

SOLDIER SYSTEMS & NETWORK SOLUTIONS **DIGITALISATION OF THE BATTLEFIELD**





NETWORK SOLUTIONS

Digitalisation has long been a normal part of everyday life – even in the military. It is impossible to imagine military operations without electronic equipment and digitalisation helps to provide a decisive **advantage on the battlefield**.

System House Rheinmetall has decades of experience and expertise in the design, development, production and operation of military systems. In close cooperation with the German Armed Forces, we have been digitalising the "last mile" since 2006, developing and improving the IdZ-ES Soldier System. Rheinmentall has the unique responsibility to innovatively network soldiers, vehicles, sensors, unmanned systems and other hardware – to give our soldiers the decisive advantage in combat.

OVERVIEW:

- THE TACTICAL MANAGEMENT SYSTEM TACNET
- THE SOLDIER SYSTEM GLADIUS 2.0
- THE NETWORKED SOLDIER
- THE VEHICLE IN THE NETWORK



THE TACTICAL MANAGEMENT SYSTEM TACNET

Modern battle management systems for fighting troops need to provide functions that go beyond those of ordinary command and information systems, and must be clear and intuitive to use.

In a revolutionary manner, TacNet combines two different software systems in one product family: firstly, exchange of information in the classic map layer; secondly, extended functions in sensor-effector networks, which are provided via standard interfaces such as the Generic Inter-Vehicle Gateway. Forward-looking standards such as the NATO Generic Vehicle Architecture (NGVA) have also been designed in to the system.

OUTSTANDING FEATURES:

- Holistic **networking**
- Interoperable using internationally recognised standards
- Compatible with other management systems
- Modern visualization
- App-based **expansion options**
- Scalable



THE SOLDIER SYSTEM GLADIUS 2.0

Equipment for infantry forces: Lightweight. Modular. Effective.

Infantry soldiers can expect to perform a **complex range of tasks** across the full spectrum of battlefield missions and scenarios. They operate in difficult and complex terrain, often in extreme climatic conditions. The threat environment can range from irregular forces to peer-on-peer operations against highly equipped opponents in high-intensity conflict.

To be of real value, modern technologies provided to soldiers must make a decisive contribution to **improving** survivability, command capability, endurance, mobility and effectiveness in the field.

The **Soldier System GLADIUS 2.0** delivers on these requirements. It provides the **highest standards** of protection, communication and up-to-date situation reporting for each individual soldier. It is modular, flexible and can integrate with a large number of subsystems thanks to its open system architecture design.

OUTSTANDING FEATURES:

- Established and proven system
- Enhanced **ergonomics**
- Information display in **Real Time**
- Open architecture
- Modular and flexible configuration
- **Battlefield superiority** thanks to information advantage



THE NETWORKED SOLDIER

A comprehensive and uniform picture of the situation and a high command speed provides the Networked Soldier with significant advantages and the initiative on the battlefield. Each soldier can act as a sensor for the entire unit. By shortening and digitalisation of the sensor-to-shooter chain, networked soldiers can secure critical time advantages. For example, the integration of modern anti-tank weapons with direct target assignment significantly increases the unit's effectiveness.

The integration of modern Unmanned Vehicles for reconnaissance, direct weapon effects and logistics support tasks promotes **Manned-Unmanned-Teaming (MUM-T)** capability.

The Networked Soldier allows for the integration of electrical and optical reconnaissance equipment, augmented reality and night vision capabilities to help deliver a decisive advantage and contribute to mission success.





THE VEHICLE IN THE NETWORK

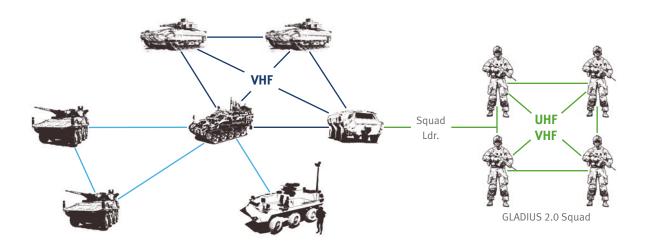
Rheinmetall's armoured and mechanised infantry system delivers **full integration of the vehicle** in the Soldier Network.

TacNet provides the means by which the troop can be networked with the vehicle and higher management levels without delay. It ensures each troop member can access vehicle sensors and platform weapons.

By integrating the fighting platform and soldier into one soldier system network, **Combat Power** can be enhanced through greater situational awareness, access to the most relevant data and information that allows for **timely decision-making actions** and a greater chance of mission success.

OUTSTANDING FEATURES:

- Centralized data exchange for all soldiers
- Power supply and centralized power management
- Access to the vehicle sensors
- Use of **onboard communication**
- Optimised onboard space concept



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