

## Case Study

# RACE: Rapid Capability Evaluation



Software Measurement Services Ltd.

Consultancy and training in the management of Information Systems.

[www.measuresw.com](http://www.measuresw.com)

### Selecting suppliers – making the right choice

How do you choose your software supplier? Experience has shown that going for the lowest price does not always deliver the best value and may carry a higher risk. A public sector organisation with one of the biggest computer complexes in Europe had a remit to maximise the taxpayers' value for money. They already had a pool of preferred suppliers, but they needed a thorough, objective and reliable way to evaluate each candidate. The solution was RACE.

Based on the best practices identified in the Software Engineering Institute's Capability Maturity Model Integration (CMMI®), RACE uses a framework for the evaluation of a supplier's potential for developing and maintaining software at low risk.

### **RACE**

- **Provides a sound objective basis for selection decisions**
- **Provides an insight into the risks and benefits of awarding a contract to a particular supplier**
- **Is rapid, repeatable and reliable**
- **Provides candidates with a snapshot view of their capability levels and encourages them to commit to process improvement**
- **Enables the client to build an ongoing, constructive relationship with their suppliers, in order to improve the efficiency of software acquisition and enhancement**

### On your marks

A large number of candidate suppliers were considered (30+).

The candidates included several leading systems companies along with some smaller, specialist suppliers.

Careful planning was required to coordinate such a number and range of assessments.

Client representatives held early discussions with SMS to set the parameters of the operation. The scope was agreed to include a variety of process areas drawn from maturity levels two and three of the CMMI®, covering engineering, project management and support.

The client was also concerned that the management of human resources should be evaluated. SMS met this need by including additional process areas from the Software Engineering Institute's People Capability Maturity Model (P-CMM®). The most important of these were: communication and co-ordination; performance management; staffing; workforce; planning.

## Get Set

Prior to an on-site visit, candidates wishing to be listed as preferred suppliers were sent detailed questionnaires for completion. Functional managers, project managers and software practitioners were all required to submit their responses. Documentary evidence was requested and obtained to support the responses. The SMS study team allowed for a two-day site visit to each of the candidates. Three evaluation teams worked in parallel to minimise the overall duration of the job.



Acquiring as much information as possible prior to visiting a candidate helps reduce the on-site effort and duration. Filling out questionnaires is rarely a favourite task, so SMS ensures that the tailor-made form is both user-friendly and self-explanatory. The candidates responded by answering promptly, and in most cases, fully, although some suppliers had security concerns. Where this was the case, SMS was happy to enter into non-disclosure agreements, and our team members reviewed documentation on site. In no case did issues of security or intellectual property rights impede the thoroughness and reliability of the evaluation.

## Go

The SMS study team visited the candidates, interviewed staff and where necessary requested additional documentation. A standard Ratings Tool was used to collect data, including observations about process strengths and weaknesses. Ratings data was collated and reported in a pre-agreed standard format that generated a Findings Report detailing the process capability ratings for each candidate. Ratings were then summarised to produce comparable evaluations in a pre-defined Ranking Table. This information assisted the client to decide whether or not the candidate had succeeded in winning a place on its preferred suppliers list.

SMS consultants are experienced and impartial professionals, and any initial nervousness on the part of the candidates was soon allayed. Indeed, the candidates generally found the exercise extremely worthwhile. Although not providing the detail available via a full CMMI® appraisal, RACE provided a thorough review of each organisation's capability levels. It gave a good indication of the improvement opportunities and suggested relative priorities.

## The Results

The study team completed their evaluation on time and in budget, whilst causing little interference with the daily business of either the suppliers or the client.

RACE provided the client with the information needed to make the optimal risk choices quickly. It proved to be a reliable method that can be repeated for a new candidate or for one re-applying after making improvements to its processes.