Australian Government
Department of Defence
Defence Science and
Technology Organisation

THE UNIVERSITY
OF ADELAIDE
AUSTRALIA

$30,000 Sponsored Masters Scholarship
through the
Graduate Industry Linked Entrepreneurial Scheme – GILES

G07/08 – Strategy Planning Analytical Framework

Objective of Project

The objective of the project is to refine and update the Prototype Analytical Framework (previously developed by the Strategy and Capability Integration Group (SCIG) of DSTO) by incorporating feedback from the systems theory academic community, from the client community and from continued literature review and research. The outcome will be an improved understanding of the activities underpinning Defence strategic planning and of the effective use of analytical methods which can support such activities.

Project Specification and Timetable

The Australian DoD recently articulated a Strategy Planning Framework (SPF) that sets forth a suite of strategic-level documents and processes that aim to support informed and balanced decision-making for the Defence Force of today and for the future. To support the SPF a Prototype Analytical Framework has been developed by SCIG consisting of a Process Component – which captures the inputs, outputs and controls of the underlying processes, a Methodological Component – which identifies appropriate analytical methods to support the transformation of inputs into outputs, and a Validity Component – to form an improved understanding of what constitutes valid strategic planning and decision-making.

The project offers the flexibility for the student to focus on any one of the three components, depending on their skills and interests. Specific tasks within the project may include:

- The review, selection and development of software-based process visualisation and modelling tools (process flow models) in order to assist strategy staff understand and follow the flow of activities, documents and decisions within Defence strategic planning (under the Process Component).

- The review and use of System of Systems Methodologies in order to classify various Defence strategic planning activities under a problem-context classification scheme (under the Methodological Component).

- The review and application of Critical Systems Heuristics in order to move toward an improved understanding of the design of Defence Strategy Planning and its implications (under the Validity Component).

Personal Requirements

This project is based around research and analysis. Therefore the relevant skills of the student include:

- Strategic Thinking: Individuals who demonstrate this skill think at a big picture level; take a long term view; and/or entertain wide ranging possibilities in developing research plans.

- Problem Solving: Individuals who demonstrate this skill seek all relevant information; analyze issues from different perspectives; and draw sound inferences from the information available.

This project supports a team in SCIG who are developing the Prototype Analytical Framework. Therefore the relevant personal qualities of the student include:

- Teamwork: Individuals who demonstrate this quality cooperate and work well with others in the pursuit of team goals; and accommodate and work well with the different working styles of others.

- Flexibility: Individuals who demonstrate this quality are receptive to new ideas; respond and adjust easily to changing work demands and circumstances; and are not bound by old ways of doing things.

Academic Qualifications

Students could come from a range of academic backgrounds depending on which component of the SPF they choose to work on. It is expected that they would have at least an honours level qualification in a relevant field:

- Process Component: This favours students with systems engineering, business process modelling, knowledge management or information systems knowledge and experience.

- Methodological & Validity Component: This favours students with systems thinking, management & planning sciences, systems analysis or operations research knowledge and experience.

.

Other Requirements

A RESTRICTED clearance is sufficient for a student to undertake this project.

Division and Contact Person

Defence Systems Analysis Division (DSAD)
Strategy and Capability Integration Group (SCIG)
Dr Andrew Gill
Senior Defence Analyst
DSTO Edinburgh, 205 Labs, PO Box 1500, Edinburgh, SA, 5111
Telephone: 08 8259 5112 Fax: 08 8259 5624
Email: andrew.gill@dsto.defence.gov.au