



TARANIS
BATTLEFIELD
MOBILE

TARANIS® BATTLEFIELD

TARANIS® Battlefield is ESG's tactical command & control system for middle military command levels. Thanks to its flexible configuration options, it can be used not just in mobile command posts but also in vehicles.

TARANIS® Battlefield is configured according to your specifications. The core system is expanded with the right modules to meet your needs.

Intuitive design

With its intuitive user interface featuring large buttons and clear display elements, TARANIS® Battlefield is especially suited for use in time-critical combat situations in which the user is under considerable stress. The system is thus ideal for use not only in spacious indoor command posts but also in cramped wheeled and tracked vehicles as well as by individual dismounted soldiers.

Highly flexible

Tactical command and control systems are used across multiple command levels, where – especially in today's spectrum of conflict – chains of command can change at short notice. As a highly flexible system, TARANIS® Battlefield meets this challenge: it can be adapted by the user to match any organisational structure even during running operation.

Communication

TARANIS® Battlefield supports a variety of different communication technologies, from HF and UHF to satellite communications. Even with narrow-band connections (e.g. those used for VHF devices), the system ensures real-time information transfer between users.

Situation picture

High-quality, near-realtime tactical images or videos, along with a variety of map information, are essential in ensuring full situational awareness. TARANIS® Battlefield gives users a level-appropriate, realtime-capable, role-specific situation picture based on geolocated data.

Interoperability

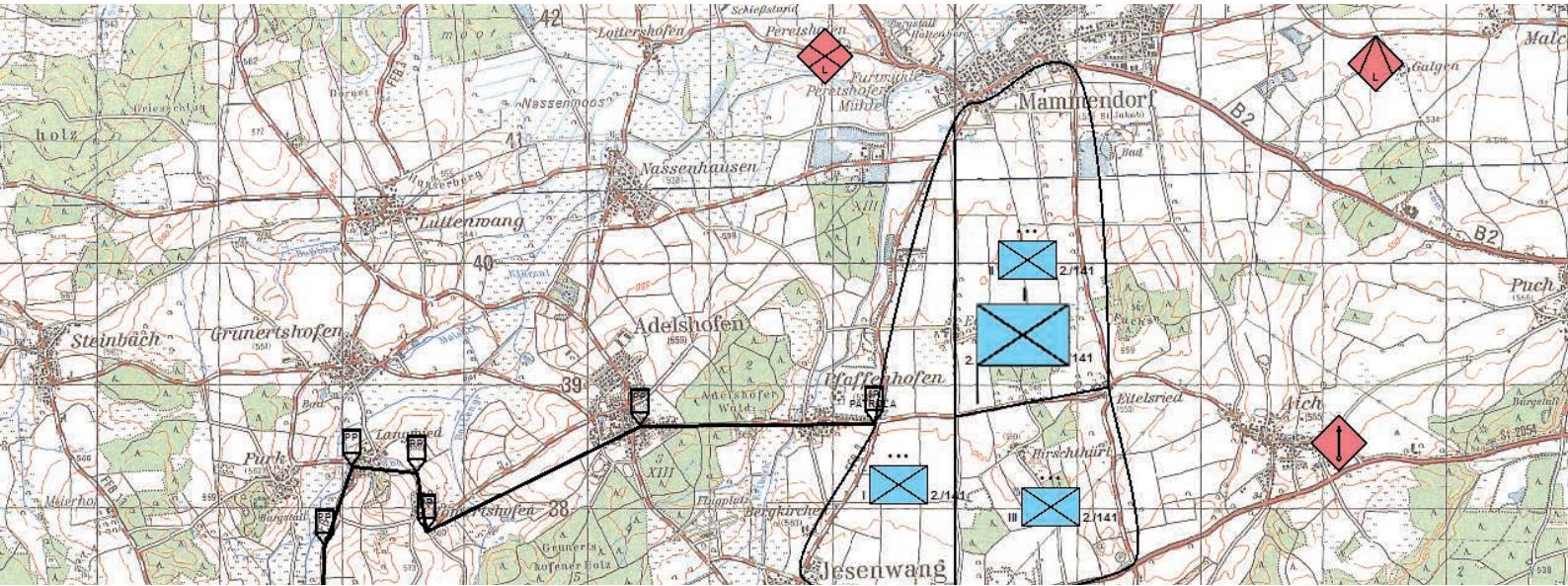
TARANIS® Battlefield is fully compatible with the TARANIS® Theatre and TARANIS® Soldier command and control systems. To connect with international command and control systems the TARANIS® Battlefield interoperability module follows the NATO STANAG 2245 standard, which is for example used by the French-German Brigade to connect with the French army. In addition, TARANIS® Battlefield supports the NATO Friendly Forces Information (NFFI), NATO Vector Graphics (NVG), MIP Baseline 2 and MIP Baseline 3 standards for information exchange with other armed forces.

BENEFITS OF TARANIS® BATTLEFIELD

- ▶ Improved situational awareness
- ▶ Faster decision-making process
- ▶ Intuitive and user-friendly HMI
- ▶ Tactical operation command & control from the individual soldier to the command post level
- ▶ Wide range of communication options

* TARANIS® is a registered Community trademark of ESG Elektroniksystem- und Logistik-GmbH





TARANIS® BATTLEFIELD MODULES

Basic Functions & Operation

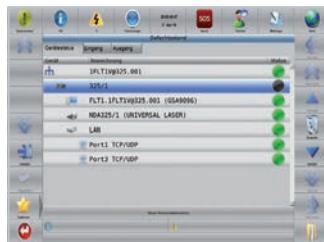


TARANIS® Battlefield has numerous basic functions, such as a clearly designed control centre allowing continuous status monitoring of the most important functions, including all incoming and outgoing messages.

The operating concept is designed for use either completely via touchscreen or with a mouse and keyboard.

The intuitive user interface, with large buttons and easy-to-read display elements, is independent from the hardware used. Relevant information and alternative courses of action are clearly displayed. Green, yellow and red colour-coding is used to aid the user.

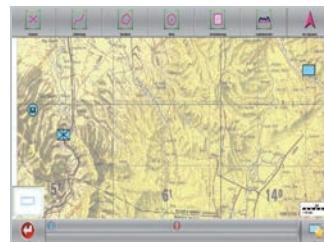
Communication



The communication module enables you to connect any number of system devices to each other. A wide range of communication channels are supported, including UHF, VHF, HF, IP radio devices, LAN, WLAN, mobile phones and satellite communications (BGAN and Mini-M).

The module is designed to provide flexibility, security and fast data transmission. Configuration is therefore quick and easy: new users can set up their communication links in less than five minutes by themselves without help from an administrator. Communication is also quick and secure: data can be transmitted in near-realtime even in the VHF range and encrypted using procedures approved for classified military use.

Map



The map module enables you to use a wide range of map formats and aerial photos such as PCMap, Geo-Tiff, CADRG, OSM and VMap within TARANIS® Battlefield. All map data can be moved around and zoomed in and out easily with multi-touch gestures, just like on a smartphone or tablet.

The map module also includes extensive map and terrain calculation functions, including position, distance, rectangle, circle, shading and terrain section.

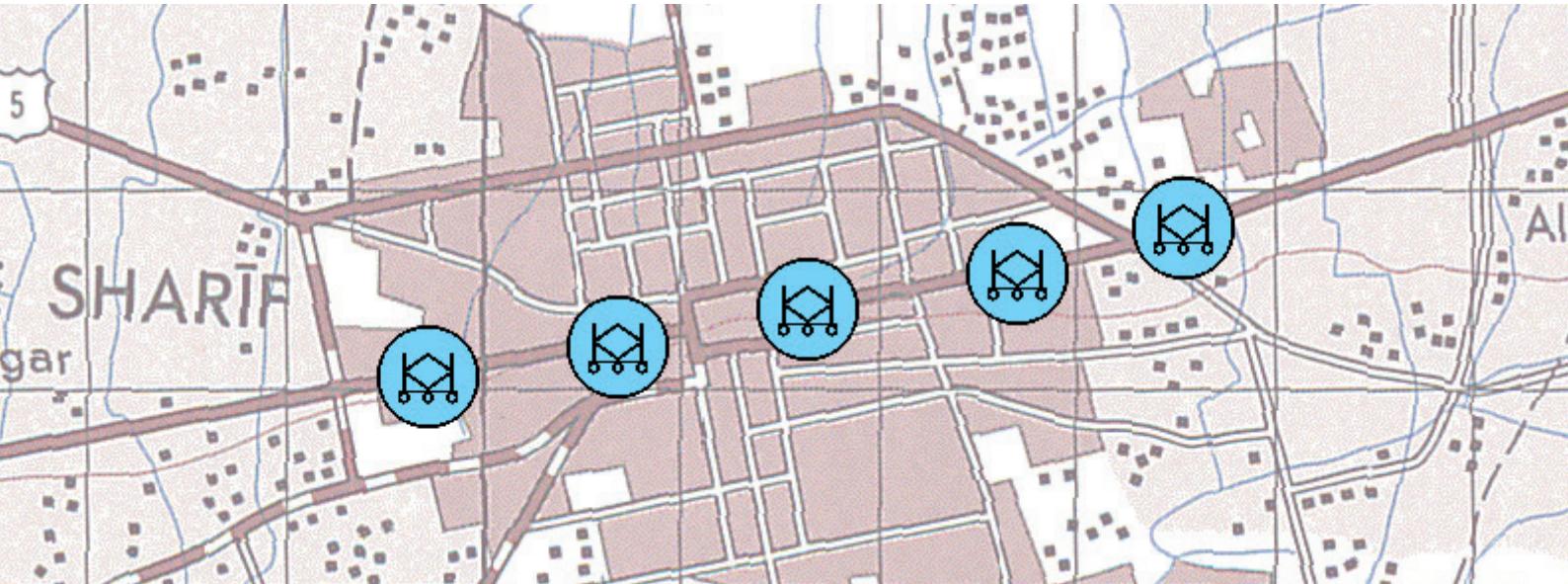
Situation



The situation module allows the user to display mission-relevant information graphically on the TARANIS® Battlefield digital map.

Use the symbol generator to create your own situation symbols from the complete APP6 pool and organise and save them into customisable symbol palettes.

The situation module offers even more useful features such as an expandable overview map, simplified object representation, layer management, automatic separation of overlapping symbols and freehand drawing directly on the map.



TARANIS® BATTLEFIELD MODULES

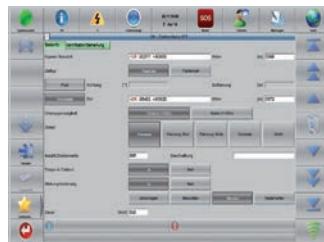
Blue Force Tracking



With the TARANIS® Battlefield blue force tracking module all participants – right up to operation command – can keep track of the positions of all forces involved in the operation.

The module gives users a round-the-clock, level-appropriate, realtime-capable, role-specific situation picture based on geolocated situation symbols.

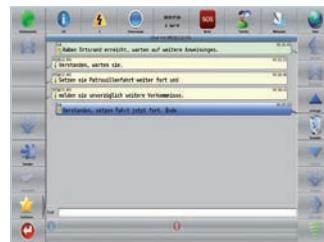
Messages



Create forms with the message module for highly efficient, near-realtime message transmission using the communication module. Examples of formatted messages include:

- ▶ MedEvacRequest 9-Liner
- ▶ Target reports
- ▶ Event messages (ambush, IED, demonstration, etc.)

Chat



TARANIS® Battlefield features an optional integrated chat module that allows near-realtime electronic communication in individual or group settings. Users can communicate with individual participants via text chat or open their own chat rooms and invite any number of participants.

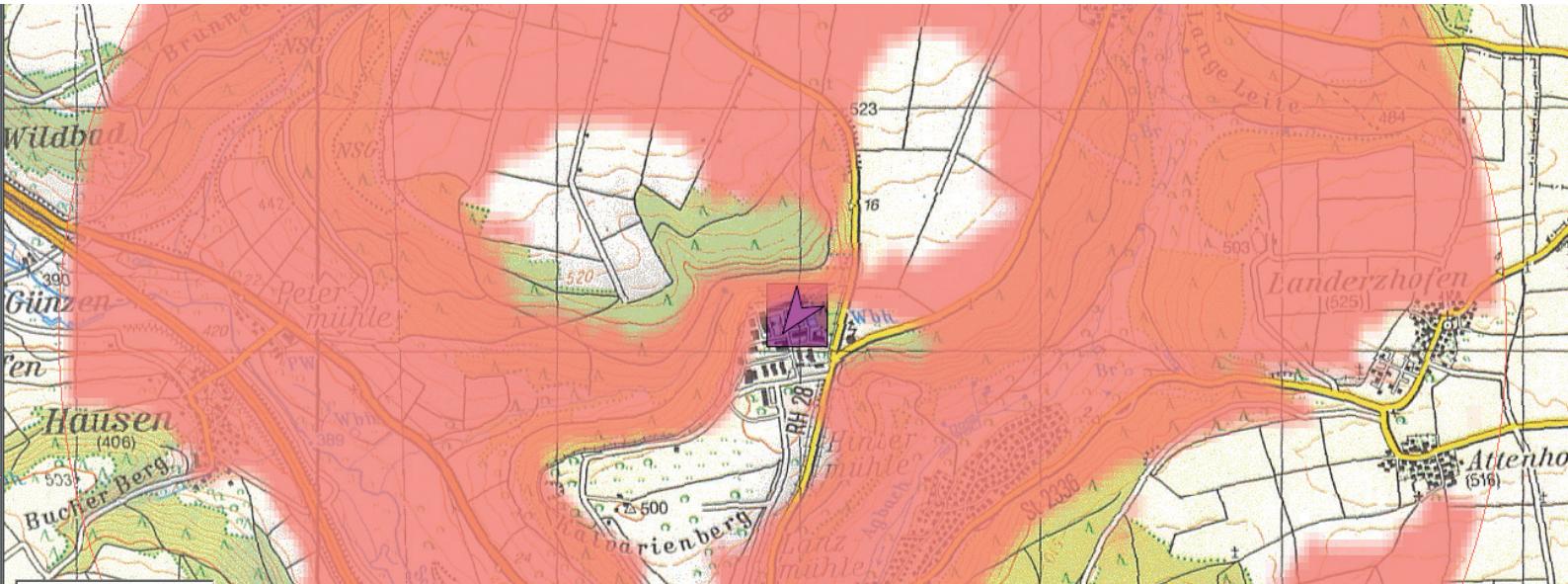
Users receive detailed status information on all outgoing chat messages, regardless of the number of chat participants. Thus, they can always see exactly when and by whom a chat message was sent, received and read.

SOS



With the SOS module, users can transmit their current position and send an SOS signal to all fellow forces at the touch of a button. The other participants are notified of the distress call through visual and audible alerts. In conjunction with the map and situation modules, the position of the SOS sender is centred on the map with his/her tactical symbol highlighted in red.

The SOS can also be easily cancelled at the touch of a button.



Navigation



TARANIS® Battlefield can be equipped with a navigation module that enables users to track their own position and direction of movement on the map at all times. TARANIS® Battlefield supports a variety of military and civilian GPS devices and navigation systems for this purpose.

Navigation and routing can be based on waypoints imported by the system or placed on the map directly by the user. Instead of the map, the driver can also view a large digital compass rose during the journey to make navigation easier, especially in poorly marked or offroad terrain.

Track Recording



With the track recording module, TARANIS® Battlefield can record, modify and import/export complete route information during the journey. Even while recording is in progress, the user can categorise the route travelled, i.e. assign it various parameters, such as condition, width, surface etc. Recorded tracks can be saved, sent to other systems or exported for other users to use later for navigation.

Visibility Calculation



With the visibility calculation module, users can see visible/non-visible terrain sections in near-realtime from any position. The following parameters are configurable:

- ▶ Vantage height (e.g. eye level above ground in vehicle)
- ▶ Target height (objects higher than x metres above ground)
- ▶ Radius around selected position

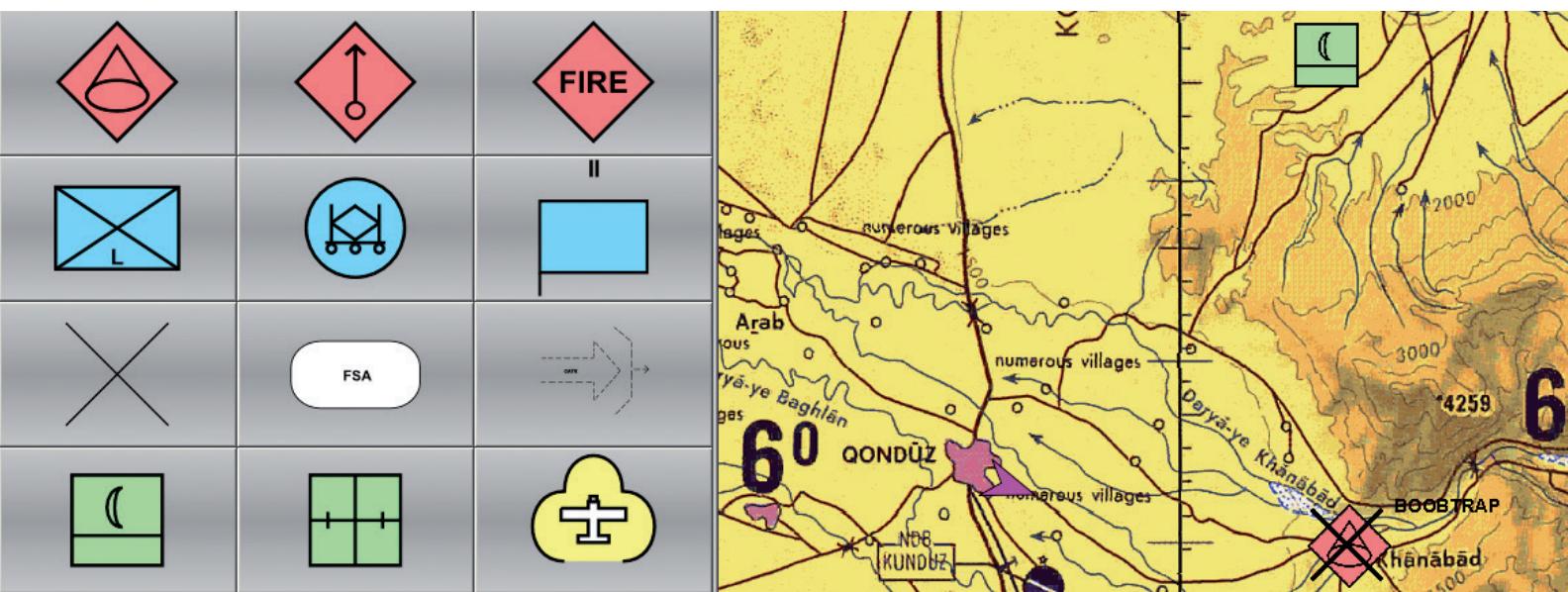
The calculation is so efficient that it can run continuously in the background during the journey based on the vehicle's current position.

Radio Coverage Calculation



With the radio coverage calculation module, users can see probable radio signal coverage in near-realtime from any position. The following parameters are configurable:

- ▶ Transmitter height (antenna height above ground)
- ▶ Receiver height (antenna height above ground)
- ▶ Frequency
- ▶ Radius around selected position



TARANIS® BATTLEFIELD MODULES

Decision Support



The decision support module can prioritise targets according to various criteria (e.g. threat) and make an engagement recommendation. The system chooses the best combination of all available resources (joint and combined) to meet the user's criteria (e.g. minimal loss, quickest engagement, lowest use of ammunition). Fire support coordination measures are taken into account in the suggested engagement options.

Firefight



The firefight module helps the user to simultaneously coordinate multiple target engagements for joint fire support. Different procedures are visualised using dynamically structured workflows to provide a clear overview of the status of individual engagements. The module also performs ballistic calculations and is thus capable of translating general engagement orders into commands for indirect weapons (direction, elevation, propellant, bullet type etc.).

Mission Assessment



The mission assessment module records and then replays all data communications with the system. The playback mode enables you to replay the mission, jump to any point and quickly fast-forward and rewind.

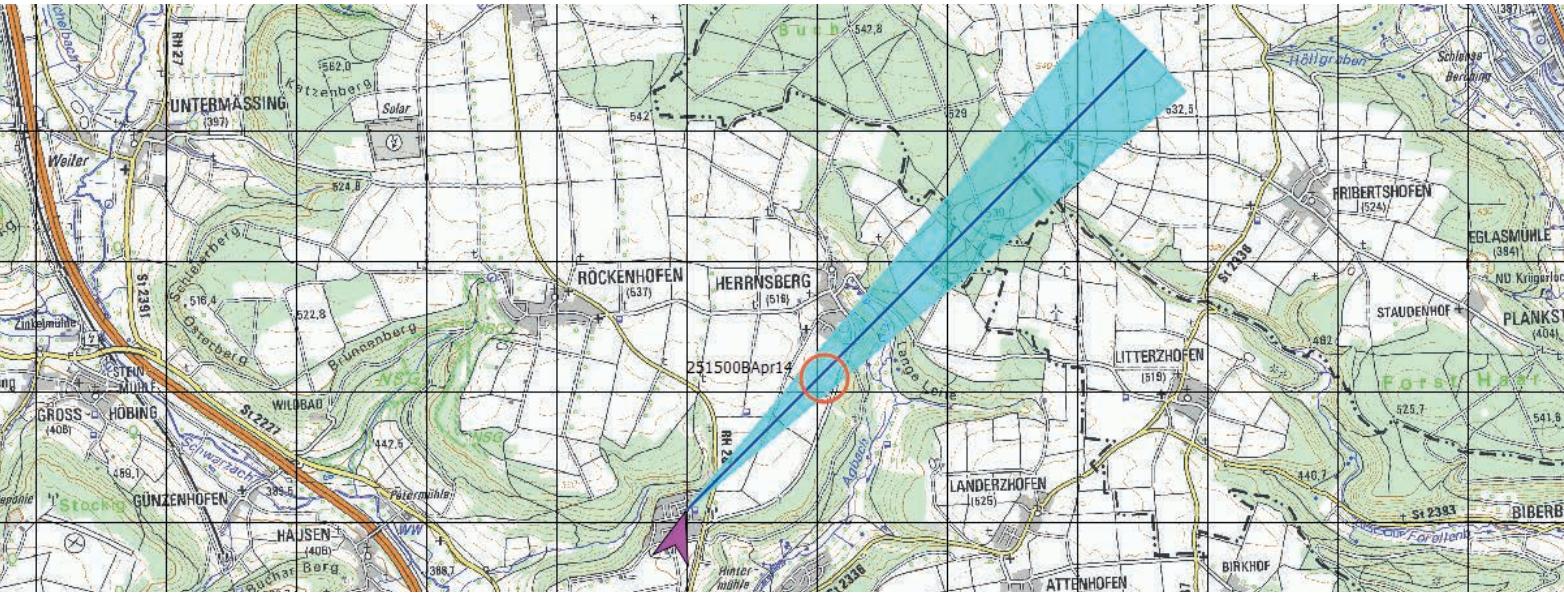
Thus, during mission debriefings, you can show precisely which information was available at what point of time and how forces were deployed.

Interfaces



With its service-oriented architecture, TARANIS® Battlefield offers the necessary services for all modules (WCF – Windows Communication Foundation).

The interface module also allows quick and easy connection to external systems via XML or integration of proprietary external system interfaces.



Interoperability



TARANIS® Battlefield supports the following international standards:

- ▶ NATO Friendly Forces Information (NFFI)
- ▶ NATO Vector Graphics (NVG)
- ▶ A-DEM

The Information Mediation Service (IMS) module enables you to connect external systems that support MIP (Multilateral Interoperability Programme) baselines to one another as well as to TARANIS® Battlefield.

Office Integration

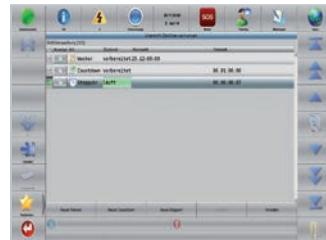


With the office module you can integrate any office suite (OpenOffice, MS Office etc.). The following functions are available:

- ▶ Word processing
- ▶ Spreadsheets
- ▶ Presentation programmes
- ▶ Graphics editing

Created files can be distributed over tactical radio networks using the communication module.

Time Monitoring



With the time monitoring module users can perform various time measurements. The module offers the following functions:

- ▶ Alarm clock
- ▶ Countdown
- ▶ Stopwatch

The above functions can even be used simultaneously. Other modules can also access these functions and, for example, automatically initiate a countdown.

Simulation & Training



The simulation and training module enables TARANIS® Battlefield to be connected to other constructive and interactive simulation systems. Users can, for example, practise or train using TARANIS® Battlefield by simulating other participants or even entire command levels within their system network.

Example: By combining TARANIS® Battlefield with the JFS Virtual System Simulator and Virtual Battlespace (VBS®*), the entire joint fire support process can be visualised and used for training for the Joint Fire Support Team.

* VBS® is a product of Bohemia Interactive Simulations.

