

Macron's engine offer for Tejas aimed at powering more Rafale sales

By Justin Paul George

Joint statements on state visits tend to be drab in nature and point 10 of the joint statement after French President Emmanuel Macron's ongoing visit to India seems just as innocuous. But its content is of serious significance to the direction of India's defence strategies, which have long been criticised as convoluted.

It reads “The leaders noted ongoing discussions between DRDO and SAFRAN on combat aircraft engine (For details, visit www.mea.gov.in).” Safran, a major French defence and technology supplier, has been attempting to pitch its engine technology to India for more than a decade, in competition with its American and European rivals.

These attempts have been aimed at the DRDO's flagging Kaveri project, which aims to develop an engine for the Tejas fighter. In 2008, The Kaveri was officially 'de-linked' from the development of the Tejas, given numerous delays and performance shortfalls and a fresh batch of F404 engines were ordered from GE in the US.

GE also won a contract worth \$822 million to supply a newer engine, the F414, for the Tejas' projected MK2 derivative; the first two of 99 F414 engines on order reached India in 2017. GE has also touted the F414 for India's future fifth-generation fighter, called the Advanced Medium Combat Aircraft (AMCA), which remains at concept stage.

However, work on the Kaveri project still continues. Ten days before Macron's visit, a French newspaper reported Safran was offering its M88 turbofan engine to India to revive the Kaveri project. The M88 powers the Rafale fighter, 36 of which are on order for India and which is at the centre of another political storm.

On the face of it, the French offer, valued at approximately euro 1 billion, seems to make eminent sense, in addition to providing a technology boost to DRDO.

The M88 is an advanced engine with a modular design, making maintenance easier and increasing operational availability, unlike Russian systems, which currently dominate Indian Air Force service. Furthermore, using a common engine type for the Rafale and Tejas would rationalise the Indian Air Force's vast and diverse logistics inventory, improving serviceability of aircraft while also lowering costs, as technicians and engineers would be dealing with common electronics, lubricants and other parts.

Pertinently, such an engine deal would also lead to cost amortisation for future Rafale orders—which the IAF has been keen on—and also give the French fighter an advantage in an ongoing Indian Navy competition to buy 57 aircraft.

However, embracing such an 'engine deal' should be done cautiously.

In its weight category, the M88 competes with the EUROJET consortium's EJ-200, which powers the Eurofighter Typhoon, and the F414; all three systems offer similar features.

The French engine has the disadvantage of lower order volumes compared with the other two, and consequently would have higher purchase costs. The F414 engine is regarded as having the lowest purchase cost of the three, as it is in service with the US Navy's Super Hornet fighter and has been ordered by South Korea and Sweden for their future fighter programmes, in addition to the Tejas MK2, as mentioned previously. With the US Navy and South Korea expected to use the F414 for decades, its 'growth' potential is considerable and the large order volumes would mean the engine would have a competitive price.

Another factor going against the French offer is how, or when, exactly an M88-powered Tejas will fructify would be difficult to envisage as the current set of 123 fighters intended for purchase by the IAF are powered by the American F404 engine. With development of the Tejas Mk2 proceeding slowly, modifying the fighter for a totally new engine is expected to lead to even more delays given the need for testing and possible design changes to its air intakes and fuselage.

An optimistic in-service date for such an M88-powered Tejas variant would be well past 2025, by when the type's basic design would be obsolete. While it can be argued that the M88 could be used for the AMCA, the level of IAF and government commitment to that programme remains unclear.

Therefore, it would be prudent to argue that deal to buy or co-develop Safran engines for the Tejas will help boost Rafale sales more than it would assist India's indigenous programmes.

<https://www.theweek.in/news/india/2018/03/10/macron-engine-tejas-powering-rafale-sales-iaf.html>



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Amid row over Rafale deal, India, France sign strategic defence pact on use of each other's military bases

New Delhi: Reflecting a growing depth in defence ties, India and France today inked a strategic pact providing for the use of each other's military facilities including opening naval bases to warships, an agreement that comes amid China's growing military expansionism in the Indo-Pacific region.

Prime Minister Narendra Modi and French President Emmanuel Macron held wide-ranging deliberations during which they also decided to create an annual defence dialogue at the ministerial level to explore ways to further deepen defence and strategic ties.

The two countries signed a pact on exchange and reciprocal protection of classified or protected information which came in the backdrop of the Indian government refusing to divulge details of the multi-billion dollar Indo-French Rafale fighter jet deal.

On ties in the maritime security sphere, the French President said both the countries will have "unprecedented" level of cooperation to ensure peace and stability in the Indian Ocean and in Pacific.

He said space agencies of both countries will have joint monitoring mechanism for developments in the maritime sphere, while navies of the two nations will share intelligence and call their respective military bases for any requirement.

Separately, Defence Minister Nirmala Sitharaman and her French counterpart Florence Parly held talks during which detailed discussions on specific projects including on the Scorpene submarine programme for the Indian Navy was discussed.

A joint statement issued after the talks said the pact on protection of classified information reflected the high level of "strategic trust" between the two countries.

It said Modi and Macron noted with satisfaction that the "on-schedule" progress in the implementation of acquisition related agreements, including the Rafale aircraft deal and the construction of six Scorpene submarines in India, in collaboration with French shipbuilder Naval Group.

"They looked forward to continue their discussions to expand and deepen the ongoing defence manufacturing partnerships," the joint statement said.

The Indo-French agreement on reciprocal logistics support for armed forces came nearly two years after India signed a similar pact with the US on use of each other's land, air and naval bases.

Officials said the agreement will facilitate the reciprocal provision of logistic support, supplies and services between the armed forces of the two countries during authorised port visits, joint exercises and joint training among others.

"The agreement is symbolic of the strategic depth and maturity reached in India-France defence ties," the joint statement said.

The two sides inked the pact amid China's growing assertiveness in the Indian Ocean and the Pacific region.

Referring to maritime security cooperation, Modi and Macron reiterated that it will be crucial in order to maintain the safety of international sea lanes for unimpeded commerce and communications.

"Our defence cooperation is very strong and we consider France among the most trusted defence partners," Modi said in a statement to the media, in the presence of Macron.

He said the pact on reciprocal logistic support between the armed forces is a "golden step" in defence relations.

Noting that defence cooperation between the two countries now has a "new significance," Macron talked about the Scorpene submarine project for the Indian Navy and the fighter jet deal for the Air Force.

"India had made a sovereign decision in this respect (Rafale fighter jet) and we are monitoring the progress in the field. We very much want to continue the programme. It is a long-term contract which is mutually beneficial. I personally consider it as the heart of the strategic partnership," Macron said.

India had signed a government-to-government deal with France in 2016 to buy 36 Rafale fighter jets at a cost of about the Rs 58,000-crore.

The Congress has been demanding details of the deal, alleging that the deal negotiated under its rule was much cheaper than the contract signed by the Modi government.

The joint statement said both sides also emphasised the importance of the joint military exercises and affirmed their intention to enhance the level of the exercises.

It said both sides acknowledged that the Make-in-India initiative offers a valuable opportunity for Indian and French defence enterprises to enter into co-development and co-production projects in the defence sector, including through transfer of technologies.

"The leaders noted ongoing discussions between DRDO and SAFRAN on combat aircraft engine and encouraged necessary measures and forward-looking approaches to facilitate early conclusion," it said.

<http://www.newindianexpress.com/nation/2018/mar/10/amid-row-over-rafale-deal-india-france-sign-strategic-defence-pact-on-use-of-each-others-military-1785092.html>