

OBRUM unveils new Polish multirole combat platform

■ BY GRZEGORZ HOLDANOWICZ

KEY POINTS

- Bumar is beginning to take the wraps off the Anders AFV
- The Anders IFV is competing against BAE Systems's CV90 for a Polish Army IFV replacement

A demonstrator for a fire-support variant (Woz Wsparcia Ogniewego – WWO) of the Anders Multirole Combat Platform (Wielozadaniowa Platforma Bojowa [WPB]) was unveiled during the MSPO 2010 exhibition at Kielce in September by the research and development company OBRUM, Gliwice, part of Poland's Bumar Group.

OBRUM has been responsible for developing chassis for the majority of Polish-designed armoured vehicles, including those used for the N-21 radar vehicle, the 155 mm tracked howitzer Krab, as well as the developmental BWP-2000 or UPG-NG platform. The company built the WWO demonstrator in partnership with the WAT military academy of technology, Warsaw, and WZM (Wojskowe Zakłady Mechaniczne), Siemianowice Slaskie, aided by a PLN17 million (USD6 million) grant awarded in 2007 by the Polish Science and Higher Education Ministry.

Ultimately it is expected that the Anders will be produced principally in its infantry fighting vehicle (IFV) variant, as a putative replacement for the Polish Army's BWP-1 family of vehicles. However, OBRUM and Bumar are advocating the WPB as the basis for a wider range of weapon,

command-and-control, electronic-warfare and logistic-support variants. Those currently under study include a command vehicle; medical evacuation platform; armoured recovery and combat engineer vehicles; multiple rocket launcher; radar carrier; air-defence vehicle (with a variant of Radwar's Loara gun/missile system); and even a 155 mm howitzer carrier.

The IFV version would be capable of carrying between seven and 15 soldiers, depending on the number of wheel stations (currently it has six, but a stretched hull with a seventh roadwheel pair is also planned), and be equipped with either a manned or remotely controlled turret.

Concept drawings shown during MSPO imply use of either Oto Melara's Hitfist 30 manned or Hitfist OWS remote-controlled turrets. The former, assembled at ZM Bumar Labedy (202 completed to date), is currently used on the Rosomak 8x8 wheeled IFV, while the latter is being put forward for an upcoming competition for at least 122 such weapon stations for the next batch of Rosomaks. During MSPO, Oto Melara and Bumar Labedy signed a licensed-production agreement for the



OBRUM: 1364185

■ The Anders WWO fire-support vehicle demonstrator showing the rear exit door for the crew and four dismounts.

Hitfist OWS (which is 89 per cent common with the manned variant), primarily for the Polish market but with optional export extensions.

The 33-ton WWO fire-support vehicle has an overall length of 8.8 m (hull 6.9 m), a width of 3.3 m and height of 2.8 m. It has a crew of three (driver, commander and gunner) and can carry up to four dismounts in the aft part of the hull. Its 720 hp MTU 8V199TE20 diesel engine and Renk HSWL106 transmission are located in the front right section of the hull, and give it an estimated maximum roadspeed of 80 km/h. Also integrated with the powerpack is an ESW IG120 120 kW starter-generator, which provides additional electrical power for onboard systems and allows the vehicle to be driven in 'silent' mode for several kilometres, a 750 V supply being provided from onboard batteries. An alternative hybrid-electric drive system could be tested in future. The version

on show had Diehl tracks but Canadian Soucy rubber band tracks are also under consideration.



■ The front view of the Anders WWO fire-support variant.

The WWO featured a remotely operated turret developed by OBRUM with the support of the Arex automation company of Gdansk, its main armament being a fully stabilised CTG 120 smoothbore 120 mm 50-calibre high-pressure gun from Switzerland's RUAG Land Systems, and a coaxial 7.62 mm UKM-2000P machine gun from ZM Tarnow. The commander and gunner are seated inside the hull below the turret, in the aft part of which the ammunition is stowed. The gunner's PS-2 (Platforma Stabilizowana-2) two-axis stabilised electro-optical (EO) sight has been developed by PCO Warsaw, as was the PNK-72 driver's observation device. A second PS-2 sight is planned to be installed on the left of the turret to give the commander a full hunter-killer capability, but aboard the demonstrator the commander uses a Carl Zeiss Optronics EO sight mounted atop the turret in line with the gun. In addition, Warsaw-based Etronica has provided its KTD-60 Kumak rear-hemisphere TV/thermal local situation awareness system, incorporating an uncooled bolometric thermal detector and giving a 40x60 degree field of view.

In its baseline configuration the vehicle is said to provide ballistic protection to a standard better than STANAG 4569 Level III, while add-on armour could raise this beyond Level V. It also has substantial but undisclosed mine protection, assumed to be no less than Level IIIB. In addition a StopFire-SF-01 fire-suppression system recently introduced by PZL Warszawa has been installed inside the vehicle. The WWO also boasts a new variant of PCO's SSP-1 Obr3 laser warning system (previously adopted by Poland and Malaysia, and selected for the Centauro vehicles sold to Oman by Oto Melara) with six sensor warheads. It is integrated with ten 81 mm launchers for self-protection grenades. Similar launchers are



■ A concept image of an Anders air-defence vehicle variant carrying the Loara twin 35 mm turret.

OBRUM/Bumar: 1364184



■ The Anders WWO fire-support vehicle demonstrator, showing the turret with its RUAG CTG 120 smoothbore gun and ZSMU Kobuz remote weapon station.

integrated into the turret-mounted ZSMU Kobuz remote weapon station from ZM Tarnow. Additional protection is provided by an active defence system – in the demonstrator both the Ukrainian Zaslon (four modules attached to the hull) and Rafael Advanced Defense Systems Trophy (mock-up on the turret) were shown. Furthermore, Czech-company URC Systems provided its latest STAR Light 3 remote-controlled IED (improvised explosive device) jammer, recently tested by the Czech Army on the Pandur II 8x8 vehicles it is preparing for deployment to Afghanistan.

WB Electronics is responsible for its intercom and battlefield management systems, the former being based on the company's Fonet IP

digital communication management system and incorporates a number of DD6920T displays installed at each of the crew stations and in the passenger compartment.

OBRUM and Bumar next intend to conduct intensive field tests with the WWO. Their outline plans have the IFV demonstrator version ready in 2011, while deliveries

■ A concept image of an Anders IFV variant carrying an Oto Melara Hitfist OWS fitted with a 30 mm Mk 44 cannon.



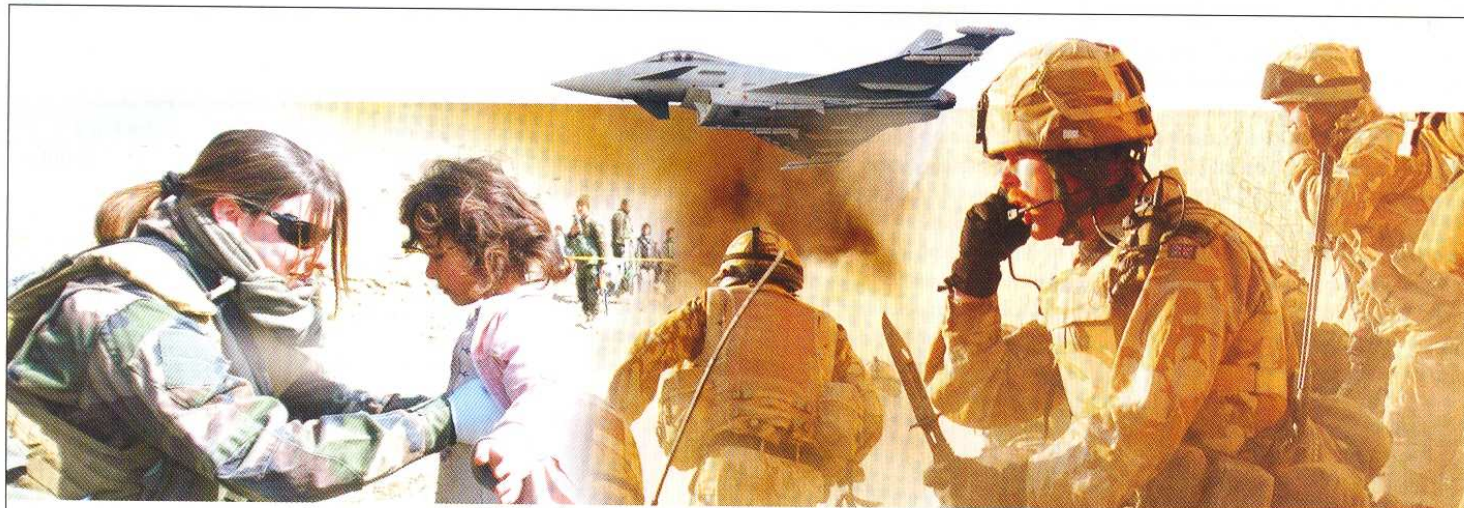
OBRUM/Bumar: 1364183

of production vehicles could begin in 2015.

Meanwhile Poland's General Staff continues to study its options for replacing its obsolete BWP-1 (BMP-1) vehicle fleet. Following the cancellation of the Puma (BMP-1M) upgrade project in 2009, the defence ministry is having to contemplate the provision of alternative vehicles for some 10-14 mechanised battalions. That could lead to a requirement for 500-1,000 IFVs and support vehicles.

BAE Systems Global Combat Systems has been promoting its CV90 (including the CV90120T fire-support

vehicle with the RUAG CTG 120 gun) for Poland since 2007, and still believes that "only a mature solution would be cost effective for Poland". On the other hand, Bumar and OBRUM believe that Polish requirements could readily be met by a domestically developed system. This, they say, would not only stimulate the national technology base but also give Bumar an advanced exportable product. *Jane's* sources indicate that detailed briefings on the WPB have already been given to several potential overseas partners, among them companies in Brazil and India.



WE SUPPORT THE PEOPLE WHOSE MISSION IS TO PROTECT THE WORLD.

AN EADS COMPANY