ANALYTICAL DECISIONS

Procurement Support

Analytical Decisions provides a spectrum of high quality procurement support services. These include:

- requirements elicitation and capture
- budgeting and estimation (including software development) eg COCOMO
- specification writing (including requirements management tools)
- tender assessment
- due diligence audits

Honest Broker

Analytical Decisions' strength in connection with requirements capture is our knowledge and understanding of both sides' needs: on the one hand the operational requirements and needs of the user and, on the other hand, the technical aspects of how requirements can be delivered. We frequently act as an

honest broker between end users and system designers.

At a practical level, we are familiar with standard requirements tracking tools such as DOORS and also with industry-standard formats such as Mil Std 498.

Budgeting for software development

We make use of tools such as COCOMO to help estimate the cost and duration of software-intensive projects. This parametric method can be adjusted for data from your own organisation or simply used with the results of a large number of software development projects.

The recent implementations of COCOMO (including ours) are able to deal with application generator, system integration, or infrastructure developments in addition to conventional software development.

The implementation we use is based on two increasingly detailed estimation models for subsequent portions of the life cycle: Early Design and Post-Architecture.

The Early Design model is useful for the exploration of alternative software/system architectures and concepts of operation. At this stage, not enough is generally known to support fine-grain cost estimation and the results are used to generate first cut budgets.

The Post-Architecture model involves the actual development and maintenance of a software product. This stage proceeds most cost-effectively if a software life-cycle architecture has been developed; validated with respect to the system's mission, concept of operation, and risk; and established as the framework for the product.

Tender assessment and risk assessment

Analytical Decisions has taken the COCOMO modelling approach further and used it as part of its quantitative risk assessment technique for software intensive projects. This allows us to quantify in financial and programme terms the impact of factors such as the experience of the company undertaking the development, the development environment itself, etc. These results can be used in the context of tender assessments to provide quantitative and traceable evidence of how selections have been made and calculating risk premiums.