



OVERVIEW OF CONTRACT ADMINISTRATION AND DESIGN & BUILD CONTRACT


PROGRAMME OVERVIEW

<p>PART 1 CONTRACT ADMINISTRATION</p> <p>Overview of contract administration Variation Delay & Extension of time Contractual troubleshooting</p>	<p>MORNING 8.30AM - 12.00PM</p>
<p>PART 2 DESIGN & BUILD</p> <p>Overview of D&B Allocation of risks Critical elements of D&B Contractual troubleshooting</p>	<p>AFTERNOON 2.00PM - 5.00PM</p>

PUJA (B) TRAINING PROGRAM


ONE-DAY TALK ON
CONTRACT ADMINISTRATION AND
DESIGN&BUILD

BY
WAN MAIMUN WAN ABDULLAH
DIRECTOR, KHALID AHMAD ARCHITECTS



PERUBAHAN UKUR JURUTERA & ARKITEK
"Our Profession, Our Values, Our Future"

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2

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3

DESIGN & BUILD CONTRACT

Design & Build / Turnkey
A method of implementing a project whereby the design, build and supervision activities are under the obligation of the Contractor

- Equipment and Maintenance
- Degree of Supervision
- Payment

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4

DESIGN & BUILD CONTRACT

Other hybrids of Design & Build:

- EPCC – Engineering, Procurement, Construction & Commissioning Contract
- Plant, processes and works of engineering nature
- Responsible for:
 - Design
 - Manufacture/fabrication, Installation/Construction
 - Final Testing and Commissioning
 - Operator training/ Technology Transfer
 - Maintenance

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5

DESIGN & BUILD CONTRACT

CHARACTERISTICS

1. Lump sum price for everything necessary including design works
2. Contract Sum Analysis
3. Consultants appointed by contractor
4. No Fluctuation of price
5. Documentation by contractor
6. Training and Operations & Maintenance manuals, where required

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6

DESIGN & BUILD CONTRACT

ADVANTAGES

- Speed of procurement
- Single point responsibility
- Fit for purpose
- Benefit of contractor's innovative & optimal design expertise and better buildability
- Better communication as consultants working directly with contractor**

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7

DESIGN & BUILD CONTRACT

DISADVANTAGES

- Difficulty in evaluation
- Uneconomic use of resources
- Less flexible to change
- Design liability through the contractor
- Professionalism & quality may be compromised as consultants are under contractor **

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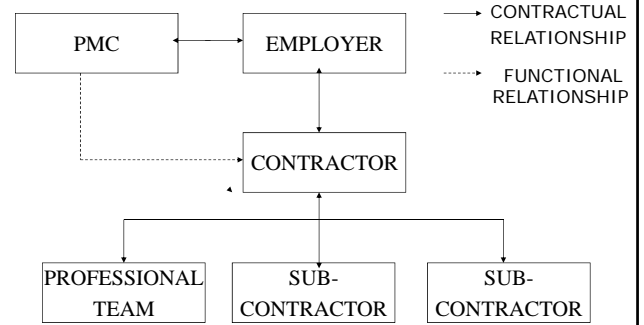
8

DESIGN & BUILD CONTRACT

Suitable for following circumstances :

- Technically complex
- Single point responsibility
- No major changes
- Price certainty
- Early start on site

DESIGN & BUILD CONTRACT



ONE-DAY TRAINING MODULE

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PART 1 CONTRACT ADMINISTRATION

Overview of contract administration
 Variation
 Delay & Extension of time
 Contractual troubleshooting

MORNING
 8.30AM - 12.00PM

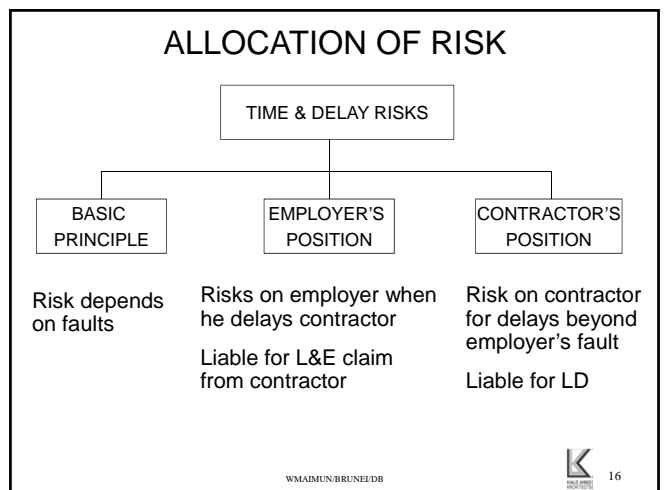
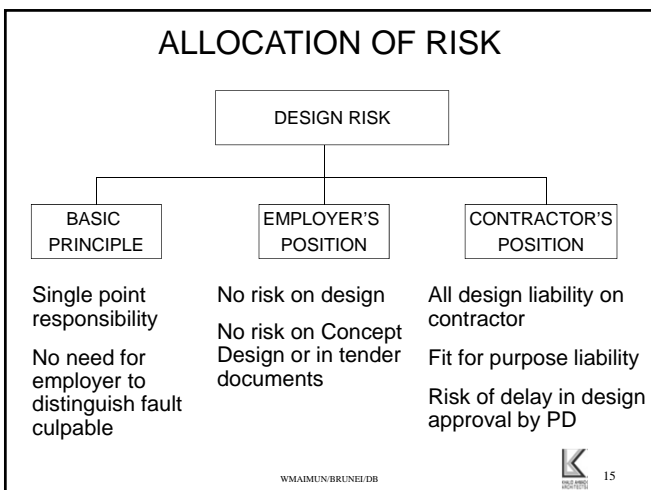
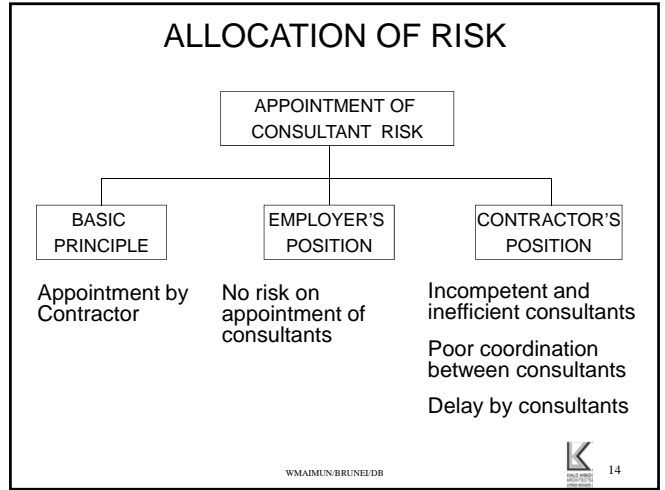
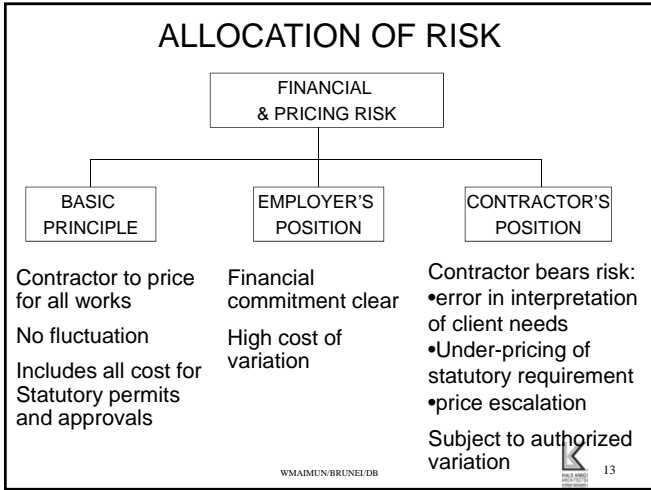
PART 2 DESIGN & BUILD

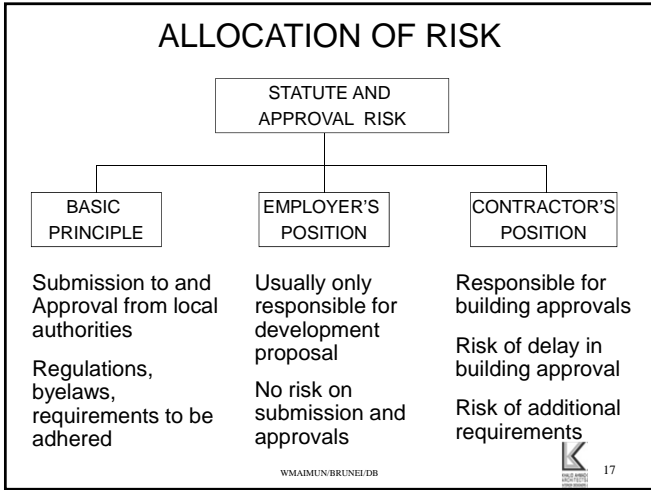
Overview of D&B
 Allocation of risks
 Critical elements of D&B
 Contractual troubleshooting

AFTERNOON
 2.00PM - 5.00PM

ALLOCATION OF RISK

1. Financial and Pricing Risks
2. Appointment of Consultants Risks
3. Design Risks
4. Time and Delay Risks
5. Statute and Approval Risks
6. Construction Risks
7. Others





- ### ALLOCATION OF RISK
- CONSTRUCTION RISKS**
- § Inaccuracy & unavailability of site information
 - § Shortage of materials and labor
 - § Labor unrest
 - § Local authorities policy – restricted working hours
 - § Authorities raid
 - § Uncertainties in construction sector
 - § Weather uncertainties
 - § Adverse physical condition
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- ### CRITICAL ELEMENTS
- Tender document
 - Realistic schedule
 - Parties to the Contract
 - Design development and approval
 - Contract document
 - Variation
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TENDER DOCUMENT

1. Adequate time to prepare Tender documents
2. Tender document must be clear to ensure contractor can price reasonably
3. Information to assist contractor
 - ❖ Information on land issues
 - ❖ Highlight encumbrances and obstacles
 - ❖ Soil investigation
4. Reduce discrepancies between documents

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21

TENDER DOCUMENT

Content of TD

- Instructions to tenderer
- Form of Tender
- *Government/Employer's Requirements*
- *Form of contract for Design & Build*
- Contract Sum Analysis
- Schedule of Rates
- Concept Drawings, if any
- Performance specifications

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22

TENDER DOCUMENT

GOVERNMENT/EMPLOYER'S REQUIREMENTS

- Adequate time to prepare
- Be clear on what need to be built
- State any preference
- If there is ambiguity/vagueness be prepared to accept design which are in accordance with that requirements
 - E.g. requirements for Community Hall, Training centre, Gymnasium, Mosque, landscaping work
 - E.g. Finishing of high quality, adequate protection, skirtings, fire rated door, powerpoints

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23

TENDER DOCUMENT

FORM OF CONTRACT

- Obligations & rights
- Remedy & damages
- Contractual procedures
- Expressed and Implied terms

Note: Any reference to clause is based on JKR D&B (2010)

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24

TENDER DOCUMENT

CONTRACT CLAUSES	JKR D&B 2007
Contractor's Obligations	3
Duties and rights of P.D	8
Contract Documents	7
Possession of site	12
Variations	23
Completion of Works	44
Damages for Non-Completion	45
Delay and Extension of time	49
Loss and Expense	50
Defects after Completion	47
Interim Payments	53

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25

TENDER DOCUMENT

FORM OF CONTRACT

Contractor's expressed and implied obligations :

- Recital C – carrying out that which is necessary for completing all the Works.
- Clause 1.1(s) – permanent and temporary works.
- Clause 3.0 – plan, design, construct, complete as specified or reasonably inferred.
- Clause 7.0 – provide everything necessary for the proper execution of the Works until its completion described or inferred.
- Clause 14.1 – fit for purpose/ independent of fault.

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26

TENDER DOCUMENT

FORM OF CONTRACT

- ✓ Clause 7.6: Sufficiency of Contract Documents
"The contractor shall not be relieved from its obligations to ensure that information given is accurate and sufficient for the purposes of this Contract."
- ✓ Clause 21.2: Inspection of Site
"Any information or document forwarded by the government to the contractor shall not relieve the contractor of his obligations under the provisions of this clause."
- ✓ Clause 13.1d: Submission of supervision reports
"The submission of reports by the contractor shall not in any way absolve the contractor of any of its liability under this contract."

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27

TENDER DOCUMENT

FORM OF CONTRACT

- ✓ Clause 13.2: Quality Assurance System
"The parties agree that compliance with such approved quality assurance system shall not relieve the contractor from any of his other duties, obligations or liabilities under the contract."
- ✓ Clause 13.5e: Program of Work
"... the approval by PD of such program shall not relieve the contractor of any of his duties or responsibilities..."
- ✓ Clause 19.2: Site boundaries and Setting out
"... the contractor, when he makes use of and interpret the same shall do so at his own risk and the government shall not be liable if such information is inaccurate or insufficient."

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28

TENDER DOCUMENT

FORM OF CONTRACT

- ✓ Clause 23.5: Variations
"Any variations made shall not relieve the contractor of his obligations..."
- ✓ Clause 35.5: Consultants
"Any action, decision, instruction or consent made or given by the government or PD regarding consultant shall not relieve the contractor of any of his obligations....."
- ✓ Clause 36.1f: Payment to consultants
"Nothing in this Clause nor anything contained in this Contract shall render government in any way liable nor relieve the contractor from his obligations and liabilities...."
- ✓ Clause 40.1: Sub-contracting and Assignment
"Where PD consent to any subcontract, such consent shall not in any way absolve the obligations of the contractor..."

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29

REALISTIC SCHEDULE

TENDER PERIOD

- Adequate Tender period
- Addenda & Queries
- Tender evaluation period

CONTRACT PERIOD

- Design by various consultants
- Design Development
- Building Approval

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30

REALISTIC SCHEDULE

TENDER EVALUATION

- Comparison of different design & tender sum
- Lowest tender – "everything necessary expressed or implied" and "fit for purpose"
- BDLT vs LTBD
- Letter of intent
- Letter of acceptance – qualifications and counter offer

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31

PROJECT DIRECTOR

- PD, PD Rep, Officer named in contract
- Responsibilities – overall supervision, issue instructions, act in respect of other contractual matters, consent & approval, payment & final account
- Satisfaction of PD
- Understand role of PD and contractor's design in accordance with Employer's requirements and Fit for purpose responsibility

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32

PROJECT DIRECTOR

PROJECT MANAGEMENT CONSULTANT (PMC)

- Professional advisor – Architect, Engineer, QS etc
- Tender administration – Establish Employer's/ Government's Requirements, prepare Tender Documents and undertake tender evaluation
- Contract administration - Advisor and Technical Auditing role or appointed as PD Representative
- Project objectives – Time, Cost and Quality

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33

CONTRACTOR

Contractor shall be fully responsible for expressed and implied obligations of:

1. Design and approval - Fit for Purpose
2. Quality and Safety
3. Plan, Execution and Construction
4. Inspection and Testing and Commissioning
5. Completion of the whole Works including any statutory certification
6. Make good defects

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34

CONTRACTOR

CONSULTANT

- Local consultants, efficient, suitably qualified, experienced and registered.
- Payment direct to consultants
- Responsibilities of contractor
 - Ensure consultants conform to contract
 - Responsible for the acts of consultants
 - Determination of consultants with PD's consent.

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35

CONTRACTOR

CONTRACTOR'S RIGHT TO/ FOR

1. Approval of Design in line with ER/GR
2. Payments
3. Site without disturbance
4. Extension of time
5. Adjudication/ Arbitration on disputes
6. Loss and/or additional expense

in accordance to the provisions of the contract

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36

DESIGN DEVELOPMENT & APPROVAL

CONTRACTOR'S PROPOSAL

Clause 1.1(d):

- Preliminary drawings and specifications.
- Detailed design and specifications as submitted by the contractor from time to time.

Recital D

- Government has examined and, subject to the Conditions of Contract, is satisfied that they appear to meet the Government's Requirement.

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37

DESIGN DEVELOPMENT AND APPROVAL

- Design Development – approval from the PD
- Design freeze
- Design Development & Building Plan Approval 6 – 8 months
- Focus on critical technical department i.e. JPBD, BOMBA, JPS, JKR to get approval in principle
- Letter of recommendation from client to speed up & facilitate process

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38

DESIGN DEVELOPMENT AND APPROVAL

Submissions for Statutory Approval by consultants

- Statutory authorities
- Technical Departments
- Primary utilities providers

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39

DESIGN DEVELOPMENT AND APPROVAL

LEGAL FRAMEWORK

- Town and Country Planning Act 1976
- Town Planner Act 1995, Act 538
- National Land Code 1965, Act 56
- Land Acquisition Act, Act 486
- Street, Drainage and Building Act 1974, Act 133
- Uniform Building By-Law

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40

CONTRACT DOCUMENTS

Contract Document includes:

- Form of Tender
- Letter of Acceptance
- Government/Employer's Requirements
- Form of Contract for Design & Build
- Contractor's Proposal
- Contract Sum Analysis
- Schedule of rates
- Concept design and Performance Specifications
- Approved design (not Variation works)**
- Any qualifications or changes agreed by Employer

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41

CONTRACT DOCUMENT

CLAUSE 7: SUFFICIENCY OF CONTRACT DOCUMENT

- Provide everything necessary to the true intent and meaning of the CD taken together whether shown or described or inferred.
- Appendices mutually explanatory of one another – contractor to rectify any ambiguity or discrepancy at own cost.
- Ambiguity/discrepancy between GR & CP or within GR & CP.

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42

VARIATION

- Works not expressly or impliedly included in the original contract and therefore are not included in the contract price.
- The main objective of D&B contract is for the contractor to design and build the project fit for the purpose and as required by the GR.
- On principle there should not be any variation in a D&B contract as the employer rely on the contractor's expertise.

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43

VARIATION

DEFINITION OF VARIATIONS (23.1)

- ❖ A change in the GR which makes necessary the alteration/modification of the design/ quality/ quantity of Works as described by or referred to therein and affects the Contract Sum, including addition/omission/substitution, alteration of standard, removal of work executed/materials.

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44

VARIATION

Project Director (Clause 23.2):

- Issue instructions effecting a Variation by VO.
- Payment unless due to contractor's default.
- Variation that alters or modify design shall be with consent of contractor.

Contractor (Clause 23.3):

- Only if PD opined it is necessary due to suitability, functionality & safety of the Works
- Contractor's own cost.
- If reduction in cost, CS reduce accordingly.

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45

VARIATION

- VALUATION OF VARIATION (Clause 24)

1. Works of similar character – Contract Sum Analysis or Schedule of Rates with due allowance for any change in conditions or any significant change in quantity of work.
2. Omission works – Contract Sum Analysis/ Schedule of Rates.
3. Works not of similar character - Fair valuation.
4. Dayworks rates – cost plus 15%.

*Include allowance for any necessary addition or reduction of site administration, site facilities and temporary works.

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46

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2.00PM - 5.00PM

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47

DESIGN ISSUES

1. What is the contractor's responsibility if the employer provides a complete design system?
 - Is the Contractor required to take on board that design?
 - If the design is used but it fails, who is responsible?
 - Is the Contractor required to check the design?
 - If the design requires amendments – is this variation?
 - Co-operative Insurance Society Ltd vs Henry Boot Scotland Ltd (2002)

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48

DESIGN ISSUES

2. What is the contractor's responsibility if the employer's requirements are not clear or vague ?

- If the contractor only construct works that are clear but later it is not functional, who is responsible?
- If the contractor construct other necessary works though not clearly provided, is this considered a variation?
- Eastern Oceanic Corp vs Orchard Furnish (1966)

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49

DESIGN ISSUES

3. What is the contractor's responsibility if the contractor's design was initially approved but later it was found that the design approved is not in accordance with the Employer's requirements?

- Are the works required after the design has been initially approved considered as additional works?
- What is the contractor's responsibility to ER since the LOA is based on the contractor's proposal which may defer from the requirements?
- Cable Ltd vs Hutcherson Brothers Pty Ltd (1969)

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50

VARIATION

4. What is the contractor's obligation if the PD issued a variation to the design and subsequently the design fails?

- Can the PD issue a variation to the approved design?
- Is the PD responsible for the varied design?
- Can the contractor refuse to change the design?
- Amaco Exploration vs Telephone Cables (2002)

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51



OVERVIEW OF
CONTRACT ADMINISTRATION AND
DESIGN & BUILD CONTRACT

الحمد لله
ANY QUESTIONS?

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52



OVERVIEW OF
CONTRACT ADMINISTRATION AND
DESIGN & BUILD CONTRACT

Thank you from PUJA(B),
The Elected PUJA Council
And PUJA (B) Academy Sdn Bhd to:

Sr Dr Wan Maimun bt Wan Abdullah

Token of our Appreciation