

A DANGEROUS NEXUS: PREVENTING IRAN-SYRIA-NORTH KOREA NUCLEAR AND MISSILE PROLIFERATION

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Good afternoon and thank you for this opportunity to testify before the Subcommittees on the proliferation challenges posed by Iran, Syria, and North Korea and the threats posed by their cooperation. I will briefly describe certain aspects of the Iran-Syria-North Korea proliferation nexus and then offer recommendations for the Administration and Congress to better address this important national security challenge.

North Korea has proven itself capable of significant acts of proliferation. It sold Syria a nuclear reactor and possibly assisted it in creating the capabilities and facilities to produce fuel for this reactor which, in normal operation, would produce weapon-grade plutonium.

Given ongoing internal conflict, Syria is unlikely to be pursuing a secret nuclear program at this time. However, the *Financial Times* raised concerns about the security of upwards of 50 tonnes of highly purified natural uranium alleged to be in Syria, formerly intended for use in fuel for the Al Kibar reactor.¹ This material, unless further enriched, is not suitable for nuclear weapons and does not pose nearly the risk of Syria's chemical weapons stockpile. However, the uranium stock could end up in the hands of terrorists who may wish to sell it on the black market. This material may also end up in undeclared programs of other states. The *Financial Times* in particular raised the concern that Syria could provide Iran with this secret uranium stock. For several years, Iran has reportedly tried to obtain covertly quality uranium on the international market. Although Iran mines its own uranium, it could prefer a secret stock of purified natural uranium for a parallel uranium enrichment program. Fifty tonnes of natural uranium would be enough, if enriched to weapon-grade, for 3-5 nuclear weapons, depending on centrifuge efficiency and cascade operations.

Unfortunately, North Korea and Iran could mutually benefit from collaboration on their respective nuclear programs. There are reports that North Korea provided Iran with nuclear weapons data. Additionally, North Korea revealed that it signed a bilateral scientific cooperation agreement with Iran in September 2012, which the Obama administration reportedly fears could facilitate nuclear and missile advances by both countries.² This

¹ James Blitz, "Fears Grow over Syria Uranium Stockpile," *The Financial Times*, January 8, 2013.

² Jay Solomon, "Iran-North Korea Pact Draws Concern," *The Wall Street Journal*, March 8, 2013.

agreement contains the similar wording—including provisions for “exchange of expertise” and “joint use of scientific research equipment”—as the scientific agreement signed between North Korea and Syria in 2002. Soon after it made that agreement, North Korea began constructing the Syrian nuclear reactor. Despite the undeniable risks presented by Iranian and North Korean nuclear cooperation, preventing nuclear cooperation is extremely challenging.

There are multiple areas where North Korean assistance could prove valuable to Iran. North Korea appears to have deployed centrifuges based on the Pakistani P-2 design, which is also the basis for Iran’s recently installed IR-2m centrifuges. North Korea just announced that it plans to use its centrifuge facility to make weapon-grade uranium, something that would likely present technical challenges for Iran if it decided to pursue nuclear weapons. North Korean knowledge could potentially help Iran to overcome significant technical challenges.

Furthermore, if North Korea continues to develop its uranium enrichment program and builds devices using weapon-grade uranium, this expertise could benefit Iran, should it decide to build nuclear weapons. Iranian scientists are rumored to be observers at every major North Korean nuclear or missile test and although North Korea has likely tested only plutonium weapons thus far, future tests could preference its uranium program. Even if North Korea never deploys and tests a uranium bomb, its experience with miniaturization and weapons components, including sensitive machining and implosion design, could be helpful to the Iranians.

Though Iranian-North Korean cooperation on uranium enrichment is not well documented, there is significant evidence of North Korea assisting Iran with its missile program. Since the 1980s, North Korea has helped Iran produce its own short, medium, and long-range ballistic missiles. But Iran has also informed North Korean efforts, purportedly helping it with its first successful long-range missile launch in December 2012. According to MIT North Korea expert John S. Park, North Korea’s successful launch was “rooted in Iran’s orbital launch of its Omid satellite atop the Safir satellite carrier in February 2009.”³ In recent years, North Korea has assisted Syria in upgrading its missile capabilities in significant ways. Israeli intelligence assessed that North Korea helped Syria double its SCUD missile manufacturing capability between 2006 and 2008.⁴ North Korea’s willingness to cooperate with other nations on ballistic missiles certainly raises concern about deeper collaboration between Iran and North Korea on nuclear issues.

Even in the absence of close Iranian-North Korean nuclear cooperation, their cooperation on missile delivery systems has the possibility of indirectly advancing the capability of these states’ nuclear programs. My organization assesses, and other experts evaluate, that North Korea now has the capability to deploy a plutonium-based nuclear weapon atop its 800-mile, medium-range Nodong ballistic missile and that it may soon deploy these nuclear-capable missiles.⁵ The

³ John S. Park, “The Iran Secret: Explaining North Korea’s Rocket Success,” *The Diplomat*, December 25, 2012.

⁴ David C. Isby, “Syrian Ballistic Missile, Rocket Capability Gets a Boost,” *Jane’s Missiles and Rockets*, March 1, 2008.

⁵ Albright, “North Korean Miniaturization,” *38North.org*, February 13, 2013; Jay Solomon, “North Korea Eclipses Iran as Nuclear-Arms Threat,” *The Wall Street Journal*, March 31, 2013.

lessons available to Iran for accomplishing a similar feat with weapon-grade uranium are apparent, when it is remembered that the Shahab 3 missile was originally a Nodong missile supplied by North Korea. Further, according to International Atomic Energy Agency (IAEA) information, by 2004 Iran is believed to have already made progress in developing a warhead small enough to fit on the Shahab 3 missile.

North Korea and Iran may also assist one another in obtaining nuclear and missile dual-use goods and materials for their sanctioned programs, and Syria may have earlier been involved in these illicit procurement efforts. We know that a Chinese office of Namchongang Trading Corporation (NCG), a North Korean trading company subordinate to its General Bureau of Atomic Energy, was involved in purchases of sensitive material linked to the construction of the nuclear reactor in Syria.⁶ North Korea helped outfit the nuclear and ballistic missile programs of Iran and Syria, and Iran in turn may help North Korea through illicit procurements of goods.⁷ Each also illicitly procures its own needed goods for the nuclear programs, often using Chinese suppliers or subsidiaries as direct sources for goods or as platforms to buy high-tech Western and Japanese goods. These Chinese entities then transship the procured materials to Iran or North Korea. One question is whether Iran and North Korea are cooperating in exploiting China's weak trade controls and poor implementation of United Nations Security Council sanctions.

Preventing nuclear and missile cooperation between Iran, Syria, and North Korea is difficult particularly because their experts can easily travel to one another's countries to exchange information. Stopping the shipment of illicit goods between them is similarly challenging. How then can the United States and its allies address this proliferation nexus and reduce the chances that each will successfully help advance the other's programs? We must focus on what we can detect and prevent—the successful acquisition of goods needed to outfit and expand the nuclear programs of these countries—in addition to what we can do to pressure and enforce measures against these countries to better stop their proliferation efforts.

Better detection of nuclear and missile cooperation between Iran, North Korea, and other countries offers opportunities to stop it. A promising way to detect this cooperation is by focusing on the illicit procurements of nuclear and missile direct-use and dual-use goods sought by these countries, both for their own programs and for one another's. Iran, Syria, and North Korea have depended on the illicit import of a variety of goods, including raw materials, equipment, technology, and components, to outfit their nuclear and missile programs. They cannot manufacture many of these goods indigenously and thus are dependent on buying them from suppliers in high technology countries or middlemen and trading companies located in countries of trafficking concern.

⁶ U.S. Department of Treasury, *United States Designates North Korean Entities and Individuals for Activities Related to North Korea's Weapons of Mass Destruction Program*, TG-840, August 30, 2010.

⁷ *Report to the Security Council from the Panel of Experts on North Korea established pursuant to resolution 1874 (2009)*, undated, circulated in 2011, pp. 35-36.

China remains a key illicit trading and transshipment point for these trafficking efforts because of its failure to adequately implement UN Security Council sanctions resolutions and enforce its own trade controls. Better enforcement in China would significantly help prevent Iran and North Korea from buying from Chinese suppliers or using private Chinese companies to purchase high-technology goods from subsidiaries of U.S., European, or Japanese companies located in China. To encourage China to take action on Iran, President Obama should designate it a “Destination of Diversion Concern” under Subchapter III of the Comprehensive Iran Sanctions, Accountability, and Divestment Act (CISADA) of 2012 unless it commits to better enforcement within a given time period. Such a designation would require a special license to export certain sensitive dual-use U.S. goods to China and could have significant and undesirable economic consequences for China. Even the threat of this designation may be effective enough—the U.S. threat to designate the United Arab Emirates motivated it to create and implement trade controls in 2007.

To broaden the reach of CISADA and target North Korea and Syria, Congress should pass new legislation giving Congress the authority to designate additional countries of diversion concern that do not prevent illicit nuclear and missile transshipments. Doing so would help reduce the likelihood that U.S. goods will end up in these programs, provide the Administration and Congress with additional robust tools to encourage cooperation from other countries, and thereby hamper Iran’s, North Korea’s, and other proliferant states’ supply lines for their nuclear and missile programs.

In order to better detect Iran’s, Syria’s, and North Korea’s illicit procurements and attempts, and to stop them from potentially trading with each other, the United States should seek the worldwide implementation of cooperative detection and prevention programs between governments and industries that supply sensitive dual-use equipment. Under such government/industry cooperation programs, governments would inform companies about the latest schemes used by Iran’s and North Korea’s nuclear and missile programs and illicit procurement networks in order to help firms avoid making accidental bad sales. Governments would receive information about procurement attempts from these companies, which is useful in informing intelligence assessments about their requirements, activities, and smuggling techniques, and potentially pointing to opportunities to conduct interdictions, sting operations, and arrests.

Now only a few countries, including Britain, Germany, and the United States, actively use these cooperative programs in which the governments regularly share information and consult with domestic companies and their foreign subsidiaries about the illicit procurement schemes of sanctioned countries. Because of the success of the British, German, and U.S. systems in stopping illicit procurement by a range of countries, improving such efforts in more countries is a critical measure to preventing these threats.

There is also room for improvement in U.S. government/industry cooperation. The United States, perhaps surprisingly given its focus on stopping nuclear smuggling, has found it difficult

to fully implement such a system because of regulatory and classification issues over this type of information sharing with companies. My organization's research and outreach efforts have indicated that Congress should prioritize passing legislation to help the Administration and companies overcome the significant barriers to their full cooperation.

Improved intelligence methods will also remain a critical way to detect and disrupt illicit trade attempts and a crucial backstop to prevent efforts by Iran, Syria, and North Korea to exchange nuclear information or assets. Keeping watch on suspicious travel, spying on or infiltrating suspect sites, and covert actions are also important methods. Infiltration of procurement networks leading to tracking or sabotage of goods so as to render them useless or able to cause damage to other parts of a system and cyber infiltration and surveillance through procured computer equipment and software are equally useful methods. The Administration should expand these.

We must also keep the pressure on Iran, Syria, and North Korea until they abandon their respective nuclear weapons aspirations or programs. U.S. efforts to increase sanctions in addition to enforcement activities are instrumental in convincing these countries to change their decision-making calculus.

As I mentioned, convincing lagging countries to better implement UN sanctions resolutions and trade controls to prevent nuclear and missile trafficking by Iran and North Korea is vitally important to reducing their access to needed goods. The United States should redouble efforts at the Security Council to pass a resolution improving the mandate of the Resolution 1540 Committee to assist and pressure lagging countries on preventing nuclear and missile trafficking.

Stopping the money flows that pay for nuclear and missile related goods is another part of this effort. Unilateral U.S. financial sanctions have proven very powerful in the case of Iran by reducing its access to the international financial system. Encouraging U.S. partners to emulate this practice in other major international financial hubs would be beneficial. Less has been done by the United States to target North Korea's proliferation financing or to reduce its international financial access. The Administration should take initial steps toward designating North Korea a "jurisdiction of primary money laundering concern" under Section 311 of the Patriot Act. Doing so would start allowing the United States to better stop North Korean transactions potentially related to proliferation financing and reduce its access to the international financial system. If North Korea does not take concrete steps to constrain or rollback its nuclear projects, the Administration should in the future enact this designation as a means of containing North Korea's illicit finance efforts.

On the enforcement side, increased arrests and prosecutions of nuclear and missile smugglers would work to delay or interrupt procurement operations and actively shut down Iran's and North Korea's illicit procurement networks. The United States has spearheaded arrests and indictments against Iranian smugglers caught operating or passing through U.S. territory. It

should increase these efforts and encourage other countries to model them. Stronger sentences against smugglers tried by the United States would also better deter and disrupt the procurement operations of these countries.

U.S. sting operations have proven effective at catching and stopping both major and minor Iranian smugglers and should be expanded more actively abroad with regard to North Korean smugglers, many of whom likely operate relatively comfortably within China's borders. The United States should convince partner countries to start using sting operations to prevent these countries from illicitly obtaining goods they require, eliminate more smugglers from the scene, and send a stronger message about the willingness of states to tolerate violations of their export laws. It is not unreasonable to expect that China and Hong Kong could initiate sting operations against Iranian and North Korean smugglers procuring for their nuclear and missile programs.

With regard to Syria, sanctions and pressure, in addition to enforcement activities, apply, but the threat posed by Syria's nuclear and missile proliferation is now rooted in its internal instability. The United States must therefore consider solutions that consider the end of control over nuclear and other weapons of mass destruction assets by the Syrian regime and to prevent the unintended leakage of nuclear assets within or out of Syria. The U.S. government and its allies, in consultation with the International Atomic Energy Agency, should closely monitor events at suspect nuclear sites in Syria, and if feasible or wise, consult with Syrian rebels that may be operating near these locations to determine if proliferation-sensitive nuclear assets exist at any of these sites. If such assets do, they should organize access and spearhead the creation of an international effort to ensure that these assets are secured and possibly removed from Syria. As part of a post-conflict, longer-term goal, the United States should work with the Security Council to pass a resolution that creates the mechanisms and authorities to verifiably characterize, locate, and dismantle Syria's weapons of mass destruction programs to ensure the threat they pose is ended.

As we seek to engage in negotiations for long term solutions with Iran and North Korea and to help end the bloody conflict in Syria, we must at the same time be pragmatic about the need to exert pressure and implement measures to detect and prevent the improvement of these countries' nuclear and missile capabilities and, in the case of Iran, inhibit its growing ability to break out. Existing and any future preventive and counterproliferation measures enacted by the United States should not be repealed just because negotiations resume or are ongoing, or because Iran or North Korea make minor concessions. These measures should be withdrawn or reduced in line with significant progress on achieving nonproliferation and denuclearization goals. The Administration and Congress will need to work together and implement the recommendations that offer potential to achieve essential U.S. goals.