

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

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## 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.<sup>2</sup>

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.<sup>3</sup> 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](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.<sup>4</sup> 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.<sup>5</sup> 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.<sup>6</sup> 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.<sup>7</sup> 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.<sup>8</sup> 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.<sup>9</sup>

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.<sup>10</sup> 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.<sup>11</sup> 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, Switzerland: 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.<sup>12</sup> Those that have not rely on separate technology-based laws to regulate CBRN imports.<sup>13</sup> 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.<sup>14</sup>

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.<sup>15</sup>

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<sup>16</sup>**

*Mismatch between donor and recipient expectations about the assistance process and goals.<sup>17</sup>*

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.<sup>18</sup>

## **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.<sup>19</sup> 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.<sup>20</sup> 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.<sup>21</sup> 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](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](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.

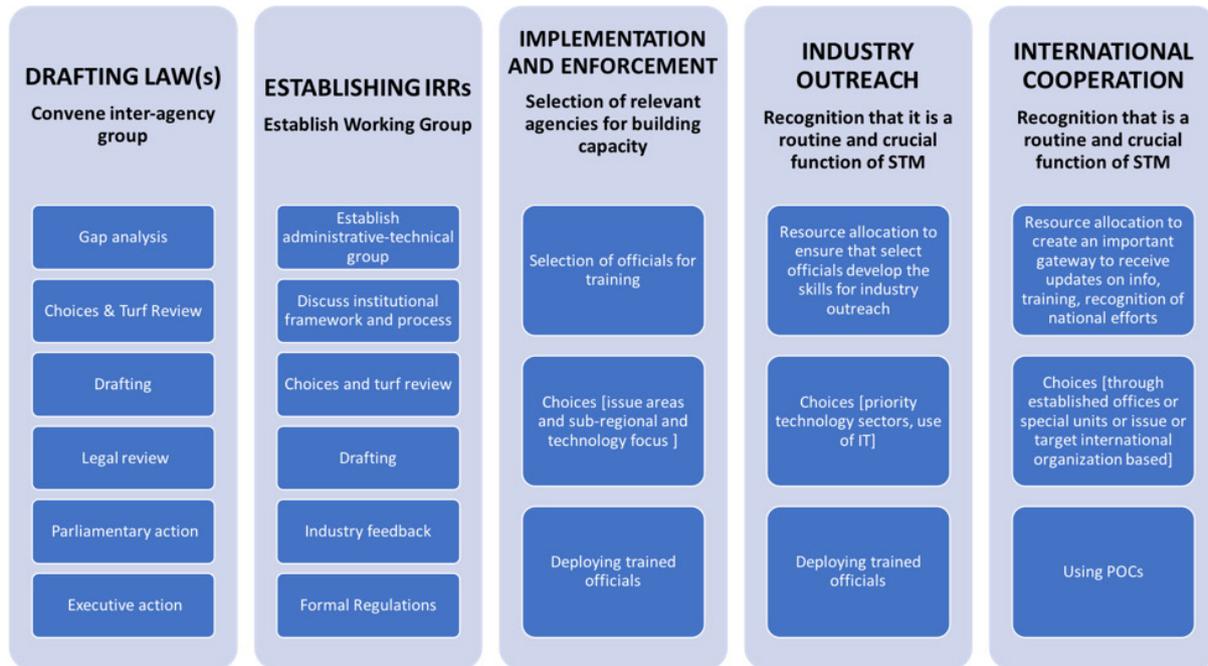
## **Challenges of Scope and Scale**

*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.



**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.<sup>22</sup> 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.<sup>23</sup> 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.<sup>24</sup> 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](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.