Proliferation Security Initiative (PSI)

Mary Beth Nikitin
Analyst in Nonproliferation

January 18, 2011
Summary

The Proliferation Security Initiative (PSI) was formed to increase international cooperation in interdicting shipments of weapons of mass destruction (WMD), their delivery systems, and related materials. The Initiative was announced by President Bush on May 31, 2003. PSI does not create a new legal framework but aims to use existing national authorities and international law to achieve its goals. Initially, 11 nations signed on to the “Statement of Interdiction Principles” that guides PSI cooperation. As of January 2011, 97 countries (plus the Holy See) have committed formally to the PSI principles, although the extent of participation may vary by country. PSI has no secretariat, but an Operational Experts Group (OEG), made up of 21 PSI participants, coordinates activities.

Although WMD interdiction efforts took place with international cooperation before PSI was formed, supporters argue that PSI training exercises and boarding agreements give a structure and expectation of cooperation that will improve interdiction efforts. Many observers believe that PSI’s “strengthened political commitment of like-minded states” to cooperate on interdiction is a successful approach to counter-proliferation policy. But some caution that it may be difficult to measure the initiative’s effectiveness, guarantee even participation, or sustain the effort over time in the absence of a formal multilateral framework. Others support expanding membership and improving inter-governmental and U.S. interagency coordination as the best way to improve the program. President Obama in an April 2009 speech said that PSI should be turned into a “durable international institution.” The Administration’s 2010 Nuclear Security Strategy said it would work to turn PSI into a “durable international effort.” The 2010 Nuclear Posture Review included PSI as a key part of the policy to impede sensitive nuclear trade. This report will be updated as events warrant.
Contents

Background ......................................................................................................................................... 1
Participation in PSI ............................................................................................................................ 1
  Organization ................................................................................................................................. 2
Measuring Success ............................................................................................................................ 2
Objectives and Methods .................................................................................................................... 4
Legal Authorities ............................................................................................................................... 5
Issues for Congress ............................................................................................................................ 7
  Related Treaties and Conventions ................................................................................................ 8
  Legislation in the 111th Congress .................................................................................................. 9

Appendixes

Appendix. PSI Participants (as of 1/01/11) ..................................................................................... 10

Contacts

Author Contact Information ................................................................................................................. 11
Background

President George W. Bush unveiled the Proliferation Security Initiative (PSI) in Krakow, Poland, on May 31, 2003. Deemed “foremost among President Bush’s efforts to stop WMD proliferation,” PSI appeared to be a new channel for interdiction cooperation outside of treaties and multilateral export control regimes.

In the December 2002 National Strategy to Combat Weapons of Mass Destruction (WMD) Proliferation, the Bush Administration articulated the importance of countering proliferation once it has occurred and managing the consequences of WMD use. In particular, interdiction of WMD-related goods gained more prominence. U.S. policy sought to “enhance the capabilities of our military, intelligence, technical, and law enforcement communities to prevent the movement of WMD materials, technology, and expertise to hostile states and terrorist organizations.”

PSI was started partially in response to legal gaps revealed in an incomplete interdiction of the So San, a North Korean-flagged ship that was carrying Scud missiles parts to Yemen in December 2002. It was interdicted on the high seas by a Spanish warship after a tip from American intelligence. The boarding was legal because there was no ship under that name in the North Korean registry. Inspectors found 15 complete Scud-like missiles, 15 warheads, and missile fuel oxidizer hidden on board. However, U.S. and Spanish authorities had no legal basis to seize the cargo, and the ship was released. Yemen claimed ownership of the missiles and reportedly promised the United States that it would not retransfer the items or purchase additional missiles from North Korea. While it is not clear that if this incident had occurred after PSI was formed the outcome would have been different, it was clearly an impetus to quickly bring a multilateral interdiction coordination mechanism to fruition.

Participation in PSI

Ten nations initially joined the United States to improve cooperation to interdict shipments (on land, sea, or in the air) of WMD, their delivery systems, and related materials. According to State Department officials, this core group defined the basic principles of interdiction and worked to expand support in the early years, but was later expanded to the 20 members of the Operational Experts Group (see below).

5 Australia, France, Germany, Italy, Japan, the Netherlands, Poland, Portugal, Spain, and the United Kingdom.
The State Department website shows that currently 97 countries (including the United States) plus the Holy See participate in the initiative (see the Appendix). Requirements for participation appear to be fairly weak. This language may have been in part a result of early resistance to the idea of PSI in the international community, in particular hesitancy over sovereignty and free passage issues, as well as U.S. policymakers’ intention to keep the arrangement informal and non-binding. For example, participating states are encouraged to [emphasis added in italics]

- formally commit to and publicly endorse, if possible, the Statement of Principles;
- review and provide information on current national legal authorities and indicate willingness to strengthen authorities as appropriate;
- identify specific national assets that might contribute to PSI efforts;
- provide points of contact for interdiction requests;
- be willing to actively participate in PSI interdiction training exercises and actual operations as they arise; and
- be willing to consider signing relevant agreements or to otherwise establish a concrete basis for cooperation with PSI efforts.6

**Organization**

PSI has no international secretariat and no distinct program funding. The participants hold regular high-level meetings and exercises to test interdiction techniques.7 Some consider the lack of formal mechanisms as advantageous. Others, particularly early-on, questioned the seriousness of the effort as well as its sustainability, as long as no formal mechanisms are created.8 The current configuration does not legally bind PSI adherents to this cooperative endeavor.

An informal coordinating structure has developed through an Operational Experts Group (OEG), which discuss proliferation concerns and plans future exercises. The OEG consists of military, law enforcement, intelligence, legal, and diplomatic experts from 21 PSI states.9 South Korea became an OEG member in November 2010.10 The Deputy Assistant Secretary of Defense for Countering Weapons of Mass Destruction leads the U.S. delegation to PSI OEG meetings.

**Measuring Success**

Since its inception, there has been little publicly available information by which to measure PSI’s success. One measurement might be the number of interdictions successfully carried out as a

---


7 See http://www.state.gov/t/isn/27700.htm for a calendar of PSI activities.


9 The 21 members of the OEG are: Argentina, Australia, Canada, Denmark, France, Germany, Greece, Italy, Japan, the Netherlands, New Zealand, Norway, Poland, Portugal, Republic of Korea, Russia, Singapore, Spain, Turkey, United Kingdom and the United States. http://www.state.gov/t/isn/115491.htm

result of PSI countries cooperating. Secretary of State Condoleezza Rice, on the second anniversary of PSI, announced that PSI was responsible for 11 interdictions in the previous nine months. On June 23, 2006, Under Secretary for Arms Control and International Security Robert Joseph reported that between April 2005 and April 2006, PSI partners worked together “on roughly two dozen separate occasions to prevent transfers of equipment and materials to WMD and missile programs in countries of concern.” In July 2006, Under Secretary Joseph said that PSI had “played a key role in helping to interdict more than 30 shipments.” He also said that PSI cooperation stopped exports to Iran’s missile program and the export of heavy water-related equipment to Iran’s nuclear program. However, whether and to what extent PSI has contributed to these interdictions is unclear; they may have happened even without PSI. Moreover, even if the creation of PSI was followed by increased numbers of WMD-related interdictions, the increase may be the product of an upsurge in proliferation activity or improved intelligence. PSI coordination may also have benefits for interdiction efforts overall, and the need to attribute an operation to PSI appears to have receded.

Another way to gauge success might be to examine the completeness of membership in PSI, particularly of countries of highest proliferation of transshipment concern. For example, some states, such as China, Malaysia, Pakistan, and South Africa, remain outside the initiative. It should be noted, however, that some countries that are not ready to sign up as full participants do attend PSI exercises as observers. Other countries may participate indirectly in interdictions or information exchange related to WMD proliferation without becoming a full participant in PSI. India has attended PSI exercises as an observer, but has not yet formally joined PSI, despite U.S. encouragement.

An additional issue affecting successful implementation is conclusion of ship-boarding agreements, particularly with “flags of convenience” countries. So far, the United States has signed eleven ship-boarding agreements: in 2004 with Panama, the Marshall Islands, and Liberia; in 2005 with Croatia, Cyprus, and Belize; in 2007 with Malta and Mongolia; and in 2008 with the Bahamas; in 2010 with Antigua and Barbuda, and with Saint Vincent and the Grenadines. Such arrangements typically allow two hours to deny U.S. personnel the right to board a ship.

When a merchant ship registers under a foreign flag to avoid taxes, save on wages or avoid government restrictions, it is called a flag of convenience (FOC). FOCS are of particular concern for proliferation reasons because of looser government regulations over their shipments and the

---

11 See http://www.state.gov/secretary/rm/2005/46951.htm for the text of Secretary Rice’s speech.
14 Before PSI was announced, the US was already cooperating with other countries to interdict WMD shipments.
ease with which ships can switch from one registry to another to avoid tracking. Thirty-two countries have flags of convenience registries. Of these, Antigua and Barbuda, the Bahamas, Belize, Cambodia, Cyprus, Georgia, Honduras, Liberia, Malta, Marshall Islands, Mongolia, Panama, St. Vincent, Sri Lanka and Vanuatu are PSI participants. Panama and Liberia have the highest volume of FOC global trade.

Objectives and Methods

The FY2011 Congressional Budget Justification for the Department of State describes PSI’s mission: “a commitment by over 90 states to take action to interdict shipments, disrupt proliferation networks, and shut down the front companies that support them.” The long-term objective of PSI participants is to “create a web of counter-proliferation partnerships through which proliferators will have difficulty carrying out their trade in WMD and missile-related technology.” It functions as an “activity, not an organization” and envisions countries working in concert to bolster their national capacities to interdict WMD shipment using a “broad range of legal, diplomatic, economic, military and other tools.”

Several approaches under the PSI framework may help improve interdiction efforts. First, participating states agree to review their own relevant national legal authorities to ensure that they can take action. Second, participating states resolve to take action, and to “seriously consider providing consent ... to boarding and searching of its own flag vessels by other states.” Third, participating states seek to put in place agreements, such as ship-boarding agreements, with other states in advance, so that no time is lost should interdiction be required. A fourth aspect is participating in joint interdiction exercises.

As many describe it, PSI relies on the “broken tail-light scenario”: officials look for all available options to stop suspected transport of WMD or WMD-related items. In practice, cargos can be seized in ports if they violate the host state’s laws, hence the focus on strengthening domestic laws. On the high seas, ships have the rights of freedom of the seas and innocent passage under the Law of the Sea Convention and customary international law. The boarding agreements may allow for boarding, but not necessarily cargo seizure. In addition, a key gap in the PSI framework is that it applies only to commercial, not government, transportation. Government vehicles (ships, planes, trucks, etc.) cannot legally be interdicted. Thus, the missile shipments

---

18 As designated by the International Transportation Workers’ Federation, the following are flag of convenience states: Antigua and Barbuda, Bahamas, Barbados, Belize, Bermuda (UK), Bolivia, Burma, Cambodia, Cayman Islands, Comoros, Cyprus, Equatorial Guinea, French International Ship Register (FIS), German International Ship Register (GIS), Georgia, Gibraltar (UK), Honduras, Jamaica, Lebanon, Liberia, Malta, Marshall Islands (USA), Mauritius, Mongolia, Netherlands Antilles, North Korea, Panama, Sao Tome and Principe, St. Vincent, Sri Lanka, Tonga, and Vanuatu. See http://www.itfglobal.org/flags-convenience/flags-convenien-183.cfm.


picked up by a Pakistani C-130 in the summer of 2002 in North Korea, reported by the New York Times in November 2002, could not have been intercepted under PSI.

The October 2003 interdiction of a shipment of uranium centrifuge enrichment parts from Malaysia to Libya illustrated the need for multilateral cooperation. The Malaysian-produced equipment was transported on a German-owned ship, the BBC China, leaving Dubai, passing through the Suez Canal. The United States reportedly asked the German shipping company to divert the ship into the Italian port of Taranto, where it was searched. Passage through the highly regulated Suez Canal may give authorities an opportunity to delay ships and find a reason to board them. While some Bush Administration officials have cited this as an example of a successful PSI interdiction, others have argued it was part of a separate operation, and thus should not be used as evidence of PSI’s success.24

Officials have emphasized that under PSI, states will develop “new means to disrupt WMD trafficking at sea, in the air, and on land.”25 PSI exercises have been held to practice interdictions in all of these environments.26 In his 2004 speech introducing the initiative, President Bush proposed expanding PSI to address more than shipments and transfers, including “shutting down facilities, seizing materials, and freezing assets.”27 However, dual-use nature of some of the goods complicates these actions. In addition, while it may be comparatively easier to target shipments to states, such as Iran or North Korea, targeting terrorist acquisitions may be a greater challenge for intelligence agencies.

Another focus for PSI has been the targeting of proliferation finance. On June 23, 2006, 66 PSI states participated in a High Level Political Meeting in Poland, which focused on developing closer ties with the business community to further prevent any financial support to the proliferation of WMD.28 PSI states have also hosted at least four workshops to introduce industry representatives to PSI goals and principles.29

Legal Authorities

U.S. officials have been careful to emphasize that PSI actions, including ship boarding and seizures, would be carried out in accordance with national legal authorities and international law and frameworks. The Statement of Interdiction Principles commits participants to “review and work to strengthen their relevant national legal authorities where necessary to accomplish these objectives, and work to strengthen when necessary relevant international law and frameworks in appropriate ways to support these commitments.” There are differing opinions on whether the

24 Assistant Secretary of State John Wolf told Arms Control Today that the BBC China was a “separate” operation from PSI. The interdiction was reportedly part of an intelligence operation against the A.Q. Khan network and was timed to spur Libyan disarmament. See Wade Boese, “Key U.S. Interdiction Initiative Claim Misrepresented,” http://www.armscontrol.org/act/2005_07-08/Interdiction_Misrepresented.asp; Ron Suskind, The One Percent Doctrine, 2006, pp. 268-269.
25 Ibid.
26 See list of all activities at http://www.state.gov/t/isn/c27700.htm
27 See http://www.whitehouse.gov/response/index.html for text of President’s speech.
The United States should work more aggressively to expand international legal authority for interdictions on the high seas and in international airspace. The 2005 Protocol to the Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (SUA) would require states to criminalize transportation of WMD materials and their delivery vehicles. This protocol also “creates a ship boarding regime based on flag state consent similar to agreements that the United States has concluded bilaterally as part of the Proliferation Security Initiative.”

The United States Senate gave its advice and consent for ratification of the 2005 SUA Protocol on September 25, 2008. The administration submitted appropriate implementing legislation to the Senate Judiciary Committee in March 2010. A further step could be adoption of a U.N. resolution that would provide for interdiction activities under Section VII of the U.N. Charter, which allows the Security Council to authorize sanctions or the use of force to compel states to comply with its resolutions.

The Bush Administration has in the past attempted to expand international legal authority for PSI and related activities. The State Department has said that participating in PSI is a way for states to comply with their obligations under UN Security Council resolutions 1718, 1737, 1747, 1803, and 1540. U.N. Security Council Resolution 1540, passed in April 2004, requires all states to establish and enforce effective domestic controls over WMD and WMD-related materials in production, use, storage, and transport; to maintain effective border controls; and to develop national export and trans-shipment controls over such items, all of which should help interdiction efforts. While UNSCR 1540 was adopted under Chapter VII of the UN Charter, the resolution did not provide any enforcement authority, nor did it specifically mention interdiction or PSI. Early drafts of the resolution put forward by the United States had included explicit language calling on states to interdict if necessary shipments related to WMD. However, over China’s objections, the word “interdict” was removed and was changed to “take cooperative action to prevent illicit trafficking” in WMD.

UN Security Council 1874 does establish procedures for the required interdiction of WMD and other weapons going to or from North Korea. The PSI mechanism may assist countries in coordinating these actions.

The Law of the Sea Convention may affect PSI implementation and is under consideration in the Senate. Secretary of State Hillary Clinton said in her confirmation hearing that ratification of the Convention is an Administration priority. The Convention has also been supported by the Pentagon as a way to enhance PSI efforts. In a letter from the Joint Chiefs of Staff sent to the Senate in 2007, the Joint Chiefs argued for ratification, explaining that the convention “codifies navigation and overflight rights and high seas freedoms that are essential for the global mobility of our armed forces.” The letter said that the Convention supports the efforts of the Proliferation Security Initiative.

---

Senior military officials have also publicly said that not being a party hinders efforts to recruit new PSI participants. In his testimony before a Senate Armed Services Committee in April 2008, Vice Chief of Naval Operations Admiral Patrick Walsh said, “Our current non-party status constrains our efforts to develop enduring maritime partnerships. It inhibits us in our efforts to expand the Proliferation Security Initiative.”

**Issues for Congress**

It may remain difficult for Congress to track PSI’s success. However, reporting and coordination requirements now in public law may result in more information than was available in the past. The Implementing Recommendations of the 9/11 Commission Act of 2007 (P.L. 110-53) requires the President to include PSI activities for each involved Agency in his budget request, and requires submission to Congress of joint DOD-DOS reports to include detailed three-year plans for PSI activities no later than the first Monday in February each year. The Act also recommends that PSI be expanded, that the United States should use the intelligence and planning resources of the NATO alliance, make participation open to non-NATO countries, and encourage Russia and China to participate. It gives the sense of Congress that PSI should be strengthened and expanded by establishing a clear authority for PSI coordination and increasing PSI cooperation with all countries.

While PSI generally receives bipartisan support in principle, critics urge changes, such as increased transparency, expansion of participants, and improved coordination, rather than an end to the program. For example, the 9/11 Commission recommended that the United States seek to strengthen and expand PSI’s membership. Others emphasize coordination. Senator Richard Lugar has said, “PSI is an excellent step forward, but what is lacking is a coordinated effort to improve the capabilities of our foreign partners so that they can play a larger detection and interdiction role.”

U.S. government organization and management issues have also been highlighted as areas for improvement. The General Accounting Office published a report in September 2006, “Better Controls Needed to Plan and Manage Proliferation Security Initiative Activities,” that recommended the following: (1) the Departments of Defense and State establish clear roles and responsibilities, interagency communication mechanisms, documentation requirements, and indicators to measure program results; (2) the Departments of Defense and State develop a strategy to work with PSI-participating countries to resolve issues that are impediments to interdictions; and (3) a multilateral mechanism be established to increase coordination.

---


37 http://armed-services.senate.gov/statemnt/2008/April/Walsh%202004-01-08.pdf


39 Note that Russia joined PSI as a full participant in May 2004.


cooperation, and compliance among PSI participants. These recommendations were also endorsed by Congress in P.L. 110-53, the Implementing Recommendations of the 9/11 Commission Act of 2007. The President was required to submit a report to Congress on implementation of these recommendations, which was done past the mandated deadline, in July 2008. A follow-up GAO report issued in November 2008 details U.S. agencies’ efforts to increase PSI cooperation and coordination. It reported that the Bush administration had not issued a directive to U.S. agencies to coordinate PSI functions, as required by law. A joint report by the Department of Defense and the State Department was submitted to Congress in January 2009. The Obama administration has said that it would like to “institutionalize PSI” as part of its agenda. This could include following the mandates in the 9/11 Commission Act of 2007, although details have not yet been announced.

Geographic expansion of PSI participants remains a key issue—particularly how to engage China and India, as well as states in important regions like the Arabian Peninsula. Congress may also consider how intelligence resources are handled. Is intelligence sufficient and are there intelligence-sharing requirements with non-NATO allies? Also, how is PSI coordinated with other federal interdiction-related programs (e.g., export control assistance, WMD detection technologies, etc.)? One potential complication for congressional oversight of PSI is the absence of a way to measure PSI’s success, relative to past efforts. Congress may choose to consider, again, how successfully the recommendations of P.L. 110-53 have been followed, and whether more non-proliferation policy coordination within the U.S. government may be required.

Related Treaties and Conventions

On October 1, 2007, the Senate Committee on Foreign Relations received the Protocol of 2005 to the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (the “2005 SUA Protocol”) for consideration. The protocol was signed by the United States on February 17, 2006. In President Bush’s submission note to the Senate, he summarizes the importance of this protocol to PSI activities: “The 2005 SUA Protocol also provides for a shipboarding regime based on flag state consent that will provide an international legal basis for interdiction at sea of weapons of mass destruction, their delivery systems and related materials.” On July 29, 2008, the committee unanimously ordered the resolutions to advise and consent to the 2005 SUA Protocol. The full Senate approved the Protocol on September 25, 2008. The Senate must next approve implementing legislation for ratification to be finalized.

As mentioned above, the Senate is considering consent to ratification of the Law of the Sea Convention which military and other government officials argue will positively impact PSI implementation. Critics of the Treaty cite concerns about limiting U.S. sovereignty. The Senate

42 GAO-06-937C, as summarized in P.L. 110-53.
44 http://www.whitehouse.gov/agenda/homeland_security/
Foreign Relations Committee recommended advice and consent for U.S. adherence to the treaty on October 31, 2007.

**Legislation in the 111th Congress**

In the 111th Congress, legislation was introduced in support of PSI. H.Res. 604, introduced by House Foreign Affairs Committee Ranking Member Ileana Ros-Lehtinen, recognizes “the vital role of the Proliferation Security Initiative in preventing the spread of weapons of mass destruction.” Representative Ros-Lehtinen’s proposed bill, the Western Hemisphere Counterterrorism and Nonproliferation Act of 2009 (H.R. 375) includes a sense of Congress that PSI has “repeatedly demonstrated its effectiveness in preventing the proliferation of weapons of mass destruction,” and that the Secretary of State should seek to secure the “formal or informal cooperation by Western Hemisphere countries” for PSI.

The Foreign Relations Authorization Act for Fiscal Years 2010 and 2011 (H.R. 2410) called for “the expansion and greater development of the Proliferation Security Initiative (PSI)”. The associated H.Rept. 111-136, in its section on minority views praises PSI thus: “The Proliferation Security Initiative is an outstanding example of U.S. leadership in the area of nonproliferation. The PSI has demonstrated that success can be achieved through a flexible consensus of like-minded countries without the need for an international bureaucracy, constraining treaties, or formal permission that often never comes.”

The Comprehensive Iran Sanctions, Accountability, and Divestment Act of 2010 (P.L. 111-195) calls for any countries designated as destinations of diversion concern to be encouraged to participate in PSI and to conclude a ship-boarding agreement with the United States.
Appendix. PSI Participants (as of 1/01/11)

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Afghanistan</td>
<td>50.</td>
<td>Latvia</td>
</tr>
<tr>
<td>2.</td>
<td>Albania</td>
<td>51.</td>
<td>Liberia</td>
</tr>
<tr>
<td>3.</td>
<td>Andorra</td>
<td>52.</td>
<td>Libya</td>
</tr>
<tr>
<td>4.</td>
<td>Angola</td>
<td>53.</td>
<td>Liechtenstein</td>
</tr>
<tr>
<td>5.</td>
<td>Antigua and Barbuda</td>
<td>54.</td>
<td>Lithuania</td>
</tr>
<tr>
<td>6.</td>
<td>Argentina*</td>
<td>55.</td>
<td>Luxembourg</td>
</tr>
<tr>
<td>7.</td>
<td>Armenia</td>
<td>56.</td>
<td>Macedonia</td>
</tr>
<tr>
<td>8.</td>
<td>Australia*</td>
<td>57.</td>
<td>Malta</td>
</tr>
<tr>
<td>9.</td>
<td>Austria</td>
<td>58.</td>
<td>Marshall Islands</td>
</tr>
<tr>
<td>10.</td>
<td>Azerbaijan</td>
<td>59.</td>
<td>Moldova</td>
</tr>
<tr>
<td>11.</td>
<td>The Bahamas</td>
<td>60.</td>
<td>Mongolia</td>
</tr>
<tr>
<td>12.</td>
<td>Bahrain</td>
<td>61.</td>
<td>Montenegro</td>
</tr>
<tr>
<td>14.</td>
<td>Belgium</td>
<td>63.</td>
<td>The Netherlands*</td>
</tr>
<tr>
<td>15.</td>
<td>Belize</td>
<td>64.</td>
<td>New Zealand*</td>
</tr>
<tr>
<td>16.</td>
<td>Bosnia</td>
<td>65.</td>
<td>Norway*</td>
</tr>
<tr>
<td>17.</td>
<td>Brunei Darussalam</td>
<td>66.</td>
<td>Oman</td>
</tr>
<tr>
<td>18.</td>
<td>Bulgaria</td>
<td>67.</td>
<td>Panama</td>
</tr>
<tr>
<td>19.</td>
<td>Cambodia</td>
<td>68.</td>
<td>Papua New Guinea</td>
</tr>
<tr>
<td>20.</td>
<td>Canada*</td>
<td>69.</td>
<td>Paraguay</td>
</tr>
<tr>
<td>21.</td>
<td>Chile</td>
<td>70.</td>
<td>Philippines</td>
</tr>
<tr>
<td>22.</td>
<td>Colombia</td>
<td>71.</td>
<td>Poland*</td>
</tr>
<tr>
<td>23.</td>
<td>Croatia</td>
<td>72.</td>
<td>Portugal*</td>
</tr>
<tr>
<td>24.</td>
<td>Cyprus</td>
<td>73.</td>
<td>Qatar</td>
</tr>
<tr>
<td>25.</td>
<td>Czech Republic</td>
<td>74.</td>
<td>Romania</td>
</tr>
<tr>
<td>26.</td>
<td>Denmark*</td>
<td>75.</td>
<td>Russia*</td>
</tr>
<tr>
<td>27.</td>
<td>Djibouti</td>
<td>76.</td>
<td>Samoa</td>
</tr>
<tr>
<td>28.</td>
<td>El Salvador</td>
<td>77.</td>
<td>Saudi Arabia</td>
</tr>
<tr>
<td>29.</td>
<td>Estonia</td>
<td>78.</td>
<td>San Marino</td>
</tr>
<tr>
<td>30.</td>
<td>Fiji</td>
<td>79.</td>
<td>Serbia</td>
</tr>
<tr>
<td>31.</td>
<td>Finland</td>
<td>80.</td>
<td>Singapore*</td>
</tr>
<tr>
<td>32.</td>
<td>France*</td>
<td>81.</td>
<td>Slovakia</td>
</tr>
<tr>
<td>33. Georgia</td>
<td>82. Slovenia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. Germany*</td>
<td>83. Spain*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. Greece*</td>
<td>84. Sri Lanka</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. Holy See</td>
<td>85. St. Vincent and the Grenadines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. Honduras</td>
<td>86. Sweden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. Hungary</td>
<td>87. Switzerland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39. Iceland</td>
<td>88. Tajikistan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40. Iraq</td>
<td>89. Tunisia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41. Ireland</td>
<td>90. Turkey*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42. Israel</td>
<td>91. Turkmenistan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>43. Italy*</td>
<td>92. Ukraine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>44. Japan*</td>
<td>93. United Arab Emirates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45. Jordan</td>
<td>94. United Kingdom*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46. Kazakhstan</td>
<td>95. United States*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>47. Republic of Korea*</td>
<td>96. Uzbekistan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48. Kyrgyzstan</td>
<td>97. Vanuatu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>49. Kuwait</td>
<td>98. Yemen</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** State Department website, http://www.state.gov/t/isn/c27732.htm.

**Note:** * Member of Operational Experts Group.

**Author Contact Information**

Mary Beth Nikitin  
Analyst in Nonproliferation  
mnikitin@crs.loc.gov, 7-7745