



26 August 2013

### **TDW SUCCESSFULLY DEMONSTRATES SCALABLE WARHEAD TECHNOLOGY**

Engineers at TDW GmbH have developed a new effector technology with which armed forces can achieve scalable target-adapted effectiveness. The subsidiary of MBDA Deutschland recently became the first company to successfully demonstrate this technology in a series of tests.

The demonstration, which took place on the grounds of Bundeswehr Technical Centre 91 (WTD 91) in Meppen, used 100 kg of explosive in a Mk82 shell with a scalable warhead. The effect of the tested warhead was comparable to the effect of 10 kg of high explosive. The purpose of the test was to significantly reduce the effective radius, i.e. to be able to effectively engage targets while at the same time minimising the damage to nearby buildings and vehicles.

“We’ve been working for some years on technological approaches to solving this problem. We’ve now demonstrated that this technology actually works. This success is another step forward in the flexibility of advanced future effectors,” says Helmut Hederer, Managing Director of TDW GmbH.

Missions in asymmetrical scenarios call for high precision and a warhead with an effectiveness accurately adapted to the type of target. With present-day effector systems, this is possible either only to a limited extent or not at all.

An answer to this challenge is available in the form of effector systems that are capable of “scalable” effectiveness. Scalable means that the type and magnitude of the intended effectiveness in the area of operations is adjustable. In the case of an air-to-ground mission, for example, the desired degree of effectiveness in the target area can be selected by the pilot from the cockpit. The advantages of the so called “dial-a-yeild” capability are that unintentional damage is minimised whilst high flexibility in operational use is guaranteed using just one effector type.

The tested technology is based on a remarkable concept: what is detonated is just a pre-selectable proportion of the explosive, sufficient to meet the requirements and not the entire explosive present in the warhead. The remainder is prevented from detonating and is modified to ensure that no residual explosive remains.

With this successful test, the Schrobenhausen-based company has demonstrated not only the high maturity of the technology, but also the possibility of its integration into existing effector systems. This opens the door to capability extension in air-to-ground roles for Air Forces. The technology can be integrated, for example, into precision guided bombs. The German Air Force’s Eurofighters and Tornados are equipped with such weapon systems. In principle, the effector technology can also be employed in army and navy missiles.



## Press Release

### Note to editor

TDW Gesellschaft für verteidigungstechnische Wirksysteme mbH is a subsidiary of MBDA Deutschland and is the European leader in developing, producing and maintaining warheads and warhead systems as well as the associated components. As part of MBDA Deutschland, TDW has around 130 employees at its Schrobenhausen site.

MBDA Deutschland is the leading missile systems company in Germany and part of the European MBDA Group. MBDA Deutschland develops, manufactures and provides customer and product support for guided missile systems and subsystems to the Air Force, Army and Navy. Today the company focuses on air defence systems. Around 1,300 people work at its Schrobenhausen, Ulm and Aschau/Inn facilities.

With a significant presence in five European countries and within the USA, in 2012 MBDA achieved a turnover of 3 billion euros with an order book of 9.8 billion euros. With more than 90 armed forces customers in the world, MBDA is a world leader in missiles and missile systems.

MBDA is the only group capable of designing and producing missiles and missile systems that correspond to the full range of current and future operational needs of the three armed forces (land, sea and air). In total, the group offers a range of 45 missile systems and countermeasures products already in operational service and more than 15 others currently in development.

MBDA is jointly held by BAE SYSTEMS (37.5%), EADS (37.5%) and FINMECCANICA (25%).

Press contacts:

#### Germany

Wolfram Lautner  
Tel: + 49 (0) 8252 99 2549  
[wolfram.lautner@mbda-systems.de](mailto:wolfram.lautner@mbda-systems.de)  
Mobile: +49 (0) 170 560 2350

#### Germany

Günter Abel  
Tel: + 49 (0) 8252 99 3827  
[guenter.abel@mbda-systems.de](mailto:guenter.abel@mbda-systems.de)  
Mobile: + 49 (0) 160 369 3037