

The background is a solid blue color. At the top, there are several overlapping, semi-transparent white wireframe cubes. Scattered throughout the background are numerous small, light blue arrows pointing in various directions, some upwards and some to the right.

Towards a novel type of PROJECT ALLIANCE

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DEFINITION

Project alliancing refers to a project delivery system, which is based on a joint agreement between the key project actors and in which the parties are together responsible for the designing and building of the project through a joint organisation, and in which the actors share positive and negative risks

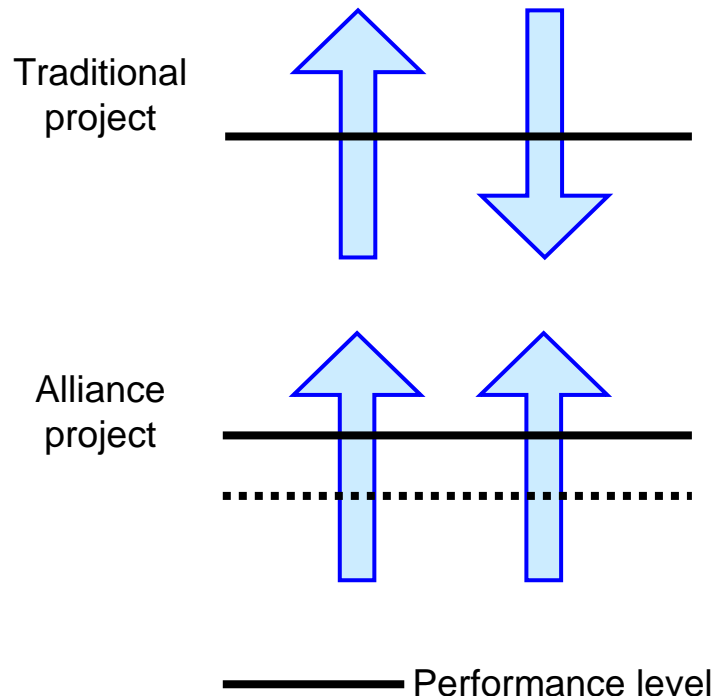


connected with the project and follow the principles of transparency.

All the participants win or loose —
the question is not of a zero-sum-game!

BASIC IDEA AND KEY MEANS

Interests of the contracting parties



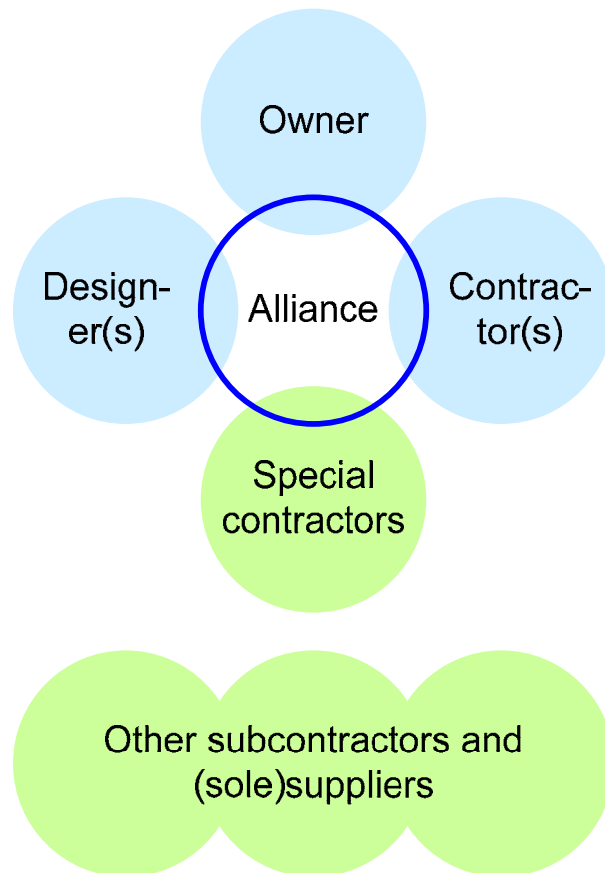
The aim of alliance contract solutions is to

- harmonise the actors' interests with regard to reaching the aims of the project
- combine broad, versatile expertise at an early stage to benefit the project
- improve the economic aspects of risky projects in particular (cf. pricing of risks)

Integration is believed achievable since

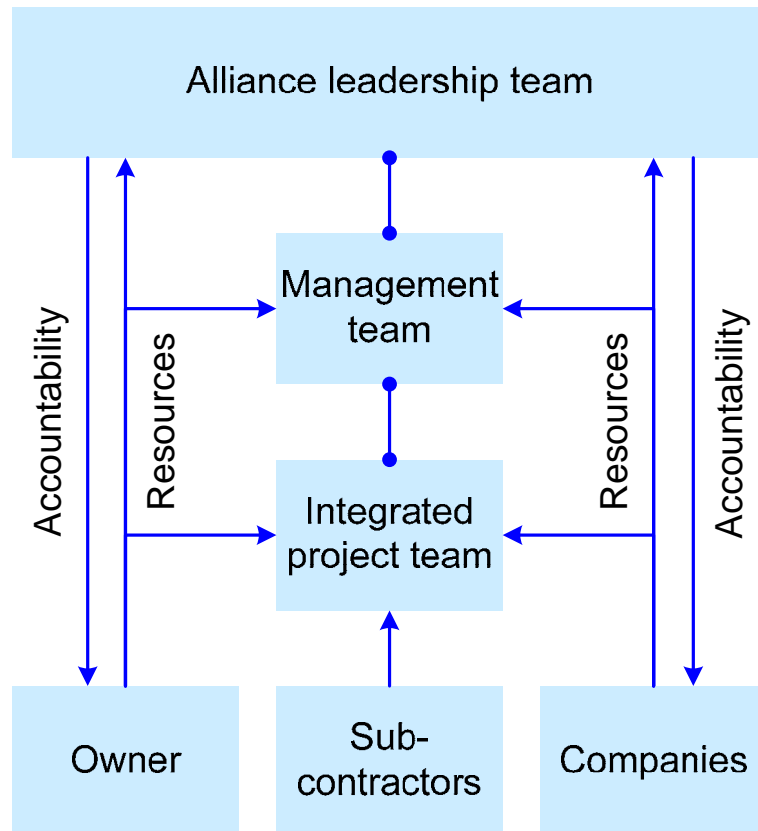
- the point of departure is a target cost model, in which cost savings and over-runs are shared
- the realization of qualitative key result areas is taken into consideration by a bonus effect
- allotments between companies are agreed in relation to the overall project costs

A SINGLE JOINT AGREEMENT



- The alliance's tasks cover planning, implementation and owner activities (promoting the project, management, decision-making)
- Its implementation organisation comprises persons from different background organisations, including the owner's personnel
- The cost analysis (estimate + control) covers all of the alliance's tasks and persons (some of them possibly part-time)
- The parties can agree on improving the prerequisites of effective operation through joint office premises, special liberties and decision-making models

ORGANISATION STRUCTURE



Alliance leadership team

- 1–2 representatives/alliance member
- solving possible conflicts of interests
- benefit of the company vs. alliance
- "use of two hats" needed/allowed

Alliance management team

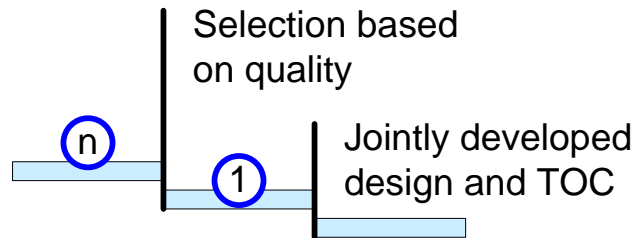
- project benefit guiding the operation
- managers of different functions
- at least one representative/member

Integrated project team

- project benefit guiding the selection of persons to the wider team

TYPES OF PROJECT ALLIANCES

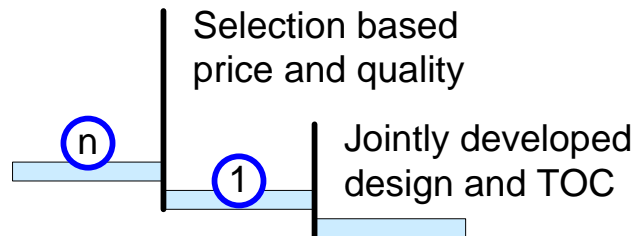
Single TOC approach / "Pure alliance"



Multiple TOC approach / Competitive alliance



A novel "competitive single TOC approach"



- Creates right psychological foundation, but how can we ensure value for money?

- Demonstrates good value for money, but how about the psychological foundation?

- Aims to both create right psychological foundation and ensure value for money!

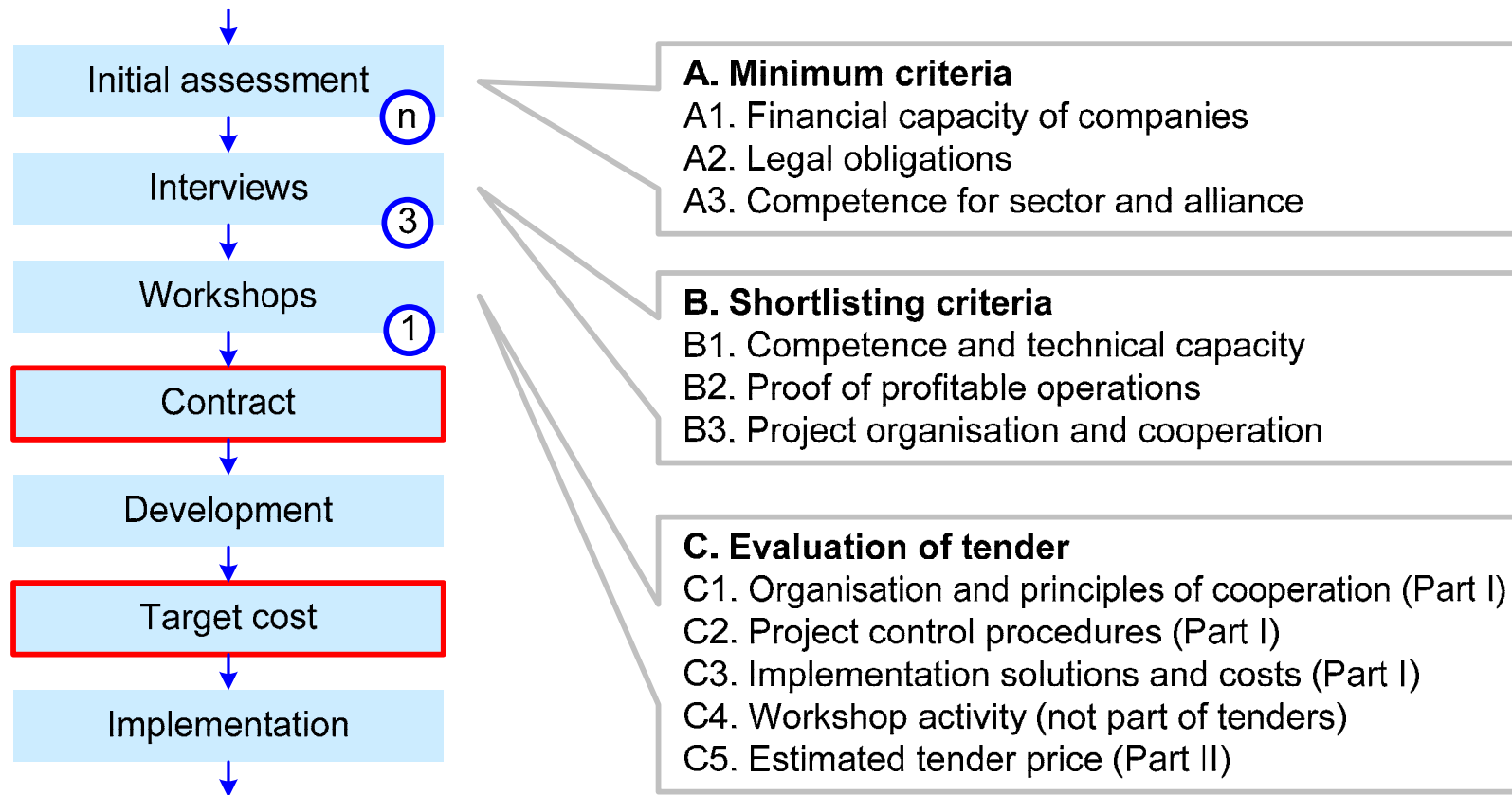
TOC stands for "Target Outturn Cost"

SELECTION OF PARTNERS



Consortia as candidates: designer, constructor, etc. are selected as a team

SELECTION CRITERIA



Selection is based on the "economically most advantageous" criterion

CALCULATED TENDER PRICE

DESIGN COSTS



Design labour cost (per type of expertise) ● × ●
 × Designer's overhead factor [1 + overhead %] ●

+
CONSTRUCTION COSTS



Basic element of site costs (own labour + normal subcontracting)

Costs by structural elements and/or work types

Priced bill of quantities for key items (per item) ● × ●
 + Total cost estimate for other items ●

+ Joint site costs

Site administration costs (per type of expertise) ● × ●
 + Other joint site costs ● × ● + ●

x Contractor's overhead factor for "own labour" [1+overhead %] ●

+ Other structural elements and reservations ●

x Contractor's overhead factor for "separate procurements" ●

- Quantities/needs of owner's road plan (same for all)
- Information from tenderers (binding on them also in future)
- Workshop/owner evaluations (same for all; only for selection)

FORMATION OF PAYMENT SYSTEM

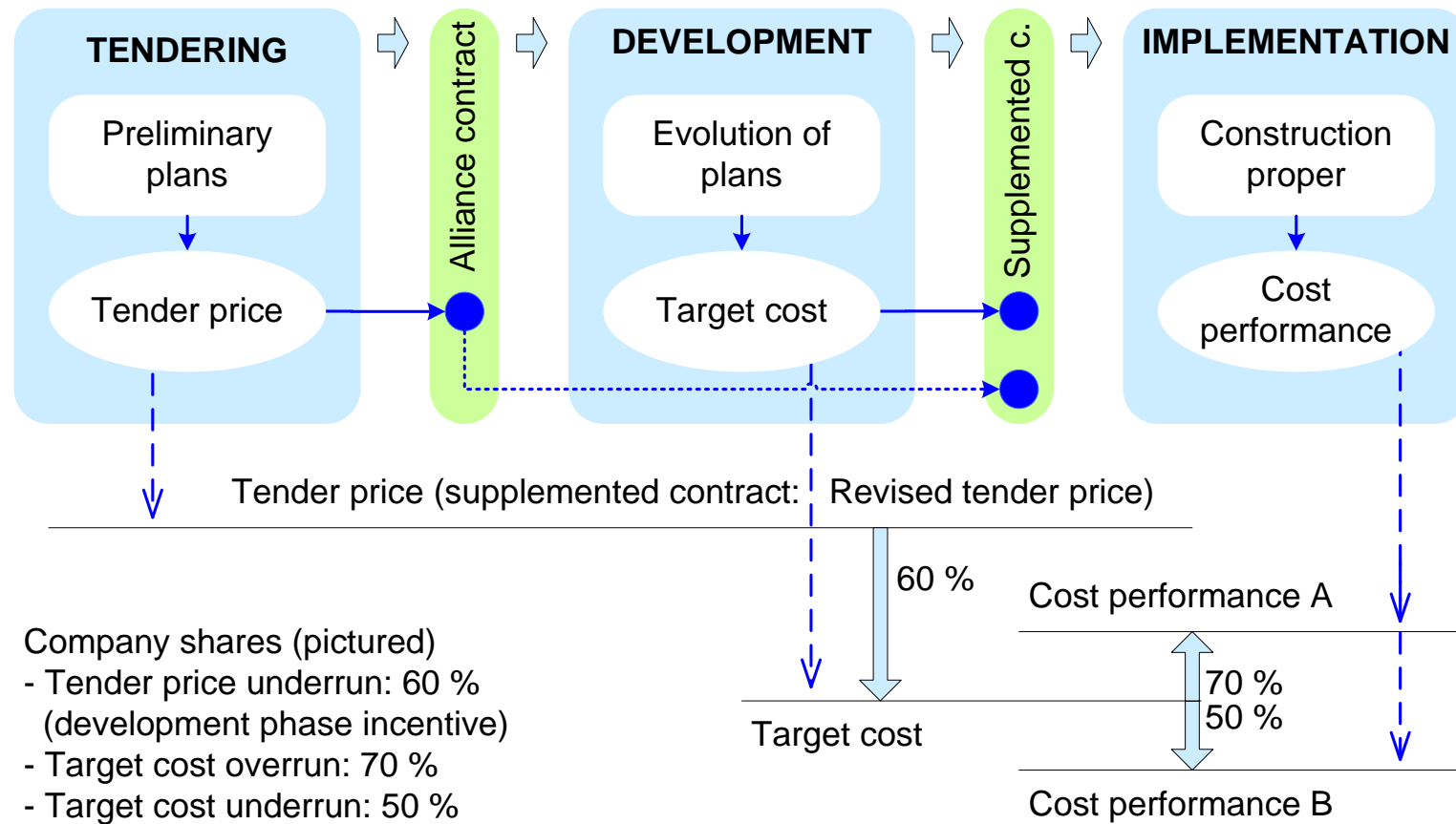
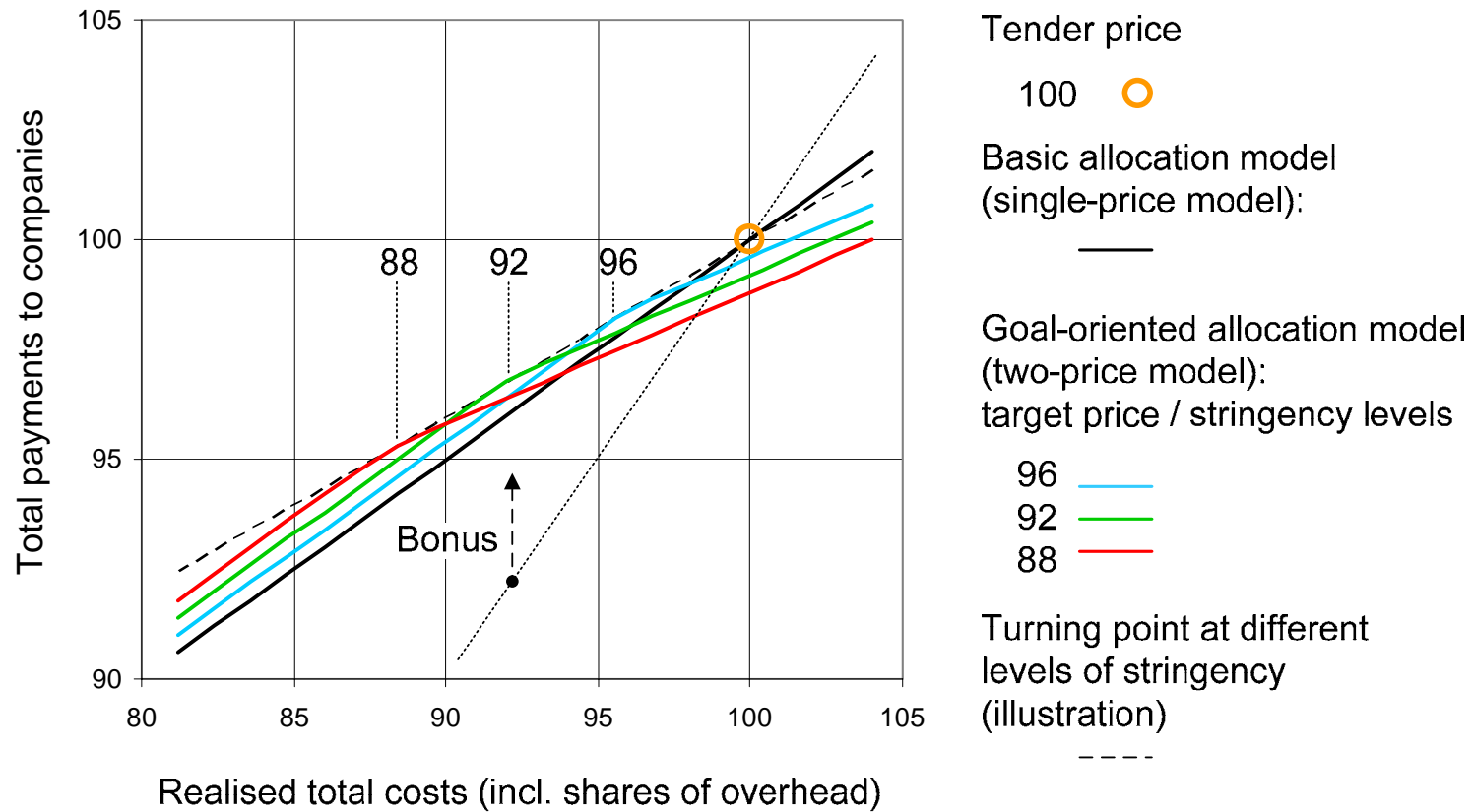
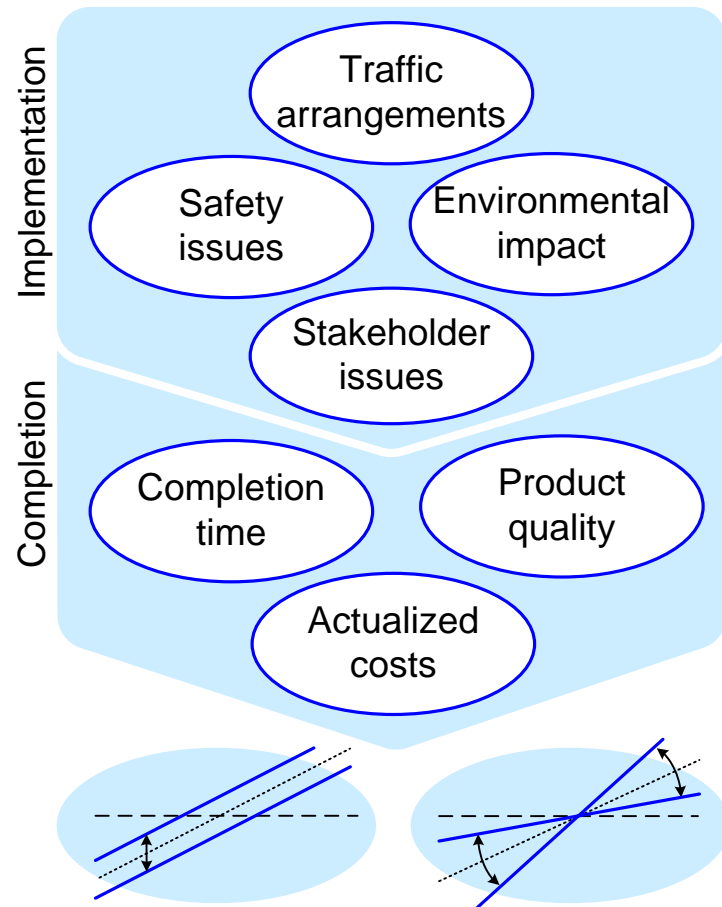


ILLUSTRATION OF THE PAYMENT SYSTEM

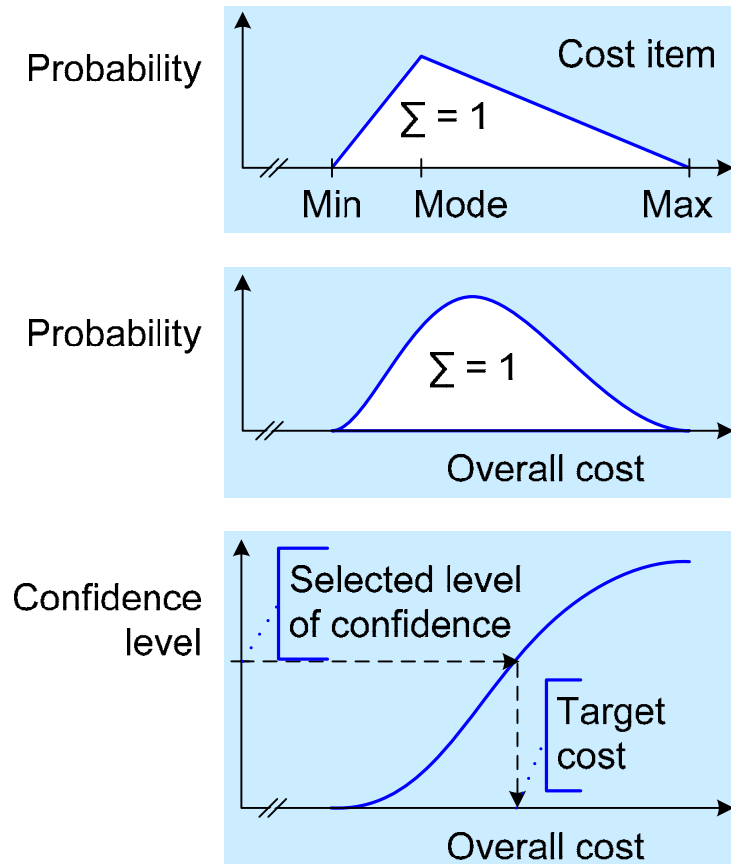


QUALITY FACTORS AS PAYMENT CRITERIA



- Traffic arrangements: minimising disturbance, related communications
- Environmental impact: little waste and damage to nature and existing structures
- Safety issues: safe conditions and arrangements, small accident frequency
- Stakeholder issues: reaction time, public recognitions/awards, writing in papers
- Completion time: commissioning time and the confidence connected with it
- Product quality: minimising faults and defects, fast reaction; quality level

COMPILATION OF A COST ESTIMATE



- The alliance is used particularly in projects that involve a lot of uncertainty and would entail high-priced risks
- The owner draws up a cost estimate, which takes the uncertainty aspect into consideration, before launching the acquisition process
- Competitors' budget criticism and pricing serve as the basis for specifying, selecting and subsequent changing of the estimate
- The cost estimate is specified together with the selected consortium as the planning proceeds in the development phase (target cost)

THE APPROACH'S SUITABILITY (1/2)

The owner's risk attitude and preparedness

- 1 The owner is not totally risk adverse but is able to estimate and carry risk
- 2 The owner is knowledgeable and can contribute to the project delivery process
- 3 The owner benefits from the continuous development of the sector
- 4 The owner is able to contribute more expertise/time to the project than is usual

Project's objectives and guiding principles

- 5 Early delivery and commissioning of the project is of great value to the owner
- 6 The owner does not seek the lowest price to be fixed before construction
- 7 The project involves many challenges while it is not clear how they can be met
- 8 Concrete requirements cannot be set, but a vision can be formulated
- 9 Changes to design and plans are likely to be made during implementation

THE APPROACH'S SUITABILITY (2/2)

Project properties and risks

- 10 The project is big enough to pay for the investment in a co-operative process
- 11 The project has many critical interfaces with existing operating facilities
- 12 There are high risks concerning industrial relations and stakeholder issues
- 13 The project is sensitive to disruptions due to heritage and environmental issues
- 14 The technology intended to be used in the project is new or evolving
- 15 Risks of the project are multifaceted and can best be managed collectively

Service provider's preparedness and resources

- 16 There are enthusiastic contractors with proven relationship contracting records
- 17 The project could be implemented by a single contractor instead of many
- 18 The project will depend on technology possessed by very few companies

KEY PARTNERS & COMMISSIONERS

