THE EFFECTIVENESS OF DISPUTE BOARDS: AN HISTORICAL OVERVIEW

JEREMY GLOVER

Partner, Fenwick Elliott LLP*

ABSTRACT

On the 50th anniversary of the first use of Dispute Boards, and in light of the Dispute Boards International Survey Report published by King's College London in December 2024, this article reviews the history of research into the effectiveness of Dispute Boards. Starting with an insight into that very first Board, the article tracks the initial studies carried out in the US, reviews the project data accumulated by a number of US Transport Departments, considers the global research carried out by the DRBF and considers the position in South East Asia. Finally, the article compares the results of these surveys with the new Report which came out last year.

INTRODUCTION

The year 2025 marks the 50th anniversary of what is commonly believed to be the first project to use a formal Dispute Review Board (or DRB) as part of the original contract documents. Coincidentally at the end of 2024, Professor Renato Nazzini and Raquel Macedo Moreira of King's College London released their Report "2024 Dispute Boards International Survey: A Study on the Worldwide Use of Dispute Boards over the Past Six Years" ("KCL Report"), which provides a number of valuable insights into the use and effectiveness of Dispute Boards (DBs)² in the construction and infrastructure sectors.

The first project, the second bore of the Eisenhower Tunnel in Colorado, was bid on 8 August 1975. The members of that first DRB were two engineers, Al Mathews and Charles McGraw, and a lawyer, Palmer King.³ We know a

¹ https://www.kcl.ac.uk/law/assets/kcl-dpsl-2024-dispute-boards-international-survey-report-digital-aw.pdf (last accessed 4 March 2025). I was a member of the Steering Committee for this survey.

³ And the make-up (and success) of that very first DB should perhaps end forever the debate about the inclusion of lawyers as members of a DB.

^{*} Email: jglover@fenwickelliott.com.

² There are a number of different forms of Dispute Board (DB), of which the DRB is just one. The ICC Dispute Board Rules 2015 state that: "A Dispute Board is a standing body typically set up upon signature or commencement of performance of a mid- or long-term contract, to help the parties avoid or overcome any disagreements or disputes that arise during the implementation of the contract." For ease of reference in this paper I will use the general term DB unless a specific form of DB is being referred to.

little about what happened from a paper prepared by Palmer King sometime after the project had been completed.⁴ He noted that the construction of the first bore of the Eisenhower Tunnel had been a financial disaster:

"Determined not to get burnt again, the Colorado Department of Highways, for the construction of the second bore, provided for a 'Review Board' to make recommendations which could not be settled at the job level."

The DB concept was very new, and had not yet been used. The previous year, the US National Committee on Tunneling Technology, looking to develop recommendations for improved contracting methods in the US, had sponsored a study of global contracting practices. The study, "Better Contracting for Underground Construction", concluded that one significant block on the efficiency of the construction process and cause of rapidly escalating construction costs was the impact of disputes and litigation. One of the new concepts proposed in the report was the DB.⁵

On the Eisenhower Project, there was an immediate change. The first bore of the Eisenhower Tunnel had resulted in a number of large claims, on which the Colorado Department of Highways had had to pay out around US\$50million. However, Palmer King reported that:

"... with the second bore, the biggest problem the Board had was that we went along for over two years with no problems."

In the end there were four minor claims, the largest being for US\$550,000. Palmer King speculated that if the claims had been submitted to litigation they probably would not have been settled before 1985. The DB can safely be considered to have had a successful impact of the project.

Given the success of the very first DB, why, 50 years on, are we still debating the value of DBs? Indeed, a July 2024 study lead by Dr Yuting Chen of some 454 projects across 74 countries from 2004 to 2022 concluded that the clause of the FIDIC contract that was most often deleted or amended was that relating to the DB.⁶ The purpose of this article, therefore, is to review some of the more important research that has been undertaken since the Eisenhower Tunnel project, and compare the results against the conclusions reached in 2024 by King's College London.

⁴ Mathews, A A, "The First Dispute Review Board", DRBF Foundation (January 1997) Forum 1(1).

⁵ The report refers to the adoption of an industry-wide system of arbitration with qualified (i.e. experienced in construction/tunnelling) proposing "Nonbinding arbitration, preferably conducted by specially qualified and long-term employed arbitrators ... provided for in the Contract". A clear fore-runner of the standing DB concept.

⁶ Dr Chen, Y and others, "The Global Use of FIDIC by Chinese Architecture, Engineering, and Construction (AEC) Firms", July 2024, Tianjin University and London South Bank University (LSBU) https://www.yutingchen.co.uk/publications (last accessed 4 March 2025).

THE WORK OF PROFESSOR HARMON

Prior to the KCL Report, perhaps the best academic source for research into the use of DBs was the work of Professor Kathleen M J Harmon who published a number of papers looking at the effectiveness of DBs. In 2003, Professor Harmon sent a survey to 63 participants of the Fifth Annual Meeting of the Dispute Resolution Board Foundation (DRBF) held in October 2001 in Las Vegas, Nevada. The questionnaire consisted of 91 statements designed to assess attitudes of the respondents regarding Dispute Resolution Boards ("DRBs"), using a Likert-type scaling system: in other words, respondents were asked to rate their extent of agreement with each statement on a five-point scale ranging from "strongly agree" to "strongly disagree". Of the 50 responses, 48 contained what was considered to be "useful" data, a 96 per cent response rate. 86 per cent reported having had some experience with the DRB9 process within the last five years. The results of the survey enabled Professor Harmon to conclude that:

"The DRB process provides a forum that allows the maintenance of the relationship and cooperation between the parties while resolving disputes in a timely and equitable manner."

89 per cent of respondents agreed that having a DRB would keep disputerelated costs to a minimum. 96 per cent felt that having a DRB provision in the contract indicated the openness of the owner to resolving disputes without resorting to arbitration/litigation. And 77 per cent went further, agreeing that having a provision for a DRB in the contract indicated an owner's willingness to resolve disputes in a timely manner (presumably the same 96 per cent agreed that the mere presence of a DRB results in the resolution of disputes and 89 per cent agreed that it reduces the number of disputes).

Professor Harmon recognised the significance of party engagement, commenting that: "Unfortunately, having a DRB is not itself a panacea for the construction industry; the parties must be committed to the process and perceive it as inherently fair." This of course, mirrors the experience of Palmer King who noted that for two years the Eisenhower Tunnel DRB had little to do. The

⁷ Professor Kathleen M J Harmon's PhD topic included research into attitudes about disputes and DBs. Her work includes "The Effectiveness of Dispute Review Boards", *Journal of Construction Engineering and Management*, November/December 2003, ASCE and "To Be or Not to Be – that is the Question: Is a DRB Right for Your Project", *Journal of Construction Engineering and Management*, November/December 2011, ASCE.

⁸ https://www.drb.org/ (last accessed 4 March 2025) In the interests of full disclosure, I am the current President of the Executive Board of the DRBF and the DRBF is a non-profit organisation dedicated to promoting the avoidance and resolution of disputes worldwide using DBs.

 $^{^9}$ The survey was again based in the US where the use of DRB, which typically provide recommendations, is preferred.

¹⁰ The Effectiveness of Dispute Review Boards.

mere presence and guidance of the DRB who attended regular meetings acted as a sufficient prompt for the Parties (who themselves were anxious to not repeat what had happened on the first bore) to help prevent issues turn into formal disputes.

Professor Harmon built on her initial small survey, sending out a further 703 questionnaires in August 2002;¹¹ 456 were returned. Nearly 97 per cent of respondents agreed that conflicts adversely affect the parties' working relationship. Brett, an officer of a consulting firm, said: "Normally, an unresolved dispute fosters hard feelings, [and] can cause lack of communication between the contractor and the owner." Nearly three-quarters (73 per cent) of respondents said that a DRB results in a better resolution than arbitration. Overall, this research indicated that 71 per cent (317 respondents) had a positive attitude toward DRBs (with only 5 per cent or 22 respondents dissenting). An even greater number (88 per cent or 390) agreed that DRBs contribute to the success of a project.

Professor Harmon went on to consider the impact of DBs on the project itself. More than three-quarters (79 per cent) of respondents said that having a DRB increases the chances that the project will be completed within budget. This led Professor Harmon in 2004 to, building again on the responses she had already received, examine the effect of the use of DBs on Bid Prices. ¹² Many respondents anecdotally had said that they would recommend a bid price reduction if there was a DB as part of the contract. However, 86 per cent were firm that they had never actually reduced their bid price. The reasons for this might be explained by one of the comments received from an anonymous contractor:

"The responsible contractor does not base his bid price on the possibility/probability of claims and disputes. That is a reckless gamble. Instead he bases his mark-up on a historic percentage of costs that will provide acceptable bottom line profits. Consequently, the long term favourable effects of DRB provisions will reduce that percentage mark-up, and thus bid prices."

DRBF STUDIES

As recognised by Professor Harmon, the DRBF is a good place to begin any research into DBs. Over the years, they have carried out a number of studies into the effectiveness of DB's. In 2010, the DRBF carried out a survey in advance of its conference in Charleston. ¹³ 929 surveys were emailed out and 116 (or 12.5 per cent) were returned. Of those who returned the survey,

¹¹ Professor Harmon, K M J, "Construction Conflicts and Dispute Review Boards: Attitudes and Opinions of Construction Industry Professionals", (2003) 58(4) *Dispute Resolution Journal* 66–75 or "Dispute Review Boards Effects on Bid Prices", (2004) 46(6) *Cost Engineering* 30.

¹² "Dispute Review Boards Effects on Bid Prices", (2004) 46(6) Cost Engineering 30.

¹³ Carried out by Joe Sperry, Pete Douglas, Bill Baker and Bill Edgerton.

72 per cent were members of the DRBF. The survey posed a wide range of questions, including as to whether or not lawyers should be able to serve on a DB. 26 per cent said never, but 63 per cent thought lawyers could serve on DBs provided they had construction experience. That is perhaps the key to answering the question of who should serve on a DB: the best panels should include construction professionals with a range of experience, ideally dovetailed to the project in question. With that thought in mind, it is unsurprising that 68 per cent of respondents stressed the importance of DB members having undergone training prior to their appointment; a number that should really be closer to 100 per cent. However, this comment about training might help explain why only 51 per cent of respondents considered the quality of recommendation to be very good, 34 per cent mixed and 1 per cent poor. With training and care given to the selection of the right DB members, those figures should change.

Where DBs were thought to add particular value was when it came to the use of informal DBs. Only just over half of respondents had experience of these, but 81 per cent of these respondents said that their use had helped avoid disputes. In 2025, one of the most important changes and trends in relation to construction projects generally as well as the use of DBs is the increasing adoption of dispute avoidance. In the UK, the Government's Construction Playbook recommends both the adoption of the Conflict Avoidance Toolkit and DBs, noting that:

"The conflict avoidance pledge (CAP) ... demonstrates commitment to conflict avoidance and the use of amicable resolution procedures to deal with emerging disputes at an early stage. Contracting authorities should adopt the appropriate provisions as a standard clause in all public works contracts, and use this mechanism to resolve problems before these escalate into disputes.

In addition, dispute avoidance boards are a potential way to avoid and manage disputes more effectively and, where appropriate, should be engaged with projects from inception to completion."

In 2013, Akenhead J noted that: "One of the main ideas of having DRBs is that they can look at disputes as they emerge and make recommendations to the parties with a view to 'nipping in the bud' such incipient disputes." The principles of dispute avoidance came to the fore in the report made in December 2022 by Kurt Dettman to a DRBF conference in The Hague on a smaller survey,

¹⁴ In fact in its 1996 Report, Prevent and Resolution of Disputes Using Dispute Review Boards, the Construction Industry Institute noted that: "The most critical element for a successful DRB is the selection of respected construction experts as board members who can be trusted to consider objectively all sides of an issue and to serve both parties equally and impartially."

¹⁵ The most obvious example is perhaps the change in name of Dispute Adjudication Board to Dispute Avoidance and Adjudication Board in the 2017 Second Edition of the FIDIC Rainbow Suite. See, too, the FIDIC Dispute Avoidance Practice Note.

¹⁶ Page 50, www.gov.uk/government/publications/the-construction-playbook (last accessed 4 March 2025).

Mi-Space (UK) Ltd v Lend Lease Construction (EMEA) Ltd (QBD (TCC)) [2013] EWHC 2001 (TCC).

The Effective Use of Dispute Review Boards on Public Private Partnership (P3) Infrastructure Projects in the USA. ¹⁸ The study concluded that the DRB process works more effectively with an in-depth understanding of dispute sources if the process is established ahead of time. With PPP projects in mind, the study concluded that the DRB process can:

- Help maintain an open and collaborative relationship, which is necessary to sustain the "partnership" on P3 projects.
- Foresee situations leading to future problems and work with parties to prevent them from evolving to formal disputes.
- Is much faster, less expensive and more suited for construction conflicts and claims, as compared to arbitration and litigation.

In contrast to the other DRBF studies, Geoff Smith and Leo Grutters carried out a more widespread, global survey of projects using DBs. The results were presented to the Tokyo International Conference in May 2018. The survey was not just limited to DRBF members, as the survey originated as a project to provide the Multilateral Development Banks with data about the use of DBs and European International Contractors also sought user feedback.

The underlying question behind the survey was the same as Professor Harmon's: are DB's effective? Unlike the previous studies, the survey focused on projects using DBs. The sample size was 231 projects (or DBs) with a total project value of US\$2.85 billion. Whilst in the US, DRB's started in the tunnelling and geotechnical industries, the more global DRBF survey showed that the majority of DBs (almost 47 per cent) were being used on projects for roads and bridges. This may have been the result of the use of the FIDIC form of contract and funding from the Development Banks and Funding Agencies. Together FIDIC and the Development Banks developed the Harmonised Red Book (or Pink Book) which was specifically tailored to meet the requirements of the banks and funding agencies. The Pink Book included provisions for the use of DBs. 21

In another difference to the US-based studies, the projects featured in this DRBF survey tended to adopt the decision, and not the recommendation approach. The survey also focused on dispute avoidance asking whether the parties (and DBs) were practicing dispute avoidance or not. There was

¹⁸ Dr Ghada M Gad and Gayathri Melaedvattil Jaganathan, Department of Civil Engineering California State Polytechnic University, Pomona. The research team focussed on 10 projects. Kurt Dettman and the DRBF P3 Task Force had contributed to the study.

 $^{^{19}\,}$ Update on the DRBF Survey, DRBF 18th Annual International Conference and Workshop: Tokyo Japan, May 2018.

Only 4 per cent of the projects considered did not use the FIDIC form.

²¹ The Japan International Cooperation Agency (JICA) prepared a manual supporting the use of DBs under the Pink Book. Today, FIDIC has signed a number of non-exclusive agreements with the development banks and funding agencies to use the 2017 Second Edition of the Rainbow Suite, which promotes the use of the DAAB.

a fairly even split: 57 per cent were. Significantly, of those that were trying to adopt dispute avoidance, there was a party satisfaction rate of 95 per cent.

Another way of measuring the effectiveness of DBs is to ask whether or not decisions are complied with. Of the 512 decisions (or recommendations) that formed part of the survey, 66 per cent were immediately complied with. Only 32 (or 6 per cent) were referred to arbitration and just seven of those were overturned (representing just 1.4 per cent of the 512 decisions). This is powerful evidence in support of the effectiveness of DBs.

The other very important focus of this DRBF research was the cost of DBs. The DRBF research showed that the direct cost ranged from 0.05–0.5 per cent of the final construction contract amount, shared equally between the parties.

Now of course, the DRBF may not be (to some at least) the most objective observer, however careful those who carried out the research were to remove any perceived bias. Professor Harmon had noted that her original sampling was limited to attendees of the Dispute Review Board Foundation annual meeting, commenting that it was difficult to determine whether the same findings would have emerged if participants had been from another construction industry sampling base.

STUDIES BY US TRANSPORT AUTHORITIES

The potential selection bias which has been alluded to of the DRBF research makes studies carried out by a number of the US Transport authorities very important. Moreover, these studies considered actual data from projects, which enabled the authors of the studies to consider the impact of DBs in terms of time and cost, something Professor Harmon had tried but not been able to do.

The Florida Department of Transport (FDOT) carried out an audit of its DRB programme in 2002. ²² It looked at the time and cost overruns for DRB and non-DRB projects. The average days overrun for projects with DRBs was 11.5 days (or 1.84 per cent). The average days overrun for the 60 projects without DRBs was 105.3 days (or 19.1 per cent). There were cost savings too, if not so large. The average cost-overrun for the DRBF contracts was US\$1,675,369 or 12.12 per cent; for non-DRB projects it was US\$1,448,997 (or 17.89 per cent). The introduction of DRBs also saw a significant reduction in the number of projects ending up in arbitration, from a high of 11 in 1998 to a total of two for the period 2006–2009.

Research carried out in Australia in 2014 has also suggested that the use of DBs had a beneficial effect in reducing delays and cost overruns, not just in reducing the costs of disputes which in many projects do not arise.²³ This

²² Success of DRBs in Florida, Ralph Ellis, Associate Professor, University of Florida.

²³ DRBF Forum Volume 19, Issue 1, 2015.

research concluded that the chance of an "industry norm project running late is 2.3 times greater on projects that do not have a DB and the chance of such a project running more than three months late is 6.5 times greater than projects with a DB and that there is a greater than 80 per cent chance that a project with a DB will be completed at, or shortly after, the contract date for Practical Completion, compared to less than 50 per cent for the industry norm."

Similar conclusions were reached by the California Department of Transportation (Caltrans) in 2007. Hetween 1996 and 1998, the number of arbitration filings on Caltrans projects had increased from 36 to 57. In 2000, Caltrans made the use of three-person DRBs mandatory on projects with a value of over US\$10 million. Then in 2007 a Dispute Resolution Advisor programme, a one-person form of DB, was introduced for small projects. Following the introduction of DRBs, the number of arbitration filings decreased. Between 2013 and 2017, there was an average of 17. The Caltrans' research also provides a breakdown of who the recommendations favoured. Of 1182 issues, 37 per cent were in favour of Caltrans, 48 per cent in favour of the contractor with 15 per cent split. Where the recommendation was unfavourable, Caltrans accepted it anyway in 57 per cent of cases, the contractor in 44 per cent. Split recommendations were accepted two-thirds of the time regardless of the Party.

The FDOT and Caltrans experiences were confirmed by the Colorado Department of Transportation (CDOT) in a detailed review (CDOT Report) carried out in July 2023 of their Dispute Resolution Process (DRP).²⁵ The research team collected and analysed data from CDOT, as well as other transport departments nationwide. The research was a mix of survey questions and individual interviews.

The CDOT Report comments that the most common theme brought up from the interviews with CDOT employees was the use of DRBs. They had two concerns. The first related to the choice of the DRB member. They should be independent, with a strict disclosure process in place to prevent any bias of a DRB member. There should also be consistent and better training for DRB members, who should be appointed to address disputes within their subject matter expertise. This is something that reflects Professor Harmon's conclusions. Secondly, and interestingly given the prevalence in the US of the use of recommendations, the DRB process should be "more binding" to instil respect for the recommendation and reduce further escalation. The CDOT notes that the: "DRB process should not be a means to an end but a major milestone that

²⁴ Robert Pieplow, Caltrans Division of Construction.

²⁵ Colorado Department of Transportation (CDOT) Dispute Resolution Process Review Project, Milestone 3, Final Report, 7 July 2023, Dr Ghada M Gad, Associate Professor, California State Polytechnic University, Pomona; Mohammed H Mehany, PhD, Associate Professor, Colorado University and Kurt Dettman, Principal, Constructive Dispute Resolutions.

is extremely hard to reject; this means that rejecting the DRB recommendation should be discouraged by different means."

The analysis of the CDOT data led to the following "strong" or "statistically significant" correlations:

- The more recent revisions to the DRP were "correlated to the magnitude of disputes being lower";
- The more recent revisions to DRPs included proactive methods;
- The use of proactive methods was linked to a lower number of disputes going to arbitration and litigation; and
- A combination of the lower number of disputes going to final stages, high levels of fairness, good relations between parties after going through DRP and shorter disputes lead to a high satisfaction level among all DOTs.

This reference to proactive methods seems to be further recognition of the increasing importance of dispute (or conflict) avoidance.

The CDOT Report confirms that the Caltrans 2022 standard specification document uses three-member DRBs on contracts with a value between US\$3 million to US\$10 million, while the DRB with a one-member board is used on projects less than US\$3 million. When it comes to the Caltrans DRBs, the CDOT Report notes the following:

- The DRB was the most effective Dispute Resolution Method. The use of DRBs "helped reduce costs and disputes that go to arbitration";
- It was beneficial to select a DRB member in the beginning, rather than waiting until there was a dispute. DRB members should have regular meetings every three months to stay updated with the project's progress and they should be informed all the time;
- The selection of DRB members was "key to their effectiveness as they may vary based on their experience and knowledge". Another nod to the importance of training. Indeed, Caltrans, maintain a yearly DRB training programme to keep everyone up to date; and
- The use of DRBs which brought in outsiders had led to better recordkeeping and the identification of weaknesses internally.

The CDOT Report noted that based on the data reported on FDOT's website in the period 2016–2022, 63 claims were referred to the DRB panel in the seven FDOT districts. Of these, 39 were accepted and 22 rejected, the result of the remaining two was not known. The main elements of a successful DRB, based on the FDOT data were as follows:

- It may be better to start with monthly DRB meetings for the first six months before dropping back to the more typical three-month period.
- The DRB was seen as an active form of avoidance with high success rate in preventing claims from escalating to litigation/arbitration, at

least in part due to regular project meetings held to discuss potential issues.

• The DRB was an effective way to resolve disputes in a manner that is fair to all parties involved.

Occasionally contractors may not agree 100 per cent with a ruling from the DRB but they are satisfied with the overall process. One advantage of DRBs is that they have a larger perspective and experience, as they oversee multiple projects and have a history of resolving disputes.

RESEARCH IN SOUTH EAST ASIA

It is important to remember that DBs are not used so frequently everywhere. In August 2022, Thao Tong carried out research for the SCL Vietnam on the "Application of DB in Vietnam: Commentary and Recommendations". This highlighted that DB's were rarely used there. When disputes arose, DBs were used less than 8 per cent of the time. Many parties were not acquainted with DBs. Nearly 64 per cent of respondents had never used DBs in practice.

There has also been some concern about a lack of awareness of DB in Indonesia. In 2020, Professor Sarwono Hardjomuljadi²⁶ authored an article: "Use of Dispute Avoidance and Adjudication Boards".

Professor Sarwono's research was prompted by the introduction of Law No 2 (Law 2017) in Indonesia which provided that in certain cases mediation and conciliation can be replaced with the appointment of a Dewan Sengketa (DS). A DS is a modification of a DB.²⁷ Professor Sarwono was interested in the attitudes of the Parties to the use of DS or DBs. He distributed questionnaires to employers (receiving 45 answers) and contractors (80) and asked why there was a reluctance to work with DBs. For employers, the key factors were:

- (1) Lack of trusted and respected persons suitable for appointment to DBs;
- (2) Doubts with regard to the impartiality of the persons being appointed to the DBs;
- (3) Problems that may have occurred with national auditors;
- (4) Difficulty in finding DB candidates who have construction contract knowledge; and
- (5) The perceived expense of DBs.

²⁶ "Use of Dispute Avoidance and Adjudication Boards", 12(4) Journal of Legal Affairs and Dispute Resolution in Engineering and Construction, November 2020, ASCE.

²⁷ Other countries have followed suit: for example, Peru and Honduras.

Contractors took a slightly different view, highlighting:

- (1) DBs being considered expensive;
- (2) Lack of trusted and respected persons to appoint to DB;
- (3) Doubts with regard to the impartiality of the persons being appointed to the DBs;
- (4) Hesitation to have expenses before a dispute occurs; and
- (5) Lack of knowledge about DBs.

Professor Sarwono characterises the reasons for the reluctance to use DBs as being psychological, financial and technical. He recommends that:

"... international institutions such as FIDIC and DRBF as well as national associations and governments should provide training and assessment in order to supply qualified people to serve on DBs ... Psychological matters could be resolved by improving the integrity to become respectable and trustable people."

Thao Tong agreed, recommending the expansion of training for DB users and members. From a purely Indonesian perspective, Professor Sarwono made the following recommendations:

"To encourage using DBs, which have become popular in recent years, the author suggests the creation of DS as an innovation the use of DBs, which is stipulated in the law and government regulations by involving the national auditor who used to conduct the post audit, to work from the early stage of project implementation ... By using DS, the dispute resolution process is shortened and all criteria with regard to legal certainty, cost, time, and relationships are fulfilled."

SUMMARY OF THE PRE-KING'S COLLEGE RESEARCH

There seem to be two clear themes. Those who use DBs seem to consider that they are effective in helping to reduce the costs and time spent on disputes both during projects and after the project has completed. Major contract forms, FIDIC, NEC, AAA/ICDR and ConsensusDocs, provide for the use of DBs. The ICC have their own DB Rules. As noted above, the Development Banks and Funding Institutions support the use of the FIDIC Form. Research by Geoff Smith and Leo Grutters showed that of only 6 per cent (or 32) of the decisions that formed part of their study were referred to arbitration and of these seven were overturned. Professor Harmon in 2003 commented that:

"... a DRB that resolves disputes contemporaneously with the emergence of a problem is likely to result in less stress, greater job satisfaction, and a more efficient workforce that can concentrate their efforts on constructing the project rather than resolving the dispute. This creates win/win solutions not only for the parties themselves, but also for the public as a whole because money is not diverted from new projects or company profits for the purpose of resolving disputes."

However, DBs are still being removed from contracts. And the second theme that emerges from the early research is concern about the lack of knowledge about DBs, their perceived cost, and the need to ensure that DB members had sufficient training and experience. So how does the King's College London study address these themes?

THE 2024 KING'S COLLEGE LONDON REPORT

The first thing to note about the KCL Report is the sheer size and scale of the project. It is far more comprehensive than the research that has gone before. The research is based on the answers to questions seeking information about DBs over the past six years.²⁸ There was a wide-ranging approach to the 307 questions asked including seeking specific information, ranking a range of options and listing preferences, including adopting a Likert-scale approach in the same way as Professor Harmon had done. 4,019 DBs were reported and responses came from four separate groups: Individuals (someone whose practice involved DBs); Entities (companies, joint ventures, associations); Institutions, or their respective nominating bodies; and Funders. Responses came from across the globe: the most from Latin America and the Caribbean, then the US and Western Europe. There was a wide range of projects: the highest number were roads/bridges, general buildings, transit and power plants. There were even a small number of IT projects. The KCL Report also includes a chapter reflecting some of the individual comments made by respondents, which add anecdotal support to the conclusions, in the same way as the early DB research.

Professor Nazzini writes in the introduction that:

"The picture that emerges from this report is, broadly, positive. Dispute boards appear to be widely used. Their cost, whilst not negligible in a sector where margins may be quite low, appears justified by their effectiveness in avoiding or reducing the scope of disputes or resolving them altogether without the need for a much more costly arbitration. Costs are a concern to users and may lead to the decision not to adopt a dispute board in the contract. However, costs should not be looked at in absolute terms but as part of a risk mitigation exercise: an increase in upfront costs may lead to significant savings later. This report provides the key empirical elements for users to carry out this balancing exercise."

The emphasis on costs in the introduction is an interesting reflection on the concerns raised in the earlier research.

However, the KCL research supports the earlier DRBF research as "respondents confirmed that the amounts reported tended to represent between 0 per

²⁸ So following on from the Geoff Smith/Leo Grutters research.

²⁹ KCL Report, page 9.

cent and 0.5 per cent of the total costs of the Projects".³⁰ This is in line with the DRBF figure of 0.05–0.5 per cent. The KCL Report notes that: "in the experience of 50 per cent of Entities, the total cost of the Dispute Board only represents between 0 per cent and 0.5 per cent of the costs of the Project. 29 per cent of Entities reported that the Dispute Board's costs normally are between 0.5 per cent and 1 per cent" and "55 per cent of Individuals reported a typical total cost between 0 per cent and 0.5 per cent of the total value of the Project. 43 per cent of Individuals reported that the Dispute Board's costs normally are between 0.5 per cent and 1 per cent."³¹

The earlier research made it clear that parties felt that the make-up of the DB was a very important factor. The KCL Research lists the most requested qualifications and attributes of DB members. These are:

- experience in the interpretation of construction and engineering contract documentation;
- experience in the sector relevant to the project;
- impartiality and independence;³²
- · availability; and
- technical background (engineer/lawyer/QS etc).

These reflect the response given in the earlier research, with the addition of availability. This is an important factor that can be easily over-looked. With a standing DB, you may be looking for someone who will have proper time for your project over the next three to five years. One of the comments included in the KCL Report reflects this: "Availability of Board members is extremely important. Potential Board candidates should decline the opportunity to join a Board if they are solidly booked months in advance." 33

As you would expect the KCL Report also asks about the perceived diversity of the composition of DBs. As with many other sectors, there is more work to be done, but it is encouraging that both individuals and entities report that diversity has improved in the past five years. Education and training will go a long way to ensuring this trend continues.

When it came to the adoption of dispute avoidance measures, 84 per cent of entities reported the adoption of dispute avoidance measures and 70 per cent of individuals reported the adoption of dispute avoidance measures either occasionally (20 per cent) or very often/always (50 per cent). As to their effectiveness: individuals reported that for 45 per cent of them, the most common result was that the dispute was completely avoided. For 41 per cent, the scope of the dispute was significantly reduced. Only 14 per cent said the scope of the dispute remained the same. It is interesting that this contrasts slightly with the perceptions of other users. Whilst half of

³⁰ KCL Report, page 16.

³¹ KCL Report, page 66.

 $^{^{32}}$ There was a low suspicion of DBs being biased. 83 per cent of Individuals reported having suspected bias of the chair member very rarely, namely between 0 per cent and 10 per cent of the time.

³³ KCL Report, page 110.

individuals (50 per cent) found the DB to be extremely useful in avoiding disputes, and most funders (75 per cent) found it very useful, most entities (38 per cent) found the DB only somewhat useful in avoiding disputes. One of the institutions noted that: "Parties often establish their Dispute Board once the dispute has arisen. It's important to emphasize the preventive role of a Dispute Board as well its standing nature."³⁴

The KCL Report also focuses on the breadth of options available by way of dispute avoidance. Respondents were asked to consider which types of dispute avoidance were most frequently adopted. The most popular was by conducting regular project meetings to discuss progress, challenges and potential issues. Other examples were encouraging communication and collaboration, the use of informal opinions and helping to identify emerging issues or potential conflicts as well as providing training.

One of the early questions in the research asks whether parties prefer the use of decisions or recommendations. Amongst individuals and institutions there is a preference for decisions (which is more marked amongst the institutions (46 per cent vs 18 per cent), albeit a significant number of respondents said that they prefer that the Parties and DB are at liberty beforehand to decide what type of finding to make. Preferences amongst surveyed individuals were spread across the three options as follows: decision 36 per cent; recommendations 14 per cent; allow the parties to choose depending on the issue 24 per cent.

Later on, the survey asks about parties' compliance with the DB's findings. The KCL Report notes that with individuals and entities, when it came to both the non-binding recommendation and the binding decisions, the parties complied with those findings most of the time. 30 per cent of individuals and 28 per cent of entities reported that, in their experience, the parties never issue a notice of dissatisfaction (or equivalent) in respect of the decision issued by the DB. Overall, the KCL Report concludes that:

"... compliance with binding Dispute Board decisions is not significantly different from compliance with Dispute Board recommendations. This result reinforces that Dispute Boards are an effective method of dispute resolution, regardless of whether their findings are binding or not." 35

The KCL Report provides further powerful support for the value of DBs, finding that most of the respondents indicated that subsequent proceedings such as litigation or arbitration were only commenced between 0 per cent and 10 per cent of the time.

Again, reflecting the conclusions of the Smith/Grutters DRBF Report, Professor Nazzini concludes that: "most respondents indicated that only rarely or

³⁴ KCL Report, page 112.

³⁵ KCL Report, page 53.

never was the decision reached in subsequent proceedings substantially different from that issued by the Dispute Board".³⁶

The effectiveness of DBs can also be demonstrated by looking at the enforcement of DB decisions. If a decision cannot be enforced, or if a party refuses to implement it, some have questioned the value of that decision in the first place. This has always been a difficult topic to research. In most cases enforcement applications are made to an arbitral tribunal. However, the KCL Report concludes that for those who sought an award (interim or final), the enforcement of a DB decision was granted between 91 per cent and 100 per cent of the time.³⁷

The reality is that all parties should perhaps carefully consider from the outset which approach works best in the circumstances of their particular project. And of course, whichever is preferred, it is always important that parties recognise the alternative: either going straight to arbitration, which may be difficult if the project is still ongoing, or storing up all the issues which may lead to an expensive and time-consuming arbitration which follows completion.

There is still a way to go. The KCL Report confirmed that DBs are still being struck from contracts, confirming Dr Chen's conclusions. 26 per cent of entities indicated that they discussed the inclusion of a DB in the contract but then decided not to include it. Amongst the main reasons behind that decision were the costs of a DB (indicated by 86 per cent of entities), unfamiliarity with how DBs function (indicated by 43 per cent) and the lack of enforceability of DB findings (indicated by 43 per cent). Education therefore remains important, both for potential DB members and users.³⁸

IMPACT OF THE KING'S COLLEGE REPORT

Professor Nazzini and Raquel Macedo Moreira have compiled a comprehensive, deeply detailed analysis into the use of DBs between 2018 and 2024, which in itself is of considerable value. Sir Vivian Ramsey in his introduction to the KCL Report notes that one of the difficulties with some of the earlier research on the use of DBs has been that there has never been a comprehensive set of data to inform the discussions on those matters. He rightly says that the KCL Report changes that. The KCL Report "has allowed reliable data to be collected on all the topics on which there was until now, with a

³⁶ KCL Report, page 56.

³⁷ Despite such a high rate, the majority of respondents were of the view that the construction industry would benefit from the existence of an international convention facilitating the circulation and enforcement of the DB decisions. Something for the future perhaps.

³⁸ One of the comments notes: "Encourage mentoring". The DRBF has a mentoring scheme. Another says: "Training as a dispute board member is very important. The role of a dispute board member is unique and involves specialist skills – and I say that after a long career as advocate (I am a KC) ... and before that, working as a projects engineer."

few exceptions, only anecdotal evidence". 39 A number of those exceptions have formed part of this article.

What is particularly interesting is the consistency of the results of the research into DBs over the past 25 years. The simple answer to the question are DBs effective is yes.

This is confirmed by all the evidence, from the Eisenhower Tunnel project and the US Department of Transport data, to the DRBF surveys and the smaller scale academic research of Professor Harman through to the much larger-scale research from King's College London.

One difference between the surveys is the emphasis on dispute avoidance which feature in the more recent reports. The early emphasis was on helping the parties resolve disputes in an equitable manner and so avoid costly arbitration. Today, Professor Nazzini notes, with some academic caution, that dispute avoidance measures are still not universally implemented but are gaining traction and, when deployed, appear to be reasonably successful. It is worth repeating that the KCL Report itself concludes that 85 per cent of individuals reported the adoption of dispute avoidance and that the most common scenario when dispute avoidance was attempted was that the dispute was avoided, or at least significantly reduced.

The research is also helpful in identifying the ongoing challenges to the implementation of DBs. If they are so effective, why are they not being used more widely? The answer today, as it was in 2003, seems to be education and training. That is clear from the South East Asia surveys and the KCL Report.

First, this means education for DB members themselves. They need to not only understand the complexities of construction projects, but understand their own role. How can they best serve the interests of the project they have been asked to join? As noted above, the role of a DB member is unique and involves specialist skills.

Second there is training for users. For example, it is often said that users are put off by the cost of DBs. Yet the DRBF research and the KCL Report put the costs of a DB at no more than 0.5 per cent of the project costs. Compare that to the costs in time and money of an international arbitration. Perhaps here more empirical data is needed to back up the research from Florida. One answer is to cover the cost of the DB by including and identifying it in the project budget.⁴⁰

Training can also be provided on the advantages of DBs as projects progress, for example on the variety of dispute avoidance techniques available. Training too should be provided for those responsible for the

³⁹ KCL Report, page 8.

⁴⁰ The Japan International Cooperation Agency (JICA) in their Dispute Board Manual November 2019 describe the DB "as a mechanism for sound contract management rather than conflict settlement procedures", and deems the cost of the DB eligible to be financed by the Loan.

procurement and implementation of contracts at project level. All of this can assist where there is a perceived lack of knowledge or awareness.

SOME SERIOUS CONCLUSIONS

Towards the end of his note, Palmer King said this:

"Now for some serious conclusions. This system of settling contract claims, in my experience proved itself beyond any expectations that anyone could have entertained."

Mr King can perhaps be allowed some hyperbole given the differences between the two bores of the Eisenhower Tunnel. However, the research from the last 50 years does seem to confirm that DBs are an effective way to not only help parties resolve disputes, but actively try to prevent those disputes from occurring in the first place.

This has been recognised in Abu Dhabi where, in 2024, the Abu Dhabi Projects and Infrastructure Centre (ADPIC) updated the General Conditions Contract for capital projects in the emirate. The updated contract includes the mandatory integration of Dispute Avoidance and Adjudication Boards. ADPIC will also be piloting Conflict Avoidance Panels, the first body outside of the UK to do this.

Looking to the future, what needs to be done to increase the effectiveness and more importantly use of DBs? The KCL Report confirms the importance of:

- Choosing the right blend of DB members at the outset. What skills and experience do they have. Can they truly be described as construction professionals? Are they independent? Are they available?
- Increased and continued training and education for everyone: DB practitioners, funders and users. This will help parties to understand how to make the most out of their DB. Training will also help provide a greater diversity of DB members.
- Increasing awareness and understanding of the value of conflict or dispute avoidance.

Do we need any more research? An update to the KCL Report would of course be excellent, but perhaps not for another two or three years. In the interim, whilst almost every base was covered by the KCL Report, perhaps research along the lines of the Florida DOT, looking to measure the impact of DBs on actual project time and costs, would be of particular interest.