

TOOL A.5

SETTING INCENTIVES AND SHARED SAVING SCHEMES

1. INTRODUCTION

The purpose of this tool is to provide guidance through the process of establishing an incentive and/or saving sharing scheme to support the application of the BDB principles.

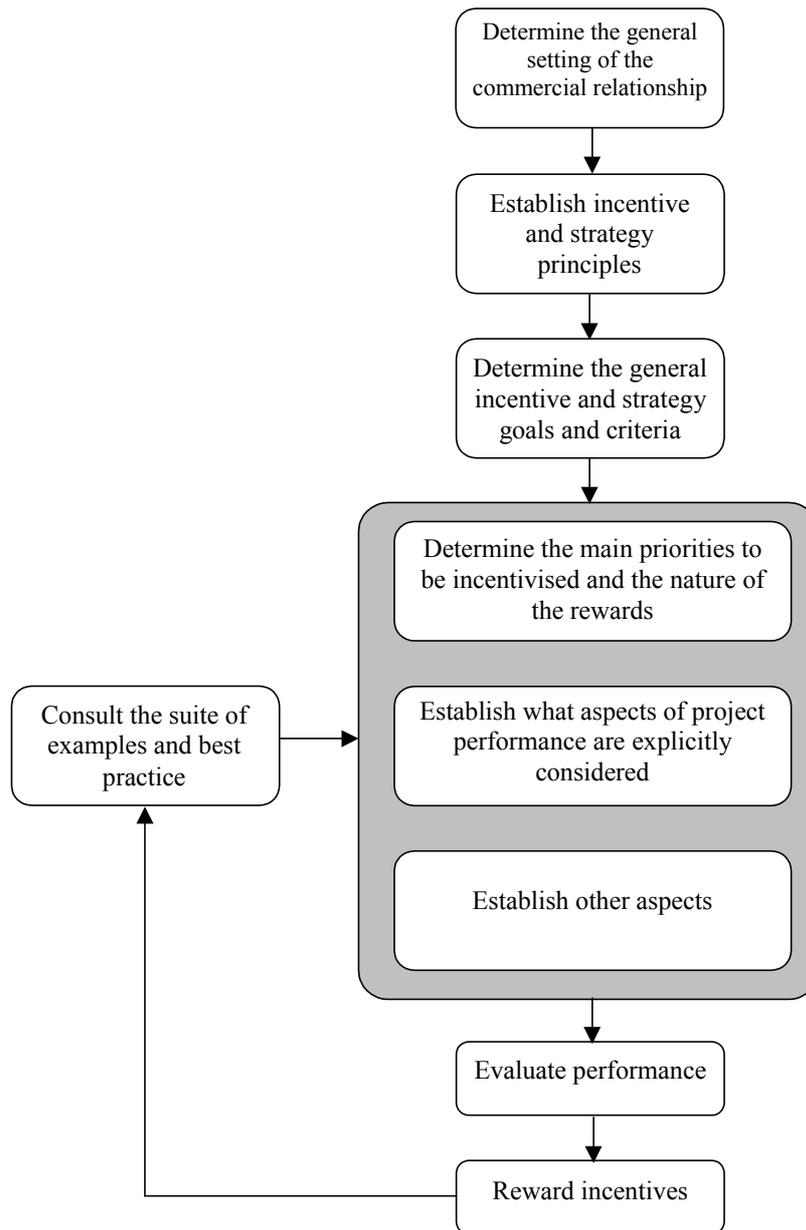
The present tool is therefore divided into three parts:

- a flow chart which illustrates the steps in the overall process;
- a check list which presents the major issues to be taken into account when considering the potential benefits of any incentivisation scheme; and
- a working example derived from the Building Down Barriers Project.

1.1 An outline of the process of target setting and incentives definition

The fundamental assumption behind the BDB approach is that the precise nature of any incentive scheme must be tailored to meet the needs of each project and must be agreed on a collaborative basis at its outset. However, it is possible to identify a process to arrive at such scheme, as well as a checklist that can assist parties in identify a scheme compatible with the principles presented in the section on the basic disciplines need to implement the BDB principles (see section II.6).

The following chart maps the protocol for determining the incentive and target strategy in a construction process.



A CHECK LIST TO DETERMINE AN INCENTIVE AND SHARED SAVING SCHEME

The incentive strategy to be developed will have to be uniformed by the following principles (for an extended discussion please see section II.6):

- Support the common objectives of the client and the supply chain;
- Motivate the supply chain to adopt collaborative behaviour patterns
- Promote better networks for communication and disclosure of mutual information
- Increase supply chain profit

To apply these principles one can use the following check list.

| A CHECK LIST TO DETERMINE A TARGET AND INCENTIVE SCHEME | | | | |
|---|--|--|--|--|
| SUBJECT | KEY ISSUES | SOME OF THE AVAILABLE OPTIONS | | ACTIONS |
| A. GENERAL | What aspects of project performance could be considered in the incentive scheme? | a. Cost b. Time c. Quality d. Operational efficiency e. Productivity f. Value for the client g. Safety | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | If cost is not picked go to 3 If none of these are picked reconsider the use of incentives as a means of supportive collaborative management |
| | What are the main priorities ticked in the incentive scheme? | a. Cost b. Time c. Quality d. Operational efficiency e. Productivity f. Value for the client g. Safety h. Culture change and training | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |

| | | | | |
|--|---|---|--|--|
| | If Cost has been selected what elements of capital cost are to be incentivised? | <ul style="list-style-type: none"> a. Risk b. Management efficiency savings c. Design savings d. Programme savings e. Productivity savings | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |
| | On what basis is the business case ("reference cost") established? | <ul style="list-style-type: none"> a. Market survey b. Client's or Contractor's historical data c. Published data d. Project specific costs + risk | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |
| | At what stage is the target cost agreed? | <ul style="list-style-type: none"> a. Before the beginning of the project b. At the brief stage c. At the end of the concept design | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |
| | How is the target cost arrived at? | <ul style="list-style-type: none"> a. No target cost necessary b. Target cost = reference cost c. Target cost derived computing risk d. Target cost derived on the basis of market considerations e. Top down calculation on the basis of agreed trade off between components of TLC | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |

| | | | | |
|------------------------------|--|--|--|--|
| | How is risk taken into account? | a. All risk to the contractor (lump sum) b. All risk to the client (complete reimbursement) c. Shared risk: reimbursement within set limits d. Other combined options | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |
| 3. Extent of incentivisation | How many tiers of the supply chain should be involved in the scheme? | a. Main contractor only b. First and second tier (main contractor and key players in the supply chain, e.g. cluster leaders) c. Lower tiers | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Collaborative gains are unlikely to be fulfilled |
| 4. Disputes | How would disputes be resolved? | a. Sequence of events: <ul style="list-style-type: none"> • Senior management • Adjudication • Arbitration b. Covered by the contract | <input type="checkbox"/> <input type="checkbox"/> | A dispute procedure over incentives payments should be agreed explicitly at the earliest opportunity. Disputes resolution should be given little emphasis. |

| | | | | |
|--------------------------------|---|---|--|--|
| 5. Incentives and the contract | Is the adopted contract suited to deal with all the issues? | Yes No Don't know | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Re-examine incentives and/or form of contract Re-examine contract/seek further advice |
| 6. Type of reward | What kind of rewards are used as incentives? | a. Future business with same or other clients b. Market share c. Commercial advantage from innovation d. Improvement in corporate image e. Commercial advantages from public exposure f. Financial g. Retention • % paid at milestones for subcontractors • bullet payment at the end | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |
| 7. Timing | When are rewards made available? | a. At the end of the project involvement b. After the conclusion when targets have been confirmed c. At milestones | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |

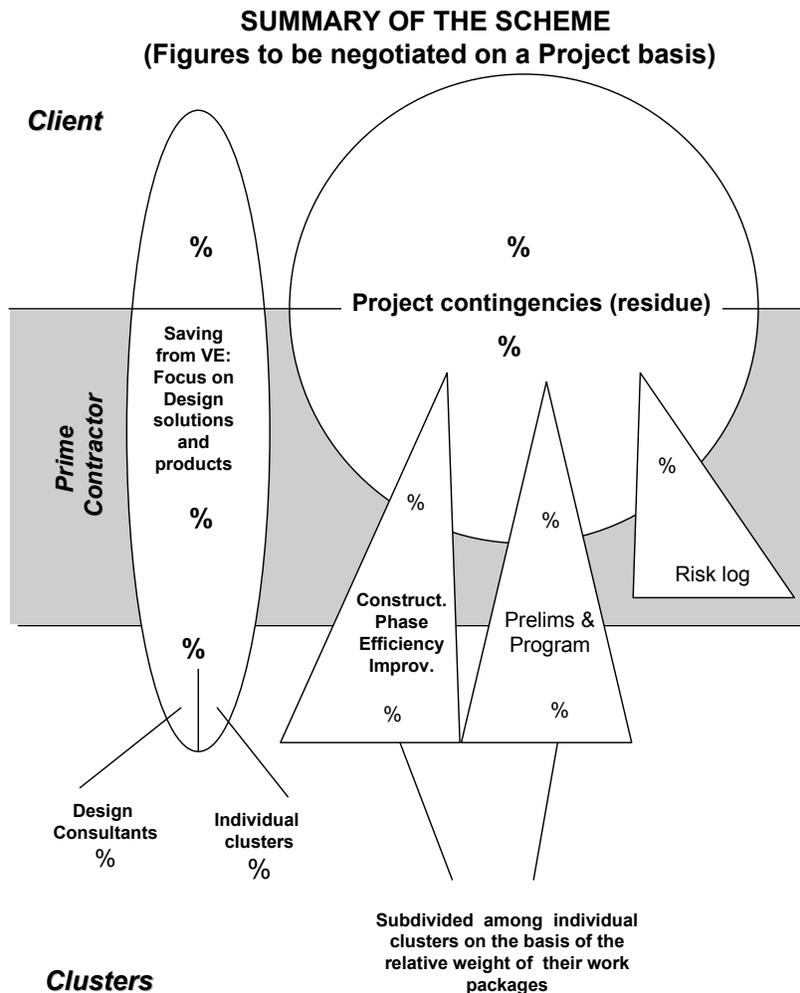
APPLYING THE PRINCIPLES IN PRACTICE: THE BDB INCENTIVE SCHEME

In order to support the commercial negotiation within the Building Down Barriers an incentive model defined as “Savings Sharing Scheme” was developed as a basis for discussion. This basic scheme constitute a useful starting point, in that it embodies the principles discussed above and in section II.6. However, it should be emphasised that the scheme is only presented here as a working example, and that prospect adopters will have to “customise” it to suit the existing needs and constraints of any specific future project.

THE SCHEME

The scheme (Fig. 1) distinguishes between savings obtained in the design phase and saving obtained during the construction phase.

Figure 1



The scheme assumes the figures quoted in the bid submitted at the end of Phase 3 (The scheme Phase) as the baseline for calculating any variation. It also assumes that profit and overhead recovery sums of all parties quoted in the bid are considered fixed, that is, they remain unchanged and “ring fenced” in the subsequent stages of the project. Variations can therefore only increase, and never reduce, the agreed profit stated at the bid stage. This allows for firms that adopt a cost plus base to reduce their overall cost without proportionally reducing their profit.

1.2 Principles of the scheme

The scheme aims to:

- Increase visibility of benefits for the client resulted from improvement activities
- Promote pooling of improvement effort and equitable sharing of benefits and risks (“alliancing”) between suppliers and PC
- Incentivise in particular collaboration between cluster leaders and consultants
- Distinguish between savings obtained in the Detailed Design (design solution and product oriented) and savings achieved in the construction phase (process oriented)
- Distribute (or at least allocate) savings early in the process in order to motivate cost reductions activities in the following phase of the project

1.3 Savings produced by improving the design and value engineering the existing solutions

Savings from improvements in the design, made before the end of the detailed design phase through use of VE techniques and refining specifications of products and materials, are shared between the Client, the PC and the Cluster which achieved them.

The design consultants share part of the savings either by obtaining a fixed percentage (as indicated in Figure 3) or through other arrangements such as through retribution for the extra work carried out to optimise the design.

The savings are calculated at the end of Detailed Design by comparing the price quoted by the clusters at the bid level with the new price based on the updated detailed designs.

As indicated above, while the overall value of the work-packages granted to the clusters may in this way diminish, their profit remains unchanged (for whatever profit they declared at the bid stage is “ring fenced”), or else is augmented. It is not to be reduced.

1.4 Savings produced by improving the construction processes

The scheme states that the Client and the PC will share on a 50/50 basis whatever remains of the Project Contingencies Allowance at the completion of the project. This residual sum will be calculated on the basis of the final out-turn cost as the unused portion of the Project Contingencies Allowance set at the beginning of Phase 4, once the Prime Contractor’s agreed Profit and Overhead Recovery amount has been taken out.

The Phase 4 Project Contingencies Allowance will be made up of three elements:

- 1) 50% of the savings obtained by improving efficiency in the construction process
Savings obtained by improving efficiency in the construction process through the use of CI techniques and Problem Solving Multi-functional Teams will be shared on a 70/30 basis between the Clusters involved and the Project Contingency Allowance. In the case of CI initiatives which involved all Clusters, savings will be shared between Clusters on the basis of the relative sizes of their work packages.
- 2) 50% of the savings obtained by reducing prelims and improving site organisation and construction programme
Savings obtained by reducing prelims and by improving site organisation and programme through the shared effort of all the members of Cluster Leaders and PC will be shared on a 50/50 basis between the Clusters involved and the Project Contingency Allowance. Cluster Leaders will share savings on the basis of relative size of their work package.
- 3) Project Risk Allowance
The Risk Allowance (as specified in the Risk Register negotiated with the Client) will constitute the initial resource for the Project Contingencies Allowance.

Throughout the duration of the project the Project Contingencies Allowance will be managed by the PC in consultation with the Client.

The scheme provides the PC with broader scope for intervening in cases of difficulties at Cluster level, e.g. in the case of mishaps and negative events. Extra cost due to worst-case risks materialising can be met by allocating some Project Contingency Allowance funds, when these have been augmented by improvement activities elsewhere. The Project Contingencies Allowance constitutes a buffer generated partly by client money, partly by Project team money. It helps the whole Supply Chain team manage the risk associated with lump sum arrangements.

Collaborating for the Built Environment (Be) – www.beonline.co.uk

Be is an independent body formed from a merger of the Reading Construction Forum and the Design Build Foundation in 2002. Its 100 member organisations come from the demand and supply chains of the 'industry formerly known as construction', ranging from public sector and private sector clients and developers to contractors, designers, consultants, specialists and suppliers. It leads research and implementation activities in support of a vision of delivering integrated built environment solutions through collaborative working.

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Collaborative Working Centre – www.collaborativeworking.co.uk

The Collaborative Working Centre of Be is a not-for-profit organisation set up from members of the team that facilitated *Building Down Barriers* to provide consultancy, training and other continuous improvement services to support the development and implementation of collaborative working.

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