



CASE STUDY

CIPHER - Crypto

SEA has significant experience in delivering secure communications and networks to the UK Ministry of Defence (MoD).

SEA's vision is to embed cryptographic functionality within our NIUs, creating a new product called CIPHERflex. In this way we can replace obsolescent cryptos, potentially across any of the lines of capability shortfall identified by the MoD, although with our pedigree in the maritime domain our key strengths would be in Link, Network and Special Cryptographic requirements.

A single CIPHERflex box will replace up to 4 existing obsolescent cryptos, representing a very significant space and weight saving, but more importantly drastically cutting cabling and interfacing costs.

Benefits include:

- Moving support of legacy encryption devices to a software-defined crypto architecture
- Provision of new and legacy cryptographic algorithms, and support for future standards
- Support for distributed Communications Office capability through standard encrypted interconnect between all NIUs and equipments
- No changes required to existing connectivity and cabling, with significant savings on any future cabling requirements

SEA has conducted research into what products currently exist to allow this development to take place quickly and cost-effectively.

The Cipher Programme combines both the Future Crypto Programme (FCP) and Interoperable Electronic Key Distribution (IEKD), and incorporates the requirements of the Security

Management Infrastructure (SMI) project (which in turn is part of the Information Assurance Technology Programme (IATP), a 'common good').

This programme is fundamental to supporting all of MoD's secure information exchange needs.

The inclusion of SMI means that the scope will be extended to provide security management capability to all government departments (FCO, through to laptop security at eg HMRC).

The programme is expected to deliver substantial savings by taking advantage of new technology to remove or automate many of the manpower-intensive tasks associated with the management of both cryptographic capability and the security management infrastructure. It is likely to be by means of a service provision contract.