



Australia



The Victorian Bar Continuing Professional Development Program

*Presented by: Commercial Bar Association, Construction Law Section in
conjunction with the Society of Construction Law & Dispute
Resolution Board of Australia Inc*

Fields: Substantive Law / Professional Skills

Seminar: 627

Dispute Boards and Construction Contracts

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20 October 2009

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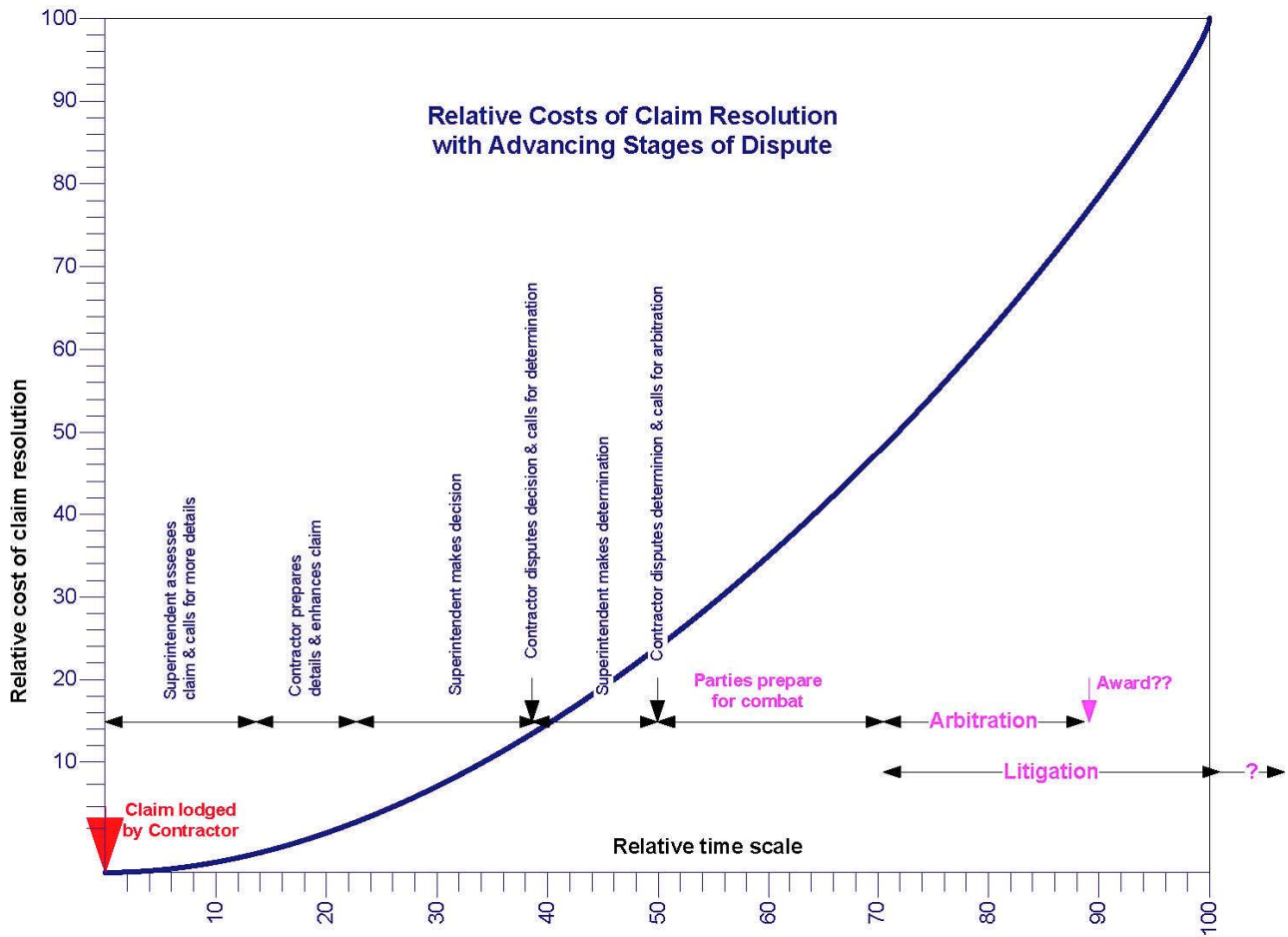
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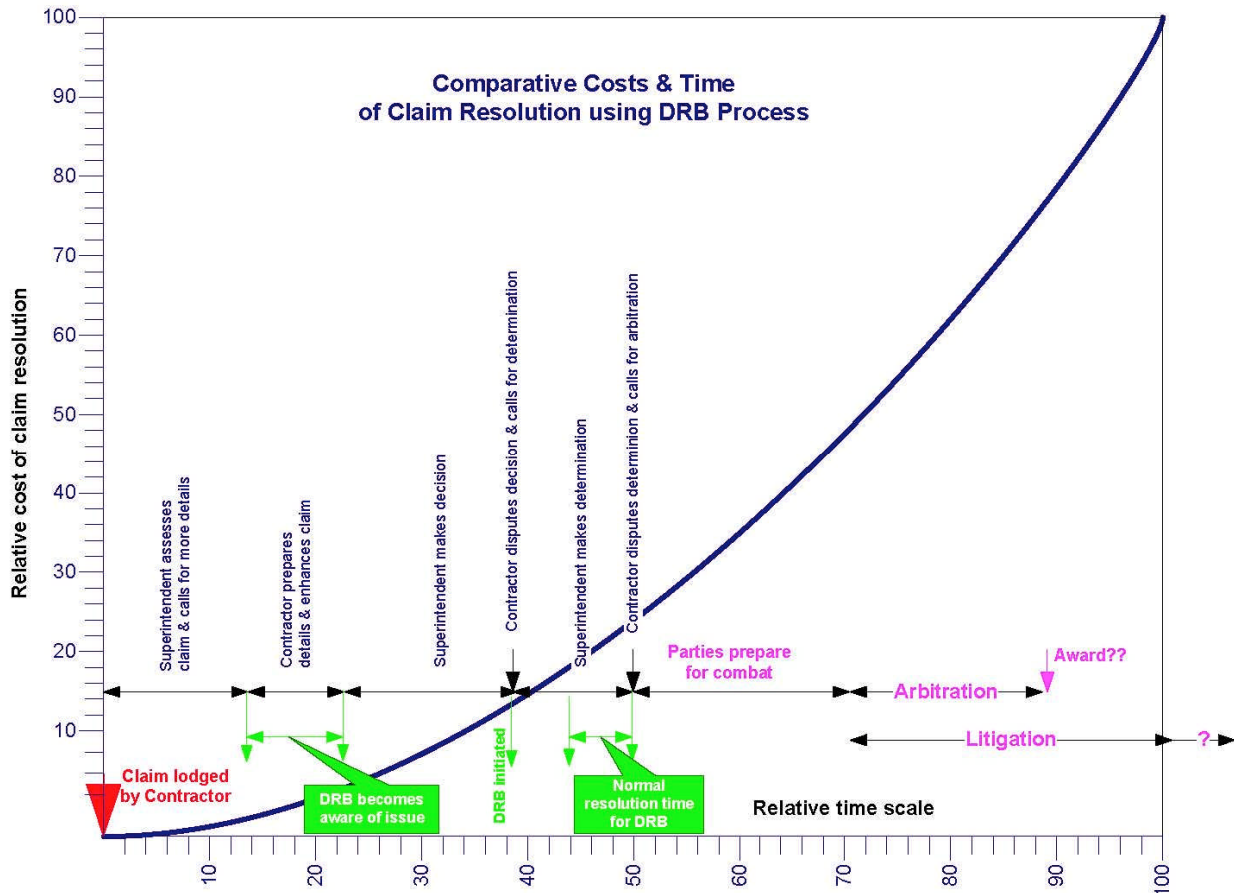
1 What is a Dispute Board?

1. In the context of construction contracts, a Dispute Board (**DB**) comprises a board of one or three persons, independent of the contracting parties, engaged to perform an overview role of the execution of the project and the contract. Its primary function is to assist the parties to avoid disputes if possible, or if not, to assist them to a speedy, cost-effective and acceptable resolution of disputes, and avoid the need for arbitration or litigation.
2. The members of a Dispute Board need to be relevantly experienced in the type of project under construction, and have a thorough understanding of contractual issues. They need to be respected for their experience and expertise, and they must be impartial. Both contracting parties must agree on membership of the DB.
3. The usual selection process for a Dispute Board on projects with a value greater than \$30 million is for the Owner/Employer to nominate one member, and the Contractor to nominate a second member. Notwithstanding their nomination by a party, each of those members must be independent of both contracting parties. Each party has the right of reasonable objection over the other party's selection. The Chairman is usually nominated by the party nominees, and then agreed to by the parties.
4. The most effective Dispute Boards are organised at the start of the contract, and before construction begins. The Board is provided with the contract documents, plans and specifications, and is provided with regular progress reports during the course of the project. Thus, the Board members become and remain familiar with the contract, the project and the participants from the beginning, and have an up-to-date knowledge of all the relevant issues which might impact on potential disputes.

5. The Dispute Board meets on regular site visits with representatives of the Employer and Contractor together, and is briefed on progress and potential problems. The Board also carries out an inspection of the works on each of its site visits, and thus obtains firsthand knowledge of the site and the project.
6. The aim of the Board's site meetings is to facilitate communication with the contracting parties, and encourage resolution of contentious issues at the job level, before they become actual disputes. With the acquiescence of both parties, it is able to provide an informal advisory opinion on a potential dispute.
7. Either party has the right to refer a dispute to the Dispute Board. Following such a referral, the Board will hold a hearing, question witnesses, consider submissions and then provide a reasoned determination of the dispute, all within a defined limited time. The contractual effect of the Board's determination depends on whether the Dispute Board is a so-called "Dispute Resolution Board" (**DRB**), or a "Dispute Adjudication Board" (**DAB**).
8. The determination of a DRB (the US model) is a recommendation to the parties of the DRB's considered opinion as to the appropriate resolution of the dispute. The DRB's recommendation has no contractual effect, unless the parties agree to implement it. However, notwithstanding the lack of a binding contractual effect of the DRB's recommendation, it is generally very persuasive because of the stature of the Board members, and the structured, fair and independent process by which they came to their reasoned decision. The Dispute Resolution Board Foundation (**DRBF**) recommends this model, and its track record of success supports its efficacy as an effective method of dispute resolution.
9. By contrast, the determination of a DAB (the European model) is a decision which is contractually binding on the parties unless and until it is formally disputed in accordance with the contractual requirements for final determination of disputes (arbitration or litigation). There is a defined limited period of time after the DAB's decision within which either party may give notice of dispute. In the absence of such notice, the DAB's decision is contractually binding on the parties. Even if one of the parties gives formal notice of dispute, the final resolution of the dispute by arbitration or litigation is deferred until the end of the project; in the meantime, the DAB's decision is binding on the parties.
10. The cost effectiveness of DBs is illustrated on the following diagrams. The first diagram illustrates the relative costs of dispute resolution with advancing stages of dispute, culminating with the high cost of either arbitration or litigation.



- The second diagram illustrates the early stages at which a DB can assist the parties in avoiding disputes, or if that is not possible, by resolution of the dispute. Clearly, in either case, successful intervention by a DB avoids the substantial cost and time involved in ultimate resolution by either arbitration or litigation.



12. The DRBF website provides a comprehensive database on projects around the world which have used DRBs, identifying the Contractor and Employer, contract value, and the numbers of disputes heard, settled or referred to other dispute resolution procedures.¹ The database lists 1532 projects started from 1975 to 2006, with a total contract value of US\$98b. Of the 1860 disputes heard, 92.4% had been settled, and only 2.8% had been referred to binding dispute resolution procedures.

2 Contractual requirements

13. Dispute Boards have been used with a variety of different forms of construction contract:

- Construct Only;
- Design & Construct (D&C);
- D & C, with Early Contractor Involvement (ECI);
- Design, Construct and Maintain (DCM);
- Design, Construct, Operate and Maintain (DCOM);
- Semi or Hybrid Alliances.

¹ http://www.drb.org/manual/Database_2005.xls

14. The formal requirements for implementation of a Dispute Board comprise the following three contractual documents:

- **Dispute Board clause** in the construction contract between Employer and Contractor;
- **Procedural Rules** defining the operations of the DB; and
- **Tripartite Agreements** between Employer, Contractor and DB Members, incorporating the Procedural Rules.

2.1 Standard Form contracts with a DB clause

15. A number of Standard Form contracts contain a DB clause, including:

- International Federation of Consulting Engineers (**FIDIC**)²;
- World Bank General Conditions³;
- ConsensusDocs (USA)⁴;
- California Department of Transportation (**Caltrans**).

16. The FIDIC Conditions of Contract for Construction contains contractual clauses on the DB to the following effect:

20.2 Appointment of the DAB

Disputes shall be adjudicated by a DAB in accordance with sub-clause 20.4 [Obtaining DAB's Decision]. The parties shall jointly appoint a DAB by the date stated in the Appendix to Tender.

- The DAB comprises 1 or 3 members (default 3).
- Appointment process for a 3 person DAB.
- Selection from a list of potential members in the Contract.
- Tripartite Agreement(s) to incorporate by reference the General Conditions of Dispute Adjudication Agreement [Appendix].
- Remuneration of DB member(s).
- A matter can be referred to DB for opinion only if parties agree.
- Appointment of a replacement DB member.
- Termination of a DB member's appointment by mutual agreement of parties.

20.3 Failure to agree DAB

20.4 Obtaining DAB's decision

If a dispute (of any kind whatsoever) arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works, including any dispute as to any certificate, determination, instruction, opinion or valuation of the Engineer, either Party may refer the dispute in writing to the DAB for its decision,

² FIDIC Conditions of Contract for Construction (2000); FIDIC Conditions of Contract for Plant and Design-Build (2000); FIDIC Conditions of Contract for EPC/Turnkey Projects (2000)

³ The World Bank, Procurement of Works and User's Guide (2006)

⁴ 200 Standard Agreement (LS) [lump sum]; 300 Tri-Party Agreement for collaborative project delivery; 410 Design-Build Agreement (GMP) [guaranteed maximum price]

with copies to the other Party and the Engineer. Such reference shall state that it is given under this Sub-Clause.

- Time of receipt for a 3 person DAB.
- Parties are to make available information, site access and facilities requested by DAB.
- DAB members are not acting as Arbitrators.
- DAB is to give a reasoned decision within 84 days.
- The DAB's decision is binding on both parties unless and until it is revised in an amicable settlement or arbitral award.
- Either Party may give notice of dissatisfaction (with reasons) of the DAB's decision within 28 days of receiving the decision.
- Notice of dissatisfaction is a condition precedent to a party's entitlement to commence arbitration.
- The DAB's decision is final and binding unless notice of dissatisfaction is given within 28 days.

2.2 Standard contract clauses for a DB

17. The International Chamber of Commerce (**ICC**) recommends the following contractual clause on the use of a DB for use in construction contracts:

The Parties hereby agree to establish a DAB in accordance with the DB Rules of the ICC which are incorporated herein by reference. The DAB shall have [one/three] member[s] appointed in this Contract or appointed pursuant to the Rules.

- All disputes are to be submitted to the DAB in the first instance.
- The DAB shall issue a decision in accordance with the Rules.
- If a party fails to comply with a DAB decision, the other party may refer the failure to arbitration.
- If either party expresses dissatisfaction with a DAB decision, the dispute shall be finally settled by ICC arbitration.
- If there is no DAB decision, the dispute shall be finally settled by ICC arbitration.⁵

18. The Dispute Resolution Board Australasia Inc (**DRBA**) publishes a draft contract clause on its website which includes within it a set of Procedural Rules for a DB. The draft clause contains the following:

1. INTRODUCTION

- 1.1 Summary
- 1.2 Definitions
- 1.3 Scope
- 1.4 Purpose
- 1.5 Continuance of Work
- 1.6 Tenure of the Board

⁵ http://www.iccwbo.org/uploadedFiles/Court/DRS/dispute_boards/clause_drb.pdf

2. MEMBERSHIP

- 2.1 General
- 2.2 Criteria
- 2.3 Disclosure Statement
- 2.4 Selection Process
- 2.5 Three-Party Agreement

3. OPERATION

- 3.1 General
- 3.2 Project Documents, Reports and Information
- 3.3 Periodic Meetings and Visits

4. REVIEW OF DISPUTES

- 4.1 General
- 4.2 Prerequisites to Review
- 4.3 Requesting Review
- 4.4 Scheduling Review
- 4.5 Pre-meeting Requirements
- 4.6 Meeting
- 4.7 Deliberations
- 4.8 Recommendations
- 4.9 Acceptance or Rejection
- 4.10 Clarification and Reconsideration
- 4.11 Admissibility

5. PAYMENT

- 5.1 Payment and Expenses.⁶

2.3 Procedural Rules and operation of a DB

19. The Procedural Rules fulfil the dual purpose of formalising the operation of the DB as between the contracting parties, and defining the operational procedures which the Board members are required to follow. As such, the Procedural Rules are usually incorporated not only as part of the construction contract, but as part of the DB members' contracts with the parties (**Tripartite Agreements**).

⁶ http://www.drba.com.au/images/DRBA_Precedents/draft%20contract%20clause%20final.doc

20. DB members must become and remain familiar with all aspects of the project by reading regular site reports, carrying out site inspections, and meeting with Employer and Contractor representatives, three or four times per year. This is an essential part of the function of Board members, and is a necessary preparation for informed engagement by DB members in the project. These aspects of the DB members' role should be incorporated in the Procedural Rules.
21. The Procedural Rules for operation of a DB also need to provide for two different modes of activity undertaken by the Dispute Board. Each mode of operation has different requirements and makes different demands on the Board:
 - **dispute avoidance**; and
 - **dispute resolution**, if a dispute cannot be avoided.
22. In "dispute avoidance mode", the Board's role is fulfilled by a flexible, informal format for meetings and communications. At their regular meetings with the DB, the parties provide detailed reports on:
 - status of the project;
 - actual and potential delays;
 - variations;
 - claims;
 - potential issues of concern; and
 - future opportunities.
23. It is highly recommended that Senior Executives of the contracting parties attend all DB meetings. This ensures not only that they are aware of progress of the project and potential issues before they become disputes, but the Senior Executives can play a proactive role in interactions with the Dispute Board, and assist in maintaining a focus on the "big picture".
24. As part of their dispute avoidance role, the DB can provide an advisory opinion on a potential dispute, if both parties agree to refer it to the Board. The Board members are ideally placed to provide such an opinion, acting as Experts, as they are already fully conversant with the contract, the project and the issues. Such an advisory opinion can be produced speedily, with a minimum of formality.
25. Although there may be significant documentation produced in connection with DB meetings, discussions and advisory opinions, all reports and communications produced during the DB's dispute avoidance activities are "without prejudice". This facilitates free

and frank exchange between all parties, and ensures that neither contracting party will ultimately be disadvantaged by its position taken or documents produced without detailed consideration.

26. The process engaged in by the DB during its dispute avoidance activities has some similarities with mediation/non-binding expert determination:
 - the DB's role includes promoting communication and assisting the parties to avoid entrenched positions;
 - the DB facilitates the parties to achieve their own resolution of contentious issues;
 - a "best for project" outcome is sought, ie "win-win" for both parties;
 - the advisory opinion arrived at by the DB does not prejudice the parties' contractual rights to initiate a formal dispute to be determined by the DB in accordance with the provisions of the contract; and
 - the parties themselves decide whether or not to implement any outcome proposed by the DB.
27. However, if, despite the DB's best efforts, a dispute between the parties cannot be avoided, the DB acts in "dispute resolution mode", where either party formally refers a dispute to it. Unlike the dispute advisory role where each contracting party must agree to refer a dispute to the DB for its opinion, both parties have the contractual right to refer a dispute to the DB independently.
28. In its resolution of a dispute formally referred to it, the DB acts somewhat more formally than in its dispute avoidance mode, to ensure that the parties are afforded procedural fairness. The process is commenced by the parties submitting details of their case with supporting documentation to the DB, which may convene a hearing at which evidence is adduced, and witnesses can be questioned by the Board.
29. Within a defined limited period of time, the DB produces a written decision on the dispute with detailed reasons. The submissions made to the DB and its decision can be used subsequently as evidence in litigation or arbitration if the DB's decision does not ultimately resolve the dispute.
30. The process engaged in by the DB during its dispute resolution activities has some similarities with arbitration/adjudication:
 - there is a certain defined formality to proceedings;

- the parties are afforded procedural fairness, in that they have a fair opportunity to present their case, rebut the case of their opponent and have a decision on the dispute handed down by fair, disinterested and impartial adjudicators;
- resolution of the dispute is based on the legal requirements of the contract;
- the DB's decision is in writing with detailed reasons; and
- implementation of the DB's decision is carried out in accordance with the provisions of the contract.

31. The DB process of dispute resolution avoids the potential conflicts that can occur if an Arbitrator acts as a Mediator, but is ultimately unsuccessful in avoiding an arbitration hearing. In the case of a DB decision, it is only binding if the parties accept it (DRB), or do not seek final resolution of their legal rights by arbitration or litigation (DAB). Thus, any "contamination" of the DB by its prior knowledge of the "without prejudice" discussions and communications during the dispute avoidance process does not prejudice the parties' contractual rights to have their dispute ultimately resolved by a Judge or Arbitrator, independent of the DB.

32. It should be apparent that there is only a distinction between a DRB and a DAB at the stage of implementation of a formal DB decision on a dispute:

DRB: the DB's decision only becomes binding if both contracting parties agree to accept it;

DAB: the DB's decision is binding unless and until it is overturned by agreement or subsequent arbitration or litigation, consequent on one of the contracting parties serving a formal notice of dispute within the limited time provided for in the contract.

2.4 Standard Procedural Rules

33. Procedural Rules for the conduct of DB proceedings are issued by the following organisations:

- FIDIC⁷;
- International Chamber of Commerce⁸;
- World Bank⁹;
- Institution of Civil Engineers (UK)¹⁰;

⁷ Annex Procedural Rules, FIDIC Conditions of Contract for Construction (2000)

⁸ http://www.iccwbo.org/uploadedFiles/Court/DRS/dispute_boards/db_rules_2004.pdf

⁹ The World Bank, Procurement of Works and User's Guide (2006) 225, 226

¹⁰ ICE Dispute Resolution Board Procedure, First Addition February 2005

- American Arbitration Association¹¹;
- Dispute Resolution Board Foundation (USA)¹²;
- Dispute Resolution Board Australasia Inc¹³.

34. The FIDIC Procedural Rules for a DAB¹⁴ cover the following issues:

- intervals between DAB site visits;
- timing and agenda of site visits;
- attendance and organisation of site visits;
- copies of documents furnished to the DAB;
- procedure for a dispute referred to the DAB;
- hearing of a dispute at the DAB's option;
- ambit of the DAB's procedural powers for a hearing;
- defined procedural powers of the DAB in deciding a dispute; and
- the process for the DAB making its decision.

35. The Procedural Rules published by the ICC¹⁵ comprehensively cover the following:

INTRODUCTORY PROVISIONS

1. Scope of Rules.
2. Definitions.
3. Agreement to submit to the Rules.

TYPES OF DISPUTE BOARDS

4. Dispute Review Boards.
5. Dispute Adjudication Boards.
6. Combined Dispute Boards.

ESTABLISHMENT OF THE DISPUTE BOARD

7. Appointment of the DB Members.

OBLIGATIONS OF THE DISPUTE BOARD MEMBERS

8. Independence.
9. Work of the DB and Confidentiality.
10. DB Member Agreement.

OBLIGATION TO COOPERATE

¹¹ <http://www.adr.org/sp.asp?id=22028>

¹² http://www.drb.org/manual_access.htm

¹³ http://www.drba.com.au/images/DRBA_Precedents/draft%20contract%20clause%20final.doc

¹⁴ Annex Procedural Rules, FIDIC Conditions of Contract for Construction (2000)

¹⁵ http://www.iccwbo.org/uploadedFiles/Court/DRS/dispute_boards/db_rules_2004.pdf

11. Providing of information.
12. Meetings and site visits.
13. Written notifications or communications; time limits.

OPERATION OF THE DISPUTE BOARD

14. Beginning and end of the DB's activities.
15. Powers of the DB.

PROCEDURES BEFORE THE DISPUTE BOARD

16. Informal assistance with disagreements.
17. Formal referral of disputes for a determination; statement of a case.
18. Response and additional documentation.
19. Organisation and conduct of hearings.

DETERMINATIONS OF THE DISPUTE BOARD

20. Time limit for rendering a determination.
21. Review of decisions by the Centre.
22. Contents of a determination.
23. Making of the determination.
24. Correction and interpretation of determinations.
25. Admissibility of determinations in subsequent proceedings.

COMPENSATION OF THE DISPUTE BOARD MEMBERS AND ICC

26. General considerations.
27. Monthly retainer fee.
28. Daily fee.
29. Travel costs and other expenses.
30. Taxes and charges.
31. Payment arrangements.
32. Administrative expenses of ICC.

GENERAL RULES

33. Exclusion of liability.
34. Application of the Rules.
36. The DRBF publishes Procedural Rules for DRBs¹⁶ covering the following:
 1. General.

¹⁶ http://www.drb.org/manual_access.htm

2. Disputes eligible for consideration by the DRB.
3. DRB qualifications.
4. Establishment of the DRB.
5. DRB meetings.
6. Dispute resolution process:
 - Prior good faith negotiations.
 - Dispute referral.
 - Pre-hearing submittal.
 - DRB hearings.
 - Failure to prepare a pre-hearing submittal or attend a DRB hearing.
 - Use of outside experts.
 - DRB Report.
 - Advisory opinions.
7. Compensation.

37. As noted in paragraph 18 above, the DRBA's recommended contract clause for a DB contains within it the Procedural Rules for operation of the DB.¹⁷

2.5 Tripartite Agreements for a DB

38. As the Dispute Board members are not parties to the construction contract between the Employer and Contractor, it is necessary for each of the DB members to enter into a contract for their services. It is important that the members' independence of both contracting parties and its equal obligations to both, is reflected in the contractual arrangements for the services of every DB member. Accordingly, it is appropriate for each DB member to enter into a contract jointly with the Employer and Contractor – a **Tripartite Agreement**.
39. As with other agreements for professional services in connection with dispute resolution by a third-party neutral, the Tripartite Agreement should define the scope of work for the DB member, his/her responsibilities, the duration of services, compensation and reimbursement for services, and legal relations. The Tripartite Agreement almost invariably will require that the DB member maintains confidentiality about the operations of the DB. Payment of the DB members invoices should be authorised by both contract parties, or separately paid in equal shares.

¹⁷ http://www.drba.com.au/images/DRBA_Precedents/draft%20contract%20clause%20final.doc

40. As with Adjudicators and Arbitrators, it is appropriate that a DB member have quasi-judicial immunity for anything s/he does in good faith in connection with the DB process. If the Tripartite Agreement did not provide such immunity for a DB member, it would suggest that the parties are attempting to hold her/him personally or professionally liable for his/her efforts to resolve the parties' disputes.
41. These principles are generally incorporated in Tripartite Agreements for DBs published by the following organisations:
- FIDIC¹⁸;
 - World Bank¹⁹;
 - Institution of Civil Engineers²⁰;
 - Dispute Resolution Board Foundation²¹; and
 - Dispute Resolution Board Australasia Inc²².

3 Cost of Dispute Boards

42. The conventional wisdom in respect of Dispute Boards is that they are more suited to large projects, say in excess of \$50 million. Certainly, the not insignificant cost of engaging a team of three experienced Board members to provide ongoing regular services throughout the life of a project is a disincentive to implementation of a DB on lower cost projects. This can, however, be mitigated by implementing a one-person DB for lower cost projects.
43. It is, however, interesting to note that with the increasing use of DBs by major US Employers such as the California Department of Transportation, a higher proportion of DBs are now implemented on lower cost projects. The following graph²³ is taken from statistics on the DRBF website, and shows both the increasing number of DBs worldwide in recent years, and the higher proportion of those projects in the \$10m - \$20m and \$20m - \$40m contract price ranges.

¹⁸ Appendix General Conditions of Dispute Adjudication Agreement, FIDIC Conditions of Contract for Construction (2000)

¹⁹ The World Bank, Procurement of Works and User's Guide (2006) 218 - 224

²⁰ ICE Dispute Resolution Board Procedure, First Addition February 2005, 21 - 24

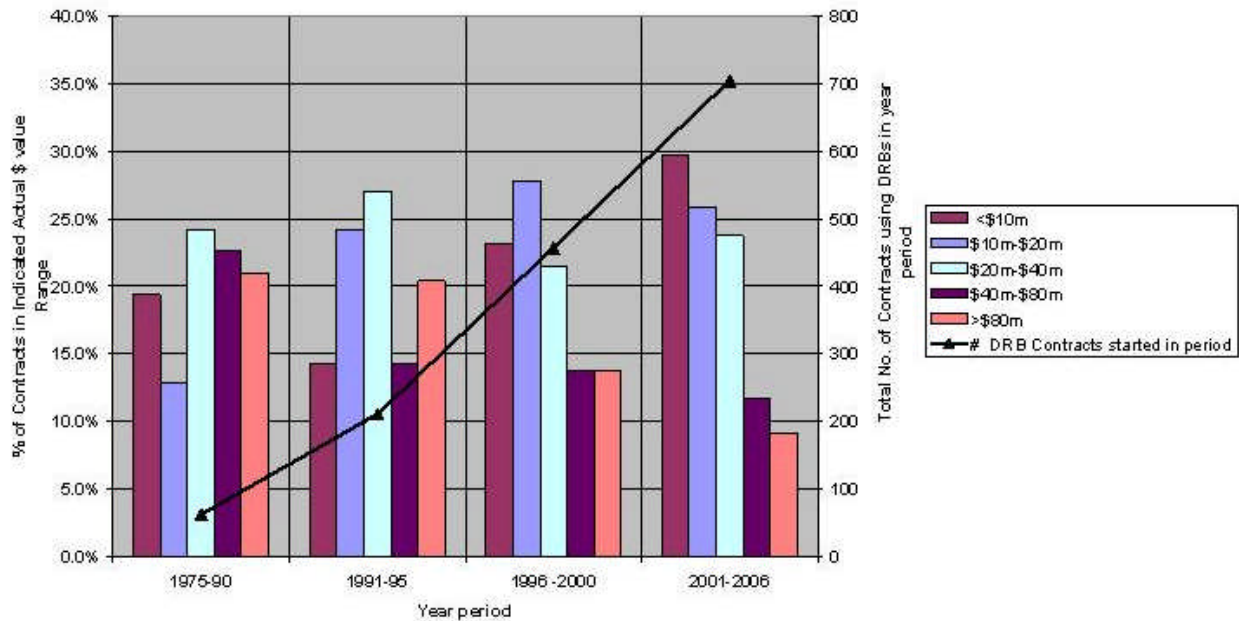
²¹ http://www.drb.org/manual/2B_final_12-06.doc

²² http://www.drba.com.au/images/DRBA_Precedents/draft%20three%20party%20agreement%20final.doc

²³

http://www.drba.com.au/images/IAMANationalConference/dispute%20boards%20in%20major%20infrastructure%20projects_an%20australasian%20perspective.pdf

Distribution of Actual \$ Value Of Contracts started & No. of Contracts started with DRBs , by year period



44. The known and predictable costs (or the perceived costs) of DBs frequently appear to be a stumbling block to their implementation.
45. The direct costs of DBs (ie the "external" costs of the DB over and above the costs of personnel involved in the project) comprise the following:
 - a retainer for each member of the DB, typically 2-3 times their daily fee;
 - a daily fee per site member for site meetings and dispute determinations; and
 - travel time and expenses.
46. In addition to these direct costs, there are indirect costs of the contract parties' employees' time in preparing for and participating in DB meetings. Arguably, many of these costs would be incurred in any event, in planning, project managing or negotiating issues with counterparts in the other contracting party's organisation.
47. Clearly, implementation of a DB involves a real and significant cost that is not present directly in contracts which do not use a DB. However, to put it in context, that cost is usually less (often considerably) than 0.25% of the final contract price. It is suggested that, in view of the track record of DBs as effective dispute avoidance mechanisms, this cost should be viewed as an "insurance cost" paid to dramatically reduce the risk of a serious and costly dispute.
48. We are all familiar with the concept of insurance: we pay a fixed known amount each year to protect us from the (potentially large) costs of a known risk eventuating. We know that,

statistically, there is a relatively low probability of the risk event occurring, but that if it does occur, the costs are likely to be very high. We understand that paying the known amount of an insurance policy will protect us from the indeterminate and potentially financially crippling costs that could occur if the risk event occurred. Usually, we are thankful in each year if the risk event did not occur, and that we did not have to make a claim on our insurance policy. Most of us would not consider that the amount we paid for the insurance policy was a waste of money because the risk event did not occur. Typically, we regard the insurance costs as part of the cost of doing business, as this enables greater certainty in planning and budgeting our activities (and projects).

49. It is suggested that the same approach should be taken to the cost of implementation of DBs in construction projects, and that it is fallacious to suggest that a particular DB was a waste of money because "it never had to do anything", ie it never had to resolve a dispute. In the author's view, it is those projects with a DB that did not have a dispute that provide the greatest justification for the decision to implement a DB, and to pay the "insurance cost" of maintaining the DB's ongoing involvement during the life of the project.
50. If a DB is effective in avoiding disputes in a major project, its cost (typically averaging 0.15% and no more than 0.26% of total project cost²⁴) is likely to be good value for money "insurance". This can be demonstrated as follows by considering the entire population of construction contracts. It has been suggested that in almost 10% of construction projects, between 8% and 10% of the total project cost is legal cost, and 50% of all legal cost is expended in connection with disputes.²⁵ Using the methodology commonly used in pricing contract risks at the tender stage, the cost of the risk of disputes in a construction contract could therefore be calculated as follows:
- 10% (probability of a dispute) x 8% (legal costs of 10% of projects) x 50% (proportion of legal costs typically expended in a dispute) = 0.4% x project cost.
51. That is, without considering any other factors, the risk cost of a dispute on a "typical" construction contract is 0.4% of the project cost. Thus, on these figures, a prudent Contractor would allow, in addition to the estimated actual costs of carrying out a project, an additional 0.4% of the project cost to allow for the cost risk of a dispute occurring.
52. However, as with any risk event, a dispute may occur, or it may not. If a dispute does not occur, there will be no legal costs incurred in relation to it. If a dispute does occur, the legal costs may range from negligible to 8-10% of the project cost (and sometimes significantly

²⁴ http://www.drb.org/manual/1.4_final_12-06.pdf ¶1.4.2

²⁵ Peter Chapman, 'Dispute Boards for Major Infrastructure Projects' (Paper presented at Seminar on The Use of Dispute Boards in Australia, Queensland, 30 November 2006).

more). In that event, the statistical risk cost of 0.4% of project cost for disputes becomes meaningless, and is likely to be a substantial underestimate of the actual costs.

53. In the light of these considerations, the costs of implementing a DB which has the effect of avoiding disputes makes economic sense from an "insurance" perspective. Paying an amount of, say 0.15%, of the project cost for a DB as "insurance" makes economic sense if it eliminates the need for, on average, the risk cost of 0.4% of the project cost for disputes. It makes even more sense in those terms if it reduces to a minimal level the not insignificant risks of legal costs ultimately exceeding 10% of the project price.

4 Dispute Boards in Australia

54. The DB concept can be used with any virtually form of standard or bespoke contract in Australasia, and has been.
55. To the knowledge of the DRBA, since 1987 there have been 20 contracts which have implemented a DB in one form or another: 13 in Australia and 7 in New Zealand.²⁶
56. The range of contract values (excluding inflation) has been from \$22 million to \$1.3 billion.
57. Since 2006, 15 contracts which have implemented a DB have been completed or are in progress. The value of these projects is approximately \$4 billion.
58. Of the 20 projects in Australasia, only five disputes have been formally referred to a DB since 1987. All of those disputes were resolved within the DB process, ie none required ultimate arbitration or litigation.
59. The contract values of these projects generally remained within the Employer's budget.
60. The following table summarises the 13 Australian projects so far which have had a DB²⁷:

²⁶ http://www.drba.com.au/images/Australian_DRBs/australasian%20drbs%20-%2011%2002%2008.doc

²⁷ Ibid

DRBA No	Project Name	Type	State	Start Year	Finish Year	Owner / Principal	Contractor	Contract Value (A\$)
1	Sydney Ocean Outfall Tunnels (3 no)	Construct only	NSW	1987	1991	Sydney Metropolitan Water, Sewerage & Drainage Board	Phillip Holzman-John Holland JV	\$450m
2	Warragamba Dam Upgrade	Construct only	NSW	1988	1990	Sydney Metropolitan Water, Sewerage & Drainage Board	Concrete Constructions	\$75M
3	Sydney Airport, Third / Parallel Runway	D & C	NSW	1988	1991	Federal Airports Corporation	Bilfinger+Berger- Boulderstone Hornibrook JV	\$100m approx
4	Dandelup Dam	Construct only	WA	1991	1993	WA Water Authority	McMahon Construction	\$35m
5	Sydney International Terminal Upgrade (SA2000)	D & C	NSW	1998	2000	Sydney Airports Corporation Ltd	Bovis Lend Lease	\$105M
6	Harvey Dam	Construct only	WA	2000	2002	Water Corporation of WA	Leighton Contractors	\$50m
7	Burrup Fertilisers Liquid Anhydrous Ammonia Production Plant	EPC	WA	2002	2003	Burrup Fertilisers Pty Limited	SNC – Lavalin (S.A.) Inc	\$TBA
8	Ross River Dam	Semi Alliance / Construct only	QLD	2006	2007	North Queensland Water	John Holland / McMahon Joint Venture	\$94M
9	Ipswich Road / Logan Motorway Interchange	D&C	QLD	2006	Ongoing	Queensland DMR	Leighton Contractor	\$240M
10	Gateway Arterial Upgrade	Design, construct & maintain	QLD	Nov 2006	Ongoing	Queensland DMR	Leighton Contractors / Abigroup Joint Venture	\$1,300M
11	City West Cable Tunnel	Construct only	NSW	2007	Ongoing	Energy Australia	Thiess Contractors P/L	\$57m
12	Sydney Desalination Plant	DBOM	NSW	2007	Ongoing	Sydney Water Corporation	Blue Water Consortium (John Holland and Veolia Water)	Approx \$1 billion,
13	Port Botany Expansion Project	D & C	NSW	2007	Ongoing	Sydney Ports Corporation	Boulderstone Hornibrook /Jan De Nul Joint Venture	Approx \$500m

5 Benefits of DBs

61. It is suggested that DBs have the following **dispute prevention benefits**:
- they tend to promote bilateral agreement;
 - they facilitate positive relations between the contracting parties;
 - they facilitate open communications;
 - they facilitate trust and cooperation;
 - they minimise aggregation of claims until late in or at the conclusion of the project;
 - they minimise contractual posturing;
 - they encourage identification, evaluation and dealing with claims in a prompt, business-like manner; and
 - they focus on early identification and analysis, and prompt resolution of issues which could fester into disputes.
62. It is suggested that DBs have the following **dispute resolution benefits**:
- they have a high resolution rate for disputes referred to them;
 - they provide an impartial forum in which each contracting party can present its case and “have its day in court”;
 - they provide an informal and rational basis for resolution of a dispute which can provide political cover for personnel in the contracting parties;
 - the parties are normally predisposed to DB proceedings, because of their familiarity with the process, its informality and their respect for the DB members;
 - DBs reduce transactional costs, both legal fees and consulting fees;
 - DBs reduce lost productivity time by enabling dispute resolution in "real time";
 - DBs produce better informed decisions in minimum time because of their intimate familiarity with the contract, the project and the participants; and
 - Tenderers may submit lower bids because of a lower bid premium for the risk of disputes.

6 Reasons for the high success rate of DBs

63. DBs provide an impartial, informed, rational mechanism for resolving issues **quickly**.
64. DB members have knowledge and experience with:
- the relevant design and construction issues;
 - interpretation and application of contract documents;
 - the general process of resolving disputes; and
 - a track record with the **specific** project at-hand.

65. Both parties are **favourably disposed** to accept the DRB's recommendations or not dispute the DAB's determinations since the parties themselves have selected and approved the particular Board members, and have confidence in and respect them.
66. The parties themselves select or approve all the DB members, and have confidence in their skills and experience as facilitators and dispute resolvers.
67. The DB process is **cost effective** when compared with formal arbitration and litigation, especially with respect to **time**.
68. Disputed matters can frequently be docketed, heard, recommended and resolved within the time it may take to select an arbitration panel or file a statement of claim in court.
69. Issues are heard by the DB **just after** an impasse is reached whilst the facts and circumstances are still **fresh** in the minds of the participants. Thus, better informed resolutions are possible since eyewitnesses are still available, and the DB can actually **see** the problem and its impacts, if any, in the field.
70. DB hearings are held in real-time and transactional costs are thereby **minimized**.
71. Expensive and time consuming legal and consultant expenses are reduced if not eliminated.
72. Importantly to the Employer and Contractor, internal management time and associated costs are greatly reduced or done away with.
73. The construction industry recognizes and rewards Employers that use fair and expeditious contracting practices. The rewards come in the form of:
 - lower bids;
 - more bids; and
 - **contingency** bidding costs are reduced if the potential for expensive disputes are eliminated or significantly reduced.