



# FELIN: Gallic Cat readies claws for deployment

With key trials concluding in mid 2009 and the first regiment equipped in mid 2009, the next twelve months are hugely important for one of Europe's largest programmes

*"The goal of the FELIN (Fantassin à Équipement et Liaisons Intégré) programme is not a set of equipment but a system built around the soldier, which can be modular," explained Major General (Armement) Vincent Imbert Deputy Head of the Délégation Générale pour l'Armement (DGA) Joint Weapon Systems Directorate and the Senior Acquisition and Procurement Executive for Army and Joint Services, outlining France's underlying approach to soldier modernisation through its FELIN programme. Discussing the challenges for the future he said soldiers would have to "Adapt to the system and adapt to the new ways to fight."*

FELIN's total production is planned for around 31,000 systems, 22,588 will be provided for the infantry with a further 9000 individual systems for supporting arms, with the first regiment equipped in the third trimester of 2009. FELIN V2 is now also being considered but this will be run as a separate acquisition.

Qualification trials, using 350 systems delivered for this purpose in 2008, will conclude in 2009 and will see FELIN embedded across different battlefield roles. These comprise three different units in a six month trial with a company of mechanised infantry, airborne infantry and a mountain infantry platoon.

## SYSTEMS CAPABILITIES

The current systems improves several systems capabilities: observations, communications, protection, lethality, mobility and logistics.

In terms of equipment General Imbert explained, "Particular attention has been paid to weight." FELIN's current load is about 24Kg while also ensuring as much as 72 hours of autonomous operation with power provided by two individual batteries. The system is recharged at a

section level, with mobile battery rechargers and vehicle integration kits. The system is integrated on three key infantry platforms; the new wheeled VBCI and VAB Revalorisé and the tracked AMX 10P.

## FUTURE PLATFORMS

In support of a number of programmes including FELIN, France has embarked on a number of national and multinational efforts. France is a partner on a number of European Defence Agency (EDA) projects including Projects Guarded, countering IEDs, SAM-UGV for CBRN reconnaissance and patrolling and project UGTV supporting logistics. On its own, its key UGV efforts are centred on the PEA MiniRoc and PEA RAMA UGVs.

In the Nano-UAV field the DGA has recently embarked on the Libellule project an exploratory research

effort being undertaken by domestic firm Silmach to create a fourth generation platform. The device is designed to be 6cm in length and be 0.12g in weight, propelling itself through the air using MEMS and 180,000 artificial wing muscles each less than 150 micrometres.

The DGA soldier UAV programmes call for a company level successor to today's DRAC UAV to be fielded at the turn of the decade. A number of R&D studies are now ongoing to produce both an Urban Miin-UAV mid next decade and a micro UAV for 2020. Work is through six main programmes known as HOVEREYE, MAVDEM, SUAV, DEMOZU, MAV4G-I and ANIMEMS, the latter two synonymous with Libellule. ■

*Major General Imbert was speaking at NATO's Future Soldier event.*

## FELIN Timeline

<b>2002:</b>	Definition contracts awarded to Thales and Sagem Défense and Sécurité
<b>March 2004:</b>	Thirty month €800m Development and production contract awarded to Sagem
<b>June 2004:</b>	Ergonomic and aptitude tests of the system with combatants
<b>March 2006:</b>	Critical Design Review and first order of 1089 systems
<b>End 2006:</b>	Prototypes Completed
<b>Jan-Feb 2007:</b>	Evaluation of key subsystems: sensors; communications, navigation, protection and weapons
<b>March 2007:</b>	Trials with five FELIN Systems completed
<b>September 2007:</b>	Trials with ten FELIN systems completed
<b>April 2008:</b>	Second order of 5045 systems
<b>June 2008:</b>	Trials with 40 FELIN systems completed
<b>July 2008:</b>	Delivery of 358 FELIN Systems for nine month trial
<b>Mid 2009:</b>	Official Tests and Evaluation completed
<b>July 2009:</b>	First Production deliveries to first regiment
<b>End 2009:</b>	Deliveries to first four regiments complete
<b>2013:</b>	FELIN production completes
<b>2028:</b>	FELIN Leaves Service