

Preparing an HMT business case for heat networks and procuring advisers

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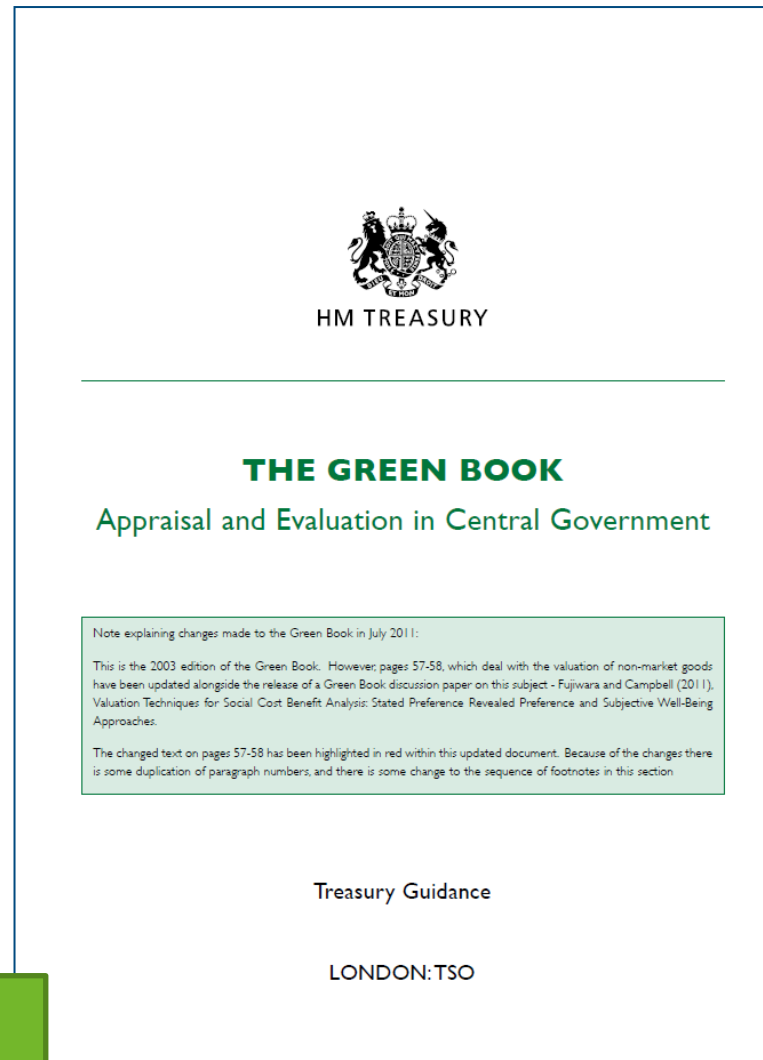


What is the Green Book?

- Sets out a clear and robust method for appraising and evaluating central government projects, programmes and policies;
- Optional for LAs to adopt Green Book;
 - however, where central government funding will typically require compliance
- It is a live document that goes through three iterations:



<https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government>



BUSINESS CASE DEVELOPMENT

BUSINESS CASES:



1. SOC

- Rationalise why and get internal seed finance for M&MP
- Essential to clearly set out the expected milestones and future professional advice needs

2. OBC

- Technically and economically feasible opportunity;
- Legal structures and sources of finance considered;
- Procurement strategy;
- Resource management;
- Budgetary implications considered

3. FBC

- Preferred technical solution has been procured;
- Assessments at OBC reassessed in light of the tender from the contractor(s);
- Approval sought from Members;
- If achieved – construction can begin!

PROJECT PROCESS



Mapping and master planning

Techno-Economic Feasibility

Detailed Project Development

Commercialisation

Mobilisation

Construction

Commissioning

Operations

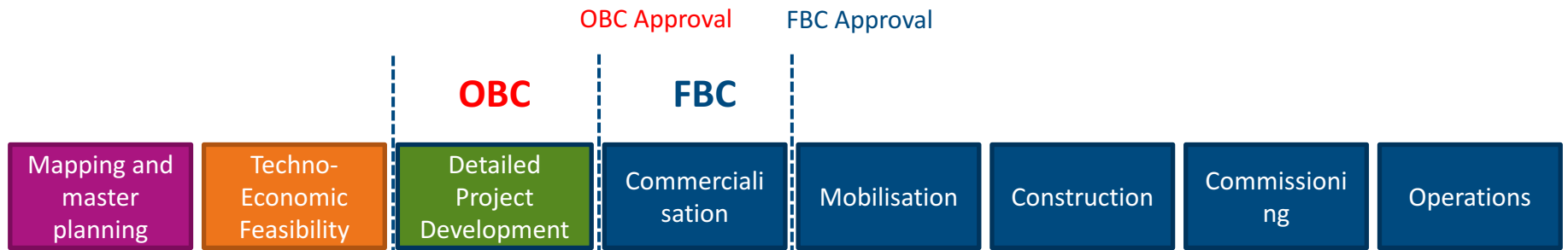


Timing of Outline Business Case (OBC)

Economic Case



OBC within the development process



OUTLINE BUSINESS CASE

- Core source for the Strategic Case

- Core source for the Economic Case

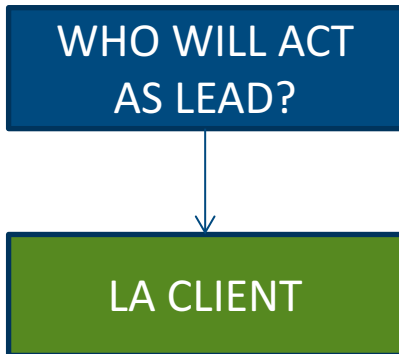
- Financial Case
- Commercial Case
- Management Case



Procuring advisers – HNDU suggested approach

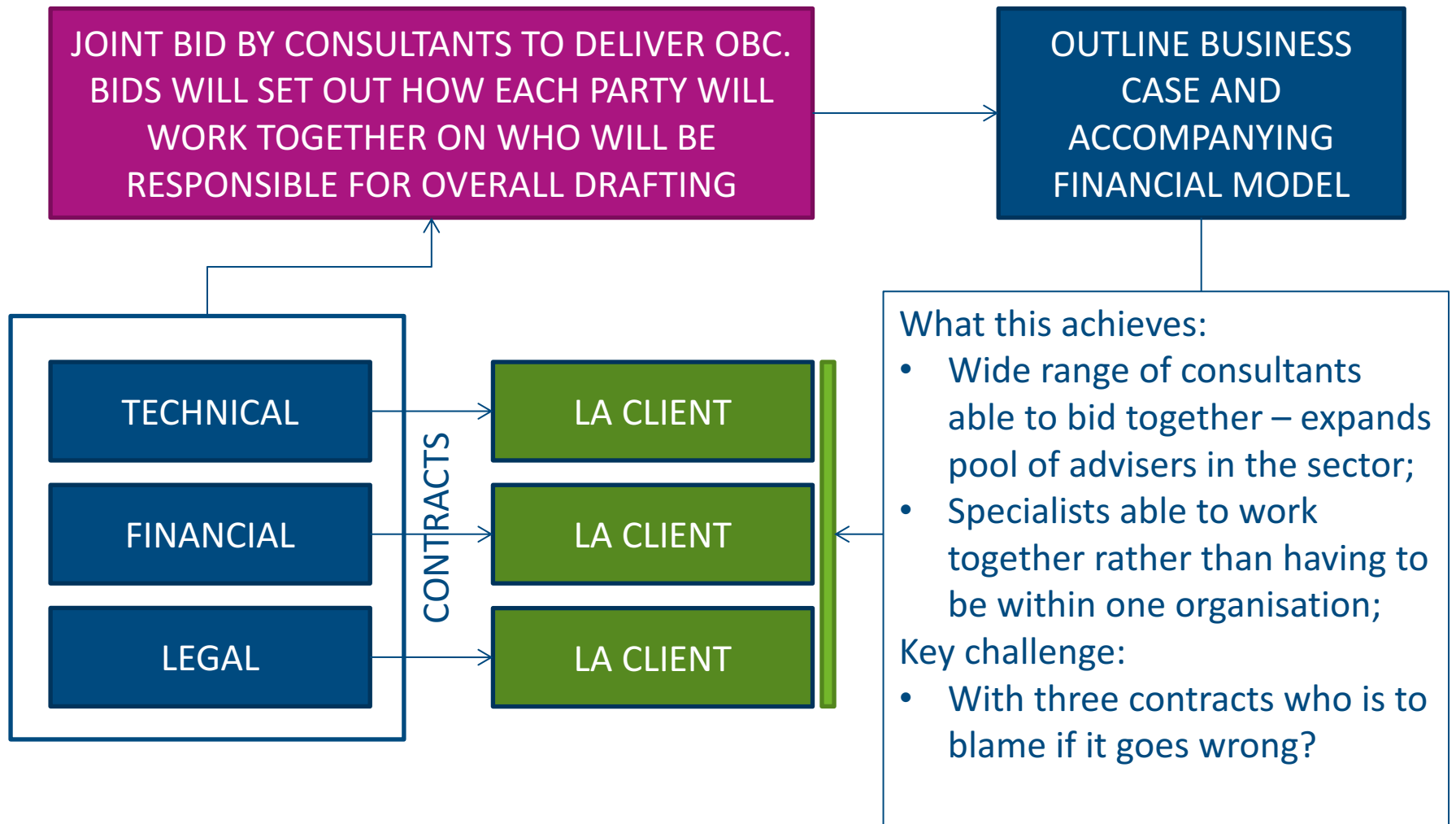


Challenges of multi-disciplinary project



- Technical lead?
 - Not a member of law society – PI risk as cannot have a duty of care to client on legal advice...
 - Relative to other advisers technical input into OBC is limited with techno-economic feasibility assessment already having been completed...
- Financial lead?
 - Same issue over legal as technical lead
- Legal lead?
 - Possible but in practice not something we have seen;
 - Informal feedback has been that fees as total of whole work package are smaller for OBC preparation – less inclined to be primary as a result.

HNDU proposed approach:



The 5 Cases at OBC and FBC



The 5 Cases Overview

Strategic Case

Essentially this is the original **Strategic Outline Case**, possibly updated for new Members' objectives (if there has been a change);

Economic Case

This is an **options appraisal** (pre-tax real NPV & SNPV are core metrics) and should compare the various potential clusters and combinations thereof within the geographic area assessed (M&MP) as well as the technological delivery options (Feasibility) **compared to a “do nothing” case.**

Commercial Case

Key commercial and legal considerations with sensitivities run. E.g. **tariff structure, procurement strategy, legal structures, sources of finance, regulatory requirements** (e.g. Licence Lite), warranties, **other contractual needs** (e.g. shareholder agreement, parent company loan agreement and their key terms etc.).

Financial Case

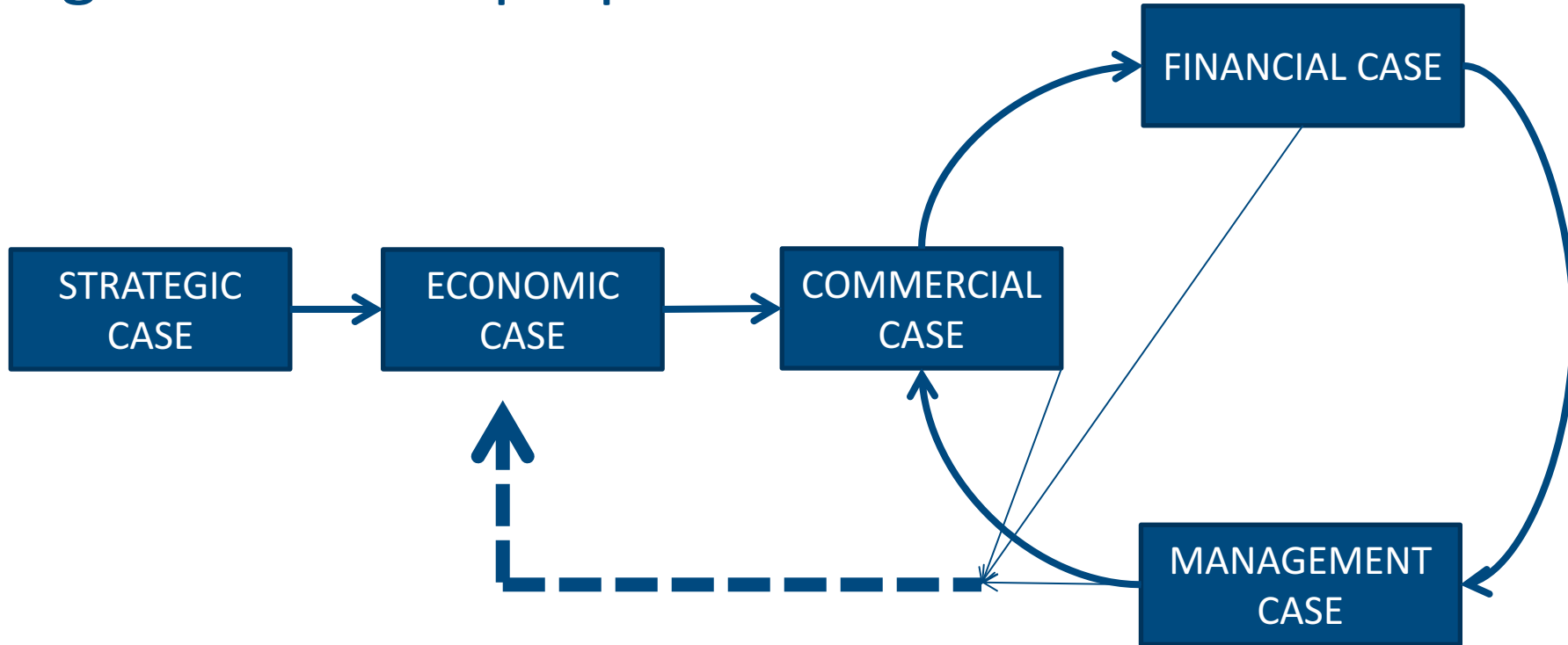
Financial analysis that overlays accounting, taxes, indexation etc. onto the legal structures considered in the commercial case and the different sources of finance that may be available (assessed through market engagement) to produce: **LA balance sheet implications, LA net debt implications, LA budgetary requirements** and **indicative investor returns.**

Management Case

Based on the proposed technical solution assessed in the economic case and the proposed procurement strategy and ongoing contract management what resource will need to be made available to make the project work.



Logical order of preparation



- At OBC the core work for the Economic Case should have been completed (techno-economic feasibility study);
- The preferred option in the Economic Case is taken forward to the Commercial, Financial and Management Cases;
- There needs to be a strong inter-relationship between the Cases – a weak OBC is one where the cases do not inform the others and have been prepared in isolation.
- In the event of a material change in circumstances it may be necessary to revert to the economic case.

Economic Case



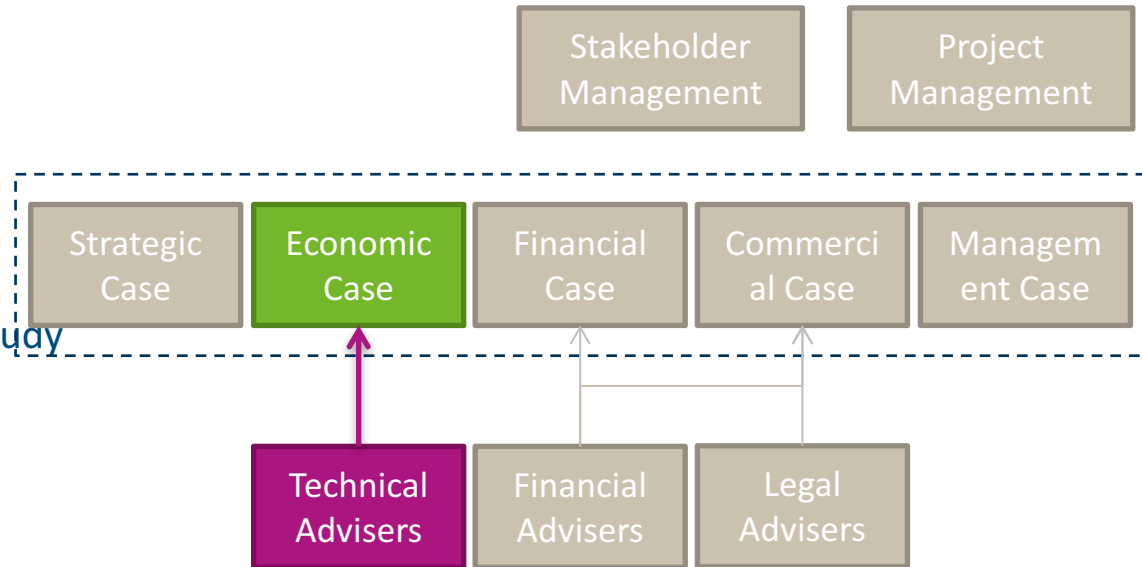
Overview of Economic Case

Who

- Technical consultants; or
- In house experts

What

1. Take techno-economic feasibility study and accompanying work;
2. Re-refresh may be necessary
3. If not already developed, establish counter-factual case;
4. Compare all options against counter-factual on NPV basis;
5. Compare all options against counter-factual on Social NPV basis (e.g. carbon impact, air quality, impact on residual charges etc.);
6. Evaluate qualitative pros / cons (e.g. job creation, regeneration, fuel poverty etc.);
7. Select preferred option to take to other cases.



**OUTCOME = PREFERRED
OPTION FOR DETAILED
ANALYSIS**

Techno-economic cash flow model (Economic Case)

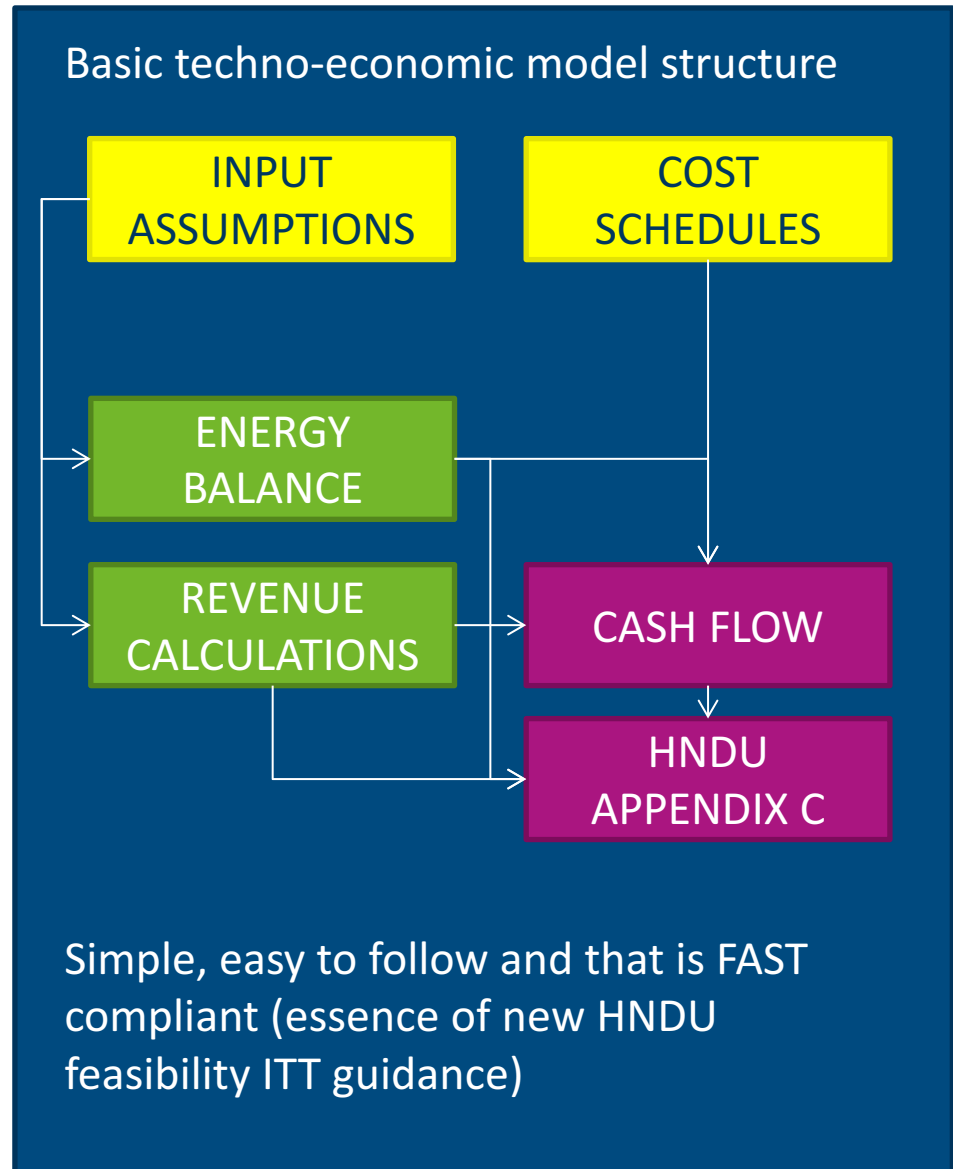
- Feasibility stage
- Pre-OBC but need to be thinking of the Economic Case
- Basic cash flow model => what does the project offer;

Do NOTs:

- **Do not** need full financial statements (just cash flow)
- **Do not** need financing solutions;
- **Do not** need legal structuring;
- **Do not need** corporation tax / business rates / VAT etc.
- **Do not** need indexation;

DOs:

- **Do** need real operating cash flows;
- **Do** need to understand operating sensitivities;
- **Do** need project IRR and project NPV at LA hurdle rate or else at the social discount rate



Commercial Case



Overview of Commercial Case

Who

- Legal consultants as lead;
- Financial consultants; or
- In house experts

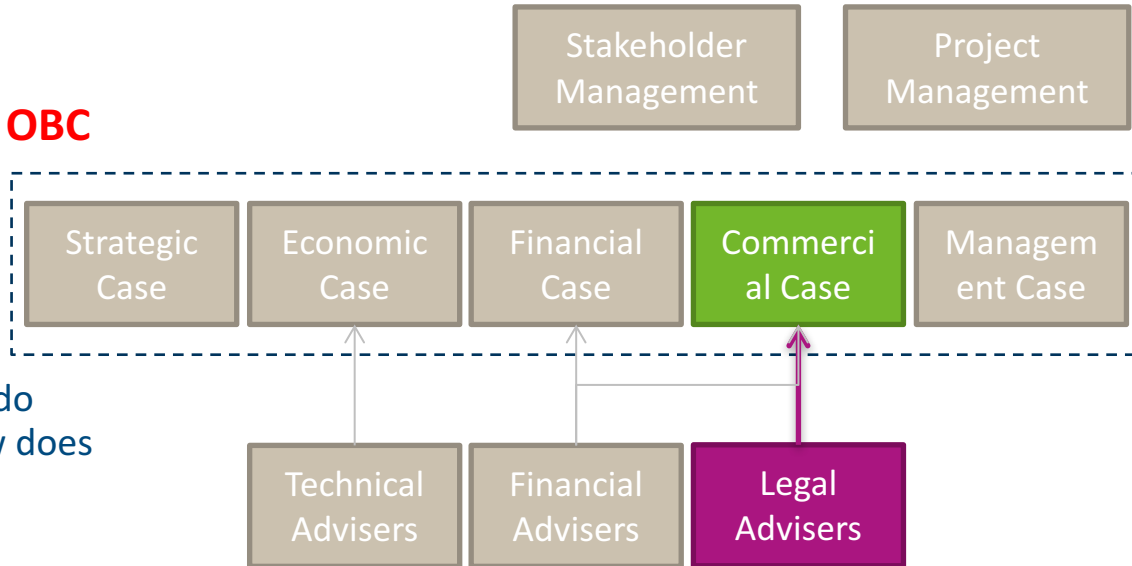
What

- Tariff structure and core HoTs for ESA;
- Legal structures – what key outcomes do they address? Incorporate when – how does this factor into procurement strategy?
- Procurement strategy considering:
 - Construction and O&M contract and terms (EPC with O&M separately procured / DBOM? Cost+ / PainGain / Fixed?)
- Shareholder agreement
- Warranties
- Connection agreements
- Easements / wayleaves, utility connections

Actions

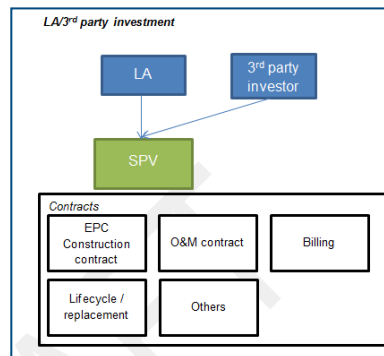
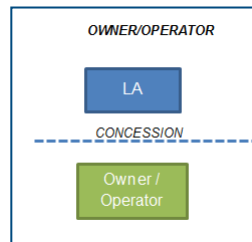
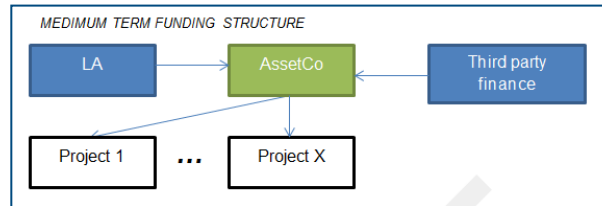
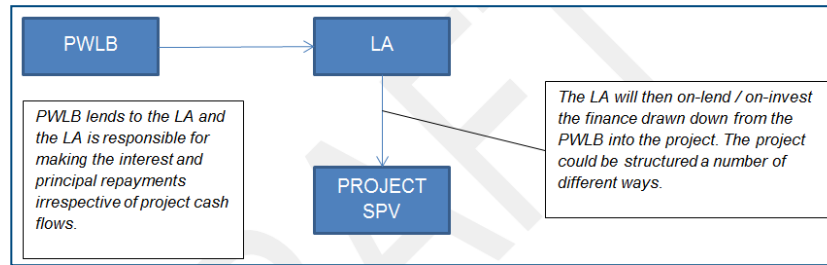
- Heads of terms with customers or at least MoUs should be under way;
- Soft market testing with finance and potentially DBOM / ESCos;

OBC

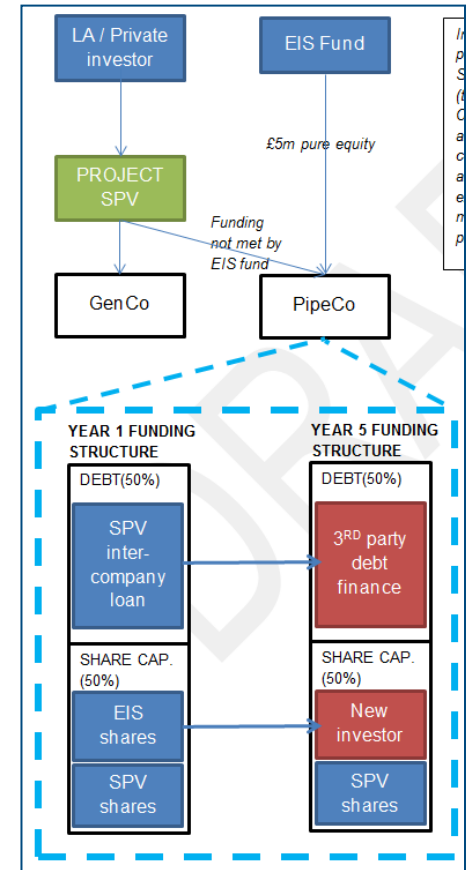


Legal Structures

- Separate session on this but need to ensure that the legal structures are designed to meet LA objectives
- For example:
 - Maximise ability to exit (either as divestment or by refinancing shareholder loans);
 - Push finance risk down to the project (e.g. bring finance in at project level with limited or non-recourse to LA);
 - Manage tax – e.g. Teckal structures;



Lots of structures!!!

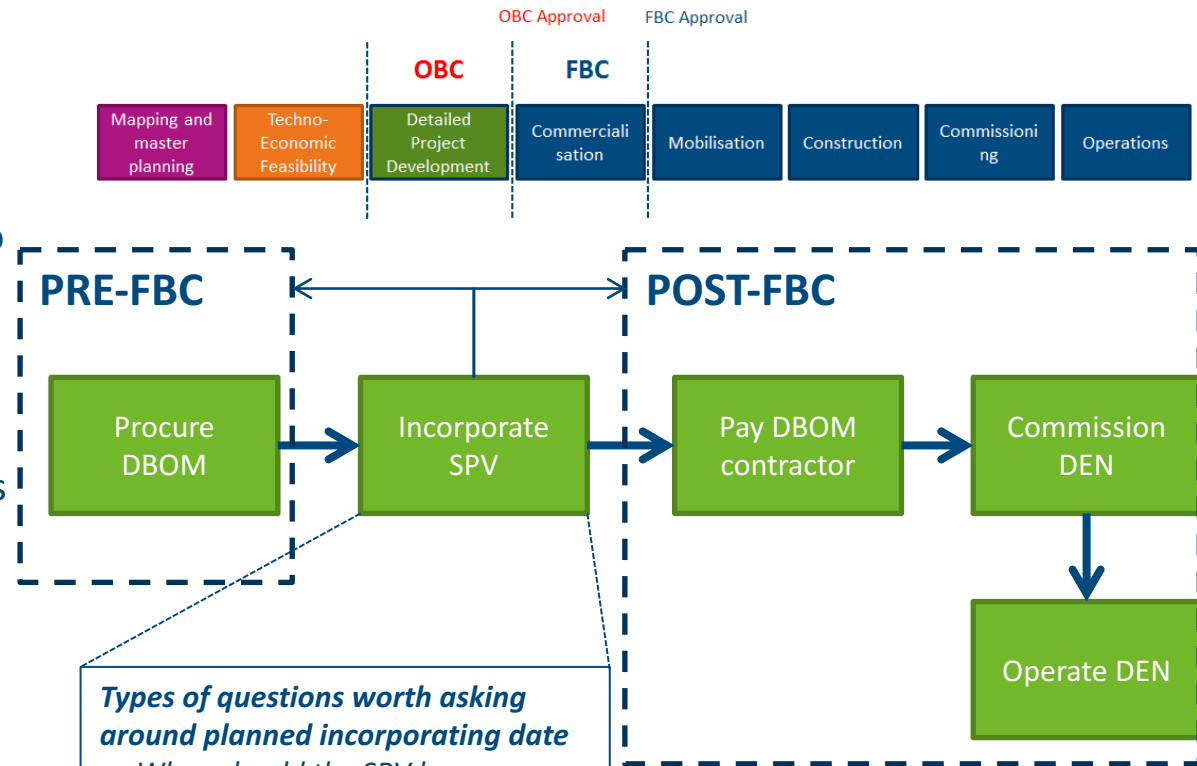


Procurement strategy

- The procurement strategy needs to set out a clear route to market.
- At OBC some soft market testing will have been done;
- By FBC the DEN should have been procured and, on the basis of the procurement, Members' approval sought to agree the terms with the, say, DBOM contractor;

AT OBC:

- Need to be considering the types of contract that most appropriate:
 - EPC + O&M? DBOM?;
 - Fixed price EPC but cost+ for O&M?
 - Would pain/gain share mechanism help manage contingency reduction?
 - Etc.



Types of questions worth asking around planned incorporating date

- When should the SPV be incorporated?
- What happens if this is delayed – who will be the procuring body?
- What are the implications for VAT recovery?
- What are the implications for budgeting? Etc.

Often will not need to model this but rather provide qualitative narrative in the Commercial case of the implications.

Operating performance

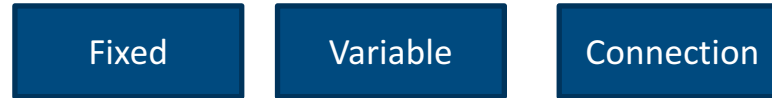
- What operating performance metrics will be used and how will these be factored into the O&M contract for service payments?
- What recourse (e.g. via warranties) will we have in the event that the commissioned asset is not to spec?
- Etc.



Customer Engagement and Tariff

- When and how often will you be engaging;
- At OBC should ideally have secured HoT with key offtake customers;
- How much protection does the proposed tariff structure provide to overall investor returns? E.g.
 - Indexation hedging – what's the exposure under the HoT?
 - How sensitive is IRR to demand (do we need to negotiate harder on fixed component)?
- What kind of contract duration is likely possible with different customers;
- How sensitive are returns to different connections being delayed or never connecting?
- Etc.

CORE INCOME



IDEAS BOARD:

SEASONAL TARIFF
STRUCTURING?

CUSTOMER
SEGMENTATION:
WHAT IS
REASONABLE AND
NEGOTIABLE?

TARIFFS WHERE
OPERATOR
CONTROLS
CONSUMPTION

Financial Case



Overview of Financial Case

Who

- Financial consultants; or
- In house finance specialists;

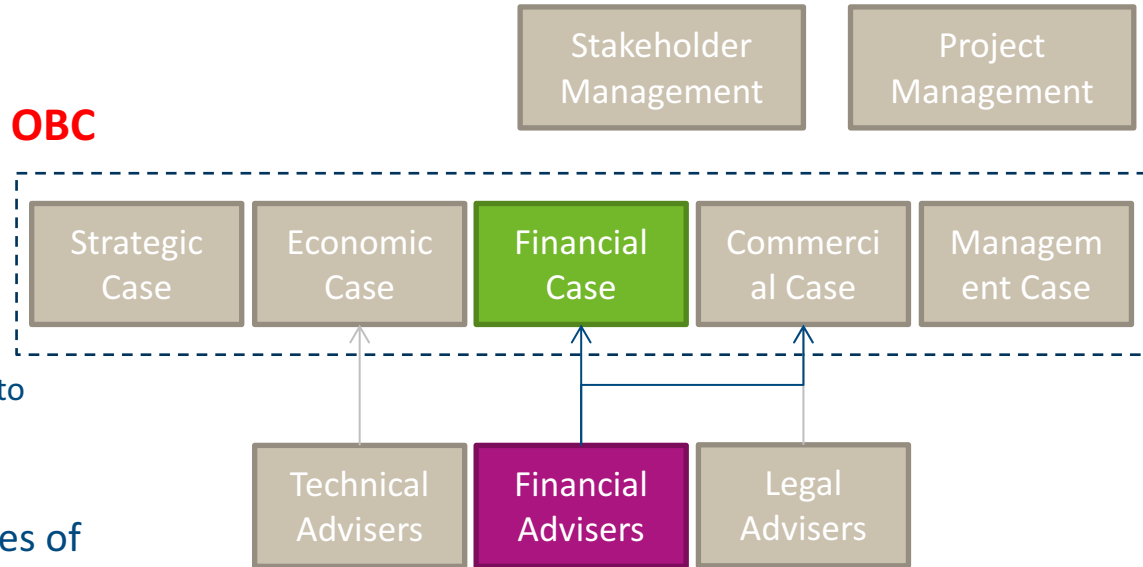
What

- Balance sheet implications of:
 - Legal structures considered (clear links to Commercial case) on LA balance sheet;
 - Ownership / levels of control
- Net debt implications to LA of sources of finance considered;
- Budgeting (revenue and capital) implications of project and sources of finance considered
- Detailed financial modelling

Actions

- Assess own borrowing limits;
- Soft market testing for sources of finance;
- s151 engagement

OBC



Procuring the OBC

- *There are significant challenges in wrapping technical / financial / legal work packages.*
- *A key issue is that financial advisers will often represent the larger portion of adviser fees for preparing OBC. They will not be able to sub-contract legal advisers as they cannot provide legal advice. This applies to technical advisers also were they to be lead.*
- *Recommended to procure each adviser separately but require a consortium bid with a lead consultant to collate deliverables.*

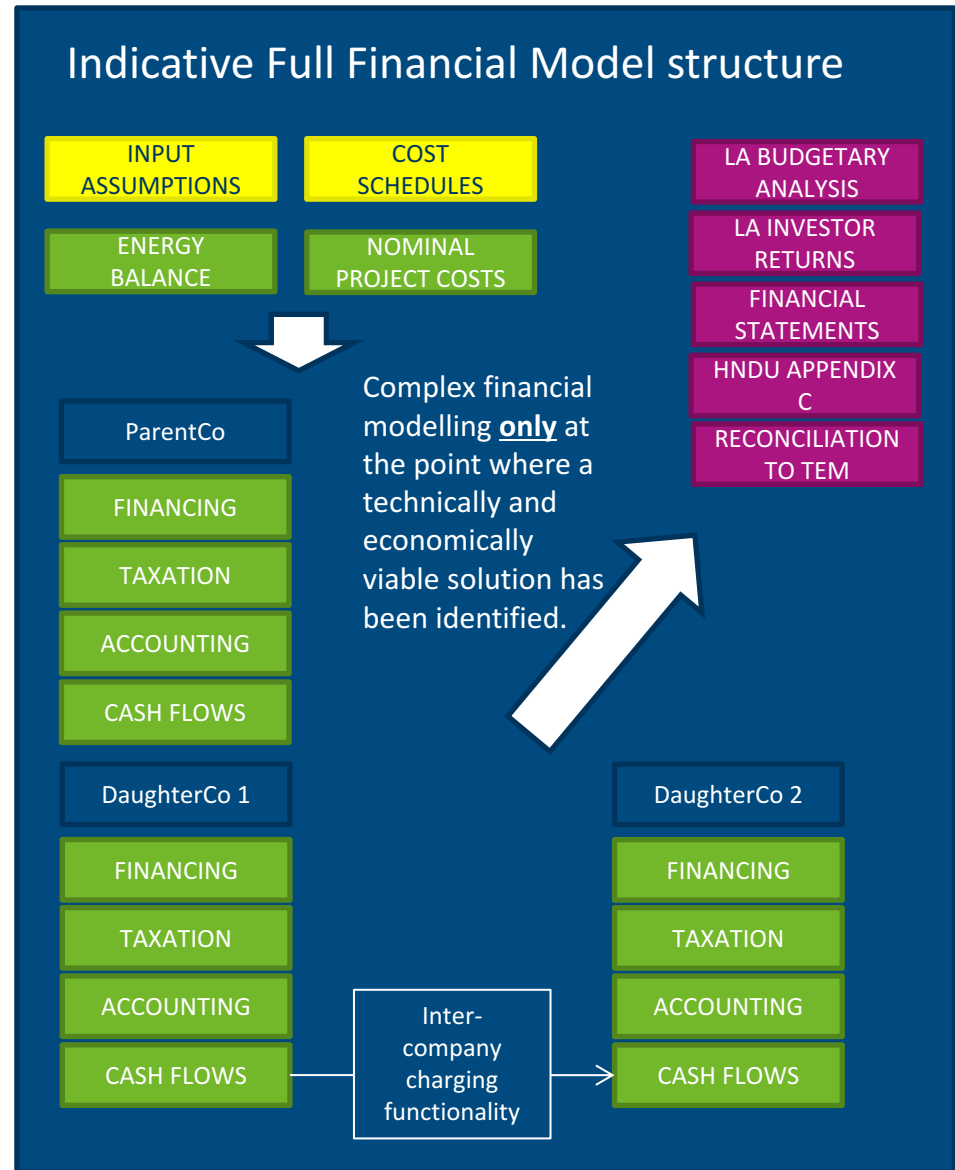


Detailed Financial Model (Financial Case)

- DPD / Financial Case
- Take through OBC approvals
- Detailed financial model to assess sources of finance, investor returns and impact of legal structures.

Key distinguishing attributes to TEM

- Tariff structure (minimum fixed / variable / connection / indexation link to underlying costs);
- Budgetary implications (LA balance sheet, net debt and cash budgeting);
- Assessment of accounting and impact on investor returns;
- Integrated financial statements;
- Corporation tax calculations;
- Business rates estimate;
- Environmental levies;
- Sources of finance;
- Legal structuring;
- Solving logic (tariff, returns etc.)

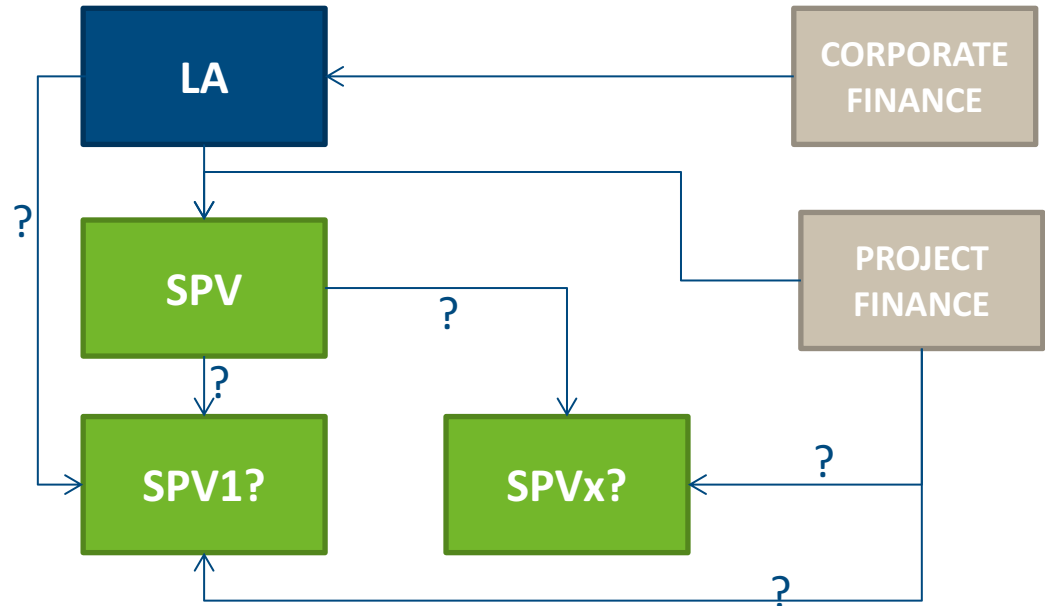


Sources of Finance

- A strong business case will **consider a range of sources of finance**; and
- **Soft market test** the extent to which different types of finance may be made available to the project and under what **indicative terms**;
- The legal structures considered will be assessed within the Commercial Case. The financial case should consider the type of finance that might be available the implications of such finance for LA:
 - Balance Sheet
 - Net Debt
 - Budgeting

Which option or options best meet LA objectives?

Third party finance funding model



Types of finance:

- *Corporate **debt** finance, e.g.*
 - *PWLB, European funding, LEEF/MEEF etc.*
- *Project finance, e.g.*
 - *Private equity (pure infra-capital, tax efficient, energy efficiency etc.) – this is a segmented market with different goals;*
 - *Lease finance (e.g. EC and associated plant);*
 - *Debt finance (however, almost certainly will require a PCG);*
- *Concession / ESCo model (possibly with LA as JV partner)*

Budgeting: capital vs revenue

- The financial case needs to look ahead at least over the next 3-5 years and assess the potential impact of the project for budgeting purposes;
- This should cover both committed funding and contingent funding

In examples:

- Corporate finance may be simplest but larger capital at risk;
- With a PE partner may have access to expertise, retain control (if required) and reduce capital at risk;
- With lease finance could retain full control of project but push finance risk down to the project – will come at a cost

100% Corp. Fin.	Y1	Y2	Y3	Y4	Y5
Capex (£m)	(0.5)	(1.0)	(1.0)	(0.5)	-
LA borrowing	0.5	1.0	1.0	0.5	
LA Debt Service	(X)	(X)	(X)	(X)	(X)

50% Private Equity	Y1	Y2	Y3	Y4	Y5
Capex (£m)	(0.5)	(1.0)	(1.0)	(0.5)	-
LA borrowing	0.25	0.5	0.5	0.25	
LA debt service	(Y)	(Y)	(Y)	(Y)	(Y)
Private equity	0.25	0.5	0.5	0.25	

50% Lease Finance	Y1	Y2	Y3	Y4	Y5
Capex (£m)	(0.5)	(1.0)	(1.0)	(0.5)	-
LA borrowing	0.25	0.5	0.5	0.25	
LA Debt Service	(Y)	(Y)	(Y)	(Y)	(Y)
Lessor acquires PPE	0.25	0.5	0.5	0.25	
Lease payments	(Z)	(Z)	(Z)	(Z)	(Z)

Questions / discussion