

Disrupting North Korea's Military Markets

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Ugandan President Yoweri Museveni eagerly observed the April 2014 graduation ceremony of 692 newly trained recruits at the Kabalye Police Training School in Masindi. Commenting upon the occasion for journalists present, Museveni thanked the country that had so reliably provided the training assistance for the course: not the United States, Germany or Rwanda, which have all assisted the Ugandan police and defence forces in past years, but rather 'the government of the Democratic People's Republic of Korea [who] ... always give us technical support'. 'There are some people who are not happy with [the North Koreans]', Museveni added, 'but I do not see any problem with them.'¹

In 2006, the United Nations Security Council had decided that North Korea was in fact everyone's problem. Pyongyang had just tested its first nuclear device and was actively developing its ballistic-missile capabilities. To generate funds in support of those programmes, North Korea was also selling arms and related goods and services to clients around the world. In an attempt to curb these activities, the UN Security Council passed Resolution 1718 (2006) which, among other things, imposed an embargo on trade with North Korea in large conventional-weapons systems, missiles, weapons of mass destruction, and related goods and services.² That arms embargo was notably strengthened twice more: once in 2009 to include all arms and related materiel and services, exempting small-arms and light-

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weapons sales;³ and once in 2016 to eliminate the small-arms exemption entirely, and to affirm that any North Korean training of police, paramilitary or special forces also constituted violations of the sanctions regime.⁴

The latter provision was designed specifically to undercut the arguments of countries such as Uganda, which regularly receive training assistance from North Korea. In 2015, the United Nations Panel of Experts Established Pursuant to Resolution 1874 determined that Uganda's contracts with the Korean People's Army violated the embargo.⁵ Uganda's leadership, including senior defence officials who themselves were trained in North Korea,⁶ disagreed with this interpretation of the 2009 resolution, and continued to call in the North Koreans for support. It is likely that they will ignore UN resolutions, even with the clarification issued by the Security Council in 2016.

Uganda is not an isolated case. Despite the fact that the UN arms embargo against North Korea will this year mark its tenth birthday, a slew of states continue to buy military goods and services from the country. Pyongyang's interest in these military relationships is obvious: defence exports are a source of foreign revenue for the cash-strapped regime, and fill some of the same coffers that fund North Korea's domestic nuclear and missile pursuits. In addition, where North Korea has military business, it also has a safe haven from which to operate unencumbered. Many of the key nodes in North Korea's global illicit network are located in customer states. Stemming such financial streams and disrupting these networks has thus been accorded higher priority by the Security Council following the country's 2016 nuclear test and satellite launch.⁷

Yet if this effort is to be successful, the drivers of *demand* for North Korean military goods and services must be well understood, in addition to the drivers for their supply. Establishing what individual clients such as Uganda have bought from North Korea since 2006, and why they selected Pyongyang as a supplier, is essential to crafting tailored diplomatic strategies that can be used to persuade customers to adhere to Security Council resolutions.

Two explanations for the continued existence of North Korean military clientele currently dominate the limited discussion on the subject: that the

country's defence offerings are inexpensive compared to competitors, and that those who buy them are internationally isolated members of the same anti-social network.⁸ Both hypotheses carry some weight. When disparate open-source evidence from the period since 2006 is collated and analysed, three broad categories of North Korean client emerge: resilient customers such as Iran, Syria, Cuba and Uganda, whose military ties to North Korea have weathered decades and who show little genuine remorse for dealing with the embargoed nation; reluctant customers like Ethiopia and pre-civil-war Yemen, which might prefer to buy elsewhere, but because of price or lingering dependency have found it difficult to cut Pyongyang out of their arms-related supply chain; and ad hoc customers like the Republic of the Congo, for which North Korea was a sporadic supplier of convenience in light of budgetary constraints and specific equipment necessities. All three categories of client demand concerted and nuanced outreach by countries interested in improving the implementation of Security Council sanctions resolutions and working towards the non-proliferation objectives they serve.

North Korea's place in the global defence market

North Korea's offering to the global defence market has evolved over time. In the late 1940s, then-supreme leader Kim Il-sung became determined to equip his own armed forces – a conviction cemented during the Korean War. As designing and manufacturing weapons from scratch would have required resources that Pyongyang did not have, Kim Il-sung instead negotiated licensing agreements for weapons of Chinese and Soviet design.⁹ By the 1960s, North Korea's defence complex was producing small arms, light weapons, artillery, tanks and armoured vehicles designed by those countries.

North Korea also began exporting its military goods and expertise not long thereafter, particularly to develop relationships that would generate support for its foreign-policy aims: reunification, the withdrawal of US forces from the Korean Peninsula and the securing of economic investment. Pyongyang saw numerous opportunities and obstacles to winning that support in the 1960s and 1970s. Decolonisation and independence movements were sweeping the globe, in an attempt to cast off imperialism

similar to the type North Korea claimed it suffered from. Socialist forces were springing up, requiring assistance from like-minded friends if they were to succeed. At the same time, Seoul was actively pursuing diplomatic relations with countries around the world, advancing a narrative counter to Pyongyang's.¹⁰

To take advantage of shifts in the global political landscape and outpace Seoul diplomatically, North Korea began to offer prospective partners military goods and services free of cost, at dramatically reduced prices, or in exchange for political support. The Castro family in Cuba reminisces now about the cost-free assistance it once received from North Korea.¹¹ Peru claimed North Korea sold it 100,000 AK-47s at 75–80% off world market price.¹² A US Library of Congress study asserts that, until the end of the Cold War, North Korea had state- and non-state customers in over 60 countries.¹³

In the 1980s, North Korea began to learn how to make ballistic missiles. Egypt agreed to sell North Korea two Soviet-made *Scud* missiles on the condition that when its scientists reverse-engineered them, they would teach Cairo how to manufacture the system in return. Pyongyang delivered on this promise, and subsequently spread the technology much more widely. Between the early 1980s and early 2000s, North Korea was one of the largest exporters of ballistic missiles and their production technology to the developing world, selling to the likes of Syria, Iran, Iraq, Yemen, Libya, Pakistan and the United Arab Emirates.¹⁴ Available information indicates that North Korea charged for these products and that missile sales constituted a substantial new income stream.¹⁵

On the whole, however, North Korea's broader defence-export campaign began to falter towards the end of the Cold War. Seoul's economy was improving dramatically, making it a more formidable competitor for the affections of foreign capitals. Any ideological and political pull North Korea once had was now fading, and its communist-bloc friends were swiftly becoming competitors in the new global defence market. Changes in the Soviet Union's military-engagement policies proved particularly problematic. Under Mikhail Gorbachev, the Soviet Union substantially scaled back its economic- and military-assistance programmes, including to North Korea.¹⁶ Weapons-production licenses from Moscow were one of the

casualties. This loss of support spurred major economic difficulties in the country, which would snowball in the 1990s. North Korea's dire economic situation meant that defence exports would from that point forward support primarily economic, rather than political, goals.

Policy changes by the Soviet Union had mixed implications for North Korea's prospective clientele. While some former Soviet weapons customers shunned by Moscow turned to Pyongyang, others struggled with the new reality of having to pay for their defence-equipment needs. Some temporarily refrained from major defence procurement and only later bought weaponry from outside the communist bloc, while others continued to extend the lives of their Cold War-era systems and periodically replace weaponry with newer variants of a similar heritage. It was with the latter category that North Korea managed to carve out a market niche: the repair, servicing and provision of spare parts for ageing communist-bloc systems. With the help of its new cash flow from ballistic-missile sales, North Korea managed to retain some of its prior military relationships, and keep its defence-export industry profitable in the final years of the Cold War and the immediate post-Cold War period.

Doing so would only get more difficult for North Korea as time went on. International norms against and controls on ballistic-missile transfers, which North Korea was aggressively pursuing, grew consistently stronger in the 1990s. In concert with concerns over the North Korean nuclear programme, especially after Pyongyang withdrew from the Non-Proliferation Treaty in 2003, these developments damaged the country's reputation as a defence supplier and pushed it even further towards the periphery of the global market.

North Korea's sanctions-era catalogue

When, in 2006, North Korea tested its first nuclear device and the Security Council concluded that its weapons trade was a threat to international peace and security, the reputational damage became irreversible. Yet, a decade after the introduction of Resolution 1718, North Korea is no less determined to sell its arms and related materiel and services overseas. In the sanctions era it has been working tirelessly to maintain existing customers, and

actively searching for new ones who are willing to circumvent sanctions or who have poor knowledge of them. For both tasks, North Korea deploys arms dealers around the world, draws upon the assistance of its embassies and trade representatives stationed abroad, and even co-opts non-North Korean facilitators. It also periodically initiates discussion with a prospective military client at a high level, as North Korea's outreach to Nigeria in 2004 best demonstrates.¹⁷

North Korea's contemporary defence-export catalogue is larger than most international-security analysts appreciate, and it appears willing to sell anything surplus to its own requirements. Its offerings include off-the-shelf weapons systems, supporting infrastructure and 'knock-down kits'; spare parts and munitions; weapons designs and technology; complete arms-production lines and factories; maintenance, repair and upgrade services; military and police training in a variety of disciplines; and logistical and procurement services. North Korea has successfully negotiated foreign contracts in all of these categories since the arms embargo was put in place in 2006.

Complete systems

The foundation of North Korea's defence manufacturing is designs from Beijing and Moscow. Though license agreements were a common way for North Korea to expand its indigenous production capabilities prior to the 1990s, it has also complemented this approach with forms of innovation. In particular, North Korea periodically reverse-engineers systems acquired elsewhere. It also modifies designs it is already familiar with. For example, it has repeatedly modified the Soviet-designed AT-4 anti-tank missile to include, among other things, a laser-guidance system.¹⁸ North Korea has from time to time also demonstrated that it is able to build systems from the ground up. The result of these efforts is that North Korea is able to produce weapons – in most cases variants of Chinese or Soviet designs – covering a wide range of categories: small arms and light weapons; towed and self-propelled artillery; multiple-rocket launchers; heavy anti-aircraft systems; surface-to-air systems and other air-defence platforms; tanks and armoured vehicles; naval craft; cruise and ballistic missiles; and weapons of mass

destruction and related technology.¹⁹ A glaring absence from this list is jet aircraft, which North Korea is not currently believed to be able to manufacture indigenously.²⁰ The quality of these wares is said to vary widely. North Korean AK-47s purchased decades ago by Malta and Peru are still being used by police and armed forces in those countries to this day – a testament to their longevity. By contrast, Yemeni officials insisted in conversations with their American counterparts that short-range ballistic missiles bought from Pyongyang in 2002 were defective.²¹

Spare parts and munitions

North Korea is able to produce and sell spare parts and munitions for all of the systems described above. It recently shipped spare parts to Vietnam for the *Yugo*-class midget submarines Hanoi purchased years earlier.²² In addition, North Korea can provide spare parts for most Cold War-era systems designed by other communist-bloc countries. As described above, this is an important niche market for North Korea; with one apparent exception, Guyana, North Korea was never at any time the primary supplier of a foreign nation's weaponry.²³ Instead, it offered weapons to foreign partners alongside other communist-bloc donors. Many countries are now laden with ageing Cold War-era weaponry that their former patrons have largely phased out in favour of newer variants. Finding spare parts to keep such arms in service is therefore a more difficult affair than it once was, and North Korea has helped to fill this void. It has supplied ammunition to Cambodia for Soviet-made small arms,²⁴ and spare parts to Ethiopia and the Republic of the Congo for Eastern European and Soviet-produced tanks.²⁵

Repair, maintenance and upgrade services

As with spare parts, North Korea is able to provide repair, maintenance and upgrade services for weapons of its own design or those of comparable design. In the last five years, for example, it is believed to have helped Syria amend its *Scud* ballistic-missile production infrastructure to manufacture variants with an extended range and newer guidance systems.²⁶ Where certain equipment is no longer produced by its original communist-bloc manufacturers, those manufacturing countries are often unable

or unwilling to service them, or charge a premium to do so. Vietnamese officials interviewed by the author highlighted their consistent frustration that Moscow ‘bends [them] over a barrel’ for after-sale services for Russian-origin equipment.²⁷ North Korea, by contrast, appears to offer such services relatively inexpensively, as demonstrated by its 2009 repair contracts for tanks, armoured vehicles and artillery in the Republic of the Congo, discussed in greater detail below.

Designs and production technology

One of Pyongyang’s most concerning offerings is weapons designs and manufacturing technology. As an unnamed US official remarked in 1996 about North Korea’s ballistic-missile-technology exports, ‘It’s one thing to give a man a fish; it’s another to teach him how to fish.’²⁸ North Korea continues to offer foreign capitals a recipe book for arms production, the necessary ingredients and a private tutor. North Korean-made arms factories now dot the globe. They can be found in Madagascar, Ethiopia, Yemen, the Democratic Republic of the Congo (DRC) and Uganda.²⁹ Namibia is the latest client to join this list. In 2016 it acknowledged that over the last 15 years it repeatedly contracted to North Korean companies to build military sites, including arms plants, and continues to do so.³⁰ Pyongyang also sold ballistic-missile manufacturing lines to Egypt, Syria, Iran and Libya, and helped Pakistan with medium-range ballistic-missile designs.

Military and police training

UN Security Council Resolution 2270 (2016) clarified that member states are expressly prohibited from contracting to North Korea for any military, paramilitary, police or special-forces training. This provision seeks to undercut another persistent revenue stream for Pyongyang’s armed forces. North Korea’s practice of offering these services has a long history. Over the years, Korean People’s Army (KPA) officers have taught counterparts from countries such as Syria, Egypt, Libya, Namibia, Vietnam, Zimbabwe, Uganda, Libya, Benin, Nigeria, the DRC, Mozambique and the Seychelles.³¹ In addition to training provided in the customer’s country, training for foreign personnel is also offered in North Korea, particularly at the Kim Il-sung

Military Academy. Information compiled through open sources, including peer-to-peer sites, highlights the range of disciplines in which KPA officers have trained their foreign counterparts. They include the operation of specific weapons systems; combat operations, strategy and tactics; leadership protection; unarmed combat; homeland security; intelligence operations and reconnaissance; and combat engineering.³²

Logistical and procurement services

Several customers have benefited from North Korea's ability to broker and procure goods from around the world. This includes both foreign-made weaponry and arms-related components. The now-defunct Liberation Tigers of Tamil Eelam are suspected of having used North Korean brokers to gain access to Chinese-made weaponry.³³ Whenever Pyongyang is assisting with a weapons-upgrade programme or defence-facility construction project in a foreign country, it can be assumed that it will also be active in procuring materials required from outside the Korean Peninsula. It draws upon its well-honed sanctions- and detection-evasion skills, and its far-reaching procurement networks to support these projects. This dynamic is borne out by previous interdictions of cargo destined for North Korean-assisted production lines in Syria, Libya, Myanmar and Egypt, among others.³⁴

It is difficult to glean sufficient information about North Korea's pricing decisions for the goods and services mentioned above. Information is often patchy, and lacking in the contractual specifics needed to draw useful comparisons with other, more reputable suppliers. Analysis of the available data suggests that North Korea likely considers both its level of competition and what the market will bear when pricing its defence offerings. It is plausible that Pyongyang is therefore comparatively inexpensive in terms of its conventional-weapons-related goods and services, but charges customers interested in unconventional weaponry and related goods and services steeper prices. Clients such as Syria, with an interest in nuclear capabilities, for example, will have few, if any, alternatives.

Two examples bear this hypothesis out, though a small number of other cases are available in open sources.³⁵ In 2008–09 the Republic of the Congo contracted to North Korea to refurbish its tanks, armoured vehicles and

artillery. The invoice submitted by North Korea shows a repair cost per unit for the 122mm multiple-rocket launchers of €5,520.³⁶ As a point of comparison, a Ukrainian defence firm was contracted for similar repairs for the Ukrainian government in 2013, charging approximately €27,000 per unit – about five times more.³⁷

In the area of unconventional weaponry, Thomas Plant and Ben Rhode recalled in this journal that North Korea allegedly charged Libya \$2 million for three canisters of slightly enriched uranium hexafluoride, or about 40 times the market rate at the time.³⁸ If correct, this figure would reinforce the idea that North Korea does not hesitate to charge high prices when it has little competition and the market will bear those costs. Any new details about North Korea's foreign defence contracts which may come to light in future years will create new opportunities to test and refine this hypothesis.

Resilient clients

North Korea's military clients are not homogeneous, either in terms of what they select from the aforementioned catalogue, or why they choose to buy those goods or services from Pyongyang over others. The open-source details of the relationships between North Korea and its individual customers reveal that client considerations have included long-standing bilateral political and military relations, often with attendant appreciation for Pyongyang's dependability; the North Korean leadership's personal relationships with particular leaders or ruling families, such as the Assad family in Syria; North Korea's willingness to assist with the establishment of indigenous manufacturing capabilities; reliance upon North Korean spare parts, or production or repair equipment; a lack of alternative suppliers; and, of course, cost. National decisions are taken sometimes in ignorance of the specifics of the UN sanctions regime against North Korea and sometimes in clear defiance of them.

Based on these details, North Korea's clientele can in fact be grouped into three broad categories: the resilient, the reluctant and the ad hoc. The first group, 'resilient' customers, includes countries such as Syria, Iran, the DRC and Cuba. Uganda, mentioned earlier, displays commonalities with the other members of this group. So too does Egypt, which was recently

confirmed to have again sought North Korean assistance with its ballistic-missile programme. The Burmese military's fondness for North Korean products and services, despite repeated pressure from Washington to cease these dealings, currently puts that country in the resilient camp. However, the country's recent transition to a civilian government eager to address issues hindering Myanmar's international integration – including ties to North Korea – may signal an imminent move to the 'reluctant' category.³⁹

Resilient clients uniformly demonstrate that they are aware of the current sanctions regime but actively choose to ignore it. With the exception of Myanmar, all have military ties rooted in the Cold War, when North Korea was an avid supporter of socialist and anti-imperialist movements. In fact, senior officials in many of the countries in this category have reminisced on-record about Pyongyang's past contributions to their countries' defence.

For some, this bilateral history is a reminder of the desire to maintain the friendship, for others it appears to be an indicator of dependability, and for others still the historical relationship seems synonymous with a particular long-reigning leader. Indeed, in a few instances, the bilateral military relationship with North Korea also seems to have an overtly political dimension. In the Ugandan case, for example, Kampala's public dealings with North Korea serve as a symbol of defiance and its independence in foreign-policy decision-making.⁴⁰

The majority of resilient customers in the post-Cold War era are somewhat isolated from the international community, and many are under sanctions themselves.⁴¹ Cuba, Syria, the DRC and Iran have fewer possible sources of weapons-related goods and services than most other nations do. It cannot hurt that North Korea asks few questions.

North Korea's pricing may also be a factor in the calculations of resilient customers, though few credible details are available to support this conclusion other than the preference of some resilient clients for barter trade.⁴² Nevertheless, civil conflicts in countries such as the DRC may make basic, inexpensive and easily resupplied weapons particularly attractive.

Syria is a prime example of such a dynamic. Of North Korea's military markets, Syria remains one of the oldest, most consistent and most lucrative. The North Korea–Syria relationship is believed to date back to the

1960s, and Pyongyang reportedly sent pilots to fly Syrian jets in the 1973 Yom Kippur War. Over the subsequent 20 years, North Korea assisted in other Middle East campaigns, trained Syrian forces, and sent weaponry including small arms, anti-tank missiles, multiple-rocket launchers and armoured vehicles.

In the late 1980s, Damascus started to involve Pyongyang in one of its most important procurement and development programmes. At the time, Syria wished to add new ballistic missiles to its stockpile of approximately 300 Soviet-made *Scuds*. Its requests to buy longer-range SS-23 missiles from Moscow were rebuffed. Moscow's appetite for military handouts to its foreign partners had dried up. Irritated, Damascus turned to Pyongyang with a request for *Scud-C* missiles and launchers.⁴³ Deliveries of off-the-shelf missiles began in 1991, but North Korea also agreed to provide production technology for the system so that it could be indigenously manufactured in factories near Aleppo and Hama. Collaboration in the ballistic-missile sphere continued in the decades thereafter, and remains active today.

Another notable area of cooperation between Damascus and Pyongyang is in the area of unconventional weapons. According to the US Central Intelligence Agency, 'as early as 1997' Syria began receiving North Korean help in the construction of a gas-cooled, graphite-moderated nuclear reactor in the desert at al-Kibar.⁴⁴ That reactor was nearing operational status in 2007 when it was destroyed by Israeli airstrikes. Multiple chemical-related shipments from North Korea have also been stopped since sanctions were imposed on Pyongyang in 2006. In 2009, South Korea detained four containers of military-application chemical-protection suits, en route from North Korea to the Syrian government-run Environmental Study Centre.⁴⁵ A second shipment of identical suits, as well as gas-indicator ampoules for chemical detection, was seized by Greece in November 2009.⁴⁶

Since the outbreak of the Syrian civil war there have been numerous indicators of a continuing and thriving military relationship between Pyongyang and Damascus. In 2012, South Korean authorities seized a large North Korean-arranged consignment of graphite cylinders bound for the Scientific Studies and Research Centre, one of the lead organisations in Syria's ballistic-missile programme.⁴⁷ Recent reports by IHS Jane's echo

earlier assessments by members of the Missile Technology Control Regime in concluding that North Korea is working in Syria to upgrade the re-entry vehicle and guidance systems for extended-range *Scud-D* missiles.⁴⁸

Other conventional-weapons shipments from North Korea to Syria have been identified in past years. Iraq denied overflight permission to a North Korean charter flight bound for Syria in 2012, which it was 'convinced' was carrying weapons.⁴⁹ Turkey seized 1,400 North Korean rifles, 30,000 ammunition cartridges, and gas masks allegedly destined for overland shipment to neighbouring Syria in April 2013.⁵⁰

Periodic reports have surfaced about the continued presence in Syria of KPA units, either for training or combat purposes. The Syrian Observatory for Human Rights has claimed that North Korean forces were fighting in Aleppo, that they were deployed at defence factories nearby and were supervising the Syrian army's artillery operations. They later claimed that North Korea had also sent helicopter pilots.⁵¹ Most recently, in March 2016, Asaad al-Zoubi, head of the opposition High Negotiations Committee to the Syrian peace talks in Geneva, alleged that 'two North Korean units [are in Syria]'.⁵² These assertions cannot be confirmed.

This pattern of behaviour is exemplary of a resilient client. Syria and North Korea's bilateral military history is substantial, having spanned half a century and a wide range of goods and services. For Syria, North Korea is a dependable supplier that is willing to ignore sanctions and provide unconventional military goods and services that Syria probably would not be able to negotiate access to elsewhere. Their political ties are comparably strong, bolstered not only by the evident warmth between the Kim and Assad families going back generations, but also by shared isolation today. The two countries frequently exchange high-level delegations and make public statements of support for one another, clarifying that they perceive common enemies. In a bizarre demonstration of its affections, Syria even built and unveiled a North Korea-themed park in summer 2015.⁵³

Syria is not alone in the resilient-client category; in fact, this category is probably the largest at present. Over time, as North Korea's reputation as

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a defence supplier has eroded, many of its less committed customers have fallen by the wayside. It is because of the considerations outlined above that clients such as Syria have not. This creates a notable policy problem for countries wishing to promote implementation of the UN arms embargo against North Korea. By definition, resilient customers are bound to be the most difficult to bring into conformity with UN measures. Neither sticks nor carrots hold much promise of changing their choices of military supplier. Normative pressure is likely to be ignored, and nationally or UN-imposed trade and finance penalties are generally viewed by these countries as par for the course. Sanctions on North Korean and Syrian entities and individuals involved in that bilateral military relationship have changed little in practice. Most resilient customers are already isolated from the international community and accustomed to facing difficulties in their military procurement.

In terms of incentives, offering carrots to the types of regimes that make up the resilient client base would be unpalatable to governments active in the non-proliferation arena. It is difficult to foresee the United States or United Kingdom incentivising Syria to sever ties with North Korea in current political circumstances, for example, especially as the North Korean dimension is not generally viewed as the priority issue in relation to resilient clients.

Though externally applied policies specifically designed to effect a change in a country's military relationship with North Korea cannot be expected to have much chance of success, impeding the activities of sanctions-busting entities and individuals remains important. Interdictions of prohibited cargoes can offer greater insight into a client's illicit relationship with Pyongyang, and can increase the costs of their business. Designations of relevant individuals and entities, especially those who are based in or travel through more cooperative countries, can also have a disruptive effect on North Korea's networks.

Ultimately, in most cases a resilient customer may only choose to cease its dealings with North Korea in the event of a wider shift in its political or security situation – such as the ongoing transition in Myanmar. This is particularly the case when non-proliferation supporters have few realistic

levers over the client in question. In the interim, these capitals must instead remain vigilant and advance international understanding of the specifics of the client's sanctions-relevant dealings with North Korea; prevent, as far as is possible, illicit cargo, technology and knowledge from reaching its destination; keep pressure on the customer; and be prepared to modify approaches should changing circumstances create an opportunity to break the customer of their North Korean habit.

Reluctant clients

The second group of North Korean customers comprises countries that maintain a military relationship with Pyongyang with evident reluctance. Like their resilient counterparts, these countries are aware of the illicit nature of their ties to North Korea, primarily because the UN and foreign governments constantly remind them. While they would prefer to buy elsewhere, North Korea continues to be a military supplier for various reasons: price, ageing weaponry that few others are able to repair or service, and historical dependency.

Ethiopia's relationship with North Korea exhibits these traits. At one time, Addis Ababa's ties to Pyongyang were anything but reluctant. The golden era in partnership started around 1980 under the leadership of Mengistu Haile Mariam. Mengistu had strong regard for Kim Il-sung and clear Marxist persuasions. According to the US Defense Intelligence Agency, North Korea repeatedly helped 'defend [Mengistu's] embattled Marxist government' with large amounts of weaponry, military training and assistance with a domestic arms-manufacturing capability.⁵⁴

These ideological considerations no longer prevail in government circles in Addis Ababa. Ethiopia now sources its military goods and services from countries with a wide variety of political leanings. One of them is the United States, which helped establish the Ethiopian Defense Command and Staff College, and which regards Ethiopia as a close counter-terrorism and regional-security partner in East Africa.

Despite this changed outlook, Ethiopia has repeatedly breached the UN sanctions regime put in place against North Korea in 2006. The reasons, insofar as they can be gleaned from open sources, are threefold: Ethiopia's

continuing need to keep its ageing Soviet-bloc weaponry in service; a prioritisation of price over quality when making supplier decisions; and historical decisions that have bred dependency upon North Korean assistance.

A leaked US diplomatic cable reveals that, ‘shortly after UNSCR 1718 banned arms transfers from DPRK in late 2006, the [government of Ethiopia] informed [the US] Embassy of an imminent delivery of tank parts and munitions components’.⁵⁵ The explanation given to US officials was that ‘they needed the equipment to sustain their Soviet-era military’.⁵⁶ This continues to be a challenge for Ethiopia, and North Korea remains one of the few countries willing and able to service those weapons, especially inexpensively. However, Ethiopia has also started to purchase somewhat newer, but

Price is a factor

still second-hand, equipment from elsewhere, potentially permanently closing parts of the market for Pyongyang. For example, Addis Ababa recently purchased used T-72 tanks from Ukraine, which also holds the related service contracts.⁵⁷

Price is another factor. In one discussion about the purchase from North Korea of lubricants and chemicals for ammunition production, Ethiopian State Minister of Defense Sultan Mohammad explained that the products were selected because they were 50% cheaper than those on offer from Beijing, even though they had greater impurities. These considerations reportedly applied to some weapons-systems and spare-parts contracts with North Korea as well.⁵⁸ The *New York Times*, which broke news of the 2007 tank-related contract mentioned above, quoted an unnamed US official as saying: ‘the Ethiopians bought the [weapons] equipment at a bargain price’. A second official said: ‘the Ethiopians know they can get the best price in Pyongyang’.⁵⁹ Demonstrating similar considerations, when the US protested to Ethiopia about purchases of fuel and oxidisers for SA-2 *Guideline* air-defence missiles from North Korea in 2008, the Ethiopians responded by requesting information on alternative, affordable suppliers.⁶⁰

A third motivation for Ethiopia’s dealings with North Korea is dependence, particularly in the area of arms manufacturing. Pyongyang is known to have built two arms factories in Ethiopia in the late 1980s: one near Ambo, now called the Homicho Ammunition Engineering Industry, and one

near Debre Zeyit, now called the Gafat Armament Industry.⁶¹ These were intended to allow Ethiopia to eventually rid itself of foreign assistance in weapons manufacturing. Rather than investing in an indigenous scientific and technical-expertise base that could achieve this goal, however, Addis Ababa opted to outsource. Korean technicians provided the Ethiopian military with the designs for the desired production lines, the machinery and parts to create them, and the training and expertise needed to operate them.

More recently, Ethiopia has complained of its dependence upon North Korean machines and parts to keep its 1980s North Korean production lines running.⁶² As retooling these production lines with non-North Korean technology is an expensive affair, in the sanctions era it is known to have opted for like-for-like replacements from Pyongyang.

Similarly, lacking the requisite expertise to upgrade North Korean production lines itself, Ethiopia is known to have called in North Korean technicians to help. An industrial-engineering study of the Gafat complex published by Addis Ababa University gives more concrete evidence of North Korean involvement in the site's operations after 2006. It refers specifically to a contract with the sanctioned Korea Ryong Bong General Corporation, still active in 2007, to retool production lines for the AK-47 and a variant of the AK-74.⁶³

In terms of the Ambo site, at the time of writing, Homicho Ammunition Engineering Industry listed a Korea Mineral Trading General Corporation as one of its primary suppliers.⁶⁴ The entity does not appear in any South Korean company registries, and uses a naming convention popular with North Korean-controlled companies. Supporting the conclusion that it is indeed North Korean is the fact that Homicho attempted to rapidly remove this name from some of its documentation when asked pointed questions about it by the UN in 2014.⁶⁵

Ethiopia's explanations to the US in the years since sanctions were introduced highlight the country's discomfort with its North Korean relationship. They have included 'North Koreans have now finished their work and are leaving', 'we will continue to source from North Korea', 'we haven't sourced from North Korea in the past year', 'the North Koreans have left' and 'some of the North Koreans may still be around'.⁶⁶ Ethiopia's chief of

defence staff, Samora Yunis, has also insisted that North Korean help at weapons complexes is needed if Ethiopia is to uphold its peacekeeping obligations.⁶⁷

US outreach to Ethiopia about its sanctionable dealings has ensured that Addis Ababa is fully aware of the risks and consequences of dealing with Pyongyang. Yet the technological, financial and historical considerations outlined above have resulted in seemingly enduring ties. This has introduced friction into the US–Ethiopian relationship.

From a policy perspective, reluctant clients such as Ethiopia are easier to prise away from North Korea than their resilient counterparts. Approaches adopted towards these countries should take account of the fact that they would prefer to source goods and services elsewhere, and they should acknowledge the comparative leverage that non-proliferation-active countries have over these clients.

Where the primary issue for a reluctant customer is cost, actions which heighten the actual or perceived cost of doing business with North Korea could be effective, such as interdicting suspect cargo and denying overflight permission to sanctions-busting flights. Yet a careful balance must be struck between these sorts of visible action and the benefits of limiting pressure to more private channels. Public penalties may drive a larger wedge between these clients and non-proliferation-active countries such as the US, reducing the latter's leverage and leading the customer to conclude that they have less to lose from continuing to do business with Pyongyang. In fact, it may be preferable to hang the threat of future unilateral penalties over private conversations, leaving their actual application as a last resort.

For clients such as Ethiopia, which buy from North Korea for a larger mixture of reasons, help finding alternative suppliers might be particularly worthwhile. The US previously encouraged Romania to make pre-civil-war Yemen an attractive offer for its marine-construction needs, to deter Sana'a from contracting to North Korea as planned.⁶⁸ The viability of such a tactic will, in all likelihood, depend upon the availability of appropriate financing – something that should be borne in mind.

Unlike for resilient clients, those supporting sanctions implementation have tools at their disposal that can realistically succeed in turning a

reluctant client away from North Korea. The approach with the highest chances of eroding demand from this group involves a mixture of pressure tactics and conditional incentives. Patience will also be essential. The process of changing the customer's cost-benefit calculations will inevitably be slow and strained. As a US official recounted: 'The Ethiopians came to us and said, "Look, we know we need to transition to different [suppliers], but we just can't do that overnight." ... [Fortunately,] they seem to have the readiness to do the right thing.'⁶⁹

It is important to note that the feasibility of any policy approach will depend on the country wishing to apply it. States such as the US will undoubtedly weigh the need to bring a country into compliance with UN resolutions on North Korea, on the one hand, against other bilateral considerations on the other. Spurning decision-makers in Addis Ababa could make them less cooperative on regional security matters, for example, something Washington is no doubt bearing in mind.

Ad hoc clients

North Korea has had sporadic or one-off customers as long as it has been in the defence-export business. Countries which have had a transient or transactional relationship with North Korea include Peru, Malta, Eritrea, Cambodia and the UAE.⁷⁰ Azerbaijan was in the final stages of negotiating a purchase of man-portable air-defence systems from North Korea in 2011 when its broker, a British arms dealer, was arrested.⁷¹ International investigators discovered that Saddam Hussein's Iraq was trying to obtain medium-range ballistic missiles and anti-ship cruise missiles from North Korea between 1999 and 2002. The goods were never shipped, though North Korea did pocket the \$10m deposit and, as one investigator said, 'took Saddam to the cleaners'.⁷²

The steady post-Cold War delegitimation of North Korea as a defence supplier has meant that ad hoc customers now constitute a far smaller share of North Korea's overall clientele than they once did. Most countries that may have considered Pyongyang decades ago would not seriously entertain the idea today. The handful that have been recently found flirting with Pyongyang's military goods and services seem to have been largely

motivated by the need to keep certain types of ageing weapons systems or production technology in service, and North Korean willingness to provide that assistance cheaply. This interest often appears to be met with genuine ignorance of the boundaries of the UN sanctions regime, in particular the fact that countries are forbidden from contracting to North Korea for repair and maintenance services, facility construction and spare parts.

The Republic of the Congo displays both traits. In 2008, Brazzaville approached numerous potential suppliers of repair services for its ageing Soviet-made T-54, T-55 and T-62 tanks, its armoured vehicles and its 122mm and 107mm multiple-rocket launchers.⁷³ Those suppliers reportedly included China, and were either unwilling to provide the necessary repairs or were notably more expensive. Buying new systems would have been prohibitively costly.⁷⁴

North Korea, which was and is still aggressively marketing its military goods and services across Africa through its companies on the continent, demonstrated interest. Brazzaville agreed a €2m contract for eight months of refurbishment work, technical assistance and training.⁷⁵ As highlighted above, precise prices have been revealed by the Republic of the Congo, and are substantially cheaper than those charged by Ukrainian defence firms for similar repairs.

The final of six shipments of related spare parts and equipment was seized by South African authorities at Durban port in October 2009, exposing the agreement between the two countries.⁷⁶ The subsequent public and official condemnation of the partnership led Brazzaville to expel the North Korean technicians in April 2010, with more than one-quarter of their work still incomplete. A second, smaller contract that had been agreed for additional refurbishment of similar weapons was also annulled by Brazzaville.⁷⁷ Since then it has cooperated fully with the United Nations, sharing details and documents relating to its contract with Pyongyang, suggesting it harboured no particular affinity for North Korea as a supplier. Those familiar with the case have similarly noted that it did not appear that the Republic of the Congo was aware that its dealings would constitute a major sanctions violation.⁷⁸

Ad hoc customers like the Republic of the Congo constitute an entry or growth market for North Korea. It is for precisely this reason that sanctions

implementers should devote attention to monitoring and addressing any emerging ad hoc military relationships with North Korea, even though they are fewer in number and less valuable than resilient customers. If left unchecked, ad hoc customers may eventually transition to another category.

As a preventative step, regular outreach, education efforts and démarches can help eliminate lingering ignorance of the sanctions regime. This can be done by governments or non-governmental organisations. Key to the success of such preventative steps, however, is that relevant decision-makers are reached. In many countries across Africa, for example, decisions over military contracts are taken exclusively in defence departments, frequently without the knowledge of other corners of the system. Information provided to foreign ministries may not be communicated across to appropriate decision-makers.

North Korean entities and individuals known to be involved in arms-related deals should be carefully monitored, including when travelling, to detect any new or resurgent client relationships. When concrete evidence of such ties does materialise, a first step is to clarify the provisions of relevant UN resolutions. Doing so can eliminate ignorance of the sanctionable nature of arms-related dealings with North Korea, and ensure that senior government figures are fully aware that the activities of their government, companies or nationals are being scrutinised.

Interdiction of suspicious cargo, as in the case of the Republic of the Congo, is also important. Such actions can bring pressure to bear on the recipient capital. In fact, whether the relationship came to light through an interdiction or by other means, pressure will be an important component of any tailored outreach to the customer. By nature of being new or sporadic clients, these capitals will have no particular political or military affinity for North Korea. Furthermore, their relationship with Pyongyang will be at a much earlier stage. The aim is therefore to deter habits from forming, rather than breaking existing habits, as with reluctant and resilient clients.

Pressure tactics can also be particularly effective if cost has been a driving factor behind the selection of North Korea as the supplier. Such tactics

*Interdiction
can bring
pressure to
bear on the
recipient*

should make use of the immaturity of the relationship with North Korea to raise the potential financial cost of any future interactions between the two. Credible threats to deny other contracts or aid to the client, or actively monitor and interdict future illicit cargo, could shift the customer's cost-benefit calculation in the sanctions implementers' favour.

Despite these opportunities, one cannot rule out the possibility that current or future ad hoc customers will not be persuaded. Should their custom become increasingly regular, approaches more akin to those used for resilient or reluctant clients may be warranted.

* * *

North Korea's defence-export history is long and colourful. Over the decades, it has learned to develop and market a wide range of weapons systems and related goods and services. It has carved out niches, including ballistic missiles and the repair and servicing of antique arms, and has steadily built up its defence-export catalogue. While that catalogue may have expanded, North Korea's client list has not. During the Cold War, the US Library of Congress assessed that North Korea had sold to state and non-state customers in over 60 countries, numbers which subsequently declined along with North Korea's ideological pull and its legitimacy as a defence supplier. The UN sanctions regime introduced in reaction to Pyongyang's first nuclear test in 2006 accelerated this trend. In the years since, North Korea has had its reactor in the Syrian desert bombed, its ships seized and its middlemen arrested.

Despite these setbacks and the uphill battle it faces, North Korea's defence-export industry remains both active and profitable. The country continues to enjoy military relationships spanning Africa, the Middle East, Asia and Latin America. It exploits ignorance of the UN sanctions regime, and leverages its ties to officials content to ignore that regime.

UN Security Council Resolution 2270 (2016), passed a decade after the UN arms embargo was initially introduced, directs more scrutiny than ever towards the entirety of North Korea's customer base. Individually, these clients may not appear to be significant pieces in the North Korean sanctions

puzzle; it is difficult to draw a clear link between tank-repair contracts in the Republic of the Congo and the pace and scale of North Korea's nuclear and missile activities half a world away. Yet collectively, Pyongyang's customers for arms and related goods and materiel are immensely important. For North Korea, they are a vital network of safe havens for its illicit operations in a world where its presence is heavily scrutinised. They are a revenue stream at a time when a growing number of states are trying to limit those open to Pyongyang. And they are ultimately a lifeline for North Korean entities and individuals that rely on success abroad for legitimacy at home, where they advance destabilising nuclear and missile programmes.

Effort must therefore be made to prevent supply from meeting demand, whether that demand is resilient, reluctant or ad hoc. As no single factor explains these customer relationships, any initiatives to dissuade capitals from doing business with Pyongyang must take into account the client's characteristics and circumstances. Visible pressure may help break an ad hoc client away from North Korea, but private pressure exerted by governments with leverage may be more effective for reluctant clients. Proposals of conditional incentives would be unpalatable if the customer is resilient, but both possible and desirable if it is reluctant.

As Samantha Power, US Ambassador to the United Nations, recently noted, we should be under 'no illusions that, following the adoption of [UNSCR 2270], the DPRK government will abruptly abandon its prohibited weapons programs'.⁷⁹ In short, there is little hope of affecting the drivers of North Korean supply. Appropriately tailoring demand-side outreach to North Korea's military customers will therefore remain vital to the success of broader efforts to disrupt North Korea's illicit networks and revenue streams, and improve implementation of the UN sanctions regime.

Notes

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- 4 UN Security Council Resolution 2270 (2016), S/Res/2270, 2 March 2016, http://www.un.org/en/ga/search/view_doc.asp?symbol=S/RES/2270%282016%29.
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- 30 UN Security Council, S/2016/157, pp. 40-1.
- 31 Details of past and present participants in North Korea's military training programmes can be found in a wide variety of sources. The United Nations has cited Uganda, Namibia and Vietnam as three countries to

have recently benefited from this type of assistance. See UN Security Council, *S/2016/157*, pp. 40–5. The author’s searches of online professional websites such as LinkedIn reveal that groups from Nigeria and Benin also received North Korean police or military training. Historical literature highlights numerous others. For the most comprehensive overview of the extent of North Korea’s Cold War-era training programmes in Africa and the Middle East, see Armstrong, *Tyranny of the Weak*, p. 194; and Defense Intelligence Agency, ‘Exporting Military and Economic Support’, in ‘The Foundations for Military Strength’. See also ‘Relations with the Third World’, in Savada (ed.), *North Korea*; and Helen Chapin Metz (ed.), *Madagascar: A Country Study* (Washington DC: GPO for the Library of Congress, 1994).

- ³² Uganda has provided the United Nations with a detailed list of the types of training it has received from North Korea. See UN Security Council, *S/2015/131*, pp. 100–2. Joseph Bermudez outlines various North Korean guerrilla-warfare and special-forces courses which groups in Mozambique and Zimbabwe, among others, took part in in the pre-sanctions era. Joseph S. Bermudez, *North Korean Special Forces* (Annapolis, MD: Naval Institute Press, 1998), pp. 142–4. LinkedIn searches for ‘Kim Il Sung Military’, or for educational institutions in ‘North Korea’ or ‘DPRK’ reveal other courses in disciplines as varied as leadership protection, intelligence collection and ‘combat engineering’.

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- ³⁹ The details of each of these cases, including the history of their relationship with North Korea and the military goods and services they have purchased from Pyongyang, can be found in Berger, 'Target Markets'. Additional countries about which there is less information may deserve membership as well. In 2014, several governments conducted coordinated démarches of over a dozen African nations, including suspected resilient clients such as Angola and Sudan, regarding possible arms-related trade with North Korea. Author interviews conducted on a not-for-attribution basis in July 2014.
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