



LIVETRAINING

LEGATUS®

MOBILE COMBAT TRAINER

HIGHEST MOBILITY FOR LIVE TRAINING EXERCISES

TAKING RESPONSIBILITY IN A CHANGING WORLD

 RHEINMETALL

LEGATUS®

LIVE TRAINING BY RHEINMETALL ELECTRONICS

The LEGATUS® system is a family of modular live training equipment and is Rheinmetall's approach to completely satisfy all customer requirements in the field of live training.

The LEGATUS® system offers three levels of mobility to control Live Simulation exercises:

- Stationary
- Deployable (container based)
- Portable



LEGATUS® MOBILE COMBAT TRAINER

The Mobile Combat Trainer is a portable miniEXCON with a ruggedized laptop and/or tablet and a Training Communications Radio (TCR) system installed in a backpack.

It provides the Instructor with a digitized map or satellite image with NATO symbol overlays. The display shows the position and status of the exercise participants in near real time.

It has been designed for smaller training groups and highest mobility – from squad training up to company level. The Mobile Combat Trainer can be operated without the need of an instrumented training area – simply on a tablet or laptop.

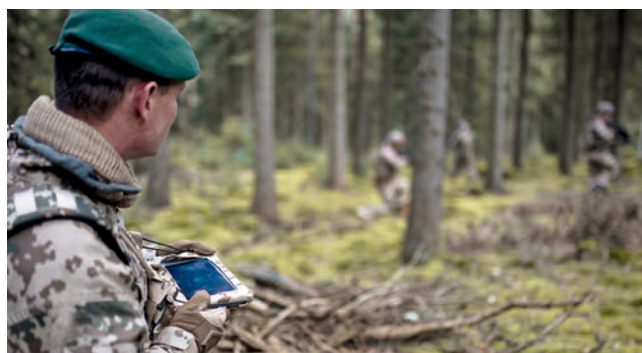


MAIN FEATURES

HIGHEST MOBILITY

The ruggedized laptop will be used for exercise preparation and After Action Review while the lightweight tablet will be used as instructor terminal when walking on foot. The notebook and the base station are carried in the lightweight-backpack.

This mobility allows the instructor to follow the focus of the exercise, no matter where the course of the exercise moves. So the instructor has the immediate overview at any time, supported by the digital information on his display. He can take actions quickly and on the spot on his tablet, while the exercise is running.



RAPID AND RELIABLE EVALUATION

Every movement, action and communication is tracked, recorded and processed for evaluation and a rapid During- or After Action Review with detailed reports for every player. This enables a reliable, error-free and comprehensible debriefing directly on the spot, to drive the lessons learned process without the loss of valuable training time.



INDEPENDENT FROM STATIONARY COMBAT TRAINING CENTRES

The Mobile Combat Trainer provides all the necessary EXCON-features, which are well proven in our large Combat Training Centres. It can be operated at any place without the need of an instrumented training area. This allows a flexible, location-independent exercise planning and enables companies to run exercises in their “home-based” training area.

Whenever there is no need to use a resource-intensive Combat Training Centre for large-scale exercises, the Mobile Combat Trainer is a cost-saving alternative which keeps the users training schedule more flexible and allows them to perform live exercises in any desired environment.



MOUT TRAINING

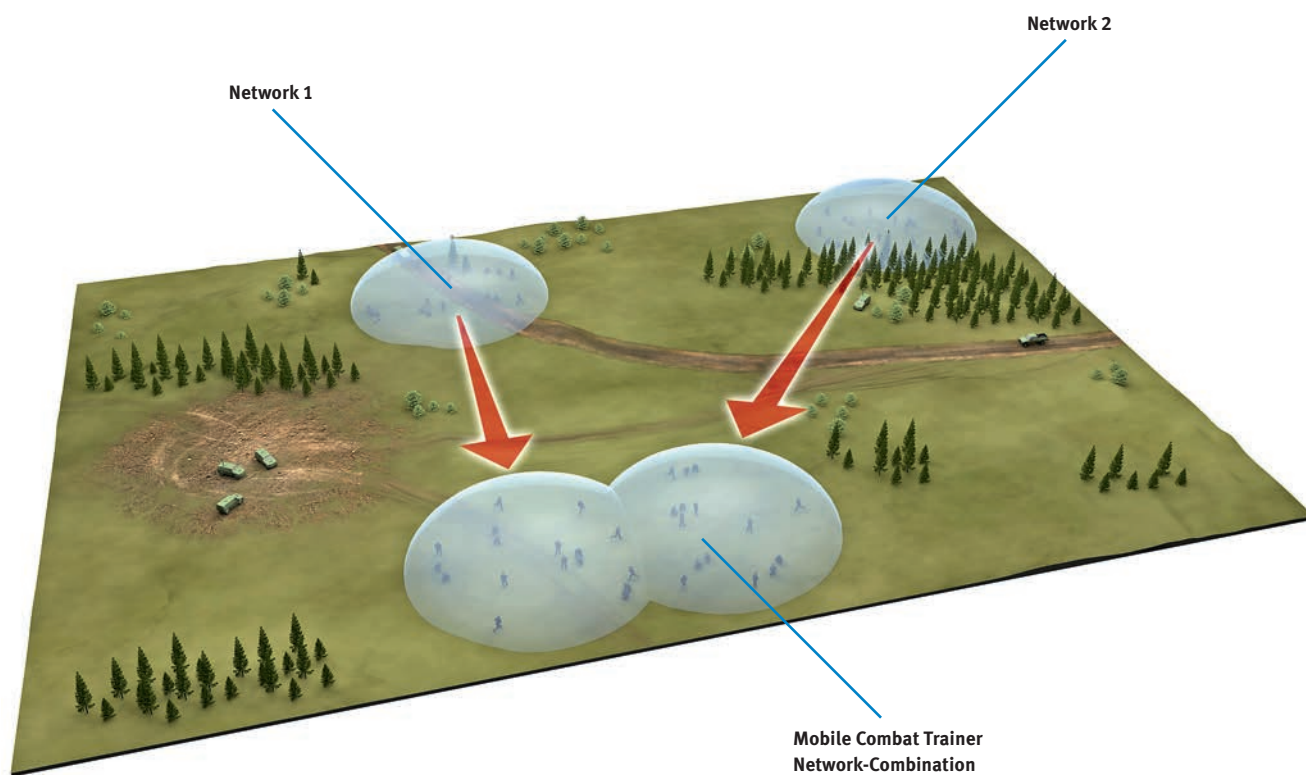
The Mobile Combat Trainer is compatible with the LEGATUS® Urban Equipment. So trainings can also take place in built-up areas and buildings, where no GPS-coverage for position tracking is available. With the flexibility of the LEGATUS® Urban Equipment in conjunction with the Mobile Combat Trainer, MOUT training can thus be implemented at short notice, and can also take place in public areas, e.g. for special forces trainings.



EXTENDABLE

The Mobile Combat Trainer is not only developed for self-sufficient use. It can also be linked to other Mobile Combat Trainers or a Combat Training Centre by using an LTE Backbone for a quick data-upload of the situation and all player positions.

This means, that several “exercise bubbles” can be performed spatially separated from each other and will be connected when they enter the terrain of another Mobile Combat Trainer or the CTC. When in range, the instructors are able to perform actions between these bubbles, for example with artillery fire, a CBRN event and even an consolidated After Action Review.



TOOLS

The control and evaluation of exercises is supported through a palette of features that enables the visualization of tactical pictures including forces involved, their geographical position and tactical status, as well as recording and playback of exercise data.

2D/3D SITUATION MAP

The portable hardware provides the instructor with a digitized map or a satellite image with NATO symbol overlays for monitoring the situation. It displays the visualization of the units involved, their geographical distribution and their combat status in near real time, as well as overlays for the graphical presentation of operational plans.



AREA WEAPON EFFECTS SIMULATION (AWES)

The instructor can enter planned and ad hoc AWES missions at the tablet or notebook. All of the AWES (boundaries of minefields, artillery and CBRN weapons) as well as the AWES status information (e.g. mission planned, mission active), are displayed on the situation map.

RECORDING AND PLAYBACK

The playback mode provides the ability to replay selected events from an exercise, vary the speed, repeat the playback/radio and concentrate on certain players.

TIMELINE VIEWER

All events can be displayed in a time line view. The timeline shows the military structure and different kinds of events, e.g. kill, shoot will be shown in different colours. The timeline gives the instructor a quick overview over the exercise flow and can be used to jump between time points in playback mode during the After Action Review.



VEHICLE BASED

Alternatively the vehicle kit allows the Mobile Combat Trainer to be easily built-in to all-terrain vehicles, which will also significantly improve the range, when a telescopic antenna mast is mounted.



LEGATUS® MOBILE COMBAT TRAINER

SPECIFICATIONS

Hardware components

Tablet	
Radio master	
Accumulator (2x)	
Antenna	
Instructor harness	
Vest	
Tablet pouch	
Backpack	
Weight	8.2 kg
Autonomous operation	8 h

LEGATUS® EXCON Software Suite

Prepare exercises	
Perform system control and monitoring	
Display the situation map	
Initiate AWES	
Evaluate the exercise	
Record and playback the course of an exercise	
Prepare and perform debriefings	

Radio master

Weight	1.4 kg
Dimensions	20 cm x 13.5 cm x 5 cm
Max. number of players	100 (75)
Range	up to 2 km radius
Frequency	380 MHz (1 channel)
Time Division Multiplexing (TDM)	4 time slots
Time synchronization	GPS
Update rate	8 s (5 s)
Training voice communication	Group call, individual call, late entry
Training data communication	Short data service
Interfaces	Power connector, antenna connector, WIFI
Power supply	2 accumulators
Storage temperature	-20°C ... +71°C
Operating temperature	-20°C ... +49°C
Ingress protection	IP65 (EN 60529)

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