Striking fresh: Finland’s combat aircraft procurement programme

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Finland is in the midst of a thorough campaign to overhaul its air combat capability through the HX programme, under which the country will procure aircraft, weapons, and sensors to completely replace its current fleet of Boeing F/A-18C/D Hornets. Charles Forrester reports

Following the establishment of a working group to start planning the replacement of Finland’s fleet of Hornet multirole fighters in 2014, a report entitled ‘The Preliminary Assessment for Replacing the Capabilities of the Hornet Fleet’ was issued in June 2015.

Accounting for a range of threats, as well as the modernisation of neighbouring air forces, the report emphasised the need to maintain a credible air deterrent and to ensure the country’s ability to police its airspace, undertake surveillance missions, conduct aerial interdiction operations to protect troops and targets, and defeat adversary aircraft in the air and on the ground.

The aircraft chosen under the HX programme will replace Finland’s F/A-18C/D Hornet fighter fleet. (Finnish Air Force)

Similarly, the role of air combat forces to undertake kinetic and non-kinetic missions in support of military operations means that a multirole aircraft solution would be needed to fill
the requirement for the new fighter. Additionally, the suppression of enemy air defences (SEAD) and ISTAR duties would be vital roles for the new platform as part of the Finnish military’s combined arms and joint operation concepts.

Acquiring a fleet solely comprising unmanned combat aerial vehicles (UCAVs) was dismissed after the report highlighted the similarity in current costs between a manned platform and a UCAV. However, the plan for flexible system evolution over the medium term – at the programme points of 2025 (initial operating capability) and 2030 (full operating capability) – is part of an effort to future-proof the capability through its lifetime that could include technology concepts such as manned-unmanned teaming.

Meanwhile, extending the lifespan of the existing Hornet fleet was dismissed as a possibility, given the cost of undertaking the structural refurbishment and the potential for uncovering further structural problems, as well as the consequent increased life-cycle support costs. Notably, as the number of ‘classic’ Hornet operators decreases beyond 2025, Finland would begin to substantially bear the costs for maintaining the aircraft’s software system, particularly if it were to become the sole operator of the platform.

From an industrial participation perspective the programme has called for at least 30% industry involvement in the programme, with the Finnish government focusing clearly on the maintenance, repair, and overhaul of the aircraft to the extent that it is cost-effective, possible, and necessary.

According to HX programme director and former commander of the air force Lauri Puranen, the Hornet replacement’s mission set ranges from regular peacetime operations to all possible situations in a military confrontation. This could require, for example, the ability to undertake independent operations for a certain time if the country’s lines of communications were cut: a capability defined in the request for quotations (RFQ). Critical equipment in this domain can range from aircraft components to expendable equipment such as weapons, Puranen said, highlighting the whole-of-capability approach that the Finnish military is adopting for the procurement.

Defining what is a critical task or piece of equipment is part of the assessment, with areas such as engine maintenance being examined as important factors. Other aspects such as local final assembly are being considered by the country as part of the sustainment framework, with Puranen suggesting that such work would help the country better understand how the aircraft worked and enable easier maintenance and support. However, he noted that the programme has to be cost-effective and that final assembly is not the only way to get such know-how.

The procurement process

Finland has opted to take a government-to-government approach to its procurement and, as a result, sent initial requests for information to the French, Swedish, UK, and US governments.
“As the US option would have been done through a Foreign Military Sales route, this request for government proposals makes it more transparent for all the other bidders,” Puranen told *Jane’s*. Moreover, he said, “As the programme includes weapons, sensors, support, training systems, and spares, it was more of a package than a single-supplier solution.”

This was emphasised in a press release on the launch of the RFQ stage, with the Finnish government stating that, to reduce the risk involved in system integration, “the tenderers are requested to provide comprehensive solutions meeting the operational requirements. Each tenderer is responsible, together with its government, for the complete package, including effective weapons, sensors and special systems, system integration, and mission support systems”.

There were also some issues around classified information relating to capabilities, which could be mitigated by going through a government-to-government route. Mission data has proven to be a significant point for the programme, with this information held at the operator level.

“When we go to HX, it is much more data-driven as a weapon system,” one source told *Jane’s*, adding, “It is fair to say that more and more work needs to be done with mission data, with the mission preparation, with the mission planning, debriefing, and the analysis of the data after the mission has been accomplished.”

Moreover, the source noted that this data “is the domain of the air force, but a key area for operating the aircraft”.

**Where things stand**

The Finnish Defence Logistics Command is evaluating offers from five candidates ahead of a more detailed RFQ being sent out in October this year. “At the moment we have around 100 people going through the submissions and going through five different packages. We will then define some areas for the bidders for further answers going forward with the defined RFQ in October,” Puranen explained.

The RFQs, which were submitted at the end of January, involved the bidders answering 2,500 questions and posing responses to seven different combat scenarios set by the Finnish Ministry of Defence (MoD).

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