

start of testing of the full system in 2019, and for AKKOR to be ready for use on ALTAY in 2020.

FIRAT-M60T Can Serve as Guide for Urgent Requirement Projects

On the second day of the seminar, Ömer Çubuklu, Lead Engineer at ASELSAN Sector Presidency of Defence System Technologies, gave a presentation describing the current works being conducted under the FIRAT-M60T project, which stands out as a good example of what can be done when urgent requirements need to be met.

The FIRAT-M60T project was initiated by the Presidency of Defence Industries (SSB) on September 26, 2016, following a rise in potential asymmetric threats against tanks during the Euphrates Shield Operation. The project, in which ASELSAN was tasked as prime contractor, aimed to achieve the following:

- Enhanced battlefield effectiveness and survivability of main battle tanks against the growing number of anti-tank threats,
- Assurance of more effective protection of tanks against terrorist units, and
- Granting of additional capabilities to existing systems.

ASELSAN's proposed solutions took the following form:

- **Countermeasure for Anti-Tank Guided Munitions:** Tank Laser Warning System, Audio Warning System, PULAT Active Protection System, spall liner protection
- **Short- and Medium-Range Countermeasures:** Remote-controlled weapon system, close-range observation system
- **Improvement of Combat Conditions:** Air Conditioning System
- **Extension of Tank's Units' Lifespan:** Power distribution system, auxiliary current system.

Following the project kick off, ASELSAN's team examined the tank in October 2016, and within 20 days, a prototype tank had been readied for qualification tests. System integration was achieved with no reduction in the tank's existing capabilities. The first phase qualification tests were performed in the operational field of Euphrates Shield, while serial production was carried out at the base of the operations.



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The M60 tank is integrated with six PULAT active protection system countermeasure modules.



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M60 tanks modernised by ASELSAN as part of the FIRAT-M60T project.

All of these works were executed without a written project contract, with the actual contract being signed during IDEF 2017.

The project saw the modernisation of 139 tanks, and all tanks currently in the inventory are set to be modernised in the long-term.

The project includes a guarantee period of six years, under which ASELSAN will intervene and assist in the event of a malfunction within an average of four to six hours, and with problems generally being resolved in less than three days. ♦

Berkin Engineering Offers Reliable Navigation Solution for Land Platforms

In addition to its indigenous products, Berkin Engineering also offers solutions to the sector via its foreign collaborations for capabilities not found in Turkey. At its stand in the foyer, the company showcased the PETRA product family of CIVITANAVI Systems.

Presenting an integrated navigation solution for land platforms, the PETRA product family has been tested and approved by ROKETSAN and TÜBİTAK SAGE, and a PETRA solution has already found use on the Pedestal-Mounted CİRİT (PMS) system designed by ROKETSAN for the ACV-15 vehicle of FNSS.

Furthermore, two NAUTILUS 3000 models, belonging to CIVITANAVI Systems' NAUTILUS product family, are currently in use by Turkish Naval Forces Command. ♦

