

# North Korea's tactical nuclear weapons expand deterrence, risk

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Experts say sanctions relief would get North Korea's attention to return to negotiations as the country faces economic downfall.

**Seoul, South Korea** – North Korea appears to be well on its way to becoming a mature nuclear state despite longstanding United Nations sanctions, after Pyongyang's tests in late March of cruise and ballistic missiles capable of carrying tactical nuclear warheads.

North Korea's nuclear development increased dramatically under leader Kim Jong Un, who took power in 2010 following the death of his father, Kim Jong II.

Kim Il Sung, the founder of North Korea and Kim Jong Un's grandfather, conducted 15 ballistic missile tests between 1983 and 1993, according to the database of the Nuclear Threat Initiative, a Washington think-tank.

Kim Jong II oversaw two nuclear tests and 16 missile tests. Kim Jong Un has presided over four nuclear tests and 91 ballistic missile tests, as well as the launches of cruise missiles and the firing of rocket-propelled artillery.

"They clearly see this type of weapons development as a key to their survival, and they will not stop," Eric Gomez, director of defence policy studies at the Cato Institute, told Al Jazeera, while at the same time suggesting there was a window through which the US could at least reduce the threat with greater efforts and compromise.

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"If the US wants to find a diplomatic way out of this it's going to be painful," Gomez said.

North Korean missile development has continued even as the North has been subject to strict UN Security Council sanctions and through on-and-off talks on denuclearisation.

Negotiations have now been stalled for about two years and North Korea has rebuffed offers to resume discussions from the new US administration under Joe Biden.

## **Predictable pattern**

The development of nuclear and missile programmes has followed a somewhat predictable pattern.

First, Pyongyang set about developing the delivery systems that could reach the US with an intercontinental ballistic missile (ICBM). Then, it tested and modified the nuclear device that could be placed on such a missile and delivered to its target. North Korea crossed that threshold in 2017, possibly earlier.

While their more recent advancements and potential future capabilities are not what experts call revolutionary, North Korea still has some nuclear weapons technologies to master that will seriously increase its ability to deter adversaries and wage nuclear war.

The recent tests involved short-range missiles ideal for a tactical nuclear warhead, Ankit Panda, Stanton senior fellow in the Nuclear Policy Program at the Carnegie Endowment on International Peace, told Al Jazeera.

These tactical missiles are based on the Russian-designed Iskander, powered by solid fuel, and able to be manoeuvred mid-flight, making them more difficult to spot on the ground and more difficult to intercept in the air.

Whether or not the missile was developed with foreign assistance is disputed by analysts, according to the Center for Strategic and International Studies (CSIS) Missile Defense Project.

Called KN-23 by North Korea, it is also meant to target US and South Korean troops and airfields on the Korean Peninsula, according to research fellow and North Korea specialist Shin Seung-gi of the Korea Institute for Defense Analysis.

## Kim's wish list

Tactical nuclear weapons are one of the items on Kim's wish list that elicit concern, because, despite Kim Jong Un's assumed preference to maintain personal "assertive control" over any launch of North Korea's nuclear weapons, with tactical nuclear weapons that expectation changes.

"Tactical nuclear weapons are a big headache when it comes to command and control ... as they lend themselves to pre-delegation to officers in the field," explained Panda.

That means tactical nuclear weapons could be more widely distributed throughout the country, to more officials capable of launching them in the case of a perceived attack, which raises additional concerns, according to analysts.

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"North Korea does not have great situational awareness – early warning systems – so the chance of a miscalculation is quite high," said Panda.

As any potential conflict escalated, Panda explained, Kim Jong Un would inform Pyongyang's adversaries that he would not need to order a retaliatory nuclear attack, but would be automatic, because authority to launch had been delegated to field commanders.

"In order to have a deterrent effect, tactical nukes need to be publicly delegated," Panda, the author of, Kim Jong Un and the Bomb, told Al Jazeera.

## 'Decapitation strike'

Such an arrangement would also dramatically increase the risk of any attempted "decapitation strike" on North Korea's leadership.

Kim's other goal that especially concerns US security analysts is a more advanced ICBM.

"I think the big thing that Kim is really going to want is a solid-propellant ICBM and new payloads, MIRVS," Panda said.

MIRVs, multiple independent re-entry vehicles, meanwhile, are ICBMs that contain several warheads that target separate locations, and create serious problems for anti-missile defences.

"The top agenda item for Kim Jong Un is to demonstrate to the United States that he has a credible survivable retaliatory capability ... deterring pre-emption," Panda said.

#### **Stockpile of fissile material**

North Korea's acquisition and stockpiling of fissile material for the nuclear warheads also poses a challenge for the US and its allies.

North Korea is estimated to have enough fissile material for about 90 bombs, according to Panda, who acknowledged that number can only be considered a rough guess.

North Korea is now thought to acquire most of its bomb-grade material using centrifuges that enrich uranium in relatively easily concealed complexes.

The International Atomic Energy Agency has said North Korea's nuclear weapons programme remains "a cause for serious concern [and in] ... clear violation of relevant UN Security Council resolutions".

Independent sanctions monitors said last month that North Korea had <u>maintained and</u> <u>developed</u> its nuclear and ballistic missile programmes throughout 2020, helping fund its activities through cyber-hacks.

On March 30, just days after the most recent missile tests, satellite imagery analysed by <u>Beyond</u> <u>Parallel at CSIS</u>, revealed steam emanating from the reprocessing lab of the Yongbyon nuclear complex, which some analysts had suggested was obsolete.

The Yongbyon complex reprocessed spent fuel from nuclear reactors, using plutonium for nuclear weapons. The renewed activity is reasoned to be aimed at possibly re-establishing plutonium bomb production as well as pressuring the US to bring something to the negotiating table. North Korea has already rebuffed overtures from the Biden administration, which took office in January, to engage in track-two backchannel talks on repeated occasions.

## **Repeated outreach**

The international community, and especially the US, have repeatedly tried to negotiate with North Korea to give up its nuclear weapons programme.

It began with the Agreed Framework of the early 1990s, then the Six-Party Talks in the 2000s and more recently, albeit briefly, in three summits between Kim Jong Un and former US President Donald Trump.

United Nations Security Council sanctions have been in force since 2006, when Pyongyang completed its first nuclear test, and North Korea is currently subject to about 12 UNSC sanctions and resolutions restricting not only Pyongyang's weapons procurement, but much of its industrial trade in a variety of other products and raw materials, including the export of coal and the importation of oil.

The US and its allies have also levied a series of other unilateral sanctions on Pyongyang.

Even with the pressure, the North has shown little willingness to give up its nuclear weapons because it views the South Korea-US alliance as a major threat, with 28,500 US troops stationed in the country.

Despite North Korea's million member standing army, its conventional forces are no match for either South Korea's somewhat smaller military, or the combined forces of the South Korea-US alliance. North Korea considers nuclear weapons as an offset, equaliser.

#### No good options

As Biden's team plans with allies in Japan and South Korea about how to get talks back on track, he may be wary of offering concessions.

When Kim and Trump traded so-called "love letters" and met on three separate occasions, the then-US president faced intense criticism.

But there are also few ways left to increase the pressure on the North towards denuclearisation.

"You don't want to be seen as rewarding certain behaviour out of North Korea, but at the same time, it's hard to see how slightly better sanctions enforcement, or slightly more coordinated external pressure on North Korea gets them to do the thing you want them to. It sucks. The US really doesn't have good options here," Gomez said.

North Korea does not want a repeat of the Trump-Kim summit in Hanoi in 2019, in which Kim Jong Un offered to scale back parts of its programme for relief from UN sanctions, but was promptly rebuffed [File: Ahn Young-joon/AP]The experts who spoke to Al Jazeera suggested the least bad option would be to enter into some type of talks with Pyongyang, as its nuclear deterrent is likely to continue to improve, and the longer the US waits, the weaker its bargaining position.

North Korea, meanwhile, does not want a repeat of the Trump-Kim summit in Hanoi in 2019, in which Kim Jong Un offered to scale back parts of its programme for relief from UN sanctions, but was promptly rebuffed in an embarrassing episode in which Kim was widely viewed as losing face.

"North Korea could not get the results they wanted in the South-North talks or through the US summits, so they increased their nuclear capability," said KIDA's Shin.

#### **Practical diplomacy**

But there are indications Biden might be getting some of the political cover from American think-tanks that he might need to exercise more practical diplomacy.

"There are more and more voices calling for an arms-control approach that would give Biden the intellectual backing he needs to do it," said Cato's Gomez.

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"It's not denuclearisation but it's still better than the alternative – for South Korea, for Japan and for the US."

But the US will have to give more concessions than it has been willing to in the past. Experts said sanctions relief would get North Korea's attention, particularly with the deterioration of the country's economy as a result of the COVID-19 pandemic and the closure of borders with China, its key trading partner.

It's an "important source of leverage ... a door the North Koreans would be looking to crack open," said the Carnegie Endowment's Panda, advocating talks aimed at risk reduction.

The Biden administration has said it will soon conclude its policy review on North Korea, which will provide some clarity concerning the new US president's strategy towards Pyongyang.

It cannot come a moment too soon, said the Washington DC-based Cato analyst Gomez, "For North Korea, if we kick the can down the road, 'oh perfect, more time to test the new stuff."