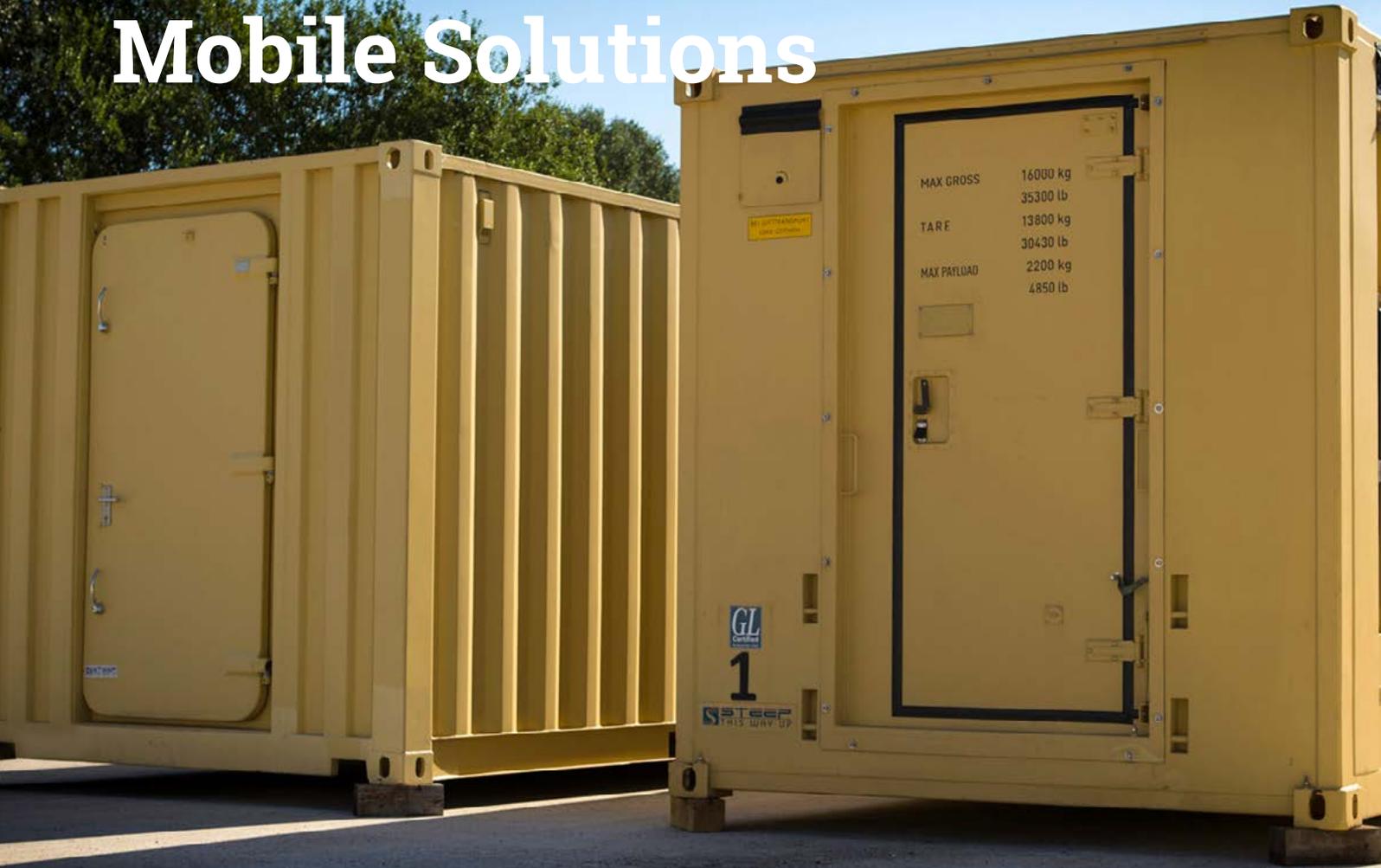


System Integration – Mobile Solutions



System Integration

Stationary Remote Detection

Ground Support Container System

Mobile Solutions

The steep GmbH is specialized in the integration of innovative radio systems as well as premium information- and communication-technology in technical facilities.

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Development and Design

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Component Selection

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Maintenance and Repair

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Testing and Evaluation

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Spare Parts Management

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Technical Documentation

System Integration

The steep GmbH is specialized in the integration of innovative radio systems as well as premium information- and communication-technology in technical facilities. Our services range from project management via engineering up to production and commissioning. Security systems for telecommunications facilities and control systems for industrial production are additional reference projects.

We supply the armed forces, police and aid organisations with fully equipped mobile operations centres. Our customers benefit from extensive services that are essential for their system integration. This includes services, such as platform selection, documentation as well as maintenance and repair of technical systems.

Overview of our Services:

- Installation and adjustment of mobile platforms and systems
- Commissioning and system support
- Fault analysis
- Maintenance and repair with replacement of broken system components
- Documentation for entire systems and components
- Procurement of new components
- Functioning testing, system checks, quality inspection and acceptance testing
- Assembly and disassembly for transportation and relocation
- After-sales and on-site service (also international)

Engineering Service

Our offer for our customers goes far beyond the development and the design of mobile systems. Our services in system support ensure a high operational availability of our customers' systems and a faultless performance of the facilities for many years. We consistently target our services towards the operational goals of our customers. This includes an optimum process- and product-quality as well as a high profitability in the installation and operation of complex solutions.



Stationary Remote Detection

The Stationary Remote Detection is a deployable container solution for access control to field camps or other stationary facilities. The system includes various access control systems and enables the remote detection of dangerous objects and persons, such as potential suicide bombers wearing explosive belts or weapons.

The system was configured by the steep GmbH on behalf of the German Federal Office of Bundeswehr Equipment, Information Technology and In-Service Support and implemented in cooperation with the partner Bavak Beveiligingsgroep B.V. One System is in deployment, other systems are in preparation.

Our Services:

- Design and planning
- Component selection and procurement
- Construction and integration
- Air-conditioning
- Functional testing
- Support in the provision of infrastructure
- Packaging and labelling
- Management of system transport
- System construction on site
- Training of operation and maintenance staff
- Support of administration staff
- Technical documentation



GSCS Eurofighter

The Ground Support Container System is a deployable and modular system for operations on a Deployed Operation Base for 6/12 Eurofighters. It is operated by an independent electricity supply and air-conditioning and provides three differently classified networks. The system can be operated up to the secrecy level SECRET and has a radio-integration into a VoIP environment. The system was realised by a consortium of the ESG and the steep GmbH.

Services of the GSS+:

- Construction of the deployable GSCS based on standardized function containers including energy supply and air-conditioning
- Procurement and integration of network and IT components
- Connecting the system to MobFüSysLw
- Proof of operational and functional ability including aviation compatibility acc. to ZDv 19/1
- Creation of an interactive electronic technical manual (IETM)
- Training of teaching staff and selected personnel
- Installation and commissioning in deployment
- Support services during deployment

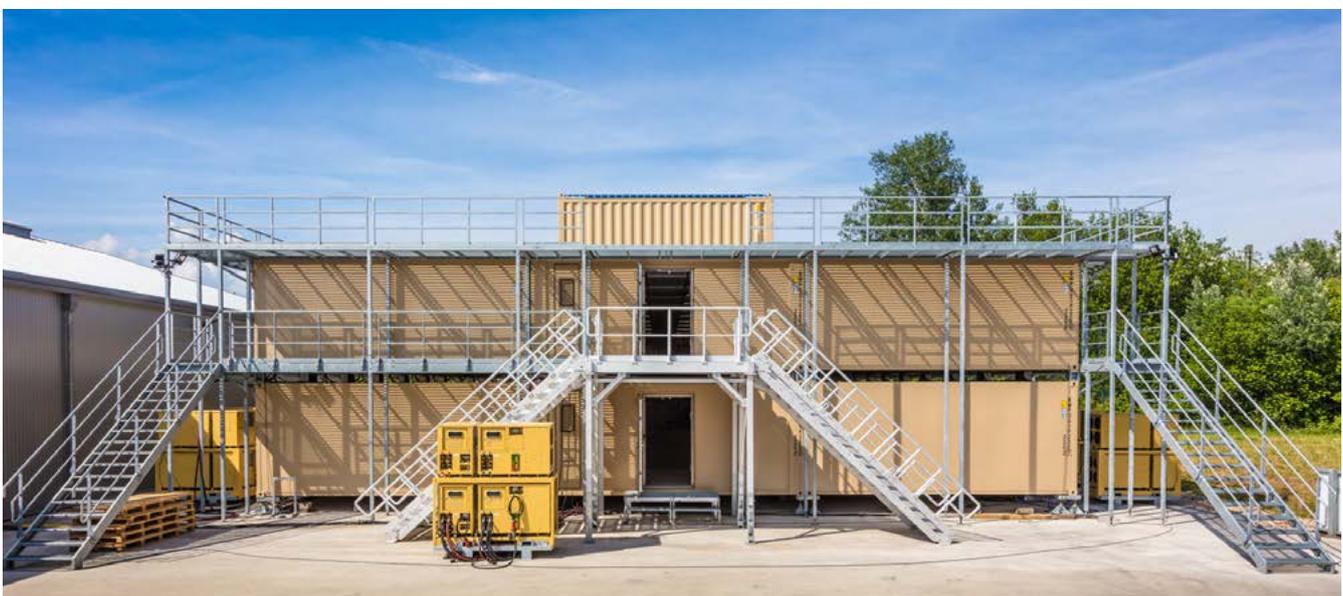
The Air Force Command Post Mission Counter Daesh (MCD)

Since December 2015, the German Bundeswehr has been supporting the war against the Islamic state in Syria as part of the mission Counter Daesh. In order to ensure the command and control capability of the German *Bundeswehr* in terms of military and IT security, the Federal Office for Equipment, Information Technology and the Use of the *Bundeswehr* (BAAINBw) has commissioned the GSS+ to realize a deployable command post for the Air Force.

The centralized system accommodates the management of the reconnaissance Tornados and the Airbus for air-to-air refuelling. The usable area of 610 sqm provided in the system is divided into 40 functional containers and 20 corridor containers. This concerns six different container types, which were equipped and integrated:

- Function containers as work or server containers
- Coupling containers left, right and centre
- Corridor end containers and centre containers
- Single containers
- Double containers
- Triple containers and quadruple containers

All containers are equipped with a standard heat exchanger based on a water chiller. Due to the parallel operation of heat and cold, the container can also be effectively dehumidified. In the server containers, one air conditioning heat exchanger per rack was installed to cool the IT components. The air conditioning is designed for outside temperatures of up to +60°C. This form of air conditioning has already been successfully implemented in various systems in operation, such as the GSCS, BFZ MANTIS or the Stationary Remote Detection System (SFSB).



Mobile Solutions

We are specialized in the integration of innovative and high-class information- and communication-technology into mobile and highly mobile solutions for network-enabled operation management. We contribute our long-standing experience to every new project and develop the technical solution in close collaboration with our customers in order to take care of every customer-specific requirement.

Mobile — Deployable Network

The deployable network has the purpose of providing a self-supporting, localized network infrastructure for units of troops in the field. In addition to providing a network access for users and a local supply, it ensures all features of a convergent network according to public standards and, by doing so, enables the operation of all applications (for example central services, command and expert information systems) on a standardized network.

Highly Mobile — Nano-Point of Presence

With the product Nano-Point of Presence (NanoPoP), a system is introduced which will allow operational forces to connect to and share information with one or more classified target networks on a worldwide scale. The need for a small, lightweight and easy-to-operate system emerged as part of the International Security Assistance Force Mission in Afghanistan (ISAF) through the change of strategy towards a wider presence of the Bundeswehr with tactical and operational elements that are continuously getting smaller.





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