

# SSEI Research Task Summary – T18

Task Number: SSEI/T18

Lead Delivery Organisation : HP Enterprise Services

Project Title : Framework for Evolutionary Transition of Legacy Software Systems

Research Theme : *Integration of Software Systems*

Version : 2



## Objective of Work (why are we doing it ?)

Historically, the UK MOD has developed and upgraded software systems in an application-specific manner based on defined, but often stove-piped, capability needs driven by urgent requirements.

This has led to substantial amounts of disparate legacy software whose maintenance becomes problematic and expensive over time.

In the absence of a controlled process or framework, the approach for the modernisation of application services is fragmented and costly in terms of hardware, operating environments, testing and interoperability.

This work is needed so that legacy software systems can be maintained and modernised to more effectively support the MOD's constantly evolving user requirements.

## Nature of Work (what is it?)

This research will investigate a new approach whereby the transition of legacy software systems to meet future capability needs is planned and managed in accordance with demonstrated best practice.

This approach involves the development of an Evolutionary Legacy Transition Framework (ELTF) to modernise legacy software systems to meet current and future capability needs.

A representative environment will be demonstrated showcasing the ELTF with appropriate systems and processes, employing a Service Orientated Architecture (SOA) approach. This environment will be used to demonstrate effective changes to legacy software systems relevant to a modern infrastructure, thereby validating by demonstration the theoretical conclusions of the first part of the research

## Outcomes (what will it produce/has it produced ?)

The task will:

- Identify ways of retaining legacy software systems and to move them into modern development environments
- Provide a Service Orientated Architecture (SOA) based framework for the evolutionary transition of legacy software systems,
- Provide a recommended Governance Approach, and a Standard of Best Practice for legacy software systems transition,
- Develop a demonstration environment to demonstrate of key principles, processes, techniques and technologies

Timescales 6 month task, timescales TBC

Partners IBM

Related Work SSEI/T 10

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