For decades, the spread of sensitive nuclear technology and information, as well as dual-use items (goods which have legitimate civilian uses, but which may also be used in the production of nuclear weapons) has been slowed by a dedicated group of professionals around the world. These professionals maintain and enforce strategic trade controls in a variety of agencies such as customs, trade and foreign ministries. To understand the current challenges and concerns facing nonproliferation efforts, we surveyed these experts in countries throughout the world. Although they reported that they share the goals of the multilateral export control regime (MECR), many of them also reported concerns about a lack of training, especially as it relates to emerging technologies. If the world is to continue “holding the line” against the proliferation of nuclear weapons, a renewed focus on capacity building is critical.

In late 2021, we sent our online survey to strategic trade professionals around the world and asked them to answer a series of questions about the current state of nonproliferation efforts, as well as specifics about strategic trade control activities in their own countries. Individuals included in our survey come from every region and play a variety of roles relevant to strategic trade. Many of these experts are alumni of various strategic trade workshops and trainings arranged by the Center for International Trade and Security (CITS) at the University of Georgia. We were able to conduct the survey thanks to generous support from the Stanton Foundation. Ultimately, we received 85 expert responses across more than 20 countries, and the feedback revealed important insights into the gaps that must be addressed if nonproliferation efforts are going to continue to be effective.
DO STRATEGIC TRADE CONTROLS MATTER?

Encouragingly, strategic trade controls continue to enjoy broad support. In our study, 93% of respondents said that “strict enforcement of the international regulations governing strategic and dual-use trade are in [my] country’s best interest.” But despite this seeming consensus, another pattern emerged: in a series of questions, respondents reported that their capacity to enforce strategic trade regulations was limited, and that they require additional resources to fulfill the goals laid out by the international community. Only 31% of experts reported that their government has the “financial resources necessary to fully implement its obligations.” A slightly higher number reported that their governments have the necessary personnel (37%) and technical (36%) resources.

When asked which resources were most critical to their government’s ability to improve its capacity, however, the focus was very much on technical support. Some 47% of the sample identified technical support and training as a critical resource, compared with 35% who said financial resources were critical, and 32% who selected additional staff.

WHAT ARE THE BIGGEST CHALLENGES?

Respondents’ concern about technical training and support makes additional sense after considering the categories of goods they find most challenging. We asked, “When thinking about the future, which category of dual-use goods will likely be the most difficult to control, monitor, and license?” A plurality (35%) responded that technology is the most difficult to control. Artificial intelligence and machine learning algorithms (31%) was the second most pop-
ular answer. Likewise, when asked which category of goods is “most likely to be traded in a manner that violates existing NPT (Treaty on the Non-Proliferation of Nuclear Weapons) commitments,” a plurality (30%) listed technology, followed by systems, equipment and components (21%). Respondents also listed these two categories as the most attractive for governments seeking to develop an illicit nuclear weapons program.

**THE ROLE OF INTERNATIONAL COOPERATION**

The experts in our sample recognize the importance of international cooperation in making sure such governments do not acquire the means to develop nuclear weapons. An overwhelming majority (89%) believe that their country’s strategic trade management processes and activities should align with the goals of the international nonproliferation regime. Given the professional roles of the individuals in our sample, perhaps this is not surprising.

But despite acknowledging the importance of international cooperation, the extent of their international professional engagement is surprisingly low. Respondents said that their most frequent professional communication was with their immediate co-workers: 45% said they communicate with co-workers on a weekly basis. Communication with professionals from other agencies in their own countries occurred less frequently. The largest percentage (34%) said they communicate monthly with other agencies. But 70% of respondents reported their communication with professionals from other countries occurred at most several times a year (as opposed to monthly or weekly). A non-trivial share (10%) said they never communicate with profession-
als outside their own country. When asked about communication with international organizations, these rates were even higher: 16% said they never communicate with such organizations.

The professional strategic trade community is on the frontlines of the world’s efforts to prevent the spread of nuclear weapons. And at least those we surveyed believe that their own country’s priorities should align with the international community. But the results of the survey also identified some serious challenges. First, the respondents identified technology and artificial intelligence as the most difficult to control. At the same time, many expressed concern that they do not have the technical knowledge or training to adequately address these challenges. And while they said that international cooperation is necessary, they revealed that they have very little communication with their colleagues from other countries (let alone international organizations).

For the United States, the results of our survey suggest that a renewed dedication to capacity building remains critical to strengthening international non-proliferation efforts. Focusing on encouraging and facilitating regional and international communication—especially through technical training opportunities—appears to be an effective means of shoring up the world’s defenses against the proliferation of nuclear weapons.

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