

# LIS

Safe way to your  
new information  
system



We have 32 years of experience in the development and integration of information systems for logistics and NATO codification for armed forces and defence industry in tens of countries on 5 continents.

## **The Logistic Information System (LIS)**

is a modular, secure and comprehensive information system developed solely for needs of military logistics. Its primary goal is to maximize the readiness of armed forces and support the proper functioning of logistics. To achieve that, it provides real-time high quality information, which helps to maintain control over assets and logistics processes.

# **LIS will increase your Strategic Advantage**

### **Interoperability and Cooperation with Allies**

Nowadays interoperability in multinational operations and effective coordination of common approach is the key foundation of success. By following international and NATO standards, using the NATO Codification System and providing support to Host Nations, LIS includes a wide range of options on how to tackle challenges of multinational collaboration.

### **Rapid deployment anywhere around the Globe**

One of the main parameters for military logistics is its operational reach. With the use of automation, standardized forms and real-time tracking, LIS allows organisations to plan, manage and execute deployments anywhere in the world using either internal resources or services of civil contractors.

### **Fast adaptation to Change**

To adapt means to explore new options and possibilities. With LIS operation planning tools, it is easy to adjust plans and decisions according the current situation. Also monitoring of assets through their life cycle provides examination of the spending structures and possible insufficiencies. These valuable insights provide fast feedback and help to deliver continuous improvement.

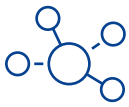
### **Readiness of the Troops and Equipment**

Capable forces and equipment are the cornerstone of any operation, whether it be combat, peace-keeping or rescue. LIS keeps relevant data about combat fitness, maintenance of materiel items and training of troops. Detailed information is summarized into comprehensive reports, which clearly show the armed forces preparation and, if needed, where to focus attention.

### **Sustainability of the Supply Chain**

The ability to sustain task forces for a prolonged period of time on expeditionary missions has a significant impact on strategy and puts high demands on a well-functioning supply chain. LIS automatically controls levels of critical provisions or spare parts and evaluates the ideal span of supply cycles to ensure that goods will be in the right place, at the right time, in the right quantity, at the right cost.

# Essential Characteristics



## MODULARITY

LIS consists of interconnected modules which could be implemented as a complex system covering all main areas of military logistics or separately to perfectly fit customer needs.



## SECURITY

Cyber-threats pose the main risk in information systems. We obey all rules of safe development and we put a lot of effort into ensuring system security. LIS is certified by the Czech National Security Authority and is operated in multiple security domains (from Unclassified to Secret).



## USER FRIENDLINESS

LIS follows modern trends in the UX design and it creates simple and intuitive working environments with a smooth workflow.



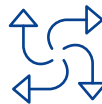
## INNOVATION

LIS uses cutting-edge, trusted and robust technologies to become a modern information system for military logistics.



## EFFECTIVENESS

To prevent redundancies in data, LIS principle is "Data created once, used many times". That enables users to get only what they really need in a fast and effective manner.



## VERSATILITY

LIS supports all service branches of the armed forces and its tools support personnel on the tactical, operational and strategic levels. It is ready to cooperate with other information systems (financial, personnel, battle control etc.).



## VISUALIZATION

A picture is worth a thousand words. LIS helps visualize data into graphs and infographics to present a clear picture about the current situation.

The screenshot displays the LIS interface. At the top, there is a navigation bar with 'Ground Forces HQ', 'Organisation', a search bar, and user information. The main content area is titled 'Item catalogue' and features a table with columns for 'ID' and 'Full name'. The table lists various items such as 'M1 Abrams', 'Fatigue uniform', and 'Ground sheet'. To the right, a detailed view for the 'M1 Abrams' is shown, including its identification details, basic parameters (like mass and length), and logistic parameters. An illustration of the M1 Abrams tank is also visible.

ID	Full name
001000050003	M1 Abrams
004440201000	Fatigue uniform
021000045007	Ground sheet
001000045008	Inner arm
001000050003	Body armour
001000050003	AFV - 1 Reconnaiss...
001000050003	Falre pistol 26,5 mm
001000050003	Penicilin
001000050003	Bandage VZ 85
004023000000	NM-35B Diesel
001067890222	Tank F789
001000050003	Beret black

**M1 Abrams**  
Last changed at 23/10/2018

**Basic parameters**

Full item name:	M1 ABRAMS
Short name:	M1 ABRAMS
NSC Group:	10: Weapons
NSC Class:	15: from 76 mm to 125 mm

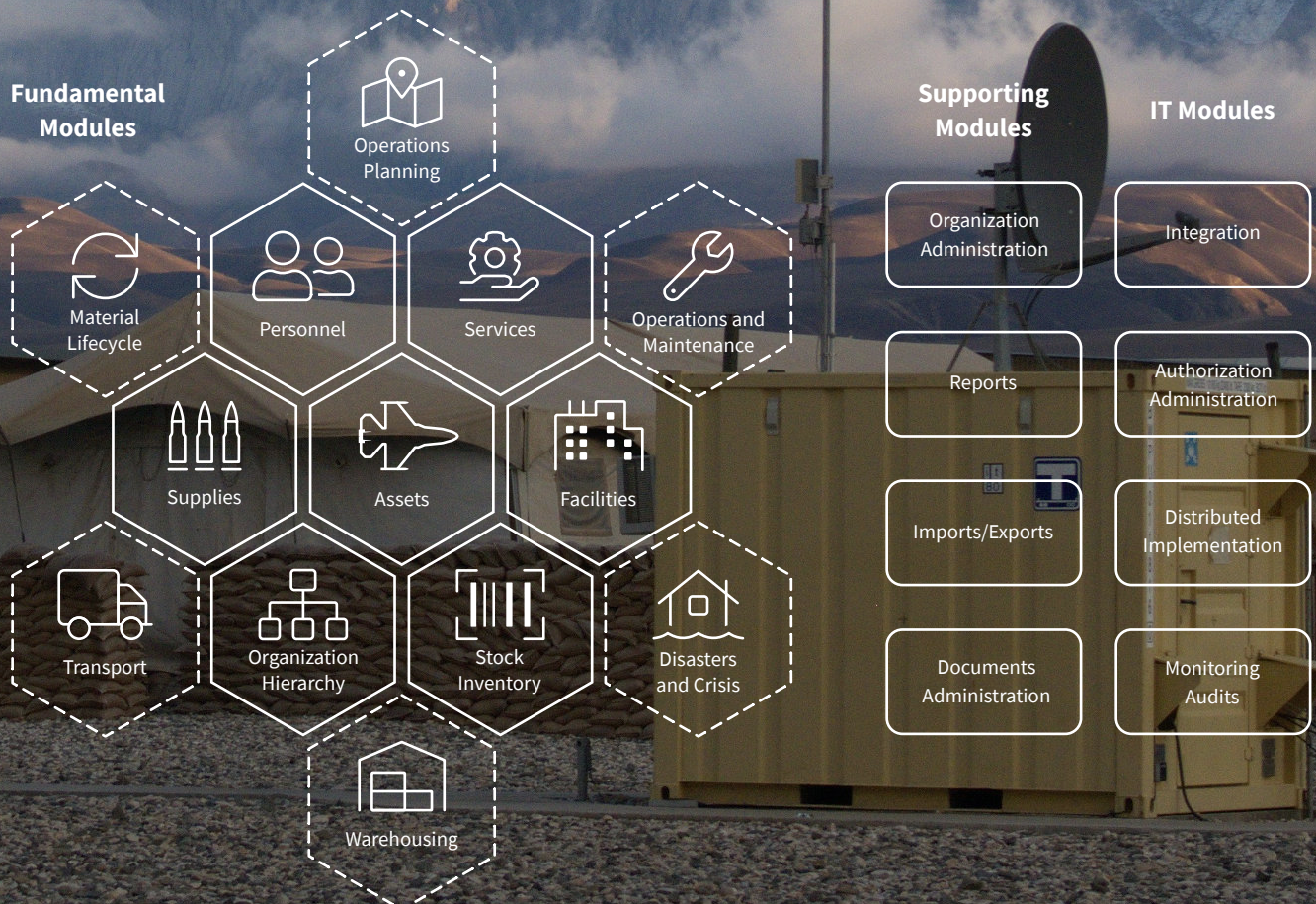
**Logistic parameters**

Mass:	M1: 60 short tons M1A1: 63 short tons M1A1 SA: 67.6 short tons M1A2 SEPv2: 71.2
Length:	Gun forward: 32.04 ft (9.77 m) Hull length: 26.02 ft (7.93 m)
Width:	12 ft (3.66 m)
Height:	8 ft (2.44 m)

# Main Standards and Principles

- Materiel codification according to the principles of the NATO Codification System (NCS). NCS is based on STANAGs 3150, 3151, 4177, 4199, 4438 and ACodP-1 – NATO Manual on Codification.
- Abiding by “MC 0319/3 – NATO Principles and Policies for Logistics” – Logistics Information Management.
- Compliance with the requirements “AJP 4.11 – Allied Joint Doctrine for NATO Asset Visibility”.
- Optimization of logistic resources in the Joint Operation Area in accordance with “BI-SC – Operations Logistics Chain Management (OLCM) Roadmap”.
- Cost evaluation of materiel items in the entire life cycle follows “TR-SAS-054 Methods and Models for Life Cycle Costing”.
- Repairs and maintenance are in conformity with "MC 0533 – NATO Principles and Policies for the Maintenance of Equipment".

## Modularity

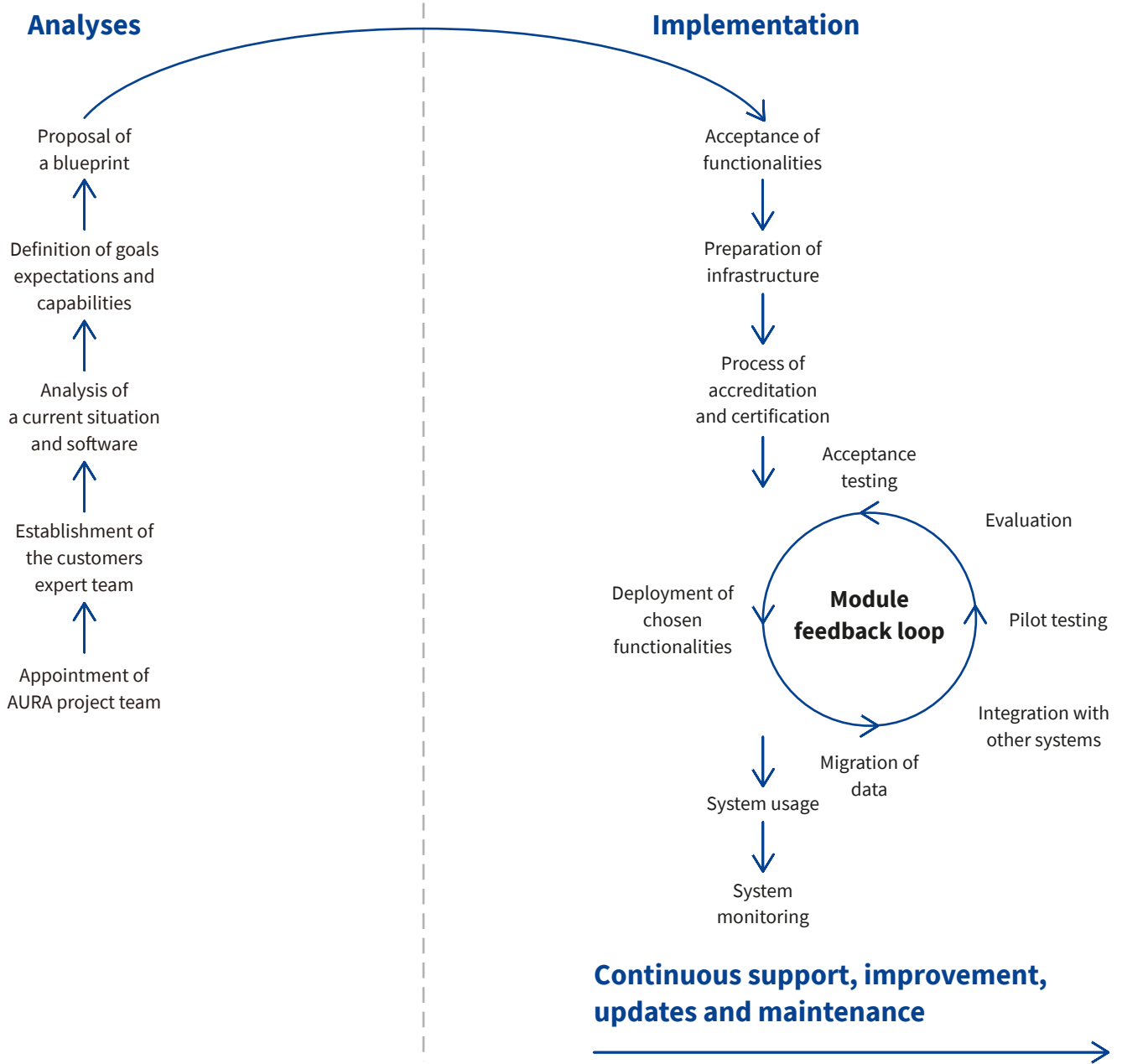


# Implementation and Support

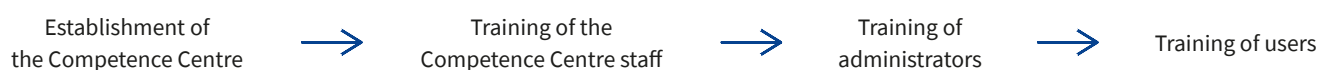
Top quality care is the basis of our partnerships. We provide a continuous product maintenance and user support in the form of Help Desk and Competence Centre<sup>i</sup>. We supply professional consultancy from our experts with more than 25 years experience. That is why we bring our own analyses and suggest new solutions leading to individual adjustments and development of the information system along with customers' needs and requirements.

## **i Competence Centre**

The Competence Centre is a team of experts on the customer side, who have a deep knowledge of internal processes. They receive all necessary knowledge to be able to provide the 1st level support for LIS, train new users and help them to assimilate the product. They will serve as a permanent bridge between AURA and LIS users.



## Transfer of “know-how”



# Key principles of the logistic information support

## Assets, personnel, facility, services and organization hierarchy control

LIS provides total and immediate control of all assets, personnel and facilities. It codifies them in a unified fashion according to the NATO Codification System. Detailed records are kept for each particular item in terms of identification, quantity, location, quality, usability, price and specific features (e.g. expiration date, lifespan etc.). They create transparent network of ownership, organizational hierarchy and the foundation for advanced reporting.

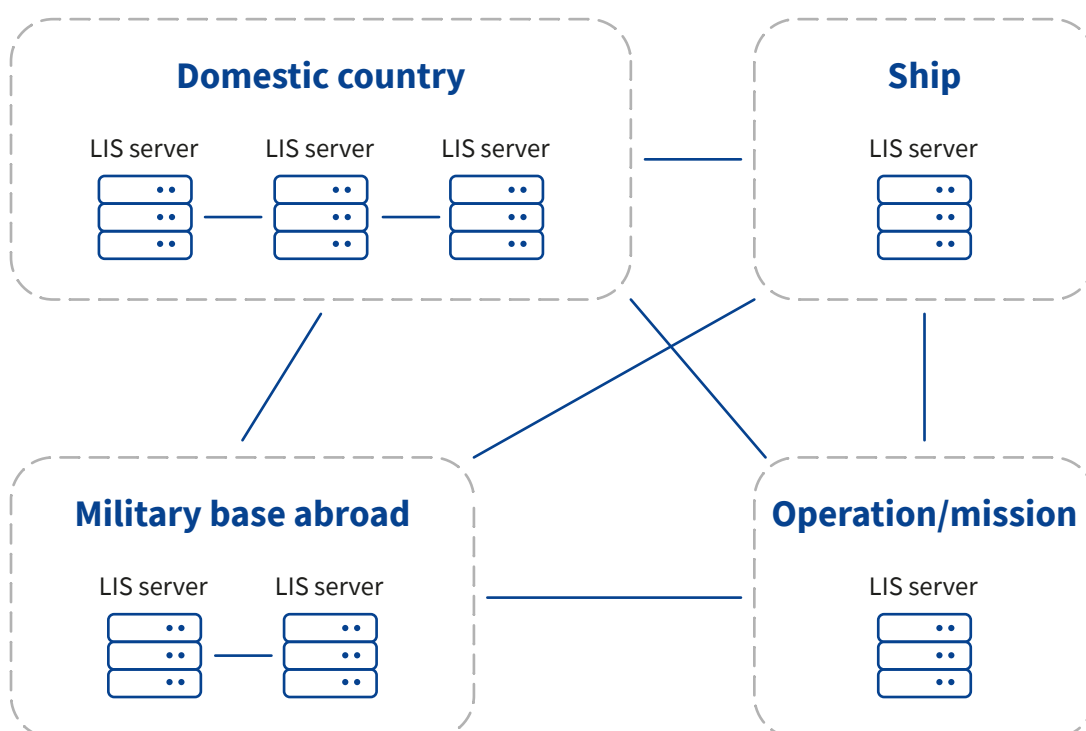
## Operations, maintenance and materiel life cycle

LIS includes capabilities for planning, execution and control of the technical maintenance of combat equipment, aviation equipment, weapons, weapon systems and other devices. LIS provides the technical maintenance and operation plans of various types and details: Equipment Operational Plan, Operational

Maintenance Plan, Work Maintenance Plan, Work Orders etc. LIS enables a continuous monitoring of the assigned operating measure units consumption (kilometres, engine hours, shots etc.) and consecutive planning of preventive maintenance including the appropriate capabilities, spare parts and other resources. Data obtained is used for the item life cycle cost evaluation, acquisition and disposals plannings or identification of necessary spare parts.

## Interoperability, standards, distributed system

LIS is interoperable with many information systems, both national and international. Interfaces are in compliance with industry and military standards (ISO, STANAG, WSDL, SOAP, WS-Security etc.). LIS works as a distributed system, where the network is created by interconnected means and can be run in online, semi-online or completely isolated modes (e.g. on warships) ensuring that units will not be left without logistics data.



### **Warehousing, transportation and deployment, supplies management**

LIS supports transportation and deployment including the transportation operated by civilian contract carriers. Each shipment (either domestic or international) can be tracked by the consignment tracking functionalities based on STANAG 2494 AST (Edition 2). Detailed information about each shipment is visible in accordance with the NATO Total Asset Visibility concept. The warehouse module contains tools for warehouse design and management of all operations from receipt of items to their disposal. Stock inventories can be transferred into portable or mobile devices. To manage load distribution, it is possible to define hierarchy of packaging and labeling (barcodes, RFID, QR codes etc.). Supplies can be distributed through either push and pull supply strategies to create optimal distribution of availability of stock according to plans or immediate needs of units.

### **Logistic support for operations, operations planning, crisis management**

LIS provides logistic support for task forces deployed in operations. With a satellite communication, deployed units can be located anywhere in the world. The operations can be of any type (combat, rescue, peace-keeping etc.) and a Task Forces can be of any size and structure including even non-military components. In connection with the Crisis Management Support, LIS reinforces the state administration bodies in crisis scenarios (e.g. Help in natural disasters). LIS also enables utilisation of all available materiel resources including the allied logistics, civilian suppliers and Host Nation Support. Operations can be planned and task forces assembled with the LIS specialized tool together with setting up the amount, type or optimal delivery cycle of provisions, spare parts and other required items.

## **History of LIS**

LIS has been in routine operation in the Armed Forces of the Czech Republic (AFCR) and the Ministry of Defence of the Czech Republic since 1998. Its technology is continuously modernized.

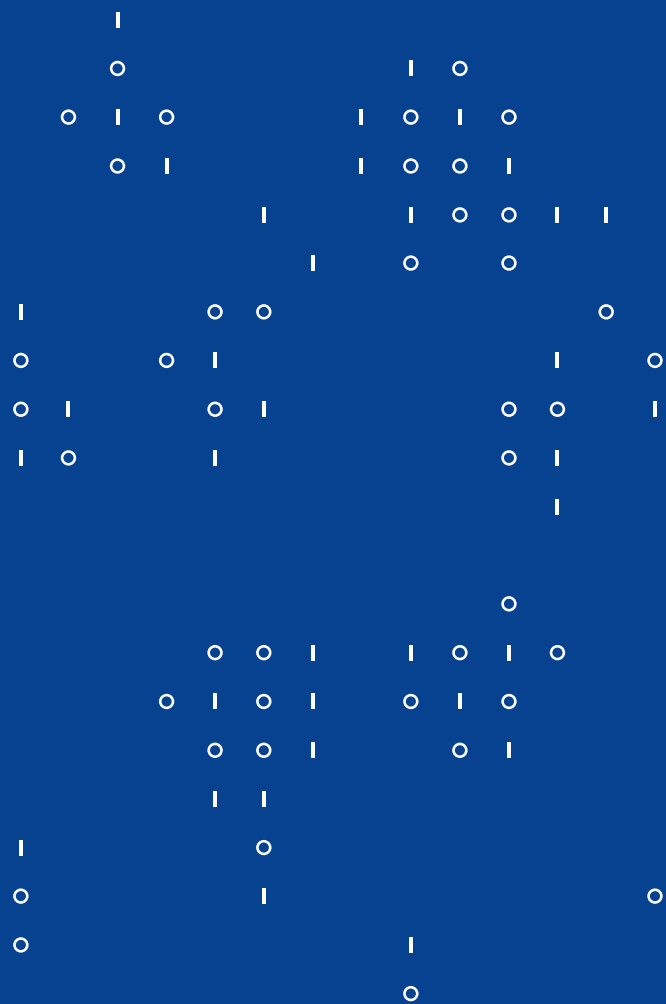
LIS is used to monitor, operate, maintain and repair about 500 000 pieces of combat equipment, aviation equipment, weapons, weapon systems and associated technical devices.



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