



Document No.	GP 43-03
Applicability	Group
Date	22 December 2005

Guidance on Practice for Contracting and Procurement Strategies for Pipelines

GP 43-03

**BP GROUP
ENGINEERING TECHNICAL PRACTICES**

Foreword

This is the first issue of Engineering Technical Practice (ETP) BP GP 43-03.

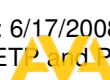
Uncontrolled Copy

Copyright © 2005, BP Group. All rights reserved. The information contained in this document is subject to the terms and conditions of the agreement or contract under which the document was supplied to the recipient's organization. None of the information contained in this document shall be disclosed outside the recipient's own organization without the prior written permission of the Director of Engineering, BP Group, unless the terms of such agreement or contract expressly allow.



Table of Contents

	Page
Foreword	2
Introduction	5
1. Scope	6
2. Normative references.....	6
3. Symbols and abbreviations.....	6
4. Pipeline system definition.....	7
5. Development of contracting strategy	7
5.1. General.....	7
5.2. Appraise	8
5.3. Select.....	8
5.4. Define	9
5.5. Execute.....	10
6. Contract types.....	10
6.1. Comparison of key factors	10
6.2. Incentives	10
7. Contractor selection process.....	11
7.1. Contractor relationship.....	12
7.2. Open tendering	12
7.3. Competitive bid contracts.....	12
7.4. Negotiated contracts.....	13
7.5. Post contract award	14
8. Major considerations.....	14
8.1. Main agreements	14
8.2. Country specifics.....	15
8.3. Land Acquisition	17
8.4. Political awareness	17
8.5. Contractor skills	17
8.6. Sector initiatives.....	17
8.7. Project finance	18
8.8. Taxation.....	18
8.9. Currency	19
8.10. New technology & standardisation (repeatability).....	19
8.11. Cost recovery.....	19
9. Engineering design	20
9.1. Appraise	20
9.2. Select.....	20
9.3. Define through to Execute.....	20
10. ESIA's, NGOs, and specialist support contractors and consultants.....	22



11.	Procurement	24
11.1.	Main principles	24
11.2.	Linepipe	24
11.3.	Pipeline pumps and compressors	24
11.4.	Valves and actuators	25
11.5.	Scada and telecomms	25
11.6.	Miscellaneous	25
11.7.	Lessons learnt on equipment/material.....	26
12.	Coating of linepipe	27
12.1.	Options	27
12.2.	Local content	27
12.3.	Areas of concern.....	27
13.	Transportation and logistics	28
13.1.	Personnel	28
13.2.	Linepipe	28
13.3.	Material and equipment other than linepipe.....	29
14.	Construction and installation	30
14.1.	Onshore.....	30
14.2.	Offshore.....	31
14.3.	Miscellaneous considerations	33
15.	Operation and maintenance.....	35
16.	Technical Integrity (TI)	35
17.	Key contract clauses.....	36
18.	Payment terms.....	36
19.	Ethical conduct and fraud	37
20.	Lessons learnt	38
20.1.	General.....	38
20.2.	Summary	39
	Bibliography	49

List of Figures

Figure 1 - Contracting process considerations	7
Figure 2 - Contract degree of control.....	10



Introduction

This guide provides information designed to assist a pipeline project team in the development of a project specific Contracting and Procurement Strategy. The guide is intended to be used across all BP business streams. The principles and techniques suggested in this Guide should enable the specific strategy for a project to be developed taking into account the unique circumstances of a project. Various lessons learned across BP highlight the importance and benefits associated with developing rigorous contracting strategies that support project success.

This is for internal circulation only.



1. Scope

This GP gives a high-level view of the considerations to be taken into account by the Project team to develop a pipeline contract and procurement strategy. This GP describes the process in identifying the extent of contractor involvement and the issues to be considered to select the optimum relationships with the contractors. The procurement of pipeline materials is considered an integral part of any overall pipeline contract strategy and is also covered in this document. This GP is primarily for the project management team/senior leaders of any business unit responsible for a pipeline at whatever stage of its life, but should also be read by project engineering and operations staff, whether employees of BP or agency staff engaged by BP, during a project or operation. It shall not be circulated externally.

2. Normative references

The following normative documents contain requirements that, through reference in this text, constitute requirements of this technical practice. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this technical practice are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies.

BP

CVP	Capital Value Process - Job Aids - Contracting - Contracting Strategy Guide http://cvp.bpweb.bp.com/jobaids.htm .
EPCP	E & P Common Process - Supplier Performance Management.
GP 43-00	Guidance on Practice for Pipeline Systems (Overview Document).
Green Book	Delegation of Financial Authorities - Group Investment Assurance and Approval Process (GIAPPs) - http://bpmanagementframework.bpweb.bp.com .
MPCP	Major Projects Common Process - Contracting and Supplier Management.
PSCM	http://pscm.bpweb.bp.com/content/page.asp?id=589 .
STARS	Group Procurement Handbook. http://pscm.bpweb.bp.com/home.asp .
SURF	Contracting Excellence (CE) - Sub-sea Umbilical, Riser and Flowlines (White Paper issued).

3. Symbols and abbreviations

For the purpose of this GP, the following symbols and abbreviations apply:

CE	Contracting Excellence
EPC	Engineering, procurement, and construction
EPCM	Engineering, procurement, and construction management
GIAPP	Group investment assurance & approval process
GOM	Gulf of Mexico
ITT	Invitation to tender



KPI	Key performance indicator
OCTG	Oil country tubular goods
PSA/JOA	Production sharing agreement/joint operating agreement
PSCM	Procurement and supply chain management
REI	Rotating equipment initiative
STARS	Sector strategies; transparency; aggregation; relationships; supply chain management
TI	Technical Integrity

4. Pipeline system definition

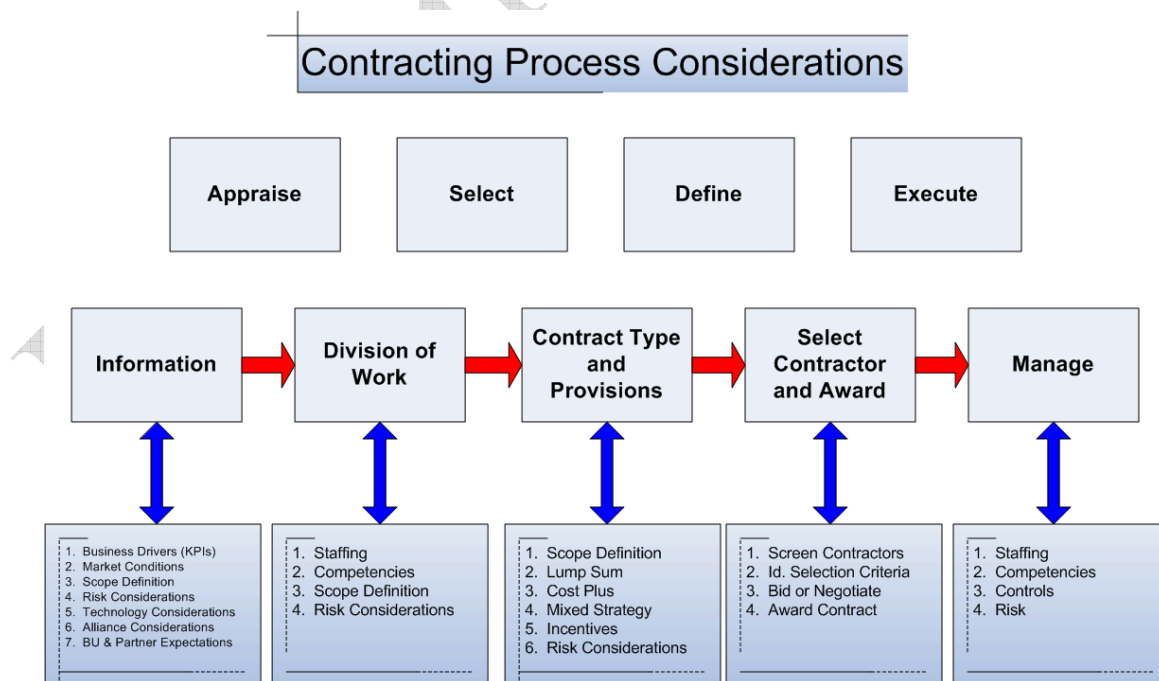
For the purpose of this document, “pipeline” means a pipe or system of pipes on land in remote areas or through mature regions, offshore or sub-sea (including associated risers), irrespective of water depth together with any material or equipment for the conveyance of any fluid as more fully described in GP 43-00.

5. Development of contracting strategy

5.1. General

- a. This document shall be applied in all Business Segments and at locations that are wholly owned by BP or over which BP has operational control, as more fully defined in GP 43-00.
- b. The project contracting strategy shall support the overarching project execution strategy which may determine specific contracting principles or strategies for the project.

Figure 1 - Contracting process considerations



5.2. Appraise

- a. During the Appraise stage, the contracting strategy activities shall focus on information gathering regarding contractors' and suppliers' capabilities and understanding the expectations of key stakeholders.
- b. If entering a new development area, a world-wide understanding of the market should be developed to establish the availability of contractors with relevant experience.

In many cases there is limited international contractor availability.

Some typical major issues in Appraise are as follows:

- *Key driver: for gas projects, schedule may be the key driver following the requirements of Gas Sales Agreement; whereas, for oil projects, cost may be the principle driver. Conflict between schedule and cost does occur.*
- *Market conditions:*
 - *Whether technology or the operating area is driving the project to a limited or single source situation.*
 - *Vessel availability for offshore projects.*
- *Relationships with partners and their expectations regarding procurement and contracts.*
- *Major regional/country issues such as host government expectations, local content, procurement laws, logistics constraints, and labour constraints such as union agreements.*
- *Regulatory requirements such as ESIA, permitting.*
- *Risk Assessments shall identify areas to study.*
- *Understanding the impact of differing development options on contracting strategy.*

- c. At the conclusion of Appraise:
 1. An outline Procurement and Contracting Strategy shall have been drafted sufficient to identify any major supply chain issues, limitations, and opportunities relevant to the range of concepts being considered.
Often depicted in the form of a single page Contracting Plan – see Annex A.
 2. Select stage contracts shall be ready for award.

5.3. Select

- a. A major deliverable from the Select stage shall be the overall contract strategy and input shall be obtained from appropriate sources.
- b. Commercial advice shall be sought from Procurement and Supply Chain Management (PSCM), and such areas as Tax, Insurance, Patents, and Legal.
- c. Technical input on options, particularly those areas of technical/construction innovation, shall be sought from the specialist support functions.
- d. The project should network with previous projects to secure any learnings, including experience of contractors that may assist in the development of the optimum strategy and document key lessons learnt.
- e. The Select stage shall culminate in a Stage Gate review to endorse the proposed strategy and in E&P lead to the Define FM attestation and approval process.



- f. Commercial negotiations should have reached the level of definition that allows the technical development to progress yet accommodate remaining commercial uncertainties within the contracts.
- g. In line with the development of the technical definition, the key work packages shall be derived.

The overall strategy may be depicted in the form of a "Contracting Plan" to demonstrate the inter-relationships between engineering, procurement, construction, commissioning, and operation for all packages (see example Annex A).

- h. Overall contracting commercial principles shall be agreed upon, such as warranty, insurance, tax, currency, retention, liquidated damages, bonus payments, performance guarantees, and any key provisions such as conditions for termination.
- i. Identify alignment & linkages with group strategies or initiatives (e.g. REI/SURF).
- j. The market shall be involved to ensure the strategy is viable.
- k. The strategy should enable a competitive situation to be maintained for the key packages.
- l. Market intelligence to include a summary of supply/demand resource constraints (e.g.: spreads, lay barges, mill capacity/capabilities, etc.) should be gathered early in the project.
- m. The number and complexity of interfaces between BP and the various contractors and suppliers shall be understood; and the BP project resources required to support and manage the proposed packages shall be identified.
- n. Long lead activities to support the strategy shall be identified.
- o. Options should be identified, such as the potential to combine packages and any options within the individual packages.
- p. Specific contract packages to support the Define stage shall be prepared.

At this early stage, the shape of the contract strategy may be determined dependent on whether the project elects to develop EPC-type contracts with a few top-tier contractors who have the complete capability; or, to develop engineering through an EPCM contract and consequentially have the opportunity to engage a broader range of contractors who have construction-only capability.

5.4. Define

- a. Having identified the major work packages in Select, the individual contract strategies shall be developed during Define based on the market characteristics of each sector.
- b. This should result in a mix of varying forms of contract and varying forms of reimbursement even within a package depending on scope definition and risks involved (see clause 6).
- c. The progress of design and ability to quantify the risks should dictate the type of contract and form of remuneration most appropriate.
- d. Contract strategies shall include the main evaluation criteria to be employed in contractor selection.
- e. The normal principles regarding risk shall be:
 - 1. Risks over which the contractor has a large measure of control or which are capable of financial quantification in advance, should be assigned to the contractor.
 - 2. Risks over which BP has control, should be assigned to BP.
 - 3. Risks which cannot be quantified in advance and which have a magnitude and/or probability such that their impact is out of proportion to the contract value, should be assigned to BP.



- f. Due to the significant lead time from contract strategy agreement to the execution of a contract, considerable contracting activity should take place during the Define stage (see clause 7). Firm quotations on long lead procurement items and major contracts shall be available with budget information on the remaining contracts and material to support the sanction case.

Depending on project schedule, there may be a need for pre-sanction commitments. These may be in the form of partial commitments to minimise project exposure yet still secure the services of key contractors and suppliers.

5.5. Execute

- Following project sanction at the end of Define, major contracts and long lead items shall be committed in accordance with the project schedule.
- The focus shall move to managing contractor performance (see Normative references links and documentation), close-out on completion, and material reconciliation.

6. Contract types

6.1. Comparison of key factors

The different types of contract are pictorially given in Figure 2 below with the impact on the degree of control available to BP, the definition required, the risks to the contractor and the corresponding motivation of the contractor.

Figure 2 - Contract degree of control

Type	BP Influence	Definition Required	Risk to Contractor	Contractor Motivation
Turnkey		Maximum	Maximum	Maximum
Lump Sum				
Bill of Quantities/Schedule of Rates				
Target Fee and Reimbursable				
Reimbursable				
	Maximum			

- Increasing BP influence should require an allowance for increasing levels of supervision.

Recent experience has demonstrated that if BP decreases control and levels of supervision, the risks to quality, operability, cost, schedule, and HSSE may increase.

- A risk assessment should help identify the major risks to quality and allow the development of appropriate control and mitigation measures.

A more detailed description with the pros and cons on each type of contract is given in Annex B.

6.2. Incentives

- Any strategy should be detailed on whether or not to apply incentives on individual contracts.

An assessment of the project's key performance drivers is the starting point in any consideration of incentives.



Contractor's reputation and the possibility of further work from BP are important incentives that may be more influential than the traditional monetary incentives or damages.

The type of contract dictates how much incentive there is for the contractor to increase his profit. The lump sum contract allows contractor to try to beat his own target and maximise his profit; whereas, the reimbursable contract normally maintains the contractor's profit at a constant percentage within the uplift applied to actual costs. Alternatively, the contractor's profit can be separated from the uplift and identified separately with payment against performance metrics. (In reality, the contractor always endeavours to hide within the uplift an element of profit thereby securing at least some positive return irrespective of their performance).

Alliance-type agreements have been applied where a separate target total project cost is agreed upon between principle contractor(s) and BP, and cost savings shared proportionally. The establishment of the project target cost is a lengthy process, usually established after appointment of contractor(s) and takes careful negotiation to ensure targets are not inflated to ensure "success". Cost overruns normally reduce the level of reimbursement such that contractor is operating on an "at cost" basis.

On pipelay contracts, a successful application has been to agree upon a target number of days and a nominal lump sum based on a schedule of rates.

- b. Schedule savings should generate cost savings. Negotiations should define how savings are shared between contractor(s) and BP.
- c. For schedule overruns, rates should be reduced.
- d. If concerns over safety during the installation of sections of the pipeline are considered more burdensome than normal (e.g., if other existing third party pipelines are adjacent to the new lay), that section of the line should be excluded from the lump sum/target cost and reimbursed on a schedule-of-rates basis to allow that section of the work to be executed without performance pressures.
- e. Incentive payments should be self-funding (i.e., generated from within agreed contract budget). Documented experience of incentives should be researched if considering their application to a particular project.
- f. With onshore pipeline contracts requiring a step change to the approach to safety, incentives on safety performance may be included (non-monetary are recommended).
- g. Incentives may be small, but regular incentives for meeting safety input targets should be instituted (risk is that inputs are generated rather than actual). Also recognition for individuals and teams with celebrations for major milestones has been used successfully.
- h. Achievement of safety targets may be rewarded by a donation to local hospitals/good causes.

For onshore pipelines and for security of delivery, providing the contracts are of sufficient materiality, it is common practice to award contracts to two or more pipelay contractors. A possible incentive is to leave the middle section of pipe to be completed by the existing contractors working towards a meeting point determined by each contractor's rate of progress.

7. Contractor selection process

The contractor selection process is described in more detail in the Group Procurement Handbook.



7.1. Contractor relationship

For major packages, the relationship with the contractor is a key to success and this should be developed at all stages of the selection process commencing with clarifying BP's goals and understanding contractor's business plans together with ensuring expectations are aligned between contractors and BP upfront.

7.2. Open tendering

Open Tendering should be resisted and if possible deleted from the Commercial agreements or PSA.

Otherwise the selection process is extended, considerable more resources to administer the process are required and BP's ability to secure proven contractors may be undermined unless the pre-qualification process is rigorously implemented.

Competitive tendering is BP's standard approach. Host government agreements, or World Bank procedures may request Open Tendering through notification in journals.

7.3. Competitive bid contracts**7.3.1. Business environment**

- a. If the project is to be executed in a mature environment the need for Market Surveys and Pre-qualification may not be required.
- b. If in a new operating area for BP, or with partners (government or other third parties) then for key commitments, Market Surveys and Pre-qualifications are recommended.

7.3.2. Market survey

- a. A market survey should be issued to solicit an "expression of interest" from contractors to pre-qualify for a selective, competitive tendering exercise.
- b. Partners and host government should be given the opportunity to offer additional candidates.
- c. Any PSA/JOA host government agreement restrictions shall be notified.
- d. Partners and host government proposals on potential contractors shall be sought at this time to avoid the addition of contractors at a later stage in the selection process.

The risk is contractors who avoid the pre-qualification stage may be technically inferior; and, if allowed to bid, may submit a low price. This, then, places the project in a politically difficult position when evaluating bids from companies who are not technically capable but have been proposed by partners or host government.

7.3.3. Prequalification

- a. A prequalification enquiry should be used to establish the identity and financial standing of the proposed contracting entity and ascertain the experience (particularly with BP) and capability of the candidate relative to the particular scope of work.
- b. Information on contractors' capabilities that is already available within BP should be accessed to avoid unnecessary duplication of effort.
- c. Evaluation shall be against pre-determined objective criteria which shall include HSSE.
- d. A site visit to view current work and vessels/equipment offered by potential tenderers should be accommodated within the pre-qualification process.

Competitive tendering normally requires 3-6 tenders.



- e. This stage is critical in that on approval of bid list any tenderers should be technically and financially acceptable, particularly if outside finance may demand award to the lowest bid.

7.3.4. Tendering and contract award

- a. Shortly after the issue of ITTs, for major contracts a single tender briefing meeting should be held for tenderers to ensure dissemination of the same information to all tenderers.
- b. For major pipeline contracts onshore, a visit along the pipeline route by tenderers should be arranged.
- c. Before receipt of tenders, any supplementary information provided shall be given to tenderers.
- d. Before the receipt of tenders, evaluation guidelines shall be developed to record the objective evaluation criteria, weightings, confidentiality, team composition, schedule, etc.
- e. Evaluation criteria and weightings between technical, commercial, and HSSE should vary according to scope, complexity, and type of contract (e.g., reimbursable contracts should place more emphasis on key personnel/technical/HSSE issues than financial competitiveness).
- f. The evaluation process may include, if necessary, a simple exchange of clarifications to ensure the bid is fully understood by both parties to enable an initial ranking and short list.
- g. Bid clarification meetings should be held with tenderers covering technical and commercial issues.
- h. Site visits should be made by BP Project team representatives to short listed tenderers' proposed offices and current construction locations.

Previous experience in country should be a key selection criterion as the learning process and time to become fully operational in a new country is often underestimated, with the contractor being overly optimistic. Claims frequently result if true costs not understood.

The opportunity to re-use contractors from the last job offers the opportunity to maximise repeatability benefits.

The conclusion of this process is the finalisation of a recommendation for award.

7.3.5. Approval process

- a. Approval times, both by BP and by partners, for all stages as required by the financial delegation of authority and governing agreements shall be included in any tender process plans.
- b. The time from issue of Market Survey to Award is a lengthy process which requires considerable attention to confidentiality and yet enrolment of key decision makers.
- c. Some key decision makers may be external to the project and the enrolment of the BUL, internal audit, and the Head of Projects together with key partner representatives should be carefully assessed and involved in a timely manner to minimise the risk of delays to approvals.
- d. Contractors who have a tagged Technical Vice-President (TVP) should be identified.
- e. Although not part of the approval process, the TVP should be made aware of their particular contractor's involvement in the contractor selection process.

7.4. Negotiated contracts

- a. A negotiated contract, instead of competitive tendering, should only be used under special circumstances such as:



1. The engagement of specialist consultants or services if patents limit contractors for repetitive work.
 2. Markets in which there is a very limited number of contractors.
 3. If an existing contractor is working and the extent of work is insufficient to mobilise a new contractor.
 4. If HSSE issues require expediency above commercial considerations.
- b. For major contracts, negotiation should not be seen as a quick process as the commercial strength of the contractor may lead to lengthy negotiations before an acceptable position is agreed.
 - c. An ITT shall be formally issued to establish the contracting framework.
 - d. Benchmarks shall be used to establish price. These should be in the form of previous contracts with BP or information from recognised industry sources.
 - e. BP levers in negotiation such as potential future work, flexibility on start date, and safety should be explored.
 - f. A negotiation strategy, including the composition of the negotiating team, shall be developed for the specific contract.

7.5. Post contract award

- a. Considerable attention should be focused on monitoring performance against KPIs and the performance management of key contractors to enhance post award management – see Normative references links and documentation.
- b. KPIs should be agreed before contract award.
- c. In a project environment, typical measures of progress against plan are well established and shall be incorporated into contract documentation.
- d. Supplier performance management processes should be investigated to determine possible application on key contractors/suppliers.

Strategy considerations with respect to post-award activities relate to ensuring sufficient resources to effectively manage the post-award activities such as negotiation of amendments, claims, and close-out.

Alternative execution plans may be required if contractors fail to perform for whatever reason.

8. Major considerations

8.1. Main agreements

8.1.1. Partners

Any financial control and local content requirements shall be identified and accommodated within the contracting strategy.

Almost all projects involve partners and some contractual obligations to host governments. Such agreements may include financial controls and local content requirements.

E.g., some countries require in-country contracting partners; financial controls dictate the approvals process and reporting requirements, local content targets are set, and local representatives nominated as mandatory members to contact committees to influence the award process.

