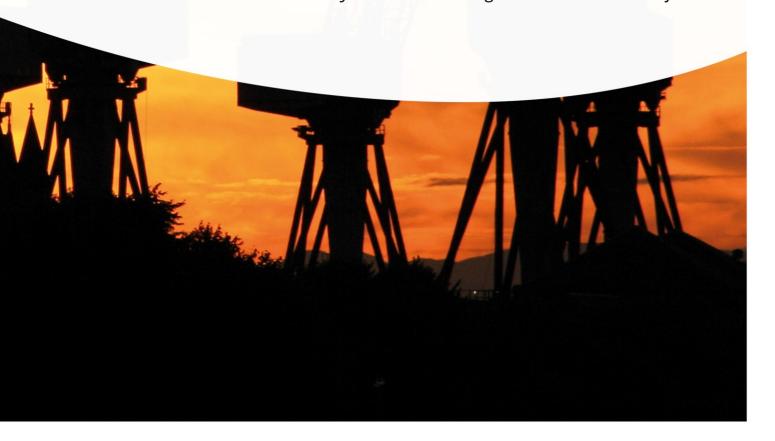






International Arbitration Survey – Driving Efficiency in International Construction Disputes

How can international construction disputes be resolved more efficiently whilst maintaining fairness and access to justice?



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Introduction

This survey considers how the process of resolving disputes for parties involved in international construction projects can be made more efficient.

As the data shows, there remain very good reasons why parties choose international arbitration above anything else as the mechanism to resolve their construction disputes: the neutrality, confidentiality, flexibility and commercial nature of the process along with the facility to choose who will determine their dispute are paramount factors that continue to influence their selection of arbitration.

However, for international arbitrations in the construction sector, the perception undoubtedly is that it takes longer and costs more than it should to pursue an arbitration to a final award (and sometimes to enforce that award). The survey seeks to understand why this is the case and what opportunities there are to make construction arbitrations cheaper and quicker for the end user. This is not easy because the majority of international construction arbitrations are characterised by large volumes of documents, numerous experts, and often multiple 'mini arbitrations' dealing with numerous claims and counterclaims.

Although parties want the process to be cheaper and quicker, for claims north of USD 100 million or where parties are involved in high value 'bet the company' disputes, cost and speed may be less important than getting the right result. However, even in cases where parties typically wish to leave no stone unturned (particularly if their business is under threat), they are still entitled to question and indeed, as the survey reveals, they do question whether the process need take so long and be so expensive.

The survey examines what factors lead to inefficiency, how different respondents from different jurisdictions and different backgrounds perceive this and how the arbitration process might be improved to meet the needs and concerns of the construction industry. The level of responses we have received to the survey is impressive and informative. Some of the main themes are set out in the Executive Summary below.

Understanding our respondents' concerns is essential to considering what steps might be taken to optimise the arbitral process. Importantly, in a construction context, the survey also tested the respondents' attitudes towards other alternative dispute resolution processes such as dispute boards (either standing or ad hoc), mediation, conciliation and early neutral evaluation.

It would be all too easy to link criticisms of efficiency of the arbitration process and calls for its optimisation with the suggestion that the underlying process is itself deficient. The survey reinforces that this is not the case. Often, international arbitration is the only viable or commercially acceptable route for parties to resolve their disputes. It is, generally speaking, supported and respected as a process around the globe. Thus, the potential for improvement in the efficiency of the process should be understood relative to what is a fundamentally sound and very widely supported process.

Pinsent Masons is very proud to have continued its relationship with Queen Mary University of London and once again to sponsor a major international arbitration survey. In particular, given its internationally recognised construction arbitration practice it is pleased to sponsor a survey which focuses on international construction disputes. We would like to thank Loukas Mistelis and Alexander Ferguson for their dedication to the project and also all of the survey respondents and other individuals and institutions who have contributed to the success of this publication.



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Foreword

It is my great pleasure to introduce the 2019 International Dispute Resolution Survey. It is the ninth survey released by the School of International Arbitration, Centre for Commercial Law Studies, Queen Mary University of London. It is the second prepared with the generous and unconditional support of Pinsent Masons, and the first to focus on Construction and Infrastructure Disputes.

Built on 646 completed questionnaires and 66 personal interviews, the survey assembles the views of a wide range of actors within the dispute resolution community and provides invaluable insight into stakeholders' experiences and perceptions of international arbitration and several pre-arbitral processes such as Dispute Boards. In fact, it is the largest sector-specific empirical study we have ever conducted in international arbitration. Given that disputes in a cross-border and cross-cultural context are inevitable, even when it comes to globalised market sectors, having a well-defined but flexible policy relating to dispute resolution and becoming disputesavvy is critical for all businesses. Exploring the views of users of dispute resolution as well as specialist dispute resolution practitioners from all over the world will assist the readers of the survey to have a well-rounded and impartial picture of the current state of affairs in international dispute resolution in the construction and infrastructure sector.

When we designed the survey, there was much that we wanted to know. Construction and infrastructure projects are critical for any economy, whether a highly developed or an emerging one. It is also well-established that the construction sector is the largest user of dispute resolution services. At the same time there are repeated calls for improving the efficiency of dispute resolution and also exploring dispute prevention mechanisms and pre-arbitral processes. Dispute boards, in particular, are

widely used but there was not much empirical evidence as to the level of compliance with their decisions and how often they effectively render the recourse to arbitration redundant. Why are certain dispute settlement mechanisms preferred and how can they be improved? Indeed, the survey provides answers to many of these questions, and sheds some light on how businesses and stakeholders approach major construction disputes – something which until now was rarely explored.

We hope that it will help people in the sector to identify weaknesses and strengths, and more effectively to use the various dispute resolution mechanisms that are available. In short, to improve the way they approach dispute resolution and contribute to the design and development of an efficient dispute resolution system. As a corollary one would expect that dispute resolution service providers might have to adapt their rules and procedures to better meet the needs of the significant construction sector and overall to improve the dispute resolution experience businesses have.

Thank you for taking the time to read this survey report. I hope that you will find it useful and thought-provoking.

November 2019



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Executive Summary

The survey shows that arbitration is perceived as the best available process for resolving disputes arising in international construction projects.

There is, however, real scope for improved efficiency at all stages of the process, right from the appointment of the arbitral tribunal, through the procedure adopted prior to the hearing, the evidentiary hearing itself and the time it takes the tribunal to issue its award.

There is a perception that inefficiencies in the process may be driven by a concern that awards could be challenged for a lack of due process and that arbitrators are reluctant to use all the armoury of remedies available to them. In particular, the survey indicates that the more effective use of interim or provisional orders may well, in practice, lead to parties resolving matters at a much earlier stage and hence deliver a more efficient process.

There is clearly some appetite in the construction sector to make interim decisions binding so that money changes hands at an earlier stage. Experience shows that doing so will often cause the parties to resolve the dispute. This requires both experienced arbitrators who are sufficiently robust in their procedural approach and good case management. It also requires the support of the relevant local courts to give effect to such orders.

The arbitral process is seen by a significant proportion of respondents as being a barrier to the fair resolution of what might be described as lower value disputes, i.e. less than USD10 million. If alternative dispute resolution provides a more efficient route to resolving such smaller value disputes, it may well be the preferred vehicle to achieve this. A theme that emerges from the survey (and in particular the interviews) is that if international arbitration wants to serve the construction industry in this respect, then it needs to become more efficient and flexible as a process.

Key features of international construction arbitration

- The five most defining features of international construction arbitration identified by respondents were the factual and technical complexity (73%), the large amounts of evidence involved (66%), multiple claims and / or multiple parties (49%), large amounts in dispute (41%) and the range of related issues (31%).
- The most common seats were London (46%), Paris (35%), Dubai (26%), and Singapore (22%).
- The most frequently used institution in the respondents' experience was the ICC (71%) followed by the LCIA (32%). Ad hoc arbitration was used in nearly a third of arbitrations.
- When appointing arbitrators, the vast majority of respondents valued construction experience above all, echoing the survey's finding that factual and technical complexity is the most defining feature of international arbitration in the construction sector.
- A significant proportion of respondents (38%) had experience
 of technical experts being appointed as arbitrators. A balance
 of legal and technical expertise within the tribunal remains
 key for the majority of respondents when deciding to appoint
 a technical expert as arbitrator.
- There were a range of opinions as to the minimum amount in dispute which respondents would consider commercially sensible to pursue through international construction arbitration. Most respondents (42%) considered that the minimum threshold was between USD 1 million and 10 million. However, most in-house counsel (43%) put this minimum threshold at between USD 11 and 25 million.

Alternative dispute resolution mechanisms in international construction disputes

 There was experience of a wide range of alternative dispute resolution processes used to resolve international construction disputes. Notwithstanding this, it is often the case that parties do not voluntarily comply with the decisions issued as part of these processes - 41% of respondents reported that parties do not voluntarily comply, 31% of respondents reported that they experienced compliance 'half of the time', and only 28% of respondents reported that they experienced frequent compliance.

- The vast majority of respondents (67%) showed support, some of which was conditional, for mandatory compliance with pre-arbitral decisions as a pre-condition to arbitration.
 During interviews, strong opinions were expressed both in favour and against mandatory compliance, with concerns being raised as to the practicalities of then starting an arbitration which might yield a different result.
- Where parties do decide to continue to arbitration after a
 pre-arbitral decision, the respondents considered that the
 significance and complexity of construction disputes, as well
 as the multiple claims that underpin those disputes, are the
 key drivers influencing this choice.

Efficient international construction arbitration: the future

- Arbitration remains the top choice of dispute resolution mechanism for disputes arising on international construction projects, notwithstanding the perceived inefficiencies discussed in the survey.
- 'Due process paranoia' was regarded as the significant factor discouraging arbitrators from taking a more robust approach to case management.
- The procedural elements which the respondents considered most likely to increase efficiency were: summary disposal of unmeritorious claims or defences at an early stage (44%), arbitrator appointments / tribunal constitution (37%), and the streamlining of evidential hearings and submissions (36%).

- The top three responses in terms of more efficient hearings and submissions were: advance identification by arbitrators of issues to be covered (55%), presentation by the parties of agreed statements of facts/chronologies (53%) and timecapped opening and/or closing submissions (51%).
- Insofar as the role of the arbitrator is concerned, the top four responses around improving efficiency were: issuing an award within a reasonable period of time (70%), being willing to make difficult decisions, including on procedural issues (68%), possessing case and counsel management skills (68%) and having technical knowledge of construction disputes (63%).
- The use of third party funding arrangements is in its early stages. 64% of respondents had not experienced funded arbitrations in the construction sector. While third party funding may provide better access to justice, it remains to be seen what impact it might have on efficiency.
- Respondents considered that there is a significant role for innovative technology solutions to play in enhancing the efficiency of the arbitration process.
- In light of the document heavy nature of construction arbitration, the respondents acknowledged that technological automation (i.e. removing human involvement) could increase efficiency of the review of large volumes of evidence. More generally there is an appetite for the use of more technological automation, but there remains a resistance to the use of automating the entire decision-making process.

Context of International Construction Disputes

The data collected for the survey is based on answers from respondents who had been involved, in the last five years, in international disputes concerning construction projects in the energy and infrastructure sectors. The respondents' experience covered disputes relating to a broad array of markets, including transport (51%), process plants (31%), pipelines (28%), renewable energy (27%), non-renewable energy (25%), and upstream oil and gas (other than pipelines) (24%).

We also asked respondents about the location of those international construction projects where disputes had arisen. Respondents could select multiple locations, reflecting that they may have been involved in multiple disputes. In the experience of respondents, those projects were located in the Middle East and North Africa (55%), Europe (31%), Asia-Pacific (29%), Latin America (23%), Sub-Saharan Africa (14%), North America (13%), Oceania (7%) and other (2%).

Our survey provides a snapshot of the typical causes of international construction disputes and of the dispute resolution processes commonly used to resolve these disputes.

Common causes of international construction disputes

Respondents were asked to identify, from a list of 14 possible options, the factors which had commonly been the causes of international construction disputes. Respondents could select one or more causes.

The two main causes of disputes, in the respondents' experience, were late performance (68%) and poor contract management (63%), reflecting the difficulty of completing sometimes very technically complex engineering projects on tight schedules.

A significant proportion of respondents (61%) also identified as a cause 'poor contract drafting', a broad category which could cover a wide range of scenarios, including for example,

obviously ambiguous drafting at inception of the contract or, at the other end of the spectrum, drafting which may only materialise as ambiguous or inadequate when faced with the reality of the project.

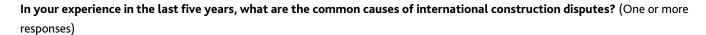
Nearly half of the respondents (49%) identified suspension or termination of the contract as a common cause of disputes. Defective materials were observed as a cause of disputes by nearly a third of respondents (27%).

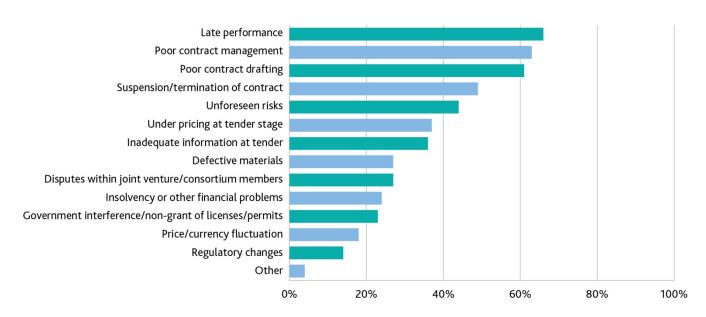
Over a third of respondents identified as causes of disputes matters relating to the pre-construction stage, such as underpricing at tender stage (37%) and inadequate information at tender (36%). Some interviewees noted that they had observed project participants bidding a lower price upon the expectation of recovering sums through variation orders which, if disputed, could be arbitrated.

"There is a trend in some jurisdictions towards two stage tendering and early contractor involvement, alliancing and other collaborative models, which move away from a logic centred on lowest price." Pinsent Masons LLP

Factors linked to the project participants themselves also featured as common causes of disputes: disputes within joint venture or consortium members (27%) and insolvency or other financial problems (24%) featured as causes for nearly a quarter of respondents.

Finally, the respondents had also experienced disputes which had arisen as a result of a range of factors extraneous to the parties, with unforeseen risks experienced by nearly half of respondents as a cause of disputes (44%), followed by government interference or non-grant of licenses or permits (23%), price or currency fluctuation (18%), and regulatory changes (14%). Another extraneous factor identified in the interviews related to general economic factors which may impact the financial position of employers.





Processes to resolve international construction disputes

We asked respondents to identify which dispute resolution processes had been used to resolve international construction disputes in their experience. Respondents could select one or more options.

The most frequently-used procedure across the sample of respondents was international commercial arbitration (71%), with domestic commercial arbitration following at a lower 39%. For in-house counsel respondents, international commercial arbitration also came first (50%), but was followed by negotiation / senior representatives (38%), as could be expected from this sub-group of respondents.

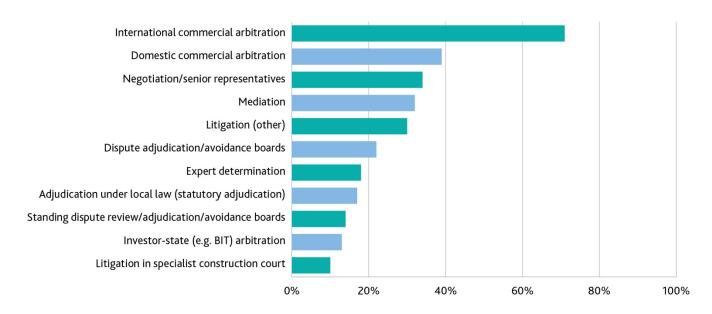
Dispute resolution processes other than arbitration were also observed within the larger sample, including negotiation or the intervention of senior representatives (34%), mediation (32%), dispute boards (22%), expert determination (17%), statutory adjudication (17%) and standing dispute boards (14%). Investor-state arbitration had been observed by 13% of respondents.

With regard to mediation, it will be interesting to see what changes the recently concluded Singapore Convention on Mediation will bring about. The Convention would operate in a similar way to the New York Convention, which facilitates enforcement of arbitral awards. The Singapore Convention on Mediation obliges contracting state parties to enforce a mediated international commercial settlement agreement (i.e. a written document setting out the terms of a dispute resolved with the assistance of a third person lacking authority to impose a solution). However, some interviewees observed that in their opinion, the resolution of technical issues was not suited to mediation, indicating that mediation was perhaps not currently as widely accepted in the construction sector as a dispute resolution technique as one might expect.

¹ United Nations Convention on International Settlement Agreements Resulting from Mediation (opened for signature on 7 August 2019, not yet in force)

² Convention on the Recognition and Enforcement of Foreign Arbitral Awards (entered into force on 7 June 1959)

In the last five years, which dispute resolution procedures have you had experience with in the context of international construction disputes? (One or more responses)



Key Features of International Arbitration in the Construction Sector

We asked respondents a series of questions regarding the key characteristics of international arbitration in the construction sector.

Respondents' answers highlight the idiosyncrasies of construction disputes, which can be complex and highly technical, of high value and often involve large volumes of documents.

What characterises international arbitration in the construction sector

Whilst construction disputes can be of all shapes and sizes, they are often characterised by their complexity, both in terms of the wider contractual picture and the nature of the claims.

Construction projects, which frequently span a number of years, often involve a multi-level contractual framework, in a multi-jurisdictional environment, with multiple parties, including the employer, the main contractor, subcontractors, suppliers, lenders, contract managers, engineers and / or architects etc.

Construction projects also almost invariably raise technical engineering and programming issues, requiring detailed analysis of a sometimes colossal volume of data, usually including daily, weekly and monthly progress reports, programme updates, minutes of meetings, drawings, specifications, correspondence,

etc. As a result, construction claims typically require detailed factual input and expert engineering, delay and quantum evidence.

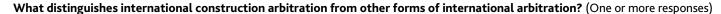
Against this background, we asked respondents to identify what in their view characterises international arbitration in the construction sector. Respondents could select one or more responses.

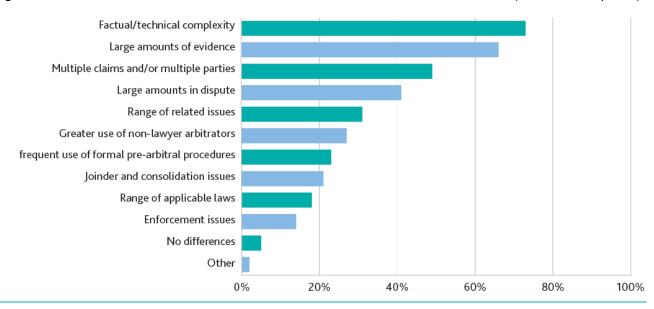
As could be expected, the five most defining features identified by respondents were factual and technical complexity (73%), the large amounts of evidence involved (66%), multiple claims and / or multiple parties (49%), large amounts in dispute (41%) and a range of related issues (31%).

27% of respondents identified greater use of non-lawyer arbitrators as a defining characteristic, reflecting the importance of industry expertise in the context of construction disputes.

23% of respondents also listed the frequent use of prearbitral procedures.

It is worth noting that enforcement issues (14%) ranked lower, which might simply reflect the respondents' perception that construction disputes do not raise specific enforcement issues compared to other types of disputes.





Arbitral seats

The choice of the seat of the arbitration has significant ramifications for the conduct of the proceedings as it determines the procedural rules which govern the arbitration, gives courts of the seat supervisory jurisdiction over the arbitral proceedings and may also impact enforcement proceedings.

We asked respondents to indicate the seats used in their experience of construction disputes in the past five years. Respondents could select one or more seats.

The most common seats were London (46%), Paris (35%), Dubai (26%), and Singapore (22%).

Overall, this is consistent with previous non-sector specific international arbitration surveys, ³ and does not seem to indicate that the sector impacts significantly on the choice of seat.

London and Paris continue to occupy predominant positions.

Arbitral institutions

Respondents were asked to identify the institutions they had seen used for international disputes in the construction sector. They could select one or more answers.

When pursuing an international arbitration in the construction sector, the ICC (71%) and the LCIA (32%) dominated. These figures are consistent with the preferences and practices identified in previous, non-sector specific, surveys. 4

The pre-eminence of these two international institutions is consistent with the 2018 International Arbitration Survey where "internationalism" ranked fourth in the top four most important reasons for respondents' preference for certain institutions. ⁵ This may also reflect the use of standard form

³ 'International Arbitration Survey: the Evolution of International Arbitration', 2018, p. 9, '2015 International Arbitration Survey: Improvements and Innovations in International Arbitration', p. 11

⁴ 'International arbitration: Corporate attitudes and practices 2006', p. 12; 'International Arbitration: Corporate attitudes and practices 2008', p. 15; '2015 International Arbitration Survey: Improvements and Innovations in International Arbitration', p. 17; 'Pre-empting and Resolving Technology, Media and Telecoms Disputes', 2016, p. 34; '2018 International Arbitration Survey: The Evolution of International Arbitration', p. 13

⁵ 'International Arbitration Survey: the Evolution of International Arbitration', 2018, p. 14

contracts, such as the Federation of Consulting Engineers (FIDIC) suite, which specifically refer to the ICC.

Adhoc arbitration - in which the parties determine and manage the arbitration procedure rather than an institution doing so - is used in nearly a third of cases (27%). This figure could perhaps be explained by a preference of state parties or entities – who are often involved in construction projects – for adhoc rather than institutional arbitration. It was, however, noted in interviews that adhoc arbitration came with some disadvantages, such as the lack of administrative support.

"In our experience, the particular circumstances of the parties often determine whether the arbitration will be institutional or ad hoc. It is not uncommon for State parties or state-owned entities to opt for ad hoc arbitration, which can be perceived as more flexible. That being said, institutional arbitration offers pre-established rules and procedures as well as administrative assistance which can be beneficial to the management of the arbitration process." Pinsent Masons LLP

Factors for choice of arbitrators

The appointment of arbitrators is one of the most important decisions in arbitration proceedings.

Respondents were asked to select the characteristics which they would be seeking when selecting an arbitrator for an international construction dispute. They could select one or more preferred characteristics.

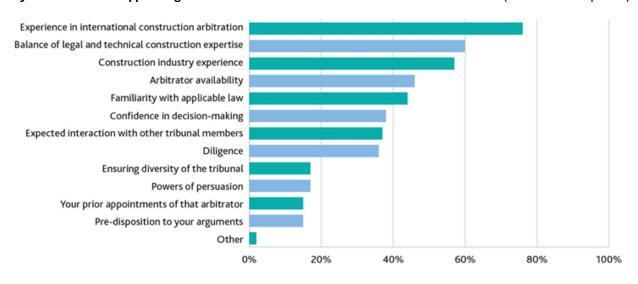
Unsurprisingly, the vast majority of respondents valued experience in construction and technical matters above all, with the most preferred characteristics identified as experience in international construction arbitration (76%), a balance of legal and technical expertise (60%) and construction industry experience (57%). This indeed echoes the survey's finding that factual and technical complexity are the defining features of international arbitration in the construction sector.

As we would also expect to be the case in other types of disputes, arbitrator availability ranked highly and came fourth (46%).

Familiarity with the applicable law, which was also perceived as an important factor, came fifth (44%).

When choosing an arbitrator, as many as 17% of respondents also took account of the diversity of the resulting tribunal. In interviews, the respondents elaborated on their perception of diversity, a notion which they framed in several ways: diversity of age, gender, country of origin, legal background (typically civil law or common law), or educational background (legal or non-legal).

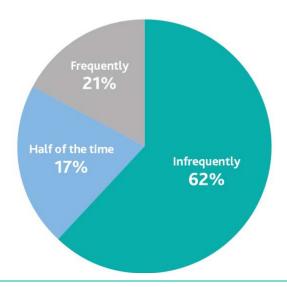
What do you look for when appointing an arbitrator to an international construction arbitration? (One or more responses)



Technical experts as arbitrators

When asked how often they had experienced a technical expert being appointed as a tribunal member, a significant proportion of respondents (38%) had experienced this.

How often have you seen a technical expert appointed as a tribunal member in an international construction arbitration? (One or more responses)



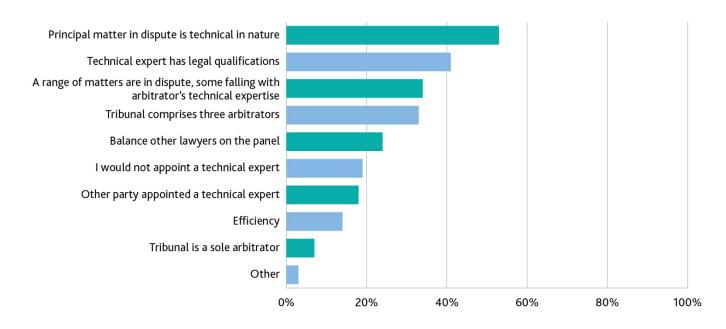
Respondents were also asked which factors would encourage them to appoint a technical (rather than legal) expert as arbitrator. The respondents could select one or more responses.

While 19% of respondents indicated that they would not appoint a technical expert as arbitrator, over half of the respondents indicated that they would be inclined to appoint a technical expert if the principal matter in dispute was technical in nature (53%) or a range of matters in dispute fell within the arbitrator's technical expertise (34%). A significant proportion of respondents also indicated that they would be encouraged to appoint a technical expert if the technical expert had legal qualifications (41%), if the tribunal comprised three arbitrators

(33%), or if there was a balance with lawyers on the panel (24%). Only 7% of respondents would consider the appointment of a technical expert where there is a single-member tribunal. These figures suggest that a balance of legal and technical expertise remains key for the majority of respondents.

As many as 14% of respondents indicated that they would consider appointing a technical expert for reasons of efficiency.

What factors would encourage you to appoint a technical, as opposed to legal, expert as an arbitrator in an international construction arbitration? (One or more responses)



Value of a dispute that is commercially sensible to pursue

As this is likely to be a key indicator of users' perceptions, we asked respondents to select the minimum amount in dispute which, if an international construction dispute arose, they would consider commercially sensible to pursue through international arbitration.

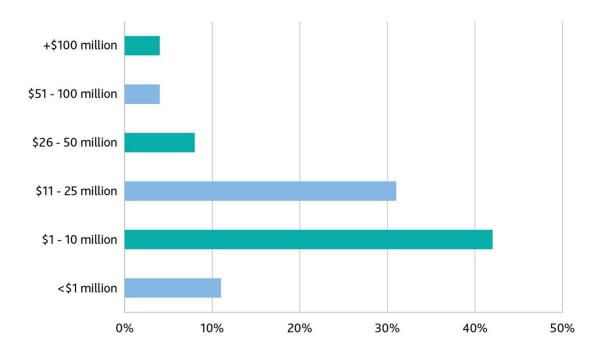
Most respondents (42%) considered that amount to be between USD 1 million and 10 million. However, when looking at in-house counsel alone, 43% considered the minimum amount to be higher, between USD 11 and 25 million.

For 11% of respondents (including in-house counsel), disputes under USD 1 million were commercially sensible to pursue. At the other end of the spectrum, 4% of the respondents considered that only those disputes worth over USD 100 million were commercially sensible to pursue.

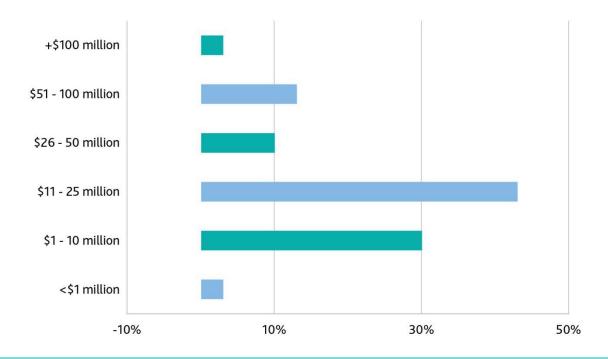
These answers show that different users of arbitration have extremely different perceptions of what is commercially sensible. The spread of the results could be a symptom of a form of 'stratification' of users of international construction arbitration, with different profiles of users displaying varying perceptions of the reasonableness of time and cost spent on a given procedure. Indeed, it was often noted in interviews that the value of a given dispute would likely inform key procedural choices, as well as perceptions of what would be an 'efficient' process.

"International arbitration is generally perceived as an expensive way of resolving disputes. The view that it might not be commercially sensible to pursue disputes below a minimum threshold of USD 11 million tends to accord with what we see in practice, but this highlights the need for the arbitration community to ensure that arbitration can also suitably be used to resolve disputes of lower values." Pinsent Masons LLP

If an international construction dispute arose today, what is the minimum amount in dispute which you consider to be commercially sensible to pursue an international construction arbitration? (US Dollars) (One response) (All respondents)



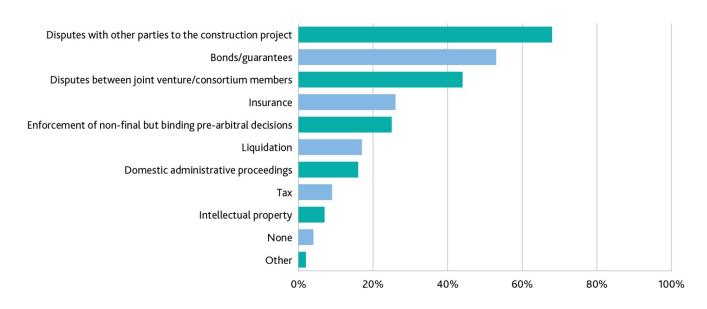
If an international construction dispute arose today, what is the minimum amount in dispute which you consider to be commercially sensible to pursue an international construction arbitration? (US Dollars) (One response) (In-house counsel respondents only)



Ancillary disputes

Asked to select one or more types of ancillary disputes which arise in the course of international arbitration proceedings related to construction disputes, respondents most frequently identified disputes with other parties to the project (68%) and disputes within a joint venture or consortium (44%). Finance-related aspects of the project were also a frequently identified ancillary dispute, reflected in bonds or guarantees (53%) and insurance (26%). This is another illustration of the intricate nature of construction disputes, and of the complex context in which they arise.

In your experience in the last five years, what ancillary disputes arise in an international construction arbitration? (One or more responses)



Alternative Dispute Resolution Mechanisms in International Construction Disputes

Resolving disputes by way of arbitration or litigation is often seen as a last resort, especially in the construction sector in which parties are keen to safeguard commercial relations. Alternative dispute resolution mechanisms were considered during the first and second phases of the survey.

Perceptions of alternative dispute resolution mechanisms

Respondents to the survey had experience of a varied range of alternative dispute resolution mechanisms, including negotiation, mediation, ad hoc dispute adjudication boards, expert determination, adjudication under local law and standing dispute adjudication/avoidance boards.

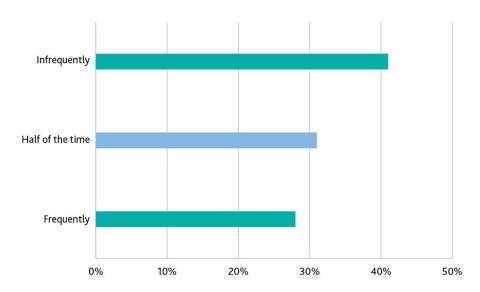
In interviews, a range of views was expressed about these mechanisms. The common theme running through the responses was that the usefulness of any process depends on the parties, their desire to resolve the dispute and the cultural context of the project. In the words of one interviewee, "so much depends on where you are".

For example, contractually-stipulated mediation is seen as useful in some jurisdictions to bring together parties that may not want to commence negotiations at the risk of what could be perceived as 'losing face'. In other regions, including mandatory pre-arbitral steps in a contract is seen as simply imposing an unnecessary step.

Voluntary compliance with pre-arbitral decisions

Respondents were asked how often parties voluntarily comply with pre-arbitral decisions. The results are split, with 41% of respondents experiencing that parties do not voluntarily comply with pre-arbitral decisions, 31% of respondents reporting compliance "half of the time", and only 28% of respondents reporting frequent compliance.

In your experience in the last five years, how often do parties voluntarily comply with pre-arbitral decisions? (One response)



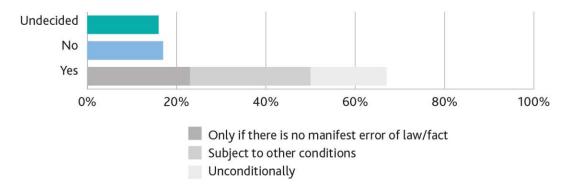
An additional distinction was made during interviews concerning standing and ad hoc dispute boards. Interviewees noted that a decision rendered by a standing dispute board was more likely to be complied with, especially if the standing dispute board had been appointed at the outset of the works.

It was also suggested that parties may not fully use the dispute board process if they are not sufficiently invested in the process. One interviewee suggested that a mandatory "pay now, argue later" approach would help to overcome that lack of buy-in.

Should compliance with pre-arbitral decisions be a mandatory pre-condition to arbitration?

The respondents were asked whether compliance with prearbitral decisions (i.e. "pay now, argue later") should be mandatory before a party disputing that decision can refer the dispute to international arbitration. The vast majority of respondents (67%) showed support for mandatory compliance with pre-arbitral decisions as a pre-condition to arbitration. The remaining 33% was split between "no" and "undecided" votes.

Should compliance with a pre-arbitral decision be mandatory before a party disputing that decision can refer the dispute to international arbitration (i.e. "pay now, argue later")? (One response)



The 67% of respondents in favour of mandatory compliance as a pre-condition to arbitration were split as follows:

- 23% of respondents agreed on mandatory compliance with pre-arbitral decisions except in cases of manifest error of law or fact;
- 27% were prepared to make compliance with pre-arbitral decisions mandatory subject to other conditions; and
- 17% were prepared to make compliance with pre-arbitral decisions unconditional.

During interviews, strong opinions were expressed both in favour of and against mandatory compliance, with concerns being raised as to the practicalities of then starting an arbitration which might yield a different result.

Other concerns voiced include:

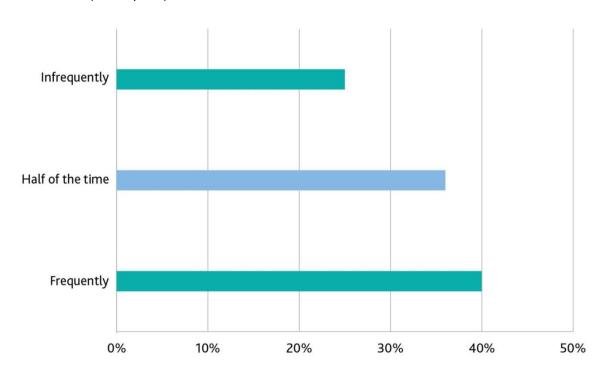
- Restricting access to justice arbitration should not be restricted to those who could pay the winning party of the pre-arbitral process.
- The perception that the parties will not start the arbitration on an equal footing, as the losing party to the pre-arbitral decision may effectively need to disprove the original finding.
- The potential difficulties in recovering monies owed under the arbitration award, when a payment was made pursuant to a contrary pre-arbitral decision.

The support of 67% of respondents for mandatory compliance with pre-arbitral decisions as a pre-condition to arbitration could indeed be read in conjunction with the results of another question: "how often is the same conclusion reached in an international construction arbitral award as in pre-arbitral dispute resolution?".

The answers were somewhat split, with 40% of the respondents choosing "frequently", 36% choosing "half the time" and 25% "infrequently", an indication of the relative consistency between pre-arbitral decisions and arbitral awards.

"Experience of markets using statutory adjudication and/or where dispute boards are more commonplace indicates very strongly that Pay Now Argue Later in practice leads to the resolution of many disputes without the need for arbitration. More generally, our experience is that compliance with the prearbitral decision often brings the dispute to an end. It is non-compliance which causes arbitrations to continue." Pinsent Masons LLP

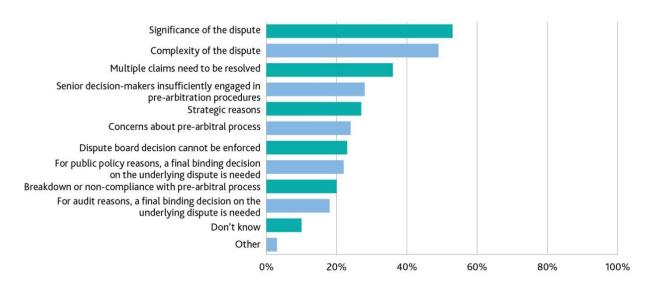
In your experience, how often is the same conclusion reached in an international construction arbitral award as in pre-arbitral dispute resolution? (One response)



International construction arbitration after the pre-arbitral process

Respondents were asked why, in their experience, international construction disputes had continued to international arbitration after pre-arbitral dispute resolution procedures had taken place. Respondents could choose one or more of the twelve options set out below:

In your experience in the last five years, why have international construction disputes continued to international construction arbitration after using pre-arbitral dispute resolution procedures? (One or more responses)



The reasons attracting the most responses were threefold: the significance (53%) and complexity (49%) of the dispute, and where multiple claims need to be resolved (36%). This is consistent with the key defining features of construction disputes identified in the survey, and shows that parties are more likely to continue to an arbitration after pre-arbitration procedures in high-stakes and complex disputes. These disputes justify counsel and the arbitral tribunal dedicating significant time to the analysis of the case, an option not available to a mediator or dispute board member.

Other reasons included senior decision-makers being insufficiently engaged in pre-arbitral procedures (28%), concerns about the pre-arbitral process (24%), difficulty or inability to enforce dispute board decisions (23%), the breakdown or non-compliance with the pre-arbitral process

(20%), and the need for a binding decision for audit reasons (18%). As discussed above, a "pay now, argue later" approach could potentially address some of these issues, in particular the lack of engagement of senior decision-makers in pre-arbitral procedures and concerns about the enforcement and binding nature of pre-arbitral decisions.

Interviewees expressed a range of views on the efficiency of these processes. Some interviewees considered that the succession of pre-arbitral procedures and arbitration would not necessarily mean wasted resources (as pre-arbitral steps could allow for the narrowing down of the issues in dispute). Other interviewees however took the view that disputes may have evolved and be framed differently by the time they were brought before an arbitral tribunal.

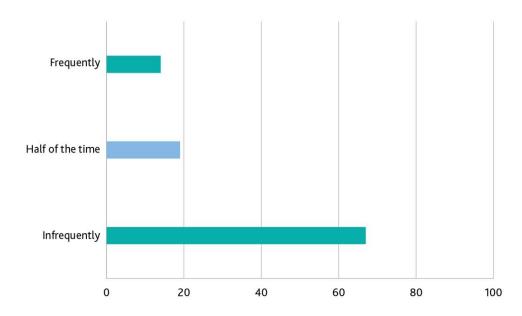
Efficient International Construction Arbitration: the Future

The main focus of the survey was to better understand how international construction disputes may be resolved more efficiently. We endeavoured to identify the perceived challenges and the views of respondents about how the process may be improved and streamlined.

Arbitration of international construction disputes remains the top choice of dispute resolution mechanism irrespective of any perceived inefficiency

The survey asked how frequently respondents had chosen not to pursue an international construction arbitration because of concerns about its efficiency. Respondents in all roles acknowledged that perceived inefficiencies do not affect their decision to seek recourse to arbitration for the resolution of disputes in the construction sector (67%).

Have you chosen not to pursue an international construction arbitration because of concerns about its efficiency? (One response)



We also asked respondents why parties chose construction arbitration over the courts. We asked respondents to choose any number of fifteen responses. The three most frequently selected reasons were to avoid legal systems or national courts (63%), the ability to select arbitrators (55%) and confidentiality and privacy (52%).

The desire to avoid national courts is one of the well-known advantages of arbitration in any sector. This is also reflected in several other reasons often identified by respondents: avoiding local political pressure (41%), neutrality (32%) and lack of diversity in national courts (19%).

Another well-known advantage of arbitration is the parties' ability to tailor the process, which was also identified as a key factor by respondents: the ability to select arbitrators (55%), to select technical (non legal) arbitrators (37%), the ability to appoint party experts (33%), and flexibility generally (32%). The ability to select technical (non-legal) arbitrators indeed ulfils the need for specific expertise required to address the complex technical issues which characteristically arise in construction disputes.

The finality of arbitration awards was selected by 20% of respondents. As would be expected, the enforceability of the award ranked as an important reason to prefer arbitration to the courts (41%).

Confidentiality and privacy also ranked highly as a reason to favour arbitration (52%).

Of note is the respondents' preference for international construction arbitration over courts due to the speed of the process (33%) more than its cost (11%).

These findings are broadly in line with previous International Arbitration Surveys which addressed international arbitration

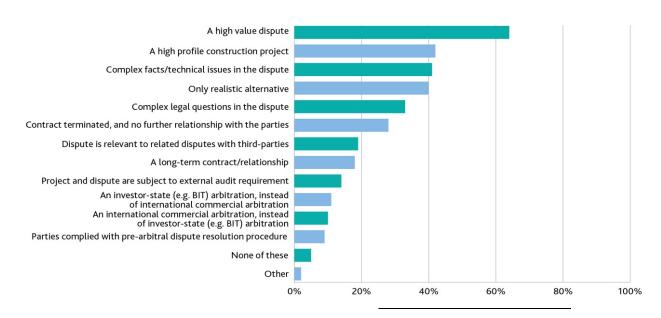
generally rather than in a specific sector. ⁶

As to costs, we challenged respondents to identify as many factors as they considered appropriate from a choice of twelve, which would justify a construction arbitration costing more than US\$ 3 million and lasting more than two years.

As might be anticipated, the top factor by some margin is high-value disputes (64%), followed by high profile construction projects (42%), complex facts/technical issues (41%) and arbitration being the only realistic alternative (40%). The complexity of the dispute, whether factual (41%) or legal (33%), was another commonly identified factor. On the issue of high profile construction projects, in-house counsel were approximately 10% less likely than the overall respondent population to think that such projects justified greater cost and duration.

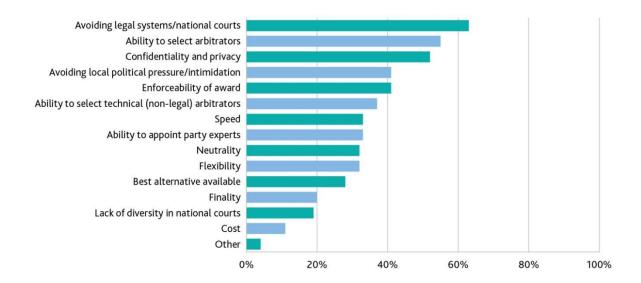
Respondents did not consider the fact that an arbitration was commercial or brought under an investor-state treaty to have a significant impact on their views about cost and duration

When is a high cost (+US\$3m) and/or long (+2 years) international construction arbitration worth it? (One or more responses)



⁶ For example, 'International Arbitration Survey: the Evolution of International Arbitration', 2018, p. 5

In your experience in the last five years, why have parties chosen international construction arbitration over litigation for resolving international construction disputes? (One or more responses)



Perceived causes of inefficiency in international construction arbitration

From a list of over twenty possible answers, respondents were asked to select all of the areas which they considered make or can make international construction arbitration inefficient.

Whilst in interviews some respondents noted that party tactics are seen as being part of the process, more than half of those answering this question considered that such tactics contributed to inefficiency of the process (53%), closely followed by perceived poor case management by arbitrators (51%) and large amounts of evidence (42%).

It was suggested in interviews that arbitrators should take a more proactive approach to managing cases, for example by focusing counsel's minds on key issues before the evidentiary hearing. Some respondents considered that "due process paranoia" was one reason why arbitrators may not take an active approach to case management. Another recurring issue mentioned during interviews relating to the management of the case was the delay in issuing a final award. Our findings on the characteristics of an efficient arbitrator appear below.

The fact that nearly half of respondents (42%) considered that large amounts of evidence render the process inefficient is not a surprise as international construction disputes are generally

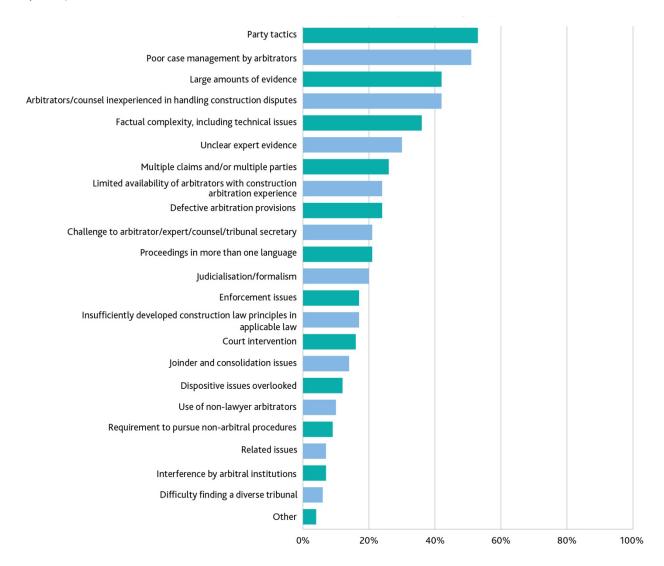
factually complex which translates into high volumes of evidence. Indeed respondents cited factual complexity (36%), as well as arbitrations involving multiple claims and/or parties (26%): multiple parties could cause delay, where, for example, there was a disagreement within a joint venture about arbitral strategy.

There was a broad consensus amongst interviewees that engaging experts at an early stage led to a better understanding of the case and clarity of evidence (30% of respondents complained that unclear expert evidence was a cause of inefficiency). This also made sense from a cost perspective.

Also of note was the fact that 42% of respondents cited arbitrators (and counsel) inexperienced in construction sector disputes as a source of inefficiency, with 24% stating that limited availability of arbitrators also contributed to inefficiency.

24% of respondents attributed inefficiency to defective arbitration provisions. An example identified in interviews was an overly prescriptive clause where unrealistic time limits for procedural steps were fixed.

In your experience in the last five years, what makes or can make international construction arbitration inefficient? (One or more responses)



Procedural Issues

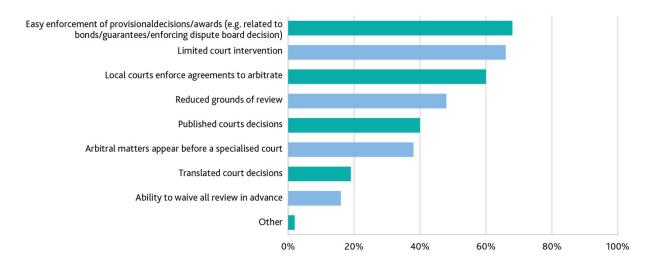
We asked respondents about a number of procedural issues which should be examined with a view to improving the efficiency of international construction arbitration.

Seat

Respondents were questioned about the characteristics that make for an efficient arbitral seat and could select as many responses as they wished from a choice of eight characteristics.

The top characteristic of an efficient arbitral seat was found to be the easy enforcement of provisional decisions/awards such as those related to bonds, guarantees and enforcing dispute board decisions (68%). The most frequent responses after ease of enforcement of provisional decisions/awards relate to the ability of the local courts to support the arbitration process: 66% considered that limited court intervention denoted efficiency, 60% identified the local courts enforcing agreements to arbitrate and 48% answered that reduced grounds of review led to efficiency.

What are or should be the characteristics of an efficient arbitral seat for international construction arbitration? (One or more responses)



Due process

Respondents were asked to select, from a choice of eight, as many due process elements as they would be prepared to forego to save time and money. Their answers provide an interesting picture of where arbitration users may be prepared to adjust what is a fine balance between efficiency and the necessary preservation of the parties' procedural rights.

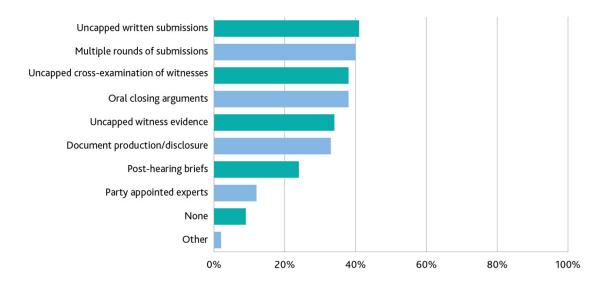
A significant proportion of respondents opted for stopping uncapped written submissions and multiple rounds of submissions (41% and 40% respectively), as well as ending uncapped cross-examination of witnesses and oral closing arguments (38% each).

Whilst a substantial number of respondents would be prepared to cap submissions and witness evidence, it was nevertheless pointed out in the interviews that doing so at an early stage could be difficult, as the dispute may not be fully understood: one interviewee considered the true position would not be known until the final submission.

Another important point which emerged from the interviews was the significant number of respondents prepared to forego document production or disclosure (33%). One interviewee expressed disappointment with the perceived default position, in some jurisdictions, that there will be disclosure. Some interviewees explained that they would not be prepared to forego disclosure, but would accept more limited disclosure. To improve the efficiency of the disclosure process, interviewees suggested appointing a member of the tribunal to liaise with the parties on electronic disclosure to resolve issues (e.g., search terms) and using a common platform for electronic disclosure at an appropriate stage of the proceedings.

Few respondents favoured foregoing party-appointed technical experts (12%). The alternative option of a tribunal-appointed expert was discussed in interviews, with some of the interviewees expressing concerns that the decision-making process should not be perceived to have been delegated to that expert.

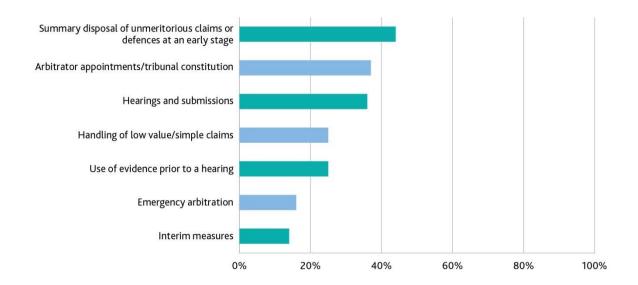
In your current international construction arbitration(s), what due process elements would you be prepared to forego to save time and money? (One or more responses)



Procedural initiatives most likely to increase efficiency

Beyond due process elements that respondents thought could be streamlined, we asked them to select from among seven options the top two aspects of arbitral procedure which offer the greatest potential to improve efficiency in international construction arbitration. The procedural elements selected by over one-third of respondents were summary disposal of unmeritorious claims or defences at an early stage (44%), arbitrator appointments/tribunal constitution (37%) and hearings and submissions (36%). Fewer respondents selected the other options, namely the handling of low value/simple claims (25%), use of evidence prior to a hearing (25%), interim measures (14%) and emergency arbitration (16%).

Please select two aspects of arbitral procedure offering the greatest potential to improve efficiency in international construction arbitration. (Two responses)

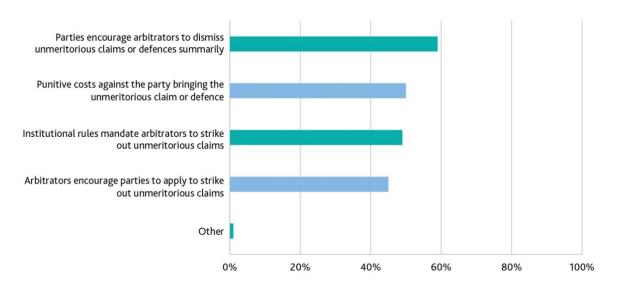


Summary disposal

A further question asked respondents to indicate from four choices how unmeritorious claims or defences should be summarily disposed of at an early stage. The favoured approach was for the parties to encourage arbitrators to dismiss unmeritorious claims (59%), although the figures were somewhat split, suggesting that there may be concerns about this approach. Punitive costs against the party bringing the

unmeritorious claim or defence came second (50%). Slightly less than half of respondents favoured institutional rules mandating arbitrators to strike out unmeritorious claims (49%). Of all the options, the least supported was for arbitrators to take the lead and encourage parties to apply to strike out an unmeritorious claim (45%).

How should unmeritorious claims or defences be summarily disposed of at an early stage in international construction arbitration? (One or more responses)

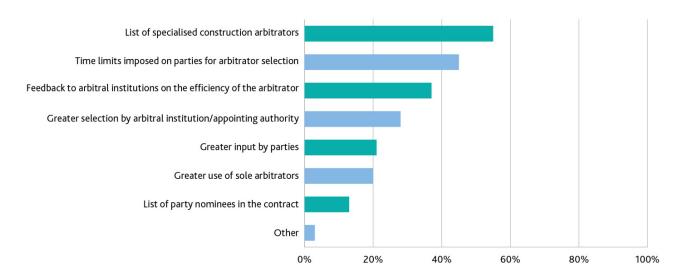


Arbitral appointments

Respondents were invited to indicate as many answers as they wished from among seven choices to indicate what would improve the efficiency of arbitral appointments. Respondents most frequently selected having a list of specialised construction arbitrators (55%), again emphasising findings elsewhere in the survey about the importance of experience in

the sector. Although imposing a time limit on parties for the selection of arbitrators was the second-most popular answer, this only represented 45% of responses. Of note is that greater selection of arbitrators by arbitral institutions/appointing authorities only attracted 28% of votes and greater use of sole arbitrators was only selected by 20% of respondents.

What would improve the efficiency of arbitral appointments in international construction arbitration? (One or more responses)



Hearings and submissions

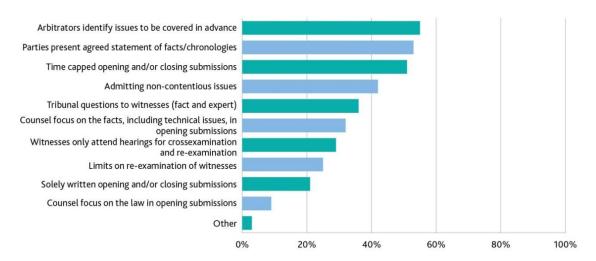
Respondents were asked what would improve the efficiency of hearings and submissions. The top three responses were advance identification by arbitrators of issues to be covered (55%), presentation by the parties of agreed statements of facts/chronologies (53%) and time-capped opening and/or closing submissions (51%).

Respondents generally considered arbitrators to play an important role and, in addition to the top response of identification by them of issues to be covered, considered that the efficiency of hearings and submissions would be improved where arbitrators posed questions to witnesses (36%).

A second theme to emerge was cooperation between parties, reflected in the above mentioned presentation of an agreed statement of facts or chronology, and also admission of noncontentious issues (42%).

A third theme is procedural constraints as reflected in the proposed improvement of time capping opening and/or closing submissions. Also, approximately one-fifth of respondents favoured dispensing with oral opening or closing submissions. This supports the above views that those submissions should be limited, which interviewees mentioned may be achieved by employing so-called chess clock timing, i.e., using a time management technique to restrict the timing of submissions.

What would improve the efficiency of hearings and submissions in international construction arbitration? (One or more responses)



Efficient actors in international construction arbitration

Respondents were asked which characteristics were the most important for the various actors in the international construction arbitration field from an efficiency perspective. A critical issue identified below and in other parts of the survey is the impact on efficiency caused by the time taken for arbitral awards to be issued.

Arbitrators

Respondents were asked to select as many answers as they wished from twelve options to identify the characteristics of an efficient international construction arbitrator.

The top four responses were issuing an award within a reasonable period of time (70%), being willing to make difficult decisions, including on procedural issues (68%), possessing case and counsel management skills (also 68%) and having technical knowledge of construction (63%). The latter figure reflects what respondents look for when selecting an arbitrator for an international construction dispute.

In relation to efficiency, a significant number of respondents also considered that it was important for arbitrators to commit early to the hearing and award schedule (50%), and identify issues for the parties (46%). This was a recurrent theme in interviews.

Arbitrators also need to have good availability (61%) and know the facts of the case (also 61%).

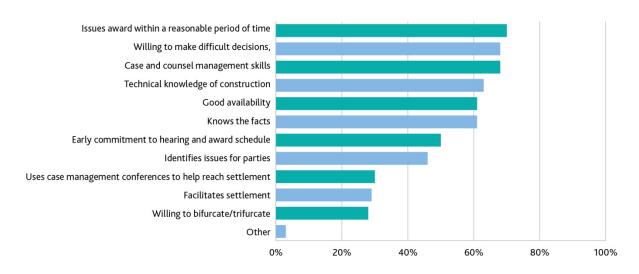
During interviews, case management strategies which could be used to avoid delays to the award being issued were identified, including in particular the forward-planning of post-hearing work for parties and the tribunal, and the organisation of tribunal deliberations immediately after the hearing.

It is of note that nearly half of the respondents (c. 45%) considered that an efficient construction arbitrator should facilitate settlements (combining the respondents who selected one or both of the following responses: "uses of case of management conferences to help reach settlement" and "facilitates settlement").

In an open question we asked what could be done within an international construction tribunal to improve efficiency. Four themes emerged from the responses. The first was division of tasks between the tribunal, such as splitting up the drafting of the award or one member taking responsibility for disclosure. The second was the importance of communication within the tribunal, with respondents cautioning against an over-reliance on email exchanges. The third was a decisive Chair who was receptive to the views of the co-arbitrators and engaged with them. The fourth theme related to the organisation of the tribunal, such as comparing diaries early and setting aside time following the hearing.

A number of interviewees expressed the view that to bring about efficiency, it was necessary for the tribunal (and indeed the parties) to undertake work at an early stage. It was suggested, for example, that arbitrators could order parties to provide information at an early stage (e.g., particularisation of quantum), which would encourage parties to frontload their work.

What are or should be the characteristics of an efficient international construction arbitrator? (One or more responses)



Clients/users

Respondents were asked to select as many responses as they wished from a choice of fourteen to indicate how clients/users can help increase efficiency.

It is evident from the survey that clients or users can help to increase the efficiency of an international construction arbitration in three ways.

The first is having an "efficient arbitral mindset", which is reflected in the most popular response, namely placing a focus on resolving the dispute, rather than "leaving no stone unturned" (62%) and approaching settlement with an open mind (52%). In interviews, it was noted that counsel must take the lead in relation to the focus to be placed on resolving the dispute. Part of this was stated to involve focusing on core documents, rather than producing high volumes of documents.

The second relates to their participation in the proceedings.

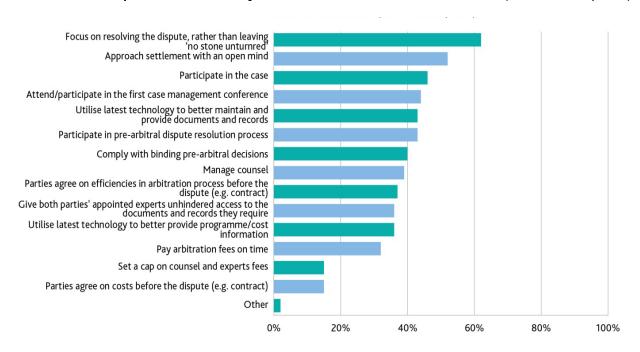
This involves clients themselves participating in the case (46%),

such as the first case management conference (44%), participating in pre-arbitral dispute resolution processes (43%) and managing counsel (39%). In interviews, a number of inhouse and external counsel emphasised the importance of users interacting efficiently with their lawyers, such as by answering questions promptly, explaining the arbitration process to business people with in-house counsel acting as a bridge between management and external counsel, or providing documents and making witnesses available.

The third relates to being prepared for a dispute, such as by using the latest technology to better maintain and provide documents and records (43%), agreeing on arbitral processes before the dispute (37%) and utilising the latest technology to better provide programme or cost information (36%).

Some respondents considered a cap on counsel and expert fees (15%) could increase efficiency.

How can clients/users help increase the efficiency of an international construction arbitration? (One or more responses)



Counsel

Respondents were asked to select as many responses as they wished from a choice of fifteen to indicate the characteristics of an efficient counsel.

Over 50% of respondents had a wish list of eleven items that they considered indicative of efficient counsel. Some of these are particularly important in international construction arbitration.

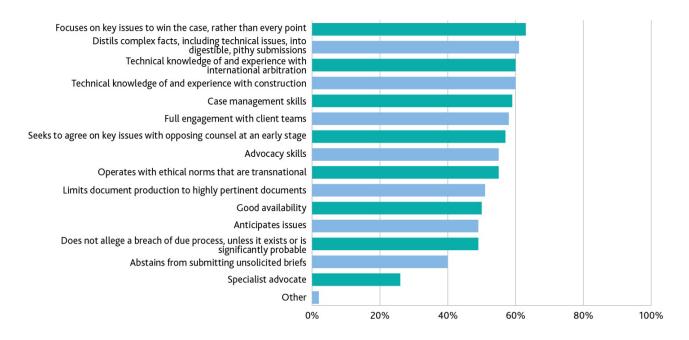
Getting to the point in a clear and focused manner comes out top, as may be seen from the two most popular answers, which were: focusing on winning the case, rather than dealing with every point (63%) and distilling complex facts, including technical issues, into digestible, pithy submissions (61%).

The next most important characteristics (60% each) were technical knowledge and experience in both international arbitration and the construction field.

Case management skills were highly valued (59%), as were full engagement with client teams (58%, and as much as 70% for in-house counsel alone) and seeking to agree on key issues with opposing counsel at an early stage (57%,the importance of which was underscored in the interviews). Advocacy skills were identified by 55% of respondents.

Other results of interest include operating within ethical norms that are transnational (55%), limiting document production to highly pertinent documents (51%) and not alleging a due process violation unless it exists or is significantly probable (49%).

What are or should be the characteristics of an efficient counsel in an international construction arbitration? (One or more responses)



Experts

Respondents were asked to select as many responses as they wished from a choice of seven to indicate the characteristics of an efficient expert.

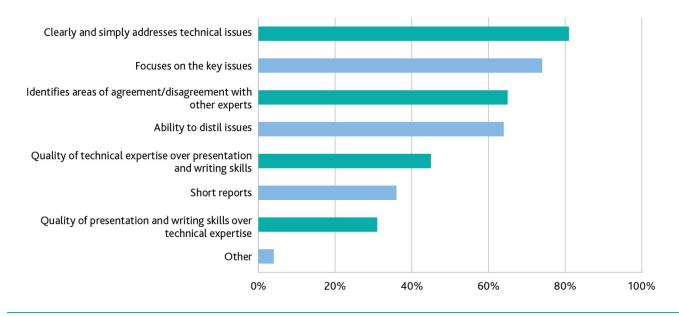
By a significant margin, respondents believed that an efficient expert clearly and simply addresses the technical issues (81%). This correlates with the comments in interviews which highlighted that expert reports must be intelligible.

Respondents valued experts who focus on the key issues (74%), identify areas of (dis)agreement with other experts (65%) and

can distil issues (64%). Interviewees also suggested that experts applying the same methodology was very useful to avoid "ships passing in the night".

Whilst a short report ranked at only 36%, interviewees noted that sometimes the usefulness of expert reports was limited because they were unduly lengthy. Concern was expressed about the use of "partisan" experts, with one interviewee suggesting a greater focus on ethical guidelines for experts.

What are or should be the characteristics of an efficient expert in an international construction arbitration? (One or more responses)



Institutions

Respondents were asked to select as many responses as they wished from a choice of fifteen to indicate the characteristics of an efficient institution administering an international construction arbitration.

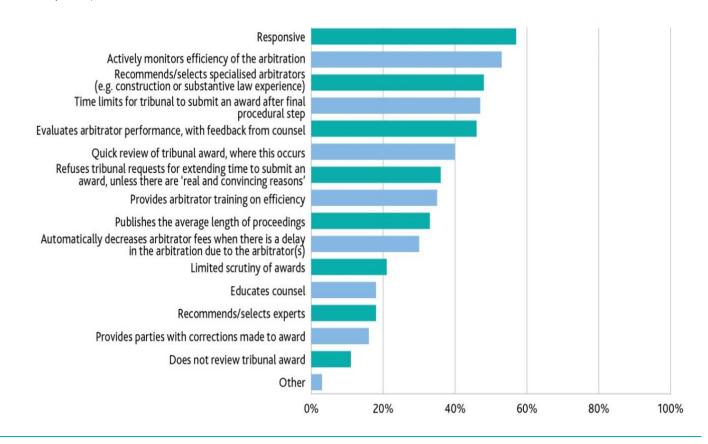
The top answer was the responsiveness of the institution (57%).

As may be seen from a number of the results of the survey, the involvement of institutions in ensuring that awards are issued promptly is another recurring issue of concern.

Many of the characteristics of an efficient institution that were noted relate to the institution's role in assisting others to be efficient, i.e., an institution which actively monitors the efficiency of the arbitration (53%), recommends or selects specialised arbitrators (48%), sets time limits for the tribunal to submit an award after the final procedural step (47%), and refuses tribunals' requests for extensions of time to submit an award unless there are real and convincing reasons (36%). For some arbitrators interviewed, the administrative functions carried out by the institution allowed them to focus on the case. A number of questions focused on the length of

proceedings, particularly taking into account, yet again, review of awards and the time taken by tribunals to issue awards. 47% thought that time limits for tribunals to issue awards were a factor in considering efficiency, as was a prompt review of an award by institutions which carry out such a function (40%), refusal of a tribunal's request to extend the time for an award to be rendered (36%), publishing the average length of proceedings (33%), and automatically decreasing arbitrator fees where there is a delay in rendering the award (30%). Only 11% of respondents considered that absence of the institutional review of an award could lead to efficiency. Arbitrators interviewed noted difficulties with reducing arbitrator fees, or publishing the length of proceedings, as the tribunal may have been delayed due to only one of the arbitrators and it would not therefore be appropriate for certain inferences or consequences to be attributed to the other tribunal members.

Interviews revealed a common concern about the time which elapses between the submission of an award by the tribunal to an institution and the final notification of the award. What are or should be the characteristics of an efficient institution administering an international construction arbitration? (One or more responses)



Fees and costs orders to encourage efficiency

The responses to our questions about fees and costs suggest that they could be used to improve the efficiency of international construction arbitration. That said, a number of interviewees suggested that fees and costs should not be the starting point for seeking to improve the efficiency of international construction arbitrations, but where other measures have been taken or have not had the desired effects, fees and costs may be useful. We have sought to identify what respondents thought about different types of fee arrangements as an incentive to efficiency.

Fixed fees

Respondents were asked whether the use of fixed or contingency fees for arbitrators and counsel would increase the efficiency of international construction arbitration and whether the use of fixed or contingency fees posed problems.

Respondents selected the impact on efficiency that they thought fixed fees would have. 25% thought it would lead to a significant increase in efficiency and 19% to a minor increase, making an overall 44% of respondents who considered that fixed fees would have a positive impact on efficiency. 22% considered that fixed fees would not affect efficiency. 21% were undecided. A minority of 13% thought that fixed fees would decrease efficiency.

Fixed fees were discussed in interviews, with interviewees expressing a range of opinions. Some expressed concerns that this type of fee structure would not set the right incentives for the best and most efficient client outcome. An interviewee also noted that any potential efficiencies might be limited where only one party had a fixed fee structure. Some interviewees expressed views in favour of such fee structures, noting however that it would require knowing which stones to leave "unturned" in very complex cases.

Contingency fees

The use of contingency fees for counsel was considered by 42% of respondents to increase efficiency. 25% of respondents were undecided and 22% considered contingency fees to have no impact. Similarly to fixed fees, a minority of 11% considered that contingency fees would decrease efficiency.

In interviews, it was observed that counsel on contingency fees could be more willing to go the "extra mile". That said, in a question to respondents on whether they had any concerns about the use of fixed or contingency fees, the majority of inhouse counsel (55%) expressed no concerns about fixed fees, whereas they had a more measured opinion concerning contingency fees (with 56% expressing minor or significant concerns about this type of fee structure).

Third party funding and insurance

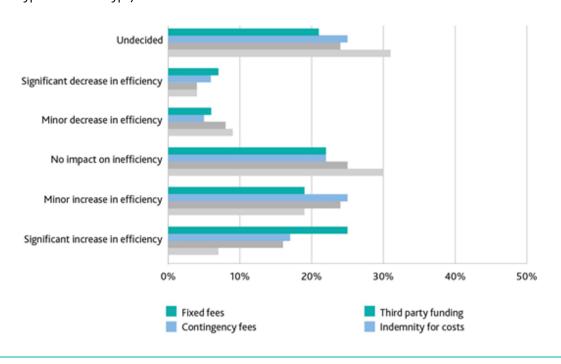
Respondents were asked to give the number of international construction arbitrations in which they had seen third party funding and/or a party with litigation costs insurance or third-party indemnity for costs and whether the use of such arrangements had an impact on the efficiency of the arbitration.

The responses suggest the use of that third party funding and insurance/third-party indemnity arrangements is in its early stages in international construction arbitration. 64% of respondents had not seen international construction arbitrations with third party funding and 65% had not seen third-party indemnity arrangements. Where such funding arrangements had been used, most respondents (27%) had only seen them in one to three arbitrations. This suggests that the effects on efficiency (if any) are yet to be fully seen.

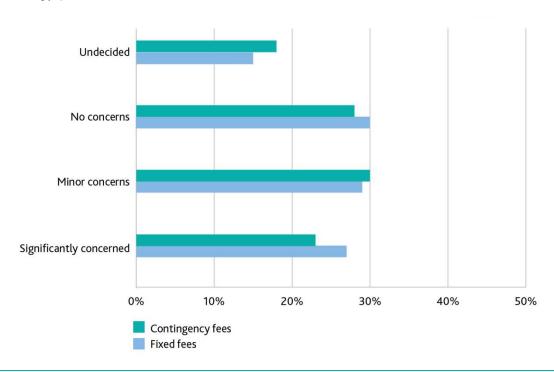
Insofar as they were able to comment on the effect of those funding arrangements on efficiency, 24% of respondents were unsure whether third party funding would impact efficiency, and 31% whether third-party indemnities would have any impact on efficiency.

It was noted in an interview that third party funding could assist with the efficient conduct of an international construction arbitration by providing the financial resources to engage an expert at the right stage. Another way that third party funding could lead to a quicker resolution was where the existence of that funding was voluntarily disclosed, which could be used to signal the strength of the case and encourage settlement.

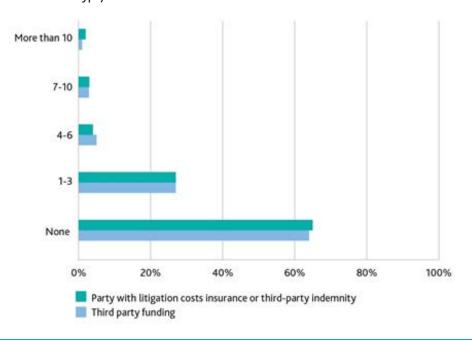
Would different type of fee or funding arrangements increase the efficiency of international construction arbitration? (One response for each fee type and finance type)



Does the use of fixed or contingency fees in international construction arbitration pose concerns or problems for you? (One response for each fee type)



In the last five years, how many international construction arbitrations of which you are aware had third party funding or insurance? (One response for each finance type)



Cost orders

We asked respondents to select one or more responses in relation to how cost orders can be used to improve efficiency and how costs should be efficiently determined.

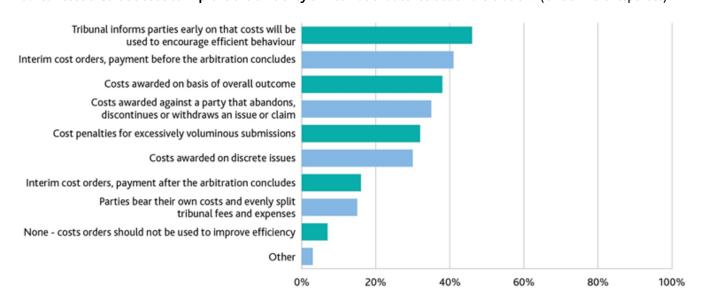
7% of respondents answered that cost orders should not be used to improve efficiency.

Varying views were advanced as to how cost orders could be used to improve efficiency. The most widely supported approach was for the tribunal to inform parties early on that costs would be used to encourage efficient behaviour (46%). Where interim cost orders were to be used, payment before the conclusion of the arbitration (41%) was supported by more than double the number of respondents who supported payment after the conclusion of the arbitration (16%). There was little support for each party to bear its own costs (15%).

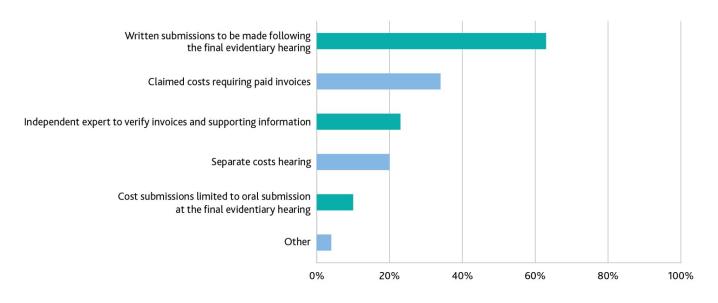
There was no clear indication from respondents about how apportionment of costs could impact upon efficiency, with all options being selected by respondents in the range of 30%-38%. Apportioning costs based on the overall outcome (38%) was most frequently selected, followed by costs against a party that abandoned, discontinued or withdrew an issue or claim (35%). 32% selected cost penalties for excessively voluminous submissions and 30% for costs awarded on discrete issues.

In response to the question about how costs should be efficiently determined, the majority of respondents favoured making cost submissions in writing after the final evidentiary hearing (63%). Only 20% favoured a separate costs hearing or oral submissions at the final evidentiary hearing (10%). 34% thought that paid invoices were a prerequisite to costs being claimed and a perhaps surprising 23% were in favour of using an independent expert to verify invoices and supporting information.

How can cost orders be used to improve the efficiency of international construction arbitration? (One or more responses)



How should costs be efficiently determined in international construction arbitration? (One or more responses)



Technology

Technology has been at the forefront of arbitration users' minds in a legal landscape which is getting to grips with contract automation, document management systems, block chain, smart contracts, artificial intelligence and so on. Embracing technology in international arbitration to reduce costs and reflect the commercial realities of the projects from which the dispute emanates is accepted as necessary and respondents recorded the increased efficiency of international construction arbitration where technology was involved.

When asked whether technology had or had not caused inefficiency, just over one third of respondents considered that technology had not caused inefficiency (34%). This is perhaps reflective of the rise in efficient and persuasive presentation methods being adopted by counsel at hearings to present technical and complex evidence (such as timelines of complex infrastructure or energy projects), which provide a better representation as compared to more traditional presentations.

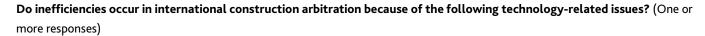
In interviews it was, however, noted that hard copy documents could still be useful in some cases, for example to refer to

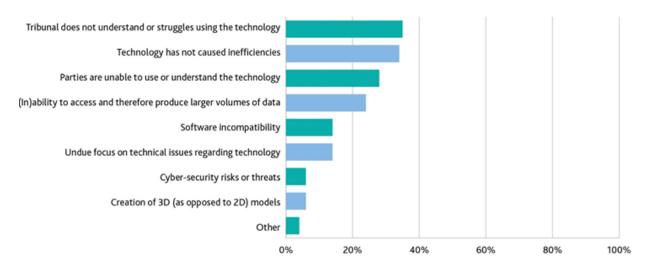
several documents at once, such as when undertaking cross-examination.

Technology tended to cause inefficiencies because of difficulties using the technology, whether by the tribunal (35%) or the parties (28%). With experience, however, users will likely become more familiar with electronic handling of data and these issues are likely to decrease.

The large volumes of data in construction disputes was another notable cause of inefficiency (24%), though this is not necessarily a matter of arbitration process but rather is reflective of the volume of data being generated on projects in the modern world.

Few respondents (6%) considered cyber-security risks or threats to have caused inefficiencies. This could be due to work undertaken within the arbitral community to reduce cyber risks. An interviewee noted that a hacking attempt had been made but was unsuccessful.





Technological automation

For some years, users of arbitration have been developing a better understanding of how the adoption of automation (i.e. removing human involvement) could influence costs and results. It is accepted now that technological automation of parts or all of the process could increase the efficiency of international construction arbitrations, which are particularly document-heavy.

Able to select one or more responses, respondents favoured automating the "simple" aspects of a dispute, such as collecting and collating a list of exhibits and references in submissions/witness statements (49%) and document production and review (40%). This is consistent with the finding that the large volume of evidence is one of the most frequently-identified causes of inefficiency (large teams of lawyers reviewing hundreds of thousands of pages of evidence for relevance to the issues in dispute).

Another area where respondents considered that automation could usefully be used to improve efficiency is the quantification of damages and delay, reflected in reviewing cost records (33%), calculating the costs of delay or disruption (32%), and delay quantification (26%).

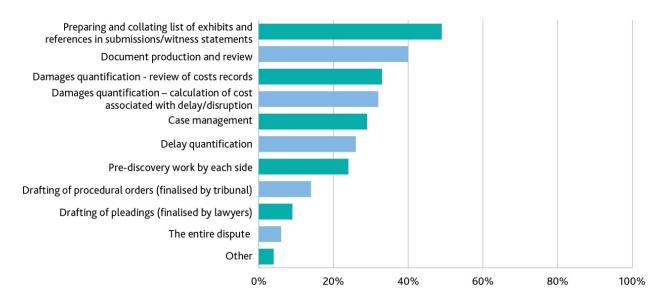
A proportion of respondents even considered that technological automation of drafting (whether of procedural orders (14%) or pleadings (9%)) could be used to increase efficiency (on the assumption that the tribunal or counsel would finalise the relevant documents). Although such technology is not yet commonly available, these figures reflect an appetite for more automation, even for the parts of the process which could at first seem less obvious candidates for commoditisation.

Fewer still favoured technological automation of the entire dispute (6% and none of the in-house counsel respondents), which certainly suggests a resistance to the use of artificial intelligence for the decision making process.

Looking forward, emerging technologies are enabling arbitration users to begin imagining automated dispute resolution platforms where technology enables more efficient proceedings. The design of such platforms will need to ensure due process requirements are complied with and also must enable the platform to adjust to the conditional logic of given scenarios.

"Whilst it may be some time before technologies such as blockchain and augmented reality are used as a matter of course in construction arbitrations, it is incumbent upon the arbitration community to engage with the technology industry and, in line with its clients, make the transition to the digital environment" Pinsent Masons LLP

In an international construction arbitration, would technological automation (removing human involvement) of the following improve the efficiency of the arbitration without compromising the process? (One or more responses)



Appendices

Methodology

The research for this study was conducted from May to July 2019 by Alexander Ferguson, LLB (Hons), BSc (ANU), LLM (Cantab), Pinsent Masons Research Fellow in International Arbitration at the School of International Arbitration, Queen Mary University of London, together with Professor Loukas Mistelis, Clive Schmitthoff Professor of Transnational Commercial Law and Arbitration and Director of the School of International Arbitration, Queen Mary, University of London.

An external focus group comprised of senior in-house counsel, private practitioners, arbitrators, technical experts and third-party funders provided valuable feedback on the draft questionnaire.

The research was conducted in two phases: the first quantitative and the second qualitative.

Phase 1: an online questionnaire of up to 52 questions (the number of questions varied depending on respondents' answers) was completed by 646 respondents between 31 May 2019 and 26 July 2019.

Respondents were asked to identify their involvement in international construction disputes. Where the respondent selected 'none' their results were excluded. The survey sought the views of those with experience in international construction disputes. The majority of respondents had frequently been

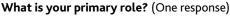
involved with international construction disputes (43%), about one-third (34%) had been involved infrequently, and 23% half of the time.

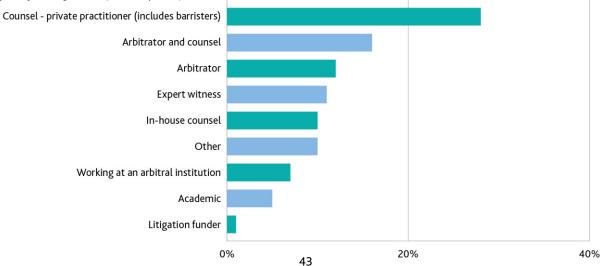
A reference to "respondents" in the report refers to those respondents who answered that particular question.

The respondents primarily came from civil law (42%) and common law (40%) legal systems, followed by mixed (15%) legal systems.

The respondents' regions of operation were spread around the world, from Europe (33%), Middle East (26%), Asia-Pacific (13%), North America (9%), Latin America (8%), Sub-Saharan Africa (4%), Oceania (1%) and other (4%).

Phase 2: 66 face-to-face or telephone interviews were conducted and written comments received between 11 June 2019 and 25 July 2019. Interviews ranged in length from 10 to 83 minutes. Interviewees were drawn from a diverse group based on primary role, seniority and geographical location. Respondents from all regions listed in Phase 1 were interviewed. The qualitative information was used to provide context to the quantitative data and provide illustrative examples, as well as to consider international construction dispute resolution as a whole. All interviews were conducted in English.





School of International Arbitration, Queen Mary University of London

It is nearly 35 years since the School of International Arbitration (the "School") was established under the auspices of the Centre for Commercial Law Studies at Queen Mary University of London.

Its aim was, and still is today, to promote advanced teaching and produce excellent research in the area of international arbitration and international dispute resolution generally. To achieve these objectives, the School offers a wide range of international arbitration courses including specialist LLM modules, postgraduate diplomas, professional training and one of the largest specialist PhD programmes in the world. Today, the School is widely acknowledged as the world's leading postgraduate teaching and research centre on international arbitration.

Since its establishment, more than 3,000 students from more than 100 countries have graduated from the School, and more than 35 PhD students have successfully completed their doctoral studies. Many of our graduates are now successfully practising arbitration around the world as advocates, in-house counsel, academics and arbitrators. Others serve governments, international organisations, including UNCITRAL and the World Bank, or work for major arbitration institutions.

From one academic member at the outset, the School now has a range of full teaching professors, readers and senior lecturers, a strong network of part-time and visiting academic members, and campuses in London and Paris. Although the School is physically located in the centre of legal London, our faculty delivers courses all over the world and we offer distance learning programmes in international dispute resolution, in addition to our London and Paris based programmes. Apart from its academic staff, the School involves high-profile practitioners in its teaching programmes. This adds crucial practical experience to academic knowledge and analysis.

Further, the School has close links with major arbitration institutions and international organisations working in the area of arbitration. It also offers tailored consulting services and advice to governments and non-governmental agencies that wish to develop their knowledge of arbitration, as well as training for lawyers in private practice, in-house counsel, judges, arbitrators and mediators.

The strength of the School lies in the quality and diversity of its students and the desire of the School's staff to shape our students' academic and professional development. However, the work of the School extends well beyond the classroom and plays a leading role in the evolution of arbitration as an academic subject. Arbitration is a dynamic and adaptable process and so is the School in its profile and outlook.

For further information, please visit the School's website: www.arbitration.qmul.ac.uk.

Pinsent Masons LLP

Pinsent Masons has one of the leading international arbitration practices in the energy and infrastructure sectors. We enjoy a world-class reputation in successfully delivering high-value and technically complex cases.

Our team is co-led by Jason Hambury in London and Dean Lewis in Hong Kong. We represent clients on commercial and investment treaty arbitrations all over the world, involving different procedural and substantive laws, issues of public international law, enforcement and treaty rights.

With some 200 dedicated arbitration practitioners based in London, Paris, Singapore, Hong Kong, Dubai, Doha, Johannesburg, as well as Mainland China and Australia, our arbitration expertise has a truly global footprint.

Typically at any one time we are instructed on over 70 international arbitrations, a significant number of which will involve sums in excess of US\$100m, and some of which will be very considerably higher.

Our current arbitration portfolio consists of cases comprising some US\$10.5bn in dispute involving claims that are high profile and have legal and political significance. We have close links to the major arbitral institutions such as the ICC, LCIA, CIETAC, AAA, DIAC, SIAC, SCC, HKIAC and ICSID. We also have significant experience in conducting UNCITRAL and ad hoc arbitrations.

Our links with the international arbitration community are longstanding. We were on the drafting committee for the England & Wales Arbitration Act 1996 and the DIAC and SIAC Rules. We regularly participate in the pre-eminent research studies. In 2016 we supported the Queen Mary University of London study on dispute resolution in the technology sector. This research was subsequently nominated by Global Arbitration Review for the Best Development of 2016 Award.

Our arbitration practitioners are truly diverse and international, many of whom are qualified in more than one legal system and multilingual. They regularly act as advocates and some of them sit as arbitrators. This has allowed us to forge strong relationships with the leading international arbitrators and provide informed advice to our clients on the important issue of arbitrator selection and the composition of the panel.

Pinsent Masons' 2019 International Arbitration Survey, in partnership with the School of International Arbitration at Queen Mary University of London, focuses on efficiency in resolving disputes in the international construction sector.

Please visit our dedicated webpage: www.pinsentmasons.com/thinking/specialreports/international-construction-disputes-survey

Acknowledgments

The School of International Arbitration would like to thank Pinsent Masons LLP for its financial support and substantive assistance, in particular Mark Roe, Charles Blamire-Brown and Cecile Tangy in London, who co-ordinated the project on behalf of Pinsent Masons. They were assisted by, in particular, Jason Hambury, Clotilde Lemarié, Gillian Carmichael Lemaire, Adrian Elliott, Gurmukh Riyat, Clea Bigelow-Nuttall, Catherine Potter and Michael Cottrell in London, Frédéric Gillion and Florian Quintard in Paris, Pamela McDonald in Doha, Jed Savager and Maria Mazzawi in Dubai and Shane Voigt in Johannesburg. We are also grateful for the support of Tom Deighton and Fiona Fitzgerald from the Pinsent Masons Business Development team in London.

We would also like to thank our external focus group for feedback on the questionnaire and methodology, including:

Rachel Ansell QC (4 Pump Court) Adam Constable QC (Keating Chambers), Bruce Gailey (Borden Ladner Gervais), Chandel Lee (Hyundai E&C), Ignacio Gacituaga (Sener), Ismail Selim (CRCICA), Lindy Patterson QC (39 Essex Chambers), Marianne Ramey (PAI), John Mullen (Diales), Nabeel Khokhar (Strabag), Dr Remy Gerbay (MoloLamken LLP, Queen Mary University of London), Sean Yates (China State Construction), Paul Taggart (Salini Impregilo) and Tim Tapper (Turner & Townsend).

Most importantly, we would like to thank all the private practitioners, arbitrators, in-house counsel, technical experts, academics, third party funders, and other respondents who generously gave their time in completing the questionnaire and being interviewed.



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