# ASCOD and PANDUR – Vienna Calling!

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At the end of May 2018, General Dynamics European Land Systems (GDELS) invited a group of journalists to their GDELS-Steyr facilities in Vienna, Austria, to draw attention to a number of new developments to be presented first at this year's Eurosatory exhibition and with a focus on the new ASCOD IFV and MMBT (Medium Main Battle Tank) variants.

Thomas Kauffmann, GDELS' VP International Business and Services, was the first presenter with a briefing on the General Dynamics Group's portfolio and capabilities as well as GDELS' particular approach to industrial cooperation on export markets.

# **Portfolio and Offset Strategy**

With 98,600 employees and ten business units in four operating groups, GD generates a turnover of US\$31Bn (2017) Of that, the business unit European Land Systems (GDELS) has a share of US\$6Bn with 2,200 people and customers in 44 countries around the globe. In accordance with the group's decentralised company strategy GDELS has manufacturing facili-

ties in Austria, the Czech Republic, Denmark, Germany, Romania, Spain (European HO) and Switzerland. In essence, the company's capability portfolio comprises ground combat platforms (including light tactical vehicles), wheeled armoured vehicles, tracked vehicles, bridging systems, artillery systems and ammunition, and integrated logistic

support (ILS). In the case of IFVs and APCs, the design philosophy centres on a common base platform – mainly the lower vehicle hull - for a variety of different vehicle variants.

In response to increasing offset and compensation requirements in the scope of export programmes, the company has developed an offset strategy for the involvement of local industries that is supported by four main pillars:

1. Direct participation in the programme as a partner, subcontractor or supplier;

- 2. "Membership" of GD's global supply
- 3. New business development through technology partnerships between local SMEs and GD
- 4. GD's global leverage to obtain business from other industry partners in the country.

### **ASCOD**

Both versions

José M. Lineros, GDELS' Vice President Engineering, briefed the group on the two combat vehicle variants to be presented first at Eurosatory, namely the ASCOD IFV and MMBT.



of tactical mobility, manoeuvrability and fightability. Lineros emphasised that the two new vehicle variants were the result of consistent development efforts and investments in a common vehicle platform that was first implemented with the two early ASCOD (Austrian-Spanish Cooperative Development) variants, namely PIZARRO in Spain and ULAN in Austria, followed by the DONAR SP artillery system and the repair/ recovery versions through to the British AJAX variants.

With the latest development status implemented, the vehicle can handle slopes up to 60%, slide slopes (tilt) of 40%, can cross ditches and trenches up to 2.5 metres. ford in waters up to 1.5 metres deep and step-climb obstacles of up to 1.1 metres in height. Based on advanced suspension and driveline technology, the vehicle platform features reduced weight, noise, vibration and roll/swing characteristics and provides for optimum shoot-on-the-move capabilities due to improved vehicle stability. The vehicle's APC version can be airlifted with A400M, C-17 (2) or IL-76 respectively (turreted options to be confirmed).

A special contribution to crew survivability is made with the vehicle's floating floor, which has replaced the conventional footrests. The modular design of the vehicle allows for interchangeable mine protection and add-on armour. turret solutions range from 25 to 120mm calibres with an additional anti-tank guided missile as an op-

The IFV variant presented in Vienna was equipped with the UT30 MK2 unmanned turret from Elbit and the ATK MK 44 ABM 30mm gun. The turret, a downgraded version of the 120mm MERKAVA MK 4 turret, was subject to a separate briefing by Maimon Ifergan, Elbit's VP International Land Programs, who also used the opportunity to

draw attention to the IRON VISION head-mounted display that provides 360° situational awareness even if used in a closed-hatched armoured vehicle. The turret, a co-development with the Israeli Defence Forces (IDF), allows for the integration of an ATGW – as currently is the plan with SPIKE in Croatia with tests ongoing in Spain – and can be upgraded to carry a 40mm aun.

The MMBT (Medium Main Battle Tank) version on display is based on the proven ASCOD running gear and was equipped with a HITFACT 120mm turret from Leonardo (formerly Oto Melara), which

was also subject to a separate presentation by Alessandro Tognetti, Leonardo's Capture and Development Manager. Both vehicles were also the subjects of dynamic displays at the company's outdoor area.

### PANDUR 6x6 EVO (Evolution)

In the scope of an ongoing procurement effort. GDELS has been tasked to deliver 34 PANDUR vehicles in APC configuration (Austrian designation: MTPz - Mannschaftstransportpanzer) to the Austrian Army. The vehicle which – according to Florian Bernhard, GDELS-Steyr's Deputy Head of Engineering – has been designed "with tracked vehicle experience", features a 8.9 L Cummins engine with 6-speed ZF ECOMAT automatic transmission, a power pack that is also in use with the 8x8 version of the vehicle. In response to a requirement from the Austrian military, the vehicle has a C-130 roll-on, roll-off (RoRo) capability and can accommodate up to 11 personnel. Deliveries are to commence in September, with 5 vehicles to be delivered in 2018, 21 in 2019 and the remaining 8 in 2020. Some 190 Austrian subcontractors and suppliers are participating in the programme. The con-



ASCOD MMBT (left) and the new ASCOD IFV with the UT30MK2 turret on display at the outdoor area of GDELS-Steyr in Vienna, Austria

tract with the Austrian MoD includes an option for a follow-on order to be exercised 1 by the end of 2019.

### **Perspectives**

Obviously, the decision to invest money in the development of the ASCOD MMBT is based on the assumption that the changed European security environment with a new priority alignment on territorial defence will stimulate the international market for armoured combat vehicles. As such, the idea of offering a lighter-than-usual main battle tank (gross vehicle weight 42 t) will certainly find its way into the consideration of all those whose budgets do not allow for the acquisition of a latest-generation main

battle tank (heavy) fleet, particularly in such countries where defence procurement is also seen as a measure to strengthen the local defence industrial base.

The ASCOD IFV, on the other hand, is a contender in the scope of the BMP-2 replacement programme in the Czech Republic and thus facing competition with BAE Systems' CV90, PSM's PUMA, Rheinmetall's LYNX and possibly others. While all serious contenders will probably be in a position to offer vehicle designs that can respond to the requirements from a technical point of view, the level of industrialisation that can be offered as part of the respective proposals may become a decisive factor. In this context. GDELS' offset strategy as described above is certainly worth noting.

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