

The JSF/F-35 in Europe: the price of pragmatism

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Abstract

This article aims to clarify the attractions of the American Joint Strike Fighter (JSF/F-35) combat aircraft programme from the viewpoint of the five European states which have decided to invest in its development (the United Kingdom, Italy, the Netherlands, Norway, and Denmark) and the repercussions of their participation on the preservation of European capabilities to develop a future air combat system.

The JSF programme is billed above all as “new generation” American programme intended to respond to the American forces’ combat aircraft requirement for the U.S. Air Force, the U.S. Navy and the U.S. Marine Corps. The programme was launched in the first half of the 1990s, a period marked by a fall in the Defence budget and by the calling into question of a number of major weapons programmes. It fits into the framework of the new procurement policy of the Department of Defense (DoD), favouring the creation of operational standards permitting the development of future combat aircraft at least cost. The acquisition strategy of the JSF has to respond to this demand for cost reduction over the whole life of the programme, from R&T to support. Starting from a basic airframe, three versions of the aircraft will be available. The level of commonality has been established as within the bracket of 70 – 90%, with priority given to the most expensive sub-systems such as the avionics, the engine and some structural components. The programme team has been assigned performance objectives intended to give the aircraft the capabilities necessary to be involved in joint service and allied operations, as well as the ability to operate in a “system of systems” environment.

In order to avoid a situation where the principal European aircraft manufacturing states launch a new generation combat aircraft programme to compete with the American JSF, and with the aim of securing guaranteed access to the export market, the DoD has decided to open the JSF programme to international co-operation, without, however, repeating the pattern of previous co-operative projects. This new programme has been conceived in the form of a “partnership” employing completely new methods for an armaments programme, guaranteeing American leadership of the JSF programme and tending to limit the costs to the United States of co-operation. Each potential partner state has been chosen by the American government. At each stage of the programme, negotiations at inter-governmental level are concluded by the signature of bilateral agreements relating to the position of the state in the programme. This co-operation is primarily financial since the status of the partner state depends on the level of its financial contribution, and its effective capacity for influence seems particularly limited. Very strict control of the transfer of classified and unclassified information is achieved by a separation of the elements of the programme, with the creation of a specific organisation devoted to international co-operation and separate from the American programme team. Finally, the industries of the partner states must earn their place in the industrial team by means of a competition process, an approach termed “Best Value”, intended to put an end to the practice of guaranteed industrial returns.

Moves inviting participation in the JSF/F-35 programme, particularly directed towards the traditional allies of the United States which have long acquired American equipment, have

been assailed by financial, capability, operational and industrial arguments. They are also coupled with a communications strategy giving priority to concepts of “true partnership”, “influence” and “reciprocal confidence”. The United Kingdom, Italy and three European members of the “F-16 Club” (the Netherlands, Norway and Denmark) have responded positively to the American call. The total financial contribution of these five countries amounts to \$240 million for the Concept Development Phase (CDP), and \$4116 million for the second phase of System Development and Demonstration (SDD). The United Kingdom is the largest contributor ahead of Italy, the Netherlands, Norway and Denmark. As well as limited influence on the programme, the partner states must accept a low level of selection of their national industries and their exclusion from the bidding in sensitive areas. American regulation of technology and information transfer renders this “competition”, presented as fair and as open as possible, particularly inoperative.

In this unfavourable context for foreign industrial participation, BAE Systems, Rolls Royce and Smiths Industries, seem to be the only one to take the best of it. In response to criticisms of the poor industrial returns by the European partner countries, the DoD and the prime industrial contractor Lockheed Martin refined their communications strategy, modified the “Best Value” approach, and developed a unique export licence. The limitations of the application of the “Best Value” policy were compounded by a number of uncertainties related to decisions of the American administration and Congress concerning the JSF/F-35 programme such as reductions in orders, unilateral changes in technical performance and protectionist moves by the House of Representatives.

The dominant position of the United States in this programme, and the consequent second-rank position of the partner states also show through in the strategy planned for the production and support phase. Contrary to previous co-operative programmes (F-86, F-104, F-4, F-15, F-16, AV-8 A/B), the United States plans that final assembly should take place only on American soil. As for support, this should be provided by a globalised logistic system managed by the Americans. Finally, and above all, once deployed, the aircraft is designed to operate in a “system of systems”, which means that its foreign users would be dependent on American infrastructure. The United Kingdom and Italy are worried about the consequences of this domination. In order to limit their dependence on the United States for the entry into service, support, modification and modernisation of their future JSF/F-35s, they have made known their desire to have an assembly line on their own soil in addition to the one planned for Fort Worth (Texas). These two states and the Netherlands have also declared their candidacy as hosts for the regional support centre for the European zone. As for specific requests for the integration of national armaments, the DoD has taken a very cautious line, citing problems of technology transfer and the risks of cost overruns.

The limitations and obstacles encountered by the European partners in the American combat aircraft programme are reflected in the many limitations and obstacles to co-operation between European states. In a tight budgetary context, the annual financial burden involved in their position in the JSF programme has caused the United Kingdom and Italy to put pressure on their German and Spanish partners to reorganise the multinational Eurofighter combat aircraft programme and to revise the capability improvements of Eurofighter Tranche 2 and Tranche 3. By the application of the drastic regulation of technology transfer the United States imposes such barriers on its international partners that fewer and fewer technological areas can become the object of European co-operation without great difficulty. The participation of front-ranking European industry in an American industrial team undoubtedly represents an additional obstacle to the consolidation of the combat aircraft sector in Europe, and appears as a new step towards an organisation of the European defence industrial

landscape according to an American logic. Hence, in the world marketplace, the European manufacturers appear disunited before their main competitor, the giant Lockheed Martin, which should reap the fruits of a true strategy of market dominance from 2010/2012.