimately, a lack of reporting from states and the omission of NGOs results in the 1540 Committee website being an incomplete source for assistance information.

Lastly, in 2016, the Institute for Security Studies (ISS) in Pretoria created a compendium of recent chemical, biological, radiological, and nuclear (CBRN) related capacity-building assistance projects and programs in Africa. This compendium consists of 57 different entities of states, IGOs, the European Union, and NGOs, which collectively provide 238 assistance projects and programs in Africa.[30] Though this data set is thorough and relatively recent, it only provides information on available assistance in African countries.

In sum, although there are sources of information on what assistance is available, these sources are insufficient in filling the information-sharing gap in the assistance process. These collections do not provide a complete picture of what assistance projects and programs are available and

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26    Daniel Feakes, "The Biological Weapons Convention and Article X Implementation: An Introductory Overview," Presentation at the International Workshop on Cooperation and Assistance under Article X of the Biological Weapons Conventions, Geneva, Switzerland, June 22, 2018, <https://www.unog.ch/80256EDD006B8954/(httpAssets)/49B90ACD9D4F854FC12582B8004233E6/$file/The+BWC+and+Art+X+implementation+-+An+introductory+overview+.pdf>.

27    1540 Committee, "Offers of Assistance," United Nations, <http://www.un.org/en/sc/1540/assistance/offers-of-assistance.shtml>.

28    1540 Committee, "General Information," United Nations, <http://www.un.org/en/sc/1540/assistance/general-information.shtml>.

29    1540 Committee, "Final Document on the 2016 Comprehensive Review of the Status of Implementation of Resolution 1540 (2016)," United Nations, <http://undocs.org/S/2016/1038>, p. 28.

30    Annie DuPre and Nicolas Kasprzyk, "CBRN Assistance and Capacity-Building Programmes for African States," Institute for Security Studies (Pretoria), 2016, <https://issafrica.s3.amazonaws.com/site/uploads/research-directory-cbrn.pdf>.

who is offering them. In order for states, IGOs, regional and sub-regional organizations, and NGOs to fully understand what assistance is out there - who needs it, who provides it, who receives it, and what it is - there needs to be a tool that stays current, is easily and publicly accessible, incorporates assistance information from a variety of institutions, and is not limited to a specific country or region. Based upon this specific need and following up from Canadian recommendations made during the 2016 Comprehensive Review of UNSCR 1540, The Henry L. Stimson Center launched, with encouragement and funding from Canada's Department of Foreign Affairs, Trade and Development (DFATD), the Assistance Support Initiative (ASI) project in 2017.[31]

## The Stimson Center's Assistance Support Initiative (ASI)

Many states have expressed the need for international support for their 1540 implementation efforts and, as demonstrated by the various sources of assistance information, many entities in the international community have offered such assistance. And yet, few effective assistance partnerships have emerged in response to these requests, as noted by the 1540 Committee.[32] The Stimson Center's Assistance Support Initiative project seeks to mitigate this problem of building effective partnerships in two ways. First, the project attempts to answer the "who" question: Who are potential assistance providers? The Stimson Center has developed a public, online, and searchable database of assistance projects and programs related to the nonproliferation of CBRN weapons and their means of delivery.[33] This database clearly identifies over 50 providers for more than 1,000 assistance projects and programs.[34] Although the Stimson Center is continually expanding and verifying the data, this constitutes a major step forward in increasing transparency for the assistance process and allows officials and civil society to gain a much better understanding of the full range of CBRN nonproliferation assistance activities by unifying project lists from various disparate sources into a single database. For states seeking assistance, knowing which partners exist and the requirements for engaging them successfully

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31    United Nations, "Security Council Adopts Resolution 2325 (2016), Calling for Framework to Keep Terrorists, Other Non-State Actors from Acquiring Weapons of Mass Destruction," S/12628, December 15, 2016, <https://www.un.org/press/en/2016/sc12628.doc.htm>.

32    In this case, "effective assistance partnerships" is defined as relationships in which provider states have a clear understanding of what kind of assistance requesting states need, and requesting states have a clear understanding about the kind of assistance that is being offered. This mutual understanding helps to establish expectations for each party and ensure the assistance is directly tending to a legitimate and recognized need. For more information, see 1540 Committee, "Final Document on the 2016 Comprehensive Review of the Status of Implementation of Resolution 1540 (2016)," United Nations, <http://undocs.org/S/2016/1038>, p. 28, 38.

33    Located at <https://1540assistance.stimson.org>.

34    This information was gathered from several different sources on assistance including: the 1540 Committee lists of States and IGOs offering assistance, the information in the Global Partnership 2012 and 2013 Annexes, information on the European Union Centres of Excellence projects, the Institute for Security Studies (Pretoria) CBRN Compendium for Africa, an online database of foundations, and participants in CBRN nonproliferation conferences.

are necessary information that was previously difficult to find (if at all).[35]

The second way the Stimson Center's ASI project aims to address the difficulty behind facilitating assistance partnerships is through its attempt to answer the "how" question: How do states engage potential assistance partners? The database provides a partial answer, particularly through linking projects and programs with Points of Contact and, where available, information on the specific requirements for assistance proposals.

It is important to note that the ASI database is constantly being reviewed, edited, and updated to ensure the content is as accurate and relevant as possible. This database can be a valuable tool to the process of assistance that is unique from the other sources of assistance information. The Assistance Support Initiative's database is purposefully designed to be easily accessible by anyone—requesters, donors, implementers, governments, IGOs, NGOs, private industry, academia, students, and global citizens. It seeks to provide as up-to-date information on assistance projects and programs as possible and to establish a historical memory of past partnerships. It has information on assistance provided by governments, IGOs, regional and sub-regional organizations, NGOs, and even academia. Finally, the database includes assistance activities that have been or currently are offered globally, regionally, or for specific states. Ultimately, the ASI database is the only tool that currently offers the fullest picture of nonproliferation assistance projects and programs worldwide.

## Methodological Approach to Analyzing Assistance Requests and Projects

Within this study, the authors review and compare two sets of assistance sources, with particular focus on border and export controls—the 1540 Committee's Requests for Assistance website and the Stimson Center's ASI database.[36] The objective is to assess how well formal requests for border and export control assistance match with available assistance projects and programs. To analyze this relationship, the authors determined that there are 79 assistance projects and 19 assistance programs within the ASI database related to border and export controls. It is important to clarify that this study has independently differentiated between assistance *projects* and assistance *programs*.[37]

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35    In addition, those entities offering assistance often want to know what assistance has been provided, a question that all partners often struggle to answer, which the database can help address.

36    1540 Committee, "Summary Requests for Assistance from Member States Since 2010", Requests for Assistance, United Nations, <http://www.un.org/en/sc/1540/assistance/request-for-assistance/current-requests-from-member-states.shtml> and 1540 Committee, "Previous Requests for Assistance from Member States Received Before 2010," Previous Requests from Member States, United Nations, <http://www.un.org/en/sc/1540/assistance/request-for-assistance/previous-requests-from-member-states.shtml> and 1540 Assistance Database, <https://1540assistance.stimson.org/>.

37    As the database creators at the Stimson Center have made clear, they are still gathering information on assistance projects and programs and inputting it onto the database. In other words, the database is still growing, which means there may be some missing information at the time of this study. For example, the database only has information on the EXBS program, and not its accompanying assistance projects that are facilitated within the program. Consequently, this study identifies trends and gaps between requests and assistance projects based on the information that is *currently available* to the authors.

This study's process to categorize border and export control entries from the database as "projects" or "programs" involves simple criteria. If an entry's title name or description includes the word "program" or "project," it is categorized accordingly. For example, the entry titled "Export Control and Related Border Security (EXBS) Program" is categorized as a program. Also, if an assistance activity is a single event (e.g. workshop or seminar), it is categorized as a project. For example, the entry titled "Training Course on Improvements to Implementation of Security Export Controls in Asia" is regarded as a project. Finally, if the database entry is somewhat ambiguous, the authors conducted independent research to find additional information on the entry to help in its categorization. Therefore, because the Assistance Support Initiative database contains 98 total assistance projects and programs, the study regards this as one dichotomous variable of 79 projects and 19 programs. To be clear, this categorization of projects and programs is distinctive; there are *no* instances in which some projects or programs are hybrids (e.g. both a project and a program). Additionally, the authors determined that of the 77 formal requests made between 2004 and 2018, 47 requests were related to border and export controls. In order to analyze these 47 requests, 79 projects, and 19 programs, the authors utilize three additional variables: CBRN risk type requested or addressed (Table 1), type of assistance requested or addressed (Table 2), region where requests were made, and region where projects and programs occurred (Table 3).

Regarding CBRN risk type, this study attributes all 47 requests, 79 projects, and 19 programs to a specific CBRN risk of Chemical, Biological, Radiological, Nuclear, or Multiple CBRN. For example, if a request asks for assistance in providing radiological equipment to enhance border security, that request is categorized as "Radiological." The purpose of this variable is to assess how states perceive border and export controls as a risk.

Similarly, this study categorizes the type of assistance involved in the 47 requests, 79 projects, and 19 programs. The Stimson Center database identifies nine types of assistance: Conference/Workshop, Knowledge Sharing/Best Practices, Infrastructure/Equipment Support, Legislative/Regulatory Assistance, Technical Training, Network Development/Outreach, Emergency Preparedness/Response, Funds, and Other. Because 22 requests, 29 projects, and 13 programs incorporate multiple types of assistance, some assistance activities are categorized multiple times. For example, if a project provides equipment and training for border protection agents on how to use that equipment, that project is categorized twice as both "Infrastructure/Equipment Support" and "Technical Training." Consequently, some requests, projects, and programs are counted multiple times; therefore, data for this variable will not equal 100%. The purpose of this variable is to reveal if the types of assistance available match with the types of assistance that are requested.

Furthermore, this study divides requests, projects, and programs into ten regions: North America, Central America, South America, Caribbean, Europe, Africa, Asia, Middle East, Oceania, and Global. Like the previous variable, because 11 border and export control assistance projects and programs are available for multiple regions, these projects and programs are categorized multiple times. For example, a single project may have the capacity to deliver assistance to both the Caribbean and Central America. As a result, some projects and programs are counted multiple times; therefore, data for this variable will also not equal 100%. The purpose of this variable is to determine if assistance is being directed where it is most expressly needed.

It is important to acknowledge that there is a discrepancy regarding the region variable—the number of countries within a region vary amongst regions. As a result, Table 3's data may not *proportionally* represent the number of requests being made regionally. To put it differently, Africa has more countries in its region than the Caribbean; thus, Africa has more countries that could submit a request. This could affect the study's analysis between formal requests for border and export control assistance and projects and programs that provided such assistance by region. To account for this discrepancy, the authors have determined the *average number of requests made by an individual country per region* by dividing the total number of requests a region made from 2004 to 2018 by the total number of countries in that region, regardless of whether a country requested assistance or not (Table 4). These regional averages are used to ensure that this study's findings represent the current condition of the assistance process as accurately as possible and allow for cross-regional comparison free from influence from the varying sizes of the regions. Ultimately, this method and these variables are intended to reveal if and how border and export control assistance requests compare with projects and programs, and, thus, identify where these assistance activities can be buttressed to establish stronger and more effective assistance partnerships.

## Comparing Requests with Projects

Upon examination of the 1540 Committee's Requests for Assistance Website, 61% of formal assistance requests address border and export control vulnerabilities. This demonstrates that states are more often than not asking for this specified assistance, which reveals a clearly perceived need. In terms of offers, by differentiating between projects and programs, this study focuses on 79 border and export control assistance projects and 19 border and export control assistance programs (independently identified by the authors).

In reviewing the 47 requests, 79 projects, and 19 programs, five main categories of CBRN risks are addressed. Table 1 portrays the distribution of the requests and the projects. It is clear that assistance requests, assistance projects, and assistance programs related to border and export controls mostly focus on addressing chemical, biological, radiological, and nuclear risks as a collective threat. It appears people regard border and export control vulnerabilities as a cross-cutting issue, especially those who are requesting this specialized assistance.

| CBRN Risk Type | Number of Border/ Export Control **Requests** Addressing Specific CBRN Risk | Number of Border/ Export Control **Projects** Addressing Specific CBRN Risk | Number of Border/ Export Control **Programs** Addressing Specific CBRN Risk |
|---|---|---|---|
| Chemical | 0 | 3 (3.8%) | 1 (5.3%) |
| Biological | 0 | 3 (3.8%) | 1 (5.3%) |
| Radiological | 5 (10.6%) | 6 (7.6%) | 0 |
| Nuclear | 0 | 5 (6.3%) | 2 (10.5%) |
| Multiple CBRN | 42 (89.4%) | 62 (78.5%) | 15 (78.9%) |

**Table 1. Border/export control assistance requests and projects by type of CBRN risk**

Additionally, the types of assistance requested and the types offered in assistance projects and programs to address border and export control vulnerabilities are separated into nine categories, as seen in Table 2. It is evident that most states request Technical Training (55.3%) and Infrastructure/Equipment Support (42.6%). Yet, of the 79 border and export control projects in the Assistance Support Initiative database, only 13 projects offer Technical Training (16.5%) and only 17 projects offer Infrastructure/Equipment Support (21.5%). Interestingly, of the 19 assistance programs available, 12 programs include Technical Training (63.2%) and 14 provide Infrastructure/Equipment Support (73.7%). Moreover, while only one request (2%) was made for a workshop or conference, 22 projects (27.9%) and four programs (21.1%) offer workshops related to border and export controls. The only types of assistance where a relatively balanced relationship exists between requests, projects, and programs are: "Legislative/Regulatory Support" with 17 requests (36.2%), 25 projects (31.6%), and five programs (26.3%); and "Funds" with four requests (8.5%), six projects (7.6%), and two programs (10.5%). Essentially, this data suggests that assistance providers may be more inclined to offer the more costly and lengthy types of assistance (like training and physical protection support) when there is a stronger and prolonged assistance partnership established between stakeholders through a program. Meanwhile, providers offering an assistance project appear to prefer to engage in partnerships to share technical knowledge which does not require as great of a commitment in terms of time and resources.

| Type of Assistance Requested for Border/ Export Control Projects | Number of Border/ Export Control Assistance **Requests** Addressing Specific Types of Assistance | Number of Border/Export Control **Projects** Addressing Specific Type of Assistance | Number of Border/Export Control **Programs** Addressing Specific Type of Assistance |
|---|---|---|---|
| Conference/Workshop | 1 (2%) | 22 (27.9%) | 4 (21.1%) |
| Knowledge Sharing/ Best Practices | 4 (8.5%) | 13 (16.5%) | 2 (10.5%) |
| Infrastructure/ Equipment Support | 20 (42.6%) | 17 (21.5%) | 14 (73.7%) |
| Legislative/Regulatory Assistance | 17 (36.2%) | 25 (31.6%) | 5 (26.3%) |
| Technical Training | 26 (55.3%) | 13 (16.5%) | 12 (63.2%) |
| Network Development/ Outreach | 0 | 15 (19%) | 4 (21.1%) |
| Emergency Preparedness/Response | 0 | 4 (5.1%) | 1 (5.3%) |
| Funds | 4 (8.5%) | 6 (7.6%) | 2 (10.5%) |
| Other | 1 (2%) | 0 | 0 |

**Table 2. Border/export control assistance requests and projects by type of assistance**

It is also interesting to note that there are no requests for Network Development/Outreach or for Emergency Preparedness/Response regarding border and export control vulnerabilities; and yet, 15 projects (19%) and four programs (21.1%) provide network development, and four projects (5.1%) and one program (5.3%) offer emergency preparedness assistance. This raises several interesting questions: Are states aware that network development and emergency preparedness are types of assistance that can be requested? Do they perceive network development as a need? Are partners that offer assistance driving these projects to meet their own needs or have they identified needs unperceived by requesting states?

Overall, Table 2 appears to reveal positive and negative findings of the assistance process. On a positive note, all types of requested assistance are being provided for. However, there is an overwhelming disproportion—with the exception of Legislative/Regulatory Support and Funds—between the number of requests for specific types of assistance and the number of projects and programs that provide those specific types of assistance.

Furthermore, to better understand the relationship between the 1540 Committee's formal requests for assistance and the ASI database's border and export control assistance projects and programs, it is valuable to explore how many requests have been made per geographic region and how many assistance projects and programs are available per region. This data is important because it can reveal if assistance is offered where it is most expressly needed. Table 3 shows the distribution of border and export control requests, projects, and programs throughout ten

regions.

The most evident discrepancy regionally is amongst Asia, Europe, and Africa. Between 2004 and 2018, nine requests (19%) for border and export control assistance were made from Asia. And yet, 26 assistance projects (32.9%) and eight assistance programs (42.1%) are available in the region. Similarly, five requests (10.6%) were made from European countries, while 16 assistance projects (20.3%) and two assistance programs (10.5%) are available in Europe. Meanwhile, 15 requests (32%) were made from African states while only 13 projects (16.5%) and two programs (10.5%) are available in Africa. In other words, Asian and European states are receiving a large amount of assistance for border and export controls, most of which they are not requesting through the 1540 Committee process. African states, on the other hand, are clearly expressing a strong need for border and export control assistance but the number of assistance projects and programs available for this region meets only a little over half of this perceived need.

| Region | Number of **Requests** for Border/Export Control Assistance from 2004 to 2018 | Number of Border/ Export Control Assistance **Projects** | Number of Border/ Export Control Assistance **Programs** |
|---|---|---|---|
| North America | 3 (6.4%) | 1 (1.3%) | 0 |
| Central America | 2 (4.3%) | 5 (6.3%) | 0 |
| South America | 2 (4.3%) | 3 (3.8%) | 0 |
| Caribbean | 1 (2%) | 4 (5.1%) | 0 |
| Europe | 5 (10.6%) | 16 (20.3%) | 2 (10.5%) |
| Africa | 15 (32%) | 13 (16.5%) | 2 (10.5%) |
| Asia | 9 (19%) | 26 (32.9%) | 8 (42.1%) |
| Middle East | 5 (10.6%) | 3 (3.8%) | 1 (5.3%) |
| Oceania | 5 (10.6%) | 1 (1.3%) | 0 |
| Global | Not Applicable | 19 (24.1%) | 9 (47.4%) |

**Table 3. Border/export control assistance requests and projects by region**

The disproportion between requests, projects, and programs for the Oceanic region is also worth noting. Five (10.6%) out of 47 total border and export control requests have been formally submitted by Oceanic states. Yet, only one border and export control project out of 98 total projects and programs—approximately 1%—is available in Oceania. Similarly, the Middle Eastern region has submitted five requests (10.6%), but only three projects (3.8%) and one program (5.3%) are available in the region. For both Oceania and the Middle East, less than half of the regions' needs for border and export controls are addressed with available assistance. A final detail to highlight is that the Caribbean has only submitted one request (2%) since 2004 and yet four projects (5.1%) are in the region. Even though the Caribbean does not have access to border and export control assistance programs, the region is still receiving over 50% more assistance than requested while Oceania and the Middle East struggle to get half their needs addressed.

To account for the discrepancy in the varying number of countries within each geographic region (and thus the discrepancy in Table 3's data), this study has also collected data on the *average* number of requests for border and export control assistance made by states per region (including countries within each region that did not submit a request), as seen in Table 4. For the most part this data supports the authors' conclusions drawn from Table 3, apart from the Middle Eastern region. Table 4 reveals that from 2004 to 2018, on average 0.26 requests for border and export control assistance were made from an Asian state. Also, on average 0.11 assistance requests were made by a European state. Meanwhile, an average of 0.30 requests were made from an African state. On average, Africa has submitted more formal requests than Asia and Europe, yet both receive significantly more assistance than Africa. Similarly, Oceania has submitted an average of 0.33 requests, which is the second highest requesting region in the world, but only has one assistance project in its region.

| Region | Average Number of **Requests** |
|---|---|
| North America | 1 (too small of sample size) |
| Central America | 0.29 |
| South America | 0.15 |
| Caribbean | 0.04 |
| Europe | 0.11 |
| Africa | 0.30 |
| Asia | 0.26 |
| Middle East | 0.36 |
| Oceania | 0.33 |
| Global | Not Applicable |

**Table 4. Average number of requests for border/export control assistance by states per region**

What is most revealing about the data in Table 4 is the fact that the Middle East is the region with the most requests for border and export control assistance with an average of 0.36 requests from 2004 to 2018. Had this study not accounted for the different number of countries per region, the data from Table 3 on its own would have suggested that Africa was the region with the highest concentration of requests—15 requests in comparison to the Middle East's five requests. Yet, despite the Middle East's average number of requests being the highest relative to other regions, it only receives three assistance projects and one assistance program.

To sum up, this data reveals a couple different trends. For example, there is evidence of proportionate matching between requests and projects and programs within some regions. South America and Central America's requests-to-projects-and-programs ratio are balanced— both regions are receiving a proportionate amount of assistance to their expressed needs. On the other hand, there is a clear mismatch amongst some regions between how much assistance a region is requesting and how much assistance they are receiving—namely Asia, Europe, Africa, Oceania, the Middle East, and the Caribbean. Nonetheless, for the regions that are not receiving

enough assistance to match their needs, the projects and programs that are offered globally—19 projects (24.1%) and nine programs (47.4%)—can potentially mitigate this problem. It is also valuable to highlight the fact that every region has at least one assistance project or program to address border and export control vulnerabilities. Evidently, both assistance requesters and providers recognize some level of importance in enhancing border and export controls across the globe.

## Conclusion: Lessons Learned and Next Steps

The prior discussion on how border and export control assistance requests compare with assistance projects and programs reveals common trends within the assistance process. This discussion also illustrates some of the problems facing the international community if it wishes to increase the initiation and effectiveness of assistance partnerships in response to requests for such assistance. These issues go beyond some of the internal and external challenges described earlier in establishing assistance projects and programs more generally.

First, at least for those states submitting assistance requests to the 1540 Committee, the number of assistance projects and programs for border and export controls that offer the type of assistance they want and need seem to be fewer or of less interest than the number of assistance projects that entities offer and supply. The data suggests that states are most interested in training programs, equipment, and physical protection capabilities. It appears that assistance programs are adequately offering these types of assistance. The fact that programs predominantly offer Technical Training and Infrastructure/Equipment Support while projects largely do not may indicate that providers prefer to supply these types of assistance when there is a longer-term commitment within a partnership. However, there is a significant number of projects and programs that provide workshops and opportunities to share best practices despite a minimal expressed need by states for this assistance. This trend is most likely because workshops and knowledge sharing opportunities involve less commitment and resources on the assistance provider's part. A workshop can be a relatively low cost, one-time event.

In addition, it is clearly evident there is a regional imbalance regarding how much border and export control assistance is requested and how much assistance is available. These disproportions may be provider-driven. Assistance providers may have their own perceptions of where globally the greatest threats and risks are in terms of border and export controls. However, if this is the case, then assistance providers' perceptions of need may be inaccurate and require some adjustment, as virtually every state has radioactive materials, sensitive chemicals, diagnostic labs, and other items or facilities at risk of exploitation by terrorists, other criminals, and even state proliferators. This study's data suggests providers view Asia and Europe as the greatest risks, but the Middle East, Oceania, and Africa have, on average, expressed a greater need for border and export control assistance. The Assistance Support Initiative's database can prove valuable in this respect because it can raise awareness amongst assistance providers of what types of assistance are currently available and where they are being delivered. The database can be an effective tool to prevent the duplication of assistance efforts and adjust the proportion of projects and programs available regionally.

Furthermore, by offering to accept requests for assistance, the 1540 Committee sets an expectation

that it will match states with an assistance provider. By not meeting these expectations, the 1540 Committee unintentionally hampers enhancing border and export controls in states. States that formally request assistance must wait for the 1540 Committee to facilitate a match that may never occur. In the meantime, their border and export control systems remain vulnerable. The Committee needs to facilitate timely and effective assistance partnerships; otherwise, the Committee itself may inadvertently act as an impediment to the implementation of obligations under UNSC resolution 1540.

Finally, and more generally, confusion reigns within the assistance process. Certainly, assistance providers receive many informal requests for assistance outside of the 1540 Committee. Frequently, assistance providers cannot or do not share these informal requests, which easily results in requests languishing in the wrong place and going unaddressed. What is more, as discussed at the 2016 Comprehensive Review, the requests rarely provide the specific information most often sought by those offering aid.[38] For instance, Ethiopia's request for border and export control assistance did not include a point of contact.[39] From the perspective of those seeking assistance, a bewildering range of projects and programs exist. For instance, the Assistance Support Initiative's database has over 1,000 assistance projects and programs worldwide. However, prior to this database, the information had not been centrally located or easily found, and the process to apply for such assistance is challenging. Essentially, states seeking assistance must navigate a veritable assistance maze. Taken together, it comes as no surprise that nonproliferation assistance processes related to border and export controls, especially those of the 1540 Committee, have not met the increasingly urgent need for all states to fulfill their WMD nonproliferation obligations and commitments under UNSC resolution 1540.

Nevertheless, it is important to qualify these lessons learned since this study collects half of its data from the Assistance Support Initiative database, a source that is still gathering and inputting assistance data. For example, the EXBS Program is included in the database, but the Stimson Center has not yet inputted data on the program's accompanying assistance projects. Consequently, this study's findings and lessons learned may change as the database grows and is used by assistance stakeholders. As discussed earlier in the study, this limitation of data is not a unique or novel challenge when exploring the current state of the nonproliferation assistance process. However, this study's findings are based upon *the most comprehensive source of assistance information currently available*. What is more, it is the authors' hope that their findings *do* eventually change because that change can act as an indicator that greater awareness has been raised about these implementation gaps and that concrete steps have been taken to address them.

Ultimately, this study on assistance and lessons learned is important because border and export controls are an integral tool in implementing a comprehensive CBRN nonproliferation strategy, the obligations of UNSC resolution 1540 (2004), and various binding UNSC nonproliferation

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38    1540 Committee, "Final Document on the 2016 Comprehensive Review of the Status of Implementation of Resolution 1540 (2016)," United Nations, <http://undocs.org/S/2016/1038>, p. 3.

39    1540 Committee, "Points of Contact," United Nations,<http://www.un.org/en/sc/1540/assistance/points-of-contact.shtml>.

sanctions resolutions. And to be most effective in preventing proliferation and eliminating safe harbors for illicit activities, border and export control systems need to be applied uniformly and consistently across states, regions, and the world.[40] If not, then:

> *Nonstate actors might use any state as a route for illicit trafficking or for export, transit, transshipment, or reexport of related materials for prohibited purposes. No state is completely immune to serving as a place where nonstate actors can take advantage of legislative and regulatory differences or shortfalls in implementation to accomplish their ends.*[41]

If states needing assistance are not receiving it, then their borders and export systems remain susceptible to CBRN proliferation by terrorists, criminals, and other proliferators. And if the assistance is not coordinated to foster uniformity and consistency, susceptible borders and export systems can potentially result in nonstate actors using these vulnerabilities to expand the scope of their nefarious activities, including in the trafficking of CBRN-related materials. If efforts are not made by both providers and requesters to mitigate the implementation gaps in the assistance process and facilitate more effective partnerships relating to border and export controls, CBRN nonproliferation will continue to threaten global trade, security, and stability.

In terms of next steps for the ASI project, the Stimson Center and the Government of Canada recognize that the database presents a comprehensive picture of the existing projects and programs that might become platforms for new assistance partnerships. Therefore, the Stimson Center continues to research, update, and refine the database. Additionally, much of the Point of Contact information for each entry currently links to the UNSCR 1540 Points of Contact. The Stimson Center will upgrade this contact information to include Points of Contact for the assistance provider and the assistance implementer for each project and program entry on the database. Also, given how large the database already is, the Stimson Center will create a video (with subtitles translated into the six UN languages) on how to most effectively use the database. If the database continues to be updated with new assistance information and when these upgrades are implemented, the authors believe the Assistance Support Initiative database can be an effective tool to reduce redundancy and resolve the systemic lack of information-sharing within the assistance process. Ultimately, it is the authors' hope that this study and the ASI database raise awareness of the full range of available assistance projects and programs to help all stakeholders identify gaps between the priorities of those seeking assistance and the aid on offer to improve strategies for creating effective assistance partnerships.

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[40]  Michael David Beck, Richard T. Cupitt, Scott A. Jones, and Seema Galhaut, *To Supply or to Deny: Comparing Nonproliferation Export Controls in Five Key Countries (*Frederick: Aspen Publishers, Inc. 2003), Preface.

[41]  "UNSCR 1540 Review Conference," *1540 Compass*, Winter 2016, pp. 6-7, <http://spia.uga.edu/wp-content/uploads/2016/12/Compass_11-Winter2016.pdf>.

# Where There's a Way, There's a Will: The World Customs Organization's Capacity-Building in the Field of Strategic Trade Control Enforcement

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## Abstract

*The World Customs Organization's (WCO) approach to capacity-building in the domain of strategic trade control enforcement has been exceptionally effective. This article outlines what the WCO has done, documents some of its impacts, and examines factors contributing to its effectiveness. One of these factors has been a focus on influencing senior policy makers at the national level in addition to upgrading working-level skills and abilities. This strategy in turn owes its success, at least in part, to the WCO's legitimacy and norm-setting ability as a member-driven international organization, a customizable approach adaptive to various national circumstances, adherence to universal international mandates such as United Nations Security Council resolution 1540, and the ability to couple training and operational activities.*

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## Keywords

Capacity-building, export control, strategic trade control, World Customs Organization, nonproliferation, customs, enforcement

## Introduction

The United Nations suggests that capacity-building can be defined as: "...the process by which individuals, groups, organizations, and communities increase their abilities to: (1) perform core functions, solve problems, define and achieve objectives; and (2) understand and deal with their development needs in a broad context and in a sustainable manner."[4] Importantly, according to this definition, capacity-building is something these organizations do themselves, not something done to them. Certainly, they may seek and obtain assistance, but capacity-building must be undertaken by the organizations seeking to improve; they cannot merely be passive recipients of training. This article will examine the WCO's efforts to assist national Customs administrations seeking to build their capacities to enforce strategic trade controls. It will summarize what the WCO has done, assess the impacts of these efforts, and offer some possible explanations for the extaordinary effectiveness of the program.

## What the WCO has Done

Despite its importance, combatting illicit trafficking in the multitude of strategic commodities related to Weapons of Mass Destruction (WMD) and their delivery systems is a particularly challenging topic for Customs. At the 31st Session of the WCO's Enforcement Committee, in March 2012, several WCO Members took the floor, outlined the challenges they faced in relation to enforcing strategic trade controls (STCs), and called upon the WCO to do more to help them. The Enforcement Committee, which represents the heads of Customs enforcement of 182 Member States, then established the WCO Security Program. Since its inception, the program has focused on three commodity-based areas of work: precursor chemicals for improvised explosive devices, small arms and light weapons, and strategic commodities, with an emphasis on materials and equipment related to chemical, biological, and nuclear weapons and their means of delivery, in keeping with United Nations Security Council resolution (UNSCR) 1540. Under this Security Program, the Strategic Trade Control Enforcement (STCE) Project first produced an Implementation Guide and a comprehensive training curriculum for Customs administrations.[5] It also conducted Operation Cosmo in 2014, the first global law enforcement operation focused on strategic goods. The WCO then launched a long-term programme employing the Implementation Guide, training curriculum, and lessons learned from Operation Cosmo to develop global STCE capacity and raise the priority of this important topic within Customs administrations. When the WCO launched the second global STCE operation,

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4    United Nations Development Programme, Management Development and Governance Division, 1998, <http://www.undp.org/>.

5    World Customs Organization, "WCO Strategic Trade Control Enforcement Implementation Guide," <http://www.wcoomd.org/en/topics/enforcement-and-compliance/instruments-and-tools/guidelines/wco-strategic-trade-control-enforcement-implementation-guide.aspx>.

Operation Cosmo 2 in 2018, it was the largest operation ever conducted by the WCO with 114 participating countries and international organizations.

## WCO STCE Curriculum and Implementation Guide

The STCE Program is the WCO mechanism and toolset through which Customs administrations can access training and materials to support their implementation of the customs elements of UNSCR 1540. The curriculum contains high-level briefings for senior managers on strengthening national STCE efforts and modules for operational personnel covering chemical, biological, radiological, and nuclear (CBRN) materials and related dual-use materials and equipment. In addition, it includes training modules on applying risk management and post clearance audit in the context of strategic trade control enforcement.

The WCO STCE curriculum is designed to be modular and adaptable in level and scope. First, a STCE Maturity Model (included in the Implementation Guide) is used as a simple diagnostic tool to identify specific gaps in national STCE systems and to suggest actionable next steps. The assessed STCE maturity level also guides selection of suitable training modules from the curriculum. For example, training in countries with a strong foundation for strategic trade control enforcement can focus on upskilling operational personnel, but training for countries without established regulations, policies, and procedures would focus first on senior-level policy makers and decision-makers and may initially promote effective implementation of sanctions and embargos. To this end, in addition to training, a WCO STCE team conducts meetings with senior officials to promote the development of a plan for the establishment and implementation of a strategic trade control regime within their Customs administration.

Secondly, the WCO STCE curriculum is designed and intended to be adapted based on each country's individual trade flows. To this end, the WCO provided its Members a Strategic Trade Atlas.[6] The Strategic Trade Atlas, developed by the United States Department of Energy's Argonne National Laboratory and the European Union's Joint Research Centre originally to support Operation Cosmo and updated to support Operation Cosmo 2, provides a high-level snapshot of each country's principal imports, exports, and trading partners for goods classified under Harmonized System (HS) Headings associated with strategic goods according to the STCE Implementation Guide.[7] The WCO uses this information to tailor the commodity-based training, which is also organized according to the HS, to focus on goods most relevant to each country. Customs administrations can also use it to guide company selection for outreach and audit and risk profile development for targeting and risk management.

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6    Cristina Versino, Peter Heine, and Julie Carrera, "Strategic Trade Atlas: Country-Based Views," European Commission Joint Research Center, 2018, <http://publications.jrc.ec.europa.eu/repository/handle/JRC111470, 2018>.

7    World Customs Organization, "What is the Harmonized System," <http://www.wcoomd.org/en/topics/nomenclature/overview/what-is-the-harmonized-system.aspx>.

## Accrediting STCE Expert Trainers

The WCO does not have the staff or resources to conduct training in all countries of the world. Instead, the WCO employs an accreditation model whereby Member Customs administrations nominate personnel to become WCO Accredited Customs Expert Trainers. The WCO announces Accreditation workshops through letters to Customs Directors General inviting them to nominate personnel matching a very specific profile which looks for duties and experience relevant to strategic trade control and to training. In addition to helping identify the most suitable candidates, this process helps ensure that the candidates' management understands and supports the STCE mission. This, in turn, sets expectations for the nominated individuals from the WCO and from their own Customs administrations, paving the way for them to establish STCE training programs in their countries.

The WCO has conducted twelve STCE Accreditation Workshops, producing a large number of pre-accredited trainers poised to complete the full accreditation process, and forty-eight Accredited Expert Trainers who have already done so. The WCO's Accredited Customs Experts (ACES) database now includes 135 accredited and pre-accredited STCE Expert Trainers from 51 different countries, spanning five of the six WCO regions.[8]

Critically, when Customs Directors General nominate their personnel to become ACES, they also commit to making them available to support as many as three WCO STCE Missions over the following three years. Through this mechanism, many of these accredited expert trainers have helped the WCO and others to deliver dozens of national and regional workshops, with several more already scheduled. Each training event provides opportunities for additional pre-accredited ACES to complete their accreditation, a virtuous cycle that further increases the WCO's capacity to build capacities.

## Operations

Operations form a very important component of the WCO's activities in general across the full range of Customs functions. Operations separate theory from practice and represent the true test of individual and collective capacities. Operation Cosmo was conducted early in the STCE Project (starting in 2014 and concluding in 2015) and served to raise awareness of strategic trade control and to reveal operational challenges. These experiences informed the STCE trainings and capacity-building efforts that followed and helped set the stage for Operation Cosmo 2, conducted in 2018.

Like Cosmo 1, Cosmo 2 was a global operation (114 countries participated – 25 more than participated in Cosmo 1) to target strategic goods during export, transit and transshipment, and promote cooperation among customs administrations. Participants reported conducting over 30,000 risk assessments during the operation's three week high-intensity period, resulting in

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8    These regions are: South America, North America, Centeral America and the Caribbean; Europe; Far East, South and East Asia, Australasia and the Pacific Islands; North of Africa, Near and Middle East; West and Central Africa; and East and Southern Africa. See World Customs Organization, "Membership," <http://www.wcoomd.org/en/about-us/wco-members/membership.aspx>.

over 8,000 physical inspections, 18 seizures, and the initiation of nine criminal investigations. In addition, participants cooperated internationally, sending 33 Customs Action Messages related to suspicious shipments on STRATComm, the WCO's secure communications platform for cases involving strategic commodities.

Many countries reported that national STCE courses helped them prepare for the operation and strengthened their ability to perform audit-based controls, risk management, and analysis of strategic goods. In addition, there was widespread appreciation for the ease of communication with Customs authorities in other countries.

However, countries also reported continuing challenges, especially their need to improve risk management of strategic goods, lack of domestic STC legislation, lack of quick and reliable technical reachback, and the need to keep training new personnel on STC. In addition, participation in the operation was not uniformly high, with many countries demonstrating little progress in their strategic trade control commitment or capacity. Cosmo 2 provided the WCO with information and understanding on what countries need to move from classroom-based theory to practical fieldwork and provided the WCO as well as the participating countries with a path-forward for future work.

## Harmonized System (HS) Reform

The difficulty with attempting to use the HS for strategic trade control enforcement was identified as a major issue at the WCO's first Strategic Trade Control Enforcement Conference in October 2012, and this is a challenge beyond the ability of countries to solve individually. As part of the overall STCE effort, the WCO Secretariat has introduced a set of possible amendments to the HS nomenclature related to dual-use items starting with the 49th Session of of the HS Review Subcommittee (RSC) in November 2015. These reforms, which focused on goods identified in the STCE Implementation Guide that were difficult to classify or which were classified under residual subheadings along with many common goods, should facilitate the monitoring and control of trade in strategic items.

## Impressive Results

The WCO's STCE capacity-building efforts have resulted in the establishment of a global network of STCE trainers and an increase in the priority afforded to strategic commodities within many Customs administrations. More countries participated in Operation Cosmo 2 than in any other WCO operation to date, and many STCE ACES have established STCE training programs within their home administrations, often without further assistance from the WCO, as the following United Kingdom case study nicely illustrates.

*United Kingdom Case Study*

The United Kingdom launched a nation-wide strategic trade control upskilling campaign following WCO STCE accreditation of officers from the UK Border Force's Heathrow Counter Proliferation Team (CPT) and from Her Majesty's Revenue and Customs (HMRC).

Over the course of several training events, UK trainers have reached frontline Border Force officers from various ports and airports, as well as officers from HMRC's National Clearance Hub who set and monitor profiles for strategic goods. In addition to employing the WCO STCE Implementation Guide and training materials in these events, HMRC's Risk and Intelligence Service provided assessments of the high- risk goods and destinations relevant to the ports, and training modules were selected to focus on these commodities in particular. Additional sessions detailed local detention and seizure processes and the compelling national and international drivers requiring effective strategic trade control.

As evidence of the effectiveness of the training, one of the airport teams made two detentions during a two-day training event, obtained the relevant technical information, and referred the cases to the licensing authority for a ruling. Since the training events, all participants have been provided access to SPIRE, the UK Export Control Organization's online licensing system, to enable smoother referrals for licensing ratings and to facilitate effective risk profiling by the officers, exactly as suggested in the WCO's Implementation Guide and training materials.

These efforts by WCO STCE Accredited Customs Experts result in more than training programs; they can also result in substanatial systemic reforms designed to increase the Customs administration's level of STCE maturity, as the Pakistan case study below well illustrates.

*Pakistan Case Study*

While Pakistan has had comprehensive STC legislation on the books for many years, major strides toward implementation within Pakistan Customs did not begin until June 2016 when an officer from Pakistan's Customs administration was first exposed to STCE at a WCO accreditation workshop.

Within a span of the following two years, the administration has been able to establish an impressive STCE training program as well as create a National Counter Proliferation Unit implementing WCO STCE guidelines. The success story of Pakistan Customs is a result of the administration's active participation in the STCE Program by sending numerous officers to accreditation workshops, hosting WCO national STCE workshops, embedding STCE curriculum into its national capacity-building training courses, delivery of national trainings and seminars not only to customs managers and frontline officers, but also to importers and customs brokers, and above all, the strong commitment of senior management.

Pakistan Customs hosted two STCE national workshops conducted by WCO staff, and the Directorate General of Training and Research also embedded STCE curriculum into different training courses meant for capacity-building of mid-career and entry level officers both for managerial and frontline streams. As of June 2018, Pakistan Customs has a pool of five accredited and five pre-accredited STCE trainers. In the span of one and half years, the Directorate General has delivered various STCE trainings and seminars attended by 83 customs managers, 299 frontline officers, and 1,232 importers and customs brokers.

Thanks to senior management engagement, on September 4, 2018 the Federal Board of

Revenue (FBR) issued an administrative order for the creation of a National Counter Proliferation Unit (NCPU) at Karachi and a Counter Proliferation Training Cell at the national training facility. The unit has been tasked, in close alignment with WCO STCE guidelines, to create counter proliferation teams at all Customs field offices which are clearing exports, update the national risk management system, support Directorate General of Post Clearance Audit in selecting and conducting audits of companies engaged in the export of strategic goods, and coordinate capacity-building activities in the area of STCE. The NCPU started working under a WCO STCE ACE as its Program Director and established two counter proliferation teams at the two major ports of Karachi which clear more than 85% of Pakistan's exports. The NCPU is currently analyzing Pakistan's national database with the Strategic Trade Atlas to update the national risk management system, helping counter proliferation teams in conducting physical examinations, providing "reachback" support to field offices, and functioning as the Customs national focal point for the national licensing authority, the Strategic Export Control Division (SECDIV).

These undertakings by Pakistan Customs mark clear and important progress toward establishing effective strategic trade control enforcement capabilities as measured by the STCE Maturity Model.

The STCE Program is recognized as the marque programme for strategic commodity capacity-building for Customs adminstrations worldwide. This has been recognised by United Nations Office for Disarmament Affairs (UNODA) and the UNSCR 1540 Group of Experts. WCO STCE also supports the Organization for the Prohibition of Chemical Weapons' (OPCW) annual Chemical Weapons Convention Controlled Chemical Training.

The STCE Program has also been a success story from a policy perspective. The WCO STCE training curriculum and Implementation Guide have been adopted by the Proliferation Security Initiative (PSI), by the export control outreach programs of the European Union and the United States, and by numerous Customs administrations internally. This emerging global standard for Customs training in the field of STCE, in turn, can accelerate adoption by remaining countries. As with many international standards, the more countries adopt it, the more effective the global system will be. The initiative has already led some participating countries to embark on policy enhancements, with some introducing dedicated Counter Proliferation Units, setting up counter proliferation targeting cells, and running regular STCE National Training and STCE-focused enforcement operations.

## Summary and Conclusion

The track record of the WCO in the field of STCE capacity-building is impressive, especially considering some of the common criticisms of capacity-building efforts generally, such as low rates of adoption, lack of measurable impact, and lack of sustainability.[9] At least in part, the WCO's success stems from its status as a member-driven international organization. Thus, the

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9    See, for example, "Aid Workers Talk Endlessly about Capacity-Building - But What Does it Really Mean?," *The Guardian*, November 10, 2016.

WCO acts on behalf of its Members and for its Members, bypassing the difficulties of donor-recipient relationships. The WCO is a resource available to Members seeking to improve their capabilities and adhere to international norms, not an exogenous force telling Members what they should do.

Also likely contributing to the success of the effort is the modular flexibility of the approach. Specifically, the training curriculum can be adapted to different levels of STCE system maturity and the commodity focus can be tailored to national priorities and trade flows. A key aspect of this flexibility is the ability to focus on decision-makers responsible for system design and resource allocation, not just implementers. Especially because STCE is not a traditional priority for Customs administrations, this senior policy-level commitment and political will is vital to success, providing essential guidance, motivation, and support to implementers.[10]

It is often said that where there is a will there is a way, but the reverse can also be true. According to Morrissey and Verschoor, decision-makers' assessments of their capacity to implement reforms will influence their *a priori* willingness to make commitments.[11] By providing a way to more easily enforce strategic trade controls, the WCO may actually increase the chances that Customs administrations are willing to try. Continued advocacy by the WCO for the importance of the security mission to Customs administrations and related capacity-building is still urgently needed, as the remaining challenges observed during Operation Cosmo 2 illustrate.

10    Derek Brinkerhoff, "Where There's a Will, There's a Way? Untangling Ownership and Political Will in Post-Conflict Stability and Reconstruction Operations," *The Whitehead Journal of Diplomacy and International Relations*, Vol. 8 (Winter/Spring 2007).

11    Oliver Morrissey and Arjan Verschoor, "What Does Ownership Mean in Practice? Policy Learning and the Evolution of Pro-Poor Policies in Uganda," in Alberto Paloni and Maurizio Zanardi, eds.,*The IMF, World Bank and Policy Reform* (London: Routledge, 2006).

# United Nations Security Council Resolution 1540 Implementation: More of the Same or Brave New World?

SEEMA GAHLAUT[1]

## Abstract

*After fourteen years of outreach on United Nations Security Council resolution 1540, most countries understand their obligations under the resolution. For most states, whether they act upon it depends on (a) political willingness to prioritize such expenses over other national needs; (b) the availability of assistance on "how" and "in what order." This article seeks to explore how implementation assistance can be improved in order to move the willing but capability-challenged states towards action. It identifies some common challenges faced by donor states, recipient states, and implementers or assistance providers. It also outlines some preliminary solutions to the challenges that cause frustration among all participants in the assistance process and raise concerns about its sustainability.*

## Keywords:

United Nations Security Council resolution 1540, implementation, assistance, capacity-building, sustainability, export controls

## Introduction

United Nations Security Council resolution 1540 is a rare international law in that it is mandatory for all United Nations Member States, brings together obligations under numerous single-technology focused treaties and agreements, focuses attention on the activities of

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non-state actors, and requires Member States to go beyond mere declarations of support for nonproliferation. It has brought sustained international attention on the issue of national level implementation of nonproliferation obligations that UN Member States have already pledged to under various treaties and conventions at the national level. This article identifies the main achievements of resolution 1540, some of the practical challenges to its implementation, and proposes some modest solutions that might help Member States in meeting their most pressing obligations under the mandate—specifically focusing on how implementation assistance can be improved in states that wish to strengthen their strategic trade programs but are challenged in terms of capability.

## 1540 Achievements: Sustained International Focus on "Doing Nonproliferation"

Many assistance-providers have provided explanations for why the implementation of resolution 1540 is important for peace and prosperity. For example, the 1540 Group of Experts, several UN Member States who have provided funding and/or expertise (e.g., U.S., Canada,  European Union, Japan, and Australia), and numerous inter-governmental (e.g., International Atomic Energy Agency (IAEA), Organization for the Prohibition of Chemical Weapons (OPCW), World Health Organization (WHO), and the World Customs Organization) and non-governmental organizations (think tanks and universities) have done a creditable job of convincing large and small economies around the world that regulating dual-use strategic technology (materials, equipment, expertise) will not be economically burdensome or impede trade. Indeed, preliminary research suggests that having such regulations might even facilitate trade and investment in the advanced technologies sectors.[2]

Given this international focus, almost all countries have felt the pressure to explain whether and how they "do nonproliferation." Consequently, for the first time in decades, a significant amount of information is available in the public domain about the status of national laws, agencies, and processes that regulate the security and trade of dangerous materials and technologies across 100+ states. The resolution 1540 National Implementation Reports, country matrices, National Action Plans, legislative datasets with full texts of the laws that are cited in the matrices, and information on the national and regional 1540 Points of Contact (POCs) are all publicly available.[3] Non-governmental organizations have used this data and added more sources to identify how many of the 1540-recommended "measures" have been adopted worldwide. They have also sorted this information by technology, country, and region, tracked strategic trade control (STC) system developments, and attempted to bring together the information needed

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2    Although a bit dated, this was the conclusion of the first systematic, data-based study. See Scott Jones and Johannes Karreth, "Assessing the Economic Impact of Adopting Strategic Trade Controls, Assessing the Economic Impact of Adopting Strategic Trade Controls," U.S. Department of State Bureau of International Security and Nonproliferation, Office of Export Cooperation, December 2010, <https://www.nti.org/media/pdfs/off_us_dept_21.pdf?_=1316466791?_=1316466791>.

3    See 1540 Committee, "General Information," <http://www.un.org/en/sc/1540/national-implementation/general-information.shtml>.

to seek and offer capacity-building assistance.[4] The optimistic verdict is that there is progress, although gaps in implementation remain.

To reflect this cautious optimism, since 2004, the mandate of the 1540 Committee that was formed to oversee implementation of the resolution has been extended three times—in 2006, 2008, and 2011—and is now set to expire in 2021. In addition, several other UNSC resolutions have reiterated the need for Member States to intensify their efforts to achieve full implementation of resolution 1540 and for the 1540 Committee to continue its efforts to facilitate the provision of technical assistance to states who request it.

After 14 years of outreach, most countries understand what needs to be done and why. Whether they act upon it depends on (a) political willingness to prioritize such expenses over other national needs; (b) the availability of assistance on "how" and "in what order;" and (c) the total disconnect between 1540 goals and the day-to-day exigent realities of some states such as civil wars, lack of a legal framework for any security-related actions, or minimal infrastructure for the development of CBRN-related civilian capacity. This article does not focus on the first and last categories of states. Instead, it seeks to explore how assistance in implementation might be improved, in order to move willing but capability-challenged states towards action.

## 1540 Implementation Challenges: The Need to Think Proactively

Several scholars have examined in great detail how the vague terminology used in resolution 1540 may have caused problems in implementation and how its legitimacy as well as enforceability have been questioned by many states, possibly affecting the level of UNSCR 1540 implementation.[5] In the interest of moving the discussion forward through debate and dialogue, this article will argue that the above-mentioned issues are no longer considered as important by many states as they were ten years ago.[6] Indeed, there is tacit admission by officials that these "impediments" are deliberately raised as justification for going slow or for inaction whenever the national leadership—political or bureaucratic—is unwilling to move on a particular implementation issue or wants to express resistance to a particular donor or

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4   See Project Alpha, "Big Data and Nonproliferation: The Alpha Proliferation Open Source Tool," King's College London, November 2, 2018, <https://projectalpha.eu/category/visualisations/>. Also see "1540 Resource Collection," Nuclear Threat Initiative, June 13, 2018, <https://www.nti.org/analysis/reports/1540-reporting-overview/>; or "UNSC Resolution 1540 Assistance Support Initiative Database," Stimson Center, <https://1540assistance.stimson.org/>.

5   See Andrea Viski, "Implementation Trends," and Daniel Salisbury, "Challenges Past and Present," in Daniel Salisbury, Ian J. Stewart, and Andrea Viski, eds., *Preventing the Proliferation of WMDs: Measuring the Success of UN Security Council Resolution 1540* (Cham, Switzerland: Palgrave MacMillan, 2018).

6   This line of argument is based upon the author's extensive discussions over the past 12 years during training and outreach programs involving over 2,000 officials from about 60 countries.

donor's pressure.[7] Broadly though, resolution 1540 in its current state has become accepted as a permanent fixture in international nonproliferation activities. Attempts to change its legal status and basic structure, make it more capable of defining violations or better specified in its requirements, or to open it for debate in the UN General Assembly, are likely to be counterproductive.[8] These proposed efforts towards "more order" might undo years of work in providing a platform where "active nonproliferation" can be discussed, explored, and promoted through a wide variety of tools and templates. For instance, in many states and regions, 1540 implementation has found greater political and bureaucratic support if some topics that are not included in the resolution itself are brought into play, such as conventional weapons regulation, arms and munitions, UN sanctions implementation, and import-licensing for dual-use goods.[9]

However, some of the impediments to implementation have been created by the resolution itself. It is unfortunate that UNSCR 1540 language uses the term "export controls"— a terminology that is outdated because 1540 requires countries to regulate a range of transactions beyond exports. Additionally, the "regulatory action" that is expected at the practical level is licensing, where the objective is to filter, channel, monitor, and track most of the regulated items, rather than to deny their exports. The terminology of export controls, therefore, creates a reflexive opposition to 1540 in countries that seek economic growth through export promotion.[10] Moreover, much of the outreach from international organizations, including from 1540 itself, emphasizes the two aspects of 1540 which often find little traction among the line-ministries in any country—promise of diffused security benefits and the intangible reward of the country being seen as a responsible member of the international community.[11] The author, therefore,

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[7] In general, mid-level government officials in agencies and ministries are considered "bureaucrats" and are often the group that integrates or translates foreign training materials and concepts into the day-to-day processes of the agencies. Legislators, agency heads, and officials in the offices of the Prime Minister or the President constitute the "political" leadership. They have the mandate of setting policy direction by prioritizing issues the bureaucrats should focus on, and they often do this by the power of the purse (budget and personnel allocations). Political leadership has to balance domestic and international obligations and requirements and assesses the overall utility of engaging with a particular regime or country within that broader context.

[8] See for instance Ian Stewart, "The Future of UNSCR 1540," in Daniel Salisbury, Ian Stewart and Andrea Viski, eds., *Preventing the Proliferation of WMDs Measuring the Success of UN Security Council Resolution 1540* (Cham, Switzerand: Palgrave MacMillan, 2018).

[9] Similarly, it has been politically easier for many non-European Union countries to adopt or adapt the EU dual-use control list and guidelines by referring to the EU's position as a major trading partner and potential source for advanced technologies. This would not have been possible if the resolution had explicitly tried to prescribe the EU list – or something similar, for implementing Operating Paragraph 6.

[10] For almost a decade, soon after the training programs on resolution 1540 implementation began, the University of Georgia experts heard from the trainees that there was more receptivity and traction for 1540 and "export control" objectives if these were seen as being focused on management of dangerous materials and technologies, by creating filters that stop their flow to actors of concern. Unsurprisingly, in many developing countries, the system is best understood and promoted as a risk management tool.

[11] Indeed, the author has had numerous discussions with officials from almost all developing countries that have sought assistance in implementation. Each such discussion has unfailingly identified the two most important requirements of the officials willing to promote resolution 1540 in their countries: a) arguments that their political leadership will find compelling enough to give them the resources (authorization, personnel, finances, institutional support a) to do what is necessary, and (b) arguments that will help quell the wave of industry pushback they expect when they propose to "control" exports.

recommends that in the interest of both accuracy and political messaging, the new iteration of the Resolution in 2021 remove references to *export control* and use the terminology that most of the economically vibrant developing countries have adopted: *strategic trade management*.

## Identifying Common Best Practices

At its heart, resolution 1540 is an attempt to move all states towards on-the-ground implementation and enforcement of national regulations over domestic activities (stocking, use, transport, sale, waste-handling) and trade activities (export, re-export, transit, transshipment, brokering and facilitation). Although the resolution does not mention import regulation, many states have included it in their bid to cover all logically-relevant activities in a supply chain.[12] Those that have not rely on separate technology-based laws to regulate CBRN imports.[13] Indeed, most widespread understanding of physical protection and accounting measures focuses on establishing licensing procedures and related conditionalities, guidance on handling, best practices to ensure that materials of concern are adequately protected in facilities and during transport *within the country* and are not diverted to unauthorized purposes or persons, and that *domestic* sales are done responsibly.[14]

Extending the same logic to cross-boundary transfers (trade) in these materials of concern, strategic trade management systems focus on the licensing of various activities, establishing the identities of all entities involved in the *trade* supply chain (manufacturers/exporters, brokers, transporters, shippers, bankers, insurers, foreign consignees/end-users), attempting to establish legal liabilities, and developing voluntary best practices that help stop diversion to

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12 For instance, radiological protection and nuclear security laws almost invariably include import and export licensing and prohibitions for nuclear and radiological materials and sometimes, related equipment. Chemical Weapons Convention-related laws sometimes include import regulations to be able to report export and import statistics to the OPCW. The regulation of imports of biological materials remains scattered across national laws related to genetic research, environment, health, and agriculture. A stricter and more legalistic reading of resolution 1540 would forego the opportunity to regulate imports of internationally identified pathogens and equipment and technology that can be used to produce or weaponize them.

13 CBRN is the term that is used by a variety of related disciplines to refer to chemical, biological, radiological, and nuclear materials and technologies, with reference to safety and security, e.g., consequence management and emergency preparedness programs, or transportation safety protocols. Enforcement agencies dealing with trade security find it more useful than the term Weapons of Mass Destruction (WMDs) because the practical work of such agencies is focused on identifying and intercepting shipments of tangible materials and equipment that can be used as components or sub-components of WMDs, and no country is trading completely assembled WMDs. Although UNSC resolution 1540 does not include radiological materials in the text, it does refer to related materials and technologies, hence its inclusion in this discussion. Indeed, a vast majority of UN Member States have radiological materials on their territories, import and export devices and equipment containing these materials, and experts on WMD-terrorism increasingly focus on the probability of terrorists accessing and using radiological rather than nuclear materials, because the latter are relatively better-guarded.

14 To be sure, most of the domestic legislative and enforcement activities here are geared towards safe-handling, but some security-relevant procedures are included as well. Much of the assistance on CBRN security is currently aimed at promoting the idea that safety and security, although different in objective, are not mutually exclusive and should not be placed in silos either by governments or by the industry.

unauthorized uses abroad.[15]

Having noted the above linkages between CBRN security and CBRN *trade* security, it is useful to remind oneself that this logic is not often visible in 1540 assistance programs. Numerous challenges have been identified by donors and implementers on the one hand, and by recipient states on the other.

## Challenges for Donors and Implementers in 1540 Implementation Assistance[16]

*Mismatch between donor and recipient expectations about the assistance process and goals.*[17]

In many cases, donors and implementers feel frustrated that their assistance is not appreciated and acted upon by the recipients in a whole-hearted manner. Discussions with recipients often reveals that this happens when they are unable to provide feedback to the donor or implementer on an implementer's performance.

*Lack of understanding among recipients about the donor's organizational culture and communication style.*

In many recipient states, assistance projects lead to unexpected negative outcomes, such as donor states coming across as pushy and arrogant, or what seem like threats of withdrawal of funding. This usually happens when donors cannot see positive outcomes (actions by recipient state agencies) and the latter are unable to grasp the importance of timelines and of completion of phases for the continuation of assistance by donors. In short, there is inadequate appreciation of the practical reality: implementers need visible milestones to convince their political or bureaucratic funders that further investment of resources in a 1540-related project in that country is justified.

*Lack of coordination within a recipient government.*

Permanent United Nations missions and resolution 1540 coordinators for a country or region do not often have institutional or professional linkages with line ministries who have to implement and enforce their 1540 mandate. Consequently, the implementation of the 1540 mandate is not translated or incorporated into the latter's departmental action plans or routine workflow.

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15    End-use/user certificates are ultimately an attempt to establish legal liabilities. Similarly, the industry focused voluntary Internal Compliance Programs (ICPs) are an example of procedures aimed at identifying suspect end-users and other actors within the supply chain. An example from the realm of chemical safety and security is Responsible Care®.

16    In this article, donors are governments and organizations that provide funds for an assistance activity, whereas implementers are the organizations and entities that deliver the assistance on the ground through training, outreach, consultations, demonstrations, and provision of equipment.

17    For more on this issue, see Cupitt and Vecellio's article in this volume regarding the genesis and findings of the *Assistance Support Initiative* at the Stimson Center.

*Lack of a tradition or culture of interagency cooperation and coordination.*

In many parts of the world, bureaucratic agencies operate as fiefdoms who fiercely guard their turf and oppose sharing information or coordinating licensing functions with other agencies. But 1540-related actions, especially licensing and enforcement, cannot operate adequately in the absence of interagency information-sharing and coordination of enforcement action. The assistance-provision project, in such cases, has to expand to a project of changing institutional culture, which requires many non-1540-mandated activities and delays project timelines.

*Absence of a focal point (agency or office in the country) to coordinate requests for assistance and/or channel available assistance to the agencies that need it.*

Often, ministries of foreign affairs take on the role of gatekeepers for communication between line-ministries and foreign assistance providers. But they are often seen as outsiders or non-specialists by other agencies in the country or they fail to establish confidence among the other agencies that they do understand the complexities of domestic regulatory issues and can see beyond the single-minded urgency of implementing a plethora of international mandates signed by diplomats.[18]

## Challenges for Countries Receiving 1540 Implementation Assistance

*Lack of coordination among donors.*

Assistance under resolution 1540 is not provided by the 1540 Committee, or even by the United Nations Office of Disarmament Affairs (UNODA), which has the responsibility for administering and managing 1540-related events. It is funded by individual donor states or groups of states. Even when funds are provided to the 1540 fund, donor states often specify their preferences in how these funds may be used by UNODA.[19] Very often, this results in too much assistance to the country/region that is deemed important by the donors (in terms of CBRN "risks" or in terms of political/diplomatic heft) and not enough to others.

*Similar assistance to one country by multiple donors.*

In several countries where there are multiple assistance projects sponsored by more than one donor, it is hard for government agencies in the recipient state to allocate their own resources (e.g., nomination of officers for training or outreach). Officials sometimes jokingly refer to a few of their colleagues as "professional attendees at nonproliferation training programs!"

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18    In some countries, line ministries often refer to units within their MFAs as agents of international actors: "Americas Division" might be referred to as "America's Division" and "Treaties Division" as "Treaties' Division!"

19    The 1540 fund informally refers to the funding individual UN members provide to UNODA for 1540 related activities. Sometimes, reportedly, donor governments may suggest to the UNODA that a part of their contribution may be used to fund a particular project/activity.

*Similar mandates to multiple assistance providers/facilitators in the same country.*

In countries where the donor states have identified greater risks but are unable to find traction among relevant government agencies, it is standard practice to engage government and non-governmental actors through multiple implementers. While logical for the donor, this strategy sometimes backfires when various implementers are unable to distinguish their own mandates/objectives/expectations of recipient support from those of other implementers operating in the same issue-area.

*IGOs providing stove-piped assistance, often in isolation from other assistance.*

Sectoral assistance by IAEA, OPCW, and other UN agencies is often focused on one technology or issue area and is not often linked in practical ways to 1540 implementation. In each of these cases, the IGOs cannot go beyond their formal mandate and are unwilling or unable to provide assistance on "related issues." For instance, adherence to IAEA Guidance on export and import of radioactive materials is voluntary and does not cover many substances and equipment that are considered important for nuclear nonproliferation.[20] IAEA assistance cannot include these items or practices that go beyond what are set forth in the IAEA conventions and documents.

This often creates confusion among recipient states and concern that they may have to expend additional personnel resources when other donors recommend additional practices, procedures, and control list items as for instance 1540 assistance would do. Similarly, OPCW assistance cannot include best practices on chemical safety and security, or even on trade controls, because this is not part of the CWC-mandate. OPCW inspections of facilities cannot include questions about facility security.[21] Requests for data on exports and imports of scheduled chemicals cannot include questions about controls on equipment or technology or technical expertise, or even about the system of licensing chemicals.

*Lack of understanding of recipient state's organizational culture and communication style*

This often shows up in the standard interagency models proposed by donors/implementers, that vary from established models of interagency leadership and communication in recipient countries, and does not take into adequate account the importance of hierarchy and (often unwritten) ranking among agencies:

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20    The text of the Guidance can be found at: "Guidance on the Import and Export of Radioactive Sources," IAEA, 2005, <https://www-pub.iaea.org/MTCD/publications/PDF/Imp-Exp_web.pdf>.

21    OPCW inspections seek to confirm the accuracy of relevant declarations submitted by States Parties under Articles III, IV, and V, and to verify that the production of chemical weapons has ceased. For chemical weapons production facilities (CWPFs), inspections seek to confirm that chemical weapons are not removed from their declared storage locations (except for destruction) and that equipment is not diverted from there. See "Factsheet #5: Three Types of Inspections," Organization for the Prohibition of Chemical Weapons, November 2017, <https://www.opcw.org/sites/default/files/documents/Fact_Sheets/English/Fact_Sheet_5_-_Inspections.pdf>.

*Need for implicit or explicit government permission to engage non-governmental actors (e.g., industry, academia, media).*

Many donors and implementers, such as the United States and some European Union countries, believe that if the government agencies are unresponsive to their overtures, they should establish partnerships with industry associations and academia to pursue some of the 1540 requirements or create external pressure nodes for the government. In much of the non-Western world, this is unrealistic. The non-governmental actors are extremely wary of engaging foreign actors unless they have a nod from their governments.

*Implementers pushing one-size-fits-all models of laws and regulations, or cookie-cutter "technical" presentations with no ability to answer second-order questions and/or explore alternative institutional designs.*

By far the biggest complaint the author has heard from recipient agencies is the inflexibility with which institutional designs are presented by donors and implementers. This is often most acutely reflected during the designing of the implementing rules and regulations once the donor-assisted strategic trade management law is in place. Recipients are often not presented with a menu of options from which they can choose, adapt, or adopt, based on their own understanding of what kinds of interagency bargaining and resource-allocation might be involved if one option is chosen versus the other.

## Challenges of Scope and Scale

*Beyond the challenges created from cultural and institutional factors listed above, 1540 implementation faces a set of practical challenges.*

Given the wide ambit of the resolution, numerous stakeholders have to be made aware of their obligations under national laws where they have been established through assistance. This includes persons and organizations involved in nuclear, radiological, chemical, biological, space, and defense sectors, whether they are government officials, academia, or industry. Under the brokering and facilitation clause, activities and industries not hitherto considered proliferation-relevant have been included: brokers, transporters, shippers, freight-forwarders, warehouses, banks, and insurers. This has meant that it is relatively easier for countries to establish laws that cover the entities and activities enumerated above than it is for them to actually enforce these in a meaningful way. Even sustained outreach to these national stakeholder groups is a daunting task for the government of any mid-sized economy. Once it is possible to move a step further on checking implementation by target stakeholders outside of the government, companies' resources to do pre-license due diligence and post-sales audits diminish by orders of magnitude, especially if the economic profile of the country includes substantial numbers of small and medium-sized companies.

In many cases, the mismatch between donor and implementer expectations versus a recipient country's realities can be minimized if both agree on a common framework of assistance for developing a strategic trade management system compatible with resolution 1540. The author has used the following template to explain to recipient countries what different kinds of

assistance are available from various donors, the stages in which they have to make choices, and how the last stages in each column are indicators of a successful outcome from the donor's perspective.
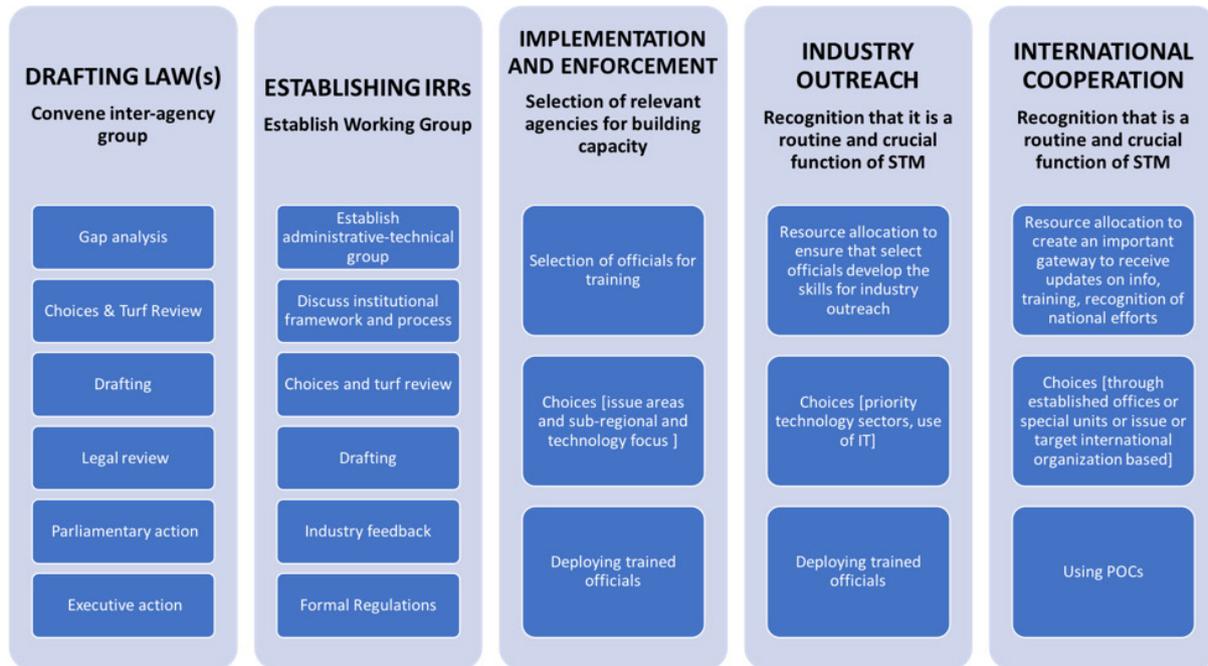
| DRAFTING LAW(s) Convene inter-agency group | ESTABLISHING IRRs Establish Working Group | IMPLEMENTATION AND ENFORCEMENT Selection of relevant agencies for building capacity | INDUSTRY OUTREACH Recognition that it is a routine and crucial function of STM | INTERNATIONAL COOPERATION Recognition that is a routine and crucial function of STM |
|---|---|---|---|---|
| Gap analysis | Establish administrative-technical group | Selection of officials for training | Resource allocation to ensure that select officials develop the skills for industry outreach | Resource allocation to create an important gateway to receive updates on info, training, recognition of national efforts |
| Choices & Turf Review | Discuss institutional framework and process | | | |
| Drafting | Choices and turf review | Choices [issue areas and sub-regional and technology focus ] | Choices [priority technology sectors, use of IT] | Choices [through established offices or special units or issue or target international organization based] |
| Legal review | Drafting | | | |
| Parliamentary action | Industry feedback | Deploying trained officials | Deploying trained officials | Using POCs |
| Executive action | Formal Regulations | | | |

**Figure 1. Strategic trade management assistance, issue areas, and stages of development**

Greater detail can be added to each stage to show that recipients can and should be active participants in shaping assistance rather than being passive and, sometimes, resentful recipients. From the donors' perspective, such a schema highlights the difference between output and outcome measures. The numbers of meetings convened, trainings organized, officials trained, and companies made aware of 1540-based regulations are indicators of output, to show positive *movement*. But the *direction* of strategic trade management development is only indicated by actual outcomes: Has the law been passed by the parliament? Does the interagency license review process work as designed? Have licenses been reviewed and issued? Have enforcement agencies stopped a cargo container to inspect for strategic trade management-relevant items? Are public forums organized to communicate with the industry? Is the country able to use its POCs for sending and receiving strategic trade management-related information to its economic and security partners abroad? Is it able and willing to act upon information and intelligence provided by others? If some of these outcomes have been visibly achieved, donors have an incentive to provide more assistance to close remaining loopholes in a recipient country. If not, they might find other targets for their assistance.

## Optimum Solutions

*A major concern about 1540 implementation is the issue of "unending" requirements.*

Many countries believe that they should not be expected to have one or more full-fledged laws that cover all measures included in the 1540 matrices. If a country has no nuclear industry but only imports radiological materials for use in certain industries, the expectation that it will adopt the EU control list and a Malaysia-style interagency system seems far-fetched.[22] Even if the argument of possible use of radiological materials by terrorist groups is considered, unless the country has had instances of its local/regional terror groups trying to acquire such materials, no amount of external assistance will produce the desired outcomes vis-à-vis 1540 implementation.

*The trend in all industries is to move toward risk-based allocation of safety and security resources. The same logic needs to be applied when generating expectations about strategic trade management developments in countries.*

Hypothetically, all countries may be used by state as well as non-state actors for either supporting a state-WMD program or a terrorist group. But when selecting countries for 1540 assistance, the additional criteria of level of threat and probability of this happening must be used to designate the high-risk countries. For instance, if transit and transshipment are the major concern in a given country, assistance could perhaps be focused on adapting customs laws to empower customs officials to both detain and seize 1540-related cargo and license the passage of such shipments; training customs officials and border guards to recognize suspicious cargo related to WMDs; and strengthening WCO-related programs such as Authorized Economic Operator (AEO) and Container Control. UN Conventions on terrorism and UNSC resolutions on sanctions may be used to expand the jurisdiction of customs agencies. Similarly, for a country that trades in chemicals, including drug precursors, while a comprehensive strategic trade management law may be necessary (since chemicals are regulated across several agencies in most countries), training and outreach should be focused on chemicals management, and the outcome measures should also focus on this sector. If this country does not establish all the 1540-measures for nuclear, radiological, and biological materials and equipment, it should not be counted as a "gap" and suggested to the country that its efforts will not be seen as complete unless all sectors are comprehensively covered. The focus, in other words, should be on results: plugging the gaps *most likely to be exploited* by the proliferators and terrorists.

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22    The EU dual-use list has become the gold standard among countries that have recently adopted STM law(s). This has come about partly because it is being promoted by one of the major sponsors of STM/1540 assistance (the U.S. State Department's EXBS program) and partly because it makes economic sense for those who trade heavily with the EU countries and/or seek imports of advanced technologies and materials for use by their domestic industry either for the national market or to manufacture components that are exported back to the EU or supplied to the regional customers of EU technologies.

*Much effort and resources have been expended recently by several countries in drawing up their National Action Plan(s) for the implementation of resolution 1540.*

The National Action Plan of Turkmenistan serves as a good example.[23] There might be two problems in making this plan actionable: some other donor will need to agree that one or more of the broad, generic, and logical goals identified in the plan are worth funding. Subsequently, a more detailed plan will need to be drawn up to identify which issue-areas, sectors, and transactions are of common concern for both the donor and Turkmenistan. A trade and smuggling profile for Turkmenistan would clarify if the country needs a comprehensive law and institutional system, or if some abbreviated version would suffice to counter possible regional proliferators and terrorists with interest in WMD-related materials located in or around Turkmenistan. Moreover, since the Plan is not formulated in the 1540-approved format for "Request for Assistance," officially, it will not be considered a request by the Group of Experts. Ergo: more effort is required to convert it into an admissible/appropriate formal request for assistance!

*A larger issue that remains problematic in institutionalizing 1540-mandate in countries is the "return on investment."*

After expending their meager personnel and political resources in establishing the STM system and getting the industry-buy-in, governments are asking about the rewards. And if the answer is "recognition as a trusted trading partner" they wait to see what trade is directed their way given their new status. But if the answer is "recognition as a responsible UN member" the enthusiasm for implementing 1540 weakens over time. Therefore, unless the systems established for 1540 implementation can also be used for non-1540 licensing and enforcement, they stand alone and will wither away over time.

*Need to find legal and technical models that make it easier for resource-challenged countries to comply.*

There is a need to develop templates and tools that kill more than one bird with one stone. Prior work by the Stimson Center focused on linking development needs with security challenges and identified the dual-uses of 1540 implementation.[24] To many states, it provided a novel lens through which to see and take advantage of security-relevant assistance provided under the auspices of UNSCR 1540. The next step, logically, should be to help optimize the national effort which many states have to make to implement the assistance: common obligations, similar activities, and the same best practices should be identified that can be applied at some level of aggregation to all technology sectors: chemical, biological, radiological, and nuclear.

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23    "Action Plan of Turkmenistan for the Implementation of Security Council Resolution 1540 (2004) for the Period 2018-2022," TKMUN/3818/2018, June 11, 2018, <https://www.un.org/en/sc/1540/documents/Turkmenistan_action-plan.pdf>.

24    Brian Finlay, ed. *Southern Flows: WMD Nonproliferation in the Developing World* (Washington, DC and Muscatine, Iowa: Stanley Foundation and Stimson Center, 2014). See also Brian Finlay, Johan Bergenas, and Esha Mufti, *Beyond Boundaries in Southeast Asia: Dual Benefit Capacity-building to Bridge the Security/Development Divide*, (Washington, DC and Muscatine, Iowa: Stanley Foundation and Stimson Center, 2013).

Templates could be developed to help countries in reporting to various UN bodies at the same time, for instance, national reports to IAEA on developments in physical security measures for radiological materials could automatically show up on the 1540 matrix under Op. 3 (a) and (b), or reports covering Financial Action Task Force (FATF) or financing of terrorism and proliferation could automatically show up in 1540 matrix under Op. 3 (c) and (d) (e.g., controls on financing etc). Stove-piped work in each of these sectors has resulted in loss of political attention, bureaucratic turf battles, confusion, and recipient-fatigue.

*Use of technology to improve transparency, information-sharing, and communication of suspicious activities and threats should be part of 1540 assistance plans.*

Institutionalized relationships for data sharing are being established by customs agencies under the World Customs Organization Safe Framework. Operational cooperation in establishing identities of trusted trading entities is happening through mutual recognition of AEO programs. But many AEO programs do not have a security and/or strategic trade management component. The World Bank has been financing Single Window Initiatives in many regions to operationalize a more cost-efficient and industry-friendly licensing and permits process for non-controlled items. These should be expanded to include licensing of 1540-relevant and strategic trade management-controlled items. In short, these non-1540 developments and efforts should be incorporated into the regulatory and institutional design promoted by 1540-assistance providers. In some parts of the world where there is an established tradition of well-specified laws and interagency systems, the current approach of assisting countries to revise or establish strategic trade management laws is best, albeit slow in producing desired outcomes. In some other parts of the world, the rule of law approach might prove suboptimal. Instead, habits of cooperation formed through operational coordination mechanisms are more likely to help achieve the outcomes that 1540 implementation requires, rather than years of externally-induced legal measures.

## Way Forward

After 17 years of existence, much as been achieved under the rubric of 1540: transparency, harmonization of strategic trade management concepts across regions, recognition of the importance of non-governmental actors in determining the success and failure of nonproliferation and anti-terrorism efforts, explicitly linking international commitments with national actions, and the positive impact of sustained international attention on implementation and enforcement of strategic trade management laws. The same period has also generated a lot of data on why new approaches are needed to define "universal" implementation. The discussion in this article has aimed to contribute to the latter in some measure.

The Group of 1540 Experts has painstakingly gathered data on which legal measures exist to regulate a particular type of technology in each of the 190+ UN Member States, which agencies or units have enforcement authority, and who might be the Point of Contact in a country or a region. Even a cursory look at that data would show that (a) most countries do not have many areas covered in their existing regulations, and (b) a lot of the data is simply not available. This is despite several refinements of the data-gathering tools, such as the 1540 matrices. A pragmatic way to assess the situation would be to acknowledge that most of the regulatory gaps

will remain unless there is a massive infusion of funding resources that would allow the 1540 Group of Experts as well as the NGO-experts to devote sustained time and attention to each country. This is unlikely in the foreseeable future.

Using the old credo, "from each according to his capacity, and to each according to his need," may not work. Instead, the next best option might be to devise practical solutions that seek to narrow the functional focus and identify where the greatest risks are: creating a typology of risks according to technology sector, assessing the most likely proliferation pathways, and the countries that might become parts of these pathways, either through complicity, neglect, or lack of capacity. Those who create such risk matrices should begin a dialogue with the countries that are most at risk. These countries should then be shown that assistance will help them build resistance against becoming a proliferation pathway as well as provide them multi-purpose tools that can help them deal with other (non-1540) challenges. If convinced, it is highly likely that they might become more proactive in proposing sustainable solutions appropriate for their own regulatory "culture" such as tweaks in existing regulations instead of a new law, or a new agency/unit with broad convening powers across various agencies, rather than establishing a more traditional interagency mechanism.

In short, there is a need to take a dispassionate look at where 1540 implementation is today, and instead of being disheartened about gaps, identify new ways of prioritizing the most pressing of these gaps and devise hands-on, effective solutions, even if these are not grounded in the liberal democratic perspective that undergirds resolution 1540.

# The Importance of Building Legislative and Regulatory Capacity for Strategic Trade Management

CHRISTOPHER TUCKER[1]

## Abstract

*This article examines the role of capacity-building on the legislative and regulatory side for establishing as well as maintaining a functional strategic trade management (STM) system. The purpose of the article is to catalog various ways to conduct legislative-regulatory capacity-building and how to match them to the economic and security profile of the target country. This analysis emphasizes how even the most robust STM system can face difficulties in dedicating resources to updating and changing regulations to keep up with the evolving international economic landscape and national political priorities. The article concludes with a survey of current efforts to provide such capacity-building assistance and suggests other methods that may be employed to ensure that newcomers to STM are able to maintain and evolve their STM regulatory environment.*

## Keywords

Capacity-building, legislative drafting, regulatory drafting, strategic trade management, training, awareness-raising

## Introduction: Cart Before the Horse? Setting Capacity-Building Priorities

Discussions on capacity-building in the strategic trade management (STM) realm typically center on a lack of technical capacity and the need to provide targeted equipment, material goods, and training to implement STM practices. However, countries wishing to establish STM systems often suffer from immense challenges in getting started despite the number of

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seminars, workshops, and events held each year emphasizing the importance of having an STM system and an STM law that must underpin such a system. Most outreach initiatives raise awareness about and describe the fundamentals necessary for a comprehensive STM law. However, fewer resources are made available for the act of drafting the STM law and crafting the regulations to ensure they are suitable for the host government. Small countries, especially transit/transshipment hubs where such measures are so urgently needed, struggle to find available capacity within their own government to dedicate to drafting STM legislation and regulations when there are so many other pressing political issues at play.

One of the important topics tackled by this special issue on capacity-building is expanding and defining the way practitioners and scholars use the word "capacity." Traditionally, in the strategic trade management realm, capacity is most often thought of in material terms. Capacity-building, then, as methods by which governments and nongovernmental organizations (NGOs) expand the functionality of an existing STM system. More often than not, capacity-building is synonymous with equipment donations or training programs. Equipment for effective border security, databases for end-use/end-user screening, training on targeting techniques, or software for collaborative interagency license review are all examples of material assistance that is provided to governments for the purpose of expanding the functionality of an existing STM system. Over the years, initiatives by Export Control and Related Border Security (EXBS) program at the U.S. Department of State and initiatives of other U.S. government agencies (inclusive of offices within Customs and Border Protection, other areas of the Department of Homeland Security, and some offices within the Department of Defense) provide such products to countries with fledgling STM systems as a means of filling "gaps" in capabilities.

However, before anyone can fill in "gaps" in the capabilities of a particular system, there needs to be an actual system that is rooted in law. The road to setting up a STM system is a long road for any country. It requires legislation that broadly outlines the national rationale, grants powers to designated institutions, and establishes some overarching bureaucratic processes for interagency coordination on licensing and enforcement. Next, implementing regulations need to detail bureaucratic processes each designated agency must follow and the important minutiae for conducting interagency licensing consultations, enforcement procedures, government-industry outreach, and cooperation with international bodies. However, to even get to the stage of passing legislation or crafting implementing regulations, there must be a great deal of existing political will and awareness of what sorts of measures are necessary for a robust STM system. The legislative and regulatory design phase must be preceded by a confluence of other variables that take a great deal of encouragement and meticulously customized outreach over time.

Frequently, this confluence of political will and bureaucratic action for setting up a strategic trade management system is extraordinarily fragile. The slightest amount of political turmoil, turnover, or bureaucratic in-fighting can set the entire process back years or shelve the process altogether. Therefore, it is critically important to be able to capitalize effectively on that confluence when it does manifest in a country, especially in countries with developing CBRN technology sectors or those countries that are emerging as major transit/transshipment hubs. Such countries typically attract most of the available external assistance in capacity-building because of their critical importance to global security.

To be able to capitalize on this confluence of political will, regardless of whether it exists due to domestic variables or international pressure, it is important for a government to have the "capacity" to do so. In some instances, "capacity" will mean an understanding of the fundamental elements of a strategic trade management law or consensus about the design of bureaucratic processes such as an interagency vetting of licenses or crafting control lists. However, in more and more instances, "capacity" means raw manpower. Legislative drafters and legal experts can frequently be in short supply in small and medium-sized countries, especially when more immediate legislative priorities are at play.

Without sufficient "capacity," that is, manpower, knowledge, and consensus, the confluence of opportunity to establish a strategic trade management system can quickly fade. Yet, assuming that such opportunity is capitalized upon and a robust STM system exists, there is still a need for legislative and regulatory capacity. After laws and regulations are put into place, most assistance providers focus on ways to improve the existing infrastructure by providing "material" capacity to fill "enforcement gaps." For example, x-ray machines, radiation portals, density busters, radiation pagers, fiber-optic cameras, and other detection tools are commonly donated equipment.[2] Training now focuses on the proper use of provided equipment, targeting and risk analysis, and commodity identification. The core focus of the capacity-building conducted in this phase is implementing, not updating and maintaining the existing system.

However, like any complex machine, a functioning STM system also requires modification and adjustment over time as part of routine maintenance. Control lists must be updated, regulations must be amended to reflect new economic priorities and new security environments, and bureaucratic procedures must continually evolve to meet modern challenges in international STM as well as the challenges faced by the individual country. Too often, strategic trade management systems are entrenched and automated, unable to accommodate changes in priorities. The U.S. strategic trade management system is an illustrative example of such stagnation.[3] Within the U.S. system, much of the regulatory framework dates back to the 1990s and is subject to interpretation of those tasked with implementation. Altering control lists in the United States, de-listing items, moving categories of items, or adding new items requires different processes, some of which require action by the United States Congress. In the United States and in other nations, for systems to change and evolve, resources, specifically regulatory drafters and political decisionmakers must be marshaled for such purposes. Aside from political will, again, there must be capacity, both manpower as well as training on the latest best practices in order to effectively update the regulatory environment.

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2    A survey of EXBS press releases catalogs numerous equipment donations, joint law enforcement exercises, and training seminars on the implementation of an STM system. See "EXBS News," U.S. Department of State, <https://www.state.gov/t/isn/ecc/c58701.htm>. More day-to-day announcements are made on the Twitter Feed for the U.S. Department of State – International Security and Nonproliferation Bureau. See <https://twitter.com/StateISN>. Further, the 1540 Assistance page details the types of donations/assistance offered by donor countries. See 1540 Committee, "Offers from Member States," United Nations, <https://www.un.org/en/sc/1540/assistance/offers-of-assistance/offers-from-member-states.shtml>.

3    The Congressional Research Service (CRS) publishes a report cataloging the status of and reforms made to the U.S. strategic trade management system. The latest version of the report, published in October 2018, illustrates the vulnerabilities in the U.S. system identified in 2007 and efforts to address said vulnerabilities. See "The U.S. Export Control System and the Export Control Reform Initiative," Congressional Research Service, October 30, 2018, <https://fas.org/sgp/crs/natsec/R41916.pdf>.

## Legislative and Regulatory Capacity: Designing the System

All systems require a law, or more typically, a series of laws, setting forth the types of strategic goods and the types of transfers to be regulated and in what manner. The modern preference is to pass one large omnibus strategic trade management law that covers all transfers of all types of "strategic" goods, effectively checking all of the requisite boxes for complying with United Nations Security Council resolution 1540 and meeting international standards.

Frequently, however, governments find themselves with laws already on the books that partially meet their STM obligations and are then faced with the challenge of finding legislative ways, through law or executive order, to "stitch" together a legal and regulatory tapestry that interacts seamlessly. Or, governments are faced with the challenge of adding to existing legislation and filling "gaps" in coverage, such as brokering controls, catch-all controls, and regulations on intangible technology transfers. Depending on the constitution or type of government involved or level of political urgency assigned, this can be a simple and straight-forward process or a deeply complex process. Methods for doing so can range from drafting and passing new legislation through a committee or parliamentary process, to issuing executive decrees, which are typically limited in scope, to administrative actions, where institutions are given guidance to adopt new duties with the hope that legislation authorizing those duties will come in the near future.

Assuming the political will exists to pass strategic trade management law(s) (omnibus or otherwise), the next step is marshalling domestic resources. In smaller countries, especially island countries and transit/transshipment hubs, there is no political priority for STM other than as a response to international pressure. But there may be a distinct willingness to meet international obligations with the aspirations of becoming a regional leader and/or looking to economic growth in the future. In many of these countries, such as some islands in the Caribbean, there are less than five persons tasked with drafting any and all legislation and regulations for the country.[4] Typically, those tasked with legislative drafting are not trained in requirements of nonproliferation or security or dual-use trade. It is the job of assistance providers to build their professional capacity by providing training, but more pointedly, by assisting in the actual drafting process.

Recently, in Panama, a number of outside assistance providers were brought in to help draft and markup the executive decree that underpins the Panamanian system and to help design interagency and licensing processes that would work for Panama based on examples from other countries. The process took months of workshops, revisions, mark-ups, and weekly phone consultations to hammer out effective language within the decree. These activities are still

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4    Personal interviews conducted with government officials in St. Lucia, Antigua & Barbuda, and St. Kitts & Nevis. All indicated two to five personnel tasked with drafting legislation and implementing regulations. Interviewees indicated that was not uncommon through the Caribbean community.

ongoing, with an aim to artfully and intelligently implement a licensing process.[5] Capacity-building in the legal and regulatory sphere means developing a pool of knowledgeable personnel within the government agencies. However, it is important that the management or decision-makers in those agencies are receptive to the ideas of these knowledgeable personnel as well as willing to take advantage of the temporary boost to in-house expertise provided by the external assistance providers.

## Legislative and Regulatory Capacity: Maintaining the System

If legislation and regulations are smartly designed, maintenance could be relatively automatic in the system. For a functional strategic trade management system, control lists and blacklists must be regularly updated, all relevant institutions must be integrated into the appropriate processes, and there must be processes to respond to industry feedback if license requirements and restrictions are found to not be user-friendly. For example, more often than not, control lists can remain stagnant for years, as some technologies become obsolete or more widely available on the open market, making controls a hindrance to business. Also, if license approvals, denials, and processes are left solely up the interpretation of licensing officers, then any turnover within the government is going to create confusion and systemic inefficiencies, which would hinder trade as well as security.

An often-told tale of the U.S. export control system in the 1990s was aerospace contractors applying for simple dual-use export licenses to the Bureau of Industry and Security at the Department of Commerce. The license would be granted for one transaction and then rejected months later with the same item and same end-user.[6] The regulations, which were incredibly outdated, were subject to interpretation by any particular licensing officer reviewing the application at the time. Detailed criteria and written guidelines for license approvals or denials were established to deal with this challenge.

Outdated regulations can create a number of issues for any sized economy. Inefficiencies in licensing processes can create unrest among industry and political pressure against strategic trade management practices or an uptick in willful violations. Low penalties, not adjusted for inflation, can create a situation where fines and violations are a cost of doing business and factored into business transactions. Finally, out-of-date legal language can create loopholes that can be exploited by skilled trade attorneys to avoid penalties or sanctions.

Frequently, once a law and institutions are put into place, those legislative and regulatory drafters and other personnel not directly relevant to STM move on to other priorities. If the government is attempting to merely meet international standards and the system is a placeholder, STM

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5    In a previous issue of *Strategic Trade Review*, Juan Hernandez articulated his involvement with the design of the Panamanian system, where he himself was a resource to boost capacity within the licensing office for the goal of designing and implementing licensing processes. See Juan Hernandez, "Facilitating the Implementation of Strategic Trade Controls in the Republic of Panama," *Strategic Trade Review*, Vol. 4, Issue 6 (Spring 2018).

6    Personal interviews with corporate officials and representatives of the aerospace industry as part of research on export control legislative development in the United States.

regulations may be filed away with other obscure legal minutiae and not be revisited for years. Furthermore, many involved in the process of drafting and setting up the STM system may move to other places in government, or retire, or other careers, creating a brain drain as well as one less person that would be motivated to conduct any sort of maintenance.

There are several examples where a lack of maintenance and a lack of legislative or regulatory capacity resulted in setbacks for strategic trade management efforts. As illustrated earlier, despite many years of STM experience, the United States' STM system has shown over the years stark indicators of a poorly maintained system.[7] While functional and effective, the regulations, which have been open to multiple interpretations over the years, led to glaring inefficiencies and gaps in control.[8] Starting with the Obama administration and with the advent of a new strategic trade management law under the Trump administration, the U.S. has been conducting STM system maintenance to address these concerns and "build higher fences around a smaller list of items," more reflective of the current high-tech manufacturing and trade environment.[9]

In the United Arab Emirates, as trade and security threats grew, a law establishing an STM system was passed in 2007 with supplementary legislation governing nuclear goods established in 2009. However, in 2019, although licensing institutions exist, the UAE is still faced with the challenge of publishing comprehensive regulatory guidelines and procedures maintaining and updating the STM system.[10]

In Thailand, the government issued guidance in 2015 for industry to prepare for the implementation of a strategic trade management system. The 2015 guidance constituted a major push toward the passage and establishment of a comprehensive strategic trade management system under new draft legislation. The new draft legislation, however, the "Trade Controls on Weapons of Mass Destruction Act," has yet to be implemented as of January 2019. From 2015 – 2019, a number of measures were taken to establish control lists, electronic license processing, industry outreach, and other elements of a robust STM system. However, turnover of officials and political unrest have led to continued delays in legislative passage and formal

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7    Personal interviews with corporate compliance officers and government officials (U.S. Department of Commerce and U.S. Department of State) indicate a regulatory environment where license applications have, in the past, been approved or denied based on an interpretation and individual judgment of a licensing officer as opposed to a course of process. Further, without updated regulatory guidance, it can be difficult to obtain consistent judgments on commodity classifications or reasons for license denials. However, evidence indicates that as strategic trade control reform became a priority of the Obama administration, many of these complaints have been addressed.

8    The 2018 CRS Report on the U.S. Strategic Trade Management System outlines these inefficiencies, gaps in control, and measures to address them. "The U.S. Export Control System and the Export Control Reform Initiative," Congressional Research Service, October 30, 218, <https://fas.org/sgp/crs/natsec/R41916.pdf>.

9    "Export Control Reform Initiative: Strategic Trade Authorization License Exception," U.S. Department of Commerce, Bureau of Industry and Security, June 16, 2011, <https://www.bis.doc.gov/index.php/licensing/forms-documents/doc_view/85-plastic-injection-molding-1989>. More details on the U.S. Export Control Reform Initiative can be found at <https://2016.export.gov/ecr>.

10   Personal interviews with government officials and corporate compliance officers indicate a strong willingness and dedication within the UAE to promote strategic trade management, however, differences remain in regulatory approach for conducting system maintenance.

implementation.[11,12,13]

In a previous issue of *Strategic Trade Review*, Karla Mae G. Pabeliña provides a chronicle of STM efforts in the Philippines.[14] She describes the "long and arduous" journey of the Philippines toward passage of the Strategic Trade Management Act (STMA) in November of 2015 and all of the capacity-building activities put toward the development of said legislation and preparing the Philippines for its implementation. However, political turnover in Manila in 2016 greatly slowed said implementation. In 2017, Filipino officials were working with EXBS to conduct tabletop exercises testing proposed licensing procedures.[15] Further, a recent presentation by the Strategic Trade Management Office of the Philippines noted that the STMA would now have a phased implementation, with companies registering as traders during the first quarter of 2019, applying for export licenses in the third quarter of 2019, with further implementation and services rolling out until the end of 2021.[16]

System maintenance, therefore, is key to a robust system and is especially crucial in an environment where political will is low and regulatory "upkeep" is a minimal day-to-day priority of government employees. While the multilateral export control regimes provide a consistent source of control list updates and guidance on best practices, it is up to legal experts within relevant government ministries to best internalize those processes and "translate" those into domestic regulations. Some governments have selected an interagency body tasked with such regulatory revision as part of regular scheduled meetings, others integrate control list updates by default – by simply referencing the EU control list or the multilateral regime lists directly in their legislation.

Building capacity to maintain a strategic trade management system is a more challenging endeavor than building capacity for legal drafting or initial regulations. The latter assumes political will, cooperation, and a desire for assistance while the former requires the host government to admit dereliction in maintaining the system. The best capacity-building efforts for maintenance involve putting measures in place that enhance automation. Databases, lists,

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11    "Thai Export Reform Is Fewer Than 6 Months Away. Are You Export Ready?," Global Trade News, August 2018, <https://blogs.integrationpoint.com/en-us/53-export-management/7704-thai-export-reform-is-fewer-than-6-months-away-are-you-export-ready.html>.

12    "Tight Controls Imposed on Export of Dual-Use Goods," *Bangkok Post*, June 2015, <https://www.bangkokpost.com/business/news/583773/tight-controls-imposed-on-export-of-dual-use-goods>.

13    "Export of Dual-Use Items: Are You in Control or Will you be Caught Out?," *Bangkok Post*, July 2017, <https://www.bangkokpost.com/business/news/1292847/export-of-dual-use-items-are-you-in-control-or-will-you-be-caught-out->.

14    Karla Mae G. Pabeliña, "The Strategic Trade Management System in the Philippines," *Strategic Trade Review*, Vol. 2, Issue 2 (Spring 2016).

15    "U.S. and Philippines Conduct Strategic Trade Management Licensing Tabletop Exercise," U.S. Embassy in the Philippines, October 4, 2017, <https://ph.usembassy.gov/us-philippines-conduct-strategic-trade-management-licensing-tabletop-exercise/>.

16    Presentation given at a joint industry outreach workshop with Singapore in 2018, available at: "Philippine Strategic Trade Management: Overview and Updates," Philippine Department of Trade and Security, Strategic Trade Management Office, <https://www.customs.gov.sg/-/media/cus/files/business/resources/courses-events/joint-industry-outreach-2018/presentation-by-philippines.pdf>.

and end-use/end-user screening data that draws from regularly updated international sources is key. Moreover, a schedule for review and revision must be embedded into the law to force government institutions to update the system and contract to outside assistance if necessary. Any resources or efforts to keep government officials engaged in regularly updated sources of information or discussions will build capacity for more effective maintenance, and if needed, prompt government officials to bring in outside hands, or "manpower," to assist with any regulatory drafting that may be needed. In some instances, such efforts can be prompted by bureaucratic change. New leadership at the ministerial level or at the mid-management level can trigger a review of current activities. In some countries, outdated websites, old licensing forms, and antiquated regulatory information was removed upon the ascension of a new administration. Sometimes, new management may also bring experts to overhaul existing regulations as well as design new methods of dissemination.

## Conclusions

Legislative and regulatory capacity-building is, in a nutshell, the provision of any sort of tools that assist a government in the creation, design, *and upkeep* of a strategic trade management system. Instead of X-Ray vans and radiation pagers, legal and regulatory assistance takes the form of legal markups, trainings, and best practice sharing. A number of public and private entities provide workshops and trainings related to STM system models on how to meet international standards, how to update control lists, and how to set up uniform practices for consistent and efficient license application vetting. Further, governments are able to contract or receive direct legal assistance to physically draft, edit, and revise laws and regulations. Each of these types of capacity-building measures are focused on "knowledge" and "manpower."

The key challenge, however, is absorbing that assistance and developing sustainable capacity to ensure that outside parties do not need to continually be shepherding government officials or an existing system. A secondary challenge is routinizing the maintenance of the existing system so that it too is not always prompted by outside parties or changes in international standards but occurs automatically as the economic and security environment of the country evolve.

Each of these challenges can be met by providing, through internal and external sources, awareness raising of the importance of strategic trade management practices and maintenance. The practitioner community should focus on implementation capacity for strategic trade management systems. But it should remain mindful of the health of the less visible bureaucratic procedures for maintenance and updates. These are, ultimately, the procedures that make capacity-building assistance successful and enable recipient countries to field robust STM systems.