COMBAT AND GUNNERY SKILLS TRAINER (CGST)



Rheinmetall Defence Electronics GmbH has designed a training system that addresses today's most challenging training tasks for crews of armoured vehicles:

- Gunnery crew training
- Combat training on platoon level and beyond

The CGST is a reconfigurable and modular training system that is not limited to a specific platform, it is adaptable to virtually

any armoured and armed platform. In its current configurations, it represents the Leopard 2A4 and has achieved customers in Canada and Indonesia.

The CGST is based on the Rheinmetall high-end scenariogenerator TacSi® plus high-fidelity simulation components including a sophisticated ballistics simulation and the power of Virtual Battlespace 3 (VBS3) as the visual system.



SCALABILITY



CGST is a modular and flexible system and can be scaled simply according to the training needs. Depending on the requirements, CGST can be configured as a single gunnery training system and then up to a full network of company or beyond. This is achieved by exploiting the intrinsic networking capabilities of the system which also allows flexible setups.

Moreover the fidelity of the crew training station can be freely chosen according to the needs and the training philosophy. Also different stations with different fidelities can be intermixed in a network, as the underlying simulation software is the same and always has the same functionality.

PRODUCT FACTS OVERVIEW

- Reusability of existing VBS2 & VBS3 databases
- Additional role-player workstation with VBS2/3 attachable
- Visual
 - VBS2/3 as visual system
 - Interface flexible for future versions
 - Day & night
 - Thermal imaging, considers environmental conditions
- Superb graphics from VBS2/3 and Rheinmetall's scenario generator allows for highly detailed scenarios including
 - Urban warfare
 - Military operations other than war
 - Combat in open terrain
- Scenario generator and exercise control TacSi® with
 - Detailed map and tactical scenarios (symbols according to NATO standards)
 - Interactive exercise control including backtrack, which allows rewinding the exercise
 - Intelligent computer generated forces suitable for gunnery and tactical training
 - Extensive support editor for artillery, minefields, IEDs, VBIED, CAS missions, barriers
 - Sophisticated ORBAT editor for exercise creation up to battalion level
 - Powerful script editor for complete self-running exercises
 - Comprehensive environment editor

- Detailed assessment of gunner and commander
 - Real-time target silhouette showing aim, laser and impact points
 - Printable gunnery and exercise reports showing timeline of target engagement and events
 - Storable record & replay of exercises with detailed assessment of crew performance
- Automatic loader and autonomous functionality as an alternative to complete manned crew stations
- Realistic simulation of exterior and interior sounds
- Flexible multi-channel radio communication simulation
- Configurable HLA/DIS gateway which allows interconnection to other simulators and extension toward live-virtual-constructive integration
- Precise ballistics simulation considering
 - Environmental conditions
 - Lead angle
 - Dynamic feedback
 - Type of ammunition
- Malfunction simulation to enable training of e.g. emergency firing procedures, interactively controlled by the instructor