

# Aims and Objectives

Arthur Griffiths

14<sup>th</sup> April 2015

BAWA, Bristol

# Purpose

- The purpose of this workshop is to provide a **training session** in cost estimating conducted by professional estimating teams from academia, industry, tool vendors and consulting with the added benefit of **top-level critique** by senior government and industry executives.
- This program will be **instructive, entertaining, and suitable for a wide interest audience** (estimators as well as managers).

# Workshop ethos

The workshop ethos will be;

- Presentations will be conducted in a **non-hostile atmosphere**.
- All observations will be **focused on the methodology and approach**, rather than the absolute cost accuracy.
- This is a **learning exercise** for the Teams and the audience.
- Team should seek ways to **demonstrate its innovation, experience, and presentation** skills.
- It is SCAF's preference that **younger members** of staff are used for the exercise, rather than 'veterans' of cost estimating, to provide a valuable opportunity for 'the next generation' to gain experience.

# Background

In 2015 there will be a general election in the United Kingdom which will determine the government for another 5 year session. It is widely anticipated that after the government has been established one of their first priorities will be a **Security and Defence Strategic Review (SDSR)** for 2015.

It is assumed that the government will have the usual **budgetary pressures** which have become common place for governments around the world. They are also required to provide the nation with **defence against a growing threat from hostile forces which requires a range of security and military** capabilities to be acquired, operating and maintained.

The solution to this problem is to conduct a **Balance of Investments (BOI)** to determine the optimum capability for the budget that is available. This requires a **high level analysis of whole life cost (WLC)** and broad appreciation of the capability acquired.

# The Challenge (Problem)

Your team are an independent group of analysts who have been employed to give an **expert opinion to the government** of SCAFland. You will conduct a BOI analysis to determine the government's best strategy.

Situated in the south Atlantic, **Fredonia is a dependant territory of SCAFland**. Fredonia has no defence force or offensive capability. There is a military scenario which could foresee Fredonia being attacked and overrun by a force against its will with the citizens of Fredonia requesting help and assistance from SCAFland. This scenario requires a **contingency plan for SCAFland to recapture Fredonia** and free its citizens.



# The Challenge (Problem)

- Your team have been requested to **plan and cost the offensive mission and conduct a BOI**. Your team will identify their proposed offensive scenario - How you would repatriate the citizens of Fredonia?
- You are required to describe the offensive action that you have planned and estimate the **Whole Life Cost (WLC)**.
- As a **minimum** your plan must consider:
  - A sea asset
  - An air asset
  - A land asset
  - A weapon system

# The Challenge (Problem)

- Each team will present its solution including;
  - The **list of assets** used and rationale – the Force Structure
  - The **capability** of the assets deployed
  - The **design** of the assets indicating existing, new or future
  - The **WLC** of the assets - the focus of the presentation
  - approaches to **data gathering**,
  - other **options** eliminated,
  - **uncertainty and risks** identified,
  - The **total cost** of the campaign

# The Challenge (Problem)

- The objective is not so much to prepare accurate and realistic estimates, but to **describe the approach** to this task and how the task has been conducted. It is reminded that the Team members should not disclose proprietary information.
- They may use and display public domain models or even invent some models for the purpose of the exercise. If so, the Team will indicate it in order to avoid the audience from being misled.
- There is **no pass or fail** and certainly no “right answer.” We strive to keep the estimating spirit alive and to present a good cross-section demonstration of how world-class estimators approach the issue of analyzing data and producing risk adjusted models.



# General Estimating Assumptions

1. The base estimates should be at **2015 economics**,
2. The teams will **not be limited to data** provided by SCAF in the supporting paper and may supply their own insight into platforms identified and utilised,
3. The team should offer a **recommendation** of the force structure, with an explanation of their reasoning, including risk and uncertainty,
4. Technology forecasting, augmenting assumptions, and **innovative estimating are encouraged**

# Format and Schedule

- The results of this case study will be in MS Office (PowerPoint and Excel) format, presented in **30 minutes** by one or more team presenters **including time for questions and answers** from the Senior Review Panel and audience

# Aims and Objectives

Arthur Griffiths

14<sup>th</sup> April 2015

BAWA, Bristol