

PRACTICE NOTE ON ECI CONTRACTS (X22)

ECI Option C procurement, setting the Stage 2 target price, and moving from Stage One to Stage Two

INTRODUCTION

Early Contractor Involvement (ECI) is a secondary option (X22) available for use with the NEC4 Engineering and Construction Contract (Options C or E). The Parties enter into a single two-stage cost reimbursable contract for a collaborative process to develop the project, including design and planning for construction before advancing to the main construction stage. Surveys and advance construction works may be carried out in the first stage of the contract. This note is based on the *Contractor* being responsible for the design and assumes the use of an ECC Option C contract.

This practice note gives advice on best practice relating to the key aspects of preparing and procuring an ECI contract, together with advice on the setting of the total of the Prices (commonly known as the target price) for Stage Two of the contract.

CHARACTERISTICS AND BENEFITS OF ECI

ECI is suited to all types of construction projects but projects involving complex construction methodologies are considered to offer most potential benefit. Less experienced *Clients* should consider appointing experienced resources to supplement in-house capability for the development of ECI contracts. ECI supports the delivery of value for money (achieving the *Client's* objectives for minimal overall cost) for the following key reasons.

- a) **It creates a strong focus on the *Client's* objectives.** ECI focusses the delivery team on the *Client's* objectives from the outset, including improved value for money, delivering business case benefits, improved safety and quality, better environmental performance, quicker delivery, and more reliable budgets.
- b) **A dedicated construction planning and design stage.** The first stage of the contract allows the *Contractor* time to plan the delivery of the *Client's* key objectives by
 - integrating design and construction planning to optimise buildability,
 - allowing substantially more time, depending on the length of Stage One, to identify, avoid or manage construction risks and
 - enabling the proposed construction methodologies, programme, and cost estimate to be reviewed and tested before construction.

KEY SUCCESS FACTORS (KSF)

KSF1 - *Client* Capability. The *Client* needs to have access to the expert resources required to procure and manage an ECI contract. For example, the development of a reliable Budget from an early stage means that ECI may require commercial expertise to be acquired to support the *Client* team, but this can equally apply to any contractual approach.

KSF 2 - Design Strategy. The design strategy needs to identify the optimal maturity of the design required for ECI tender purposes. If the design is developed too far by the *Client*, it

may result in design work being abortive if the *Contractor* carries out redesign to achieve value engineering opportunities. Over design by the *Client* may also restrict the *Contractor* in seeking buildability improvements and better value for money solutions. The design strategy must also ensure that responsibilities for design throughout contract delivery, are clear and reflected in the contract documents.

KSF 3 - Adequate Budget. ECI with secondary option X22 requires the *Client* to set a Budget. The ECI Budget incentive aims to focus the *Contractor* on delivery within the *Client's* Budget. The development in Stage One of a design solution within the Budget is a key factor in determining whether the *Client* is willing to proceed to the construction stage. The Budget should

- be based on sufficient project development and definition to verify that the Budget is adequate and
- include an adequate overall allowance to cover both the *Contractor* risks and *Client* risks (potential compensation events).

KSF 4 - Pricing Information. The nature of ECI projects means that the design is not sufficiently mature to support the development of a tendered target price. Pricing Information is therefore required to be provided by the *Contractor* to set out the process for developing and finalising the target price for Stage Two during Stage One of the ECI contract. Further information is provided below.

PROCUREMENT OF AN ECI CONTRACT

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CONSIDERATION	ADVICE
Timing of <i>Contractor</i> Appointment	<p>The proposed timing of the ECI <i>Contractor</i> appointment in the project lifecycle has an impact on all aspects of ECI contract development and procurement. The ECI contract is most beneficial for clients that appoint the <i>Contractor</i> before planning procedures are completed as this provides the opportunity for better schemes to be developed and submitted for planning approval. However, ECI awards prior to completing the planning procedures may require more assumptions to be made in the production of the requirements and Budget, so it is a balance of risk and opportunity.</p> <p>An early procurement planning task should be to decide whether ECI is suitable for the circumstances and, if so, on the optimal timing of <i>Contractor</i> appointment. It is good practice to consult with the market regarding the key aspects of the proposed approach including the timing of <i>Contractor</i> appointment, contract options, and procurement schedule.</p>
Pricing Information	<p>The contract specifies that the <i>Contractor</i> must provide Pricing Information, but it is silent as to what it should contain in detail. Pricing Information requirements need to be carefully considered and specified by the <i>Client</i> to establish an effective basis for agreeing the target price. The <i>Client</i> should consider how it anticipates working with the <i>Contractor</i> through Stage One to identify the estimated cost of the work which will form the total of the Prices in Stage Two, and what information is needed to achieve this. Further advice is provided below.</p>
Submission Procedure	<p>The <i>Client</i> needs to prepare the submission procedure, which will set out how the <i>Contractor</i> is to prepare information, what is to be provided and when. As a minimum, the procedure should provide for submissions of proposals for parts of the Stage Two works as they are developed.</p> <p>The procedure should set out the level of detail that the <i>Client</i> expects to see in respect of the <i>Contractor's</i> design proposals, time, and cost impact. It needs to give clear timescales for both submission and acceptance of the proposals.</p>
Budget	<p>The Budget must be prepared by the <i>Client</i> and stated in the Contract Data. It is essential to the mechanics and ultimate success of ECI using X22 that the <i>Client</i> includes an achievable Budget within the Contract. The Budget should include an allowance for both <i>Contractor</i> risk and <i>Client</i> risk and inflation through to the end of the Contract. The Budget may be more difficult to determine for projects where the <i>Contractor</i> is to be appointed very early but this is offset by greater opportunity. In the determination of the Budget by the <i>Client</i>, supported by expert advisers where appropriate, particular attention must be paid to risk allowances to guard against over optimism, which can occur at the early stages of project development and design.</p>

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Budget Incentive	The <i>Client</i> will need to determine the percentage that will be paid to the <i>Contractor</i> of any savings made against the Budget. The percentage should be sufficient to incentivise provision of the <i>Contractor's</i> best team, thorough construction planning during Stage One, and efficient and effective risk management. The level of reward required to motivate the <i>Contractor</i> will vary between projects and will be influenced by factors such as the <i>Contractor's</i> share if Option C is being used. Care is needed in setting the level of incentive to make sure the <i>Contractor</i> is not better rewarded by collecting profit on turnover.
Time	The programme for the project will need to be considered by the <i>Client</i> including the <i>access dates</i> , Key Dates and Completion Date, which are required to be included in the Contract Data. These are the <i>Client's</i> forecast of the dates, but they may be changed during the submission procedure in Stage One. The submission at the end of Stage One confirms any agreed revision to these dates and includes them in the revised programme.
Award Criteria and Evaluation	The method for appointing the <i>Contractor</i> will have a significant impact on overall project success. ECI provides an opportunity to focus on technical criteria such as the <i>Contractor's</i> proposed people, processes, systems, and culture alongside the commercial criteria. The technical and commercial award criteria should combine to help identify the <i>Contractor</i> that is most likely to successfully deliver the project. It is good practice to place a high proportion of the overall score weighting on the technical award criteria (at least 70%). This is because the success of ECI is driven by the quality of the team and their approach to delivery, which will be essential to the achievement of value for money.
Technical Award Criteria	<p>The technical award criteria and questions should include investigating how the <i>Contractor</i> intends to deliver the <i>Client's</i> requirements on time and within the Budget. This could include the <i>Contractor's</i> proposed approach to design development; construction planning; health and safety; the identification and management of risk; the <i>Contractor's</i> proposed organisation; approach to collaboration; methods of construction; innovation; consideration of the approach to whole life value and net zero carbon; specific engineering challenges; <i>key people</i>; involvement of the supply chain; delivery processes; and the cultural and behavioural approach.</p> <p>The technical criteria should include a requirement for the <i>Contractor</i> to set out the detail of the procedure for using Pricing Information for building up the Prices for Stage Two. This should be developed based on a framework of principles, basic rules, guidelines, and any constraints as described by the <i>Client</i> in the Scope. The <i>Contractor's</i> detailed procedures set out in the Pricing Information should provide confidence that the Prices for Stage Two will adequately reflect the Defined Cost of the work plus Fee together with a realistic risk allowance.</p> <p>The part of the tender technical return that sets out tenderers' Pricing Information procedures must not include commercial data which will be gathered and assessed as part of the commercial award criteria. This will allow independent assessments of the technical and commercial elements of the tenderers' proposals.</p>
Commercial Award Criteria	<p>At ECI tender stage, the <i>Client's</i> requirements for the Pricing Information set out in the Scope should identify commercial information required in the process to develop the target price for Stage Two. The commercial information should be subject to competitive tension by forming part of the commercial award criteria set out in the IfT and which can include</p> <ul style="list-style-type: none"> • <i>fee percentage</i>, • Prices for parts of the works, such as typical sections of works and • schedules of rates/prices. <p>To assess the commercial submission, the <i>Client</i> will need to prepare a commercial model to determine the commercial scores and compare the tenders. As part of developing the commercial model a sensitivity analysis should be undertaken to avoid allocating an excessive weighting to any of the constituent commercial elements.</p> <p>In some cases, it may be possible for tenderers to develop an indicative target price to support the process for the further development of the Prices for Stage Two. This target could form part of the Pricing Information but would require further development during Stage One in accordance with the processes set out in the Pricing Information. If this approach is used, the technical submission of the Pricing Information should include supporting details of how the target was established. An indicative target price is not a tendered total of the Prices and should not be included in the Contract Data Part Two when the ECI contract is awarded. It should only be used as part of the criteria for contract award as the indicative target does not form a binding commitment; the final target price for Stage Two will be developed from the Pricing Information.</p>

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	The commercial information from the successful tenderer will be included in the Pricing Information or in the Contract Data Part Two, as appropriate.
Contract Award	<p>The Contract should include any tendered commitments made by the successful tenderer.</p> <ul style="list-style-type: none"> The Pricing Information should include any detailed procedures or commitments and commercial information to be used in the development of the target price during Stage One. Any other tendered commitments that are of value to the <i>Client</i> should be included in the <i>Contractor's Scope</i>.

PRICING INFORMATION

Pricing Information is the information and process set out by the *Contractor* to demonstrate how the target price for Stage Two will be established during Stage One. The process will need to give the *Client* sufficient confidence that at the end of Stage One it will lead to a successful agreement of the target price for Stage Two. A range of methods can be used to determine the target price for Stage Two including rules relating to open book accounting, tendered rates, actual costs of people together with Subcontractor quotations. The pricing process will be detailed by the *Contractor* during the tendering of the ECI contract. The *Client* must set out its requirements in relation to the Pricing Information and state any rules or constraints on how the process for setting the Prices for Stage Two is developed. The *Client's* requirements for the preparation of the Pricing Information should be included in the Scope and supported by clear directions in the instructions for tendering.

Key issues which the Pricing Information should cover include

- the source of the information used to establish the target price for Stage Two,
- the allowance for risks during the construction stage assessed and included within the target price,
- information on the procedure for the procurement of subcontracted work, and the process for establishing that prices for the *Contractor's* and Subcontractor's work are in line with market prices and
- any governance or assurance procedures the *Client* may require as part of the finalisation of the target price for Stage Two.

The submissions procedure should provide for the *Client* having access to the source of information used by the *Contractor* to assess the target price for Stage Two.

The Pricing Information should also include commercial information relevant to the pricing process that is not required as part of the Contract Data Part Two. This information will vary according to the level of detail for the project already developed at the time tenders are sought for the ECI contract. This may include

- prices for parts/elements of the contract, such as typical sections of works,
- schedules of rates/prices and
- people costs for the management of the construction stage.

Following the award of the contract, during Stage One the process for establishing the target price for Stage Two should be in accordance with the Pricing Information. The *Contractor* and *Project Manager* should fully collaborate in establishing the build-up of prices for the proposed design and construction solutions.

CONTRACT OPERATION**Stage One submissions**

The submission procedure sets out the details of what is to be submitted and when during Stage One. Submissions are required to include the cost and time impact on the Stage Two works and will typically include detailed proposals for that part of the works, forecast Defined Cost for the work and any impact on other elements of the Project Cost, and changes to the Accepted Programme.

For early submissions, the full details of the cost and time impact may be uncertain, but as the submissions progress this should become clearer as the combined effect of all submissions made to date is established. Regular submissions will help the *Client* to gauge progress and help to identify early any issues regarding the development of a solution within the Budget.

At the start of Stage One, the Accepted Programme is likely to contain little detail of what is proposed for Stage Two. Clause 32 requires regular revised programmes to be submitted for acceptance at the interval stated in Contract Data. Each revised programme submitted for acceptance shows any proposed changes to the Accepted Programme.

Similarly, the Activity Schedule (if an Option C contract) will have limited information for the Prices for Stage Two, but through the submissions' procedure changes are identified to include for forecast costs.

At the end of Stage One, a final submission is made giving details of the cost and time proposed for Stage Two. Regular submissions should have been made, so the final submission will be a collection of previous submissions and is likely to include little new material.

Acceptance of submissions

There should be a collaborative approach and regular discussion between the *Client's* technical adviser and the *Contractor's* designers during the development of the design. This should facilitate the acceptance of the *Contractor's* design proposals for Stage Two submitted for acceptance at the end of Stage One. The *Project Manager* establishes that the time and cost consequences of the design proposals have been assessed properly in accordance with the Pricing Information. There are limited grounds for rejecting the submission, but one is that the *Project Manager* is not satisfied that the Prices or any changes to the Prices have been properly assessed. If that is the case, the *Contractor* makes a revised submission taking account of the *Project Manager's* reasons for non-acceptance.

Once the design proposal is accepted, the *Contractor* can revise the design and submit it for the *Project Manager's* acceptance, but it would not give rise to a compensation event.

Budget changes

Clause X22 allows for changes to the Budget to be made both during Stage One and Stage Two. Changes are only made because of an instruction changing the *Client's* requirements stated in the Scope. Accordingly, the *Client's* requirements need to be carefully drafted to identify those matters which are essential.

Changes to the Budget are considered by the *Project Manager* and the *Contractor* following an instructed change in the *Client's* requirements. If no agreement can be reached on the change the *Project Manager* is responsible for its assessment as set out in X22.6. Before making this assessment, the *Project Manager* should first discuss the matter with the *Contractor* and the *Client*.

Proceeding to Stage Two

Once all submissions have been made, and if the *Contractor* has properly provided the cost and time impact of each submission, the process of agreeing the Prices for Stage Two ought to be straightforward. Assuming an Option C contract, the Activity Schedule will be built up as the submission progresses, and the total of the Prices will be the total of the activities in the Activity Schedule. If an Option E contract is used, the *Contractor's* forecasts of the Defined Cost plus Fee for its work will be the total of the Prices.

At this stage, the Accepted Programme will have been updated to show the activities of the *Contractor* in carrying out the Stage Two work. This Accepted Programme will show the *access date*, Key Dates, and the Completion Date for the works.

The final activity before the *Project Manager* issues a notice to proceed to Stage Two is that the *Client* must confirm that the works are to proceed. This allows for the internal governance of the *Client* organisation to confirm the commitment to construction. The time for this governance stage would have been specified by the *Client* and included within the Accepted Programme, and it is crucial that the time allowed be adequate for the procedures which need to be followed. The entire construction programme will have been developed on an assumed *access date*, and delays in giving access by the *access date* would be a compensation event and result in changes to the total of the Prices, the Defined Cost plus Fee, Key Dates and the Completion Date.

The *Project Manager* issues a notice to proceed when the requirements set out in X22.5 have been achieved. At this stage, the following information should be available

- the Scope on which the total of the Prices for Stage Two is based,
- the Accepted Programme which at this stage will include full detail of the Stage 2 works,
- changes to the Activity Schedule if an Option C contract,
- the total of the Prices,
- the *access dates*, Key Dates and Completion Date and
- the Budget.

Deciding not to proceed

If Stage Two is not to proceed, the *Project Manager* must issue an instruction removing that work from the Scope. This may happen for any reason, but examples could include

- if the total of the Prices for Stage Two cannot be agreed,
- if the work cannot be carried out within the Budget,
- changes to the *access dates*, Key Dates or Completion Date cannot be agreed or
- for other reasons the project is found no longer to be viable.

If the reason is that the Prices for Stage Two cannot be agreed, the *Client* is able to use the Stage One work and invite tenders for the remaining Stage Two work.