

School of Engineering

CONTRACT VARIATION

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CONTRACT VARIATION

Most contract specifications change during the life of a contract, and re-negotiation is required.

This is an opportunity for the supplier to:

- ❖ Recoup Losses
 - ❖ Increase Profit
 - ❖ Re-negotiate Timescales
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CONTRACT VARIATION

It is equally a threat to the customer, if the contract is part of a larger contract, to maintain:

- ❖ Budget Costs
 - ❖ Milestones
 - ❖ Timescales
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CONTRACT VARIATION

To avoid problems at this stage, the customer should have in place:

- ❖ A long term working partnership with its preferred suppliers
 - ❖ Regular contract reviews against agreed performance targets, such as:
 - ❖ Costs
 - ❖ Timescales
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CONTRACT VARIATION

- ❖ Regular estimates on:
 - ❖ Time to completion
 - ❖ Cost to completion
 - ❖ Regular review of appropriate technical and test reports.
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PROJECT CHANGE

The management of project change is an almost inevitable part of every Project Manager's life.

Change arises from

- ❖ Customer request (external)
 - ❖ Project failures (internal)
 - ❖ Functional Deficiencies
 - ❖ Slippage
 - ❖ Cost Variances
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PROJECT CHANGE

- ❖ External request can be seen as an opportunity to renegotiate costs and timescales
 - ❖ Internally generated changes are a threat to meeting project objectives
 - ❖ The change control system normally relates to the functional specification
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CHANGE REQUEST & REVIEW

Change requests originate from:

❖ The customer

- Specification change
- Delivery schedule change

❖ In-House

- Failure to meet functional requirements
 - Cost considerations
 - Manufacturability
 - Component sourcing
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REVIEW PROCEDURE

1. Specify the changes
 2. Review the changes
 3. Modify the product, process or schedule
 4. Review the change for:
 - function
 - Cost of product/process
 - Quality
 - Producibility
 5. Test – if required
 6. Authorise
 7. Negotiate – if appropriate
 8. Implement
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DOCUMENTATION

- ❖ Request for change
 - ❖ Review meeting minutes
 - ❖ Drawing process change
 - ❖ Test reports and technical data – if required
 - ❖ Authorisation
 - ❖ Implementation instructions
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COMMERCIAL ASPECTS

A customer requested change gives the opportunity for:

- ❖ Negotiating price increases
- ❖ Additional profit
- ❖ Relaxing or lengthening time scales

The style of conduct of the negotiations will depend upon your relationship with the customer, and what other advantages might be gained if prices and delivery schedules remain unaltered, eg.

- ❖ Confidence
 - ❖ Additional business
 - ❖ Strengthened position for future negotiations
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PROJECT IMPACT

For internally generated change, the following items should be considered

Short Term

- ❖ Cost
 - ❖ Profit
 - ❖ Options
 - ❖ Timescales
 - ❖ The recovery plan
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PROJECT IMPACT

Long Term

- ❖ Fracas system
 - ❖ Failure Reporting Analysis and Corrective Action System (FRACAS)
 - Product failure
 - Process failure
 - ❖ Procedural change
 - ❖ Quality considerations
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FINANCIAL RISK

Projects have to be financed.

Sources of funds may come from:

- ❖ Internal company funds
 - ❖ External sources, such as
 - Banks
 - Government
 - Venture capital companies
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FINANCIAL RISK

Each source will have a choice of projects for investment, and therefore seeks

- ❖ Competitive returns on investment
 - ❖ Higher rates of return on more risky projects in order to cover the losses which are likely to be incurred on a portfolio of such projects
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RISK ALLOWANCES

❖ Contingency

An allowance added to an estimate to cater for undefined or uncertain terms. The magnitude of the allowance is generally based on experience.

❖ Tolerance

The range of values above and below the estimated project or task duration, cost or performance within which the final value is likely to fall.

❖ Risk Exposure

The residual risk which has not been allowed for by contingency or tolerance values.

PROJECT RETURNS

Project evaluation therefore implies assessment of risk, and its effect on project financial returns.

Returns are normally calculated using discounting techniques, which take account of both the timing and the magnitude of cash flows, and reduces later cash sums by the interest they would have earned had they arrived earlier.

Principal discounted cash flow (DCF) return indices are:

1. Internal rate of return (IRR)
 2. Net present value (NPV)
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DCF INDICES

Internal Rate of Return

Is the interest rate used for discounting the cash flows, which, at the completion of the project, makes the total sum of the discounted returns equal to the costs of the project.

Net Present Value

Is the difference between the total sum of the returns and the costs of the project, all discounted at some defined rate.

Trust

- A contract based on trust is fine when it goes well
 - But what happens when it does not?
 - Do not give the project manager and the wider team a hospital pass.
 - Managerial
 - Technical
 - Commercial
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Contract Terms and Conditions

- A contract requires terms and conditions to :

Contract Terms and Conditions

- A contract requires terms and conditions to control the effect of project deviations:

Contract Terms and Conditions

- ❑ A contract requires terms and conditions to control the effect of project deviations:
 - ❑ Many contracts have standard company terms and conditions
 - ❑ Most contracts require some specific terms and conditions
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Contract Terms and Conditions

For the supply of engineering services

- 1. Definitions :
 - Legally defines expressions used within the Ts and Cs.
 - Client / supplier
 - Contract
 - Documents
 - Intellectual property rights
 - Services
 - Etc
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Contract Terms and Conditions

For the supply of engineering services

- Develop an outline set of terms and conditions for an engineering contract for the development and supply of 2 off motorsport vehicle chassis.
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Contract Terms and Conditions

For the supply of engineering services

□ 2. General :

- Variation authorisation
 - Use of agents
 - Project management and communication arrangements
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Contract Terms and Conditions

For the supply of engineering services

☐ 3. The Proposal :

- Time limitations
 - Binding conditions
 - Cancellation charges
 - Client proposal review responsibility
 - Client expenses & timing
 - ☐ Information supply
 - ☐ Retention of information
 - ☐ Equipment supply
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Contract Terms and Conditions

For the supply of engineering services

□ 4. The Services :

- Suppliers right to change
 - Clients change request rights
 - Meeting the dates
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Contract Terms and Conditions

For the supply of engineering services

- 5. Price and Payment :
 - Net price
 - Invoice payment terms
 - Final payment lateness charges
 - Invoicing stages
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Contract Terms and Conditions

For the supply of engineering services

☐ 6. Specification and Information :

- Accuracy of information
- Invoice payment terms

☐ Indemnify loss

- Consumer protection act 1987
 - Negligence
 - 3rd party IP infringement.
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Contract Terms and Conditions

For the supply of engineering services

□ 7. Special Equipment :

- Special equipments is all the tooling and designs thereof used in the provision of the engineering services and associated products
 - The suppliers retains it all.
 - If the supplier does not get it then the client must say so and pay so.
 - The client may lend equipment to the supplier.
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Contract Terms and Conditions

For the supply of engineering services

□ 8. Intellectual Property :

- What is IP ?
 - Who brings what to the project?
 - Who owns it?
 - Who can use it?
 - What if IP is generated during the project?
 - What if the project infringes other IP?
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Contract Terms and Conditions

For the supply of engineering services

□ 9. Confidentiality :

- Both parties treat information as confidential
- The contract itself is confidential

Contract Terms and Conditions

For the supply of engineering services

- ☐ 10. Warranties and liability :
 - Level of warranty offered
 - Liability limitations concerned with
 - ☐ Documentation
 - ☐ Health and safety
 - The information and material supplied is approximate.
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Contract Terms and Conditions

For the supply of engineering services

☐ 11. Termination :

- Either party can terminate the contract
 - Conditions for termination
 - ☐ Insolvency
 - ☐ Breach of contract
 - ☐ Lack of payment
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Contract Terms and Conditions

For the supply of engineering services

☐ 11. Non-Assignment :

- Cannot sub-contract obligations

☐ 12. Waiver :

- If a breach for one bit of the contract is accepted, it does not apply to other bits.

☐ 13. Interpretation

- How to read the contract

☐ 14. Proper Law

- Which law is the contract within
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