



Removing the risk from procuring MMC

8 stages to promote risk in the delivery of OffSite Homes

1. Plan
2. Engage
3. Approve
4. Tender
5. Receive
6. Replan
7. Construct (or not construct)
8. Complete (or not complete)

Stage 1: Plan

Working from your planned (or unplanned) new build strategy:

- Select a site that you have found difficult to progress.

(Ideally this should have a history of failed attempts, but hearing that OffSite is the universal panacea for difficult sites, and one of your board members fancies the idea of pushing this Modern Methods of Construction lark, push ahead, secretly harbouring a mistrust of anything modern or 'smart'.)

- Talk to your contractor friends.

(They all say they've been building houses for decades and bricks and mortar are better than prefabs.)

- Push ahead, proposing a pilot scheme of four to eight houses to test the theory.

(The only thing a pilot scheme of 4 - 8 houses proves is that it doesn't work for 4 - 8 houses)

Stage 2: Engage Consultant

Engage a consultant (who may engage or recommend sub-consultants) with whom you have worked before on traditional construction.

- Brief him/her to sketch out a development proposal, based on previous new build specifications, layouts and costs.
- Reduce the programme to less than half of your previous projects, as you've heard that OffSite is quicker.

Stage 3: Approve Plans

Attend a series of design meetings, at which you should:

- Insist that the houses should not look like prefabs

(The proposed residents wouldn't like that.)

- Approve the consultant's sketch plans and commission him/her to apply for planning permission.
- Approve revisions suggested by the planning officer at the pre-planning consultation, reducing the density and ensuring that the proposal doesn't look 'bland'.

(The councillors wouldn't like that.)

Stage 4: Tender

Before receiving planning consent:

- Commission your consultant to obtain lump sum, single stage Design & Build tenders.
- Ensure that a mix of tenderers is encouraged to tender, from Main and Management Contractors to Supply Only and Turnkey Manufacturers.
- Engage a QS who has no experience of OffSite to cost monitor the project.
- Ensure that the project documentation places all risk with the successful tenderer, including planning and building regulations consent (which have not yet been obtained).
- During the tender process, avoid meeting with the tenderers, citing tendering process restrictions, but pass on the results of the conditional planning consent just received.

Stage 5: Receive Tenders

Receive tenders from three of the six candidates who expressed interest.

- As all tenders are above the original budget, commission your QS to conduct a ~~cost-cutting~~ value engineering exercise, without consulting the tenderers.
- If such an exercise is fruitful, proceed to PreContract Services stage with the ~~cheapest~~ most economically advantageous tenderer, who recommends a complete redesign to suite OffSite methods.

Stage 6: Replan

In a series of design meetings:

- Replan the original proposal to suite OffSite methods, insisting that the items 'engineered out' by the QS are reintroduced, as their omission doesn't comply with your organisation's minimum requirements.
- If fruitful, approve the final scheme and costings.
- If not fruitful, abandon the project and start again using traditional methods

(Advise the board that OffSite was a waste of time and money.)

Stage 7: Construct

If the proposal hasn't been abandoned:

- Proceed to contract with the selected tenderer.
- During the initial fabrication stage, review the agreed designs and introduce layout and specification changes.
- Consider abandoning project due to delays and cost over-runs.
- Consider litigation to recover damages.

Stage 8: Complete

If the project is completed:

- fail to engage in project reviews and lessons learned
- fail to monitor the project performance in use
- vow never to propose OffSite again.

Employ the services of an
OffSite Project Integrator
from the moment you commence
your new build strategy

“There are clear and tangible benefits from off-site manufacture for construction which make a compelling case for its widespread use.”



House of Lords, Science and Technology Select Committee Report
“Off-site manufacture for construction: Building for change” 19 July 2018

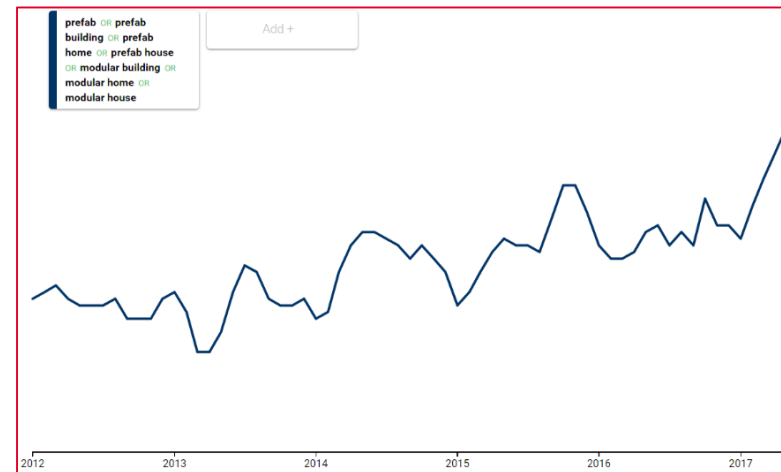


Introductory comments

“However, despite these benefits, the take up of off-site manufacture has varied and in certain parts of the sector has been somewhat limited.”



House of Lords, Science and Technology Select Committee Report
“Off-site manufacture for construction: Building for change” 19 July 2018



Introductory comments

“Much of the evidence we received painted a picture of a construction sector which is fragmented and lacking in trust.”



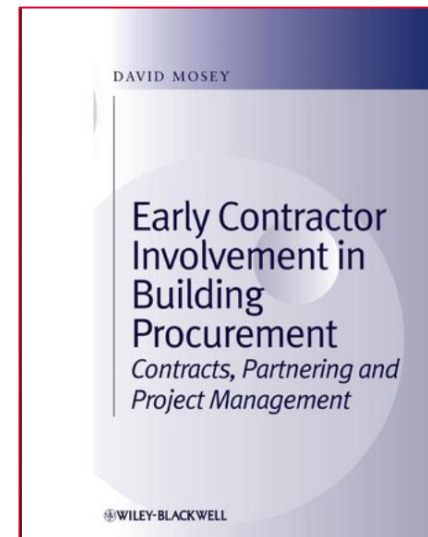
House of Lords, Science and Technology Select Committee Report
“Off-site manufacture for construction: Building for change” 19 July 2018



“Designers, contractors and suppliers must all have early involvement in a project for off-site manufacture to be successful.”



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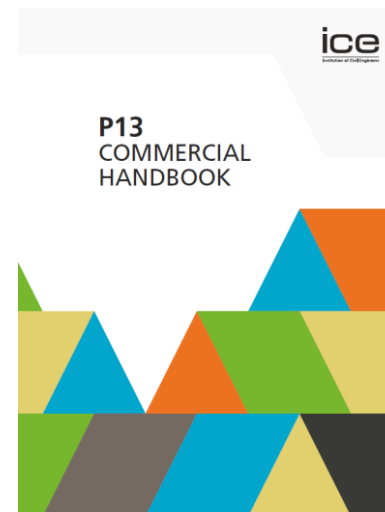


Introductory comments

“There is a need for a client’s professional team or advisers to adopt a different approach, as outlined by the Infrastructure Client Group’s Project 13”

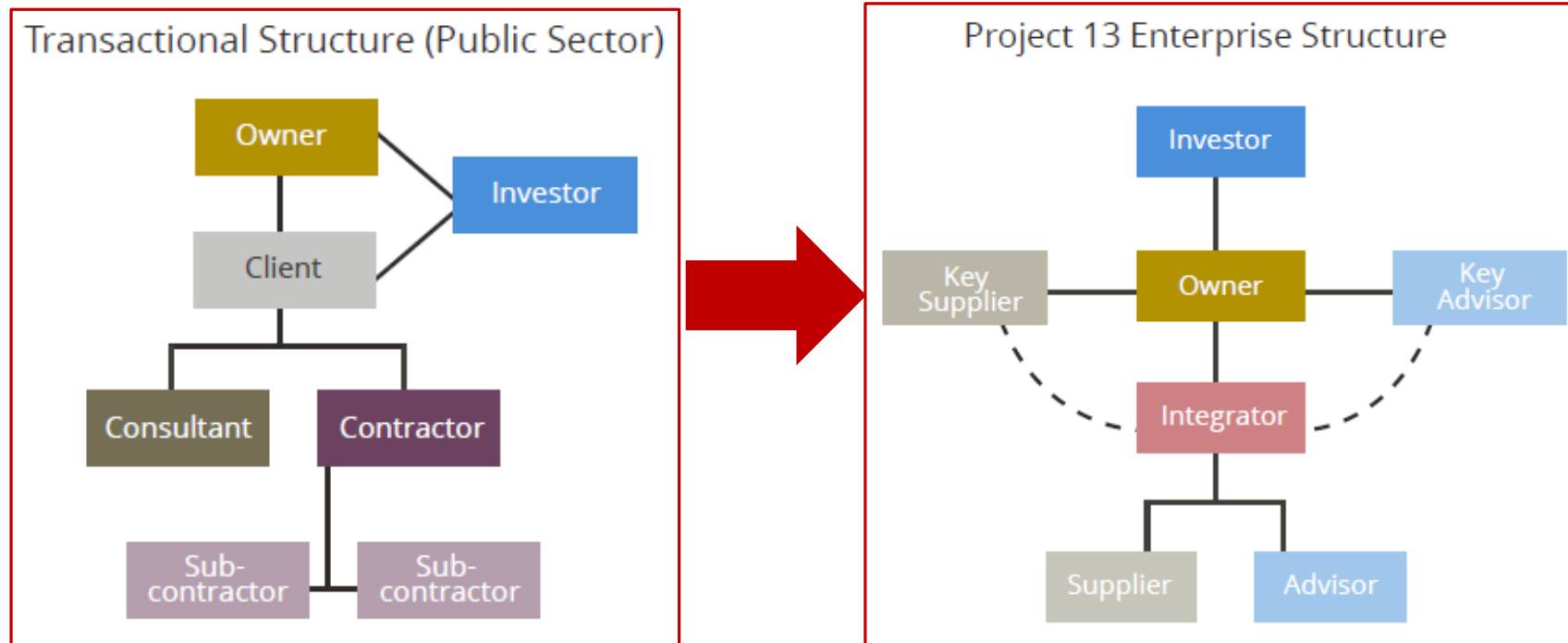


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Overview of Challenge Area

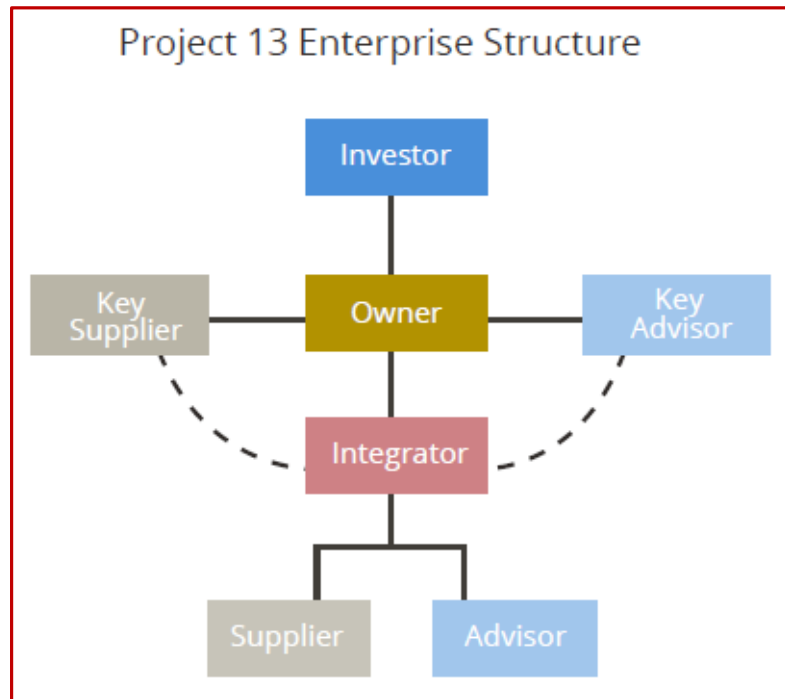
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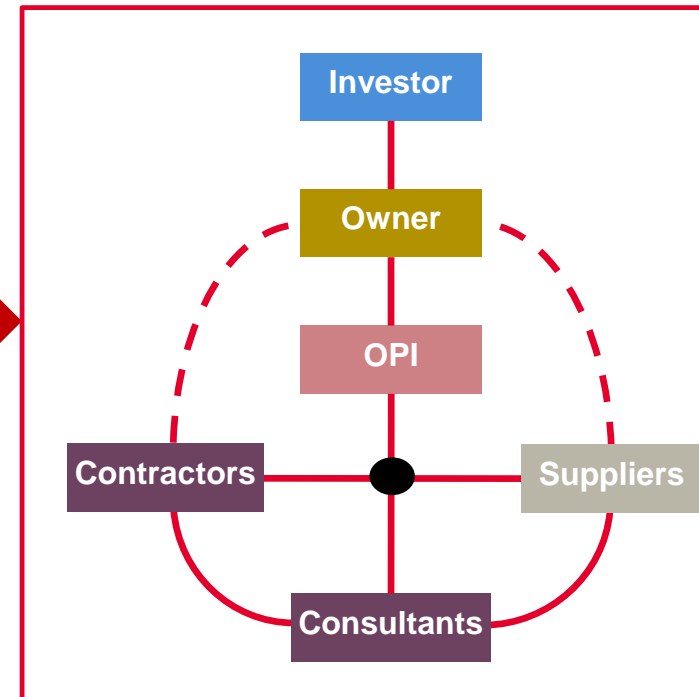
Institution of Civil Engineers, P13 Blueprint (May 2018)

Overview of Challenge Area

The way CPC sees this from a Client's project point of view is that of an OffSite Project Integrator (OPI)



Institution of Civil Engineers, P13 Blueprint (May 2018)



LHC (Jan 2019)

Integrator (Project 13)

➤ Long-term 'Integrator' role acting as:

- Poolers of demand
- Poolers of component-based supply by manufacturers
- Poolers of collaboration and standardisation

➤ Short-term 'OffSite Project Integrator' role:

- Smart procurement of single projects
- Leverages the skills and capability of the existing LHC framework

OffSite Project Integrator framework (LHC)

- i. Initiation and development
- ii. Land assembly services (if required at call-off stage)
- 0. Strategic Definition (if not previously addressed by the Client)
- 1. Preparation and Brief
- 2. Concept design management
- 3. Developed design management
- 4. Technical design management
- 5. Construction stage management
- 6. Handover and close out management
- 7. In use reviews

OffSite Project Integrator framework (LHC)

Will initially cover:

- Category 1 – Pre-Manufacturing – 3D primary structural systems (Volumetric)
- Category 2 – Pre-Manufacturing – 2D primary structural systems (Panelised)

As defined by the MHCLG Joint Industry Working Group on MMC

OffSite Project Integrator framework (LHC)

The framework requirements include:

- Cost Management
- Risk Management
- Performance Monitoring
- Compliance with statutory, regulatory and standards requirements
- Provision of business continuity and disaster recovery plan
- Provision of a service level agreement with each Client

Collaborate

Innovate

Integrate

What are the biggest obstacles to delivering MMC projects?

What would help your organisation to overcome these obstacles?