



Cancellation of Spike ATGM Deal: Indigenisation over Force Modernisation

Arjun Subramanian P

Keywords: ATGM deal, Force modernisation, anti-Tank missile, DRDO

The ministry of defence has surprisingly cancelled the deal to procure over 8000 Spike Anti-Tank Guided Missiles and has instead tasked the Defence Research and Development Organisation (DRDO) to design a man-portable ATGM¹ with a range of 2.5 to 4 km within the next three to four years.² The move is seen as an effort to boost indigenous design and development of weapon systems. However, it is a massive setback to army modernisation programme and would delay the induction of the critical system by several years.

This is not the first time an ATGM tender was cancelled as it has happened a couple of times in the last decade with the scrapping of the Milan missile procurement over its range and other factors.³ The current arsenal of the army has the second generation Milan and Konkurs ATGM variants which have become obsolete. Even after counting the current arsenal there is still a massive shortage of 40000 missiles.⁴ This has left a serious gap in the army's anti-armour capability while Pakistan is well equipped with

Chinese and US ATGM missiles and is also operating the Ukrainian T-80 and Chinese T-85 tanks.⁵

The Spike ATGM was to be produced in India in collaboration with the Bharat Dynamics Limited (BDL) via transfer of technology. The Israeli company had also entered into a joint venture with the Kalyani Group for local production of the missile. The Spike comes in four variants – Spike-MR, Spike-LR, Spike ER, and Spike NLOS, of which India negotiated a deal for the Spike MR variant. The chosen variant is a Man Portable system with a range of 2.5 km and equipped with a tandem HEAT warhead⁶ capable of top attack mode.

Although, the DRDO has expressed confidence in its ability to design and develop a similar MPATGM within the given timeframe, it is to be noted that the organisation had in the past expressed confidence in several other projects which are still nowhere near fruition. The case of the anti-tank missile Nag itself is proof of this with several decades of delay and it has still not

satisfied the army. Contrary to DRDO's claim of successful completion of the development trials this year, the army says that the tests have only proven it to be partially successful and more trials are needed.⁷ This throws a question mark on DRDO's promise to deliver an advanced missile in the given time frame.

The DRDO developed Nag ATGM system has a range of four kilometres, but it is not man-portable as it is heavier and is carried in a tracked BMP. It is also said that the range of the system gets reduced to 2.5 km in the extreme hot conditions of the plains in the western sector as the un-cooled LWIR sensor suffers from high background clutter.⁸ The Spike system too uses an uncooled LWIR,⁹ but since the max range of the MR variant is just 2.5 km, it doesn't affect its standard range and further it is also man-portable. A man-portable system has advantages over a tracked vehicle carrying the ATGMs. It has less signature which protects the launcher from attracting enemy fire, and is also easy to maintain and operate and has lower maintenance cost. However, a DRDO document points out that its Research Centre Imarat (RCI) has realised a 384x288 MWIR sensor and that work is on for developing a 640x512 MWIR FPA.¹⁰ If this capability is mature enough, then it could solve the clutter problem in the - to be developed MPATGM.

The army intends to equip all its 382 infantry battalions and 44 mechanised infantry units with third generation anti-tank missiles.¹¹

Since the indigenous route would certainly create delay in meeting the massive requirement of the army, there is a high chance that the government might announce a deal to buy a reduced number of Spike missiles during the Israeli Prime Minister's visit to India in the next two months. There might also be an announcement to jointly develop the next generation of ATGM much on the lines of the US offer that came with the Javelin deal.

The primary problem in trying to infuse foreign technology into local industries via the procurement route is the reluctance of the foreign OEMs to part with their classified technology which they developed at very high cost. Moreover, trying to infuse complex technology via ToT into local companies – which have little or no prior experience in the area – will be futile. The presence of a vibrant domain specific ecosystem of MSMEs would make way for better absorption and assimilation of cutting edge technology. Hence, initial focus needs to be on boosting innovation capital (physical, knowledge and human capital) to build an ecosystem of MSMEs that will build capacity to easily assimilate and improve any foreign technology brought via the procurement route.

A real push towards indigenisation should come from fast tracking policy implementation by way of reducing bureaucratic procedural delays to enable MSMEs to develop capacity. The DPP in its current form presents excellent ways to boost indigenisation in defence production by

MSMEs via majority government investment in R&D and prototype development. But, the key to success is implementing the processes without bureaucratic delays which otherwise might kill the spirit of the local industries particularly the MSMEs.

(Disclaimer: The views and opinions expressed in this article are those of the author and do not necessarily reflect the position of the Centre for Air Power Studies [CAPS])

Notes

¹ "Defence ministry scraps Spike Anti-Tank Guided Missile deal with Israel: All you need to know", <http://www.firstpost.com/india/defence-ministry-scraps-spike-anti-tank-guided-missile-deal-with-israel-all-you-need-to-know-4218575.html>, 20 November 2017

² Ibid

³ IndrajitMajumdar, "Spike ATGM: Cancelling a deal that was never existed", <http://idrw.org/spike-atgm-canceling-a-deal-that-was-never-existed/>, 26 November 2017

⁴ VivekRaghuvanshi, "India to buy Spike anti-tank missiles from Rafael", <https://www.defensenews.com/breaking-news/2017/03/27/india-to-buy-spike-anti-tank-missiles-from-rafael/>, 27 March 2017

⁵ Ajai Shukla, "Army opts for Nag missile as it enters final trials ", <http://ajaiashukla.blogspot.in/2010/03/army-opts-for-nag-missile-as-it-enters.html>, 8 March 2010

⁶ "Spike anti-tank guided missile technical data sheet information specification description pictures", https://www.armyrecognition.com/israel_israeli_armi_lig ht_heavy_weapons_uk/spike_anti-tank_guided_missile_technical_data_sheet_information_specification_description_pictures.html, 21 July 2011

⁷ Harsha Kakar, "Cancelling Spike order a mistake ", <http://www.thestatesman.com/opinion/cancelling-spike-order-mistake-1502535996.html>, 28 November 2017

⁸ Ajai Shukla, "Indian Army and DRDO co-operate to boost tank killer Nag missile", http://www.business-standard.com/article/economy-policy/indian-army-and-drdo-co-operate-to-boost-tank-killer-nag-missile-112071502004_1.html, 15 July 2012

⁹ http://www.rafael.co.il/SIP_STORAGE/FILES/1/2211.pdf, accessed on 29 November 2017

¹⁰ "DRDO: A Glimpse", <https://www.drdo.gov.in/drdo/English/DRDO-a-glimpse-ebook.pdf>, pg-94

¹¹ No.4