

ELECTRONIC WARFARE SYSTEMS CONTROL PROCESSOR (EWSCP)

A FULLY INTEGRATED
ELECTRONIC WARFARE
SUITE CONTROLLER



BAE SYSTEMS

THE ELECTRONIC WARFARE SYSTEMS CONTROL PROCESSOR IS AN OPEN ARCHITECTURE EW SYSTEMS CONTROLLER WHICH HAS BEEN DEVELOPED TO ALLOW FEDERATED NAVAL SYSTEMS TO OPERATE AS A FULLY INTEGRATED ELECTRONIC WARFARE SUITE.

Modern naval platforms are fitted with a variety of sensors and countermeasures to ensure survivability in a complex hostile EW environment. The use of a Joint Industry Developed Open Architecture Data Interface Standard provides a sensor and countermeasure independent maritime Electronic Warfare Systems Control Processor (EWSCP). The Open Architecture Interface is the result of an Australian Capability and Technology Demonstrator (CTD) Program developed under contract from Capability Development Group, sponsored by the Director General Maritime Development.

The EWSCP integrates federated EW systems, including both sensors and countermeasures, to provide a combined threat and tactical EW situational awareness picture which enables the prioritisation and co-ordination of responses using user-programmed data.

The EWSCP, by monitoring individual sensor reports and fusing them, minimises false alarms which can occur in a federated EW system. This results in the provision of optimum countermeasure responses which can take into account platform motion and other platforms positions so as to provide a truly fleet wide Cooperative Engagement Capability. Within the EWSCP countermeasures can be manually or automatically initiated as required.

When coupled with existing Tactical Data Links (TDL) and evolutionary High Bandwidth Data Links the EWSCP is able to perform passive multiplatform geo-location.

EW operator workload is reduced due to the integration of all the available EW assets which reduces the picture compilation and soft kill allocation times and provides an enhanced EW system interface to the host vessel's combat management system.

The EWSCP has been designed to integrate and fuse the following:

- Electronic Support Measures (including ELINT, SEI, LPI and mmWave detection systems)
- On-board Electronic Attack Systems
- Off-board Electronic Attack Systems
- Countermeasure Launching Systems
- Laser warning receivers,
- Missile warners and
- Infra-Red Countermeasure systems.

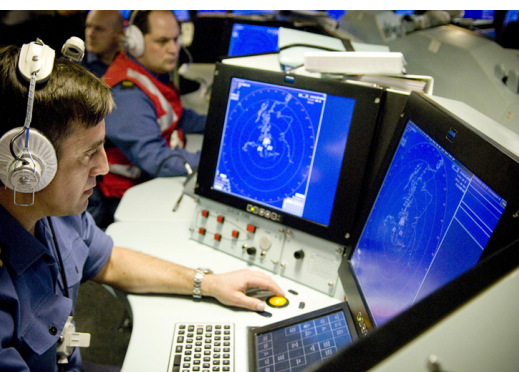
The EWSCP performs sensor fusion and countermeasure control using a mixture of knowledge-based processes and pre-loaded mission defined intelligence data. Use of a combination of these approaches enables the EWSCP to perform multispectral and same spectrum sensor fusion which provides the following operational benefits:

- Enhanced platform survivability
- Reduced operator workload
- Mission library configurable so as to enable optimum effectiveness
- Prioritised EW Situational Awareness picture shown on a single Open Architecture compliant Tactical EW Display (TEWD)
- Single EW System data recording capability providing data for post mission analysis

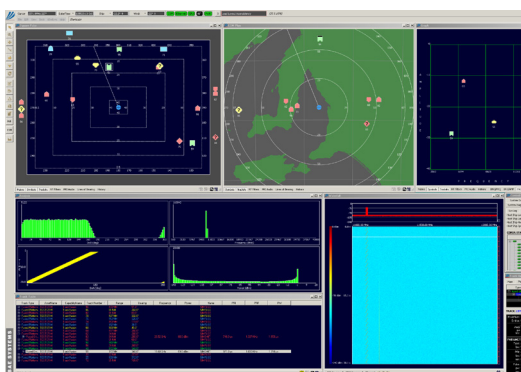
BAE Systems EWSCP is an International Traffic in Arms Regulations (ITAR) - free programme and represents the next generation Force Level EW capability enabler provided today.

Interfaces	Open and Published
Operating Systems	Windows, VxWorks, Linux
Dimensions (mm)	132(h) x 124(w) x 255(d)

The EWSCP, as a Software Configuration Item, can be hosted on any suitable customer supplied processor card.



Combat Management Console



EWSCP screenshot



EWSCP unit

FOR MORE INFORMATION CONTACT:

BAE Systems
 2 Second Avenue
 MAWSON LAKES SA 5095
 PO Box 1068 Salisbury SA 5108
 Telephone +61 (0)8 8300 4400
 www.baesystems.com