

Missile diplomacy: North Korea enhances tactical weapons as nuclear talks stall

[Content preview – Subscribe to **Jane's Defence Weekly** for full article]

Whether or not a nuclear deal is reached between Washington and Pyongyang, North Korea's drive to improve its tactical weapon systems has highlighted its ability to respond to what it calls "military provocations" by the United States and its regional allies. *Gabriel Dominguez* reports

"I believe that [North Korea's] development of a missile that flies at a lower altitude than a conventional ballistic missile in an irregular trajectory is aimed at breaking through the missile defence system [of Japan]," Japanese Defence Minister Takeshi Iwaya told reporters at a 27 August press conference following Pyongyang's series of missile test-launches carried out earlier that month.



North Korea's KN-23 SRBM, which has been tested on four occasions since 4 May, bears a resemblance to the 9M723/9M723E series of close- to short-range ballistic missiles used by the Russian Iskander system. (KCNA)

1745468

The statements made by Iwaya, which also pointed to North Korea's efforts to reduce the signature of the firing preparations of the four new road-mobile, short-range missile systems

it has tested repeatedly since 4 May, highlighted Japan's growing concern about the new, relatively advanced tactical weapons being used against Japan.

The growing difficulty of countering North Korea's newest missiles, which have all been test-fired from different locations and appear to use a solid propellant propulsion system, was mentioned by Iwaya's South Korean counterpart Jeong Kyeong-doo during a defence forum in Seoul on 31 July.

Speaking about North Korea's KN-23 (South Korean/US Forces Korea designation) short-range ballistic missile (SRBM), Jeong said stopping it would be difficult, although South Korea's missile defence systems would be able to detect and intercept it.

KN-23 SRBM

A missile similar in appearance to the KN-23 SRBM was unveiled by North Korea on 8 February 2018 in a parade to mark the 70th anniversary of the founding of the Korean People's Army (KPA).

North Korean media has since shown the KN-23, which resembles the 9M723/9M723E series of close- to short-range ballistic missiles used by the Russian Iskander system, being test-fired from tracked and wheeled transporter-erector-launcher (TEL) vehicles. As with the Iskander system, two missiles are carried on each TEL and are erected by a hydraulic piston attached between the TEL body and a launching rail.

The SRBM type, which as far as is known uses a single-stage solid propellant rocket motor, was fired on 4 and 9 May, as well as on 27 July and 7 August. According to South Korea's Joint Chiefs of Staff (JCS), the missile reached altitudes of between 37 km and 50 km during these test-firings and flew distances between 240 km and 600 km, the latter making it capable of reaching any target in South Korea and possibly parts of western Japan, as well as United States military bases in those areas.

To demonstrate the weapon's accuracy, the state-run Korean Central News Agency (KCNA) released photographs at the time reportedly showing that the KN-23 was able to hit what appears to be a small islet in the Sea of Japan, also known as the East Sea.

Given its range and purported accuracy, the SRBM could be used by North Korea in the event of conflict to target South Korean air bases hosting F-35 Lightning II Joint Strike Fighters or the deployment site of the US Terminal High Altitude Area Defense (THAAD) system in South Korea's Seongju County.

A 30 August report by an expert panel for the United Nations Security Council (UNSC) quoted an unnamed UN member state saying that North Korea's "capacity to penetrate ballistic missile defence [BMD] systems has increased with the new [KN-23] SRBM tested on 4 and 9 May 2019 because its trajectory is flatter than that of a traditional 'Scud' missile". It added that North Korea has "upgraded its missile systems with better guidance and electronics".

Another UN member state was quoted in the report saying that North Korea has “achieved indigenous capabilities in the production of guidance systems”. The report authors concluded that although North Korea has not resumed testing of nuclear weapons or intercontinental ballistic missiles (ICBMs) as part of a ‘self-imposed’ moratorium announced in April 2018, the missile launches involving the KN-23 show that the country has “enhanced its overall ballistic missile capabilities”.

Large-calibre MRL

The second of the four weapon systems recently tested by North Korea is what the KCNA described as a newly developed “large-calibre multiple-launch guided rocket system” that “will play a main role in ground military operations in a short span of time”.

The weapon, referred to by South Korea’s JCS as being “a different type” of SRBM, was test-fired on 31 July and 2 August, with the projectiles reaching an altitude of between 25 km and 30 km and flying between 220 km and 250 km at a top speed of Mach 6.9 before falling into the East Sea/Sea of Japan.

The state-run Korean Central Television (KCTV) released heavily pixelated photographs of the system at the time showing what appears to be a tracked TEL fitted with at least four launch tubes. One of the images shows a projectile being launched that seems to have small control surfaces on its nose: a feature seen on guided artillery rockets used in North Korea and other countries.

[Continued in full version...]

(785 of 4583 words)

For the full version and more content:

Jane's Defence Industry and Markets Intelligence Centre

This analysis is taken from [Jane's Defence Industry & Markets Intelligence Centre](#), which provides world-leading analysis of commercial, industrial and technological defence developments, budget and programme forecasts, and insight into new and emerging defence markets around the world.

*Jane's defence industry and markets news and analysis is also available within **Jane's Defence Weekly**. To learn more and to subscribe to **Jane's Defence Weekly** online, offline or print visit <http://magazines.ihs.com/>*

For advertising solutions visit [Jane's Advertising](#)