

MAKING THE RIGHT CHOICE STRUCTURED TENDER ASSESSMENT USING MS EXCEL ON A NETWORK

BY

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ABSTRACT

The assessment of competitive tenders is a key moment in the life-cycle of a project. It has to be conducted fairly and auditably during what is typically a period of high workload and tight time scales. This article describes a method of structured tender assessment which can be implemented using MS Excel spreadsheets on a network. Peak workloads for the tender assessment team are reduced and much of the report generation is automated. A worked example is given, where the method was successfully employed in selecting the Project Management Contractor for the relocation of the Royal Naval Submarine School.

Introduction

Most of the services or products which the MoD procures are obtained by competitive tender, often with firm prices based on a taut specification. This approach is adopted to transfer risk to industry and to minimize uncontrolled growth in cost and requirement. It necessarily limits the influence of the customer after the contract is placed. The period when the customer has greatest influence in the quality of the final product is arguably during the tender competition, especially at the stage when tenders are being assessed. The tender assessment period is typically a time of high workload and tight time scales. It is important therefore to minimize the impact of the mundane and routine tasks associated with the process, allowing those assessing the tenders to concentrate on the significant and value-adding aspects.

The MoD is increasingly adopting the Microsoft (MS) Office software suite as standard, and many establishments now have networked systems. This article describes a method of tender assessment which can be implemented using a working knowledge of MS Excel in a user account on any network which supports e-mail. A worked example is described where the method has successfully been used in the assessment of a project management tender. In use, it lowered the peak workload of the tender assessment team, was simple to operate, auditable, robust and produced a high quality report to support the final value for money selection.

Background

The existing guidance on tender selection will be familiar to many readers. Tenders will typically be assessed by a technical assessment team, working without price information, with the aim of producing an order of technical merit. These rankings will then be assessed in the light of bid prices to obtain the best value for money choice.

The assessment process used must be unbiased and fair to all tenderers. It should be decided upon and recorded before the tenders are opened, and in some situations may even have been made available to the bidding firms. The tender assessment team will typically involve a number of people to minimize the effect of individual preferences, and these people should work independently. All decisions should be supported by reasoned and auditable argument. The possibility of the assessment being required for defensive pur-

pose following a challenge by an unsuccessful bidder should be borne in mind.

The Project

The method described in this article was used to select the best value for money project management tender for the relocation of the Royal Naval Submarine School (RNSMS). The RNSMS relocates from its current site in HMS *Dolphin* at the turn of the century, predominantly to HMS *Raleigh* but with some equipment going to HMS *Sultan* and HMNB Clyde. This project is a hybrid develop and construct strategy, with roughly equal value allocated to building costs and relocation of equipment. The building tasks include a large new building in HMS *Raleigh* connected to an existing block which is to be refurbished, plus refurbished senior rate and junior rate living accommodation. In addition, a new building to house the VANGUARD weapon handling rig is to be built in the demanding regulatory environment of HMNB Clyde. The equipment varies from complete tactical weapon systems for submarines, through control room trainers, to computer based skills trainers.

The project is owned by Flag Officer Training (FOTR) and managed by a uniformed Project Sponsor (COMMANDER P.N. PAYNE-HANLON RN) supported by a Deputy Project Sponsor (LIEUTENANT COMMANDER M.J. WILLIAMS RN). The Project Sponsor team members are both submarine Weapon Engineer Officers, reflecting the specific focus of the equipment to be moved. The responsibility for the different aspects of the project is divided between:

The Project Sponsor

Responsible for defining the requirement in the project brief, executing the project to time, cost and quality, and for all MoD interfaces.

Project Management Contractor

Responsible for the design development and detailed project management.

Prime Contractor

Responsible for the execution of detailed design, all building works, and equipment relocation and commissioning.

Naval Bases and Supply Contracts Branch.

Responsible for the contractual aspects.

This complex project requires a broad range of capabilities from the successful project manager. The aim of the tender selection process described below was to ensure that the selected tenderer possessed sufficient skill, experience and resources in all the required areas.

The method

This section describes the method used to control and enable the tender assessment process, in broadly chronological order.

The tender

The first key point is to make sure that the Invitation to Tender (ITT) document defines the structure of the tender. The tender structure must require the bidder to demonstrate his understanding of the requirement, his skills, experience, services, registrations and qualifications and any other attributes which might be used to differentiate between bids. This process is ideally done with the involvement of the members of the Tender Assessment Panel (TAP).

TAP

The TAP is formed. There will be a number of assessors, some of whom (e.g. QA, Defence Estates Organisation (Works)) may only be assessing specific aspects of the tender. A 'Report Compiler' is nominated. The report compiler is responsible for constructing the marking spreadsheet and compiling the data into a final report.

Preparation

The TAP agrees the marking scheme. The marking scheme should be matched to the structure of the tender as defined in the ITT, but can be tailored to emphasise specific areas. The detailed structure of the scheme is described below. Once the marking scheme is agreed, the report compiler can construct the spreadsheets. The process is run using dummy data to check the spreadsheet calculations and links. When testing is complete, the report compiler e-mails copies of individual company score sheets to each assessor.

Assessment

Assessors complete markings by typing scores and comments directly into the individual score sheets, then protect the sheet (Tools menu, protection, protect sheet command) using their own password and e-mails the sheets as attachments back to the report compiler. When the report compiler receives the e-mail, he saves-as each sheet replacing the appropriate empty sheet in his spreadsheet structure. The score sheets remain protected and cannot be amended by the report compiler without the assessor's password. The report compiler's summary sheets automatically compile the report from the individual marking sheets.

Scrutiny

With the raw data from the assessors now compiled in a series of summary graphs and tables, scrutiny of the results can be conducted in an informed manner by the panel to reach an overall recommendation.

The Spreadsheet design

The design of the spreadsheet will vary with each project, but this section will describe the structure which was found to be useful in the RNSMS relocation. The basic model of the spreadsheet is three layered (Fig. 1):

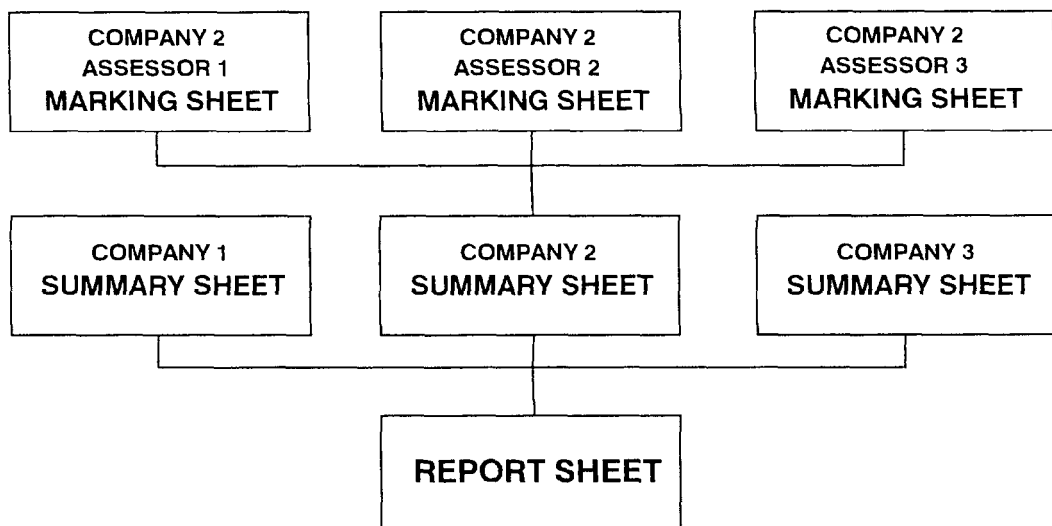


FIG. 1 — THREE — LAYER STRUCTURE

The Marking Sheet

The detailed layer is a number of marking sheets, one per company per assessor. These are the sheets which are e-mailed from the report compiler to the assessors and back.

The Company Summary

The report compiler has a spreadsheet for each company which summarizes all marking sheets for that company.

The Report Document.

The report compiler has a spreadsheet which compares the individual company summaries, ranking them and displaying the results in graphical and tabular form as required.

FIG. 2 — EXTRACT FROM TYPICAL MARKING SHEET

<u>A. COMPLIANCE STATEMENT</u>		score/10	weight	wt score
A1.	Detail provided in Matrix of Compliance		1	
Total Score				
Total Possible			10	
Section A %				
<u>B. UNDERSTANDING THE REQUIREMENT</u>		score/10	weight	wt score
B1	The requirements at the 3 sites.		1	
B2	The testing requirements.		3	
B3	The main risks associated with the equipment moves		3	
B4	The flexibility required in the design of the MOET.		1	
B5	The nuclear requirements in Faslane.		2	
B6	The security aspects.		1	
B7	The potential access problems.		1	
B8	The required refurbishment levels.		1	
B9	The need to achieve the AA timescales.		1	
B10	The need to minimize training disruption.		1	
B11	The overall requirement.		3	
Total Score				
Total Possible			180	
Section B %				
<u>C. METHOD STATEMENT</u>		score/10	weight	wt score
C1	Location / Availability of PM		3	
C2	PM's dedication to this project		2	
PM's professional representation at sites (Asst PM?)				
C3	Dolphin		1	
C4	Raleigh		2	
C5	Faslane		2	
C6	Sultan		1	
On-site control - technical representation				
C7	Dolphin		1	
C8	Raleigh		1	
C9	Faslane		1	
C10	Sultan		1	
Total Score				
Total Possible			150	
Section C %				

The Marking Sheet

The Marking Sheet (FIG. 2) is structured into sections, each corresponding to a section in the tender. There are numerous questions in each section in order to cover all the aspects which are to be assessed. Each question is assessed and given a mark out of ten by the assessor. Each question is weighted for its relative importance within that section (and only that). The marks for each section are then converted to percentages by the spreadsheet.

COMPANY

	COMPLIANT			WEIGHTED WEIGHT	SCORE
	SCORE				
	assesor 1 %	assesor 2 %	assesor 3 %		
A. Compliance Statement				3	
B. Understanding the Requirement				10	
C. Method Statement				5	
D. Project Team				6	
E. Team Structure and Resources				8	
G. Key Personnel				10	
H. Programme				8	
I. Risk Management				5	
K. Location				7	
M. Management Information				6	
N. Selection of Tenderers				5	
O. Health and Safety				3	
P. Deliverables				6	
PRE-INTERVIEW TOTAL					
INTERVIEW				15	
FINAL TOTAL					

FIG. 3 — TYPICAL COMPANY SUMMARY SHEET

Company Summary Sheet structure

The input of the Company Summary Sheet (FIG. 3) is the percentage section scores from the marking sheets, using the linking facilities in MS Excel.

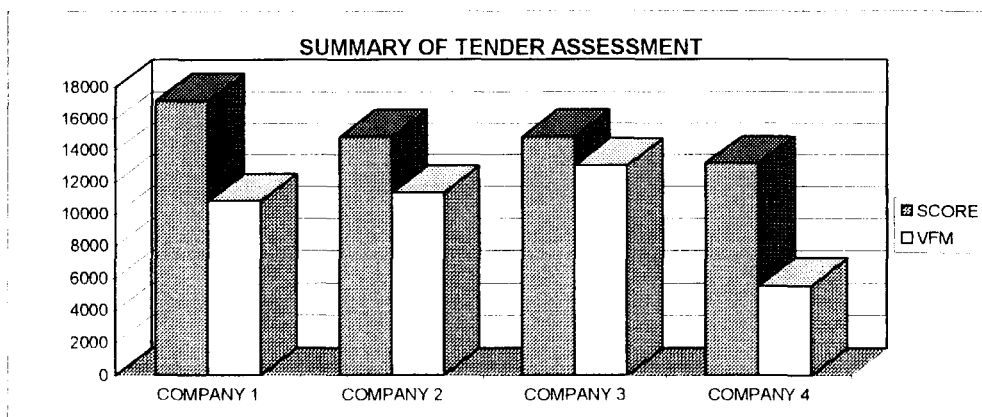
A simple sum is carried out of each assessor's score for that section and a summary weighting is applied to that sum to reflect the relative importance of that section. The output of the Company Summary Sheet is a set of weighted section scores and a grand total for that company.

EXAMPLE REPORT SHEET - SUMMARY OF TENDER ASSESSMENT

POST INTERVIEW RANKINGS

	SCORE	%	RANK	COST	VFM
COMPANY 1	17153	69%	1	£64	10,824
COMPANY 2	14838	60%	2	£53	11,307
COMPANY 3	14835	60%	3	£46	13,025
COMPANY 4	13173	53%	4	£96	5,542

(VFM = percentage score / cost (£M))



BREAKDOWN OF SCORES BY SECTION

	C1	C3	C2	C4
Detail in compliance statement	360	480	360	330
Understanding the requirement	1539	1406	1417	961
Method	937	890	873	740
Team	1310	1120	980	1130
Resources	1492	1289	1605	1012
Personnel	1871	1490	1448	1400
Programme	1648	1552	1792	1728
Approach to Risk	1100	950	850	1050
Location	1077	1007	932	872
Reporting	864	726	732	660
Tendering	1175	925	1000	950
H&S	720	690	690	570
Deliverables	810	810	810	720
	2250	1500	1350	1050
Total	17153	14835	14838	13173

FIG. 4 — EXTRACT FROM EXAMPLE REPORT SHEET

Report Sheet

The Report Sheet is linked to the outputs of the company summaries and uses these figures in graphical and tabular forms to analyse the results (FIG. 4).

Key points

The key characteristics of this method include the following:

- The tender structure is predefined to provide all information required.
- The overall marking scheme is determined and agreed before tenders are received, using unbiased inputs from assessors.
- The marking sheets are structured to match the tender.
- Each assessor has one score sheet per company.
- Simple to operate with each mark given out of 10—less chance of marking error.
- Each mark is input once only—less possibility of transcription error.
- Calculations are automatic—less chance of calculation error.
- Summary spreadsheets are linked to individual mark sheets.
- Marking sheets are protected—cannot be amended other than by the assessor.
- Multi-level design—reports can be produced at an appropriate level for any reader.

Benefits

The method described in this article can be implemented by anyone with a working knowledge of MS Excel and brings together a number of simple ideas. It is simple to operate for the assessors, with each mark being scored out of 10, minimizing the chances of errors in the marking. It is robust, with each mark being input once only, leading to less chance of calculation error. It allows efficient parallel working with all assessors working simultaneously and independently as required. Indeed, as inter-site e-mail becomes more common, assessors work remotely. The bulk of the report is produced automatically and quickly, presenting the data in a way which allows intelligent informed decision making. It concentrates the time consuming preparation into a period when the tenders are away at the bidders, minimizing the paper-work effort required by the tender assessment team during the pressured assessment phase.

Conclusion

The finished product is a clear, professional, structured and auditable document which should help the TAP make the right choice. It may even assist the panel in the subsequent phase of negotiations with the Contracts Branch
