

# How Agni-V induction will enhance India's nuclear deterrence

*By Debalina Ghoshal*

Recent reports suggest that India's Agni-V intermediate range ballistic missile (IRBM) with a strike range of 5000kms is ready for induction. The Indian military has always been careful in choosing its words right and any acquisition of weapon systems during peace time is termed as 'induction' by the Indian armed forces. Deployment is a more aggressive term that relates to a war time or crisis situation. The missile has the capability of striking the northernmost parts of China and can carry nuclear warheads. Thus, it is a deterrent against China's nuclear capabilities.

Standoffs between India and China are not uncommon. In addition, China's nuclear policy is clear on the fact that its 'no-first use' policy only holds true as long as the territory does not belong to them. China has kept open the option of using nuclear weapons first in a territory they consider their own. Thus concerns remain alive regarding the 'first-use' of nuclear weapons in Arunachal Pradesh, an Indian state which China considers to be a part of its territory. Hence, India's nuclear deterrence needs to be credible enough to deter China from attacking any Indian territory with nuclear weapons.

New Delhi has been very careful to restrict the range of the missile at the moment to 5000km by keeping the missile's flight trajectory a depressed one. A depressed and lofted trajectory result in the reduction of range of the missile. There are also reports that the range of the missile was purposely restricted to an IRBM capability due to diplomatic pressures from the United States, though these reports have been denied by the government of India.

Agni-V in future would be equipped with multiple independently targetable re-entry vehicles (MIRVs). MIRVs are multiple warheads fitted on a single re-entry vehicle. These warheads are miniaturised nuclear warheads rather than a single warhead. Such systems enable a ballistic missile to evade enemy missile defence system. The missile like the other ones in the Agni category missile system is a solid-propellant missile system that is mobile.

One of the key improvements in the Agni-V system is its ability to be canister launched. Canister launched system indicates that missiles could be mated with their warheads. There is a concern therefore that canister launched missile could indicate that India could make a shift from its 'recessed deterrence posture' to a 'ready deterrent posture'. Recessed deterrence posture is a posture in which missiles are not mated with their warheads while in ready deterrent posture the warheads are mated with their delivery systems. Recessed deterrence posture puts lesser burden on the command and control of the nuclear forces, hence, managing a ready deterrent posture could be a challenge for the nuclear command and control in India. However, canister launched missiles can be preserved for years.

The missile is reported to use advanced gyroscopes and accelerometers that can improve the accuracy of the missile system. Carbon-to-carbon composites ensure that the payload inside is safe amid the high temperature. The missile has been constantly test fired in order to ensure its operational readiness.

Induction of the missile into India's nuclear arsenal would clearly signal that the country is moving towards a 'credible minimum deterrence' posture whereby it is developing nuclear deterrent capability that can strengthen deterrence against both Pakistan and China.

However, according to the Cold War literature, MIRVs have always been first strike weapon systems. MIRVs on Agni-V can convey a message to China that India has given up on its 'no-first use' doctrine, which is highly debated considering that Pakistan does not adopt a 'no-first use' doctrine.

However, no-first use doctrine by both China and India keeps the nuclear threshold high between the two countries. Hence, it is very important that India is able to convey to China that MIRVs would not be used as a first strike weapon system but only as a deterrent, ensuring India's counter-strike and second strike capability.

Should the United States fear the Agni-V?

India has built up a successful partnership with the United States in the recent times. It is also a member of the Quadrilateral Security Dialogue (QUAD). India's relevance in the Indo-Pacific region is well fathomed by the United States as it sees India as a partner that could help counter the Chinese influence in the Indo-Pacific region.

In fact in 2012, when India test-fired Agni-V, the United States hardly raised any criticisms against India for doing so. Though the United States urged India to "exercise restraint" on their nuclear capability, the former also praised India then for its strong non-proliferation record. Of course, the United States realised that India would attain capabilities that could reach targets in China so as to keep the Chinese concerned.

How it affects China?

Having a country whose nuclear capability may put its security at stake does not make the Chinese comfortable. In fact, in 2012, China's Global Times, a daily that has close connections with the Chinese Communist Party had expressed concerns, "India should not overestimate its strength. Even if it has missiles that could reach most parts of China, that does not mean it will gain anything from being arrogant during disputes with China."

Agni-V is a China specific nuclear deterrent and the decision to induct the missile just within a year after the Doklam standoff is a clear indication to China to not mess with India. The tough stance during the crisis from India's side helped it gain a diplomatic victory over China. However, there is always a possibility of another Doklam-type standoff between the two countries. Thus, India now needs to be prepared with a credible nuclear deterrence. In the near future, India's nuclear capability could probably coerce China to agree to India's entry into the Nuclear Suppliers' Group (NSG) that China has been blocking for years, despite the West now showing positive signs of India's entry into the NSG.

Agni-V would surely prove its mettle as a weapon system that enhances India's nuclear deterrence but could also become a diplomatic weapon that could ensure India's ability for coercive diplomacy vis-à-vis China.

<https://www.theweek.in/news/india/2018/08/22/How-Agni-5-induction-will-enhance-India-nuclear-deterrence-china.html>



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## Govt appoints G Satheesh Reddy as DRDO chief

Reddy was holding the post of scientific advisor to the Raksha Mantri and heading the strategic missile systems division of the DRDO.

The government on Saturday appointed missile scientist G Satheesh Reddy as chairman of Defence Research and Development Organisation (DRDO), nearly three months after the post fell vacant following the retirement of Selvin Christopher in May. Reddy will hold the post for two years. It was being looked after by Defence Secretary Sanjay Mitra as additional charge.

Reddy was holding the post of scientific advisor to the Raksha Mantri and heading the strategic missile systems division of the DRDO.

The missile system division is in-charge of developing strategic delivery systems such as the Agni series and other nuclear-capable missiles for the country.

## **Will focus on cutting military imports, says new DRDO chairman**

*New DRDO chairman, G Satheesh Reddy, has been a strong proponent of easing restrictions on military exports and giving incentives to the private sector to build manufacturing facilities and pursue research and development*

On a day he was named the new chief of the Defence Research and Development Organisation (DRDO), G Satheesh Reddy said his top priorities would include reducing military imports and supporting the export of locally produced weapons and systems in a big way.

The Appointments Committee of the Cabinet on Saturday appointed the eminent scientist to the post of Secretary, Department of Defence Research and chairman, DRDO, for two years. Defence secretary Sanjay Mitra was given additional charge of the post for three months after the previous DRDO chief S Christopher retired on May 28. Currently, Reddy is the scientific adviser to the defence minister, a charge he was given in June 2015.

“My focus areas will cover developing indigenous weapon technologies and encouraging the industry to come up with products that are competitive at the international level. That’s how we can cut imports and boost exports,” the 54-year-old told Hindustan Times.

He is a specialist in avionics and missile systems.

One of the topmost challenges that Reddy will face as chief of India’s premier defence research agency is to ensure that the DRDO meets the timelines for the development of key military technologies.

Reddy has been a strong proponent of easing restrictions on military exports and giving incentives to the private sector to build manufacturing facilities and pursue research and development.

India is the world’s biggest importer of weapons, dependent on foreign suppliers for 65%-70% of its military requirements. India was the world’s largest weapons importer during 2013-2017, according to a March 2018 report by the Stockholm International Peace Research Institute (SIPRI). Russia, the country’s top arms supplier, accounted for 62% of India’s arms imports in 2013–17, followed by the US (15%) and Israel (11%). India spent more than \$100 billion on buying new weapons and systems during 2008-17.

The DRDO was set up in 1958 to develop indigenous military technology and cut back on arms imports.