

Global Sustainment

Full European technology at the service of our Customers



ELTGROUP.NET



ELTGROUP

We do not
simply anticipate
the future

Who we are

In a fast-changing world we represent the touchstone of technological evolution thanks to our creative and timely strategic thinking and an innovative portfolio of solutions unique in its entirety.

What we do

To offer the most innovative solutions to guarantee the security of people, means and information in the most complex operational scenarios: this is our sole mission.

Our clients recognise the uniqueness of our offering: to work with us means entrusting themselves to an international company of outstanding excellence which, thanks to its Italian roots, creates bespoke solution with professionals who mould the best technologies to suit their needs.

How we do it

We invest in our people, the most important asset, to anticipate the needs of tomorrow with the ingenious of today.

ELT Group designs and develops entirely in house, and complete the supply up to the finalization of each program, including integrations and installation on board of any type of platform.

We use cutting edge technologies suitable for export.

We stay close to the customer with our network of offices, granting proximity to the end users of our solutions. A full expert and skilled team is at your disposal for the satisfaction of your EW exigencies.

ELT Group is a technical partner and a preferred solution provider of the Italian Armed Forces.

EW Academy & Training Simulation System

Learn, grow and increase in the comprehensive use of the EW assets to train, exercise and perform the full range of EW operations.

ELEPHANT

Fight as you have been trained

ELEPHANT Program has been conceived to deliver immersive training possibilities (and more) to valued End Users and attempt to share procedures, methods, experiences and results acquired by ELT Group throughout half-a-century lifetime.

ELEPHANT and its Electronic Warfare Training Support System (EWTSS) masters all aspects of EW domain.

EW Battle Lab is the core of the Elephant Program. It is an integrated, all-around EW training and simulation that immerse the EW user into an innovative EW arena enabling effective mission training and tailored 3D Virtual scenario.

A sophisticated simulation of EW enablers and threats and a “collaborative” training arena with multiplayer battle-space give a boost to the simulation realism and allow single to team training.

ELEPHANT program includes a comprehensive set of Electronic Warfare fundamentals Training Courses to allow a quick verification of the data-flow occurring in the EWTSS, and easing the familiarization of all the different stakeholders of the EW battlefield.

ELEPHANT program includes EW Academy.

Our courses are primarily focused on addressing the training needs of maintainers, operators and specialists up to the entire EW command and control organization. Should attendees lack the necessary qualifications, beginner or refresh courses are also provided by the EW Academy; syllabus covers basic electronics theory up to the more challenging EW topics.





Multi-role, Multi-platform, Multi-armed force digital arena for leading edge “EW Computer Aided Exercises”. By simulating, modern EW systems it enables effective and realistic EW Net-Centric training for operational personnel at all levels.

ELEPHANT at a glance

- Classroom training modules, from the basic of EW to advanced technical and operational aspects
- EW simulation environment through dedicated operational consoles
- Gaming scenarios from single-seated operation to multi-platform joint exercise
- Ability to insert HW in the Loop (HWITL) increasing the effectiveness of the training
- Recording & Replay for debriefing, analysis and storytelling



Operational Support

Improve EW effectiveness.

EW Centre

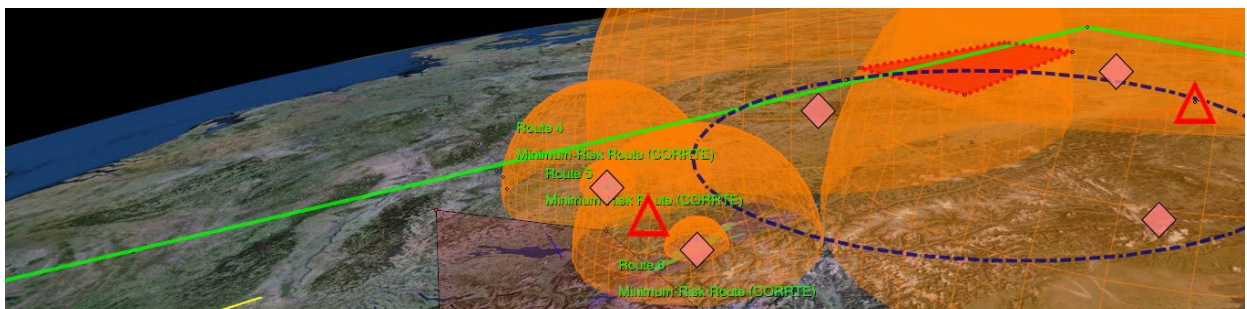
Your mission multiplier

EW CENTRE represents the crucial “back office” behind the success of your EW mission. It is the ultimate solution to perform an effective build-up, management and exploitation of the EW Data.

EW CENTRE sustains the EW specialists in enriching their EOB\COB with update analysis of the collected data from either signal gathering or intelligence sources.

EW CENTRE consists of “fuel cells” each one powering the flux of activities between data collection, technical analysis, EW library generation and validation, mission preparation, reporting and debriefing.

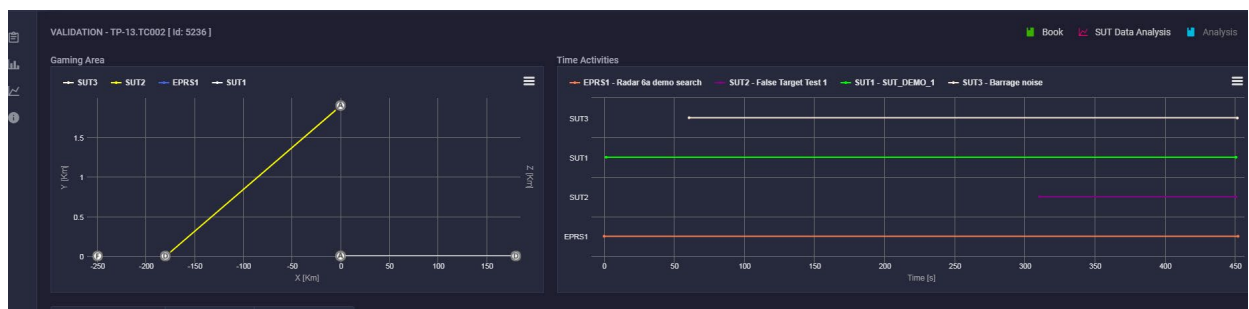
EW CENTRE relies on an HW modular infrastructure, that include only the hardware relevant to the cells present in each specific configuration of the system. The number of workstations of EW CENTRE is also depending on the Customer needs.





EW Centre at a glance

- **Database Management cell:** performs the management and maintenance of the Central EW DB, which is the repository for technical data (ELINT, COMINT), tactical data (EOB), and mission data
- **Tactical cell:** analyses, updates, and enriches the EOB data with intelligence information, creating Intelligence reports based on EOB data
- **Programming cell:** generates the EW Library according to a specific scenario where the mission will take place
- **Planning cell:** allows the operator to plan a mission in order to accomplish the assigned operational task, defining the EW equipment and their configuration, and generates the Validation Reports related to the EW Library used during the simulation
- **Validation cell:** allows the operator to analyse and validate the EW Library, verifying the capability of the EW equipment to identify and counteract the threats according to the data retrieved from the EW Library
- **Debriefing cell:** analyses the data recorded during the actual missions, and provides the relevant mission reports to the Tactical cell for the purpose of tactical update proposal generation



Operational Support

Family of Test, Simulation & Validation Systems (TSVS)

Test, Simulation and Validation of ESM/ECM/ELINT/COMINT sensors and operations with fixed and mobile solutions

The ELT Group family of Test, Simulation & Validation Systems (TSVS) is conceived for validation of Radar Electronic Warfare ESM/ECM/ELINT sensors (i.e., the System under Test, SUT) with both stationary and deployable solutions.

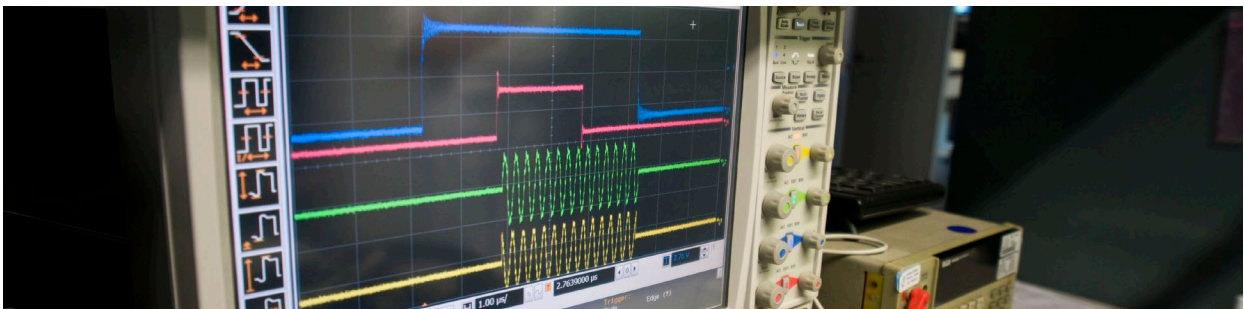
TSVS are based on fully independent shelters with integrated antennas, masts, electronic equipment, air conditioning system and operators' work posts. Design includes converted and re-qualified commercial truck and energy station for deployment in adverse conditions. Shelters are as well deployable on ship's deck for maritime scenarios in open seas.

According to customer needs, ELT Group TSVS are empowered with field-proven capabilities for

- simulation of complex scenarios of electromagnetic emissions
- transmission to several direction in order to stimulate many SUT at the same time
- reception and analysis of signals emitted by the SUT.

It includes Radar Signals Environment Simulator (RSES) is a portfolio of solutions high-mobility land solution within ELT Group product family.

ELT Group TSVS capabilities – available in the frequency ranges from 0.5 to 18 GHz and optionally up to 40 GHz – allow generating a realistic electro-magnetic environment, which is transmitted to the SUT by using the integrated functions for power amplification and multiple antennas.





Pointing of the antennas in the direction of the SUT is achieved manually by the operator or via the automatic tracking function based on the integrated electro-optical sensors (daylight/infrared cameras).

ELT Group TSVS are fully integrated and can be operated standalone or in a networking configuration within a Test Range.

ELT Group TSVS features

- Simulation and generation of complex radar signals
- Transmission of signals interleaved in time and over the frequency range
- Wideband reception and real-time analysis of electro-magnetic signals
- Recording of signals received from the system under test and off-line analysis
- Automatic tracking of ground and air-platform carrying the system under test
- Maximum distance of ca. 5 Km
- Qualified for a wide range of climate conditions (between -30° and 50°C) according to MIL-810
- Certified for road transport
- Designed for easy system rigging (wind speed of 80 km/h)
- Compliant with MIL standards for e.m. compatibility and Information Assurance



Operational Support

Integration Capabilities

Electromechanical Integration of Radar/EW Sensors in shelters and vehicles

ELT Group provides the capability of integration and installation of Radar/EW sensors on vehicles and certified shelters. Sensors are integrated in both, specific operation systems as well as in existing platforms for capability enhancement.

Integration solutions are based on ELT Group distinguished engineering capabilities to cover the complete life-cycle of complex systems, independently of any technology and platform. Solutions embrace concept design, software and firmware development, hardware manufacturing, integration, test as well as after-sales support and logistic capabilities.

Based on a standard open architecture, market available COTS can be easily integrated in order to provide competitive turnkey solutions.

ELT Group protected and access restricted production facilities allow to develop up to NATO secret customers' solutions, which can be supplied and supported world-wide.

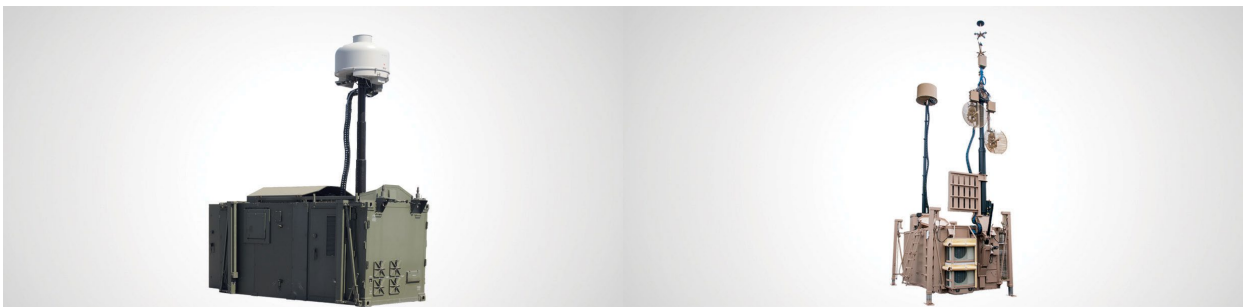
ELT Group is committed to provide high quality solutions according to specific customers' needs.

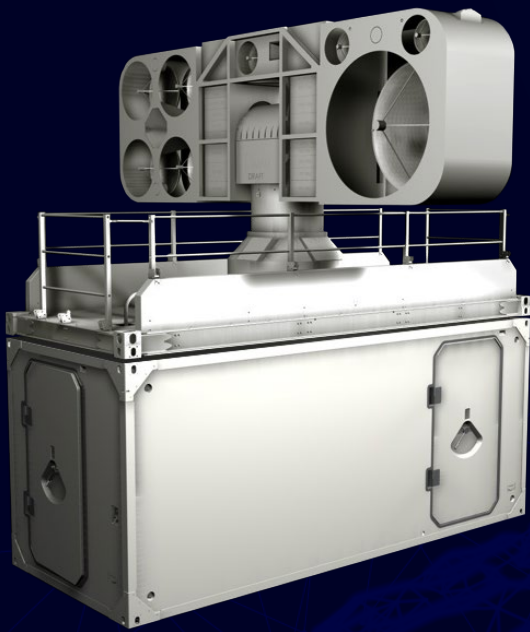




ELT Group Integration capabilities comprises:

- Platform independent integration of multi-role sensors by means of masts, cables, racks, working space furniture and IT security regulations
- Distinguished experience in the installation within military armored vehicles and shelters following MIL-SPEC standard regulations, in particular ergonomic constraints in extreme situations
- Installation, demounting and conversion of brand independent vehicles based on in-house electronic and mechanical 3-D design
- Fully equipped workshop facilities for trucks and shelters
- Full protected and access restricted production area
- Performance of NATO Standard certifications





TSVS in maritime solution.

TSVS in laboratory solution.



TSVS in land solution.

Customer Service

Keeping EW in perfect shape.

CUSTOMER SERVICE is the capability that enriches the value proposition of ELT Group's solution.

ELT Group can support the customer for the service activities on site by: performing the whole activity directly (interventions by ELT Group technicians) or collaborating with the customer (or a local partner) by setting up a shared team composed by ELT Group/customer personnel (know how transfer).

ELT Group can grant the repair and manufacturing of the spares for the product life cycle by maintaining the producibility of Manufacturing Data Package by sustainability activities and Tte manufacturing/repair capabilities by keeping operative the ELT Group internal manufacturing/repair lines.

System performance monitoring and availability increase service is another crucial service delivered to the Customer.

The system reliability sustainment is progressively kept under control through the whole life cycle: status accounting & Asset tracking, spares stock inventory management to achieve the maximum fleet availability, Engineering technical assistance and obsolescence issue with relevant solution proposals to the Customer.

A full capability to perform all maintenance levels training courses compete the Customer Service Capability.





CUSTOMER SERVICE at a glance

- Customer's assets composition analysis
 - Configuration control supported by proprietary or customer owned IT tools
 - Material Management:
 - > Failure detection and registration
 - > Asset repair by failed part "remove and replace"
 - > Failed part repair loop tracking
 - Crew competence management
 - > Competence gap filling of crew personnel
- Or
- > Integration of the crew with competent personnel



Our solutions

ELT Group is a world leader in Electronic Warfare for all the domains of military operation, with state-of-the-art technology portfolio that integrates several capabilities into software defined systems. This allows to perform Electronic Defence, ISR, Force Protection and extended combined aerial, terrestrial and naval operations with the same solution: full European technology at the service of our Customers.

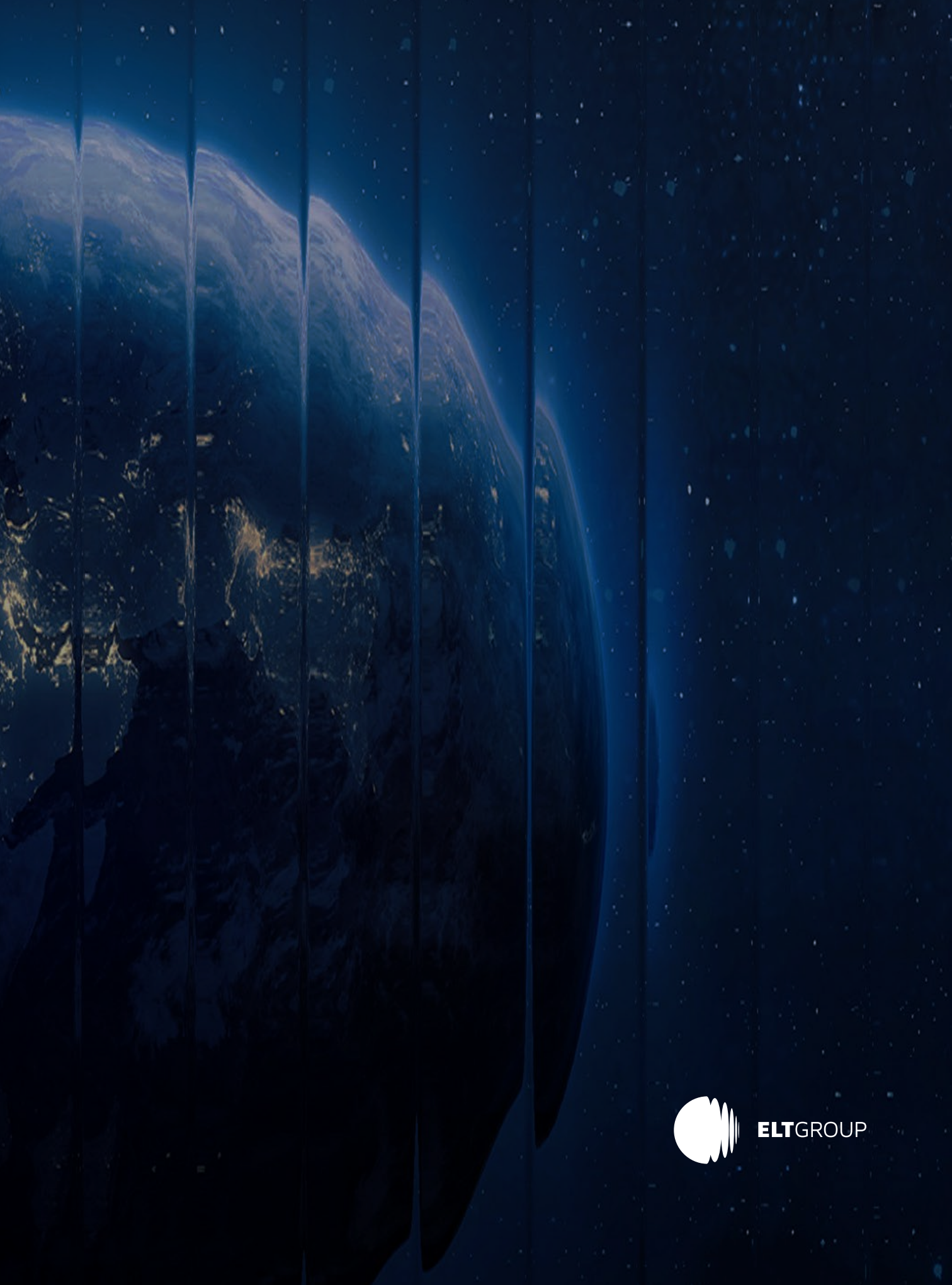
We sustain our solutions with a global approach that ranges from EW education&training, advanced simulation systems, EW operational support and full Life Cycle Management. Our Global Sustainment is the perfect complement to our solutions for the realization of the complete EW experience of our Customers.

Global Sustainment is a turn-key solution entirely conceived, developed and produced in-house, adaptable to the correspondent End User's organization and designed for exportability.

We offer the following capabilities for Global Sustainment:

- Education & Training
- Operational Support
- Customer Service





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