

# **Development Of A Suite Of Operation and Support Cost Analysis Models (OSCAM) for the Defence Community**

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This paper describes the development of a suite of cost analysis models (OSCAM) for a range of defence clients.

To illustrate the adopted approach and the resulting models, focus is applied to a joint UK/US programme designed to develop a tool that can provide rapid assessment of the Operation and Support (O&S) costs of naval vessels and their component systems. The requirement was to assess the impact of alternative maintenance strategies and operating policies on the cost of these naval assets.

The study methodology, using system dynamics, is described in some detail drawing out key salient points. This included the process of eliciting systemically the process and management of operating and supporting naval assets. The development of quantitative models followed including both a system dynamics simulation and comprehensive user interface to data management systems.

The resulting tool is in use with both the Royal and US Navies and is offering a number of benefits:

- Active participation by both navies accurately reflecting the processes used in O&S
- Engendering access to initiatives and best practice from both sides of the Atlantic
- Calibration against data from the US Navy
- A rapid analysis tool for the investigation of alternative policies and strategies
- A complementary tool to those already used by cost analysts e.g. parametric cost models.