

Selecting The Team



Selecting the Team

Acknowledgements

As with its parent, A Guide to Project Team Partnering, the preparation of this companion publication has continued as a team effort dedicated to accelerating the development of partnering across the construction industry. The Partnering Task Force, who carried out the drafting, was drawn from a wide range of disciplines well representing the industry.

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Input on behalf of the Strategic Forum for Construction from: Martin Davis and Kevin Thomas.

Feedback

This is intended to be a live document responding over time to the developments in the industry, the experience of practitioners of project team

partnering and the needs of all those who engage or wish to engage in the process.

To help in this process we invite contributions from anyone who wishes to share their views on how this document can be improved. Whatever your view, it may be a useful web site, book or article, it may be a practical experience that you do not feel this guide covers adequately. It may be that you have specialist knowledge.

We want this guide to be both useful and relevant, so please send your comments to: cic@cic.org.uk

Other CIC Publications

Selecting The Team complements the other CIC publications available on the theme of Partnering, these are:

A Guide to Project Team Partnering
ISBN 1 898671 21 4

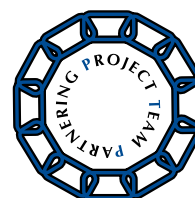
A Guide to Partnering Workshops
Available as an electronic copy
ISBN 1 898671 38 9

For details of these and other CIC publications visit www.cic.org.uk

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Foreword

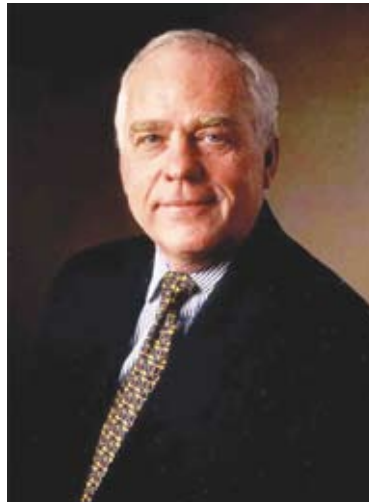
I was pleased to be invited to write a foreword to the two new companion publications to the *CIC Guide to Project Team Partnering*. Forming a satisfactory team is a vital step if partnering is to be successful. Selecting the Team will be of great assistance, not only to clients and their advisers, who are embarking on integrated team working for the first time, but will also serve as a standard methodology for those who are more experienced. This guide, from the CIC partnering task force, provides a process that has been tried on real projects and refined in the light of experience in use. Its use, together with *A Guide to Partnering Workshops*, will, I am sure, help to consolidate and accelerate the good progress already made towards team working becoming the norm rather than the exception. I commend the members of the task force who have freely given their time and experience to bring about this document.

The advice given sits well with the recommendations of the Strategic Forum for Construction contained in *Accelerating Change* and its Integration Toolkit, and I endorse its use, and the suite of partnering guides produced by the CIC, to construction clients and all those practicing integrated delivery of their projects. I am confident that substantial benefits will accrue to their project partnering teams.

Sir John Egan

Former Chairman, Strategic Forum for Construction

President, Confederation of British Industry



Foreword

As chairman of the Strategic Forum for Construction (SFfC) one of my aims is to encourage initiatives that lead to industry improvement. I welcome the publication of *Selecting the Team* because it provides clients with a tool that will help them choose the right people and organisations for their project and make integrated working achievable.

Using a carefully selected integrated team will enhance a project in many ways. A key factor to the success of any project is getting the brief right and a well chosen team is better able to develop a brief that meets the client's needs. A good team will adopt a coordinated approach that means problems can be anticipated and planned for allowing the client to more effectively manage the level of risk. The project objectives are more likely to be understood by everyone involved in the construction process (the project stakeholders) and health and safety, environmental and sustainability issues are all considered throughout the construction phase not in an 'ad hoc' way.

Selecting the Team gives practical advice on putting together a selection panel, developing a questionnaire, setting the criteria for your shortlist and evaluating your short-listed candidates. By following this process you are much more likely to create a team able to work together successfully on project after project.

Peter Rogers

Chairman, Strategic Forum for Construction
Director, Stanhope plc.



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Introduction

Selection is where team building begins.

Picking the right players is the key to building any successful team. Simple as it seems, the process is not just about selecting the best available for each role. It is about getting the right blend to form the team best suited to undertake the particular job in hand.

This document is written as a guide for those who understand the benefits of partnering and teamwork within construction and should be read as a companion to and in conjunction with the CIC publication, *A Guide to Project Team Partnering*.

The selection process in construction has, for too long, relied too heavily on lowest price as a simple but brutal guide. This document describes a more systematic approach based on establishing a set of criteria that are collectively identified as critical to the success of a project.

During the early stages of a project it is important to obtain the best expert and up-to-date advice in order to help make informed decisions on the criteria critical to a project's success. These "value criteria" (e.g. environmental, health and safety, sustainability, whole-life cost assessments) involve assessment of the risks, costs and benefits of different design and procurement options. These are issues where a well-integrated project partnering team, consultants, contractors, specialists and key suppliers, can make a substantial contribution.

Such early cross-industry input is a fundamental principle underlying the *Strategic Forum for Construction's Integration Toolkit* – which is supported by the major Government clients as well as the Construction Clients Group – and STT is intended to complement the Toolkit's processes of selection.

In the future, team selection will increasingly involve reselecting existing or part-existing teams and companies and the development of long-term relationships. The selection process presented here may be used to confirm team members, select between options or to make totally new appointments in an objective, systematic, fair and transparent way.

STT has been designed to be as simple to implement as possible, but it is best to seek professional advice when using it for the first time. This will help to build more rapidly confidence in the process and experience in getting the best results.

The STT Process

STT is a tool designed objectively to assess the ability and merits of firms and organisations applying to work as an integrated team on a project. These firms and organisations will range from consultant designers, project/construction managers, specialist contractors, key suppliers/manufacturers and supply chains, cost advisors and facilities managers. The end result will be a straightforward ranked order of suitability for each category.

A key ingredient when producing a quality project is adequate planning and design. This helps minimise the chance of expensive mistakes and duplication of effort. One of the more beneficial aspects of STT is how it helps a project team jointly develop a Strategic Brief into the full design solution. This is achieved by repeatedly identifying selection objectives that are critical to a project's success each time a new appointment to a project team is made.

In an effort to make STT as easy to use as possible a worked example of the process is included at the back of this guide. This includes sample documents and forms that might be created by a selection panel using STT. The example also presents specimen answers that a selection panel might receive from applicants and demonstrates how these answers are used to select the most suitable applicant.

STT is a two-stage process, the main elements of which are shown in [Figure 1](#).

Stage one begins with the formation of a selection panel, establishing and prioritising selection criteria and closes with drawing up a short-list of applicants. The second stage is to evaluate the short-listed applicants and select the best. Under the *Strategic Forum's Integration Toolkit*, this selection panel would be the same as the "Advisory Team", which "should be populated by people skilled in translating business needs into physical requirements, and who have strategic knowledge of the working (especially clusters) of the construction environment".

The STT process is, however, also progressive: it would be unnecessary and unwise for the selection panel to appoint the entire project team at the outset. *The Strategic Forum's Integration Toolkit* envisages this progression from the Advisory Team

IPT (Integrated Project Team Workbook) 3: form the Core Team, and

IPT (Integrated Project Team Workbook) 4: expand the Core Team and Clusters

Accordingly, as new members are appointed they should be introduced into the selection panel so as to share in the ownership of selecting their future peers. Experience has shown this is the best way to build a team that really thinks together and works together.

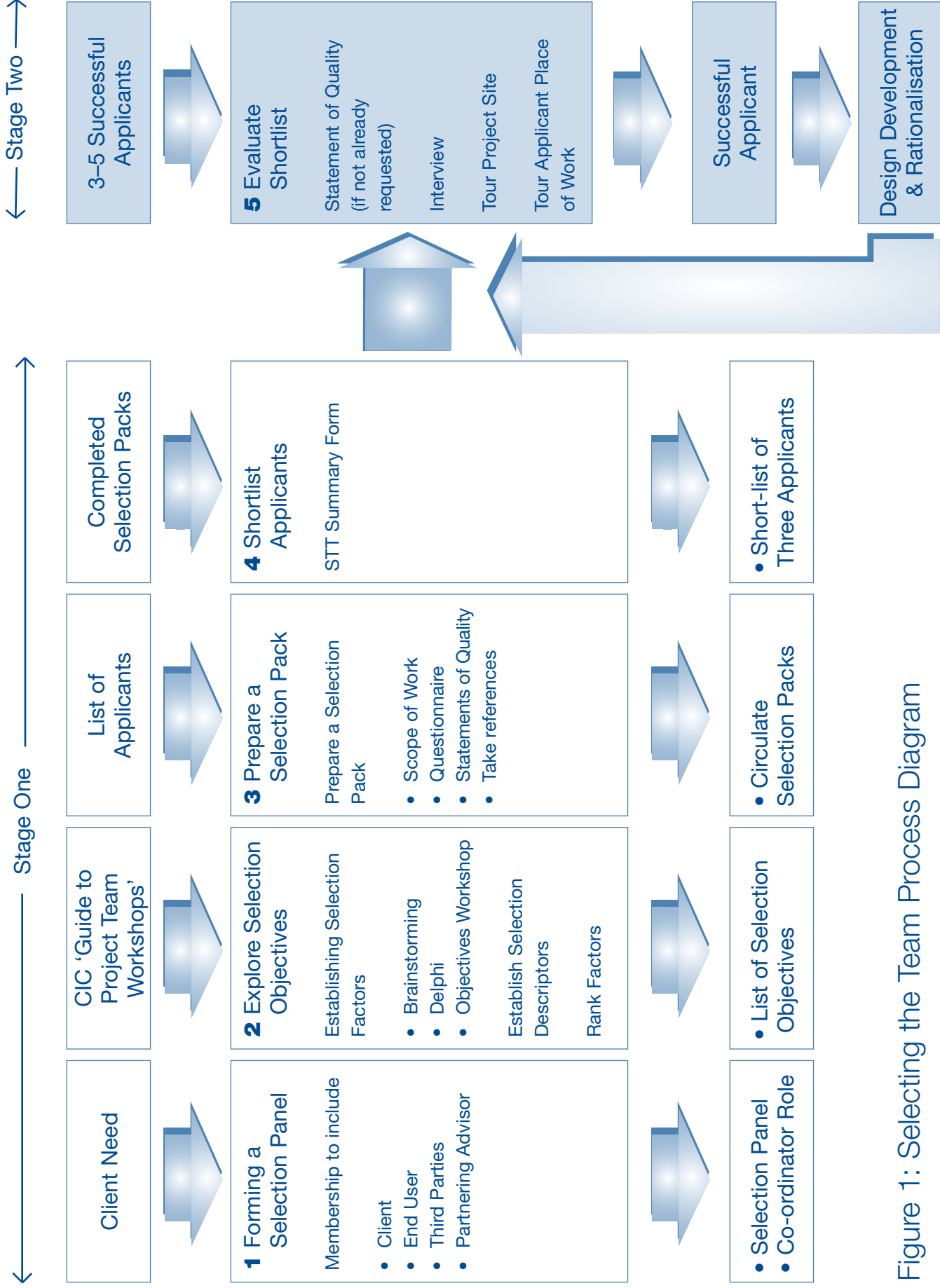


Figure 1: Selecting the Team Process Diagram

Stage One

1 Form a Selection Panel

An advisory team develops ideas, methods and solutions to address the client's business needs. By forming itself into a selection panel it will also help avoid the selection methods for the project being open to manipulation. Membership of the panel should be as widely representative of the industry as appropriate, so that a suitable range of views and opinions are canvassed and included. However, the selection panel should include strong representation from:

- the client organisation;
- the end user/s, who will ultimately be using the facility;
- third parties with a vested interest in the project; and
- a partnering advisor (or independent client advisor).

Further information on partnering and partnering advisors can be found in the *CIC's Guide to Project Team Partnering*.

It is important to elicit opinion from as wide a group as possible throughout the STT process. For practical reasons STT recommends that the selection panel has no less than 3 and no more than 12 members. Larger selection panels should only be used for projects with complex clients or with larger partnering teams with numerous interfaces.

Once the selection panel has been assembled a co-ordinator should be nominated. The co-ordinator will be responsible for

ensuring the selection process is fair for all parties throughout the STT process.

2 Explore Selection Objectives

The selection objectives cannot be developed until the team has come to a conclusion about the project objectives and "value criteria". The selection objectives have then to be tailored to focus particular expertise on those aspects or elements of the project which will be critical to the delivery of the project objectives (e.g. sustainability, or cost in use of engineering services). The selection panel must be able to capture and articulate fully the expectations and objectives of any new appointment to the project team, as the complete identification of these expectations and objectives will determine whether the appointment is a success or failure.

To assist in this process the panel will need a framework of selection objectives within which to work that are informed by the Strategic Brief which will include the overall objectives and "value criteria" for the project. An effective way to construct this framework is to start with a set of broad areas (selection factors), which can then be subdivided into sub points (descriptors). This will provide a list which should look similar to Form STT 1 (see page 19).

One central set of selection factors can be used for the entire project team, or the selection factors can be revised for each new member being considered to accommodate specific attributes. The latter option offers the opportunity to develop a set of

criteria and objectives through which the Strategic Brief can be developed into a full design solution.

Whether a single set of selection factors is used, or revisions for each selection stage, a full set of selection factors and descriptors is useful when drawing up a formal commitment to mutual objectives and partnering. •

EXPLORE SELECTION FACTORS AND DESCRIPTORS

The methods used to establish selection factors and descriptors vary depending on the size and complexity of each project. However, the following processes are suggested:

Brainstorming

One simple way to establish selection objectives is by brainstorming. This method is particularly suitable for smaller projects, projects that have few stakeholders or are highly prescriptive in nature. In these cases the selection factors will be established by face-to-face discussions involving the entire selection panel. Other interested parties who are not formally part of the selection panel (e.g. consultants, specialists or manufacturers respected for their expertise relevant to a particular aspect of the project) may also be invited to these discussions. Each of the selection factors can then be developed into a number of descriptors.

Delphi

The Delphi method is more structured and is recommended for larger projects. It is especially suited to projects where it is difficult to gather all the stakeholders into one room, and also works very well with the internet.

The process involves the selection panel drawing up a preliminary list of selection factors and descriptors through discussion with individuals or by

brainstorming. That list is sent beyond the selection panel to appropriate interested parties and experts who are invited to either add or remove selection factors and descriptors where they see fit.

The replies are gathered together by the selection panel and used to complete a revised list of selection factors and descriptors. This revised list is sent back out to the external parties and the process is repeated until consensus is reached. This provides the selection factors and descriptors to be adopted.

If there is difficulty in reaching consensus, this is a clear indication that the reasons for the differences need to be aired and properly resolved. The process below would then be advisable.

Selection Objectives Workshop

A Selection Objectives Workshop (this may be the start-up workshop or a stand-alone workshop) can be useful on the largest of projects or in situations where there are a number of complex issues to be resolved with conflicting objectives. In these situations there is often a case for a one to two day workshop where the selection factors can be clearly explored and defined.

The expense of hiring a venue on neutral ground and an independent facilitator can often be justified by the time saved for the entire panel. It is a concentrated but rapid method of finalising a clear set

of selection factors. By the end of the workshop the whole selection panel should feel satisfied with, and have ownership of the outputs.

Details on holding such workshops can be found in the companion CIC publication *Guide to Partnering Workshops*.

PRIORITISE SELECTION FACTORS AND DESCRIPTORS

Having established the selection factors and descriptors they must be prioritised. Such prioritisation should logically follow the team's prioritisation of the "value criteria" of the project. Placing relative priorities on the selection factors will help to filter applicants by providing a basis for dispassionate comparison and ranking. Different methods to rank the selection factors may be appropriate depending on the project size and complexity. STT suggests the following method:

Mark Distribution Ranking

This is a rigorous method that evaluates the relative importance of each selection factor. The factors are listed in a table and each member of the selection panel is required to allocate a total score of 100 marks across the factors. More marks should be allocated to factors considered more important to this particular round of selection. The selection panel can carry out the process together, but it is preferable for each selection panel member giving an opinion to carry out the task individually in the first instance.

The overall ranking is determined by aggregation, totalling the marks awarded to each factor and calculating the percentage of the total marks for each. But there is an important caveat to aggregation. If there are significant differences between the individual scores against given selection factors, these must be investigated and properly resolved – either by group discussion or in the workshop environment. Aggregation of significantly divergent scores potentially hides the problem and will result in an average which satisfies nobody.

A set of close scores of selection factors indicates they have near equal importance. A widely distributed set of scores implies some factors are of greater importance, and deserve greater attention during the rest of the process. Project to project a different pattern of scores can be expected.

Two sample forms for this task can be seen in appendix STT 2 (see page 21).

3 Prepare a Selection Pack

The selection pack is central to the STT process. It must contain all the information needed by any applicant so that they can provide the necessary responses from which the selection panel can make a reasonable assessment of their work. Attention should be paid to possible omissions or misinterpretations within the selection pack, as ultimately the information received back from the selection packs will be used to compile a short-list of successful applicants.

The selection pack should comprise all, or a considered selection from, the following:

[For information Strategic Brief Section A Selection Factor Questionnaire](#)
[Section B Request for a Statement of Quality](#)
[Section C Request for references](#)

When the selection packs are returned the applicants' scores are compiled, with each of the three sections, A, B & C, earning a possible 100 marks toward a predetermined qualification benchmark. More on selection pack assessment can be found in Section 4 and in the appendix of this guide (see page 19).

STRATEGIC BRIEF

The Strategic Brief is a formal document outlining the initial goals and objectives of the project, signed off by the client as the definition of the business

need to be met. The document will be compiled by the selection panel, or by nominated members or by the Client's Advisor on its behalf, for agreement by the Advisory Team.

The Strategic Brief should include all project specific requirements and constraints that may be pertinent: for example, local planning restrictions may require the use of specific materials or restrict the physical dimensions of the project. In general, it is important to give as much relevant information as is available, as this will allow the applicants to build a better idea of their ability to offer value for money solutions, and indeed to self-select themselves.

It is essential that the Strategic Brief should state any time or budgetary constraints, but also indicate any potential opportunities to trade off construction cost against operation and maintenance costs.

Items from the list provided below could be included in the Strategic Brief to assist applicants. This is by no means exhaustive and will vary from project to project.

1 The client's business need

- The need, not the solution;
- description of the client's relevant operations/activities;
- completion/occupation requirements, with constraints and options;
- any specific requirements of functionality or otherwise.

- life expectancy, again with constraints and options.

2 External factors

- Environmental considerations – local tenants, etc;
- specific risks associated with location, etc;
- local planning constraints; and
- other specific requirements.

3 Prioritised value criteria, e.g:

- Reliability;
- cost in use;
- business productivity; enhancement;
- functionality;
- aesthetics of design;
- sustainability;
- criticality of completion; and
- capital cost.

SECTION A: SELECTION FACTOR QUESTIONNAIRE

The selection factors covered in the questionnaire will vary widely in importance from the essential to the merely desirable. However, comparing the completed questionnaires with the selection panel's factor rankings will reveal the areas of agreement and likely conflict between the selection panel and the prospective new team members. This provides valuable information that can be explored in more depth during an interview.

In this context it is essential that the goal is not just to select individuals of excellence but also project team excellence where the "total capability is greater than the sum of its individual parts". The selection factors should therefore focus even-handedly between:

- qualifications, experience and track record of each particular firm and its proposed individuals; and
- culture, behaviour and track record of each firm and its proposed individuals at working in a collaborative team.

The more STT can build on established alliances (e.g. consultant, specialist contractor and key manufacturers) with a proven track record of delivery, the more predictable the project outcome will become, and the more favourable the premiums insurers can be expected to offer.

There are a number of options

available for the design of the questionnaire, and the decision on which to use it is a function of the complexity and magnitude of the project. STT recognises the use of three types of selection questionnaire that may be used for this section of the process:

- 1 Simple Ranking;
- 2 Mark Distribution; and
- 3 Computer Assisted Hierarchical Ranking (CAHR).

Should you require more detailed information on how to use any of these techniques please contact CIC.

It is possible to use more than one of the questionnaires mentioned above. Using two questionnaires to probe applicants about the same set of selection factors can be useful to check for consistency in an applicant's responses and whether they fully understand the expectations of the project and their role.

Whichever option is chosen, it is important that a scoring and weighting system is established before questionnaires are sent out. This ensures a fair assessment of the selection packs against the benchmark set objectively by the selection panel.

On the next page is a worked through example questionnaire, using the Mark Distribution technique.

Mark Distribution Questionnaire

In the Mark Distribution questionnaire each question is related to a specific selection factor. Each individual question consists of a lead question and a number of related statements, compiled by the selection panel, representing possible answers. Each lead question highlights a point of concern or importance to the selection panel, as in the example below: "What factors might influence satisfactory completion of the project?".

Those completing the questionnaire are asked to distribute marks across the six statements, allocating more to statements of greater importance. This allows the respondents to weight their opinion accordingly. The total sum of marks to be distributed amongst the statements is 100.

A sample questionnaire is provided at the back of this guide, Form STT 3 (see page 22). The questionnaire follows a structure recommended by STT and is compiled using the following basic rules:

- The total number of questions should be a set multiple of the number of selection factors. There could be one, two, or more questions for each selection factor. In the example 8 selection factors are used to formulate 8 questions, but there could have been 16, 24 or 32 questions.
- Each question is focused on

one of the selection factors.

- Each question is followed by 6 statements derived from the selection descriptors.
- Each lead question highlights a point of concern or importance to the selection panel.
- Of the six statements following each lead question the selection panel should:
 - agree with 2 of the statements, allocated '+1' weighting;
 - disagree with 2 of the statements, allocated '-1' weighting; and
 - adopt a neutral stance on 2 of the statements, allocated '0' weighting.
- The total sum of marks to be distributed amongst the statements is 100.

An example question and answers are provided on the next page:

The following question was compiled to explore the suitability of potential project partners for work on an existing operating building where disruption to the occupants had to be avoided. This could be, for example, an extension to a school, hospital, office, factory or shop. In the question below, the grey shaded areas are included to help illustrate how the applicants overall questionnaire score is calculated. Any questionnaire included in a selection pack should not include these sections.

Question 1. What factors might influence satisfactory completion of the project?

		MARKS AWARDED BY RESPONDENT (A)	SELECTION PANEL WEIGHTING (B)	TOTAL (A) X (B)
ANSWER 1	In our experience, disruption to working in the existing building is inevitable.	25	0	0
ANSWER 2	Additional resources may need to be devoted to design and planning at the earliest stage to minimise disruption.	30	+1	+30
ANSWER 3	Operations in existing buildings always cause delays to the construction work.	12	-1	-12
ANSWER 4	Extra time and money should be allowed for projects of this type.	8	0	0
ANSWER 5	It may be necessary to allow sufficient funds for regular liaisons with the occupants of the existing building to explore ways of minimising the impact of the works.	18	+1	+18
ANSWER 6	Innovative working methods and materials may help to ensure satisfactory completion of the project, but the client must take on the extra risk.	7	-1	-7
TOTAL		100	0	+29

Interpretation of answers and explanation of weighting.

Answer 1 This suggests that disruption will always occur and hence there is no reason to try to avoid it. This is not an answer that would be given by someone who is going to deliver the project to meet the client's expectations.

Answer 2 This answer recognises that work undertaken before construction begins will benefit the project, but this will take time and money. However, expenditure of resources at this stage should provide dividends later.

Answer 3 This suggests that the respondent may be looking for extra time and money for disruption of the construction.

Answer 4 This is similar to answer 1, where the respondent is not prepared to work towards achieving the selection factors.

Answer 5 This is a proactive approach to successfully completing the project.

Answer 6 This answer suggests that the respondent will try anything, but, if the project goes wrong they will view this as someone else's problem.

In this example the respondent scored a total of 29 out of a possible 100. The total for all the questions in the questionnaire is calculated and then entered in the correct box in the STT Summary Form STT 4 (see page 27). A score of 20 marks or above is considered to be a reasonable qualifying standard to set for this section of the process. The final score for each applicant's questionnaire should then be entered into section (A) of the STT Summary Form STT 8 (see page 31)

SECTION B: REQUEST A STATEMENT OF QUALITY

Each applicant is asked to produce a statement of quality describing their proposed approach toward the project and also providing general information about their organisation and how it operates both internally and as a member of a team. The options provided below are suggestions regarding the extent of the information required. This will vary with project magnitude and complexity.

When compiling the statement of quality it is important to consider the marking scheme that will be used when they are returned. The following format is suggested, but any combination of maximum marks and requests can be used:

- 10 requests for information, each scoring between 1 to 10 marks, a maximum of 100 possible; or
- 20 requests for information, each scoring between 1 to 5 marks, a maximum of 100 possible.

The final score for each applicant's statement of quality should then be entered into section (B) of the STT Summary Form STT 8 (see page 31).

Items from the list provided below could be included within the Statement of Quality. It is by no means exhaustive and will vary from project to project.

Organisation Specific Information:

- Commitment to project team partnering.
- Commitment to rethinking construction/innovative thinking.
- Community involvement.
- Competency, staff training policy including NVQ's.
- Commercial approach and methodology.
- Current workload.
- H&S policy, CDM compliance.
- Head office support facilities.
- Lead thinking practices.
- Liaison arrangements and management of third parties and PR.
- Management structure, including:
 - key persons;
 - experience; and
 - qualifications/competence.
- Supervision and workforce for assembly and/or installation:
 - key persons (experience, qualifications/competence);
 - core labour force; and
 - frameworks with regular partners.
- Open book accounting.
- Structure of organisation .
- Business information including:
 - turnover;
 - profit;
 - time trading; and
 - number of personnel.
- Past experience on similar projects.

- Procedures and criteria for the selection and management of supply chain.
- QA policy.
- Zero defects policy and track record.
- References from previous clients.
- Risk management policy.
- Value engineering techniques.
- Efficiency and productivity
- Any other project-specific information the selection panel feels is important to the project.

If further information is required it may be necessary to ask for the following Project Specific Information:

- personnel to be assigned to the project.
- plan for managing and performing the required work.
- proposals for senior management involvement in the contract.
- proposed work schedule.
- the office in which the work will be performed.
- any other project-specific information the selection panel feels is important.

SECTION C: REFERENCES

It is useful, as in any other area of commerce, to take up references. This check should not be limited to the references supplied by the applicant firms, and the client should ask the listed referees for other sources of information about the organisations capabilities. Some of the issues that might be checked with referees are listed in Form STT 4 (see page 27).

It is important where possible, to check references of companies that have been employed by the organisation under consideration as well as their clients. This can be an invaluable way of identifying the attitude the organisation has adopted in previous project teams.

A scoring system is suggested in Form STT 4. The final score for each applicant's references should be entered into section (C) of the STT Summary Form STT 8 (see page 31).

Circulate Selection Packs

Potential members of the project team will initially be drawn from one or more of the following:

- Alliances (e.g. consultant, specialist contractor and key manufacturers).
- Individual firms with a known track record of competence for the type of project concerned.
- Other firms offering expertise in areas relevant to the Strategic Brief.

These may be identified from existing lists such as Constructionline www.constructionline.co.uk public advertisements, or best by recommendation by the Advisory Group or members of the project team. The objective is to move progressively towards repeat appointments and long-term relationships with limited numbers of highly competent and effective project "partners".

It may be helpful to ask for the questionnaires and the quality statements to be submitted as separate sealed documents. This encourages the assessment of each application on its own merit rather than by comparison with competitors.

4 Shortlist Applicants

The ultimate goal of this process is to narrow the field and create a shortlist of ideally three, but possibly more, applications. Each application should be evaluated against the set of predetermined ranked selection factors drawn up by the selection panel.

For efficiency and effectiveness a qualification level should be set, above which applicants proceed to the next stage of the process and those below this level are rejected. Details of suitable qualification levels and a table for explaining the qualifying process are included in STT 8. (see page 31)

For matters of probity, the selection panel must set the qualifying score, and conduct this evaluation as a whole. Government agencies often have specific rules or policies regarding the make-up of selection committees. The selection panel should document the proceedings and any decisions made during the evaluation process. A sample of this process is provided in Form STT 7 (see page 30).

A sample form for evaluating the various elements of the selection pack is included in the STT Summary Form STT 8 (see page 31). It has been completed using the specimen results included in the appendix.

The scores from each of the sections used, A, B and/or C in

the selection pack, is entered in to the appropriate box in STT 8. Weighting can then be added to each element of the selection pack. In the example provided in STT 8 the three elements of the selection pack are weighted to a ratio of:

Questionnaire: Statement of Quality: References 2: 1: 1.

Here the questionnaire is given twice the weight in contribution to the qualification score as the other two elements of the selection pack.

The applicant scores, resulting from evaluation of the selection packs, can be compared against the predetermined qualifying score and inappropriate organisations can be disqualified, leaving a shortlist of successful applications for further consideration. Repeated use of the STT selection process will result in increased confidence in developing the scoring mechanism. It may be wise to set a relatively low qualification level when using STT for the first time to ensure that all of the candidates are not eliminated during the first stage of qualification.

Stage Two

5 Evaluate the Short-List

Those firms that have made it to the shortlist must now be evaluated further. This will involve comparing in more detail the selection pack of each short-listed organisation with the profiles of the selection panel. This will help to flag any particular concerns and areas of conflict that may have been disguised by the aggregation methods used in the scoring system so far applied.

STATEMENT OF QUALITY

If they have not already done so, each short-listed organisation should be asked to produce detailed information through a statement of quality.

INTERVIEW

Interviews give the selection panel considerable scope to get to know the applicants more intimately. For example, it opens the opportunity to compare the applicant's creative approaches or practical contribution to the design process, as well as their interpretation and understanding of the project implementation.

The recommended interview process commonly takes the form of a presentation by the applicant followed by a question and answer session.

Interviews also provide the selection panel with an important insight into each applicant's management style and communications abilities. For this reason, the panel should request

that all of the short-listed firms send principals, as well as the key personnel who will be responsible for the work.

The following guidelines for interviewing applicants are suggested:

- Throughout the entire interview the selection panel should regularly refer back to the selection factors identified in Stage 1.
- Only interview the organisations short-listed.
- Adequate time should be scheduled for each presentation, the time limit for the interview should be pre-determined and fixed and timekeeping should be rigorous for all interviews.
- Each organisation should be given clear guidance as to the content of their presentation.
- The selection panel should retain the same membership for all applicants.

The recommendation is that each interview should last 45-minutes, which is fair and reasonable and provides adequate time to glean the information required for most project selections. More time will be needed for more complex projects. The typical interview should consist of:

- 5 minutes for introductions and preliminary remarks by the selection panel chair (this need not be the selection panel co-ordinator);

- 20 minutes for the presentation;
- 15 minutes for questions and answers; and
- 5 minutes for a closing summary by the applicant.

Other considerations include:

- Schedule adequate time between interviews for the selection panel to discuss the presentation privately and complete the score, before beginning the next interview. The post interview discussions should ideally be constrained to points of fact and clarification and be informed by what is within the scope of the evaluation form. That said, interviews are an essential opportunity to verify whether the written word is yielding a true and balanced reflection of the capability and culture of both the organisation and also particularly the individuals concerned. For example, are the written assurances sincere, or "what the panel wants to hear"?
- Schedule all interviews for a particular project selection for the same day, if possible. This permits the panel to compare all interviewed firms while the information is fresh in their minds, and encourages more consistent interview scoring. Using 45-minute interviews, four short-listed firms is the maximum a panel can sensibly schedule in one day, including committee rating, discussion and decision time. Overnight

delays will not help to preserve the continuity and quality of judgements, and should be avoided.

- The selection panel should not ask for detailed design solutions during the interview, although it is appropriate to question organisations about their approach to the design and implementation of a project.
- The selection panel may wish to ask applicants how they propose to charge for their services. However, time charging, overheads and profit are best dealt with in detailed discussions with the firm finally selected, and then only after there is a comprehensive and mutual understanding of the actual scope of work or services required. Good, open communication is essential to avoid misunderstandings at a later date and to ensure that the firm has included in its scope of work or services the client's expectations for the project, as well as all detailed requirements. Reference should be made to the Strategic Forum's *Integration Toolkit IPT* (Integrated Project Team Workbook) 3, especially sections 3.2, 3.7 and 3.15.
- Team building should begin in the interview process. The ability of an applicant's personnel to interact with the client is an important factor in determining future success of the proposed project. Mutual respect and good "chemistry" with the other members of the team are however also

essential, especially those with whom the applicant's personnel will be working closely (e.g. structural consulting engineer and structural steelwork specialist contractor).

- Let all the applicants know when the decision will be made and when they will receive communication regarding the outcome. It is recommended that, if possible, the committee's decision be made on the same date as the interviews, but enough time must be allowed for the selection panel to evaluate properly all the organisations.
- The sequence of interviews for each particular project selection should be arranged so that there is the opportunity to invite a particular applicant, once selected, to join the selection panel for an ensuing day when another but related project selection is to be made (e.g. engineering services consultant to attend when the engineering services specialists are being interviewed).

The physical set-up for the interview should be comfortable, with good acoustics and ample room. A separate waiting area should be provided for other firms attending to be interviewed. Preparation should include ensuring that equipment such as white boards, flip charts and audio-visual screens are available if necessary, although most firms tend to bring the equipment they

need. Since equipment set-up time may cause some delays, two rooms should be used, if possible. This allows one firm to be interviewed, while another is setting up and checking equipment in the second room. This should result in a smoother and more efficient day of interviewing.

TOURS OF THE PROJECT SITE

Providing the short-listed firms with a tour of the project site prior to the interview can be one of the most important parts of the selection process. A tour of the project site provides an opportunity for the applicants to obtain first-hand information about the proposed project and the client's specific needs, and reflect this in their responses.

TOURS OF THE APPLICANT'S PLACE OF WORK

A tour of the applicant's place of work, again prior to the interview, will help the selection panel get a better feel for the company's culture and systems and help confirm the claims made in the invitation packs. This can be achieved through inspecting the organisation's working procedures, document control, QA, H&S, general working environment and policy.

REFERENCES

References should also be taken up prior to interview if this has not been done already. Details on this process can be found in form STT 5 (see page 28).

6 Rank Candidates & Select

The sample post-interview evaluation form is a useful instrument for evaluating and ultimately selecting the most compatible and qualified organisation. A sample copy of an evaluation form is included in the appendix of this guide, form STT 6 (see page 29).

Each member of the selection committee should separately evaluate all of the short-listed applicants, taking adequate time to score each interview. The co-ordinator of the selection panel should then compile the individual score sheets once all of the short-listed firms have been evaluated. This system provides a documented record of the selection process as support for the committee's actions, which is important for matters of probity.

Post-Selection

EXPANSION AND ADJUSTMENTS TO THE CORE TEAM

The above process is best used to select the integrated project team in stages as envisaged in the *'Strategic Forum's Integration Toolkit'*;

Core team – IPT Workbook 3

Expand core team and clusters
– IPT Workbook 4

As each new member joins, the team dynamics may change, and this needs to be recognised and managed. If a member is failing to perform, whether professionally or co-operatively with the other members of the team, either the person concerned or, in the last resort, his organisation may have to be changed – in which case resort should be had to the next highest scoring organisation on the short list of three.

ONGOING COLLABORATION

The project team now has to settle down, collaborate and succeed.

The first stage is a “start up workshop” – for which reference should be made to the CIC publication *Guide to Partnering Workshops*.

Reference should also be made to the *Strategic Forum's Integration Toolkit* IPT workbooks 3-6 for the many issues of process, culture and techniques involved in collaborative working.

Information for the User of This Guide

The following appendix contains forms to assist in selecting the team. There is also a set of typical answers that might be arrived at by using STT. The specimen forms, answers and procedures are based on those produced from a series of trial construction projects used to develop STT. The projects all used STT to select members to their project delivery teams throughout their entire supply chain.

Text in red and shaded areas of the forms in the appendix are for the selection panels information alone, they are not to be included in the finished documents sent out in the selection packs.

For ease of comprehension, numbers from the analysis can be rounded up or down to whole numbers to avoid fractions or decimal points. It is important to remember, when doing this, that often the total of the column has to be 100.

For the purpose of the example process, the following rules were observed.

1 FORMING A SELECTION PANEL

- The selection panel consisted of 5 members.
- The selection panel membership included the partnering advisor but excluded the partnering facilitator.
- The scope of work was drafted before the workshop.

2 EXPLORE SELECTION OBJECTIVES, (FORMS STT 1,2)

- The entire selection pack was compiled during a one day workshop including selection factors, descriptors and questionnaires. (See the companion CIC publication *Guide to Partnering Workshops*).
- The selection panel independently weighted the selection factors during the workshop session, arriving at the final ranking (STT 2).
- 'Health and safety' followed by 'quality' and 'time' were the top ranked selection factors (STT 2).
- From the 8 selection factors decided upon during the workshop, it was agreed that all 8 should be used in the questionnaire. None were discarded.

3 PREPARING A SELECTION PACK, (FORMS STT 3 & 5)

- It was decided to use all three elements for the selection pack, a questionnaire (STT 3), a statement of quality and references (STT 5), all bundled with the scope of work.
- The selection packs were compiled during the workshop and sent to a total of seven organisations. They were drawn from a list, compiled by the selection panel, of suitable organisations with whom they had previous experience in this area of work.

4 SHORTLISTING, (FORMS STT 4, 7, 8)

- Five organisations replied within the specified 2-week completion period. One replied but failed to meet the deadline and was not considered further. One organisation failed to respond at all.
- The predetermined scoring scheme was established and a qualifying score of 120 was set for the applications to proceed to Stage 2. (Form STT 7).
- The data from the selection packs was filled into the appropriate forms Form (STT 4 and STT 8).
- The three elements of the selection pack were weighted to a ratio of questionnaire (2), statement of quality (1), references (1). The questionnaire was weighted twice as significant as the other two elements of the selection pack. (See Section 4 of the main document).
- Two of the four applications, (applicants 1 & 3), met the qualifying score of 120 marks and went on to Stage 2.

5 EVALUATE SHORTLIST (FORMS STT 6 & 8)

- Interviews were conducted with the two successful applicants from Stage 1. The interviews included the optional tour of the proposed site and the applicant's place of work (STT 6).
- Scores from the interview were added to the summary form

Form STT 8. The interviews carried the same weighting as the selection packs in their entirety.

- Applicant 1 was chosen as the most suitable applicant, with applicant 3 placed second if the performance of applicant 1 was not successful during project design development.
- As a matter of courtesy all applicants were notified of the results of the selection process once a decision had been made.

Form STT 1: Selection Objectives

The following is a list of selection objectives derived from a workshop session, which took half a day. The group first identified critical selection factors to the project and then elaborated on them to produce a list of descriptors under each heading.

The table below was then used to help formulate the questionnaire for the selection process.

SELECTION FACTORS	DESCRIPTORS
COST	<p>The need to produce accurate pre-construction budgets.</p> <p>The need to ensure that the budgets are not exceeded or significantly underspent.</p> <p>The need to balance capital expenditure against operational and maintenance costs.</p> <p>The desire to examine option to enable choices to be made about costs.</p> <p>The need to ensure a balance between the cost of any solution and its effectiveness.</p>
CULTURE	<p>To preserve the continuity of the project team throughout the project.</p> <p>To engage parties who will assist the client throughout the project.</p> <p>To engage parties sympathetic to the client's requirements.</p> <p>To engage parties who will operate an 'open book' philosophy.</p> <p>To engage parties who are able to demonstrate a positive working relationship with all parties involved in a project.</p> <p>A willingness to adopt the agenda of 'Rethinking Construction'.</p> <p>A desire to work with others in a co-operative manner.</p>
DESIGN	<p>To engage parties who have the ability to enable the project design.</p> <p>To produce a structure that is sympathetic to environmental and planning issues.</p> <p>To produce a design that is both individual and intellectually challenging.</p> <p>The need to 'value engineer' to ensure an agreed maximum price.</p> <p>To value manage to ensure an optimal outcome.</p>
INNOVATION	<p>To engage parties who have been proven to assist in the design of structures with flair and imagination.</p> <p>To engage parties who are able to demonstrate sensitivity to the needs of building structures in sensitive environmental locations.</p> <p>A willingness to embrace new ideas and concepts.</p> <p>The need to work with others who are known for flexibility in thinking and working methods.</p>
HEALTH AND SAFETY	<p>To meet the expectations of bodies such as the Health and Safety Executive and CDM Regulations.</p> <p>To promote the training of employees in on-site safety.</p> <p>To initiate extra H&S initiatives above the statutory norm.</p> <p>To adequately equip all operatives with the required PPE for the work.</p>
QUALITY	<p>To ensure that design quality translates effectively into physical quality.</p> <p>To provide a structure with low maintenance and operating costs.</p> <p>To engage with formal QA type procedures.</p> <p>To provide a service that will be of a quality worthy of being referred to as an Rethinking Construction Demonstration Project.</p> <p>To engage parties who are able to demonstrate a record of building structures of proven quality.</p> <p>To engage in work with ISO 9000/12000 compliant organisations.</p>

<p>TIME</p>	<p>The length of the overall design and construction period. Ability of constructors to forecast programmes accurately. Completing works by dates agreed with the project partnering team. The desire to examine options to enable choices to be made about the length of the overall programme.</p>
<p>WASTE</p>	<p>To minimise defects and re-work. To keep a lean drawing register with minimal re-issued drawings. To integrate the supply chain to ensure a smooth seamless supply. To integrate the design process, collaboratively and concurrently. Co-ordinated and consistent design teams. Ensure frequent meetings ensuring good levels of information. Lean logistics are a key element of site management and project delivery.</p>

Other topics that could be explored amongst the group during a ‘selection factors’ session include:

- Sustainability;
- respect for people;
- working environment;
- lean engineering;
- logistics / delivery;
- environment; and
- risk management.

Form STT 2: Prioritisation of Selection Factors Questionnaire

Questionnaire

INSTRUCTIONS

The table below is designed to help you rank the selection factors that you and your team consider important to the success of the project.

The factors are listed and each member of the selection panel is required to allocate a total score of 100 marks across the objectives. More scores should be awarded to the factors you consider more important.

EXAMPLE 1

Rank the following modes of transport in order of importance with respect to environmental damage:

FACTOR	SCORE
Train	8
Plane	8
Car	35
Bicycle	4
Walking	1
Boat	8
Motorcycle	20
Bus	15
TOTAL	100

EXPLANATION

In the example the respondent has judged that the Car is the mode of transport most environmentally damaging with the greatest score of 35, whilst Walking is least environmentally damaging with a score of 1.

EXAMPLE 2

Please complete the table below:

FACTOR	SCORE
Quality	15
Time	15
Innovation	2
Culture	10
Waste	3
Cost	20
Design	10
Health and Safety	25
TOTAL	100

Form STT 3: Mark Sum Distribution Questionnaire & Sample Answers for Applicant 1

Questionnaire 2

INSTRUCTIONS

In the following questionnaire you are required to award 100 points in total across the answers indicated. Your highest score should be given to the answer that you most agree with and your lowest (including zero score) to the answer(s) you agree with least. You must answer all questions.

EXAMPLE

Question - 1 What measures could be adopted to ensure a reduction in environmental damage resulting from transportation?

		MARKS AWARDED
ANSWER 1	Public Transport could be subsidised to reduce car use.	55
ANSWER 2	Cars, buses and motorcycles should be fitted with catalytic converters to reduce emissions.	30
ANSWER 3	The use of aeroplanes should be encouraged to minimise shipping.	0
ANSWER 4	The way to reduce environmental damage is to reduce use of all modes of transport. Everybody should walk.	5
ANSWER 5	Additional resources could be employed to improve road standards.	0
ANSWER 6	It will be difficult to reduce transport usage, it is a necessary part of the modern world.	5
ANSWER 7	By preserving areas of countryside it is possible to maintain and even increase the use of public transport in everyday life.	5
TOTAL		100

EXPLANATION

In the example the respondent has judged that the most significant statements to the question are answers 1 and 2, whereas answer 4,6 and 7 have minimal significance to the statement, answers 3 and 5 in the opinion of the respondent have no relevance to the statement.

Selection Questionnaire

Please complete the following questionnaire:

QUALITY

Question - 1. How do you believe that the client can best achieve a product that will retain “quality” throughout its life?

		MARKS AWARDED	SELECTION PANEL WEIGHTING	OVERALL WEIGHTED SCORE
ANSWER 1	This can only be achieved if the client allows sufficient time in the design and construction stages.	30	+	+30
ANSWER 2	Ways to ensure that sufficient funding is safeguarded for future maintenance should be explored.	0	-	0
ANSWER 3	By employing contractors with extensive experience of building different structures.	50	0	0
ANSWER 4	If “ownership” of the project can be achieved then post construction quality issues may be reduced.	15	+	+45??
ANSWER 5	The design team specifying the highest quality materials and standards of construction can best achieve this.	0	-	0
ANSWER 6	By ensuring that this requirement is fully understood by the project team.	5	0	0
TOTAL		100	N/A	+75

TIME

Question - 2. What measures could be adopted to ensure completion of the project on time?

		MARKS AWARDED	SELECTION PANEL WEIGHTING	OVERALL WEIGHTED SCORE
ANSWER 1	We can assist the design team and suggest design changes, which should improve construction times.	23	+	+23
ANSWER 2	Our track record on projects of this nature is good and we have a proven record of meeting target completion dates.	40	0	0
ANSWER 3	If a quality scheme is to be produced it may not be possible to achieve the due date but this should be capable of extension by negotiation.	20	-	-20
ANSWER 4	Additional resources could be employed and construction times reduced.	17	0	0
ANSWER 5	It may be difficult to achieve prestige project quality within the time-scale.	0	-	0
ANSWER 6	Design times may need to be extended in order to produce a scheme which is practicable to build quickly.	0	+	0
TOTAL		100	N/A	+3

Selection Questionnaire

INNOVATION

Question - 3. How does your organisation adapt to embrace new concepts?

		MARKS AWARDED	SELECTION PANEL WEIGHTING	OVERALL WEIGHTED SCORE
ANSWER 1	We tend to wait to see how relevant these are before adopting them.	5	-	-5
ANSWER 2	We seek out third parties to introduce us to new ideas and concepts.	0	0	0
ANSWER 3	New concepts are carefully considered at a senior level before being introduced in a systematic way.	5	0	0
ANSWER 4	We adapt when external considerations require this.	0	-	0
ANSWER 5	These are carefully evaluated in order to demonstrate proven cost benefit before introduction.	30	+	+30
ANSWER 6	We actively seek to work with the design team to improve the overall quality of the finished product.	60	+	+60
TOTAL		100	N/A	+85

CULTURE

Question - 4. What difficulties do you envisage in embracing the cultural values of partnering?

		MARKS AWARDED	SELECTION PANEL WEIGHTING	OVERALL WEIGHTED SCORE
ANSWER 1	Partnering arrangements are often bureaucratic and this can lead to difficulties when quick decisions are required.	10	-	-10
ANSWER 2	We treat each client as an individual and try carefully to identify and work toward their particular requirements.	20	+	+20
ANSWER 3	We have worked in Partnering arrangements with other clients and see little difficulty in adapting to the projects needs.	20	0	0
ANSWER 4	Persuading the client to release cash early in the construction cycle to enable early payment to suppliers and sub-contractors.	20	0	0
ANSWER 5	It may be difficult for our organisation to adopt an 'open book' free flow of information across the project and team.	10	-	-10
ANSWER 6	We have experience and do not expect any problems with the adoption of workshops and value engineering to develop the project culture.	20	+	+20
TOTAL		100	N/A	+20

Selection Questionnaire

WASTE

Question - 5. How will your organisation be able to eliminate waste throughout the project?

		MARKS AWARDED	SELECTION PANEL WEIGHTING	OVERALL WEIGHTED SCORE
ANSWER 1	We closely supervise our operatives to eliminate waste throughout the project.	5	-	-5
ANSWER 2	We ensure that there are sufficient materials to cover any losses or breakage.	5	0	0
ANSWER 3	We ensure that all defects are managed out or corrected before handing over any portion of work.	7	-	-7
ANSWER 4	We always focus on client's needs.	23	+	+23
ANSWER 5	We maintain a close relationship with our suppliers to ensure value for money and delivery on time.	20	0	0
ANSWER 6	We rely on employee empowerment to deliver quality, rather than using others to identify defects.	40	+	+40
TOTAL		100	N/A	+51

COST

Question - 6. Which methods can your organisation use to ensure the project is delivered at the agreed price

		MARKS AWARDED	SELECTION PANEL WEIGHTING	OVERALL WEIGHTED SCORE
ANSWER 1	Optimal cost benefit is achieved through early project involvement.	50	+	+50
ANSWER 2	We will ensure design costs are minimised in order to maximise the construction budget.	0	-	0
ANSWER 3	We focus on the project specification to ensure delivery of our works to the agreed price.	3	0	0
ANSWER 4	Our organisation is always willing to try new work methods, but realise there may be additional cost associated with this.	17	0	0
ANSWER 5	Achieving best value, rather than focusing on absolute cost is the only way to satisfy a client.	10	+	+10
ANSWER 6	Our experience has told us that poorly prepared budgets are the reason for escalating costs.	20	-	-20
TOTAL		100	N/A	+40

Selection Questionnaire

DESIGN

Question - 7. How relevant is it to involve the client, the consultant, the contractor, sub-contractor and suppliers in the design process?

		MARKS AWARDED	SELECTION PANEL WEIGHTING	OVERALL WEIGHTED SCORE
ANSWER 1	This can be achieved but only if the project time-scale is managed to suit an integrated design process.	25	+	+25
ANSWER 2	If all parties agreed it could be worth exploring the value of this.	25	0	0
ANSWER 3	An integrated project design team is the only way to achieve best value.	35	+	+35
ANSWER 4	Where the client may be constrained by the requirements of other project criteria.	0	0	0
ANSWER 5	Involvement at an early stage has cost implications that could increase the overall cost of the project and can therefore be difficult for the client to justify.	15	-	-15
ANSWER 6	A good designer should have sufficient experience such that they do not need any significant input from other areas of the construction industry.	0	-	0
TOTAL		100	N/A	+45

HEALTH & SAFETY

Question - 8. Our approach to Health and Safety uses the following philosophy

		MARKS AWARDED	SELECTION PANEL WEIGHTING	OVERALL WEIGHTED SCORE
ANSWER 1	Our primary aim is respect for people and this is reflected in our H&S procedures.	12	+	+12
ANSWER 2	We ensure we meet the expectations of the relevant statutory bodies.	25	0	0
ANSWER 3	We rely on outside organisations to ensure H&S performance.	45	-	-45
ANSWER 4	Our operators are comprehensively trained regardless of cost, to ensure we are market leaders.	6	+	+6
ANSWER 5	Our H&S policies are well established and we never had H&S problems.	10	0	0
ANSWER 6	H&S problems are usually the fault of other organisations over which we have no control.	2	-	-2
TOTAL		100	N/A	-29

Form STT 4: Mark Distribution Questionnaire Summary Sheet

Selection Panel Summary Table

SELECTION FACTOR	SELECTION PANEL MEMBER (n MEMBERS)*					TOTAL	TOTAL n*	RANK **	
	NAME (OPTIONAL)								
	n1	n2	n3	n4	n5	n6			
QUALITY	15	12	20	30	10		87	17	2
TIME	15	12	20	25	10		82	16	3
INNOVATION	2	8	0	0	3		13	3	6
CULTURE	10	10	0	0	25		45	9	5
WASTE	3	9	0	0	2		14	3	6
COST	20	22	20	5	12		79	16	3
DESIGN	10	12	20	10	18		70	14	4
HEALTH & SAFETY	25	15	20	30	20		110	22	1
TOTAL	100	100	100	100	100	100	100n	100	N/A

* This column is completed by dividing the selection factor score for the exercise by the number of members on the selection panel (n).

**The rank is a straightforward numerical order of importance of the selection factors. In this example from 1 through to 8, 1 achieving greatest score, 8 the least. This can be useful for compiling objectives and partnering charters. For more on this see the *CIC Guide to Project Team Partnering*.

Mark Distribution Summary Table*

Question Number	Selection Factor	Selection Panel Score (a)	APPLICANT 1		APPLICANT 2		APPLICANT 3		APPLICANT 4	
			Score Actual (b)	Score Weighted (axb)/100	Score Actual (b)	Score Weighted (axb)/100	Score Actual (b)	Score Weighted (axb)/100	Score Actual (b)	Score Weighted (axb)/100
1	Quality	17	75	12.8	89	15.13	15	2.55	51	8.67
2	Time	16	3	0.5	-15	-2.4	31	4.96	44	7.04
3	Innovation	3	85	2.5	-2	0.06	40	1.2	40	1.2
4	Culture	9	20	1.8	41	3.69	-39	-3.51	96	8.64
5	Waste	3	51	1.5	40	1.2	-44	-1.32	-70	-2.1
6	Cost	16	40	6.4	53	8.48	68	10.88	-56	-8.96
7	Design	14	45	6.3	-20	-2.8	-65	-9.1	-58	-8.12
8	Health & Safety	22	-29	-6.4	-65	-14.3	97	21.34	19	4.18
	TOTALS	100	230	25.4	121	8.94	103	27	66	10.55

Form STT 5: Suggested Referee Forms & Sample Answers for Applicant 1

MARKING SCHEME	0	2	5	10	SCORE	
1 How many years have you worked with this firm?	<1	1-2	2-5	>5	5	
2 On how many schemes?	1	2-3	4-5	>5	10	
3 Please comment on the overall quality of their work.	Poor	Satisfactory	Good	Excellent	5	
4 Please comment on their contract management and site supervision efficiency.	Poor	Satisfactory	Good	Excellent	10	
5 How would you describe the effectiveness of their management support?	Poor	Satisfactory	Good	Excellent	5	
6 Overall how well would you describe their management of contracts with you?	Poor	Satisfactory	Good	Excellent	10	
7 How would you describe the firm's attitude to predicting and preventing delays to the works?	Poor	Satisfactory	Good	Excellent	2	
8 If delays occurred how co-operative were they in seeking to work with you to find mutually beneficial solutions?	Poor	Satisfactory	Good	Excellent	5	
9 How would you describe the firm's attitude in not seeking to exploit delays for their own advantage?	Poor	Satisfactory	Good	Excellent	2	
10 Please comment on the firm's ability to co-operate at all levels without undue dispute.	Poor	Satisfactory	Good	Excellent	5	
11 How would you describe the firm's willingness to make constructive suggestions about the project and to share any mutual benefits?	Poor	Satisfactory	Good	Excellent	0	
12 How would you describe your working relationship?	Not prepared to	Reluctant to	Prepared to	With pleasure	5	
13 Please describe your attitude to working with this firm again.	Poor	Satisfactory	Good	Excellent	2	
14 Do you have any informal or formal policies in respect of "local labour" , if so how well did they comply to your requirements.	Poor	Satisfactory	Good	Excellent	5	
15 Please give dates and values of contracts which you consider relevant and, if possible, a brief description of the work.						
					6/10	
					TOTAL	77/150
					TOTAL%	52%

Form STT 6: Interview Quality Evaluation Form

The following may be used to evaluate applicants during the interview process.

Higher the Number = More Value

Rating Column 0-5 points, *excepting 10,11 & 12 which are rated 0-10 points.*

Quality Evaluation

Project

Applicant

QUESTION	RATING						SCORE
	0	1	2	3	4	5	
1 Firm's History					✓		4/5
2 Evaluation of Assigned Personnel					✓		4/5
3 Related Experience;							
a. Design Services		✓					1/5
b. Contract Administration		✓					1/5
c. Similar Contracts				✓			3/5
d. Partnering			✓				2/5
e. Rethinking Construction				✓			3/5
f. Lean Engineering	✓						0/5
4 Familiarity of local area geography and facilities						✓	5/5
5 Ability to relate to project requirements			✓				2/5
6 Project Methodology				✓			3/5
7 In-house Resources		✓					2/5
8 Responsiveness to Project Team Concerns						✓	5/5
9 Attitude to team building and culture						✓	5/5
10 OVERALL FOR INTERVIEW				✓			7
11 TOUR PROJECT SITE				✓			5/10
12 TOUR APPLICANTS PLACE OF WORK						✓	8/10
TOTAL							60 /100
TOTAL %							60%

Reviewer Name

Form STT 7: STT Scoring Scheme

The following may be used to evaluate the overall score of the applicant's selection packs. The scoring scheme suggested below and in STT Form 8 is provided purely as an example and is not meant to be prescriptive. When developing the selection process the Selection Panel should consider the importance of each of the elements in stage 1 and 2 of the selection process and weight the scoring mechanism accordingly.

Scoring Scheme

SELECTION PACK ELEMENT	FORMAT	POSSIBLE RANGE OF MARKS		QUALIFYING LEVEL
		PER QUESTION	PER ELEMENT	
Questionnaire	8 questions, one for each selection factor	-100 to +100 marks	-800 to +800 marks to be divided by 8 (number of questions) to form a range from -100 to +100 marks	20 marks
Statement of quality	25 requests for information	0 to 4 marks per question	A total of 100 marks	50 marks
References	Form STT 5 used 15 questions	0 to 10 marks per question	A total of 150 marks per reference received back. To be totalled and divided by number of references received. Producing an aggregate range of 0 to 100 marks.	50 marks
			STAGE 1 REQUIRED QUALIFYING SCORE	120 MARKS

Form STT 8: STT Summary Form

STAGE 1									
SELECTION PACK ELEMENT	WEIGHTING (FOR SECTION)	APPLICANT NUMBER AND NAME							
		1 NAME		2 NAME		3 NAME		4 NAME	
		SCORE	SCORE WEIGHTED	SCORE	SCORE WEIGHTED	SCORE	SCORE WEIGHTED	SCORE	SCORE WEIGHTED
A Questionnaire	2.0	25.4	50.8	8.94	17.88	27	54	10.55	21.1
B Statement of Quality	1.0	73	73	71	71	86	86	56	56
C References	1.0	52	52	25	25	60	60	29	29
TOTAL	4.0	150.4	175.8	104.9	113.9	173	200	95.55	106.1

PROCEED TO STAGE 2?			✓		×		✓		×
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STAGE 2									
D Interview	4.0	60	240			32	128		

OVERALL SCORE	8.0	210.4	415.8			128	328		
RANK			1				2		

Selection Panel Members

Membership of CIC (as at May 2005)

FULL MEMBERSHIP

ABE	Association of Building Engineers
ACA	Association of Consultant Architects
ACE	Association for Consultancy and Engineering
APM	Association for Project Management
APS	Association for Project Safety
BIAT	British Institute of Architectural Technologists
BIFM	British Institute of Facilities Management
BRE	Building Research Establishment
BSRIA	Building Services Research and Information Association
CEBE	Centre for Education in the Built Environment
CIBSE	Chartered Institution of Building Services Engineers
CIOB	Chartered Institute of Building
CIRIA	Construction Industry Research and Information Association
DSA	District Surveyors Association
GF	Ground Forum
ICE	Institution of Civil Engineers
ICES	Institution of Civil Engineering Surveyors
ICWGB	Institute of Clerks of Works of Great Britain
IHIE	Institute of Highways Incorporated Engineers
IHT	Institution of Highways & Transportation
IMBM	Institute of Maintenance and Building Management
IPHE	Institute of Plumbing & Heating Engineering
IStructE	Institution of Structural Engineers
LI	Landscape Institute
NHBC	National House-Building Council
RIBA	Royal Institute of British Architects
RICS	Royal Institution of Chartered Surveyors
RTPI	Royal Town Planning Institute
SCI	Steel Construction Institute
TSA	The Survey Association

ASSOCIATE MEMBERSHIP

ACAI	Association of Consultant Approved Inspectors
ACostE	Association of Cost Engineers
ACED	Association of Civil Engineering Departments
ACBS	Association of Consultant Building Surveyors
BACH	British Association of Construction Heads
CHoBE	Council of Heads of the Built Environment
CHSG	Construction Health & Safety Group
CIMCIG	Chartered Institute of Marketing Construction Industry Group
CICA	Construction Industry Computing Association
COTAC	Conference on Training in Architectural Conservation
CQSA	Consultant Quantity Surveyors Association
FoB	Faculty of Building
FPS	Federation of Property Societies
ICM	Institute of Construction Management
RSME	Royal School of Military Engineering
SCHOSA	Standing Conference of Heads of Schools of Architecture
SCL	Society of Construction Law
SPONGE	(a network of young construction professionals focusing especially on sustainability)
TAG	Local Government Technical Advisers Group
TeCSA	Technology and Construction Solicitors' Association
TRADA	Timber Research And Development Association



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