

Army enthused by new indigenous artillery gun

The Army has given the thumbs-up to a heavy artillery gun, Advanced Towed Artillery Gun System (ATAGS), being developed by Defence Research and Development Organisation, in collaboration with the private sector. This is significant step in indigenisation as the Army and the DRDO had considerable differences on projects in the past.

“The gun has come up very well. The way the project is unfolding, if it continues that way, it will be one of the finest guns in its class in the world,” a senior Army officer told *The Hindu*.

ATAGS is a 155-mm, 52-calibre towed artillery gun being developed in mission mode for the Army’s artillery modernisation programme. It was designed by the DRDO’s Armament Research and Development Establishment (ARDE) in Pune. Bharat Forge Ltd. of the Kalyani Group, Tata Power Strategic Engineering Division and Mahindra Defence Naval System from the private sector are involved in a big way, along with the Ordnance Factory Board (OFB), in the project.

The officer said an Army team had been involved in the project since the conceptual stage.

Technical trials

Proof firing tests of the armament systems were carried out during technical trials in June and September and some initial integrated firing tests were successfully carried out in December. Officials said they were on track to have the first fully integrated gun system for user trials by the Army in the first half of 2017.

The government informed Parliament in November that the gun had several significant features such as an all-electric drive, high mobility, quick deployability, auxiliary power mode, advanced communication system, and automated command and control system. It also boasts a range of 45 km, depending on the type of ammunition used. The gun has to go through a rigorous integration and testing cycle before large-scale induction. Sources said that by the present sequence, it could tentatively be inducted in the Army between 2022-24.



Dhanush hits trial target

By Ajay Banerjee

Home-grown gun in last lap of testing before bulk production begins

‘Better’ than Bofors

- *Dhanush has an effective range of 38 km as against the 27-km of the original Bofors*
- *Has a system to auto-correct any variations in ammunition and atmospheric pressures*
- *The gunner has a high-resolution sight, besides an infrared sight*
- *Electronics suite enables real-time adjustments for moving and static targets*

In what could be the last step before indigenous artillery gun Dhanush is ready for induction, the Army has been carrying out ‘user-validation’ trials in the Himalayas.

The exercise is being conducted under the aegis of the Srinagar-based 15 Corps and the Leh-based 14 Corps. The 15 Corps is tasked to face Pakistan while the 14 Corps is dual-tasked to face Pakistan as well as China.

A total of six guns are being tested-fired in snow and in conditions where temperatures are presently hovering at minus 10 degrees.

A production-level prototype is being tested and this is supposed to be the last lap of trials before the Ordnance Factory Board starts its bulk production. "The guns are doing well, but results in a tabulated form are awaited," sources said.

Dhanush 155 MM/45 calibre gun is based on the 1980s' Bofors FH-77B/39 Calibre artillery gun design and aided by the transfer of technology (ToT) clause signed with the Swedish company.

The Ordnance Board, an organisation under the Ministry of Defence, first unveiled the Indian version of the gun in February 2014 and handed it over to the Army for intensive tests. These were successfully conducted.

₹5,023 cr	3,000	410
deal cleared to buy 145 ultra-light howitzers in November 2016	artillery guns of all kinds to be acquired by 2027 under a 1999 plan	pieces of Bofors' howitzers were purchased for ₹1,500 cr in 1986



The first three guns of the production-level prototype underwent four-month trial from June to September. Three more other guns were to be added and the entire lot will be tested in high-altitude winter conditions.

The Indian version has several improvements to make Dhanush compatible with today's modern communication techniques. The Army's Field Artillery Rationalisation Plan, drawn in 1999, aims to acquire 2,800-3,000 155 mm/52-calibre guns of all kinds and 155 mm/39-calibre lightweight howitzers by 2027.

India has partially broken the 'Bofors jinx' and cleared, in November 2016, a deal to get 145 ultra-light howitzers for US\$737 million (Rs 5,023.65 cr). In a way, this was the first new 155 MM artillery guns since March 1986 when 410 pieces of the Swedish company

Bofors' FH-77B 155mm/39 calibre howitzers were purchased for Rs 1,500 crore.