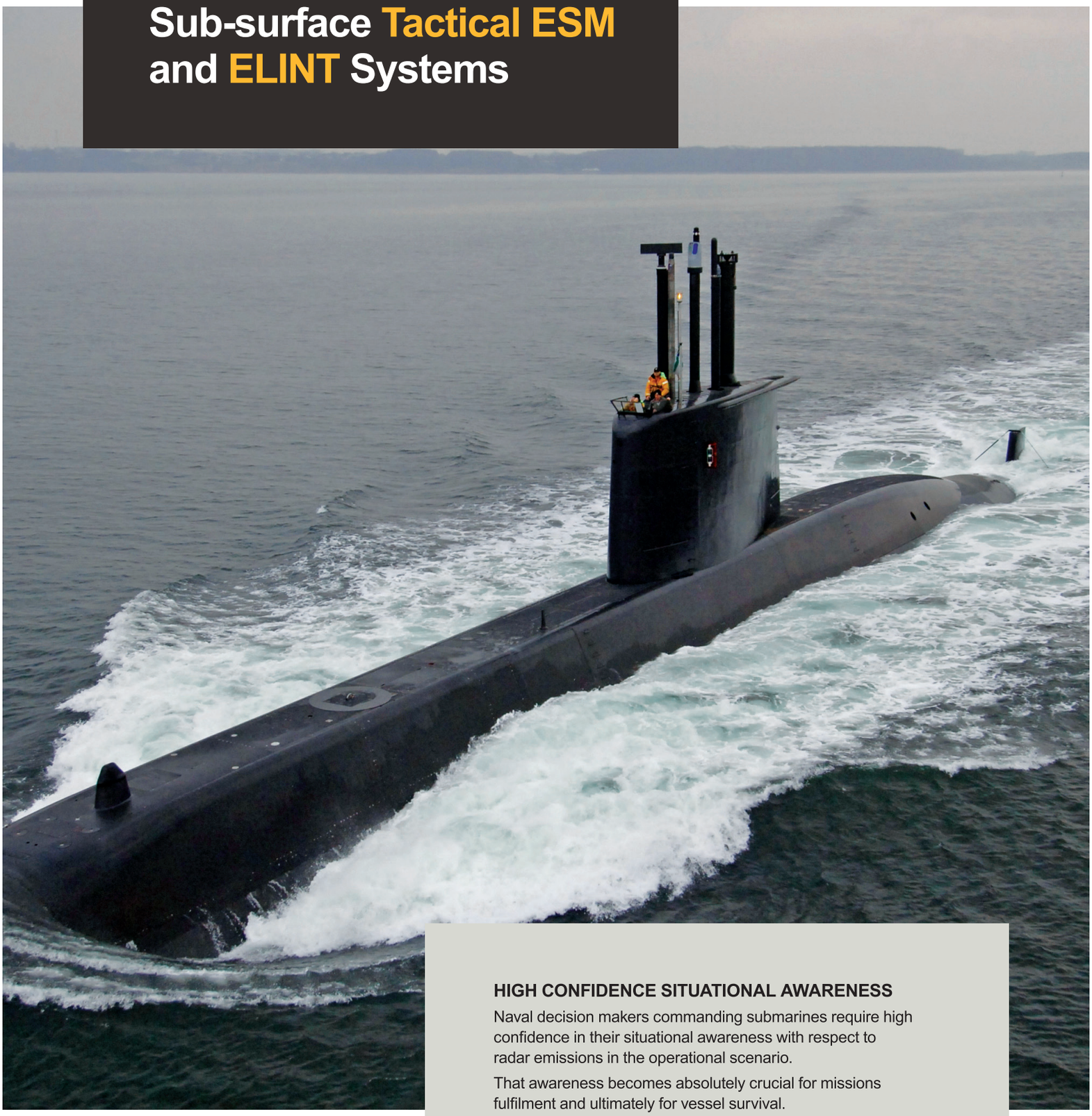
Sub-surface Tactical ESM and ELINT Systems



HIGH CONFIDENCE SITUATIONAL AWARENESS

Naval decision makers commanding submarines require high confidence in their situational awareness with respect to radar emissions in the operational scenario.

That awareness becomes absolutely crucial for missions fulfilment and ultimately for vessel survival.

SAAB TECHNOLOGIES

SAAB

NAVAL ESM & ELINT

High Confidence Situation Awareness

The UME family consists of a range of compact, high performance tactical ESM and ELINT systems capable of meeting today's stringent operational EW requirements.

Different configurations, suitable for installation on all sub-surface platforms, are available.

The system provides automatic interception, analysis and classification in dense signal environments. High fidelity ELINT capability is provided in parallel providing interpulse, intrapulse and time analysis detail. The system also features extensive recording capability.

The system is suitable for operation in bluewater and littoral missions, having high sensitivity, wide dynamic range and accurate instantaneous direction finding capability.

The system supports both static (national) and dynamic (local) library files to support classification of Radar emitters with platform association.

Key Operational Advantages

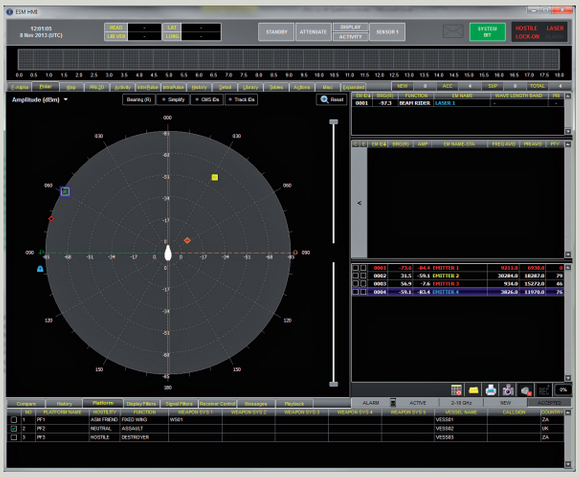
- Rapid reaction for interception, characterisation & classification of radar emitters.
- Parallel ELINT analysis capability.
- Operates effectively in dense signal environments, even in the presence of high power interfering signals.
- Easy to operate which minimises the cost of training.
- Low Size, Weight & Power (SWaP).

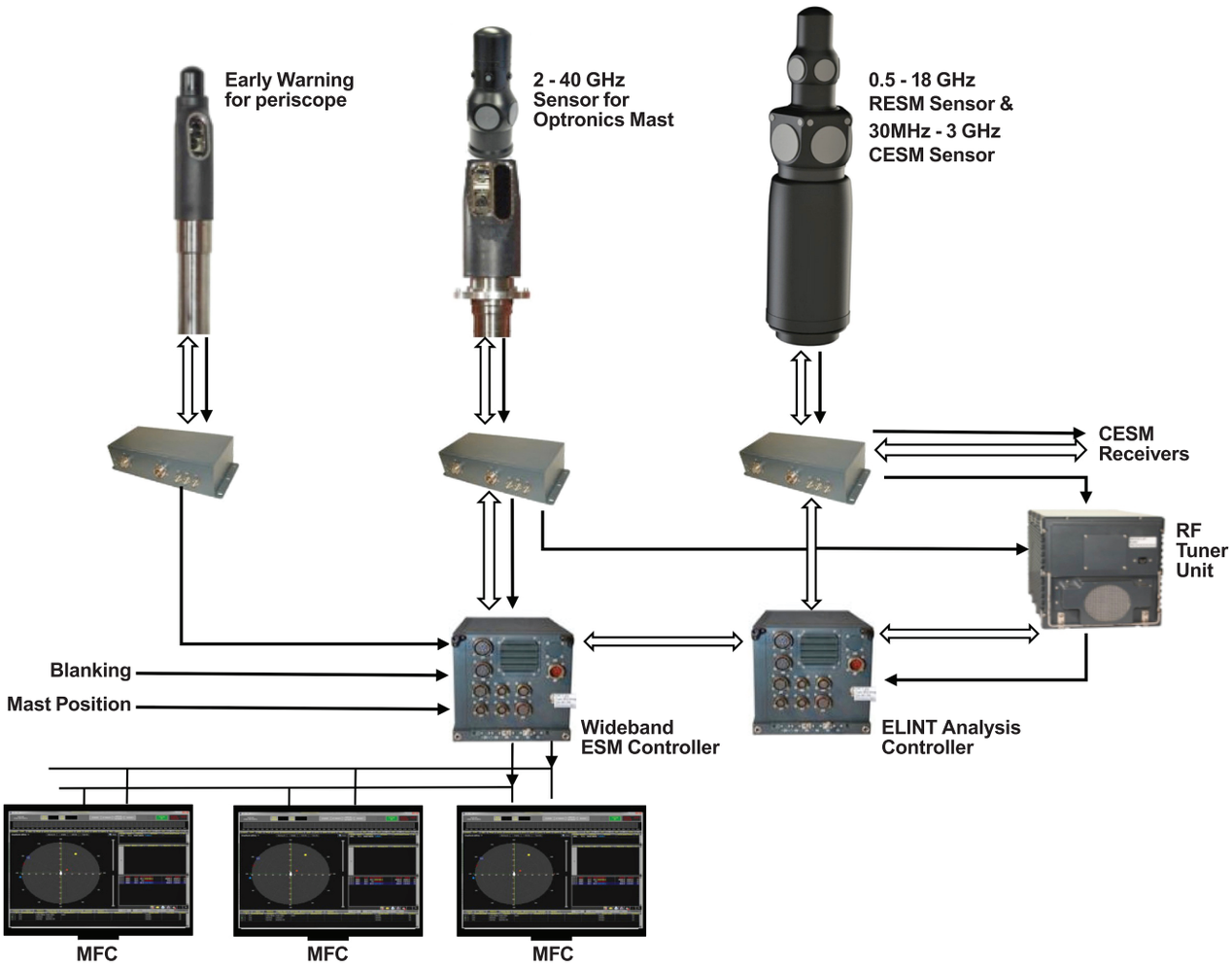
What Sets UME Apart?

- High performance with small footprint.
- Open architecture, scalable solution.
- Modular software.

Key Features

- High probability of intercept.
- High sensitivity with wide dynamic range.
- Wide operating frequency range.
- Operates in very dense signal environments.
- Fast reaction time.
- Interfaces with the combat management system.
- Full threat identification.
- Extensive built-in test facilities.
- Extensive recording (SDW, IQ, event).
- Integrated wideband & narrowband receivers.





KEY PARAMETER	UME-50	UME-150	UME-250
	ESM functionality	ESM with ELINT functionality	Parallel ESM and ELINT functionality
ARCHITECTURE	ESM Receiver	Acquisition Receiver ESM Receiver	Acquisition Receiver ESM Receiver Digital ELINT Receiver
FREQUENCY RANGE	2 - 18 GHz	2 - 18 GHz MMW optional	0.5 - 18 GHz MMW optional
DIRECTION FINDING			
Method	Omni monitoring or amplitude monopulse	Amplitude monopulse	Amplitude monopulse & Phase Interferometric
Accuracy	< 3.5˚ rms	< 3.5˚ rms	< 2˚ rms
Simultaneous Signals	< 500	< 500	< 500

Support Equipment

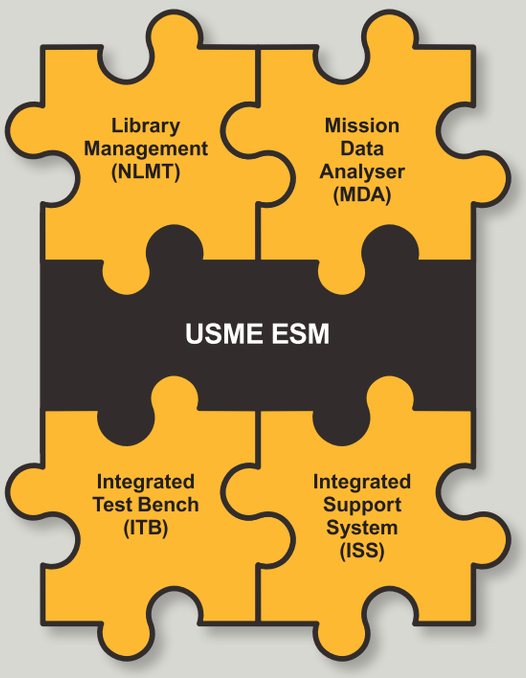
NLMT
The NLMT is a library management tool that supports import of Radar and Laser emitter entries into a local database from where mission files can be generated for the ESM system. XML import and export utilities ensure seamless integration with customer databases and analysis tools.

Mission Data Analyser
The MDA provides the user with the capability to analyse system recordings and dynamic database library entries and allows the user to isolate specific operational recordings, diagnostic recordings etc.

Integrated Support System
The ISS is a portable laptop based support tool that provides the maintainer the capability to perform onboard and alongside maintenance tasks. It allows manual system control, computer assisted diagnostics and hosts the HMI.

Integrated Test Bench (ITB)
The ITB provides the a capability to perform shore based system and LRU testing in a controlled environment. Complete system diagnostics and verification capability is provided.

Integrated Test Bench (ITB)



USME Support Tools

Specifications subject to change without notice.

Saab Grintek Defence 118/119 Capricorn Drive, Capricorn Park, Muizenberg, 7945
PO Box 39347, Capricorn Square, 7948, Republic of South Africa. Tel: +27 21 709 9000
www.saab.com