Cambridge South East Transport Phase 2

Outline Business Case
Commercial Dimension Addendum

Greater Cambridge Partnership

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1. Commercial Dimension Addendum

1.1. Introduction

This Commercial Dimension Addendum forms a part of the Outline Business Case (OBC) for Cambridge South East Transport Study Phase 2 (CSET2 scheme).

A Commercial Case (document reference no. 403394-MMD-BCA-00-RP-BC-0231 Rev C) was produced by Mott MacDonald as part of the OBC Stage in May 2020 (hereafter referred to as "OBC 2020"). OBC 2020 was produced to reconfirm the conclusions set out in the A1307 Haverhill to Cambridge (now known as CSET2) Preferred Options Report[1] developed by WSP in 2017. It focused on the detailed assessment of the options to find the optimum solution to address the problems identified.

This Commercial Dimension Addendum details the updates in relation to the commercial viability of the CSET2 scheme since the Commercial Case produced in 2020. The key Commercial Dimension elements in line with the Department for Transport (DfT) guidance[2] and the updates undertaken in this Commercial Dimension Addendum are detailed in Appendix A.

1.2. Output Based Specification

This section summarises the outputs which the CSET2 scheme is required to meet. Further details of the scheme objectives, outputs and outcomes of the CSET2 scheme are presented in the updated logic map in the Strategic Dimension (5212868-ATK-GEB-WHL_AL_SCHME-RP-TB-000001).

The outputs delivered by the CSET2 scheme are outlined below:

- New public transport route between the A11 and the Cambridge Biomedical Campus (CBC);
- A new travel hub near the A11/A1307/A505, to give more opportunity for sustainable travel in addition to the existing Babraham Road Park & Ride. The travel hub will also provide an easy interchange between different modes of transport such as walking, cycling, existing bus services, and access to the new public transport route by car; and
- New active travel facilities at the new travel hub including secured and covered cycle parking and waiting room with toilets.

1.3. Procurement Strategy

The below section presents an update from the OBC 2020 on the approach to the procurement, delivery and contracting model as detailed in GCP's Procurement Strategy (2022)[3] for the CSET2 scheme. The below sections present a summary of the Procurement Strategy (2022).

The Procurement Strategy (2022) for the scheme has been developed using best practice - making use of tools and guidance such as the Cabinet Office's Construction Playbook, HM Treasury Business Case guidance, Infrastructure Projects Authority guidance and internal GCP guidance. The Procurement Strategy (2022) encourages efficiencies by recommending the optimal delivery model for the scheme and use of previously tested procurement methods.

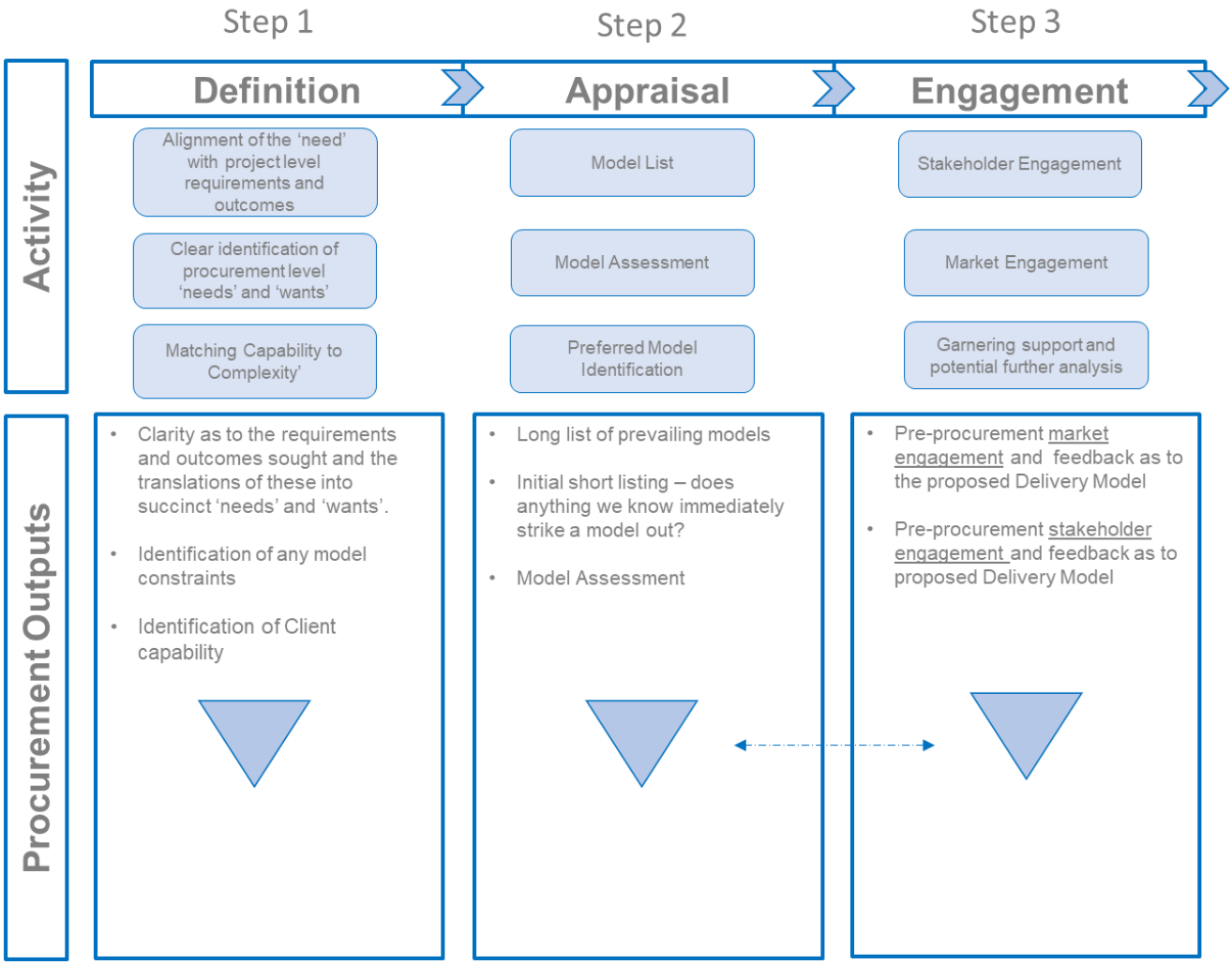
1.3.1. Delivery model

1.3.1.1. Methodology

The delivery model for the CSET2 scheme is determined through a three-step process, as shown in Figure 1-1. Step 1 (Definition) defines the scheme objectives and outputs for the CSET2 scheme as detailed in Section 1.2. Step 2 (Appraisal) considers potential delivery options to deliver these objectives and appraisal of these delivery options. The final Step 3 (Engagement) includes engagement with the market and wider stakeholders in respect of the Preferred Model. It is expected that this Engagement phase will be undertaken prior to development of the tender documents.

[1] A1307 Haverhill to Cambridge Preferred Options Report, REPORT No. 70012014-2016-04, February 2017
[2] https://www.gov.uk/government/publications/transport-business-case/transport-business-case-guidance
[3] https://www.greatercambridge.org.uk/asset-library/Sustainable-Transport/Public-Transport/Cambridge-South-East-Transport/Documents-2023/CSET-Ph2-Procurement-Strategy.pdf

Figure 1-1 - Methodology to determine the delivery model

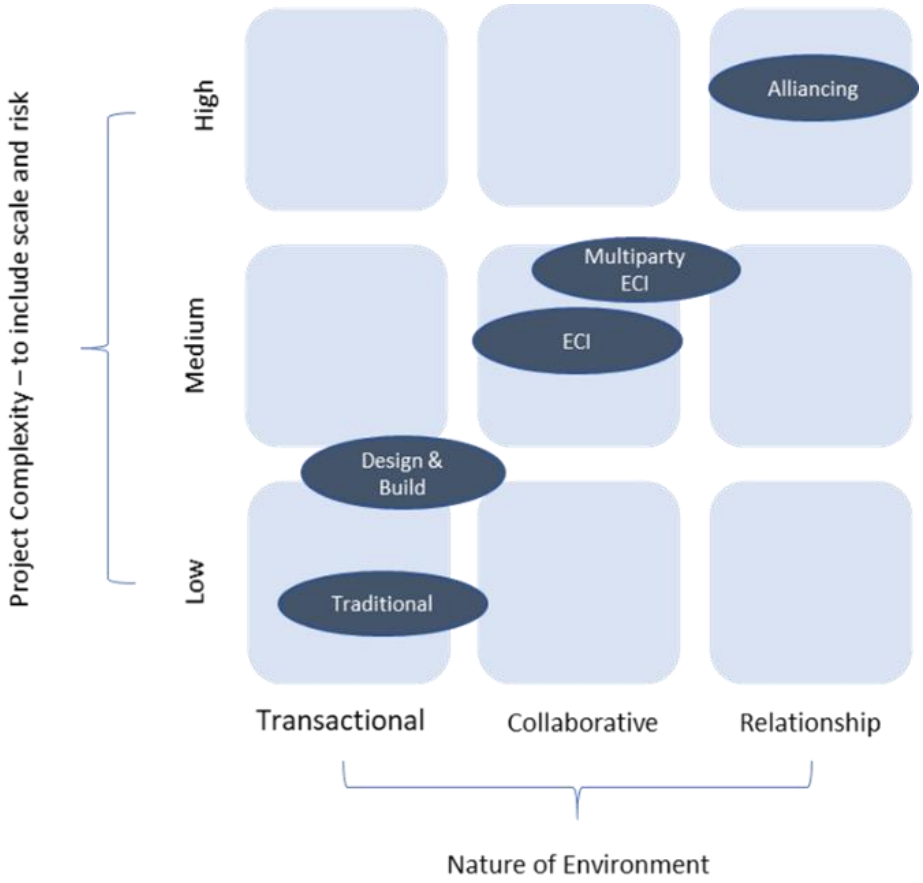


Source: GCP's Procurement Strategy (2022) for CSET2

1.3.1.2. Potential delivery models

The potential delivery models available to GCP with their complexity are presented in Figure 1-2.

Figure 1-2 - Potential delivery models and project complexity



Source: GCP's Procurement Strategy (2022) for CSET2

Of the available delivery models, the ones suitable for the CSET2 scheme based on the nature and complexity of the scheme are as below:

- Traditional delivery models
  - Traditional 1: this model sees the appointed contractor being responsible for construction only, with all key risks (e.g., physical conditions, statutory authorities, weather) being allocated/ transferred to the contractor.
  - Traditional 2: this model sees the appointed contractor being responsible for construction only, with all key risks being allocated to GCP.
- Design & Build delivery models
  - D&B 1: this model sees the appointed contractor being responsible for detailed design and construction.
  - D&B 2: this model again sees the appointed contractor being responsible for detailed design and construction, however, it envisages an early phase of Early Contractor Involvement (ECI) advice.

The Delivery Options Report (Appendix A of the GCP's Procurement Strategy) for the CSET2 scheme presents further details on the benefits and disbenefits of these delivery models.

1.3.1.3. Evaluation Method

The evaluation criteria utilised to assess the potential delivery models are set out in Table 1-1.

Table 1-1 - Evaluation criteria to assess the potential delivery models

	Criteria Detail
C1	Will the Delivery Model deliver within the Project's funding constraints?
C2	Will the Delivery Model deliver within the Project's programme constraints?
C3	Can the Model deal with the complexity of the Project as it now stands?

	Criteria Detail
C4	Does the client have the resources in-house to manage the Delivery Model - given the proposed model's complexity/ will the organisation be acceptant of the model on day one?
C5	Will the Delivery Model provide clarity around the key risk of design responsibility?
C6	Does the Delivery Model typically see an equitable and palatable allocation of key risks ("Key Risks") – physical conditions, weather, programme risk pertaining to statutory authorities, scope creep and scope change?
C7	Given the current position of the Project within the project lifecycle, is the Delivery Model capable of taking on the Project in its current state?
C8	Is the Delivery Model going to deliver on local and national policy objectives, e.g., Social Value, the use of MMC, Digitalisation, Net zero and so on?
C9	Is the Delivery Model capable of managing change should it be required – for whatever reason, be that technical, stakeholder driven, legislative driven etc.

Source: GCP's Procurement Strategy (2022) for CSET2

Each delivery model was considered against each of the above criteria, with a score of High (5), Medium (3) or Low (1) being given.

The analysis of each delivery model was conducted twice (x2). Firstly, it was done based on 'principle' knowledge around the models – essentially the establishment of a baseline position for each model. Thereafter that assessment was repeated, calibrating the scoring to take account of material factors.

The material factors used to calibrate were as follows:

Table 1-2 - Calibration - Material Factors

	Material Factor Detail
MF1	Market intelligence - knowledge of the civil/ infrastructure sector and what is and is not palatable in the market at present
MF2	Market intelligence – knowledge of the behaviours prevalent across the civil/ infrastructure sector at present
MF3	Market intelligence – is true delivery against policy aspirations likely to materialise
MF4	Likely perception around the model, not only in the marketplace, but also at a local/ central government level across England and Wales – particularly should the Project be audited at a local or national level
MF5	Client risk appetite (consideration being given to GCP appetite for risk in the context of the Project)

Source: GCP's Procurement Strategy (2022) for CSET2

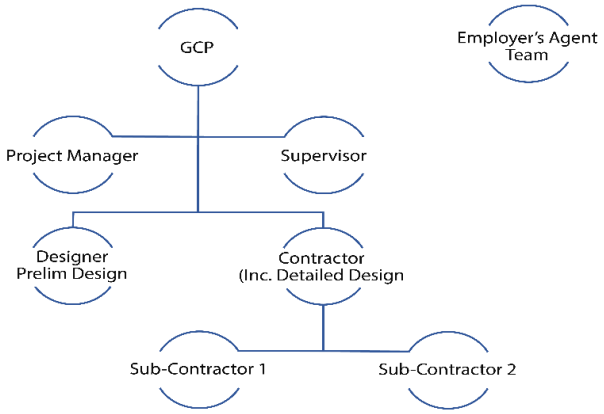
1.3.1.4. Evaluation results

Based on the assessments using the above criteria, the Procurement Strategy (2022) recommends the scheme to be progressed utilising the "Design and Build 2" delivery model.

Through further analysis of traditional v design and build procurement models, the Procurement Strategy (2022) acknowledges that there are likely to be programme efficiencies achieved through the design and build delivery model. This is due to the potential for overlap between the completion of detailed design and the construction stage. The contractor is likely to progress with pre-construction activities, mobilisation and early works while the design is being finalised.

The recommended delivery model is presented in Table 1-3. Further analysis and assessment of the recommended delivery model is found in Appendix A – Delivery Options Report of GCP's Procurement Strategy for CSET2.

Table 1-3 - Recommended delivery model for CSET2

Model Type	Key Characteristics (Summary)
Design and Build 2 	• Preliminary design has been developed by the GCP design consultants. • The contractor in turn is responsible for detailed design and construction. However, it is also typical for the contractor to take on responsibility for the preliminary design work upon appointment. • Risk around other matters such as statutory undertakers, engagement with complex stakeholders etc. would typically sit client side, i.e., the GCP in this context – but not always. • The model can be used with differing pricing mechanisms e.g., lump sum or target cost. • Typically, an Employer's Agent ("EA") would be appointed to help assist and likely administer the contract on the client side. The EA has no contractual link with the contractor. The EA would include the likes of Technical Design Assurance, Project Manager, Quantity Surveyor, Supervisor etc. • This model includes ECI advice, which has been provided by Milestone Infrastructure through the EIA and TWAO stages.

Source: GCP's Procurement Strategy (2022) for CSET2

1.3.2. Public procurement

Since leaving the European Union, the public procurement procedures in the UK are subject to World Trade Organization's Government Procurement Agreement (GPA). In order to ensure compliance with the GPA, and to safeguard against disruption, the 2015 Public Contracts Regulations (PCR) continue to apply – this will be the case until they are formally repealed and replaced with longer term, UK specific arrangements.

The Cabinet Office set out its proposals for shaping the future of public procurement legislation with the publication of its Green Paper: Transforming Public Procurement in December 2020, and published its feedback to the proposals in 2021. The Cabinet Office has confirmed that given the timescale around the legislative process, any new procurement regime is unlikely to come into force until 2023 at the earliest.

The CSET2 scheme will continue to comply with the PCR, while the GCP continues to keep abreast of the developments in public procurement.

1.3.2.1. Procurement route procedures

There are four recognised routes to market available for the procurement for the CSET2 scheme:

- **Open procedure** – Notice issued inviting all interested Contractors / Suppliers to submit a tender for consideration. Selection criteria can be included in the notice to identify the appropriate suppliers at the outset.
- **Restricted procedure** – Notice issued inviting all interested contractors to express interest in submitting a tender. Selection Questionnaire (SQ) issued to interested parties and evaluated prior to issue of formal Invitation to Tender to a restricted number of suppliers.
- **Competitive Dialogue procedure** – Designed primarily for complex Private Finance Initiative (PFI), Public-Private Partnership model (PPP) and major infrastructure projects. Contract requirements, procedures and proposed solutions can be discussed with shortlisted tenderers (minimum 3) who meet initial contract notice criteria.
- **Competitive Negotiated procedure** – Terms of contract can be negotiated with chosen contractors following competitive tender process.

Further details of the various procurement procedures available under the PCR can be found in Appendix D of GCP's Procurement Strategy (2022) for the CSET2 scheme.

1.3.2.2. Route to market recommendation

The Procurement Strategy (2022) recommends the CSET2 scheme to be procured using the "restricted procedure". Table 1-4 below sets out the high-level structure of a restricted procurement, and also sets out the list of documents necessary to be drafted at advert publication.

Table 1-4 - Restricted procedure

Procedure	Any limitation/ constraint to using the procedure	Stages	Minimum number of candidates	Likely level of competition	Key documentation for drafting
Restricted	None. Procedure can be used for all purchasing activity including works of the nature of the Project.	Prequalification/ selection Tender and evaluation	All interested parties can submit expressions of interest (i.e., submit a PQQ/ SQ). At least 5 pre-selected candidates to submit a tender	Prequalification likely to be high	Project Advert (PIN) Pre-qualification questionnaire (PQQ) Invitation to tender (ITT) Project Background New Engineering Contract 4 (NEC4) Engineering Construction Contract (ECC) NEC4 Scope NEC4 Activity Schedule

Source: GCP's Procurement Strategy (2022) for CSET2

The current anticipated programme for the CSET2 scheme will allow the timeframe for a restricted procedure and will most likely offer best value for money owing to the introduction of a competitive tendering stage for the detailed design and construction stages.

Further discussion around the use of existing frameworks will be considered if constraints around programme change – i.e., if the work in the overall GCP programme needs to be staggered to enable delivery.

1.3.2.3. Procurement method

This section sets out the procurement method for consultant / contractor services to deliver the CSET2 scheme. Consultant services extend to design and advisory services to GCP and contractor services include construction of the scheme.

The existing framework contracts available to GCP are set out in Table 1-5 alongside the advantages and disadvantages of each.

Table 1-5 - Advantages and disadvantages of existing framework contracts for appointment

Framework	Advantages	Disadvantages
Eastern Highways Alliance (EHA)	• Cambridgeshire County Council is a member of the EHA • Framework is tried and tested in Cambridgeshire. • The Framework is designed to meet the requirements of current and potential future Alliance members for project delivery, such as cost, quality and timescales.	• The Framework contract is due to expire on 31/03/24 though advised this will be re-tendered, extending beyond this date. • Framework is designed to deliver construction projects costing between £2m and £30m. Estimated construction cost of all the options are in excess of £95m. Schemes exceeding £30m might be acceptable subject to approval by the EHA Board. • CCC has a limit on value of work it can procure through this framework.
SCAPE Civil Engineering Construction Framework	• The Framework is available to local authorities and public sector bodies. • The SCAPE Group Ltd is an organisation originally established by numerous local authorities in 2006 delivering greater value for money within the procurement of major building works. Since then, they have diversified within other areas establishing frameworks for services, for example; QS services & project management. • Each designed Framework can accommodate construction projects costing between £50k & exceeding £100m plus. Furthermore, these are free to employers. • Savings via financial and time are achieved by not conducting an OJEU procurement exercise. • Ability to leverage same advantages of ECI; however, with only one supplier (Balfour Beatty).	• Framework based on a single source direct appointment (Balfour Beatty), i.e., no competitive tender. • By awarding a single supplier there is a potential the value for money main construction contract will be impacted. • Lack of competition when the design and build contract is let. • Restricts evaluation of approaches achieved via OJEU tender.
Cambridgeshire County Council's Highways Service Contract	• The delivery programme can be communicated to existing framework contractors (Milestone Infrastructure), and they can mobilise accordingly. • Economies of scale / efficiencies resulting from long-term understanding of local needs and policies. • Direct award on agreement of target cost thus increased efficiency in procurement process.	• Limited incentives and opportunities for the contractor to create efficiencies in delivery, thereby leading to limited cost savings for GCP. • Less direct control in relation to appointment of sub-contractors and suppliers.

Framework	Advantages	Disadvantages
Hampshire Generation 4 Framework Contract	• This Partnership Framework helps local councils to retain their distinctiveness while providing a framework, ensuring opportunities for the communities to work collaboratively towards their priorities. • Ensures local resources are used efficiently and delivering value for money. • The Framework is designed to deliver construction projects between £8m to £150m.	• The Hampshire G4 Framework is a long-term partnership, as such this can sometimes be challenging to manage. • A framework can provide restrictions for new suppliers that wish to provide e.g., innovative ideas etc. • Levy charge for using framework.
Pagabo Framework Contract	• A fast, fully OJEU compliant contracting mechanism for public sector organisations. • Transparency and value for money through Pagabo actively performance managing framework partners. • A no project, no fee approach from Pagabo, who do not charge a fee on pre-construction service agreements – only once your project officially starts on site.	• No guarantee of business even if a supplier is selected as an approved supplier. • Frameworks are unresponsive to change. There may be new suppliers and/or new solutions within the market that were not included when the agreement was set up. • Levy charge for using framework.
Crown Commercial Service (CCS)	• Ensures supply chains are engaged from the earliest stages of the project. • Ensures transparency and collaborative values flows down the supply chain to produce a supply chain that clients have confidence in.	• No guarantee of business even if a supplier is selected as an approved supplier. • Frameworks are unresponsive to change. There may be new suppliers and/or new solutions within the market that were not included when the agreement was set up.

Source: GCP's Procurement Strategy (2022) for CSET2

The availability of suitable frameworks for the appointment of contractors will continue to be reviewed by GCP and the preferred method for appointing contractors confirmed at the final business case (FBC) stage following further assessment.

1.3.2.4. Pre-procurement market engagement

GCP's Procurement Strategy (2022) highlights that market consultation is undertaken for the proposed route for procurement – both in terms of the delivery model and contractual model to be deployed. A dialogue with the market pre-procurement can help identify potential opportunities for improvement to proposals (or indeed innovative ideas).

The Procurement Strategy (2022) recommends engagement to be conducted using the following measures:

- Openly announcing the preliminary market engagement via the publication of a Prior Information Notice (PIN) on the UK government's portal;
- Giving bidders enough time to be able to organise attending such an event; and
- The sharing of information about the findings of market engagement post holding the event, again giving providers enough information after the event to make meaningful use of the information.

It is also recommended that there are three stages to the engagement process:

- **Stage 1** - an event to kick off the engagement where aspects such as the nature of the project, programme, proposed procurement etc. can be set out.

- **Stage 2** - more detailed engagement with bidders to be had on a one-to-one basis, focusing on procurement/commercial and technical matters.
- **Stage 3** - an opportunity to be afforded to bidders to come back in writing regarding matters, post Stages 1 and 2.

The resulting findings from the above engagement process will be fed into the Procurement Strategy (2022).

1.3.3. Procurement Timescales

The key dates for the procurement timelines based on the latest programme are set out in Table 1-6.

Table 1-6 - Key dates for procurement

Key activities	End Date
Publish Prior Information Notice (PIN)	February 2024
Pre-procurement Market Engagement	May 2024
Publish SQ	June 2024
Tender Period	June 2024 – December 2024
Contractor Appointment	December 2024
Contractor Detailed Design and Construction	December 2024 – August 2027

1.3.4. Lessons learnt

The procurement process of the CSET2 scheme will incorporate lessons learned from previous projects. A lessons learnt session was held for OBC 2020. Learnings on the following themes were discussed:

- Programme
  - the need for a proactive rather than reactive programme
  - early preparation before fixing a TWAO application/submission date,
- Reviews, Meetings & Preparation:
  - the need for value engineering workshops throughout the process to ensure value for money and efficiency
  - the need for specialist legal support on-board early to help guide the process and identify possible legal challenges early
  - design constraints placed on consultants throughout the process should be reviewed as these may change
- Documentation:
  - the need for a document controller to manage the storage and sharing of all project documents,
  - the need for one shared area rather than multiple sites to work from
- Managing Cost Pressures:
  - ensuring cost estimation guidance provided to consultants is up-to-date
  - issues with level of contingency applied at the various project stages and balance between known costs and contingency
  - the need for more cost review stages built into the project rather than aligning them too closely to Business Case stages
- Stakeholder/Landholder Engagement:
  - Early engagement with key stakeholders and landholders, and keeping a decision log and/or design change requests log
  - Early engagement with authorities such as EA and Natural England
  - Linking with GCP Comms

A following lessons learnt session was held in September 2023 to discuss any issues of the project and lessons learnt from similar projects such as c2c.

1.4. Contract and Payment Mechanisms

Payment mechanisms under UK construction contracts are governed by Part II of the Housing Grants, Construction and Regeneration Act 1996 and the Scheme for Construction Contracts (England and Wales) Regulations 1998. All the forms of contract considered for this scheme have mechanisms which comply with this legislation.

The payment mechanism used is to a large extent determined by the form of contract selected and the level of risk to be apportioned to the parties.

1.4.1. Form of Contract

There are three forms of contract that have been widely used in the UK for major civil and highway engineering schemes over the last 20 years. These are commonly known as:

- Infrastructure Conditions of Contract (ICC);
- Joint Contracts Tribunal (JCT); and
- New Engineering Contract (NEC) published by the Institution of Civil Engineers.

The details of these are provided within the OBC 2020 Commercial Case. The preferred form of contract is NEC, and this Commercial Dimension Addendum presents the details of current form of NEC4 contract below.

1.4.1.1. Preferred Form of Contract

The preferred form of contract for delivery of the CSET2 scheme is NEC4 for the following reasons:

- Allows flexibility and agility and will stimulate good management across the project;
- Encourages co-operation between parties (other forms of contract more liable to create confrontation);
- Early warnings promote a proactive approach to risk resolution (other forms of contract do not include early warnings);
- More flexibility than ICC, which only provides for payment through re-measurement; and
- JCT contracts tend to be used for building contracts rather than civil engineering and highways contracts.

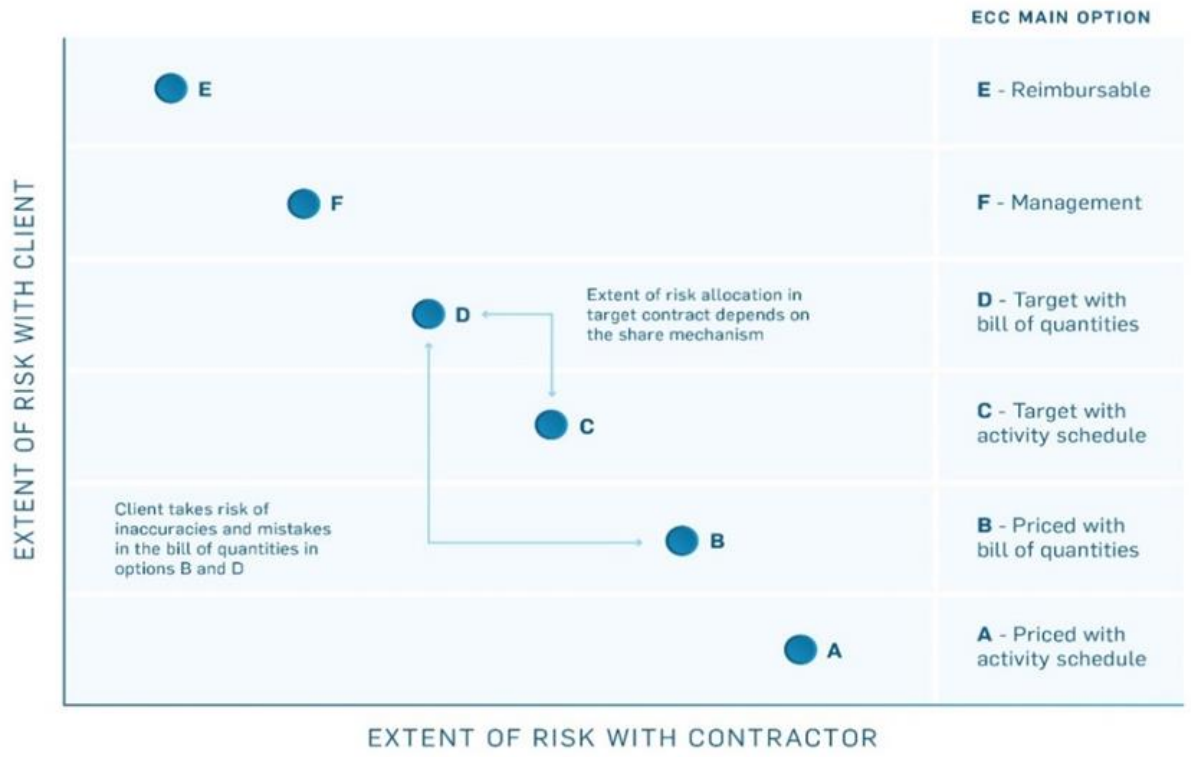
1.4.2. NEC ECC Contract

It is generally accepted that the NEC Engineering and Construction Contract (NEC ECC) should be used for the appointment of a contractor for engineering and construction work, including any level of design responsibility. The NEC ECC is packaged into six main options to suit the scope of works and appetite for risk between the employer and contractor, as presented in Figure 1-3.

The Procurement Strategy (2022) highlights the need to establish an appropriate risk profile that is acceptable to all parties and is critical to the success of the project. Neither success in procuring or delivering will be forthcoming if the balance of risk is incorrect. Having determined the contractual form to be used, it is now necessary to identify the appropriate main payment option – the correct selection is critical as it is this main provision that largely dictates the extent of risk that sits with the contractor and the extent of the risk that sits with the client.

Figure 1-3 shows that ‘Option A’ sees the majority of risk being sat with the contractor, while ‘Option E’ sees the majority of the risk sat with the client. Put succinctly, the former being appropriate for use when there is clarity and certainty as to the exact requirements and the latter being when the extent of the work is not fully defined.

Figure 1-3 - ECC options and analyses of risk



Source: GCP's Procurement Strategy (2022) for CSET2

Based on the complexity and the scale of the CSET2 scheme, the Procurement Strategy (2022) recommends using Option C (Target cost with activity schedule) contract, where the risk is shared through the pain-gain mechanism.

1.5. Summary of procurement options

The procurement options, route to market and form of contracts for the delivery of the CSET2 scheme are detailed in Section 1.3 and 1.3.4. The preferred procurement options detailed in these sections are summarised in Figure 1-4.

Figure 1-4 - Summary of procurement options

Preferred delivery model	•Design & Build 2 delivery model (Contractor responsible for detailed design and construction, with an early phase of ECI advice)
Preferred route to market	•Restricted tender
Preferred method for appointing Contractors / Consultants	•To be confirmed at the FBC Stage following further assessments
Preferred form of Contract	•New Engineering Contract 4 (NEC4)
Preferred NEC Contract conditions	•Option C (Target with activity schedule)

1.6. Summary

This Commercial Dimension Addendum provides updated procurement strategy in line with GCP's Procurement Strategy (2022) for the CSET2 scheme, in addition to the information provided in the OBC 2020 Commercial Case.

The recommended delivery model in the Procurement Strategy (2022) is the appointment of a contractor under a Design & Build contract, similar to the recommendation provided in the OBC 2020 Commercial Case.

The Procurement Strategy (2022) recommends "restricted procedure" as the preferred procurement route at this stage (OBC), similar to the recommendation provided in the OBC 2020 Commercial Case.

The preferred framework for appointment of a consultant remains to be determined.

The Procurement Strategy (2022) recommends that NEC4 contract is adopted for delivery, similar to the recommendation provided in the OBC 2020 Commercial Case. The recommended preferred contract conditions at this stage are a target cost contract with activity schedule as the financial risks are shared between the employer and the contractor in a way which should ensure the contractor is motivated to carry out the works as cost efficiently as possible.

Appendices

Appendix A. Key Commercial Dimension elements