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Report on Party-Appointed Expert Witnesses in International Arbitration: Effectiveness and Best Practice



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Preamble

Expert witness evidence is a critical component of contemporary international arbitration. Tribunals routinely depend on expert input to address complex technical, financial and scientific matters, and the quality of this evidence frequently influences the outcome of proceedings. As arbitration grows in scale and complexity, it has become increasingly important to ensure that expert evidence is prepared, presented and tested in a manner that supports the efficient, fair and informed resolution of disputes. At the same time, practitioners continue to observe recurring challenges—including late expert engagement, insufficient communication, and a lack of clarity in the presentation of expert analysis—that can diminish the usefulness of such evidence.

This Report has been developed in response to these concerns. It forms part of Ciarb's initiative *Maximising the Effectiveness of Party-Appointed Expert Witness Evidence in ADR* launched in 2024. This Report is a key project of the Chartered Institute of Arbitrators, building on the Institute's longstanding commitment to thought leadership in this field. Over several decades, Ciarb has produced influential guidance that has shaped global arbitral practice, including the *Ciarb Guideline on Party-Appointed and Tribunal-Appointed Expert Witnesses*, the *Ciarb Protocol for the Use of Party-Appointed Expert Witnesses in*

International Arbitration, and the *Ciarb Guidelines for Witness Conferencing in International Arbitration*. This Report continues that tradition by providing updated, empirically grounded recommendations that reflect contemporary arbitral practice and the evolving expectations of users. This initiative was prompted by practitioner feedback during and aligns with themes articulated in Ciarb's 2025 Roebuck Lecture, delivered by Sir Robin Knowles CBE, which underscored two key responsibilities: first, that improving expert evidence rests primarily with those who use it; and secondly, that engagement with experts only at the evidentiary hearing stage is inadequate. These observations underscore the need for clearer, earlier and more structured approaches to the use of expert witnesses.

A distinguishing feature of this project is the breadth and diversity of its consultation process. Four regional working groups—the Americas; Europe and Africa; the Middle East; and Asia Pacific—each comprising practitioners across disciplines, contributed to the analysis and drafting. Contributions were received from arbitrators, counsel, expert witnesses, in-house counsel, arbitral institutions and subject-matter specialists across all regions. The project aims to produce practical, globally applicable guidance grounded in empirical evidence and professional experience.

Table of Contents

1	Preface	1
1.1	Introduction	1
1.2	Status and intended use of this report	2
1.3	Core themes	3
1.4	Methodology and limitations	4
1.5	How to use this report	5
2	Key findings	7
2.1	Introduction	7
2.2	Summary of main findings	8
2.3	General observations	9
3	Theme 1 – Communication between expert witnesses, the tribunal and counsel	10
3.1	Tribunal proactivity in early case management	11
3.2	How tribunals should proactively engage with experts	13
3.3	Over-instruction of experts by counsel	21
3.4	Counsel’s role in joint expert reports	25
3.5	Conflicting guidance on the law to opposing experts	28
3.6	Case management conferences to identify core issues	30
3.7	Frequency of expert meet-and-confer	33
3.8	Experts approaching the tribunal directly on fundamental differences	35
3.9	Use of the Ciarb Protocol in practice	38

4	Theme 2 — Timetables and timing of involvement of expert witnesses	40
4.1	When experts should ideally be instructed	41
4.2	Whether experts are instructed at the appropriate time	44
4.3	Main reasons experts are instructed late	47
4.4	Cost recoverability as a fix for late instruction	49
4.5	Adequate time, and expert input on the timetable	52
4.6	Tribunal technical knowledge for procedural matters	55
4.7	Procedure and submission style, and expert effectiveness	58
4.8	Expert involvement in case formulation	62
4.9	Joint reports as a norm	66
4.10	Timing of joint expert reports	70
4.11	Sufficiency of a Scott Schedule alone	72
4.12	Withholding opinions and “ambush” reply reports	74
5	Theme 3 — Ensuring the tribunal understands	77
5.1	Early expert meetings on common data and methodology	78
5.2	Reading expert reports as they are served	83
5.3	Word-limited summaries, and word or page limits	86
5.4	Tribunal question lists in advance of the hearing	89
5.5	Tribunal involvement in expert meetings	91
5.6	Tribunal assistance in identifying the issues	94
5.7	A standardised expert report template	96
5.8	Use of technology to present evidence	99
5.9	Lists of agreed and disagreed issues with reasons	101

6	Theme 4 — The hearing and post-hearing	104
6.1	Witnesses of fact acting as expert witnesses	105
6.2	Prevalence of expert witness conferencing	108
6.3	Witness conferencing versus cross-examination	110
6.4	Key components of successful witness conferencing	112
6.5	Use of the Ciarb Guidelines on Witness Conferencing	116
6.6	Opening expert presentations at the hearing	119
6.7	Private post-hearing tribunal-expert meetings	123
7	Conclusion	126
7.1	General observations	127
7.2	Areas of divergence and why they matter	127
7.3	Theme 1 summary	128
7.4	Theme 2 summary	129
7.5	Theme 3 summary	129
7.6	Theme 4 summary	130
7.7	Overarching conclusions	130
A	Appendix A — Suggested language for procedural order(s)	132
A.1	Theme 1	133
A.2	Theme 2	139
A.3	Theme 3	140



Preface

1.1 Introduction

1.1.1 Arbitral tribunals routinely rely on expert witness analysis to address complex technical, financial and scientific matters, and the quality of this evidence frequently influences the outcome of proceedings. For arbitrations of significant scale and complexity, it has become increasingly important to ensure that expert witness evidence is commissioned, prepared, presented and tested in a manner that supports the efficient, fair and informed resolution of disputes. Yet recurring challenges, including delayed expert witness engagement, insufficient communication, interference and a lack of clarity in presentation—continue to affect the quality and effectiveness of expert witness evidence.¹

1.1.2 In response to these concerns, *Maximising the Effectiveness of Party Appointed Expert Witness Evidence in ADR* launched in 2024. This Report is a key project of the Chartered Institute of Arbitrators and builds on the Institute's longstanding contribution to thought leadership in this field.

1.1.3 Ciarb's existing body of work, including its *Guideline on Party Appointed and Tribunal Appointed Expert Witnesses*, the *Protocol for*

the Use of Party Appointed Expert Witnesses in International Arbitration, and the *Guidelines for Witness Conferencing in International Arbitration*, has shaped global arbitral practice for many years. This Report extends that foundation, reflecting current trends and challenges, and the evolved international best practice in expert witness evidence.

1.1.4 The initiative for the Report was shaped by extensive practitioner feedback and aligns with themes articulated in Ciarb's 2025 Roebuck Lecture delivered by Sir Robin Knowles CBE. Sir Robin emphasised that responsibility for improving expert witness evidence rests primarily with those who use it, and that engaging expert witnesses only at the evidentiary hearing stage is inadequate. These observations endorse the need for earlier, clearer and more structured approaches to the use of expert witnesses.

1.1.5 A distinguishing feature of this project is the breadth and diversity of its consultation process. Four regional working groups—the Americas; Europe and Africa; the Middle East; and Asia Pacific—each comprising practitioners across disciplines, contributed to the analysis and drafting. Contributions

¹ *Coverage*. This Report is primarily informed by practices and experiences where expert evidence and oral hearings, particularly expert cross-examination, are comparatively common. It does not purport to reflect the full diversity of international commercial arbitration.



were received from arbitrators, external counsel (including barristers), expert witnesses, in-house counsel, arbitral institutions and subject matter specialists across all regions.

1.1.6 The project further benefited from engagement with senior practitioners across both common law and civil law traditions, ensuring that the guidance reflects a global range of procedural perspectives. The project aims to produce practical, globally applicable guidance grounded in empirical evidence, broad international consultation and professional experience drawn from real-world practice.²

1.2 Status and intended use of this report

1.2.1 This Report is intended to operate as a foundational and advisory reference for relevant arbitration proceedings, rather than as a binding standard or prescriptive code of procedure. It brings together empirical data, practitioner perspectives and thematic analysis to identify recurring challenges and emerging practices relating to the use of party-appointed expert witness evidence in international arbitration.

1.2.2 The purpose of this Report is to provide a well founded basis for

improving the use of party appointed expert witness evidence in international arbitration where applicable. Its objectives are as follows:

- a) identify recurring challenges and inconsistencies in current practice;
- b) consolidate good practice recommendations that respond to the needs of tribunals and users;
- c) promote earlier and more effective engagement with expert witnesses;
- d) support clear and transparent communication among expert witnesses, counsel and tribunals; and
- e) contribute to future standards developed by Ciarb, in collaboration with other professional bodies, including forthcoming guidelines and protocols.

1.2.3 The Report seeks to enhance the clarity and evidential value of expert witness evidence, thereby supporting the integrity and efficacy of arbitral proceedings.

1.2.4 The findings and recommendations set out in this Report reflect trends observed across the consultation exercise, including areas of strong convergence as well as areas where views diverge meaningfully between

² *Seat of arbitration.* The analysis in this Report proceeds on the basis of arbitration practice as commonly encountered in seats with well-developed arbitration frameworks and judicial oversight and does not seek to account for material variations in procedural norms, court intervention, evidential expectations, or expert-related practices that may arise under different arbitral seats.

different stakeholders and professional roles. In designing the Report, deliberate care has been taken to ensure that the strength and tone of its recommendations are proportionate to the nature and limits of the arbitral process.

1.2.5 The Report does not seek to impose uniform procedural models, nor to establish mandatory expectations for tribunals, parties or expert witnesses. Instead, it is designed to offer flexible guidance and illustrative tools that may be adapted to the particular circumstances of each arbitration. The Report considers factors such as the Seat, applicable procedural law, institutional rules, sectoral context, and the composition of the tribunal.

1.2.6 Where recommendations reflect practices that are closely associated with particular procedural traditions, these are intended to be read as options or reference models, not as presumptive international norms. The overarching objective is to support informed judgment and procedural discretion, while contributing to a transparent, consistent and effective use of expert witness evidence across diverse arbitral contexts.

1.2.7 Finally, the Report is intended to inform future institutional work by the Ciarb and other bodies. It may serve as an evidence base for further reflection, consultation, or potential refinement of guidance over time.

Any future instruments would be subject to their own development processes and consultations and should not be inferred from the publication of this Report alone.

1.3 Core themes

1.3.1 The data presented is organised around four themes, each corresponding to a distinct phase or dimension of expert witness involvement in arbitral proceedings:

a) Communication Between Expert Witnesses, the Tribunal and Counsel:

examining the nature, timing and appropriateness of direct and indirect communication between the tribunal, parties' counsel and expert witnesses, including the role of the tribunal in directing and facilitating that communication.

b) Timetables and Timing of Involvement of Expert Witnesses:

addressing when expert witnesses are appointed, the adequacy of the time afforded to them, and the extent to which expert witness input is sought when procedural timetables are established.

c) Ensuring the Tribunal Understands:

focusing on mechanisms designed to improve tribunal comprehension of expert witness evidence, including expert witness meetings, agreed methodologies and common data sets, and the preparation of question lists.

d) The Hearing and Post-Hearing:

covering hearing-phase formats such as cross-examination and expert witness conferencing, the use of opening expert witness presentations, and the role (if any) of private post-hearing engagement between the tribunal and expert witnesses.

1.4 Methodology and limitations

1.4.1 This Report is grounded in one of Ciarb's most extensive multi-stage consultation exercises relating to expert witness evidence in international arbitration. This exercise combined qualitative and quantitative inputs, including a global survey, structured practitioner consultations, regional working groups, and synthesis of professional experience across different legal traditions and sectors.

1.4.2 The project's global survey received 419 responses from arbitrators, expert witnesses, external counsel and in house counsel, capturing perspectives across a broad range of roles involved in the arbitral process. In addition, four regional working groups—covering the Americas; Europe and Africa; the Middle East; and Asia Pacific—contributed thematic analysis and commentary. In our reporting, we have taken into account the experience profiles of survey respondents. In addition, webinars, workshops and in person consultations highlighted community led discussions, involving

practitioners from both common law and civil law backgrounds.

1.4.3 It should be noted that the findings presented in the Report reflect perceptions, experiences and professional judgments of respondents, rather than independently verified empirical measurements of practice. As with any survey-based exercise, the data is subject to such inherent limitations as the following:

- a) the composition of the respondent pool, which reflects the Ciarb community and those who chose to participate, particularly limited in relation to in-house counsel responses;
- b) potential regional, sectoral or disciplinary skews in participation;
- c) role-based perception differences, including self-reporting and professional-interest bias; and
- d) variations in respondents' reference frames, shaped by procedural culture, seat, institutional rules and sectoral context.

1.4.4 The consultation exercise was not designed to produce statistically representative findings for international arbitration as a whole, nor to rank practices by prevalence or "correctness". Rather, its primary objective was to identify recurring themes, points of convergence, and areas of persistent divergence across different stakeholder groups.

1.4.5 Where the data reveals strong alignment across multiple respondent categories, the Report reflects this by articulating clear practice signals. Conversely, where responses diverge meaningfully between roles or regions, those divergences are treated as substantive findings in their own right. In such areas, the Report intentionally frames its recommendations with greater caution and flexibility, recognising that differences in perspective may reflect legitimate procedural choices rather than deficiencies in practice.

1.4.6 The recommendations set out in this Report are therefore calibrated to the nature and limits of the underlying methodology. They are offered as context-sensitive guidance and illustrative tools, not as prescriptive or uniform procedural standards, and are intended to support informed discretion by tribunals, parties and practitioners operating within diverse arbitral environments.

1.4.7 Readers familiar with surveys such as the QMUL study may note the absence of detailed respondent demographic profiling. Given the multi-stage and multi-format consultation underlying this Report, and its emphasis on qualitative engagement across professional roles, a granular demographic breakdown was not considered appropriate. The analysis therefore treats convergence

and divergence between stakeholder groups as substantive findings.

1.5 How to use this report

1.5.1 This Report is intended for practical use as a reference and analytical resource, rather than as a linear manual or prescriptive checklist. Readers may adopt whichever recommendations apply to their practice or the particular case; accordingly, there is no need to approach the Report sequentially. It is designed to support informed judgment by enabling tribunals, parties, counsel and expert witnesses to engage selectively with those aspects most relevant to their role, the nature of the dispute, and the procedural context.

1.5.2 For arbitral tribunals, the Report may be used to:

- a) inform early and ongoing case-management decisions relating to expert witness evidence;
- b) identify procedural tools that may assist in clarifying expert witness methodology, data and assumptions;
- c) understand how differing stakeholders experience currently prevalent expert witness practices; and
- d) benchmark proposed approaches against observed practice without treating any approach as mandatory.

1.5.3 For counsel and users of arbitration, the Report may assist in:

- a) designing proportionate and realistic procedures for the appointment, instruction and use of expert witnesses, as appropriate to each dispute's particular context;
- b) anticipating areas where expectations between tribunals, expert witnesses and parties may diverge;
- c) framing procedural proposals or submissions in a manner sensitive to tribunal discretion and international practice; and
- d) understanding the cost, timing and strategic implications of different expert witness evidence models.

1.5.4 For expert witnesses, the Report provides:

- a) insight into how tribunals and parties may perceive the effectiveness and challenges of expert witness evidence;
- b) guidance on areas where greater transparency, structure or early engagement may enhance the usefulness of expert witness opinion; and
- c) context for differing practices encountered across seats, institutions and procedural traditions.

1.5.5 For arbitral institutions, academics and trainers, the Report offers:

- a) an empirically informed overview of contemporary expert witness evidence practice;
- b) a source of themes and issues relevant to training, policy development and further research; and
- c) a foundation for consideration of future guidance, protocols or educational initiatives.

1.5.6 Readers are encouraged to approach the Key Findings and Theme level analysis first, before turning to the specific recommendations and illustrative procedural language most relevant to their circumstances.³ Where the Report includes sample wording or procedural models, these are intended as illustrative tools only, to be adapted or omitted as appropriate having regard to the Seat, applicable rules, procedural culture, and the complexity of the dispute.

1.5.7 The overarching aim of the Report is to enhance transparency, understanding and informed decision-making in the use of party-appointed expert witness evidence, while preserving the flexibility, discretion and diversity that are central to international arbitration.

³ See Appendix A – Suggested language for procedural order(s).

2. Key findings

2.1 Introduction

2.1.1 This section sets out five findings of particular salience, where responses across one or more respondent groups approached or reached unanimity. These are:

2.1.2 The effectiveness of expert evidence improves materially where tribunals take structured ownership of the expert process — particularly through early engagement, issue identification, and active management of methodology, data and comparability.

2.1.3 Tribunal questioning after first expert witness reports: There is near-universal support among expert witnesses (95%) for the proposition that tribunals should put questions to them following submission of first expert witness reports. This view is shared by 78% of arbitrators, 90% of external counsel and 83% of in-house counsel.

2.1.4 Early expert witness meetings on common data and methodology: There is very strong cross-role support for tribunals requiring early expert witness meetings to agree on common data sets and methodologies and/or

to explain their respective approaches, with agreement levels of 81% among arbitrators, 81% among expert witnesses, 90% among external counsel and 83% among in-house counsel.

2.1.5 Early appointment of expert witnesses: A clear overall preference emerges for the early instruction of expert witnesses, with 71% of all respondents favouring appointment during the pre-arbitration stage.

2.1.6 Over-instruction of expert witnesses by counsel:⁴ In-house counsel reported a unanimous view that expert witnesses are “often” or “very often” over-instructed by counsel, and external counsel reported a 60% view to the same effect. This contrasts to the position of expert witnesses themselves, 73% of whom reported that over-instruction occurs “never” or “not often” — a divergence that represents one of the starkest role-based splits in the entire data set.

2.1.7 Counsel involvement in joint expert witness reports:⁵ A weighted average⁶ of 84% of all respondents favoured minimal or no involvement by counsel in the drafting of joint expert witness reports, with that figure rising to 93% among expert witnesses themselves.

⁴ Over-instruction occurs when the instructions given to an expert witness improperly shape, constrain, or direct the expert witness's opinions in a way that compromises, or appears to compromise, the expert witness's independence and objectivity.

⁵ Such as limiting instructions to seek to avoid areas of difficulty, or coaching.

⁶ Where reference is made to a ‘weighted average’, this reflects an aggregation of responses across respondent groups, weighted by response volume within each group, and is used only where cross-group comparison assists interpretation.

2.2 Summary of main findings

2.2.1 Across all four themes (as set out in Section 1.3.1), the survey identifies a consistent overarching pattern: the effectiveness of expert witness evidence is widely perceived to improve when tribunals adopt a proactive role. In particular, the tribunal should maintain focus on the issues in dispute and engage directly with the methodologies adopted by expert witnesses in their work, rather than treating expert witness evidence as a matter to be left entirely to party presentation.

2.2.2 Communication between expert witnesses, the tribunal and counsel.

Perceptions diverge sharply on early-stage case management involving expert witnesses. Tribunals (64%) and in-house counsel (83%) tend to regard tribunals as sufficiently proactive in this regard, whereas expert witnesses (62%) and external counsel (55%) tend to disagree — suggesting a meaningful disconnect between the direction that tribunals believe they provide and the experience of those receiving it. A further role-based divergence is apparent on the question of direct tribunal–expert witness engagement prior to the submission of initial expert witness reports: most arbitrators, external counsel and in-house counsel are opposed to unsolicited direct communication at that stage, while expert witnesses are more supportive of earlier and more direct engagement.

2.2.3 Timetables and timing of involvement of expert witnesses.

Expert witnesses are materially more likely than other respondent groups to report that they are inadequately consulted (or not consulted at all) or not afforded adequate time. Forty-four percent (44%) of expert witnesses consider that they are given sufficient time, and 60% favour direct expert witness input when procedural timetables are being set — a position that attracts comparatively lower support from arbitrators and counsel. Considering the strong cross-role support on this issue, perhaps greater support from arbitrators and counsel would be advantageous. Cost pressures and a lack of mutual understanding between expert witnesses and legal teams are identified across respondent groups as recurring constraints, affecting both the timing and quality of expert witness involvement.

2.2.4 Ensuring the tribunal

understands. Within this theme, the dominant pattern is high cross-role support for structured mechanisms designed to improve the comparability and comprehensibility of expert witness evidence, most notably in early expert witness meetings on common data and methodology. In addition, tribunals should be encouraged to read expert witness reports as they are served, rather than relying on distillation by counsel, and to prepare question lists prior to the hearing.

2.2.5 The hearing and post-hearing.

Views on hearing-phase formats are more evenly distributed: support for cross-examination versus expert witness conferencing is broadly balanced across the responses as a whole, with in-house counsel

more favourably disposed towards traditional cross-examination. There is strong support — particularly among expert witnesses and in-house counsel — for the use of opening expert witness presentations. In the post-hearing phase, broad scepticism is recorded across respondent groups as to whether private post-hearing meetings between the tribunal and expert witnesses are helpful, or whether such meetings are increasingly prevalent. A substantial portion of respondents express due process and fairness concerns regarding such interactions,

including the risk that they may give rise to grounds of challenge or create suspicion as to the integrity of the proceedings.

2.3 General observations

2.3.1 The duty of the expert witness. This Report makes several references to expert witnesses owing an overriding duty to the tribunal. This position is, or at least is proposed in this Report to be, the prevailing norm in international arbitration. It should nevertheless be acknowledged that this approach is not universally adopted and does not reflect the position in certain jurisdictions. Notwithstanding these differences, this Report proceeds on the basis that, in international arbitration, expert witnesses owe an overriding duty to the tribunal.





Theme 1

Communication Between Expert
Witnesses, the Tribunal and Counsel

3. Are tribunals proactive/sufficiently proactive during the early stages of an arbitration regarding case management directions involving the expert witnesses?

3.1.1 The survey results showed mixed results amongst the respondents, with most arbitrators and in-house counsel agreeing that tribunals are proactive, or sufficiently proactive, during the early stages of arbitration regarding case management directions involving expert witnesses. However, most expert witnesses and external counsel disagreed with that proposition. Specifically, 64% of arbitrators and 83% of in-house counsel agreed that tribunals are proactive in their case management, whereas by contrast, 62% of expert witnesses and 55% of external counsel suggested that tribunals are not sufficiently proactive in their case management regarding expert witnesses.

3.1.2 Notably, these survey results highlight a disconnect between the case management direction that tribunals believe they are providing to expert witnesses and the direction that expert witnesses perceive themselves to be receiving from the tribunal. Based on the results, both expert witnesses and external counsel seek additional support and input from the tribunal during the early stages of arbitration.

3.1.3 Community-led discussions during webinars and in-person sessions highlighted a shared desire among expert witnesses and counsel for more proactive tribunal engagement, particularly through clearer procedural and early-stage case management guidance.

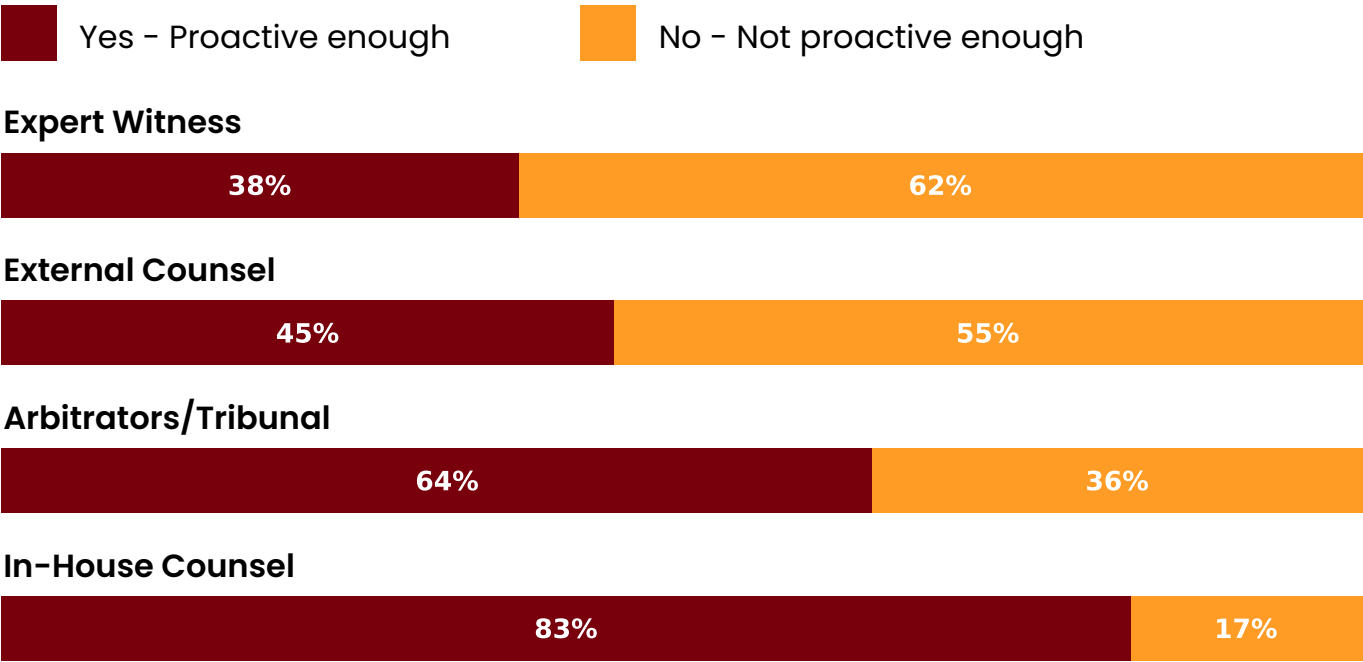


Chart 1. Are tribunals proactive enough during the early stages of an arbitration regarding case management directions involving the expert witnesses?



3.1.4 A consistent theme emerging from both the survey and discussions is the need for expert witness evidence to be clear, focused, and readily usable by the tribunal. More precise tribunal direction—particularly as to the form of expert witness evidence rather than its substantive content—can materially assist in achieving this objective. Tribunals can add value through proactive case management directions on matters such as deliverables, timing, sequencing, report structure, and expert witness instructions.

3.1.5 However, although specific instruction related to case management, such as communication and calls, may be helpful, its usefulness is best served on a case-by-case basis. Therefore, the parties could

agree to include certain mutually agreed baseline directions.

3.1.6 The data indicates that tribunals should adopt a proactive role in early case management of expert witness evidence, particularly in relation to format, sequencing, and procedural expectations, rather than leaving such matters to party presentation. In some jurisdictions and procedural traditions, a more restrained or party-led approach to case management is customary; thus, enhanced tribunal proactivity may require careful calibration to preserve party autonomy and due process expectations.

3.1.7 By way of recommendation the following language could be inserted in the terms of reference or in the first procedural order:

“Expert witnesses or counsel may themselves suggest (copying both sets of counsel and expert witnesses), at any time, that a conference with the tribunal is warranted to discuss the scope of the expert witness reports or to address any issue arising in connection with the development of expert witness opinions. The intention is to promote efficiency, transparency, and the early clarification of technical matters. The intention is not to address substantive issues. The tribunal may decide on whether a conference is warranted after hearing the views of the parties.”⁷

⁷ Where this Report suggests language to be inserted in the terms of reference or the first procedural order, such wording is offered as an illustrative example only. In some jurisdictions and procedural traditions, comparable objectives may be achieved through different procedural formulations, and adaptation may be required to reflect local practice, institutional rules or the seat of arbitration.

4. How should tribunals proactively engage with expert witnesses?

4.1.1 Tribunal engagement with expert witnesses by email. The survey results showed that whereas most arbitrators, external counsel and in-house counsel do not support direct unprompted communication between tribunals and expert witnesses before the hearing on any relevant matters likely to arise, most expert witnesses expressed a preference for earlier procedural clarity from the tribunal. This preference reflects the desire of expert witnesses to understand the scope and sequencing of the evidence, as well as the tribunal’s evidential needs, rather than an expectation of

later substantive guidance on opinion formation. The results showed a clear division in this regard. In total, 68% of arbitrators, 60% of external counsel, and 67% of in-house counsel agreed that tribunals should not proactively, and without prompting from the parties, communicate questions or directions on the key issues in advance of the hearing. In stark contrast, 67% of expert witnesses agreed that tribunals should proactively, and without prompting from the parties, communicate in this way with expert witnesses before the hearing.

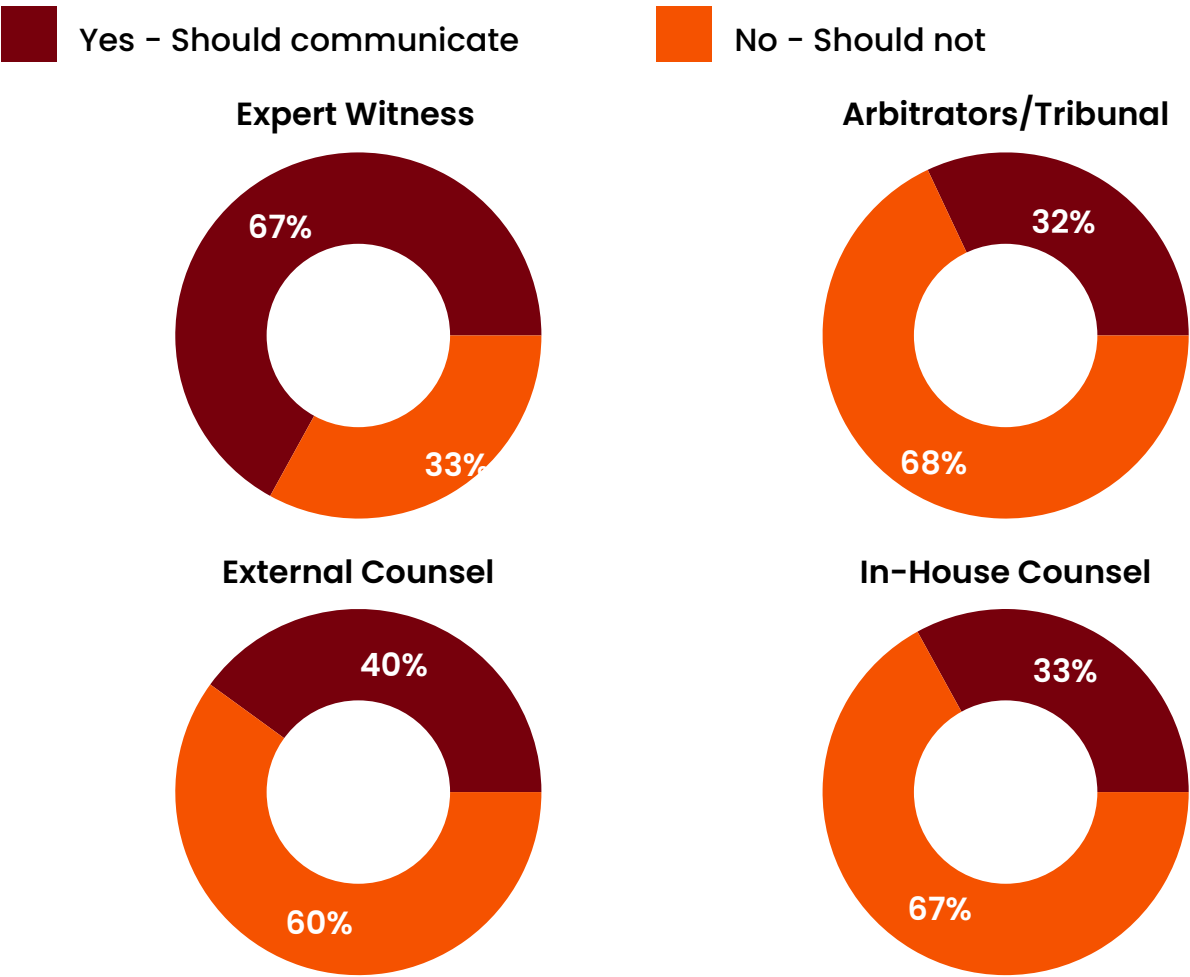


Chart 2. Should tribunals proactively, and without prompting from the parties, communicate directly with experts by email (with Counsel copied) with questions / directions on the key issues, before the hearing?



4.1.2 Tribunal questions to expert witnesses before expert witness reports.

The survey results showed that while most arbitrators, external counsel, and in-house counsel do not support questions being put to expert witnesses before submission of their first expert witness reports, most expert witnesses, in contrast, favoured such questioning. Specifically, 66% of arbitrators, 55% of external counsel, and 67% of in-house counsel did not support putting questions to the expert witnesses before submission of their first expert witness reports, whereas 63% of expert witnesses support being asked questions before the submission of their first reports. The responses to this question (as well as others asked as part of the survey) highlight the desire of expert witnesses for increased guidance and interaction with the tribunal as part of the arbitration process. It is likely that arbitrators, external counsel, and in-house counsel who are not in favour of tribunals putting questions to expert witnesses before the submission of their first expert witness reports are acknowledging the typically adversarial nature of arbitration. Thus, they may wish to keep expert witness reports prepared by party-appointed expert witnesses confined to counsel's instruction. This desire itself may raise concerns. Given that expert witnesses may have an overriding duty to the tribunal as independent subject

matter experts, it is perhaps natural that external counsel and some or all parties may wish to mediate the questioning and overall interaction with the expert witnesses before these expert witnesses submit their report.

4.1.3 Tribunal questions to expert witnesses after expert witness reports.

The survey results showed that arbitrators, expert witnesses, external counsel and in-house counsel agree by a substantial majority that tribunals should put questions to the expert witnesses after the submission of their first expert witness reports – specifically, 78% of arbitrators, 95% of expert witnesses, 90% of external counsel, and 83% of in-house counsel. This strong consensus across all groups suggests broad support for tribunals engaging directly with expert witnesses earlier in proceedings than is typical.

4.1.4 Given that expert witnesses may have an overriding duty to the tribunal, they may wish to offer guidance to the tribunal on issues pertaining to the expert evidence. For this purpose, it is important that the tribunal provides direction – unmediated by counsel or the parties – ahead of the hearing. The hearing is often the first time that expert witnesses learn the tribunal's views on which issues are critical to the outcome of the dispute. In this regard, the expert witnesses'



preference for pre-hearing⁸ contact may be particularly strong where expert witness conferencing is likely to take place and where, as a matter of practice, direct questions from the tribunal are expected, because in that situation expert witnesses are available for simultaneous questioning on the key points.

4.1.5 However, external counsel and the parties may wish to mediate the questioning regarding expert witness evidence ahead of the hearing. This approach aligns with the adversarial nature of arbitration and recognises that written expert witness reports from party-appointed expert witnesses are typically prepared at counsel's instruction. It is this mediation by external counsel that tribunals (and expert witnesses) may wish to avoid.

4.1.6 While it might be expected that tribunals would align themselves closely with expert witnesses, given expert witnesses may have an overriding duty to assist the tribunal, expert witness evidence is nonetheless ultimately provided in response to the claims and defences as pleaded by the parties. In that context, tribunals may reasonably prefer a largely hands off

approach on substantive matters as the hearing approaches, leaving the issues to be decided on the basis in which they are presented rather than reshaped at a late stage.

4.1.7 In this regard — tribunal's questions to expert witnesses — timing appears to be an important factor in the responses. It is notable that all participant groups agreed by a wide margin (in response to a different question) that tribunals should put questions to the expert witnesses early in the arbitration — that is, after the submissions of the first expert witness reports.

4.1.8 It is important to note that the survey focused on party-appointed expert witness evidence. If tribunal-appointed expert witnesses are involved, such expert witnesses may well be instructed to put questions to (or identify issues for) party-appointed expert witnesses, whether after pleadings or before a hearing or both.

4.1.9 By way of recommendation, the following could be included in the terms of reference or the first procedural order:

⁸ *Frequency of hearings*. References to protecting a distinct "pre-hearing" phase reflect a predominantly common law conception of arbitral procedure and should not be read as excluding inquisitorial or hybrid approaches, under which tribunals—particularly those led by civil law or technically trained arbitrators—may deploy early or iterative expert engagement, including through preliminary or issue-specific hearings, as an integral part of fact finding.

“Following the exchange of the first round of expert witness reports, the Tribunal should ordinarily expect to engage with expert witnesses (always copying counsel) through structured and transparent questioning for the purpose of seeking clarification on technical matters, methodology, or the scope of the expert witnesses’ opinions, as well as limitations resulting from counsel’s instructions.

Such communications shall not extend to matters of substance that have not been addressed in the expert witness reports as filed. The Parties shall have the opportunity to comment on any questions posed by the Tribunal. Nothing in this provision shall prevent the Parties or the expert witnesses from requesting, at any time, that the Tribunal convene a short procedural conference to address issues arising in connection with the expert witness process.”

4.1.10 Tribunals should be encouraged to engage with the expert witnesses as early as possible, so that tribunals are educated at the appropriate time and can give informed directions on when to present expert witness evidence and to what that evidence will pertain.

4.1.11 In some jurisdictions and procedural traditions, direct communication between the tribunal and party-appointed expert witnesses – particularly outside the hearing – may be unfamiliar or regarded as procedurally sensitive and may require express party agreement or procedural safeguards.

4.1.12 By way of recommendation, the tribunal should confine the parameters and topics for questions (if any) put to the expert witnesses before report submissions in order that topics encroaching on expert witness opinion should be avoided. Potential questions should focus on the timetable, documentation, and other procedural aspects of the matter, and, in certain circumstances, methodology. The tribunal’s role is to decide the case, not to dictate or second-guess how parties assemble or present their cases. Caution must be exercised to ensure this line is not crossed if questions to the expert witnesses in advance of expert witness reports are permitted.

4.1.13 While the *Ciarb Protocol for the Use of Party-Appointed Expert Witnesses in International Arbitration* primarily focuses on tribunal questions to the expert witnesses in the evidentiary hearing, Article 2 provides:

“Arbitrators should, in consultation with the parties, consider at the outset of the arbitration, and keep under review during the course of the arbitration, whether expert witness evidence is needed to resolve any specific issues in dispute.”

4.1.14 Tribunal-led efforts to narrow issues early may substantially reduce overall costs to the parties. Emphasising this cost-saving angle may also provide a policy-based justification for adopting the majority view of respondents.

4.1.15 The survey results suggest a majority consensus that tribunals should be encouraged to read the first expert witness reports as soon as they are served, or as soon as possible thereafter. What cannot be inferred is whether respondents consider that each tribunal member should submit questions to the expert witnesses individually, as might be

done at an oral hearing, or whether the tribunal would instead issue a single consolidated set of questions on behalf of the tribunal, without identifying the origin of each question. The latter approach may be preferable, as it avoids the risk of inconsistent or duplicative questioning and presents a unified tribunal position to the expert witnesses. However, the tribunal should consider this approach on a case-by-case basis.

4.1.16 Understandably, expert witnesses favour early tribunal involvement as they may have an overriding duty to assist the tribunal and to prepare for a hearing on matters relevant to resolving the dispute, as viewed by the tribunal. Early identification of unclear or insufficiently explored issues – or confirmation of agreed points among the expert witnesses – may also help to streamline any joint expert witness memoranda or meetings. The process may also benefit future expert witness reports and evidentiary hearings, to the benefit of counsel and the parties.

4.1.17 Some of the above issues are indirectly dealt with or mediated by external counsel, e.g., as a result of document production requests, applications, procedural hearings, or party-to-party resolution of differences regarding evidence gathering, such as in respect of site visits or laboratory visits.

4.1.18 In keeping with Article 2 of the Ciarb Protocol for the Use of Party-Appointed Expert Witnesses in International Arbitration, the tribunal might, in consultation with the parties, adopt some of the following approaches when considering how to handle expert witness evidence at the outset of the arbitration:

a) Consider establishing a timetable at the first procedural hearing to permit the tribunal to put questions

to the expert witnesses or to request certain issues be covered by the expert witnesses in their future expert witness reports. For example, a paragraph might be inserted into the terms of reference or the first procedural order requiring the tribunal to review all expert witness reports within [say 14] days of filing, and to circulate a consolidated list of questions to the parties within a further [say 7] days. For example:

“Within [14] days of the filing of all expert witness reports by the Parties, the Tribunal shall undertake a preliminary review of such reports for the purpose for identifying issues requiring clarification or elaboration. No later than [7] days following the conclusion of this review, the Tribunal shall circulate a consolidated list of questions and/or topics which it considers appropriate for the expert witnesses to address in any subsequent reports or submissions.”

b) Consider establishing the scope and purpose of tribunal questions in a procedural order or in directions, subject to amendment. The procedure may also be addressed. Thus, for example, a tribunal may propose that any communication to or from an expert witness and the tribunal

should be limited to clarification, rather than providing direction on substantive positions. Questions could be answered singly or jointly by the expert witnesses, as a form of expert witness conferencing, depending on the tribunal's approach. For example:

“Tribunal–expert witness communications shall copy the Parties’ counsel and shall be limited to clarification of technical matters arising from the expert witness reports. Questions posed by the Tribunal may be addressed singly or jointly by the expert witnesses, as the Tribunal may direct, having regard to the nature of the issues and the interests of efficiency and procedural fairness.”

c) Consider whether, for the sake of efficiency, a single virtual procedural hearing would be more practicable than staggered written exchanges. As is already practiced, short virtual procedural meetings may be scheduled between rounds of written submissions, as needed, to deal with or resolve technical questions. The tribunal may require the expert witnesses to attend.

d) As a corollary to the above, the tribunal may wish to revisit the mode of early engagement. For example, the parties could agree to include a “teach-in” where the expert witnesses could inform the tribunal on technical matters in complex disputes. In such a session, with counsel present, no

findings will be advanced and the material introduced is not part of the evidence which will be formally introduced at a later stage. This approach may bridge the divide between counsel and expert witnesses on contact with the tribunal before the hearing. On one hand, as a result of the teach-in the tribunal is better able to prepare questions and the expert witnesses to answer them.

On the other hand, it is not an evidentiary hearing. Counsel will have a separate opportunity to present their case. A teach-in fits naturally after the service of expert witness reports but may also be helpful whenever a tribunal finds itself ‘at sea’ on technical matters.⁹ This approach could be expressed as follows:

“At any time following the exchange of expert witness reports, or, exceptionally, at such earlier stage as the Tribunal considers appropriate, the Tribunal may convene a technical teach-in session at which the expert witnesses shall present to the Tribunal on relevant technical matters arising in the dispute. Such sessions shall be conducted in the presence of the Parties’ counsel. For the avoidance of doubt, a teach-in session shall not constitute an evidentiary hearing: no findings of fact or law shall be made by the Tribunal on the basis of the session, and no material introduced during the session shall form part of the evidential record unless formally submitted by a Party at a later stage of the proceedings in accordance with the applicable procedural rules.”

The purpose of the teach-in session shall be limited to enhancing the Tribunal’s understanding of the technical issues in dispute and assisting the Tribunal and the expert witnesses in the preparation of any subsequent evidentiary hearing. No new material should be introduced. The Tribunal shall provide reasonable advance notice of any teach-in session and may give directions as to its format, duration and scope.”

⁹ Timing of teach-ins may be affected by the style of submissions.

4.1.19 The above considerations appear consistent with Article 5.1, *“Testing Expert opinions,”* of the *Ciarb Protocol for the Use of Party-Appointed Expert Witnesses in International Arbitration* – i.e., tribunals may give *“further directions as to the testing of expert’s opinion once the reports have been exchanged.”*

4.1.20 Early engagement and written questions may facilitate such directions.

4.1.21 The Report recognises that expectations concerning tribunal–expert witness interaction vary materially across procedural traditions and Seats. In some jurisdictions, any tribunal-initiated contact with party-appointed expert witnesses outside the hearing may be unfamiliar or impermissible absent express party agreement. The approaches discussed here should therefore be read as contingent options, not default norms, and adapted carefully to the applicable legal and procedural framework.



5. Are expert witnesses over-instructed by counsel?

5.1.1 Over-instruction occurs when the instructions given to an expert witness improperly shape, constrain, or direct the expert witness's opinions in a way that compromises, or appears to compromise, the expert witness's independence and objectivity.¹⁰

5.1.2 The survey results revealed a clear divergence in perceptions of over-instruction among the different respondent groups, exposing the enduring tension between the principles of party autonomy and expert witness professional autonomy (independence) that continues to shape contemporary arbitral practice.¹¹ While there is broad acknowledgment that the relationship between counsel and expert witnesses necessarily involves a degree of instruction and coordination, the results suggest that many within the arbitral community perceive that this balance has, in practice, tilted toward excessive influence by counsel.¹² Expert witnesses must be mindful of this and maintain their professional integrity.

5.1.3 Among arbitrators, a substantial majority of 66% responded that

expert witnesses are “often” or “very often” over-instructed by counsel. This perception highlights a recurring concern among those charged with safeguarding procedural integrity: that expert witness evidence – intended to assist the tribunal through technical impartiality – may, at times, become overly shaped by the strategic imperatives of the party who appointed the expert witness. Similar concerns were reflected by external counsel, 60% of whom acknowledged frequent or very frequent over-instruction, suggesting an awareness within the advocacy community of its own structural influence on the expert witness process.

5.1.4 In-house counsel reported the highest perceived incidence of overinstruction, with 100% of respondents indicating that expert witnesses are “often” or “very often” over-instructed by counsel.”

5.1.5 By contrast, the expert witnesses themselves presented a notably different perspective. A decisive majority of 73% said that they are “never” or “not often” over-instructed.

¹⁰ An example of over-instruction might be that Counsel requires the expert witness to exclude adverse documents or alternative methodologies because they undermine the party's pleaded case. Another example might be that Counsel instructs the expert witness not to express conclusions beyond the pleaded issues, even where the analysis objectively points to a wider or different outcome.

¹¹ The survey findings indicate that concerns regarding over instruction arise less from individual conduct and more from structural features of the party appointed expert model, in which legal strategy, procedural incentives, and evidential positioning necessarily intersect with the expert engagement process.

¹² The survey responses indicate that over-instruction is widely perceived as a recurring risk inherent in the party-appointed expert witness framework, particularly in the absence of clear procedural boundaries.

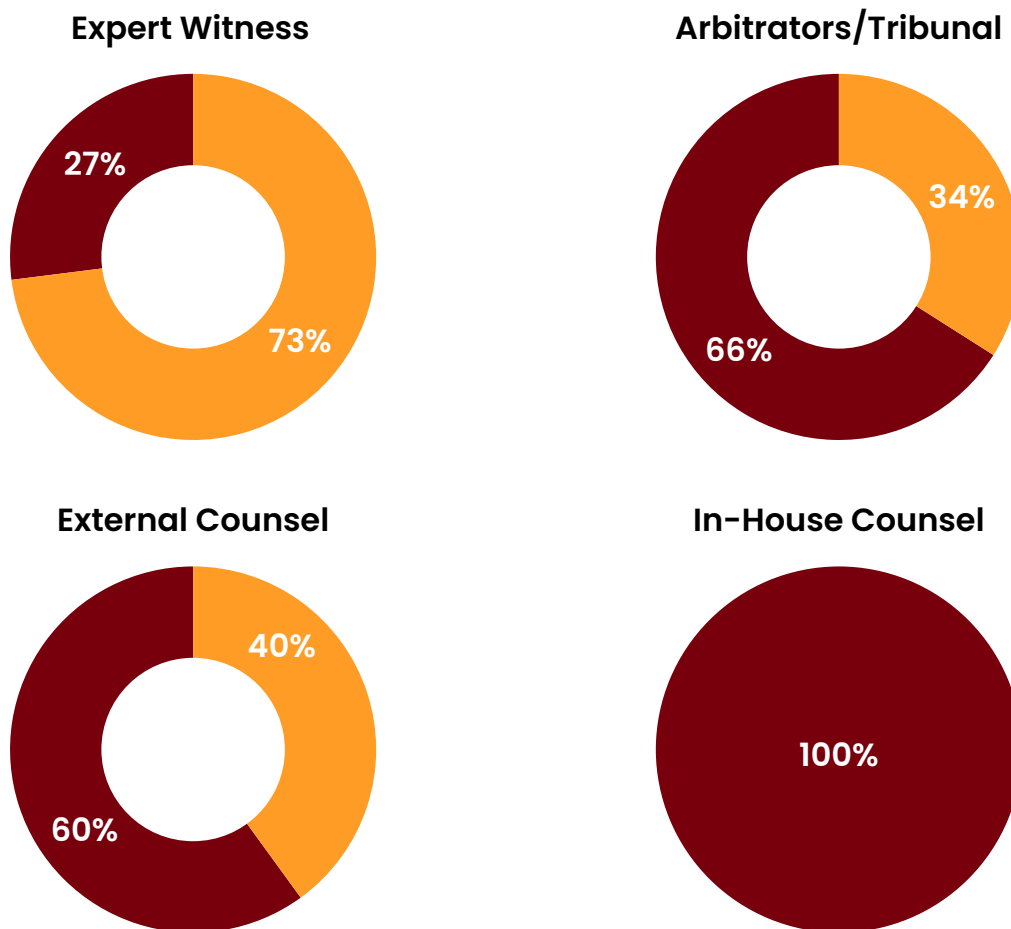


Chart 3. Are expert witnesses over-instructed by counsel?

Possible explanations include practitioner observation of expert witnesses' professional autonomy and adherence to ethical standards, or, conversely, an underestimation of the subtle procedural and strategic pressures that arise from the party-appointed model.

5.1.6 The Report recognises that a degree of instruction, coordination and iterative engagement between counsel and expert witnesses is both legitimate and unavoidable in adversarial arbitration. Counsel is under professional and fiduciary

obligations to advance their client's case efficiently and coherently, and expert witness engagement necessarily takes place within that context. The concern identified in the consultation is therefore not instruction per se, but the absence of procedural structures that make the boundaries of permissible involvement transparent to the tribunal.

5.1.7 Taken together, these findings highlight a structural tension inherent in arbitration: reconciling a party's right to appoint and instruct its expert witness with the tribunal's need for

objective and independent technical assistance. While over-instruction may not affect the admissibility of expert witness evidence, it can undermine perceived objectivity and credibility. This possibility highlights the need for procedural mechanisms that reinforce expert witness independence and maintain tribunal confidence. In practice, experienced expert witnesses may respond to instructions that risk constraining their independence by clarifying assumptions, explaining limitations transparently, or – where appropriate – presenting alternative analyses, thereby assisting the tribunal without departing from their professional role¹³

5.1.8 From a procedural perspective, the survey results emphasise the importance of clear and enforceable guidance defining the boundaries of counsel involvement in the expert's role. While the *Ciarb Protocol for the Use of Party Appointed Expert Witnesses in International Arbitration* affirms that the primary duty of an expert witness is to the tribunal, the survey data suggest that restating this principle alone may be insufficient. Tribunals may therefore wish to adopt proactive, transparent case management mechanisms – such as early methodology conferences, clarification of assumptions provided to expert witnesses, and structured expert witness disclosure – designed

to reinforce independence while preserving party autonomy.

5.1.9 In this context, tribunals may find it helpful to draw attention to, and explain, the following declaration from the Ciarb Protocol, compliance with which is fundamental to expert independence.

"I confirm that I have referred to all matters which I regard as relevant to the opinions I have expressed and have drawn to the attention of the arbitral tribunal all matters, of which I am aware, which might adversely affect my opinion."

5.1.10 In conclusion, this issue highlights a central and enduring tension between advocacy and expertise in international arbitration. While party autonomy remains a defining feature of the arbitral process, it must coexist with the imperative of impartial and credible expert witness evidence. Survey comments suggest procedural refinement: the codification of clearer expectations regarding counsel's permissible scope of instruction, and a cultural shift toward greater transparency in the expert witness–counsel interface.

¹³ Expert witnesses should be providing opinion on competing facts, not simply following instructions to follow one set of facts which may be supporting their client's position.

5.1.11 In this regard, tribunals should issue specific directions – such as requiring expert witnesses to identify and explain any assumptions provided by counsel along with their reasoning; to declare expressly whether any instruction was declined or reformulated; and to present alternative analyses where an instruction appears unrealistic – thereby reinforcing the expert witnesses’ duty to the tribunal, and enhancing the reliability of the expert witness evidence presented. Through such calibrated measures, arbitration can preserve both the efficiency of its adversarial structure and the integrity of its evidentiary foundation.

5.1.12 Nothing in this Report is intended to suggest that counsel should be excluded from the expert witness engagement process, nor that expert witnesses should operate independently of legal instruction. The focus is on procedural transparency and tribunal confidence, not on attributing fault or prescribing conduct.

5.1.13 Finally, community-led discussion raised the possibility of expert witness instructions being drafted jointly by both sets of counsel (possibly approved by the tribunal) so that the expert witnesses receive the same instructions. Such instructions being issued at an early stage of the arbitration might achieve the following:

- a) mitigate the opportunity for over-instruction;
- b) ensure both expert witnesses are opining on the same issues;
- c) increase the potential for expert witness evidence that can be read side by side;
- d) reduce expert witness fees;
- e) increase the potential for agreement between expert witnesses; and
- f) indirectly address several other matters raised in this Report.



6. In international arbitration, what involvement should counsel have in the production of joint expert witness reports?

6.1.1 Regarding the role of lawyers in the production of joint expert witness reports, the survey results showed a significant convergence of views across arbitrators, expert witnesses, external counsel, and in-house counsel. With a weighted average of 84% of respondents favouring minimal or no involvement of counsel in expert witness reports, the results indicate an overwhelming consensus.

6.1.2 This position is particularly emphasised by 93% of expert witnesses, who view counsel interference as a threat to their independence and credibility.¹⁴

6.1.3 On the other hand, a small minority – particularly among tribunals (25%) and external counsel (23%) – acknowledge that detailed support by counsel may occasionally be beneficial. Such views are likely pragmatic exceptions linked to procedural efficiency or clarification of scope.

6.1.4 The following key insights can be drawn from the survey:

a) Independence of expert witnesses.

Expert witnesses highlight the primacy of impartiality in joint expert witness reports, which must reflect direct procedural and/or logistical dialogue rather than legal influence.

b) Tribunal pragmatism. A minority of tribunals recognise that in complex disputes, limited guidance from counsel may help structure the process without undermining substance.

c) Counsel's divided view. While most external and in-house counsel agree on limited involvement, some still perceive value in closer participation.

d) Cross-profession agreement. The prevailing consensus is clear: counsel should not drive the content of joint expert witness reports but may provide procedural or logistical support.

¹⁴ This concern is consistent with the approach adopted in England & Wales, where case law has highlighted the seriousness of improper involvement by legal advisors in expert witness collaboration. Courts have found clear evidence of counsel providing comments on draft joint expert witness statements, in breach of applicable procedural rules and guidance, which stipulate that while legal advisors may assist in identifying issues to be addressed, they must not participate in negotiating or drafting the joint expert witness statement. Any invitation to amend a draft should occur only in exceptional circumstances and must be directed to all expert witnesses involved. In such cases, courts have held that it was appropriate for the expert witness to be cross-examined on the comments received and on whether they had been incorporated. Providing a draft joint expert witness statement to instructing lawyers for comment has been described in the case law as a “serious transgression”. These authorities illustrate why expert witnesses remain acutely wary of counsel interference and reinforce the imperative of maintaining a clear and uncompromised line between advocacy and technical evidence

6.1.5 By way of recommendation, counsel involvement should be minimal or none. This approach strengthens the following goals:

a) Independence and objectivity. The overriding duty of the expert witness is typically to the tribunal, not the parties. Excessive counsel involvement risks undermining credibility.

b) Tribunal confidence. Tribunals value reports that transparently reflect expert-to-expert exchanges, free from legal counsel interference.

c) Alignment with institutional guidelines. Leading arbitral institutions encourage expert witness collaboration without undue counsel pressure.

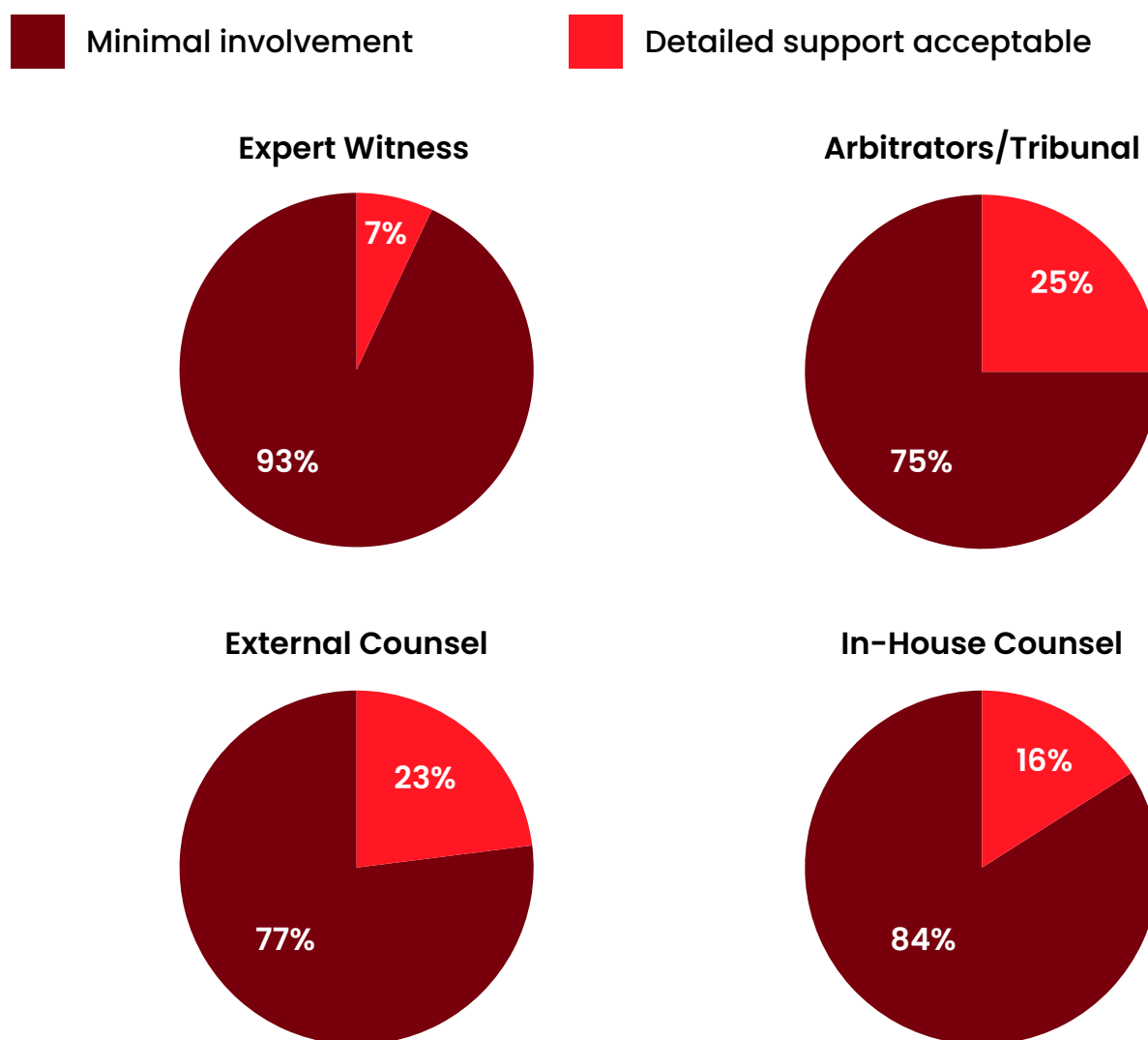


Chart 4. In international arbitration, what involvement should counsel have in the production of expert witness joint reports?

6.1.6 The credibility of joint expert witness reports rests on the integrity of the expert witnesses' dialogue – not on scripts shaped by legal teams. Accordingly, tribunals may wish to address this issue explicitly during the preliminary meeting (and this is recommended), ensuring that all parties share a common understanding of what constitutes

permissible assistance and what amounts to improper interference. Establishing such expectations at the outset promotes transparency, minimises the risk of later disputes, and reinforces the integrity of the joint expert witness process. Appropriate language such as the following could be included in the terms of reference or the first procedural order:

"The expert witnesses shall prepare any joint expert witness report or statement independently of counsel. Counsel shall have no involvement in the drafting, negotiation or substantive content of any joint expert witness report. Counsel's role shall be limited to procedural and logistical assistance only, including the identification of issues to be addressed and the coordination of meetings.

For the avoidance of doubt, counsel shall not provide comments on, or seek amendments to, any draft joint expert witness report or statement, save in exceptional circumstances and only with the agreement of the tribunal and with all expert witnesses copied. The purpose of this provision is to preserve the independence of the expert witnesses and the integrity of the joint expert witness process."

7. Have you ever observed or experienced “opposing” expert witnesses being given conflicting guidance (instruction) on the law, from their instructing counsel?

7.1.1 With regard to this question, the survey results showed that the degree of perceived prevalence varies according to the respondent’s proximity to the dispute, with the tribunal at one end of the spectrum and in-house counsel at the other, notwithstanding that a majority within each group identified the situation as

real. The overall results of the survey are 61% saying “Yes” and 39% saying “No”. The perception of the problem (Yes) is highest among in-house counsel (83%), followed by external counsel (68%) and expert witnesses (64%), with arbitrators reporting the lowest incidence (55%).

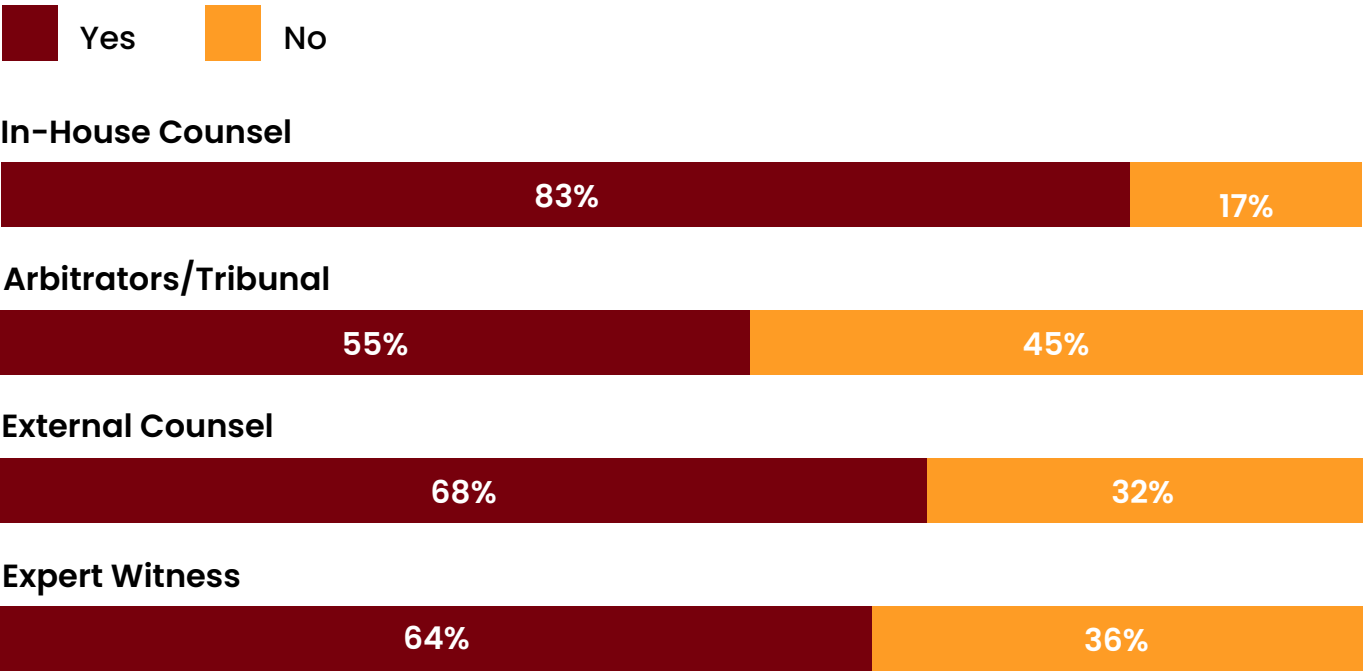


Chart 5. Have you ever observed or experienced “opposing” expert witnesses being given conflicting guidance on the law from their instructing counsel?

7.1.2 All respondent groups report a majority of “Yes” responses. This conclusion may reflect the predominant use of party-appointed expert witnesses in international arbitration and may be consistent with disputes involving common law jurisdictions or practitioners.

7.1.3 This perception of conflicting guidance reinforces the importance of adopting and explaining mechanisms such as “figures-as-figures” assessment, where expert witnesses present numerical (and other) assessments divorced from advocacy-



driven narratives.¹⁵ By encouraging or directing the use of figures-as-figures formats, tribunals can take the lead in reducing the risk of perceived bias and in promoting a more transparent

evidentiary process. Early guidance from the tribunal on this point may help align expectations and mitigate the variability reflected in the survey results.¹⁶



¹⁵ For example, based on different pleaded cases or different disagreed data sets.

¹⁶ The use of figures-as-figures analysis varies across regions and disciplines, and may require explanation or adaptation where it is not standard practice. The term “figures-as-figures” refers to presenting expert conclusions contingently, so that outcomes flow transparently from whichever factual or legal scenario the tribunal ultimately accepts.

8. Are early and ongoing case management conferences a good platform for tribunal and expert witnesses to identify the core issues in dispute?

8.1.1 With regard to this question, the survey results showed an overwhelming consensus across all groups that early and ongoing case management conferences do indeed establish an effective platform for identifying core issues. With a weighted average of 90% favouring this practice, the results reflect a high degree of agreement that this practice provides an effective platform for identifying and narrowing the genuinely relevant issues from the outset.

8.1.2 The following key insights can be drawn from the survey:

a) Cross-professional alignment (83%–91%). Across arbitrators, expert witnesses, external counsel, and in-house counsel support this practice, reflecting a rare strong majority in the arbitration community.

b) Expert witnesses' strong support (91%). Expert witnesses value early clarity, as it enables them to focus their expert witness reports on the issues that matter most, thereby saving time and cost.

c) Arbitrators and external counsel (89%). Both groups recognise that case management conferences streamline proceedings: tribunals can narrow the scope of hearings, and counsel can refine their case strategies accordingly.

d) In-house counsel (83%). This group is also highly supportive, though the slightly lower percentage may reflect concerns about the additional resources required for multiple conferences.

8.1.3 The survey reveals near-universal agreement among arbitrators, expert witnesses, and counsel that early and ongoing case management conferences are an effective platform for identifying the core issues in dispute. With support ranging from 83% to 91% across all groups, this finding highlights the role of proactive case management as a key tool in improving efficiency, reducing costs, and focusing expert witness evidence where it matters most.

8.1.4 The results confirm that early and continuous case management conferences have become a cornerstone of modern international arbitration. Their benefits may include the following:

a) Early engagement. Such conferences compel tribunals to engage early with the subject matter.

b) Clarifying expert witness scope. Conferences ensure that expert witness evidence addresses only the truly disputed technical issues, avoiding unnecessarily broad or unfocused expertise.

c) Promoting procedural efficiency. By structuring the case calendar around identified issues, tribunals can achieve significant savings in time and cost.

d) Encouraging constructive expert witness involvement. Early expert witness engagement helps frame questions, identify shared assumptions, and establish effective formats for joint expert witness reports.

e) Enhancing neutrality and credibility. Tribunal oversight from the outset reduces risks of bias and

strengthens the reliability of expert witness evidence, particularly when joint expert witness reports or expert witness conferencing are used.

8.1.5 Well-structured and ongoing case management conferences, especially when held early, serve as a highly effective platform for tribunals and expert witnesses to identify and define the core issues. They enhance the credibility of expert witness evidence, streamline the arbitral process, and reinforce trust in international arbitration.

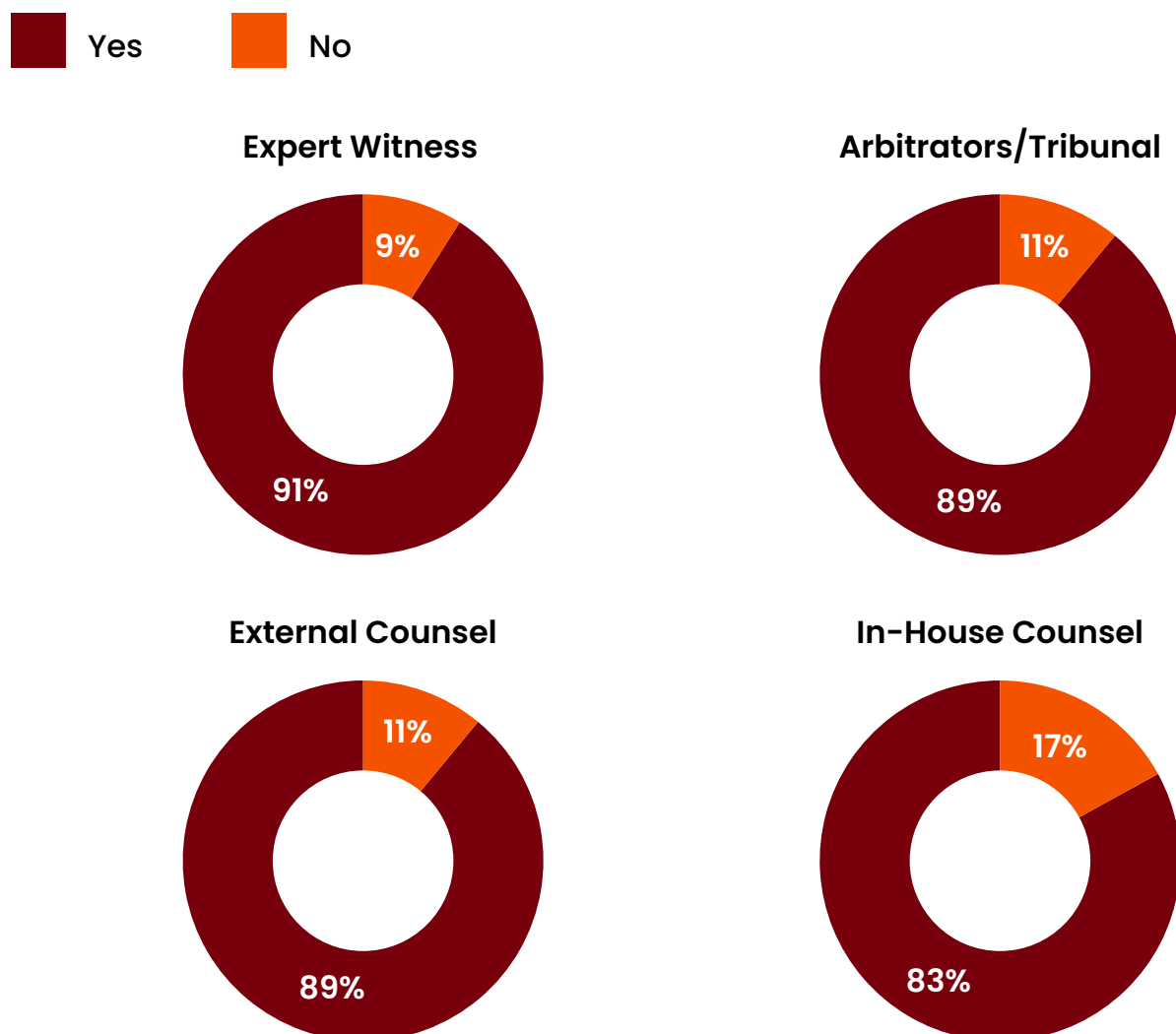


Chart 6. Are early and ongoing case management conferences a good platform for tribunal and expert witnesses to identify the core issues in dispute?

8.1.6 To encourage more consistent practice in this area, tribunals should ordinarily consider issuing specific directions on the timing and structure of such conferences. For example, a tribunal could order an initial case management conference involving the expert witnesses shortly after the exchange of pleadings, and could schedule subsequent conferences at defined procedural milestones (such as following the submission of expert witness reports, after the exchange of joint expert witness questions, or

immediately prior to expert witness joint meetings).

8.1.7 In this sense, “ongoing” refers to a sequenced series of touchpoints aligned with the procedural calendar, rather than exceptional meetings. Providing this clarity enhances predictability and fosters a cultural shift towards early and continuous expert witness engagement – ensuring that expert witness participation becomes an integral and expected component of effective case management.



9. Should expert witnesses meet and confer frequently throughout the whole arbitration process leading up to the final joint statement, whether by tribunal instruction or not?

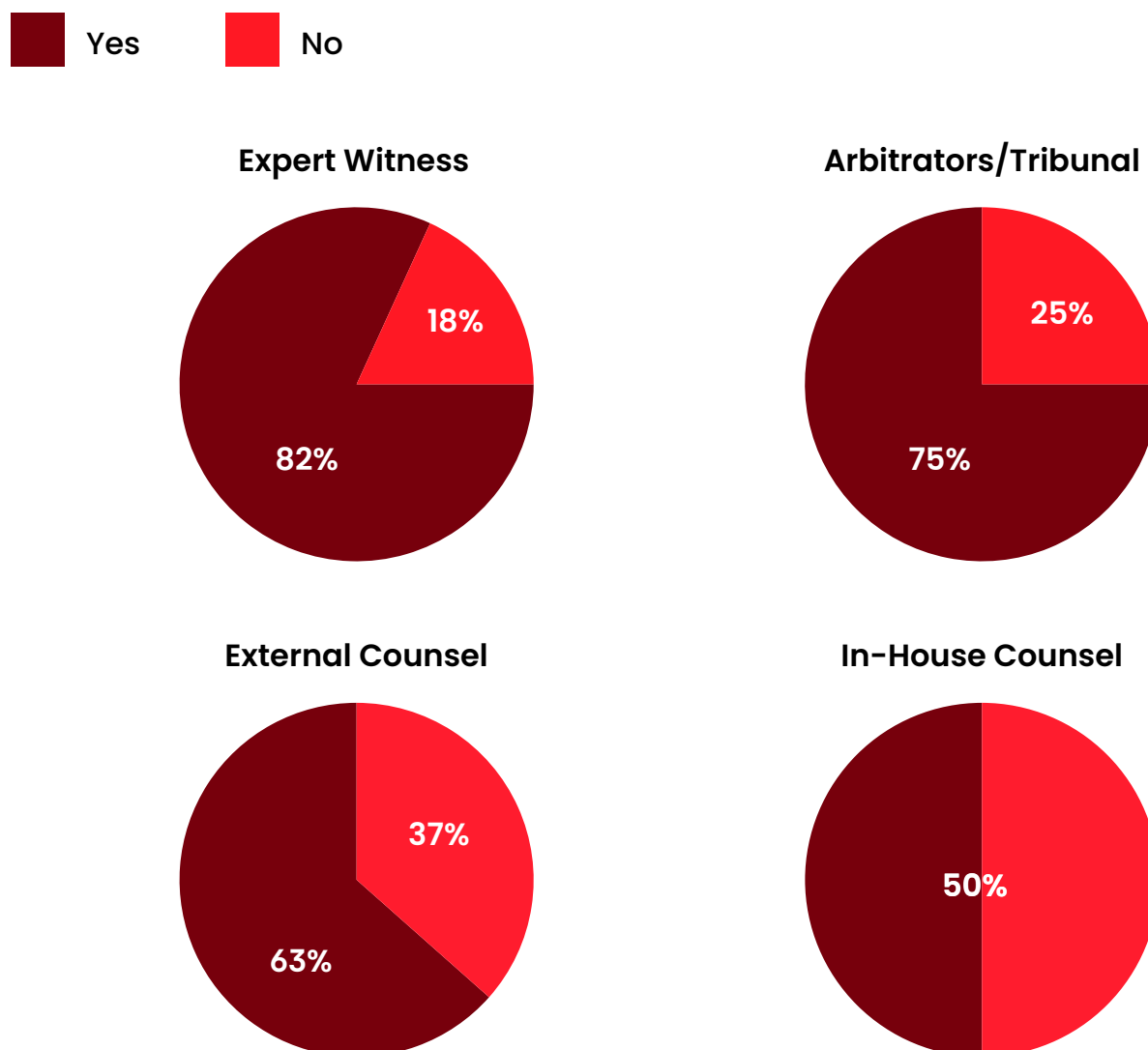


Chart 7. Should expert witnesses meet and confer frequently throughout the whole arbitration process leading up to the final joint statement, whether by tribunal instruction or not?

9.1.1 The survey results showed (other than by in-house counsel) a consensus that expert witnesses should meet and confer frequently throughout the whole arbitration process. Those in favour are arbitrators (82%), expert witnesses (75%), and external counsel (63%), while in-house counsel was evenly split at 50%.

9.1.2 The breakdown by profile shows a clear consensus among tribunals and expert witnesses that frequent collaboration is beneficial. The high “Yes” rate among arbitrators is a very strong signal that the tribunal itself sees value in continuous interaction between expert witnesses.

9.1.3 The response from in-house counsel is the most notable point. The exact 50%-50% split suggests a fundamental disagreement within this group on whether collaboration among expert witnesses benefits or harms the process. This stands in sharp contrast to all other groups, which show majority support for collaboration.

9.1.4 These survey results highlight a structural reality: even where expert witness meetings are widely regarded as beneficial, they are unlikely to occur without express procedural direction. Tribunals should ordinarily adopt standard-form language – either in the first procedural order or at the

initial case management conference – clarifying the expectation that expert witnesses will meet at defined intervals, the permissible scope of such meetings, and their independence from counsel instruction when engaging in those discussions.

9.1.5 Such guidance can mitigate the likelihood of counsel resistance, reduce strategic uncertainty, and ensure that expert witnesses are not placed in a professional or ethical dilemma.

9.1.6 By way of recommendation, the following could be included in the terms of reference or the first procedural order:

“The expert witnesses of like discipline shall meet and confer at appropriate stages throughout the arbitration process for the purpose of identifying areas of agreement and disagreement, discussing relevant data sets and methodologies, and preparing any joint expert witness statements or reports required by the Tribunal. Such meetings shall occur at intervals directed by the Tribunal or as otherwise agreed by the expert witnesses, acting consistently with their overriding duty to assist the Tribunal.

The expert witnesses shall conduct these meetings independently of counsel. Counsel’s role shall be limited to procedural or logistical coordination and shall not extend to directing, influencing, or participating in the substantive discussions between expert witnesses. The purpose of this provision is to promote clarity, efficiency, and the integrity of expert-to-expert dialogue, while preserving the independence of the expert witnesses and the Tribunal’s confidence in the joint expert witness process.”

10. Should expert witnesses be encouraged to approach the tribunal directly (with counsel copied) if there are fundamental differences between them (procedural or methodology) as to how to proceed with their work?

10.1.1 The survey results showed a significant divergence of views among arbitrators, expert witnesses and counsel regarding whether or not expert witnesses should approach the tribunal directly when fundamental differences arise (whether procedural or methodological).

10.1.2 While some respondents registered a technical majority in favour or against the proposition, the margins were consistently narrow, demonstrating that this remains a live and contested issue within the arbitral community.

10.1.3 The results revealed degrees of support as follows among respondents:

a) Arbitrators. Although a majority (63)% of arbitrators supported the idea that expert witnesses should be encouraged to approach the tribunal directly, provided counsel is copied, this leaves over a third of arbitrators in opposition. Perhaps a reason for the majority support is that arbitrators are thereby enabled to resolve technical or procedural issues early. This could prevent delays or misunderstandings that might compromise the efficiency and credibility of expert witness evidence and thus lead to difficulty for the tribunal in deciding the award.

b) Expert witnesses. A slim majority (55%) was in favour, with a substantial 45% opposed. The small majority is most likely due to a view that direct communication offers a means of clarifying expectations or technical parameters, particularly in highly specialised or complex disputes where methodological disagreements can significantly affect the outcomes.

c) External counsel. In this group, 55% opposed the proposal of direct contact between expert witnesses and the tribunal. This likely stems from concerns about procedural fairness, due process, and the risk of undermining the adversarial structure of arbitral proceedings, where counsel traditionally controls communication with the tribunal.

d) In-house counsel. This group was evenly split 50%-50%, which may reflect internal tensions. While some in-house counsel probably sees the potential for efficiency and clarity, others may align with external counsel in prioritising procedural safeguards and the integrity of party representation.

10.1.4 The responses across all categories suggest that, while the proposal may offer potential procedural benefits, it remains fraught

with conceptual and practical tensions that must be carefully navigated. The fact that arbitrators and expert witnesses may be favourable to the proposition, while counsel – both external and in-house – may oppose it, seems to deserve a careful appraisal.

10.1.5 To reconcile these perspectives and enhance the credibility and usefulness of expert witness evidence, the following approaches could be considered.

10.1.6 Adopt clear protocols for expert witness communication. These may include express provisions at the case management conference, or in any terms of reference or in the first procedural order defining the scope, format, and permissible triggers for such contact, with clear parameters governing the admissibility and

manner of expert witness-initiated communications. In addition, the protocol should define and specify whether, and in what circumstances, expert witnesses may communicate with the tribunal, always ensuring that all parties and counsel are included (copied) in any communication.

10.1.7 Consider using case management conferences or “hot-tubbing” (concurrent expert witness evidence sessions). Such an initiative addresses methodological disagreements directly before the tribunal, with counsel present. In this regard, reference may be made to the Ciarb Guidelines for Witness Conferencing in International Arbitration (April 2019), which provide practical guidance on the conduct of concurrent expert witness evidence sessions.

 Yes  No

In-House Counsel



Arbitrators/Tribunal



External Counsel



Expert Witness



Chart 8. Should expert witnesses be encouraged to approach the tribunal directly (with counsel copied) if there are fundamental differences between them as to how to proceed with their work?



10.1.8 Tribunal-guided technical

meetings. Instead of direct unilateral communication, tribunals can convene structured technical meetings where expert witnesses from both sides jointly present differing methodologies and respond to tribunal questions, with counsel observing.

10.1.9 Joint expert witness reports.

It would be advantageous to require that expert witnesses confer and produce joint expert witness reports identifying agreed and disagreed points, explaining the reasons for disagreement. This should promote clarity while avoiding procedural impropriety.

10.1.10 Training and guidance.

This measure would educate expert witnesses (especially those less familiar with arbitration) on the boundaries of their role and acceptable channels of communication, minimising risks of procedural challenges.

10.1.11 Proposed policy

recommendation. A balanced approach would be to discourage ad hoc, unilateral expert witness–tribunal communication but to encourage structured, transparent, tribunal-led interactions with the Parties copied – especially when fundamental methodological differences arise.

10.1.12 These approaches align with the desire of both expert witnesses and

tribunals for clarity and with counsel's need for procedural fairness.

10.1.13 Rather than endorsing a blanket or undifferentiated rule, arbitral practice would be better served by the adoption of calibrated procedural mechanisms, sensitive to the particularities of each dispute.

10.1.14 In so doing, tribunals and parties can preserve the structural integrity of arbitral procedure, safeguard the tribunal's impartiality, and uphold the adversarial balance that defines party autonomy.

10.1.15 In conclusion, context-specific protocols offer the most efficient path forward: they reconcile the practical exigencies of expert witness evidence with the normative demands of fairness, transparency, and institutional legitimacy within the arbitral process.

10.1.16 The responses to this question reflect not a settled position, but a point of active deliberation in contemporary arbitral practice.

10.1.17 The near-even split in response to this question among all stakeholder groups highlights that, while there is some appetite for rethinking the boundaries of expert witness communication, any reform in this direction must be approached with caution.

11. Is the Ciarb protocol for the use of party-appointed expert witnesses in international arbitration used in the arbitrations in which you are involved?

■ Often/very often
 ■ Not often/never

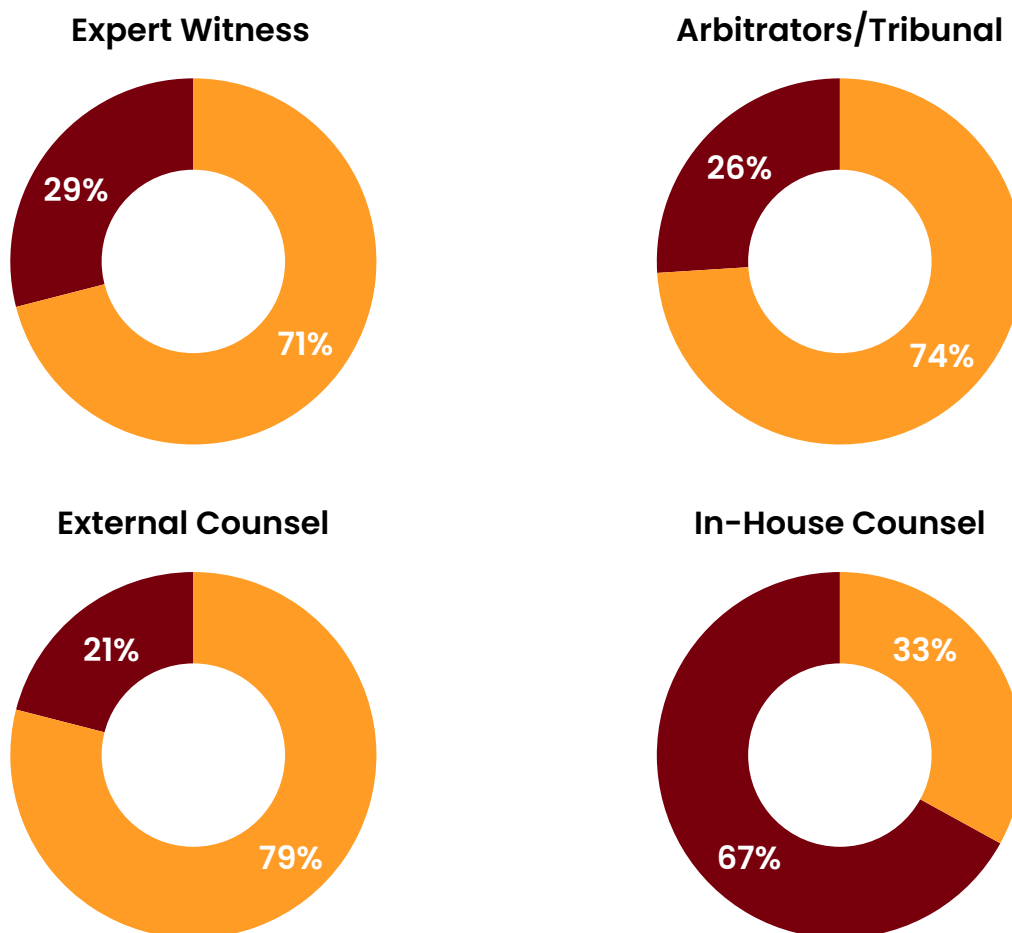


Chart 9. Is the Ciarb protocol for the use of party-appointed expert witnesses in international arbitration used in the arbitrations in which you are involved?

11.1.1 The survey results showed a varied response amongst respondents, as follows:

a) In-house counsel. A majority of 67% said the protocol is used “very often.” A minority uses it “not often,” and another minority uses it “never.”

b) Expert witnesses. The majority of expert witnesses report limited use

of the protocol, with 50% using it “not often” and 21% “never.” Only 29% use it frequently or very frequently.

c) Arbitrators. The arbitrators’ perception is that the protocol’s use is similar to that of expert witnesses. The majority (74%) use it “not often” or “never,” while only 26% use it frequently or very frequently.

d) External counsel. The use of the protocol is more divided in this group. The majority (79%) say they use it “not often” or “never,” while 21% use it frequently or very frequently.

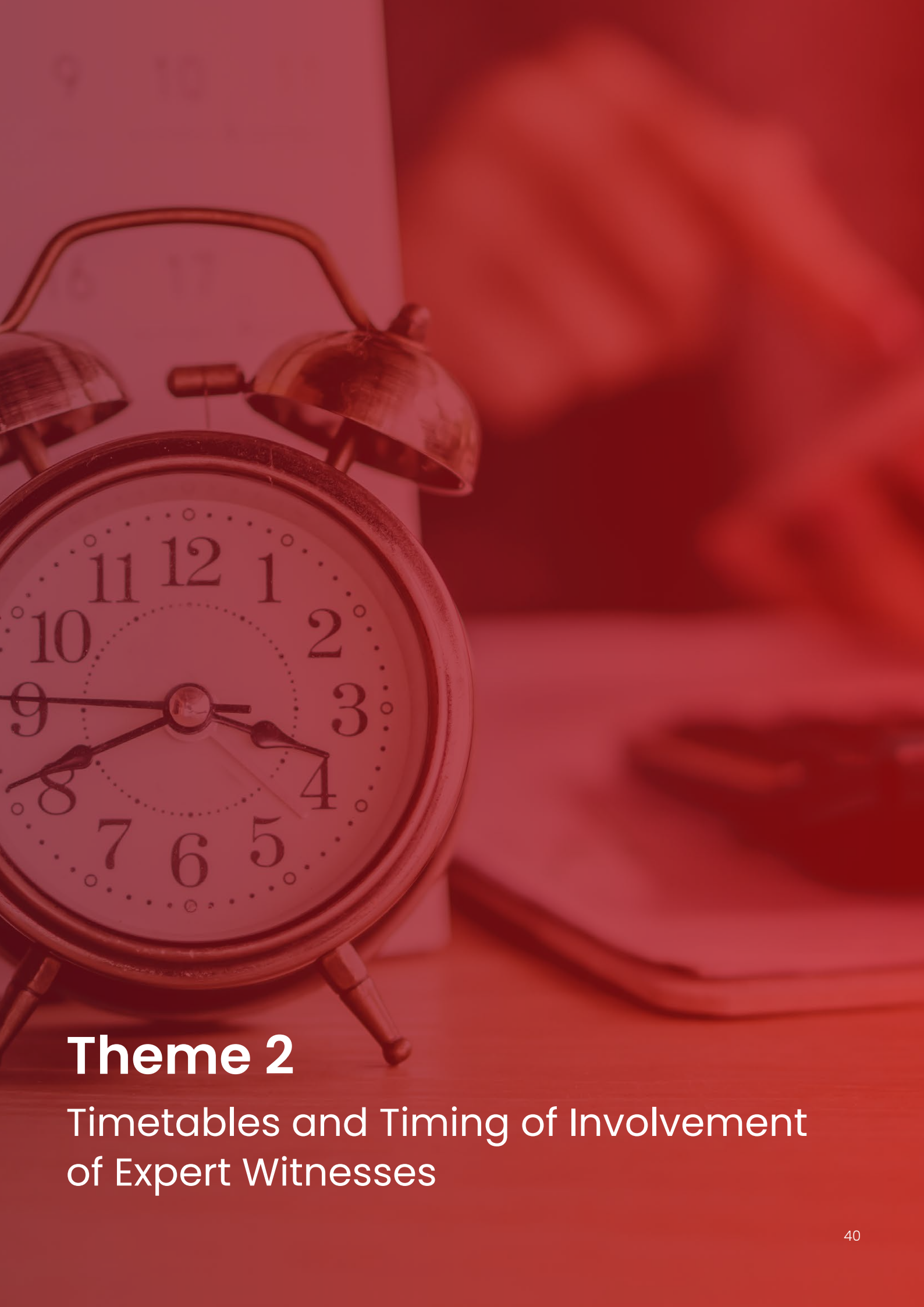
11.1.2 The data from the arbitrators, expert witnesses, and internal counsel indicate a clear pattern: the *Ciarb Protocol for the Use of Party-Appointed Expert Witnesses in International Arbitration* is not widely adopted, with the majority using it “never” or “not often.”

11.1.3 Importantly, however, the *Ciarb Protocol for the Use of Party-Appointed Expert Witnesses in International Arbitration* has the potential, at least in theory, to respond to many of the criticisms identified in this

report. Its provisions on the duties of expert witnesses to the tribunal, the encouragement of conferences between expert witnesses, and the standardised elements of expert witness reports are designed to address the very issues of conflicting guidance, lack of communication, and inconsistency that the survey respondents highlighted.

11.1.4 One matter that arose in community discussions to which tribunals should be alive is that in some circumstances expert witnesses are bound by their professional bodies to follow certain guidelines. If only one expert witness is bound in this way, an inequality between expert witnesses may immediately arise.





Theme 2

Timetables and Timing of Involvement
of Expert Witnesses

12. In the interest of achieving effective expert witness evidence, when ideally should expert witnesses be instructed?

12.1.1 The survey results showed that 71% of respondents consider that, ideally, expert witnesses should be appointed in the pre-arbitration stage, with 42% preferring the appointment once issues between the parties are known or have crystallised, and 29% preferring appointment before making a claim.

12.1.2 Even when the survey groups are considered separately by respondent group, most respondents consider that, ideally, expert witnesses should be appointed in the pre-arbitration stage. For example, 51% of expert witnesses and 80% of in-house counsel prefer expert witnesses to be selected when issues between the parties are known or have crystallised, whilst 48% of external counsel prefer them to be selected before making a claim.

12.1.3 The next highest response indicates that 15% of all respondents consider that expert witnesses should be appointed at the dispute resolution phase before the procedural timetable is set.

12.1.4 Taken collectively, the results demonstrate a clear preference for expert witnesses to be engaged early in the dispute resolution process.

12.1.5 This is consistent with established research, which has shown that expert witness evidence can have the

most impact when considered at a stage when the opinions of the expert witnesses can be carefully considered by the parties and their legal advisors as they set the overall strategy for the dispute resolution process.

12.1.6 Because expert witness evidence usually accounts for a significant portion of the overall cost in international arbitration, it is important that the process of obtaining expert witness evidence is managed as effectively as possible. This strategy will ensure that such evidence is of the utmost benefit to the parties, as well as enhancing its role in educating the tribunal at the outset on the technical issues in dispute.

12.1.7 Early advice from expert witnesses can assist the parties and tribunal in ensuring a reasonable timetable for producing expert witness reports (including joint expert witness statements), in addition to clarifying the issues and helping the parties to focus their case where it matters most.

12.1.8 Clear benefits of appointing expert witnesses early include obtaining upfront clarity on technical issues when expert witnesses are sought for objective advice; formulating better case strategy; potentially reducing fees through focused opinion work; more effective and quicker narrowing of

issues as expert witnesses gain better understanding at the outset of the process; and streamlining agreements and/or disagreements between expert witnesses.

12.1.9 In addition, regarding the procedural timetable, tribunals can be encouraged to ask the parties to confirm whether the advice of the expert witnesses was considered

during discussions of requirements for expert witness reports, joint expert witness statements and hearings (e.g., whether witness conferencing might be beneficial). Expert witnesses are not always consulted about the timetable and are simply expected to comply once it has been set, often leading to insufficient time for preparing expert witness reports and joint expert witness statements.

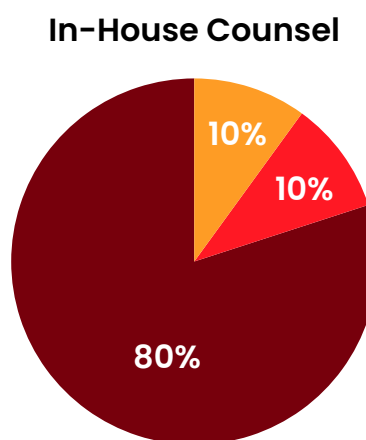
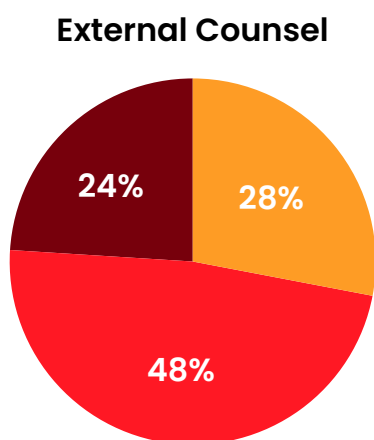
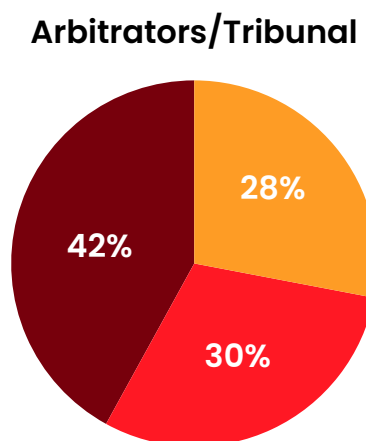
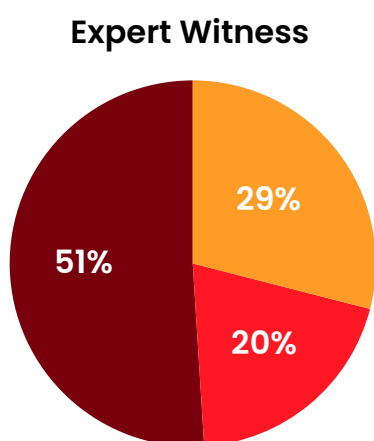
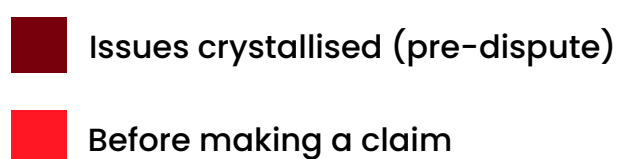


Chart 10. In the interest of achieving effective expert witness evidence, when ideally should expert witnesses be instructed?

12.1.10 The work of expert witnesses involves the investigation of available documentary evidence and carrying out detailed analysis and assessments. Expert witnesses will often also rely on evidence provided by fact witnesses, particularly where there might be a gap in documentary evidence. Appointing expert witnesses during the pre-arbitration stage allows the expert witnesses to carry out early reviews of the available evidence in order to identify gaps and requirements for further investigation.

12.1.1 Appointing expert witnesses at the pre-arbitration stage will result in greater efficiency in the use of expert witnesses and deliver the utmost benefit of their evidence for all participants in the arbitral process.

12.1.12 It should be noted, however, that transparency regarding when expert witnesses were appointed, and in what capacity, is essential.



13. In your experience, are expert witnesses instructed at the appropriate time?

13.1.1 With regard to this question, the survey results show that no clear majority emerges across the respondent groups. The most frequently selected response was “it depends” — on the basis that expert witnesses will do their best in the circumstances — chosen by 44% of arbitrators, 39% of expert witnesses, 42% of external counsel, and 60% of in-house counsel.

13.1.2 For the remaining two options of “Yes” and “No”, the combined average for “Yes” was 27% and for “No” (and this is the norm) was 27%.

13.1.3 The survey results indicate that the experiences vary almost evenly across the range of respondents. This could be due to a number of factors, including the geographic location of the respondents and the types of cases in which they are most commonly

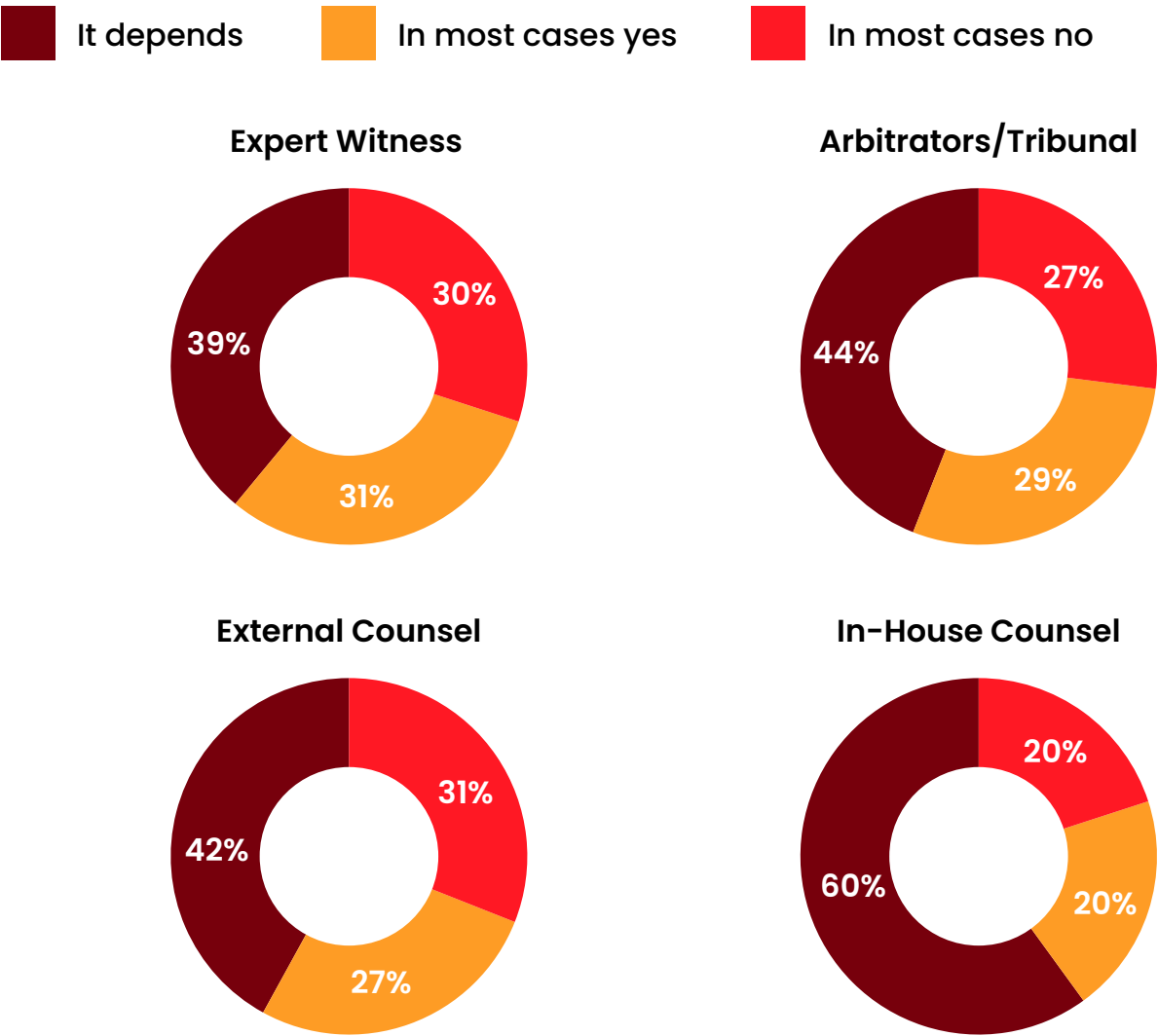


Chart 11. In your experience, are expert witnesses instructed timely (i.e. at the appropriate time)?



involved. Large-scale international construction disputes give rise to different issues than those inherent in commercial disputes, suggesting equally distinct experiences for those involved.

13.1.4 A standard in which simply leaving expert witnesses to try their best in whatever procedural circumstances they find themselves in should not be seen as adequate. In order to achieve better outcomes, tardy instruction of expert witnesses should be regarded as a departure from good practice.

13.1.5 It is quite often the case that expert witnesses are appointed after the filing of the notice or request for arbitration and the response. At this stage, the parties have already set out their respective positions on relief and remedies. It is not unusual to see requests for relief that say a claim amount that is not supported by objective evidence, simply because the amount has not been sense-checked by an objective person.

13.1.6 It is also not unusual to see requests for relief that simply say, for example, *“order the Respondent to pay the Claimant its [head of claim] to be assessed by the Claimant’s appointed expert witnesses or as determined by the Tribunal”*. In such cases, it is evident that no reasonable attempt has been made to assess the claim prior to the request being filed and

therefore the assessment needs to be considered and prepared by the party-appointed expert witnesses at a later stage in the proceedings.

13.1.7 In some arbitral institutions, the fees of the tribunal are based on hourly rates. However, in others the fees of the tribunal are based on a scale of costs calculated as a percentage of the monetary value of the claims. Where fees are based on a percentage of the monetary value of the claims, it is beneficial to the parties that such monetary values are checked by an objective person and more closely aligned with what might be supported by the expert witnesses when robust methodologies of analysis and assessment are applied.

13.1.8 When due consideration is given to the overall objective of appointing expert witnesses, and the fact that expert witness evidence is the predominant means of evidence when it comes to technical matters, it should be a natural conclusion that expert witnesses should be appointed at the appropriate time and not simply being left to try their best in whatever procedural circumstances they find themselves.

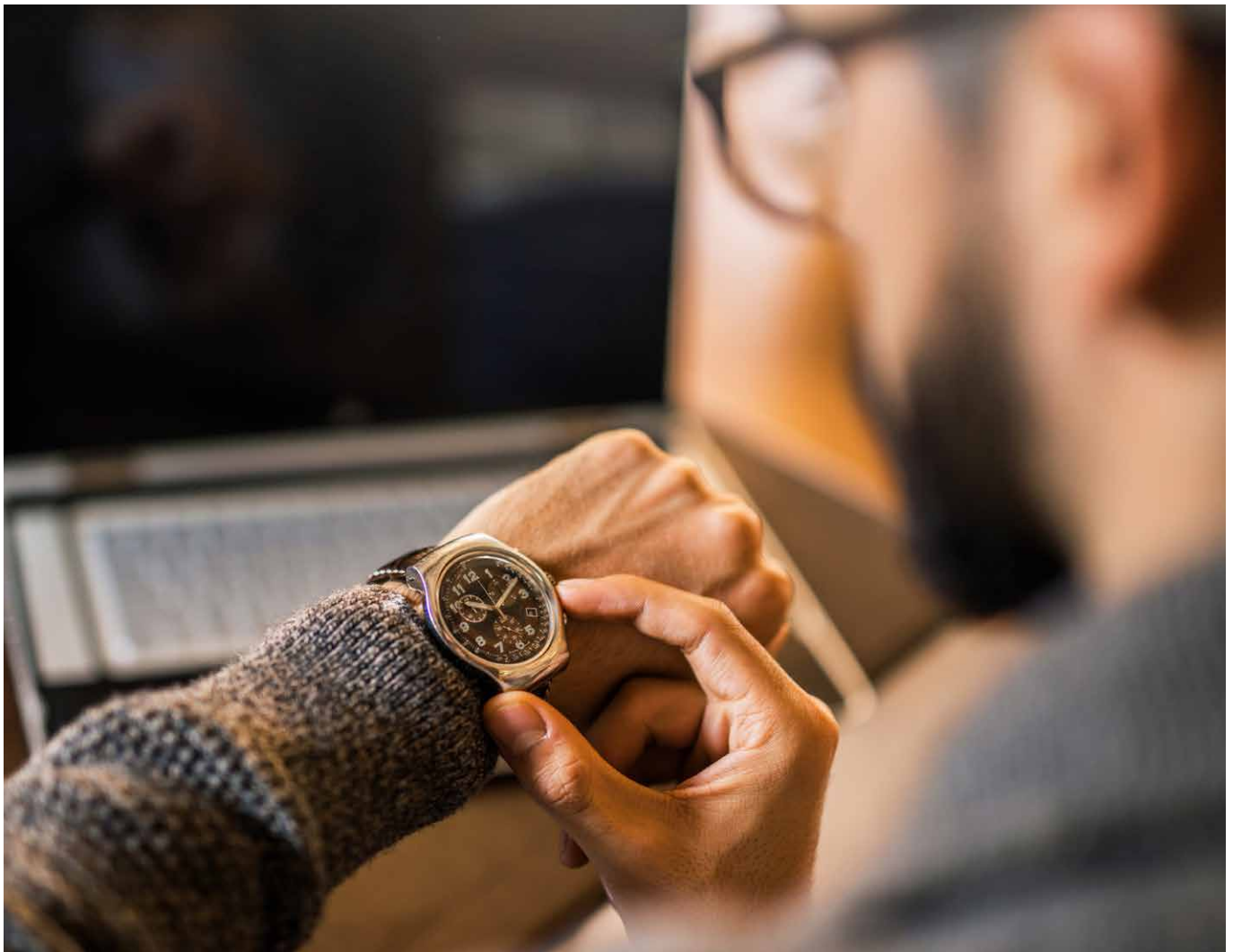
13.1.9 Appointing expert witnesses at the right time, and early once a dispute has arisen, is particularly relevant for large-scale international construction arbitrations where it is often necessary to appoint not one but several expert

witnesses to give evidence in a variety of technical fields such as delay, quantum, structural, architectural, mechanical and electrical, and geotechnics. When there are several expert witnesses covering a variety of technical matters, it is beneficial that each expert witness has sufficient time to prepare their analysis and opinions in a manner that allows all other expert witnesses on the case to give due consideration to relevant opinions as appropriate.

13.1.10 For example, it is possible that a quantum expert witness might rely

on the opinions of a technical expert witness when preparing assessments for disputed variations. If the technical expert witness is not appointed at the appropriate time, then some of the work of the quantum expert witness could be delayed or even be abortive.

13.1.11 To achieve efficiency in the use of expert witnesses, and obtain the utmost benefit from expert witness evidence, expert witnesses should be appointed at the appropriate time.



14. What is the main reason expert witnesses are instructed late?

14.1.1 The survey results showed that there is a consistent pattern across feedback indicating that expert witnesses are frequently instructed far later than is optimal for effective dispute management. Results suggest that the principal causes of delay that create a recurring pattern of late engagement across sectors, are cost, limited understanding of the expert witnesses' wider role, and strategic behaviours within counsel teams.

14.1.2 The survey results showed that, among arbitrators, 35% attributed late appointment of expert witnesses to cost, 37% to other party and/or counsel team considerations, and 28% to a lack of understanding of the role of expert witnesses. Expert witnesses themselves identified a lack of understanding of their role as the primary cause (42%), followed by cost (39%), with only 19% citing other party and/or counsel team considerations. External counsel pointed predominantly to cost (53%), with 34% citing other party and/or counsel team considerations and only 13% attributing late instruction to a lack of understanding of the expert witness role. In-house counsel responses diverged markedly, with 60% identifying other party and/or counsel team considerations as the main cause, while cost and lack of understanding of the role each accounted for 20%.

14.1.3 There is a longstanding perception that the role of an expert witness begins only when formal proceedings have commenced, at which point it becomes clear that expert witness evidence may be required. It is also often assumed that the role of expert witnesses is limited to the production of evidence to opine on claims in the arbitration. Expert witnesses are therefore seen primarily as report writers, rather than as early strategic advisors who can shape issues, test claims, and identify technical weaknesses – a perception which influences appointment timing. The strategic use of expert witnesses to de-escalate claims or narrow the issues is less prevalent, possibly due to a preference to develop the legal narrative first and to internal party concerns about tactical flexibility.

14.1.4 Across the respondent groups, the proportion attributing late instruction to a 'lack of understanding of the role of expert witnesses' varies, with counsel believing this is a low risk (13%), whereas expert witnesses themselves believe this to be a considerable factor (42%). Most compelling is the fact that of the counsel discipline responses, 53% consider cost to be an overriding factor in the early engagement of expert witness services.

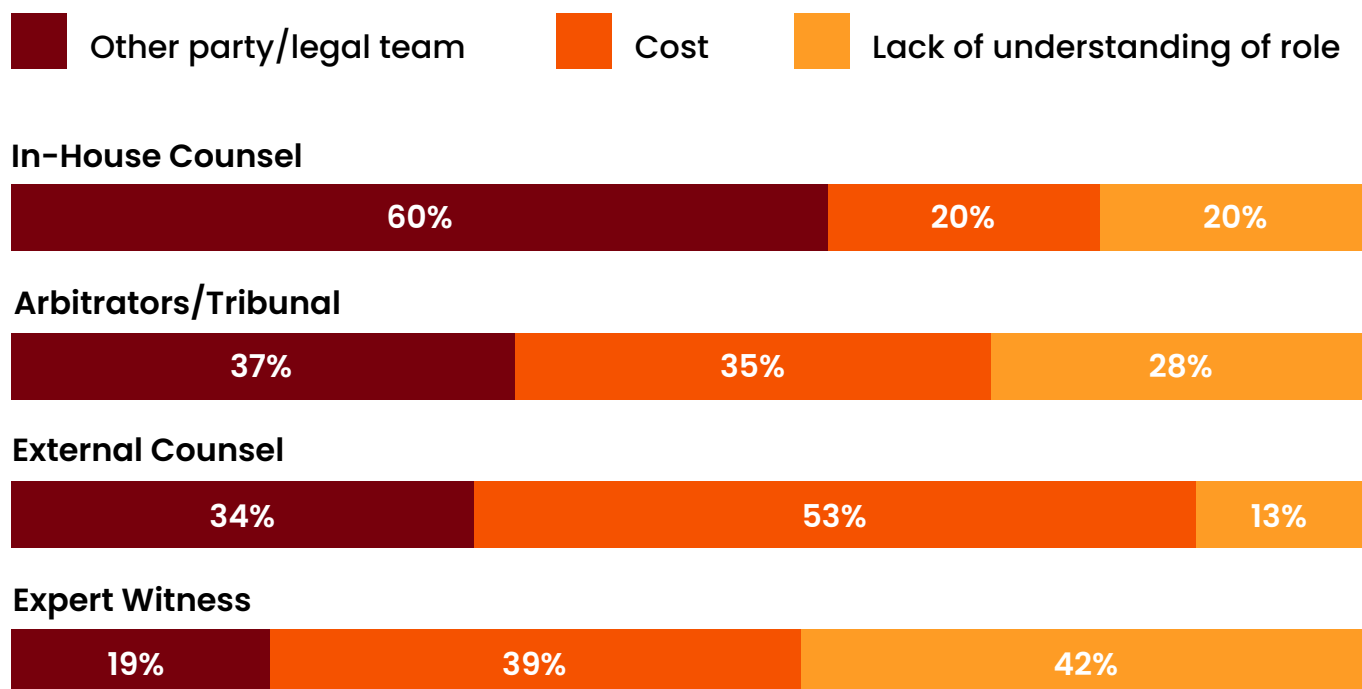


Chart 12. What is the main reason expert witnesses are instructed late?

The majority (60%) of in-house counsel consider delayed instruction of expert witnesses is due to other party or counsel considerations.

Furthermore, if early expert witness involvement is managed as evidence emerges then the costs can be managed.

14.1.5 Other than for in-house counsel, cost seems to be a leading driver of late expert witness instruction. The early engagement of expert witnesses may be perceived by clients as an expensive and unnecessary investment, especially if there are prospects of settlement. However, such short term cost savings can prove counterproductive because late instructions compress the time available to produce more robust reports and increase the intensity of the expert witnesses' analysis, ultimately raising overall costs.

14.1.6 Contrary to the tendency to delay the involvement of expert witnesses, early engagement can reduce both cost and complexity. When instructed at an early stage, expert witnesses can test the viability of claims, identify areas of agreement that reduce the scope of the dispute, clarify technical issues that would otherwise evolve into contested matters, inform procedural planning by indicating what work is realistic, and shape the overall direction of the case.

15. If cost is a detrimental factor in appointing expert witnesses in a timely fashion, would the agreement on recoverability of such costs (in case of legal success) resolve this problem?

15.1.1 The survey results showed that 55% of arbitrators, 45% of expert witnesses, 53% of external counsel and 60% of in-house counsel consider an agreement on the recoverability of costs (in case of legal success) would not resolve the problem of expert witnesses not being engaged early.

15.1.2 Anecdotally, during webinars and events, the community consensus is generally that early expert witness engagement offers procedural, strategic and economic advantages as well as the ability to interrogate complex factual records. One of the drivers for not engaging expert witnesses earlier in the process is the risk of wasted cost expenditure. There is also a mindset that expert witnesses are only needed once pleadings are crystallised and the case theory is already fixed. Desire to preserve maximum flexibility in the case theory is also mentioned, with some seeing early expert involvement unnecessarily narrowing the case. This related to the common belief that expert witnesses are not engaged early because factual records are still being explored, and multiple alternative case theories are

being kept alive. In some cases, there is indeed anxiety around early expert witness work generating documents and exposing weaknesses that could be disclosed and exploited by one or the other side.

15.1.3 In contrast, however, the benefits of early engagement are well known and include for example early issue crystallisation (which helps parties identify the real technical issues before positions harden), better framing of pleadings and relief sought, and forestalling of the risk that expert witnesses will not be given enough time.

15.1.4 In the survey results, nearly half of the respondents consider that an agreement on recoverability would assist in resolving the issue of early expert witness involvement and in clarifying its benefits. In order to reduce one barrier of several, parties could consider including the following wording in their arbitration agreements to address the recovery of reasonable pre arbitration expert witness costs:

“The Parties acknowledge that circumstances may require a Party (“Instructing Party”) to engage an expert witness to prepare a report prior to the commencement of arbitration for the purposes of evaluating, substantiating, or narrowing the issues in dispute. The Parties agree that any reasonable and properly incurred costs and expenses relating to such independent expert witness engagement (including but not limited to expert witness fees, analysis, testing, site investigations, and preparation of preliminary or full expert witness reports) constitute recoverable costs of the arbitration, notwithstanding that they were incurred before formal proceedings commenced.

The Instructing Party shall be entitled to recover these costs if it is the successful Party in the arbitration, as determined by the arbitral tribunal in the final award. For the avoidance of doubt, “successful Party” includes a Party that substantially prevails on its claims or defences, even if not successful on all issues. Nothing in this clause limits the arbitral tribunal’s discretion to assess: (a) the reasonableness, necessity, and proportionality of the expert witness costs claimed; (b) whether such costs were incurred in good faith, for a legitimate purpose connected to the dispute; or (c) any conduct of the Parties relevant to the allocation of costs.”



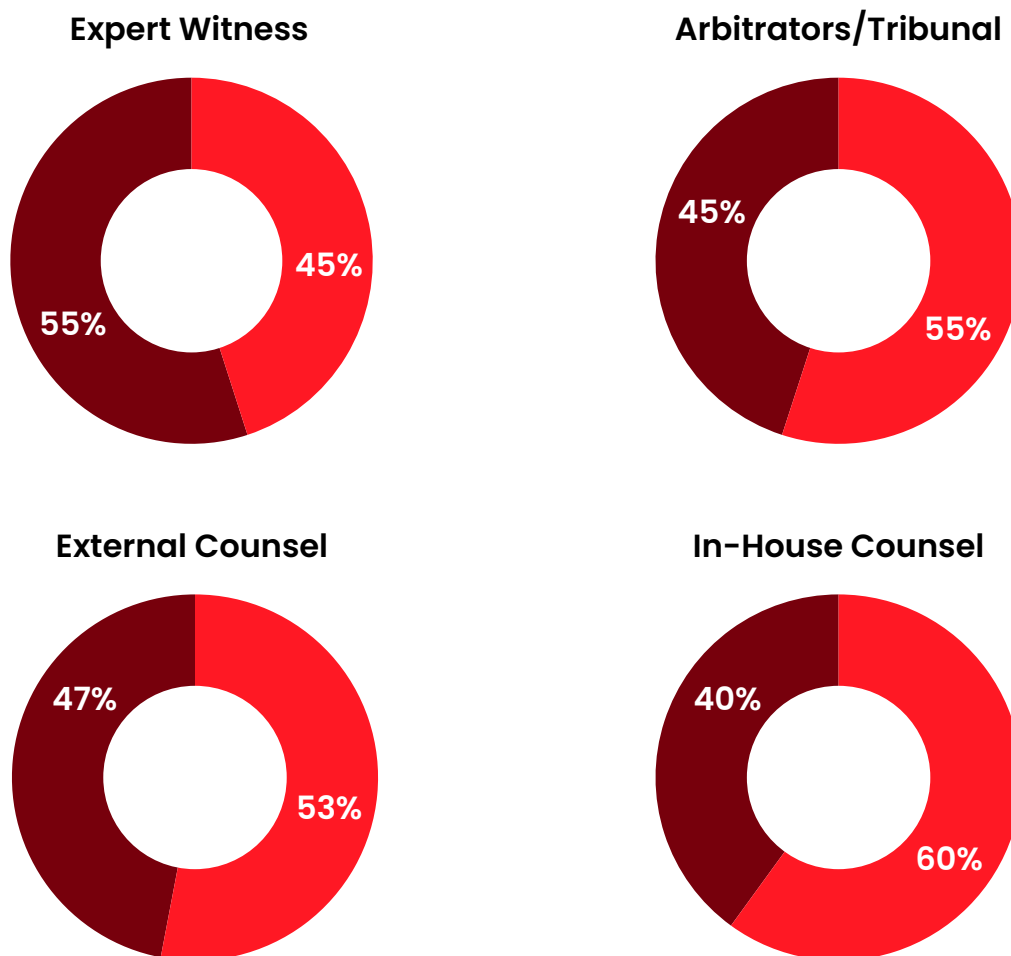


Chart 13. If cost is a detrimental factor in appointing expert witnesses in a timely fashion, would the agreement on recoverability of such costs (in case of legal success) resolve this problem?

15.1.5 The aims of this suggested clause are to provide greater cost certainty, to reduce hesitation around early technical analysis, and to align

party behaviour with practices that promote more efficient, transparent and effective use of expert witness evidence.¹⁷

¹⁷ While the measures in this Report are addressed in the name of efficiency, there is at least a real potential for them to increase, rather than reduce, cost and procedural burden, particularly if adopted mechanistically. A proactive tribunal can make expert evidence more efficient, but only if such measures are applied selectively, proportionately, and with close regard to cost-benefit considerations, a concern that in-house counsel responses rightly bring into sharp focus.

16. Do parties and/or tribunals typically give expert witnesses enough time to carry out their work and should expert witnesses have the opportunity to provide input and/or comments directly to the tribunal when the procedural timetable is being set?

Enough time
 Not enough time

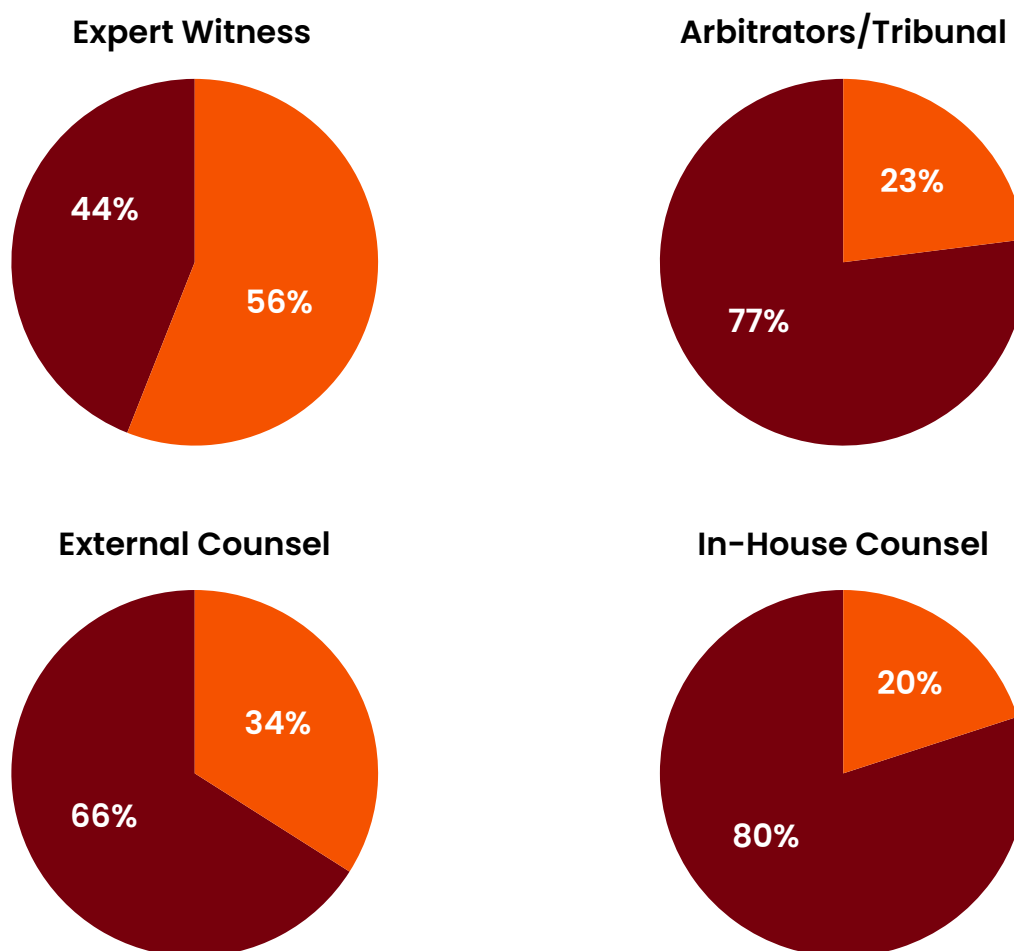


Chart 14. Do parties and/or tribunals typically give expert witnesses enough time to carry out their work?

16.1.1 The survey results showed that:

a) 77% of arbitrators, 44% of expert witnesses, 66% of external counsel, and 80% of in-house counsel consider that the parties and/or tribunals give expert witnesses enough time to carry out their work; and that

b) 37% of arbitrators, 60% of expert witnesses, 36% of external counsel, and 25% of in-house counsel consider that the expert witnesses should have the opportunity to provide input and/or comments directly to the tribunal when the procedural timetable is being set. The contrast in responses is stark.

16.1.2 It is notable that most expert witnesses do not consider that they are given enough time to carry out their work (albeit not an overwhelming majority) whereas the other respondents consider expert witnesses are given enough time.

16.1.3 It is equally notable that most expert witnesses consider that they should have the opportunity to provide input or comments directly to the tribunal when the procedural timetable is being set, whereas the other respondent groups do not share that view.

16.1.4 These results might speak to a number of issues, including the following:

- a) The tribunal's understanding of the volume of work required to be undertaken by the expert witnesses.
- b) The tribunal's understanding of the availability of the expert witnesses at certain times and appropriate disclosures of time by the expert witnesses.
- c) The expectations of the parties. For example, the Claimant may urge a very short procedural timetable, which may not allow sufficient time for the expert witnesses to complete their work.
- d) When setting the procedural timetable, does the tribunal understand when the expert witnesses

were appointed and how much work they have done to date?

e) The impact on the expert witness evidence of the style of submissions, i.e., pleadings or memorials.

f) The extent to which tribunals consider they should communicate with expert witnesses.

16.1.5 To enable proper allocation of time for expert witness work, tribunals should, at the earliest case management conference, invite submissions from the parties on the timing of expert witness appointments and the current status of any expert witness work already undertaken. When setting or revising the procedural timetable, tribunals should ordinarily require the parties to confirm:

- a) The date on which each expert witness was or is expected to be appointed.
- b) The scope and volume of work anticipated for each expert witness discipline.
- c) Any known constraints on expert witness availability during the proposed timetable periods.
- d) Whether the expert witnesses have been consulted on the adequacy of the time allocated for the preparation of their reports and any joint expert witness statements.

16.1.6 Tribunals should also have regard to the style of submissions adopted in the proceedings – in particular, whether pleadings or memorials are used – and the consequential impact on the sequencing and preparation of expert witness evidence.

16.1.7 Where the procedural timetable is likely to impose compressed timeframes for expert witness work, the tribunal should consider whether it is appropriate to afford the expert witnesses a direct opportunity to communicate, through counsel, any concerns regarding the feasibility of the timetable. In cases involving multiple expert witness disciplines,

the tribunal should be attentive to interdependencies between expert witnesses and ensure that the timetable accommodates the sequential nature of their work where the analysis of one expert witness is dependent upon the conclusions of another.

16.1.8 The parties should be encouraged to engage their respective expert witnesses in the timetabling process at the earliest opportunity, so that the procedural calendar reflects a realistic and informed assessment of the time required to produce expert witness evidence of the highest quality.



17. In your experience, are tribunals sufficiently knowledgeable across technical issues (i.e., Expert issues) to be able to address related procedural matters during the case (at/after the first case management meeting)?

17.1.1 The survey results revealed a wide spectrum of perceptions regarding the technical acumen of tribunals across various professional groups. Among arbitrators, 1% reported never encountering sufficient knowledge, 43% acknowledged it as infrequent, 43% as common, and 13% as very frequent. Expert witnesses reported similar views: 5% as never, 40% as not often, 42% as often, and 13% as very often. External counsel indicated 2% as never, 56% as not often, 36% as often, and 6% as very often. In-house counsel responses showed 20% as never, 40% as not often, and 40% as often.

17.1.2 These findings highlight a significant variation in the perceived technical competence of arbitrators, a factor that could impede the efficiency of procedural management during arbitration.

17.1.3 A consensus emerges advocating for an enhancement of arbitrators' technical understanding as a cornerstone for the effective operation of arbitration processes. To bridge these gaps, the following measures are recommended:

a) Arbitrators should undergo continuous technical training, tailored to address specific areas prevalent in arbitration cases. Detailed pre-hearing briefings with expert witnesses and clearer procedural guidelines will collectively ensure that tribunals are better equipped to manage technical matters effectively throughout the arbitration process.

b) Pre-hearing briefings with expert witnesses should be established to furnish tribunals with a foundational understanding of technical aspects prior to case management meetings.

The incorporation of expert witness panels during such meetings could prove invaluable in expediting tribunals' comprehension of intricate technical issues. Expert witnesses attending case management conferences can offer significant value and efficiency, facilitating real-time discussions on issues such as documents requested in Redfern requests. This interaction enables the tribunal and parties to assess the necessity and value of such documents for the arbitration, thereby aiding expert witnesses in streamlining their work and ensuring consideration of only the most pertinent information.

c) The development of comprehensive procedural guidelines delineating steps for addressing technical matters would equip tribunals to navigate such matters with greater efficacy.

The majority consensus from the survey thus advocates for enhancing the tribunal's capability to manage procedural matters

efficiently, including engagement with expert witnesses prior to the hearing, ultimately leading to fairer and more informed outcomes. These measures will ensure tribunals are not only knowledgeable but also confident in navigating technical challenges throughout the arbitration process.

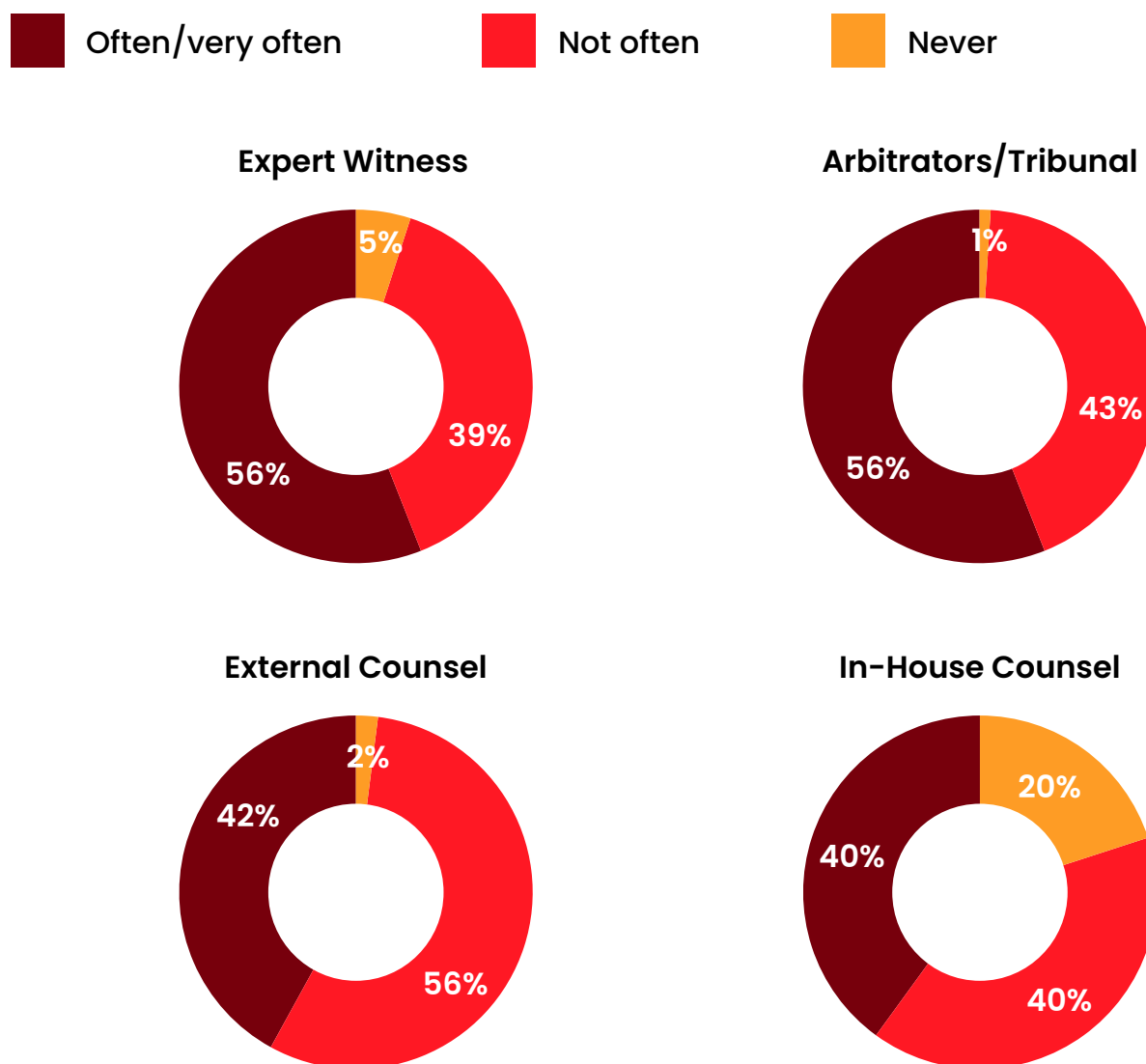


Chart 15. In your experience, are tribunals sufficiently knowledgeable across the technical issues to be able to address related procedural matters during the case (at/after the first case management meeting)?

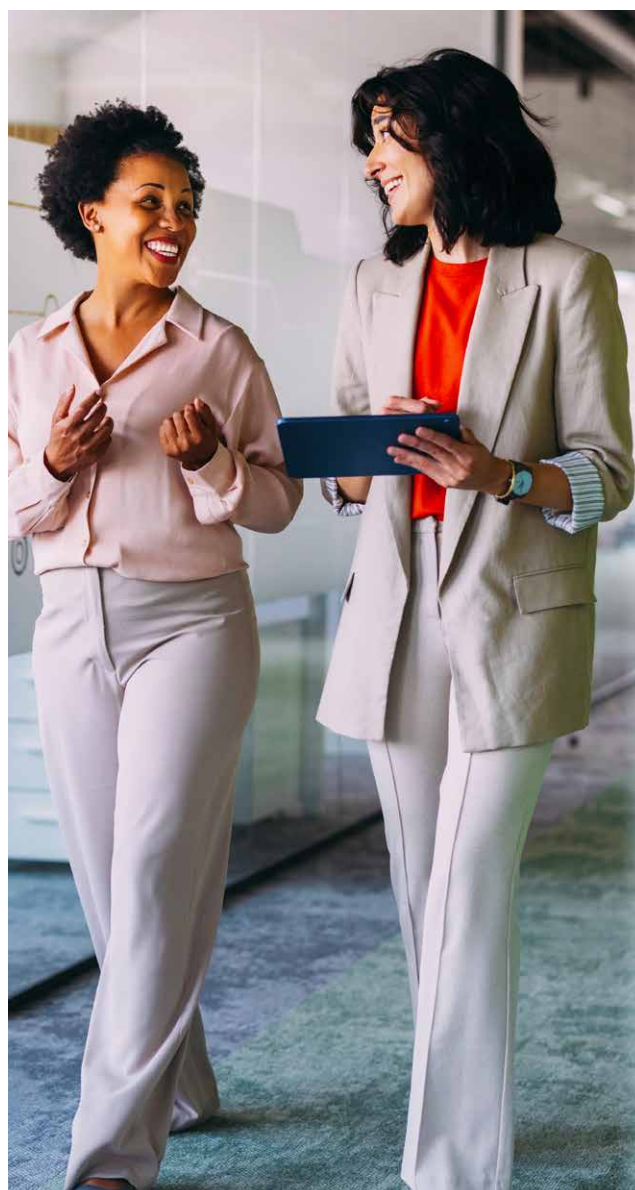
17.1.4 The research conducted by Queen Mary University of London on the future of international arbitration in the energy sector¹⁸ further accentuates the pivotal role of specialised knowledge, with 76% of our survey respondents deeming the technical expertise of tribunals, counsel, and expert witnesses as imperative. This highlights the essentiality of specialised skills within the tribunal in the effective resolution of disputes within arbitration.

17.1.5 The survey consensus is that fortifying the tribunal's capacity to manage procedural matters effectively will invariably lead to more equitable and informed outcomes. These initiatives will ensure that tribunals are not only competent but also confident in addressing technical issues throughout the arbitration process.

17.1.6 It is imperative to elevate the technical expertise of tribunals. The insights gleaned from our survey, alongside the compelling findings from Queen Mary University of London, highlight the necessity for specialised knowledge within a tribunal in delivering equitable and judicious outcomes. This knowledge stands as a pivotal component in refining the arbitration process.

17.1.7 By instituting targeted training programmes, fostering structured interactions with expert witnesses,

and establishing comprehensive procedural frameworks, tribunals can be better equipped to address the complex technical challenges inherent in contemporary arbitration. Such measures would strengthen the credibility and efficiency of arbitration proceedings and promote greater confidence among stakeholders in the tribunal's capacity to render informed and well-reasoned decisions.



¹⁸ Queen Mary University of London, Future of International Energy Arbitration Survey Report 2022, 20 January 2023, pages 31 to 32. <https://www.qmul.ac.uk/arbitration/research/2022-energy-arbitration-survey/>

18. Which type of procedure and/or submissions typically results in more effective expert witness evidence?

18.1.1 The survey results showed a divergence of views among arbitrators, counsel and expert witnesses regarding which procedural structure most effectively facilitates the production and usefulness of expert witness evidence. The responses suggest that perceptions of procedural effectiveness vary considerably, depending on the user’s role within the arbitral process and their practical interaction with expert witness evidence.

18.1.2 Among arbitrators, the largest proportion (41%) considered that procedural format has no dominant

impact on the effectiveness of expert witness evidence, followed by 37% who favoured pleadings with separate or subsequent submission of expert witness evidence, and 21% who preferred the memorial style with concurrent submission of expert witness evidence. Expert witnesses displayed a markedly different distribution, with a clear majority of 55% favouring pleadings with separate or subsequent submission of expert witness evidence, 30% considering that procedural format has no dominant impact, and only 15% preferring the memorial style with concurrent submission.

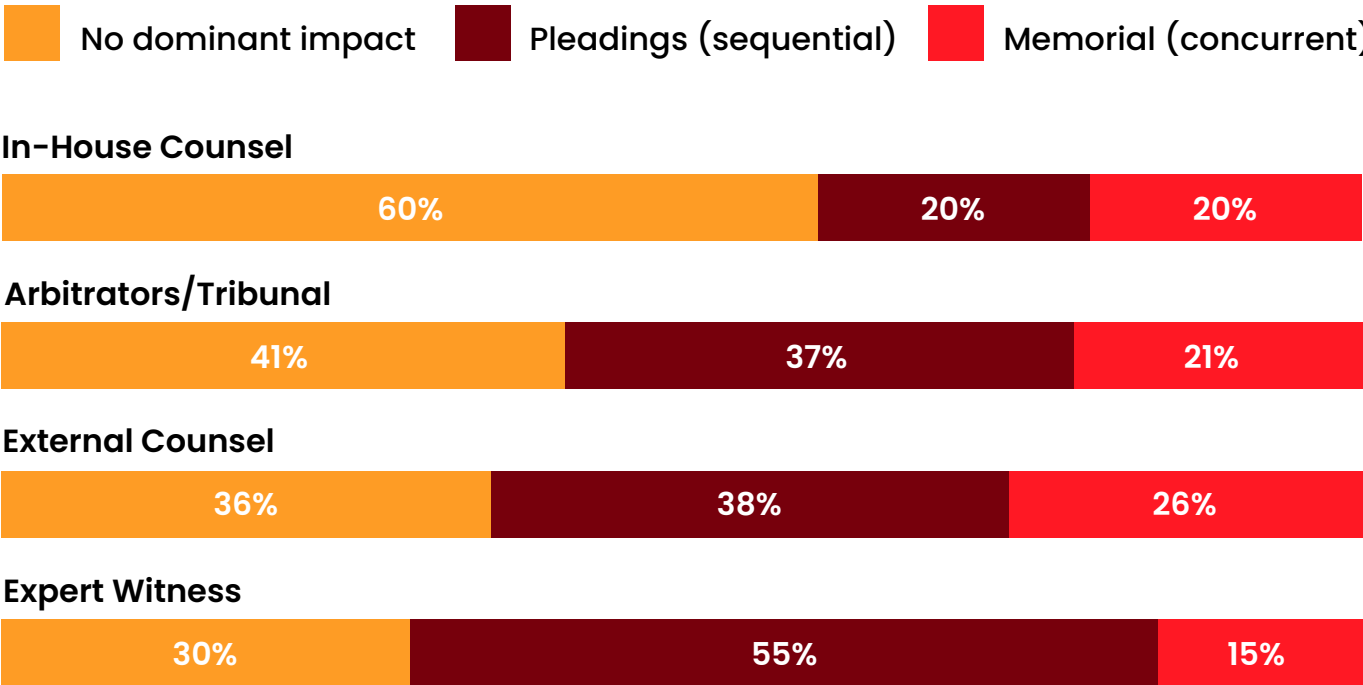


Chart 16. Which type of procedure/submissions typically results in more effective expert witness evidence?



18.1.3 External counsel presented a more evenly divided picture, with 38% favouring pleadings with separate or subsequent submission, 36% considering that procedural format has no dominant impact, and 26% preferring the memorial style. In-house counsel diverged from the other groups, with the majority (60%) considering that procedural format has no dominant impact on the effectiveness of expert witness evidence, while the remaining responses were equally divided at 20% each between pleadings with separate or subsequent submission and the memorial style with concurrent submission.

18.1.4 According to the data collected, no procedural model emerges as clearly dominant across all stakeholder groups. Instead, the results reveal a distribution of preferences, reflecting the different operational priorities and institutional perspectives that characterise each actor within the arbitral ecosystem.

18.1.5 The findings indicate that the perceived effectiveness of expert witness evidence is influenced not only by procedural design, but also by broader considerations relating to evidentiary clarity, methodological rigor, and the timing of technical engagement within the dispute.

18.1.6 Among tribunals, it is particularly revealing that a significant minority

(41%) consider that the procedural format has no dominant impact on the effectiveness of expert witness evidence. From such a tribunal perspective, the ultimate value of expert witness evidence appears to depend less on the structure of submissions and more on the substantive quality, independence, and analytical clarity of the expert witnesses' work.

18.1.7 Tribunals may therefore regard the procedural sequence as a secondary consideration when compared with factors such as methodological robustness, transparency of assumptions, and the ability of the expert witness report to assist the tribunal in understanding complex technical issues. Nonetheless, a proportion of tribunals (37%) reasonably favoured the sequential "pleadings first" model, which suggests an appreciation for the benefits of allowing technical opinions to develop in response to a fully articulated factual and legal framework.

18.1.8 Expert witnesses, by contrast, display a pronounced and concentrated preference within the survey. A majority (55%) favour the sequential model in which expert witness reports are submitted after the parties' pleadings. From a technical and methodological standpoint, this preference is understandable. The reliability of expert witness analysis frequently depends on the stability

and clarity of the factual assumptions on which the analysis is based.

Where expert witness evidence is prepared concurrently with early-stage submissions, expert witnesses may be forced to operate within a shifting factual landscape in which key elements of the dispute remain uncertain or contested. By contrast, a sequential model allows the expert witness to engage with a more crystallised evidentiary record and more clearly defined claims, thereby reducing the risk of methodological revisions or analytical inconsistencies.

18.1.9 External counsel demonstrates a more evenly distributed set of responses between the two options: 38% favouring the sequential pleadings format and 36% indicating that procedural structure has no dominant impact.

18.1.10 This division reflects the strategic realities of arbitration practice. On the one hand, the ability to develop expert witness instructions after reviewing the opposing party's narrative offers important tactical advantages, enabling counsel to refine the scope of expert witness analysis and ensure closer alignment between the expert witness report and the evolving theory of the case. On the other hand, there is a recognition that the ultimate weight of expert witness evidence will depend less on the procedural sequence and more on the expert witness's independence, the coherence

of the methodology applied, and the effectiveness of testing that evidence through cross-examination and expert witness conferencing.

18.1.11 It is in-house counsel that shows the strongest inclination towards the view that procedural format has no dominant impact on the effectiveness of expert witness evidence, with 60% selecting that option. This position likely reflects a corporate perspective that prioritises efficiency and outcome-oriented dispute management. From this vantage point, the procedural sequencing of submissions may be seen as less critical than the selection of qualified expert witnesses, the clarity of the instructions provided, and the overall alignment of the expert witnesses' work with the organisation's broader litigation strategy and risk management considerations.

18.1.12 One of the most striking findings emerging from this question is the significant prevalence of the "no dominant impact" response across multiple respondent groups. With 41% of tribunals, 30% of expert witnesses, 36% of external counsel, and 60% of in-house counsel adopting this position, the data suggest a widespread recognition that procedural structure alone cannot guarantee the effectiveness of expert witness evidence. The quality of expert witness evidence ultimately depends on factors that transcend the formal architecture of submissions,

including the expert witnesses' independence, methodological transparency, the clarity of the issues being addressed, and the tribunal's ability to meaningfully engage with the technical material presented.

18.1.13 These findings indicate a mature understanding within the arbitral community that procedural design, while important, is not determinative. Even the most carefully structured timetable cannot compensate for deficiencies in analytical rigor, unclear expert witness instructions, or insufficient disclosure of underlying assumptions. Conversely, well-prepared expert witness evidence may retain its effectiveness across a variety of procedural formats, provided that the process allows sufficient opportunity for clarification, rebuttal, and meaningful scrutiny.

18.1.14 In conclusion, the responses suggest that there is no dominant model for the presentation of expert witness evidence in arbitration.

18.1.15 Instead, the responses point toward a pragmatic recognition that procedural frameworks must remain flexible and responsive to the specific characteristics of each dispute. While many expert witnesses favour sequential submissions to ensure methodological stability, a substantial proportion of the arbitral community views procedural structure as secondary to the substantive quality

and independence of the expert witnesses' work.

18.1.16 Accordingly, the design of procedural timetables should not be approached as a rigid or standardised formula, but rather as a context-sensitive exercise tailored to the complexity, technical density, and evidentiary needs of each arbitration.

18.1.17 Such flexibility ultimately contributes to enhancing the effectiveness, reliability, and credibility of expert witness evidence within the arbitral process.



19. What involvement, if any, should expert witnesses have in the formulation of a case?

19.1.1 The survey results showed a meaningful divergence of views regarding the appropriate level of expert witness involvement in the formulation of a case. Among arbitrators, the largest proportion (42%) selected “as much as the client or lawyers want”, followed by 31% who selected “some” and 27% who selected “none”. The profile presented by expert witnesses was comparable, with 36% selecting “some”, 34% selecting “none”, and 30% selecting “as much as the client or lawyers want”.

19.1.2 External counsel also indicated a preference for broader involvement, with 40% selecting “as much as the client or lawyers want”, 36% selecting “some”, and 25% selecting “none”. In-house counsel leaned decisively toward permitting involvement, with 60% selecting “some” and 40% selecting “as much as the client or lawyers want”, with no respondents selecting “none”.

19.1.3 According to the data collected, no single option achieved dominance across all constituencies. Instead, the responses reveal a nuanced and balanced distribution, reflecting both the practical realities of technically complex disputes and the structural sensitivities surrounding the role, independence, and evidentiary function of expert witnesses in arbitration.

19.1.4 Among arbitrators, the largest proportion (42%) favoured allowing expert witnesses to be involved “as much as the client or lawyers want”. This indicates a relatively permissive approach, which may reflect confidence in party autonomy or a pragmatic recognition that expert witness input may be indispensable in framing technically sophisticated claims. At the same time, 31% preferred a more calibrated “some” involvement, and 27% favoured no involvement at all. While most tribunals therefore support some degree of participation, a significant minority remains attentive to the need to preserve clearer boundaries between technical expertise and advocacy.

19.1.5 Expert witnesses themselves present a balanced profile. The significant minority (36%) selected “some”, while 34% chose “none”, and 30% endorsed full involvement. This distribution likely reflects heightened sensitivity within the expert witness community to issues of independence, credibility, and professional integrity. Expert witnesses are acutely aware that excessive entanglement in strategic case formulation may expose their evidence to challenges based on partiality or advocacy alignment. Their responses suggest a preference for structured participation, one that informs the case without compromising objectivity.

19.1.6 External counsel displayed a preference for broader involvement, with 40% selecting “as much as the client or lawyers want”, closely followed by 36% opting for “some”. Only 25% favoured complete exclusion. From a litigation strategy perspective, this is unsurprising. In technically complex disputes, early expert witness engagement can assist in shaping legal theories, refining quantification methodologies, stress-testing assumptions, and ensuring internal coherence between pleadings and eventual expert witness reports. For many counsels, integrated expert witness participation may therefore be seen as enhancing procedural preparedness and reducing later evidentiary inconsistencies.

19.1.7 In-house counsel leaned decisively toward permitting involvement, with 60% selecting “some” and 40% choosing full involvement. The absence of support for “none” may reflect a corporate, outcome-oriented perspective in which expert witness input is viewed as part of efficient dispute management and risk assessment, rather than as a strictly compartmentalised evidentiary function.

19.1.8 Taken together, the responses suggest that the arbitral community does not consider expert witness participation in case formulation to be inherently problematic. This is notable given that some tribunals – who might be expected to regard

a potentially undesirable degree of such involvement as capable of jeopardising the impartiality of the expert witnesses’ technical opinion – were among those expressing support. The near consensus appears to centre not on permissibility in principle, but on degree, structure, and safeguards. The relatively limited support for complete exclusion across most groups indicates that a rigid separation between expert witness evidence and case development is neither widely expected nor necessarily considered desirable. Conversely, the absence of overwhelming endorsement for unrestricted involvement demonstrates an ongoing concern with preserving the integrity and perceived neutrality of expert witness evidence.

19.1.9 From the perspective of those favouring broader participation, early expert witness involvement is likely perceived as enhancing the substantive quality and technical robustness of the dispute, while not jeopardising their independence and impartiality. In highly specialised arbitrations, the identification of relevant data sets, the articulation of appropriate analytical frameworks, and the delimitation of methodological boundaries often require expert witness input from the outset. Without such engagement, pleadings may lack technical precision, and subsequent expert witness reports may expose structural weaknesses that could have been addressed earlier.

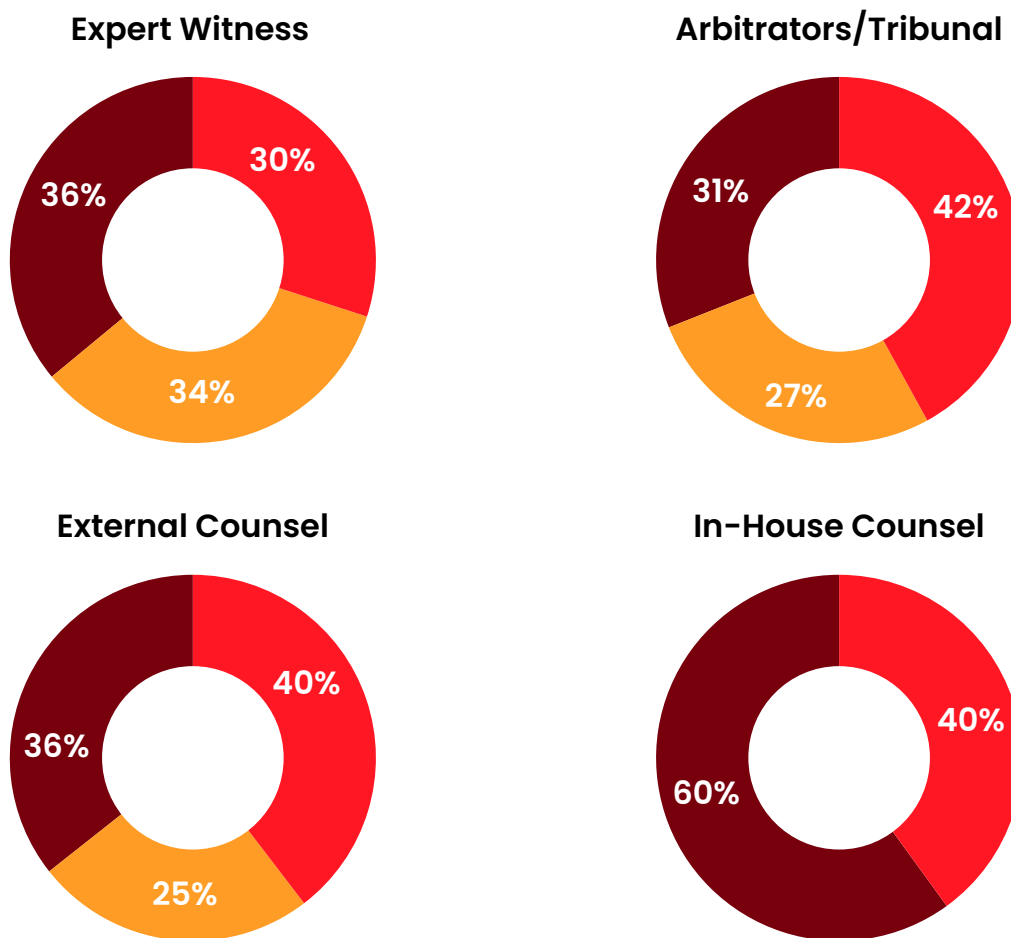


Chart 17. What involvement, if any, should expert witnesses have in the formulation of a case?

19.1.10 Conversely, the more cautious responses highlight the importance of maintaining a clear distinction between informed technical contribution and advocacy-driven positioning. Where expert witnesses become deeply embedded in strategic decision-making, there is a risk that their reports may be perceived as retrospective justification of litigation strategy rather than independent professional analysis. Such perceptions can weaken the persuasive value of expert witness evidence and

complicate the tribunal's task in assessing credibility.

19.1.11 Importantly, the data suggest that the central issue is not whether expert witnesses should contribute to case formulation, but how that contribution is managed and documented. Meaningful expert witness involvement can strengthen analytical consistency, improve evidentiary comparability, and assist tribunals in understanding complex subject matter. However, if role definition is not transparent

and adherence to professional independence standards is compromised, the same involvement may generate challenges regarding impartiality or procedural fairness.

19.1.12 In this respect, the question aligns with a broader theme emerging from the survey: the effectiveness of expert witness evidence depends less on rigid formal restrictions and more on procedural clarity, role transparency, and disciplined professional practice, mainly from counsel and expert witnesses. Where expert witness participation in case formulation is clearly delineated, consistent with independent obligations, and understood as contributing technical insight rather than advocacy direction, it is unlikely to undermine the arbitral process. On the contrary, it may enhance the coherence, reliability, and utility of the evidence ultimately placed before the tribunal.

19.1.13 In conclusion, far from a polarised disagreement, the data reflect a sophisticated balancing of competing arbitral values: party autonomy, procedural fairness, evidentiary credibility, and technical accuracy. The prevailing sentiment across groups favours calibrated and responsibly structured expert witness involvement. Rather than endorsing either strict exclusion or unlimited integration, the responses point toward a middle ground in which expert witnesses contribute meaningfully to the formulation of a case while remaining clearly identifiable as independent opinion witnesses. Such equilibrium ultimately serves the broader objective of maximising the effectiveness, reliability, and legitimacy of party-appointed expert witness evidence in arbitration.



20. Should joint expert witness reports (or at least joint statements) be a norm in every arbitration with a view to achieving effectiveness?

■ Yes ■ No

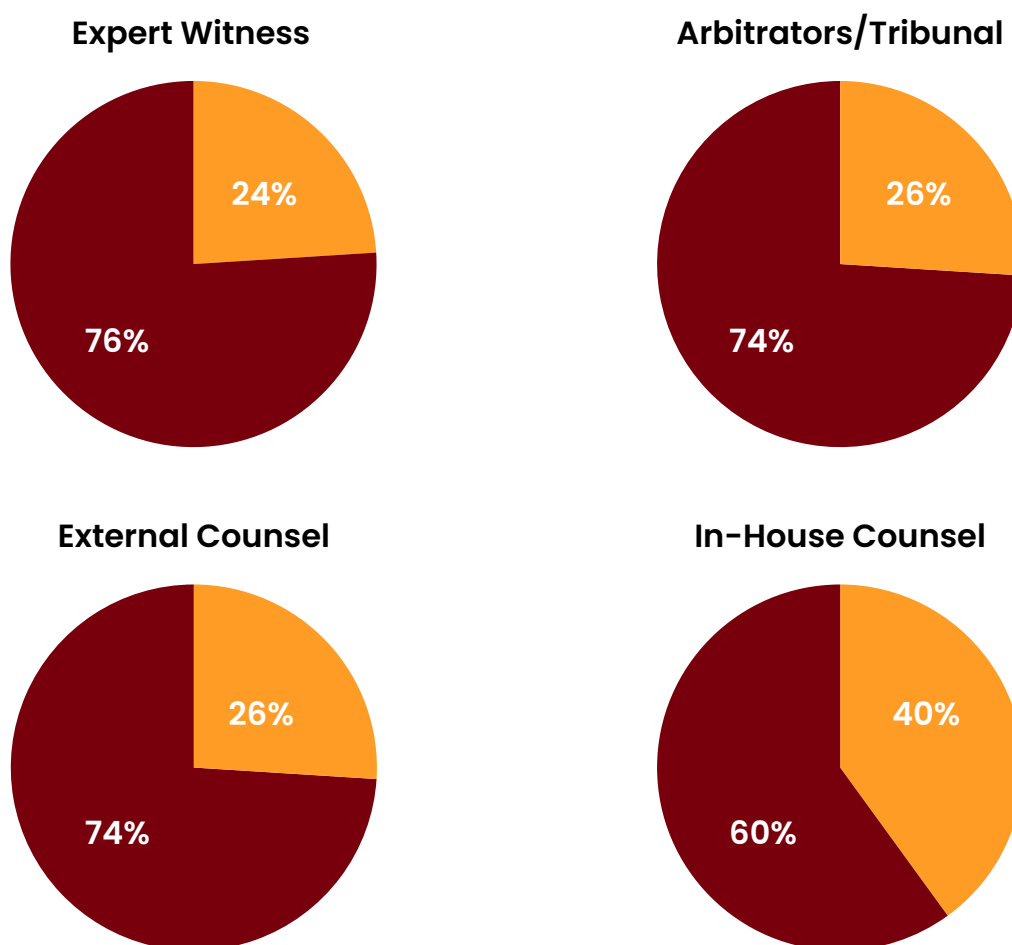


Chart 18. Should joint expert witness reports (or at least joint statements) be a norm in every arbitration with a view to achieving effectiveness?

20.1.1 The survey results showed a compelling argument for establishing joint expert witness reports¹⁹ or statements as a standard practice in arbitration, aimed explicitly at enhancing effectiveness. Among arbitrators, a substantial 74% support this approach, while 26% do not.

Expert witnesses align closely with this perspective, with 76% supporting this approach, 24% not supporting. External counsel similarly supports this approach, with 74% in favour and 26% not supporting. In-house counsel exhibits a more varied opinion, with 60% in support and 40% not in support.

¹⁹ In some jurisdictions and procedural traditions, joint expert meetings or reports may be less familiar or may raise concerns regarding party control or evidentiary strategy, and their timing and scope may therefore require adjustment.

20.1.2 These statistics highlight a prevalent recognition among professionals that joint expert witness reports or statements can substantially streamline arbitration processes and improve clarity in communication. By harmonising expert witness opinions and presenting unified statements, tribunals are better equipped to comprehend complex technical matters, potentially leading to more expeditious and informed decision-making. The principal benefits of this approach are the delineation and identification of areas of agreement and genuine disagreement – areas that allow the tribunal to focus on the issues requiring determination – and the generation of combined and objective technical expert witness opinion, which informs the tribunal’s decision-making. As the arbitration landscape continues to evolve, the integration of such collaborative practices bodes well to achieve greater procedural efficiency and effectiveness.

20.1.3 The consensus suggests that adopting joint expert witness reports should indeed become a norm in arbitration, as such reports can significantly reduce discrepancies and elucidate key issues for the tribunal. Joint reports have the capacity to align expert witness perspectives, minimise the possibility of conflicting evidence, and provide a consolidated view on

technical matters, thereby accelerating the tribunal’s decision-making process. The adoption of joint expert witness reports directly addresses the well-recognised problem of expert witness evidence that fails to engage with the opposing expert witness’s analysis – an undesirable situation in which expert witnesses address different issues and fail to confront matters central to the questions which the tribunal must decide.

20.1.4 The overarching purpose of joint expert witness reports and expert witness meetings is to foster opportunities for exploring and exchanging relevant technical information and to identify and narrow the issues in dispute. Expert witnesses must understand that their role is not to advocate a party’s position, but rather to fulfil their duty to the tribunal by objectively clarifying and narrowing issues. The role of the expert witness is not to adjudicate or settle the case, but to facilitate a clearer understanding of the subject matter of the arbitration.

20.1.5 The expert witness discussions aim to identify and discuss expert witness issues in the proceedings, with a view to potentially reaching consensus. The objectives include recognising agreed facts and issues, agreeing (if possible) upon a common data set to utilise, and highlighting facts and issues that are not agreed

upon. The compiled joint report that emerges will detail areas of agreement and disagreement, including reasons for disagreement. Such data sets may require updating as additional / new evidence is submitted.

20.1.6 Encouraging joint expert witness reports as a norm can standardise practice across arbitrations, promote efficiency, and reduce disputes relating to expert witness evidence. Integrating joint reports into procedural timetables, supported by clear guidance on scope and objectives, facilitates early and meaningful collaboration between expert witnesses. Appropriate use of technology and structured facilitation can further support a constructive and productive process.

20.1.7 Where expert witnesses are instructed at an appropriate stage, the joint process can begin with the preparation of a joint expert witness report addressing an agreed list of questions. Such reports should clearly identify areas of agreement and disagreement and articulate the underlying assumptions, methodologies, and conclusions supporting each position. These steps are critical to ensuring that joint expert witness reports are both efficient and of genuine assistance to the tribunal.

20.1.8 Expert witnesses should be encouraged to engage, without

prejudice, in discussions at an early stage with the objectives of exploring their respective positions, testing their analyses, and identifying areas of common ground. Parties should afford expert witnesses the necessary latitude to participate in these discussions, recognising the need to balance concerns about unsanctioned concessions against the value of focused expert-to-expert engagement in supporting informed tribunal decision-making. Timing is important: joint discussions may take place at any stage from the service of reports to the hearing but should not be left until the last moment. Early engagement supports agreement on facts, methodology, issues, and relevant documents. In some jurisdictions, such joint discussions are reflected in pre-action protocols.

20.1.9 The survey results strongly support the establishment of joint expert witness reports or statements as a standard practice to enhance effectiveness, with substantial majorities of arbitrators, expert witnesses, and external counsel in favour. While in-house counsel express greater caution, likely reflecting concerns about excessive latitude that could potentially compromise the integrity of the proceedings, the prevailing view is that harmonised expert witness outputs enable tribunals to better understand

complex technical matters and reach decisions more efficiently. Changes in expert witness opinion following joint discussions should be regarded as a strength rather than a weakness; in some jurisdictions, case law recognises that expert witnesses enjoy protection

when opinions evolve through proper joint engagement. Overall, joint expert witness reports promote collaboration, clarity, and narrowing of issues without advocacy, thereby enhancing the quality, reliability, and legitimacy of arbitral outcomes.



21. When should joint expert witness reports be issued?

21.1.1 The survey results showed that almost 70% of the respondents think that joint expert witness reports should be issued after individual expert witness reports. In fact, such seems to be the normative practice in international arbitration. However, more than 30% of the respondents – a material minority – said that the joint expert witness report should be presented before the individual expert witness reports.

21.1.2 The percentages vary among the different groups: 78% of expert witnesses said that the joint expert witness report should be issued after the individual expert witness reports; as did 65% of arbitrators, 58% of external counsel and 69% of in-house counsel.

21.1.3 Conversely, 42% of external counsel said that joint expert witness reports should be presented before individual expert witness reports, and 36% of arbitrators said the same.

21.1.4 Perhaps the starting point in analysing these statistics is that, historically, issuing only individual expert witness reports was the default and it is only in more recent times that joint expert witness reports have become more prevalent. Both options have their advantages.

21.1.5 Where issues in dispute are crystallised early, it may well be helpful for the tribunal to have the expert witnesses issue their reports individually, as a joint process might not add anything; the facts are known and the issues are clear. Perhaps straightforward or discrete technical issues might be better addressed in this way.

21.1.6 However, where the issues are more complex and/or numerous, and there are large volumes of disputed factual documents, the benefits of a joint expert report become clear. For example, having the expert witnesses record in a joint report such elements as their respective chosen methodologies, instructions and data sets could forestall “ships passing in the night” and provide the tribunal with aspects of expert witness evidence that can be easily compared.

21.1.7 The timing of issue of joint expert witness reports can have a significant impact on the usefulness of expert witness and should be carefully considered by the tribunal.

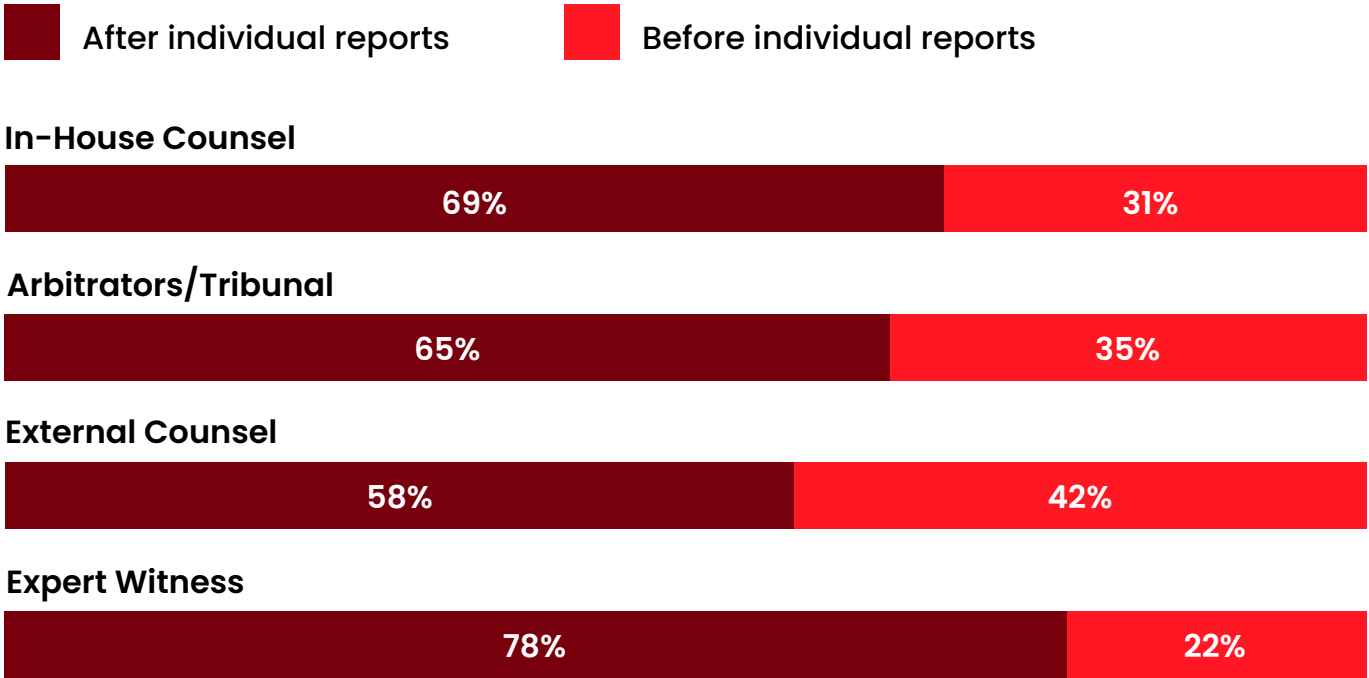


Chart 19. When should joint expert witness reports be issued?



22. In your experience, would you agree that all that the tribunal really needs is an enumerated clearly set out Scott Schedule²⁰ with areas of agreement, areas of disagreement and reasons for the disagreement?

22.1.1 The survey results showed limited consensus across tribunal, expert witness, external counsel and in-house counsel respondents that a Scott Schedule²¹ alone is sufficient to assist the tribunal in understanding areas of agreement, disagreement and reasons. While a clearly structured schedule identifying areas of agreement, disagreement and reasons is recognised as a helpful decision-support tool, the survey results indicate that most respondents consider a Scott Schedule to be useful but not self-sufficient.

22.1.2 Overall, a small minority of respondents considered a Scott Schedule adequate on its own, whereas the majority considered its usefulness depends on the expert witness reports and/or the degree of cooperation and consistency between expert witnesses. Among arbitrators, only 17% agreed that a Scott Schedule alone is sufficient, 45% considered that tribunals still benefit from first expert witness reports, and 38% agreed only on the condition that a Scott Schedule builds on cooperation among expert

witnesses who work to the same standards.

22.1.3 Expert witnesses were the most resistant to the proposition, with only 10% agreeing that a Scott Schedule is adequate on its own, a clear majority of 61% maintaining that tribunals still benefit from first expert witness reports, and 29% agreeing conditionally on expert witness cooperation.

22.1.4 External counsel presented a more distributed picture, with 18% agreeing outright, 27% considering that tribunals still benefit from first expert witness reports, and the largest proportion of 55% agreeing only if expert witnesses cooperate and work to the same standards.

22.1.5 In-house counsel was the most emphatic in rejecting the sufficiency of a Scott Schedule, with no respondents agreeing that it is adequate on its own, only 20% considering that tribunals still benefit from first expert witness reports, and a decisive 80% agreeing only on the condition that expert witnesses cooperate and work to the same standards.

²⁰ A Scott Schedule should be set out in a clear tabular form, with each issue or claim item identified separately and the parties' and experts' respective positions shown side-by-side. It should clearly distinguish what is agreed, what is disputed, and the concise reasons for any disagreement, so the tribunal can readily see the real issues requiring determination.

²¹ In some jurisdictions and procedural traditions, Scott Schedules or equivalent formats are not commonly used, and other mechanisms may be preferred to structure areas of agreement and disagreement.

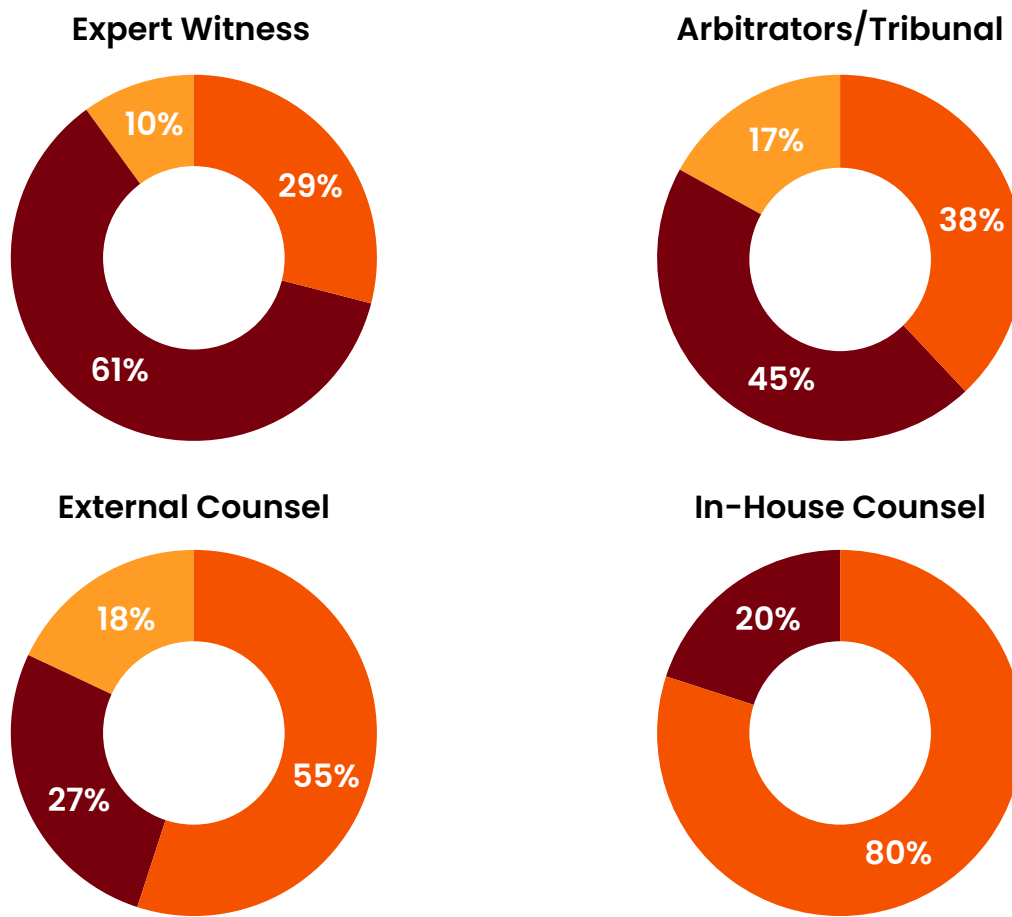


Chart 20. In your experience, would you agree that all the tribunal really needs is an enumerated, clearly set out Scott Schedule with areas of agreement, areas of disagreement and reasons for the disagreement?

22.1.6 A Scott Schedule, while a useful decision-support tool, summarises outcomes of discussions rather than providing the analytical foundation on which those outcomes rest. Tribunals must understand why expert witnesses disagree, which ordinarily requires familiarisation with the underlying factual premises, methodological choices, data sources, and sensitivities informing the expert witnesses' opinions – particularly where disagreements turn on methodological differences, data reliability, or the application of legal or technical standards. Used after the foundational

expert analysis has been completed, a well-prepared Scott Schedule can nevertheless be highly effective: it crystallises the issues, clarifies precise points of divergence, supports targeted questioning, streamlines hearings, and assists tribunals in mapping their findings efficiently, consistent with cost-efficiency objectives. However, it is not a substitute for the evidential record or legal submissions and should be deployed as part of a broader procedural framework, calibrated to the complexity of the dispute and supported by an appropriate level of detail.

23. Have you experienced an expert witness withholding opinions in their first report/joint expert witness report and so ‘ambushing’ the opponent in their reply report?

23.1.1 The survey results showed a range of experiences regarding the practice of expert witnesses withholding opinions in their initial reports or joint statements, thereby ‘ambushing’ opponents in subsequent expert witness reply reports.

23.1.2 Among arbitrators, 45% have not encountered such tactics, 17% experience them sometimes, 29% say

yes, and 9% often. Expert witnesses present a contrasting pattern, with a mere 15% indicating no such incidents, 21% sometimes, 50% occasionally, and 14% often. External counsel reports 34% having no experience with ambushes, 19% sometimes, 34% occasionally, and 13% often. In-house counsel reveals a more concentrated experience, with 66% encountering it sometimes, 17% often and 17% never.

Never
 Sporadically alone
 Sometimes
 Often/frequently

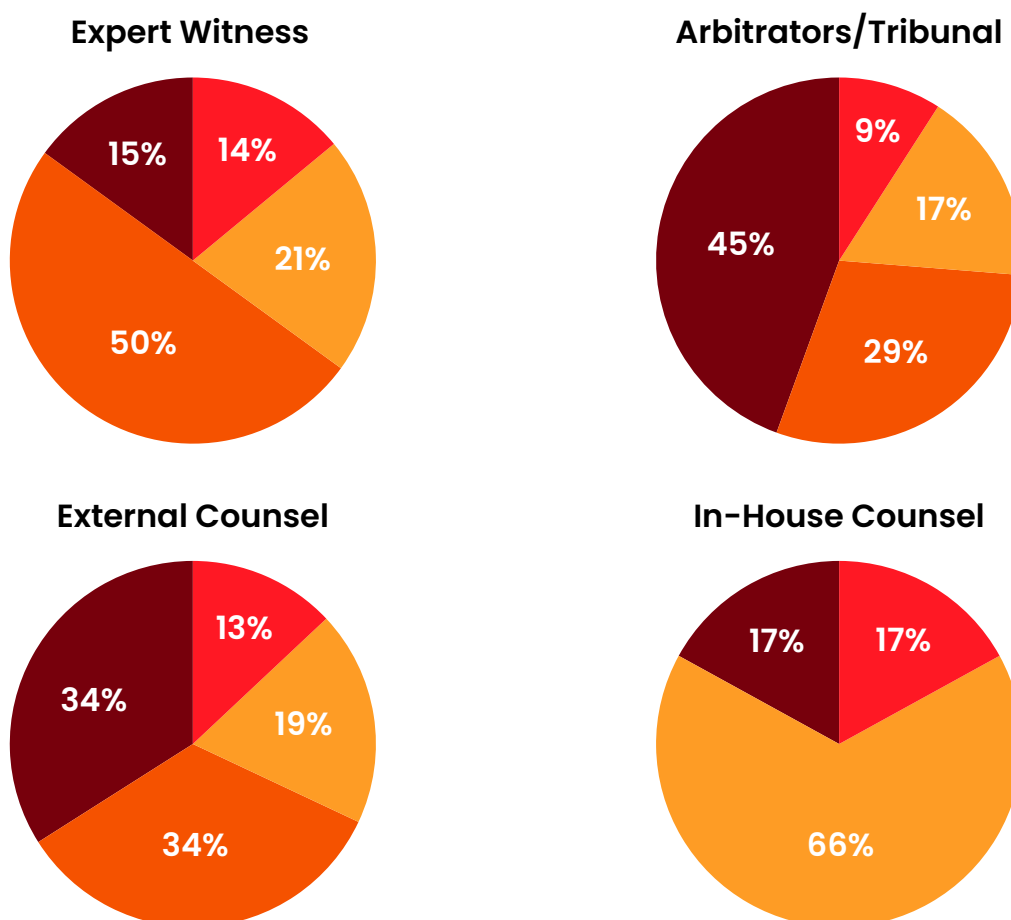


Chart 21. Have you experienced an expert witness withholding opinions in their first report/joint expert witness report and so ‘ambushing’ the opponent in their reply report?

23.1.3 These findings highlight that although ambushing tactics are not universally pervasive, they are sufficiently prevalent to demand attention, especially among expert witnesses and in-house counsel who, by the nature of their roles, will have more visibility of these issues arising.

23.1.4 Addressing this concern could bolster transparency and fairness within the arbitration process, ensuring that all parties are fully informed and adequately prepared throughout the proceedings. To mitigate such occurrences, crafting clearer directions by tribunals that mandate comprehensive disclosure of expert witness opinions within initial reports is essential. This would minimise surprises in expert witness reply reports and encourage open channels of communication between expert witnesses and the tribunal to foster transparency and mitigate instances of withheld opinions.

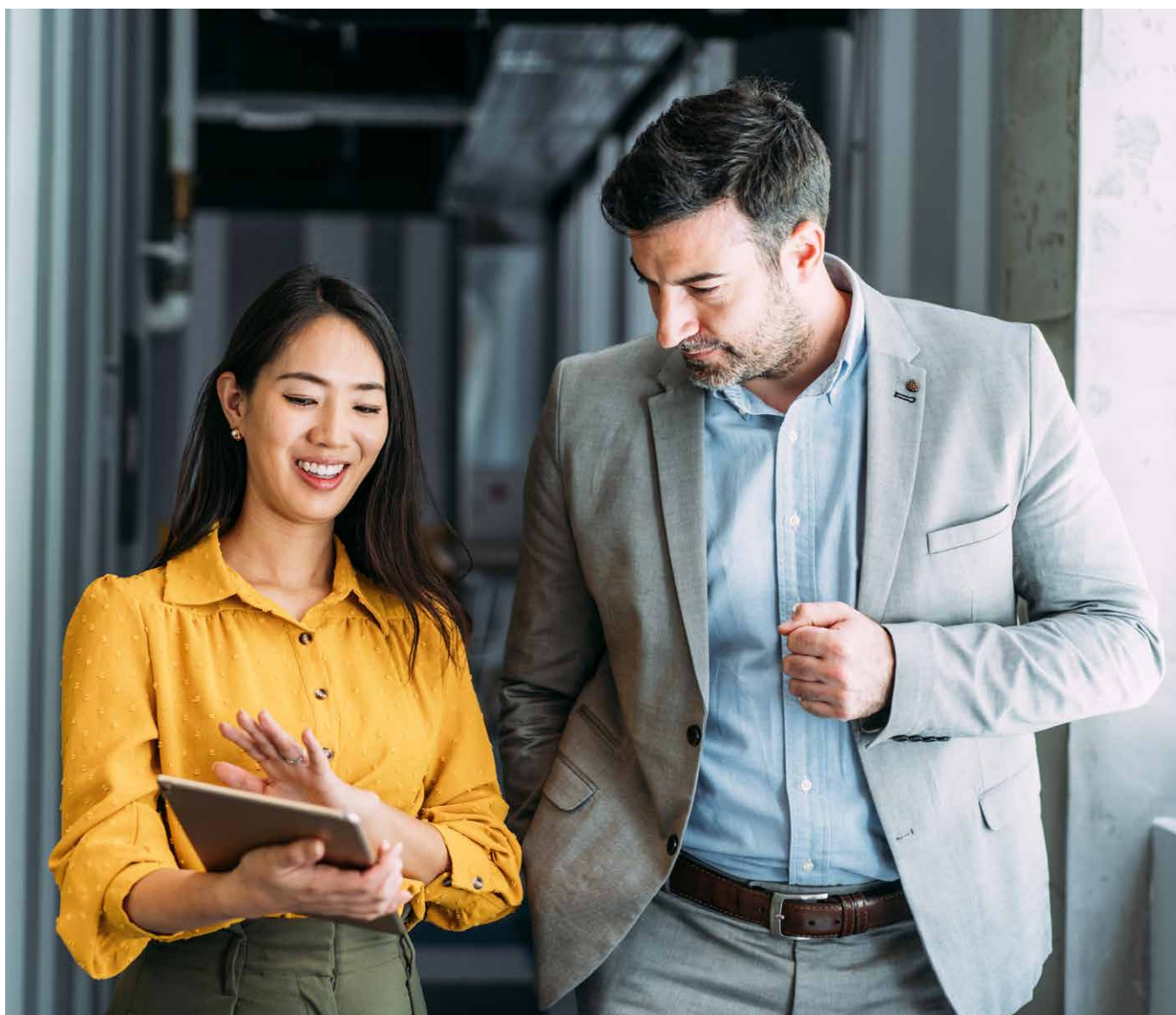
23.1.5 In some cases, tribunals may usefully convene meetings of the expert witnesses at the very outset, before even the first party submission, so that party-appointed expert witnesses can agree on the issues, the methodology and the documents they need in order to opine. A process led by the tribunal with limited involvement of counsel may promote a cooperative approach.

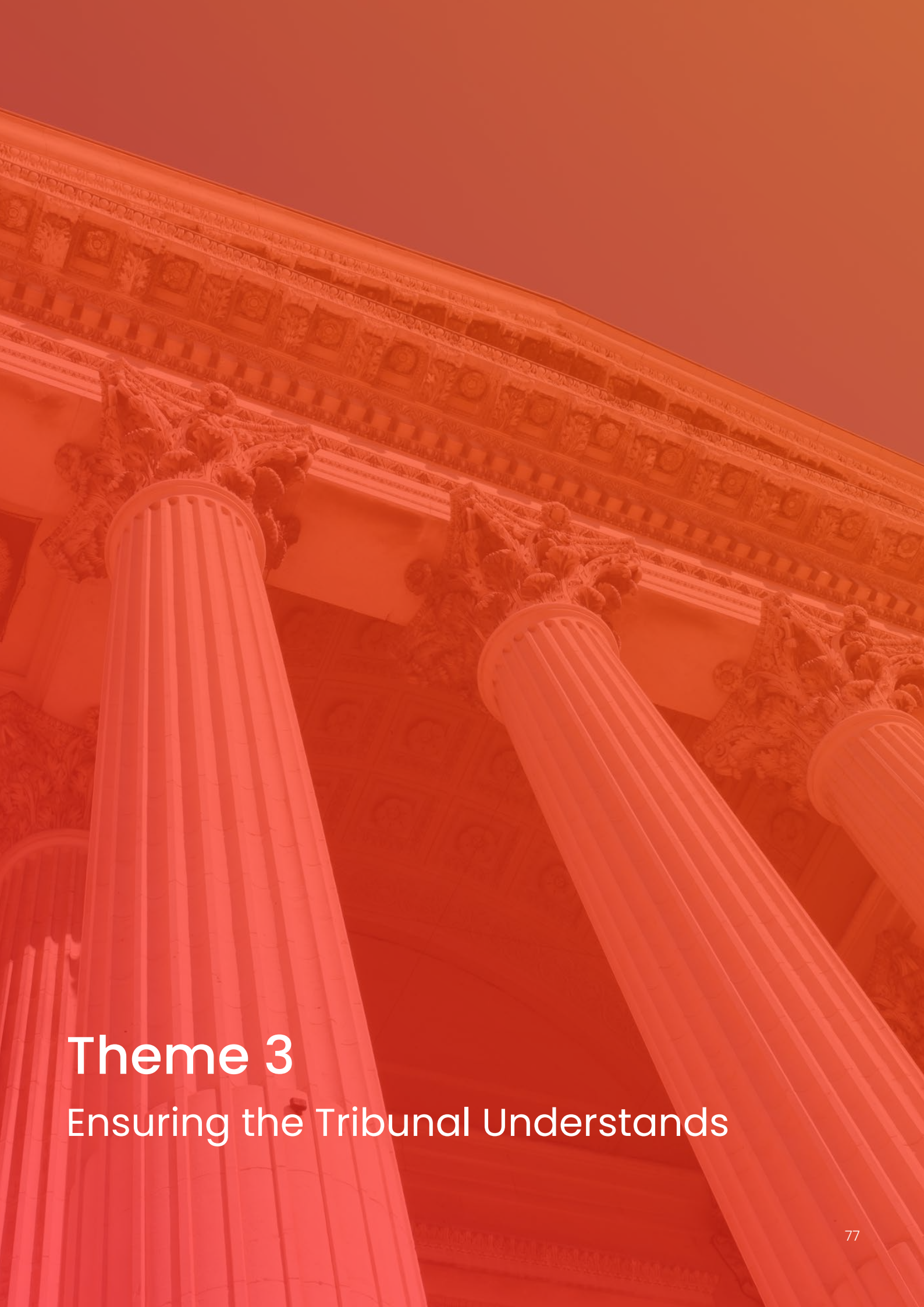
23.1.6 Ambushing tactics in arbitration can often be mitigated by establishing a common data set from which all expert witnesses can draw, hence the suggestion that the tribunal should get the expert witnesses together at the start of the process. This procedure will mitigate the significant challenge posed by reliance on conflicting facts, data, and methodologies. While there is value in presenting the tribunal with genuine methodological differences, issues arise when expert witnesses base their analyses on fundamentally disparate facts or data sets. Such divergence can render their conclusions unhelpful for a tribunal attempting to make comparative evaluations, thereby diminishing the overall utility of expert witness evidence.

23.1.7 The survey results illuminate a complex landscape of experiences regarding the practice of withholding opinions in expert witness reports, an issue that significantly challenges the integrity of arbitration proceedings. The prevalence of ambushing tactics, particularly among expert witnesses and in-house counsel, highlights the need for reform. By instituting robust guidelines mandating comprehensive disclosure and fostering transparent communication channels, the arbitration process can be safeguarded against unexpected and potentially disruptive surprises.

23.1.8 Furthermore, procedural adjustments that allow expert witnesses to elucidate or expand upon their initial opinions before submitting expert witness reply reports can curtail ambush scenarios, ensuring a more equitable playing field. Training expert witnesses in the importance of full disclosure, alongside the implementation of unified data sets and consistent questioning, will further strengthen the coherence of expert witness evidence.

23.1.9 In conclusion, resolving the issue of withheld opinions in expert witness reports is critical for preserving the integrity and efficacy of arbitration proceedings. By championing transparency and instituting clear guidelines, tribunals can ensure fairness and understanding, leading to more predictable and equitable outcomes for all parties involved. These reforms promise to elevate the arbitration process, reinforcing its credibility and reliability in the realm of dispute resolution.





Theme 3

Ensuring the Tribunal Understands

24. In general, should the tribunal require the expert witnesses to meet at an early stage in the procedural timetable to agree on matters such as common data sets and methodologies, to explain to the tribunal the approach they intend to adopt, and/or to facilitate case management?

24.1.1 The survey results showed that 81% of arbitrators, 81% of expert witnesses, 90% of external counsel, and 83% of in-house counsel agree that the tribunal should require the expert witnesses to meet at an early stage in the procedural timetable to agree matters such as common data sets and methodologies, to explain to the tribunal the approach they intend to adopt, and/or to facilitate case management. This is consistent with community-led discussions during webinars and in-person sessions.

24.1.2 Perhaps this result should not be surprising, as early engagement between expert witnesses is frequently discussed and generally encouraged, in recognition of the perceived benefits it brings. Notwithstanding, what is done in practice and how it is done may vary from one tribunal to another.

24.1.3 Early engagement could be by way of procedural order, and could mean adopting one or more of the following approaches:

24.1.4 Establishing a common and catalogued data set.²² A central pillar of effective expert witness evidence is the data set upon which it is based. Ensuring transparency and consistency in the evidence presented starts with ensuring that expert witnesses have access to, and rely upon, a transparent and common data set. Ideally, transparency should extend to the identification of documents the expert witnesses would expect to exist but may not have been provided.

24.1.5 Once an agreed data set²³ is established, only the documents it contains should be relied upon in the expert witness reports. This restriction prevents “document ambush” and ensures that both parties and the tribunal are navigating the same evidentiary landscape.

24.1.6 Counsel should take primary responsibility for establishing a document platform and for cataloguing the data. Expert witnesses can then focus on their core task, which is interpreting and analysing the material on a shared basis.

²² A common data set is the defined and agreed body of documents and information upon which all expert witnesses (or sometimes discipline by discipline) are to rely, ensuring that their analyses are undertaken on the same factual and evidentiary basis. Its purpose is to promote transparency, comparability, and procedural fairness by avoiding reliance on undisclosed or divergent material and ensuring that any differences in expert opinion arise from methodology or judgment, not from the underlying data.

²³ Which may be versioned and updated.

24.1.7 This approach aligns with procedural fairness and aids the tribunal by reducing procedural disputes over the admissibility or availability of information during the expert witness phase.

24.1.8 Parties could therefore agree on the following in the terms of reference or the first procedural order:

“During the first meeting of expert witnesses of like discipline, the expert witnesses shall discuss and if possible agree upon the documents and data that will be relied upon by both expert witnesses. Any agreements shall be recorded in a joint statement and any disagreements shall be raised to the tribunal with reasons within [7] days of the date of the joint statement. If one expert witness receives new documents which are relevant, then they are required to share these documents with the other expert witness expeditiously. Expert witnesses shall always have access to the same documents.”

24.1.9 It should be acknowledged that if documents are “drip fed” to the expert witnesses, or provided late, then the result may be that the expert witness evidence cannot or does not align. It will also likely increase the fees of the expert witnesses as they navigate a changing evidentiary landscape. The tribunal and counsel should be proactive in managing this together.

24.1.10 Methodologies. Differences in methodology are often a primary point of divergence in expert witness opinion and among the most difficult for tribunals to navigate. Encouraging early discussions between expert witnesses on the methodologies they intend to adopt can significantly

improve the clarity and efficiency of expert witness input.

24.1.11 Early in the timetable, and before expert witness reports are exchanged, the tribunal should ordinarily require expert witnesses to meet and identify the methodologies they propose to use. This not only assists the expert witnesses to better understand each other’s approach but also provides an opportunity to explain those methodologies to the tribunal before any substantive analysis begins. In some cases, the tribunal may itself indicate a preferred methodology or identify key assumptions that should be addressed. In the event of such expert

witness preference, the tribunal should be alert to suggestions of tribunal bias or predisposition. If an issue will ultimately turn on which methodology the tribunal finds more persuasive, early engagement determining expert witness methodologies may prevent the doubling of expert witness fees with consequential ongoing fee increases and unnecessary duplication of work.

24.1.12 Clarifying methodological issues from the outset can also help to narrow the dispute, focus expert witness analysis on points of real contention, and ultimately reduce the time required for the tribunal to understand and decide the issues at hand.

24.1.13 Parties could therefore agree on the following to be included in the terms of reference or the first procedural order:

“During the first meeting of expert witnesses of like discipline, the methodology that the expert witnesses will use shall be discussed and if possible agreed. If the methodology is agreed then the methodology should be recorded as such in a joint statement, including in relation to the specific samples and ranges to be adopted (if appropriate).

If the methodology is not agreed, then the expert witnesses shall be obliged to promptly notify the tribunal as to whether the difference in methodology: a) may create a substantial difference in their final opinions, b) may incur substantial expert witness fees, and c) anything else of relevance for the tribunal’s consideration at this time.

What is “substantial” should be considered in the context of this [arbitration]. Any disagreements shall be raised to the tribunal with reasons. If the tribunal considers it appropriate, it will provide direction/ instruction on the proposed methodologies.”

24.1.14 Figures-as-figures. In cases where quantum expert witnesses are asked to give evidence, the concept of figures-as-figures is often used. This refers to an assessment presented on a contingent or assumed basis, setting out alternative outcomes depending on which factual or legal assumptions the tribunal accepts. Expert witnesses should be encouraged/directed by the tribunal to provide opinion based on whoever succeeds in a particular claim.

24.1.15 To be effective, tribunal expectations on figures-as-figures should be defined and made clear to all parties from the outset. In many arbitrations, tribunals do not explicitly request figures-as-figures, and some expert witnesses may be unfamiliar with the expectation to present their analysis in this manner.

24.1.16 Given that the tribunal is ultimately responsible for drafting the award and determining the outcome of the parties’ disputes, the tribunal should assume responsibility for the structure in which the figures-as-figures assessment is to be presented.

24.1.17 Currently, the understanding and application of figures-as-figures vary significantly across regions and practice areas. However accomplished, promoting global consistency as to how expert witness evidence is presented and quantified will assist tribunals.

24.1.18 Parties could therefore agree on the following to be included in the terms of reference or the first procedural order:

 Yes  No

In-House Counsel



Arbitrators/Tribunal



External Counsel



Expert Witness



Chart 22. In general, should the tribunal require the expert witnesses to meet at an early stage in the procedural timetable to agree matters such as common data sets and methodologies, to explain the approach they intend to adopt, and/or to facilitate case management?



24.1.19 The effectiveness of party-appointed expert witness evidence depends not only on the expertise of the expert witnesses involved, but on the clarity of the process and the expectation surrounding their work. By requiring early expert witness meetings, shared data sets, pre-agreed methodologies, and structured

quantification through figures-as-figures opinion, tribunals can improve both the quality and efficiency of the expert witness process. Above all, these measures help ensure that the tribunal understands the evidence presented to it – an objective that is essential to any effective dispute resolution process.

“Where there are differing facts, methodologies and liability scenarios, the tribunal requires the expert witnesses, within reason, to prepare their opinions in relation to all scenarios. Those scenarios should be agreed upon between the expert witnesses as early in the process as possible and reported to the tribunal in order to elicit any comments, along with any disagreed scenarios (i.e., whichever party succeeds on liability on each claim). The expert witnesses should prepare joint wording explaining the basis of each scenario and the facts, assumptions, and liability upon which they are based.”



25. Should the tribunal be encouraged to read the expert witnesses’ reports as they are served?

25.1.1 The survey results showed that 67% of arbitrators, 89% of expert witnesses, 92% of external counsel, and 83% of in-house counsel agreed that tribunals should be encouraged to read expert witness reports as they are served.

25.1.2 In addition, in community-led discussions during webinars and in-person sessions, the recommendation for arbitrators “to engage on time” and

“review documents earnestly” was repeatedly identified as important. This is particularly important, as it enables tribunals to react promptly to requests for intervention and orders, with full knowledge of the issues the parties are engaged in discussing. All parties – clients, lawyers and expert witnesses – expect and desire tribunals to be available and interactive throughout the whole dispute resolution process.

Yes No

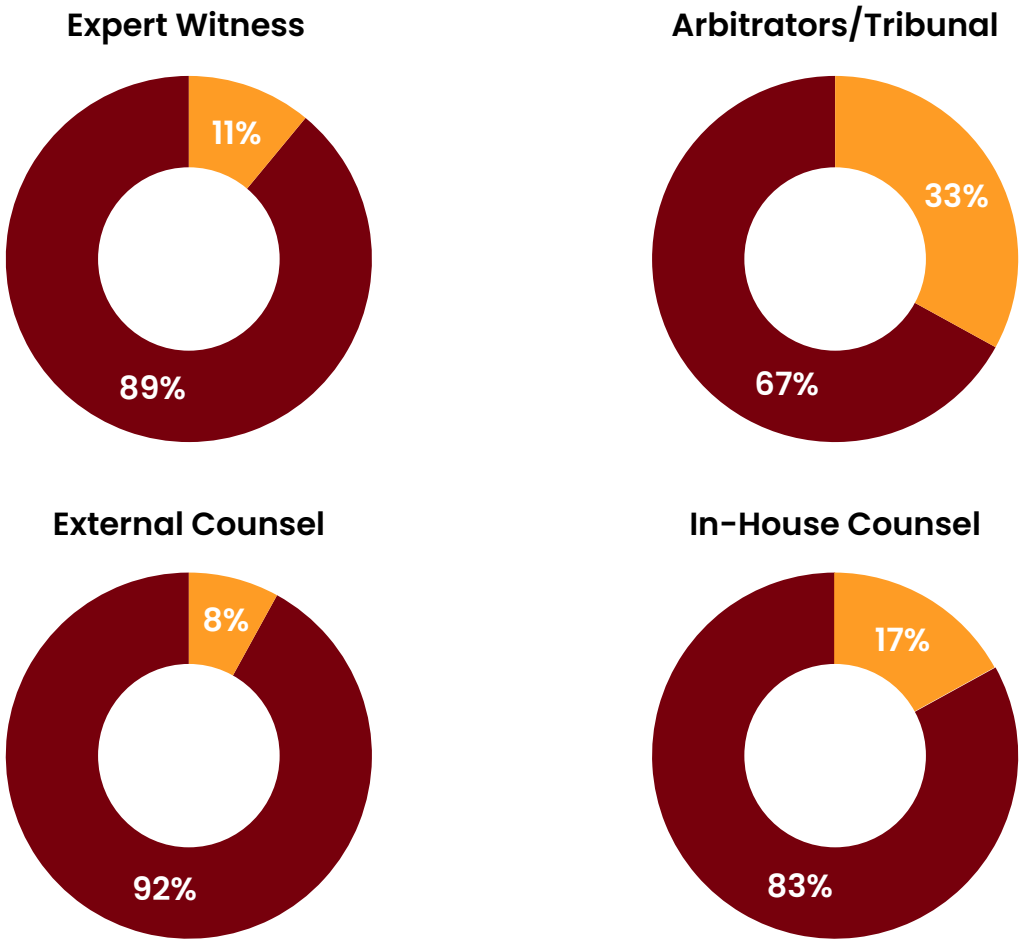


Chart 23. Should the tribunal be encouraged to read the expert witnesses’ reports as they are served?



25.1.3 Notably, the result of the survey showed that fewer arbitrators than expert witnesses and counsel considered that tribunals should be encouraged to read expert witness reports as they are served. Possible reasons for this might include availability and capacity constraints of the tribunal, and/or a desire to read the expert witness reports and reply reports together, prior to the hearing, and together with the final joint statements and reports.

25.1.4 However, given the consensus that tribunals should read the expert witness reports as they are served, and the fact that doing so enables tribunals to be more proactively engaged in the production of the most helpful expert witness evidence and address the most salient issues, tribunals are encouraged to be engaged with expert witness evidence throughout the proceedings.

25.1.5 Parties should, prior to appointment of an arbitrator candidate (together with the usual conflict check email), ensure candidate availability by requesting information as to how many other disputes they are currently arbitrating. The parties should also indicate to the candidate their expectation that the case will involve expert witness reports and ask the candidate to confirm that they will review the reports as they are served and will engage with the parties and expert witnesses in an ongoing manner

to ensure the expert witness reports are helpful to the tribunal.

25.1.6 In addition, scheduling in the timetable should include a stage after the first (or all) expert witness reports are served in order to (1) allow the tribunal to ask questions or request that certain issues are covered or expanded upon by the expert witnesses in their subsequent expert witness reports, and (2) allow the expert witnesses to identify the main areas of disagreement between them along with full reasons (to assist the tribunal to navigate the key issues).

25.1.7 If expert witness reports are expected to be particularly technical, complex and/or lengthy, the tribunal could be invited to prescribe a particular format for the expert witnesses to follow to identify and explain the key issues or principles in the first section of the report. This could include (1) the questions being opined on, and (2) the outcome of the analysis.

25.1.8 A related point is that most survey respondents concluded that tribunals do not engage enough with expert witnesses ahead of evidentiary hearings. Earlier engagement between tribunals and expert witnesses is likely to increase if tribunals read expert witness reports as they are served, as this is likely to raise immediate questions and thoughts which the tribunal should feel permitted to ask

without the worry that it will lead the expert witnesses or parties in any particular direction. Parties could

therefore agree on the following in the terms of reference or the first procedural order:

“The parties and tribunal concur that expert witness evidence will be beneficial for the tribunal’s understanding of certain matters in dispute. The tribunal wishes to ensure that the expert witness evidence addresses the issues in dispute and is easily comparable as between the expert witness reports for each party. To this end, the parties agree that the tribunal is permitted and encouraged to write to the parties with comments and questions arising from the expert witness reports at any time. The parties agree that such questions or comments will not be construed as leading, indicative or conclusive, and are shared with the parties in the interests of efficiency and to serve both parties’ best interests.”

25.1.9 It is expected that this provision could encourage tribunals to feel emboldened to articulate their expectations and observations earlier in time, and even to recommend guidance to the parties and the expert

witnesses as to what they consider are (post first expert witness reports) the issues in dispute that the expert witnesses are required to address, without feeling exposed to the risk of impugning any award.



26. Should directions for expert witness reports include directions for word-limited summaries to be served with the full reports to encourage the tribunal to engage with the reports as they are served? Should tribunals place specific word or page limits on expert witness reports?

26.1.1 The survey results showed that 59% of expert witnesses, 61% of arbitrators, 75% of external counsel, and 83% of in-house counsel agree that directions for expert witness reports should include directions for word-limited summaries to encourage the tribunal to engage promptly with the reports as they are served.

26.1.2 Similarly, in response to the question as to whether the tribunal should place specific word or page limits on expert witness reports, the results reveal a range of views across stakeholder groups. Among expert witnesses, the largest proportion (49%) considered that it depends on the case, whilst 30% thought word or page limits should not be imposed and 21% thought they should. External counsel was more resistant to word or page limits, with 41% considering that it depends on the case, 52% opposing word or page limits, and only 7% supporting them. Arbitrators presented a more balanced distribution, with 49% considering that it depends on the case, 30% opposing word or page limits, and 21% supporting them. In-house counsel showed the strongest inclination toward a case-specific approach, with 84% considering that it depends on the case and 16% supporting word or page limits.

26.1.3 These results are consistent with one of the principal issues raised in community-led discussions during webinars and in-person sessions: that expert witness reports can be overly lengthy, particularly in construction-related disputes where anecdotal evidence suggests that reports frequently exceed 800 pages (excluding appendices). Even several hundred pages may be too much for a tribunal to fully absorb.

26.1.4 Practitioners reported a perception that tribunals may not engage with lengthy reports at the time they are served, instead relying on expert witnesses to crystallise and narrow down their agreements and disagreements through the joint expert witness process. Joint statements are commonly served near to the hearing date. At that stage, it is often too late for the tribunal to usefully intervene to contribute to the effectiveness of expert witness evidence, and hence the tribunal may receive expert witness evidence which is unhelpful and/or does not answer the specific issues on which the tribunal expected to receive technical guidance.

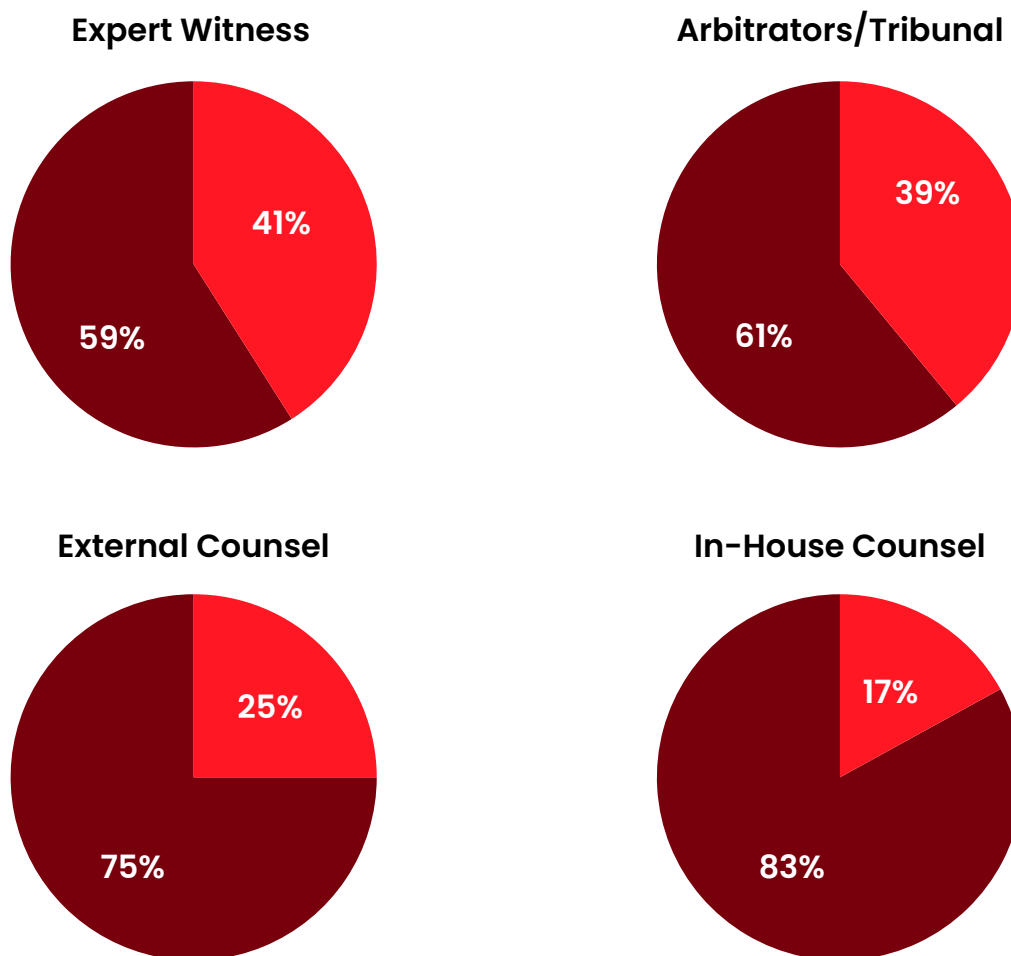


Chart 24. Should directions for expert witness reports include directions for word-limited summaries to be served with the full reports to encourage the tribunal to engage with the reports as they are served?

26.1.5 The strong majority support is therefore that word-limited summaries are a necessity and that such summaries would encourage the tribunal to engage with expert witness evidence as the expert witness reports are served.

26.1.6 The survey shows that, compared to party representatives (external and in-house counsel), fewer expert witnesses and arbitrators consider word-limited summaries to be helpful.

This is possibly due to a belief by some expert witnesses and arbitrators that expert witnesses should not be constrained in how their opinions are presented or summarised. However, given that most of the arbitration community appears to favour limitation guidelines, these should be considered and (if appropriate) implemented by the tribunal in the first procedural order.

26.1.7 If such guidance is implemented, it will be essential for the summary to be helpful, accurate and clear. A summary which does not achieve these objectives may lead to the opinions being misunderstood by the tribunal and the parties. One example of an unhelpful approach to summarisation is where quantum summaries contain figures only, without any explanation of how (or from where) the figures have been derived.

26.1.8 As to what word-limited summaries should contain, this could be a pragmatic and succinct explanation of the issues being addressed, augmented with the anchor points of the expert witnesses' reasoning together with the opinion, such that the opinion can be easily and fully understood. Details as to the data set from which the opinion derives should be referenced (possibly using footnotes) to enable cross-checking against the more detailed reasoned analysis underpinning the summary. Ideally, the structure and content of the summary should be agreed between expert witnesses of like discipline, to enable a comparison to be made on a 'like for like' basis. The use of a Scott Schedule summarising each issue and the expert witnesses' opinion could be adopted.

26.1.9 Lastly, as to the specific word or page limit, international arbitrations vary significantly in size

and complexity and so the content, format and limits should be discussed between the expert witnesses and ultimately decided by the tribunal on a case-by-case basis for each expert witness discipline. In practical terms, summaries of expert witness reports of the same disciplines should be very similar in terms of content, format and word and page limit, and expert witnesses should contemplate this whilst preparing their expert reports by adopting the guidance as set out above.

26.1.10 This could mean agreement between the parties within the terms of reference or first procedural order, as to the appropriate word or page limits of the expert witness's reports.



27. Should the tribunal prepare lists of questions for the expert witnesses in advance of the hearing?

Yes

No

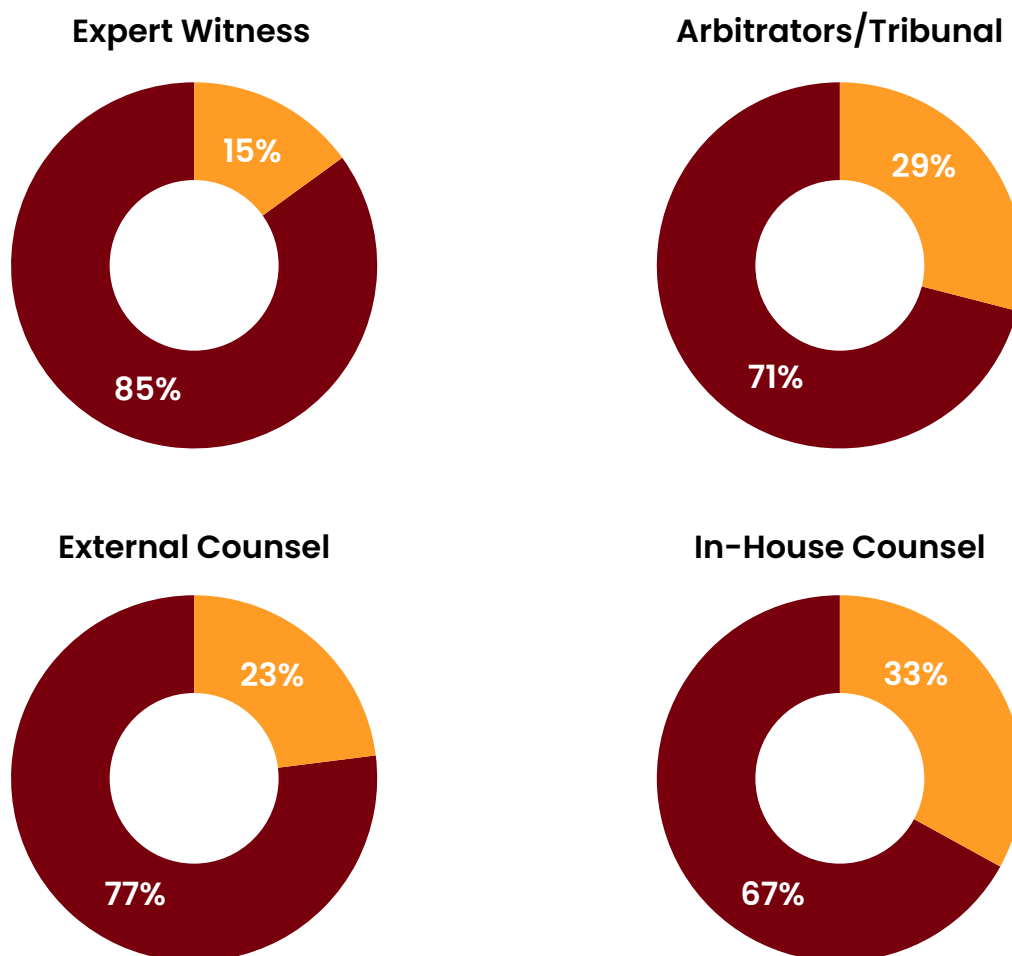


Chart 25. Should the tribunal prepare lists of questions for the expert witnesses in advance of the hearing?

27.1.1 The survey results showed that 71% of arbitrators, 85% of expert witnesses, 77% of external counsel, and 67% of in-house counsel agree that the tribunal should prepare a list of questions for the expert witnesses in advance of the hearing. The clear majority consensus is therefore that the tribunal should be in a position, prior to the hearing, to prepare a list of questions for the expert witnesses.

27.1.2 Lists of issues are commonly used by parties in arbitration to guide the tribunal as to the key legal and factual questions which will require the tribunal's utmost attention. In the context of expert witness issues, it seems a natural extension for arbitrators to be encouraged to prepare lists of questions for the expert witnesses before the hearing, provided it is done transparently and even-handedly.

27.1.3 The timing of when the questions are asked should be addressed by the tribunal in the timetable and may be impacted by the mode of submissions. For example, with memorial style pleadings lists of questions might be issued iteratively, but if expert witness reports are concurrent and post-pleadings and post-factual evidence, then perhaps only one list of questions might need to be prepared.

27.1.4 In all cases, expert witnesses should be given sufficient time in advance of the hearing (and of the joint expert witness reports if possible) to thoroughly consider the tribunal's questions. The questions should provide some assistance to expert witnesses in the preparation of final joint expert witness statements and hearing preparation. The earlier the list of questions is provided, the more opportunity the expert witnesses have to fully address the questions and so the tribunal has to support the expert witnesses as required.

27.1.5 The tribunal will be keen to ensure that the release of lists of questions is framed and timed to avoid any appearance of pre-judgment and to preserve each party's right to present its case.

27.1.6 The benefits of tribunal pre-hearing engagement with the expert witnesses in this way include

the potential to narrow the field of questioning and ensure like-for-like comparisons are clear as between opposing expert witnesses. Early provision of targeted questions increases the likelihood that expert witnesses will "hit the mark" under cross-examination and also has the potential to reduce the length of the hearing. Such targeted questions should also provide the tribunal with a useful platform to engage in expert witness conferencing should they so choose.

27.1.7 Tribunals producing such lists should ensure the draft is shared with both parties, possibly inviting short simultaneous comments to elicit additional issues or questions to be added. Then a final, non-exhaustive list of questions, with a neutrality disclosure such as "these questions do not indicate any concluded view" should be issued. Tribunals should seek to ensure the questions are topic-based and symmetrical, avoiding leading formulations.

27.1.8 Used effectively, a pre-hearing list of questions posed to expert witnesses can be a powerful tool – not only to expedite the progress of the case, but particularly to shape helpful, comparable and efficient expert witness evidence.

28. Should the tribunal have any involvement with expert witness meetings?

28.1.1 The survey results showed limited support for tribunal involvement in expert witness meetings. Only 6%–8% of respondents supported direct involvement, whilst 33%–50% of respondents say it “depends on the case”. A majority therefore either rejected tribunal involvement or preferred a case-specific approach.

28.1.2 These findings suggest a general reluctance to endorse routine tribunal participation in expert witness meetings. However, community-led

discussions during webinars and in-person sessions indicated that some level of early tribunal direction can enhance clarity and focus, ensuring that expert witness evidence directly addresses the issues in dispute.

28.1.3 The idea of tribunal attendance at expert witness meetings may raise concerns with tribunals around perceptions of bias, procedural fairness, and practicality. In particular, there is a concern that too much involvement could be perceived

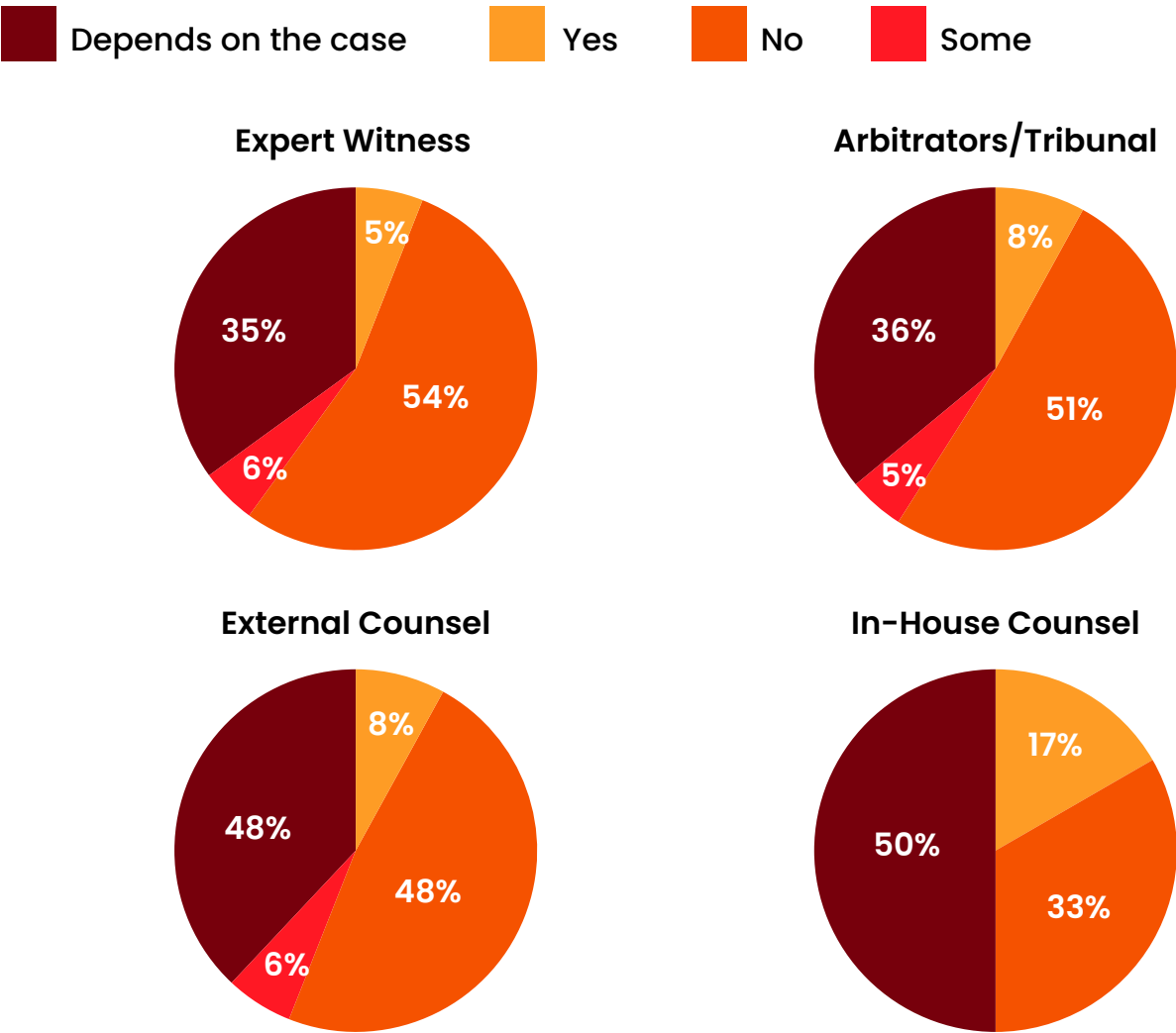


Chart 26. Should the tribunal have any involvement with expert witness meetings?



as being overly interventionist. The responses suggest that tribunal involvement with expert witness meetings should be limited and carefully calibrated.

28.1.4 Circumstances where tribunal involvement may be appropriate include highly technical disputes (e.g., construction, energy, or finance) where tribunal guidance would ensure expert witnesses are aligned on scope and underlying assumptions (if any); multi-disciplinary expert witness cases where coordination is required to prevent fragmentation; and situations which may involve significantly divergent methodologies that may confuse the tribunal if not clarified early. In some instances, party agreement on Tribunal involvement may be appropriate, especially in disputes with high evidentiary complexity, or where the tribunal identifies misalignment (or potential for misalignment) in expert

witness reports that could reduce the usefulness of the opinions.

28.1.5 Practically enabling an appropriate level of tribunal involvement could include early agreement on how and to what extent expert witness conferencing will be supervised, or agreement during the first procedural conference, together with the use of tribunal-issued or approved lists of issues or procedural guidance. In addition, expert witnesses should be required to produce joint expert witness reports that clearly identify agreed and non-agreed items with reasoning, and the tribunal should be encouraged to set expectations for the format and key points of expert witness reports (e.g., a summary of core questions and conclusions).

28.1.6 By way of recommendation the following text (or similar) could be incorporated in the terms of reference or first procedural order:

“The tribunal recognises that expert witness evidence may be central to the resolution of technical issues in this dispute. To promote efficiency and transparency, the tribunal may provide procedural directions regarding expert witness meetings, including setting a list of topics to be addressed after consultation with the parties. The tribunal will not attend such meetings unless agreed by the parties. Any such direction will be made solely to facilitate clarity and shall not be construed as influencing the expert witness evidence or prejudging any issue.”

28.1.7 The tribunal will need to identify whether counsel should also attend any such expert meetings.

28.1.8 The consensus appears to be that tribunal involvement in expert witness meetings should not be routine.

However, structured, case-specific tribunal facilitation on procedural issues may improve clarity, reduce duplication, and promote meaningful expert witness engagement, particularly in complex disputes with highly technical aspects.



29. Should the tribunal assist in identifying the issues which it requires the expert witnesses to address in their reports?

Yes No Perhaps/case-specific

In-House Counsel



Arbitrators/Tribunal



External Counsel



Expert Witness



Chart 27. Should the tribunal assist in identifying the issues which it requires the expert witnesses to address in their reports?

29.1.1 The survey results showed majority support for the notion that the tribunal should assist in identifying the issues which it requires the expert witnesses to address in their reports. Only 20% responded that the tribunal should not identify the issues, whilst 60% responded that the tribunal should identify the issues for the expert witnesses. This finding is in line with community-led discussions during webinars and in-person sessions.

29.1.2 Typically, arbitral rules provide tribunals not only with the discretion but also, in many cases, with a responsibility to define or refine the scope of expert witness evidence. This

ensures that expert witness opinion is focused, proportionate, and responsive to the matters genuinely in dispute.

29.1.3 Widely recognised rules on the taking of evidence commonly provide that, in the case of tribunal-appointed expert witnesses, the tribunal shall, after consultation with the parties, establish the expert witness’s terms of reference. For party-appointed expert witnesses, such rules empower the tribunal to require expert witnesses to identify points of disagreement among them, thus clarifying the key issues.

29.1.4 The Chartered Institute of Arbitrators Protocol for the Use of



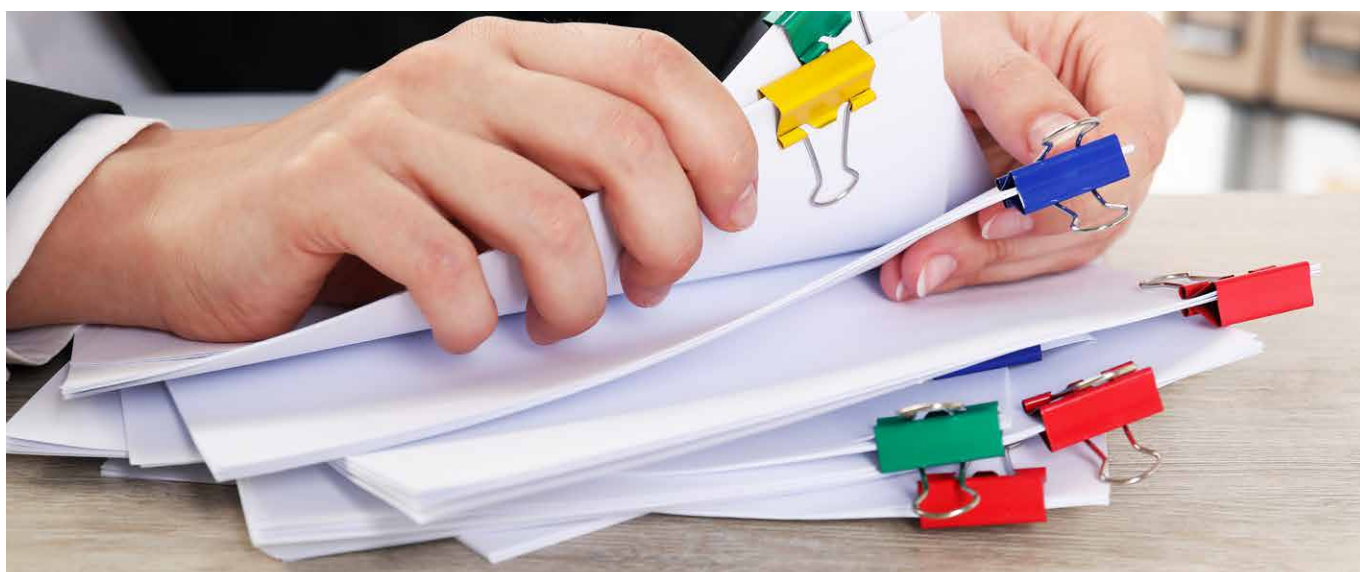
Party-Appointed Expert Witnesses in International Arbitration 2007, drawing on legislative reforms that had occurred in England & Wales and elsewhere, offered detailed guidance on expert witness reports and the principles of independence. Article 6 for example, provides detailed, but flexible, guidance on procedural matters for the taking of evidence, encouraging expert witnesses to discuss, identify, and where possible, agree on issues and analysis prior to the preparation of reports. As part of this process, the tribunal can direct expert witnesses to exchange draft outlines without prejudice to the parties' positions (not seen by the tribunal). Expert witnesses shall then provide a statement to the tribunal on areas of agreement and disagreement with reasons, a process which is useful for focussing in on the key contentious points in the evidence.

29.1.5 In practice, there are various reported cases where tribunal definition of issues took place, and

where the tribunal actively defined technical questions so the expert witnesses could avoid duplication and streamline the proceedings. Tribunals are also known to have shaped the scope of expert witness evidence to ensure proportionality and to prevent overreach.

29.1.6 Tribunal assistance in the early identification, definition and redefinition of the issues is recommended practice and is beneficial as it enhances the ultimate value of expert witness evidence.

29.1.7 Defining the scope of expert witness evidence enhances efficiency, safeguards fairness, and ensures that arbitral proceedings remain within the tribunal's control. While respecting party autonomy, tribunals that engage in issue identification strengthen the quality and reliability of expert witness input, ultimately aiding in the resolution of the dispute.



30. Should the industry have a standardised expert witness report template?

30.1.1 The survey results showed that only 18% of arbitrators, 12% of expert witnesses, 13% of external counsel, and 0% of in-house counsel agreed that the industry should have a standardised expert witness report template.

30.1.2 The overwhelming response was therefore against the use of a standardised expert witness report template as a matter of course. Given the vast array of likely topics and disciplines which may form the subject of expert witness evidence, there is likely to be a need for flexibility in the form of expert witness reports to suit the requirements of the subject matter.

30.1.3 However, there were significant numbers who considered it may be possible for some parts of a report to be standardised. Indeed, 42% of arbitrators, 47% of expert witnesses, 48% of external counsel, and 83% of in-house counsel could see merit in some element of standardisation in the reports. The real question, therefore, becomes: which elements of expert witness reports could or should be standardised?

30.1.4 Respondents identified certain elements which should be included in expert witness reports. These include the declaration and key conclusions sections, a structured summary of areas of agreement and disagreement,

and appendices for detailed workings or calculations.

30.1.5 Beyond this, it was considered that creating a rigid standardised format for a report is probably inappropriate and that the structure and contents of expert witness reports should be left to the discretion of the expert witnesses themselves.

30.1.6 By way of recommendation for expert witness reports, respondents noted the following:

- a) Reports must clearly address the relevant issues.
- b) Reports work better as a narrative rather than exposition of overly complex calculations.
- c) Consideration should be given as to how the tribunal will absorb and understand the information presented. Reports should make it easy for the tribunal to digest and access key information efficiently.
- d) Lengthy (e.g., 300+ page) PDFs without bookmarks or built-in navigation should be avoided. Relying solely on lengthy, dense written reports is ineffective and renders reports hard to follow.

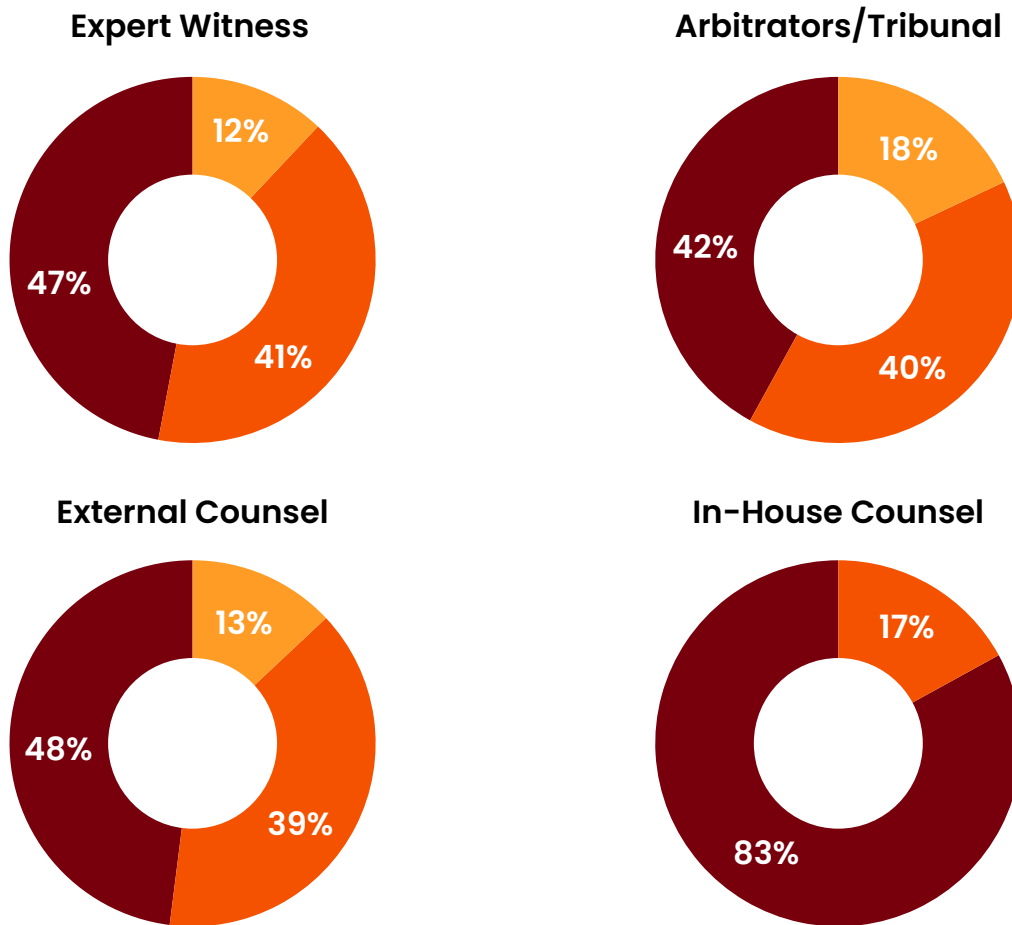


Chart 28. Should the industry have a standardised expert witness report template?

e) Noting that many tribunals use electronically generated information, reports should be optimised for digital review.

30.1.7 It was also noted that there are organisations which provide model forms of reports designed to assist expert witnesses in producing reports that are clear, concise and tribunal-friendly. While some of these templates are focussed on court litigation, it is possible to adapt them for arbitration.

30.1.8 It is also common for external counsel to provide their appointed expert witnesses with parameters in terms of the format of their reports, again seeking to ensure that expert witness reports are concise and include such key elements of well organised reports as the following:

- a) contents page;
- b) separate sections with clear headings;
- c) glossary of significant technical terms;

- d) details of academic and professional qualifications;
- e) identification and credentials of assistants;
- f) a statement of the source of instructions and purpose of the report;
- g) a chronology of events;
- h) a statement of the methodology used;
- i) details or lists of documents or other evidence upon which aspects of the report are based;
- j) a statement setting out the substance of all material instructions;

- k) an executive summary;
- l) any qualification of or reservation of opinion;
- m) a summary of the conclusions reached; and
- n) declarations and disclosures.

30.1.9 There may be circumstances where a tribunal may choose to give guidance as to how certain elements of an expert witness report could be approached, such as declarations. This may extend to the technical areas of a report where a tribunal is of the view that this will assist them with understanding such areas.



31. Do expert witnesses make sufficient use of technology to present their evidence (including bookmarks/videos/graphic timelines etc.)?

31.1.1 The survey results showed that nearly two-thirds of all stakeholder groups agree that expert witnesses make sufficient use of technology to present their evidence, but only either “occasionally” or “sometimes”. Among arbitrators, 32% voted that sufficient use happens often, with 21% of external counsel and around 16% of expert witnesses and in-house counsel agreeing. Only 4% of arbitrators voted that expert witnesses do not make sufficient use of technology, with

10% of external counsel, 15% of expert witnesses and 17% of in-house counsel agreeing.

31.1.2 In general, the survey therefore indicates that, although expert witnesses do not greatly underuse technology, further usage could assist in maximising the effectiveness of expert witness evidence.

31.1.3 Whilst expert witness evidence is typically expressed in written reports,

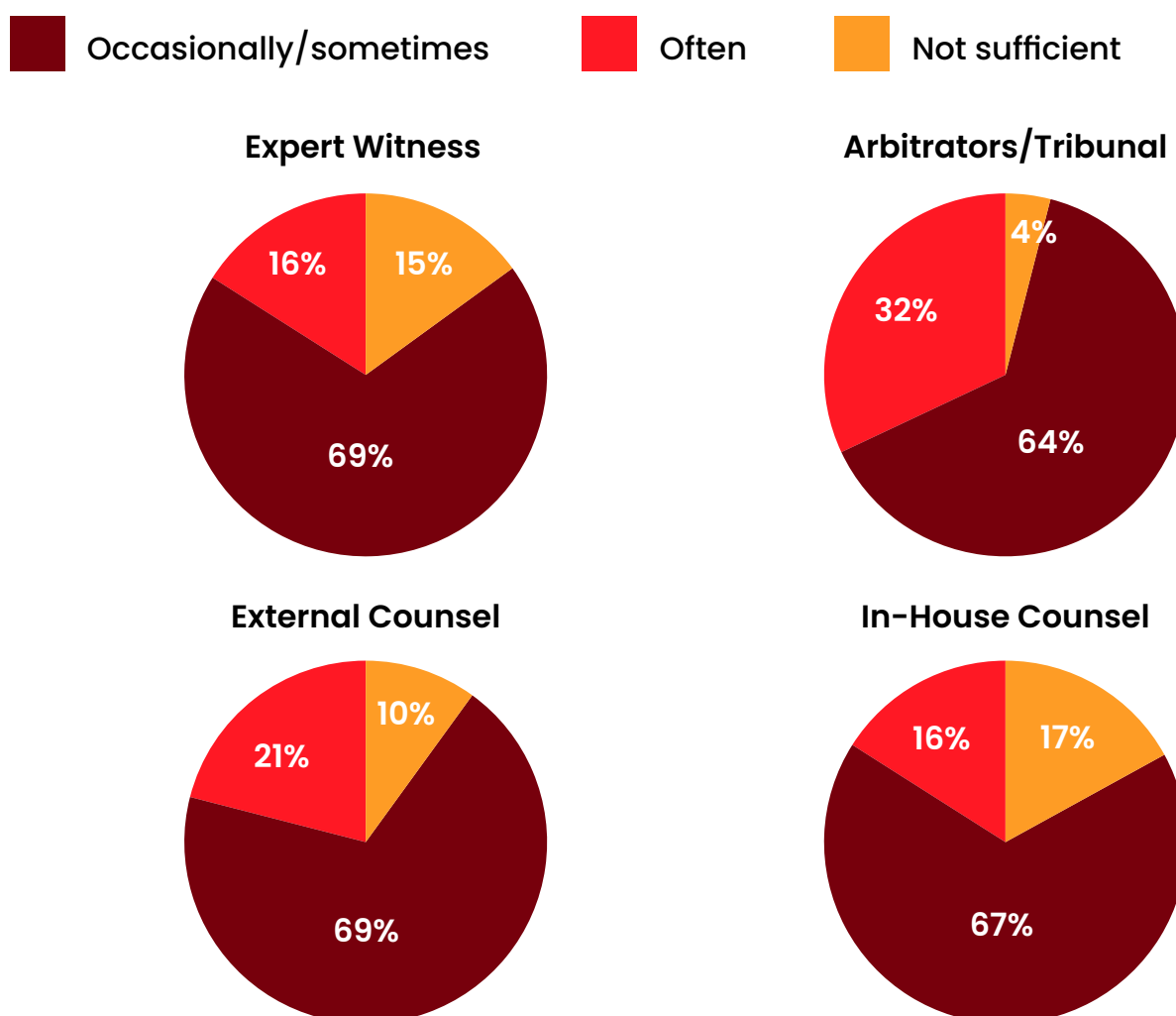


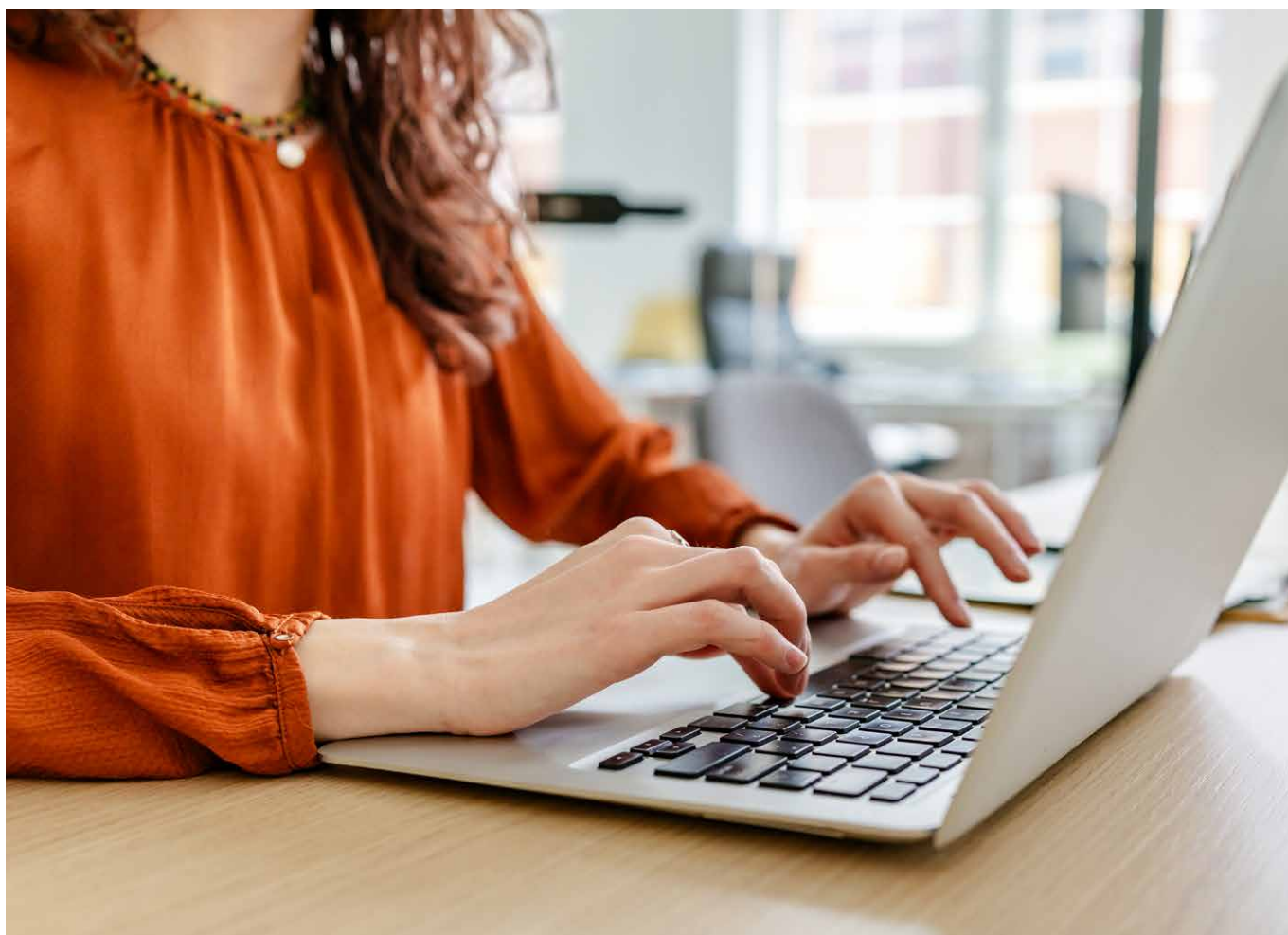
Chart 29. Do expert witnesses make sufficient use of technology to present their evidence (including bookmarks/videos/graphic timelines etc.)?

expert witnesses are encouraged to use any technology available to them. This can be materially helpful. One example is the use of graphics and demonstrative videos in complex delay analysis cases where they can be used effectively as a way of presenting vast volumes of documents, and reinforce understanding of why certain activities are on the critical path and others are not.

31.1.4 As a minimum in the use of technology, expert witness reports ought to be in an easily navigable PDF format, with an automated contents page, enumerated sections and paragraphs, and automated footnotes.

These features make it easy for the reader to quickly move around the report. Where circumstances allow, expert witness reports hyperlinked to appendices and exhibits are of substantial benefit.

31.1.5 By way of recommendation, parties should set about agreeing what technology they require the expert witnesses to adopt, and request that the tribunal sets this out in the first procedural order. That procedural order should provide expert witnesses the autonomy to use any tools available to them to present their evidence.



32. Should the tribunal require expert witnesses to produce lists of agreed/disagreed issues with full/complete reasons for any disagreement?

32.1.1 The survey results showed, supported by webinar and in-person discussions, a strong consensus that tribunals should require expert witnesses to produce joint lists of agreed and disagreed issues, with full reasons for any disagreements. Support was high across all groups. Among arbitrators, 63% supported this approach, 33% said it depends on the case, and 4% opposed it. Expert witnesses showed similar views, with 66% in favour, 28% saying it depends, and 5% opposed. External counsel was also broadly supportive, with 60% in favour, 38% saying it depends, and 2% opposed. In-house counsel expressed the strongest support, with 83% in favour and 17% saying it depends, and no opposition.

32.1.2 The rationale for this consensus is likely rooted in the practical benefits such lists provide to the tribunal and the arbitral process as a whole. The expectation and desire of clients, counsel, and expert witnesses is for the tribunal to be able to quickly and efficiently identify the real areas of dispute, understand the basis for any divergence, and focus the hearing on the most material issues. This is particularly important in complex technical or quantum disputes, where the underlying reasons for disagreement may not be immediately apparent from the expert witness reports alone.

32.1.3 The majority consensus is therefore that tribunals should require expert witnesses to produce structured lists of agreed/disagreed issues, with full and complete reasons for any disagreement. This requirement is seen as a key tool for maximising the effectiveness of expert witness evidence and ensuring the tribunal's understanding.

32.1.4 By way of recommendation:

- a) The tribunal should direct at an appropriate stage in the timetable (typically after the exchange of initial expert witness reports and before the hearing) that the expert witnesses confer and jointly produce a list of issues, clearly identifying those on which they agree and disagree.
- b) For each issue agreed, the expert witnesses should be required to provide a full reasoned basis of the agreement.
- c) For each issue disagreed, the expert witnesses should be required to provide a full, reasoned explanation for their respective positions. This should include references to data, methodology, or assumptions, and, where relevant, highlight any factual or legal issues that may impact the expert witness's view.

d) The process should be collaborative between the expert witnesses, with minimal counsel (if any) involvement, given this is a joint expert witness process.

e) The tribunal may wish to provide guidance or a template for the lists, but flexibility should be retained to accommodate the needs of different disciplines and case types.

f) Where expert witness evidence is particularly technical or complex, the tribunal could invite the expert witnesses to include, in the first section of their joint statement, a summary of the key issues and the outcome of their analysis, to assist the tribunal in navigating the evidence.

32.1.5 It is acknowledged that, in some cases – particularly smaller or less complex disputes – the requirement of lists of issues may not be appropriate or may need to be adapted. The tribunal should retain discretion to tailor the process to the circumstances, but the default should be in favour of requiring such lists unless there is good reason not to.

32.1.6 During community discussion the option to direct a first joint expert witness report into areas of agreement/disagreement (with full, reasoned explanation for their respective positions) was debated. The consensus went further than most recommendations on joint expert witness reports, proposing that expert witnesses see each other's full opinions

■ Yes ■ It depends on the case ■ No

In-House Counsel



Arbitrators / Tribunal



External Counsel



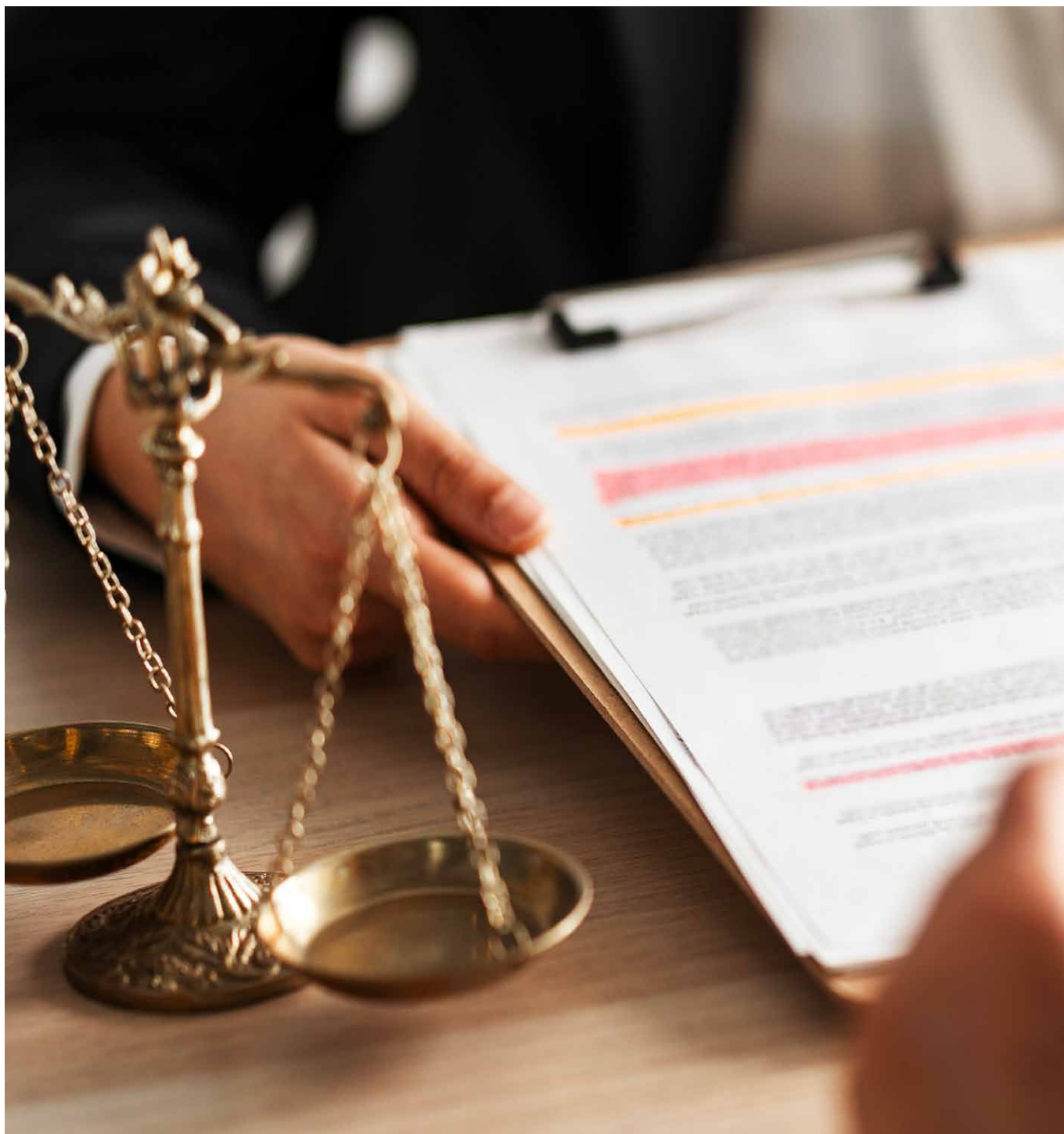
Expert Witness

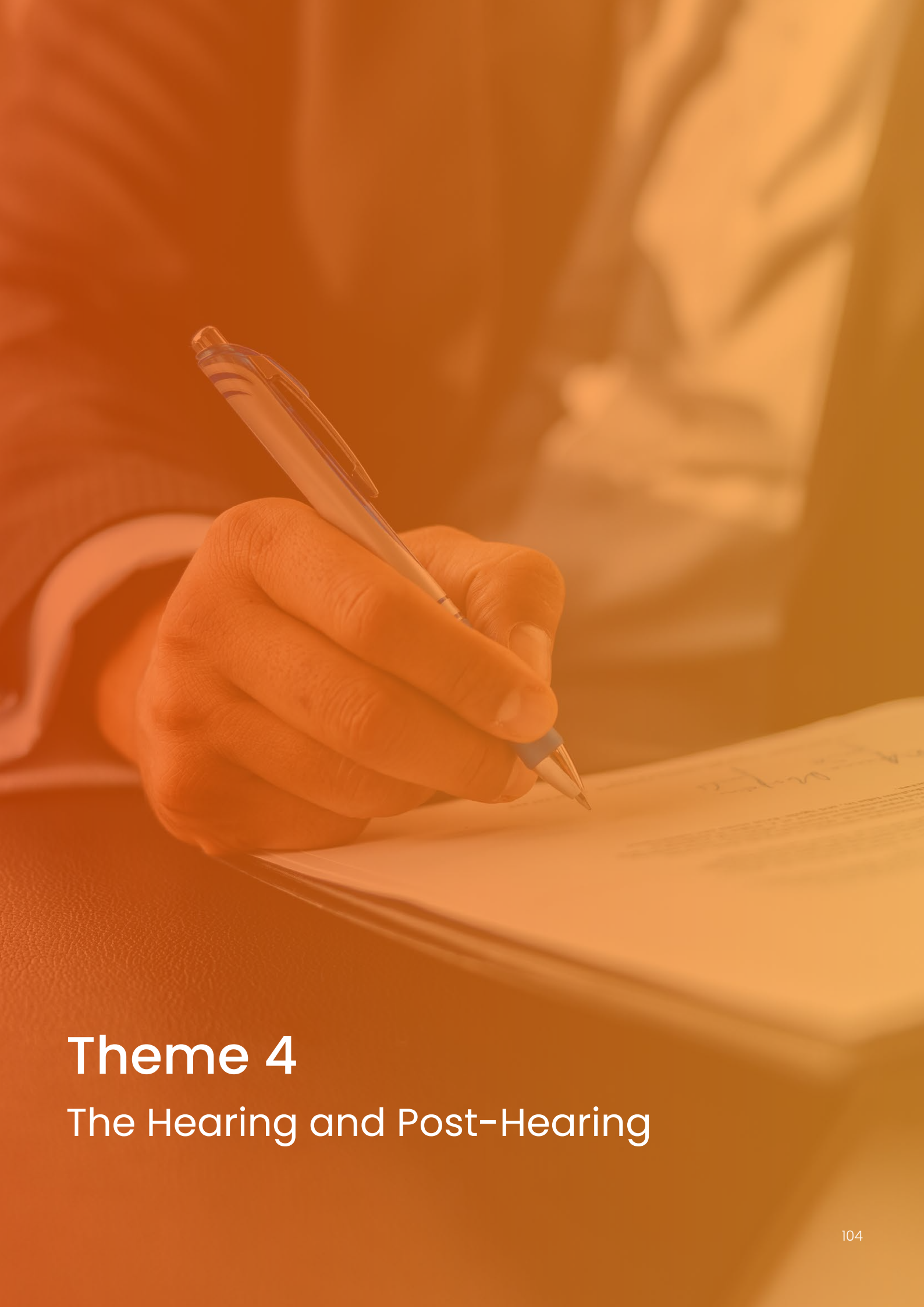


Chart 30. Should the tribunal require the expert witnesses to produce lists of agreed/not agreed issues with full and complete reasons for any disagreement?

in writing prior to submission of any report to the tribunal. This allows for a full dialogue to take place, retaining the benefits of a joint expert witness report process while incorporating the depth and detail typically found in individual expert witness reports.

32.1.7 It is expected that this approach will encourage expert witnesses to engage constructively, provide transparency in their reasoning, and enable the tribunal to focus on the real issues requiring determination. This, in turn, will enhance the efficiency and effectiveness of expert witness evidence in arbitration.





Theme 4

The Hearing and Post-Hearing

33. Can witnesses of fact act as expert witnesses?

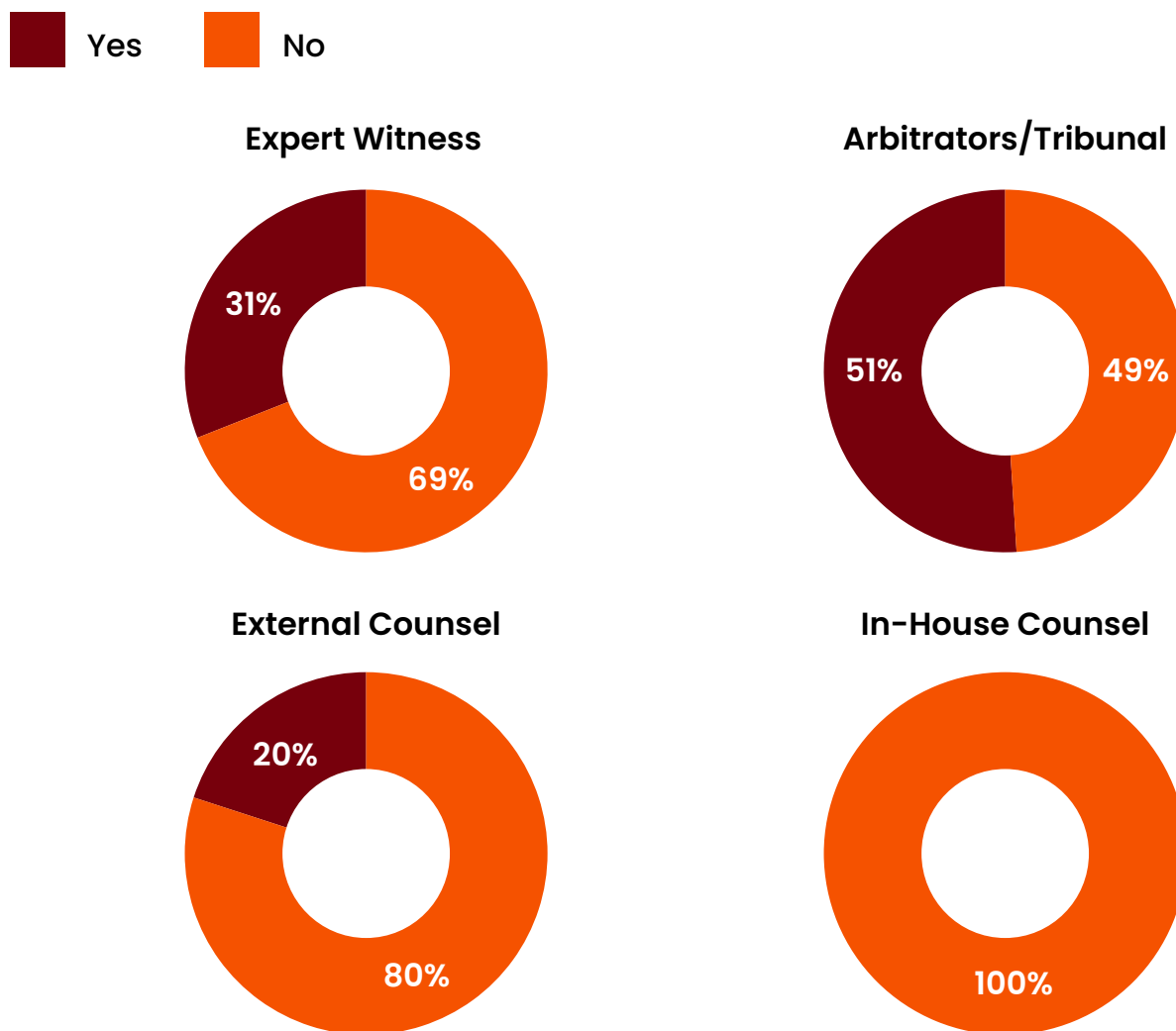


Chart 31. Can parties' witnesses of fact act as expert witnesses?

33.1.1 The survey results showed that 51% of arbitrators considered that witnesses of fact could act as expert witnesses, whilst 49% disagreed. However, 80% of external counsel considered that witnesses of fact should not act as expert witnesses. Expert witnesses were similarly conservative, with 69% opposing the practice. In-house counsel unanimously (100%) opposed the idea of witnesses of fact acting as expert witnesses.

33.1.2 Survey respondents emphasised the importance of, and need for,

independence in providing expert witness evidence, and that fact witnesses typically lack this independence. Arbitrators are pragmatic with objectivity of expert witnesses typically being most important, but cautious about witnesses of fact acting as expert witnesses, whereas counsel is more conservative.

33.1.3 The majority favour a separation between factual and expert witness evidence, with expert witnesses preferred; any exceptions should be transparent and carefully managed from

an early stage of the proceedings. Such exceptions may occur where the evidence relates to a niche area or industry – where a witness of fact may be the most knowledgeable person about a particular expert witness issue – and in lower-value cases.

33.1.4 Thus, the question of whether a witness of fact can also act as an expert witness in arbitration is both practical and contentious. It arises where individuals with direct involvement in events underlying the dispute possess relevant expertise.

33.1.5 Expert witnesses are expected to provide impartial, objective opinions to assist the tribunal, regardless of which party has appointed them. In contrast, witnesses of fact are typically involved in the events at issue and may have a direct or indirect interest in the outcome. Therefore, the overriding concern with witnesses of fact giving expert witness evidence is that they are not able to give unbiased evidence.

33.1.6 Survey responses reveal broad agreement across all groups – that independence matters, despite mixed views on permissibility. Many arbitrators and counsel are particularly wary of the risk of bias.

33.1.7 A minority of respondents, particularly among arbitrators, acknowledged that in some circumstances, a witness of fact with uniquely relevant expertise may be

permitted to provide expert witness opinion, provided the tribunal is alert to the risk of partisanship and the evidence is appropriately weighed.

33.1.8 In some cases, the most knowledgeable individuals on a technical issue are those directly involved in the project or dispute. Their practical experience can be invaluable in explaining complex facts or technical processes. In those circumstances, those witnesses of fact may be able to assist the tribunal in providing expert witness views. Some expert witnesses, while generally sceptical, recognise that sometimes the parties' witnesses know more about the subject than anyone else, so it makes sense for them to give opinions, albeit with limits. Several arbitrators in the survey acknowledged that where a case involves historical events, sometimes the only expert witnesses are those who were also involved at the time. On the other hand, counsel tended to be the most cautious, highlighting the risk that such witnesses lack independence, but are still often expert, and warned that their evidence should be treated with caution.

33.1.9 One of the challenges associated with allowing a witness of fact to act as an expert witness is that their evidence may blur the lines between objective analysis and subjective interpretation, which could potentially confuse or mislead the tribunal. Survey respondents raised concerns about

the potential for such witnesses to advocate for their party's position rather than provide neutral expert analysis. To address this, any witness giving both factual and expert evidence should do so in different witness statements – i.e., a witness statement of fact and an expert witness report.

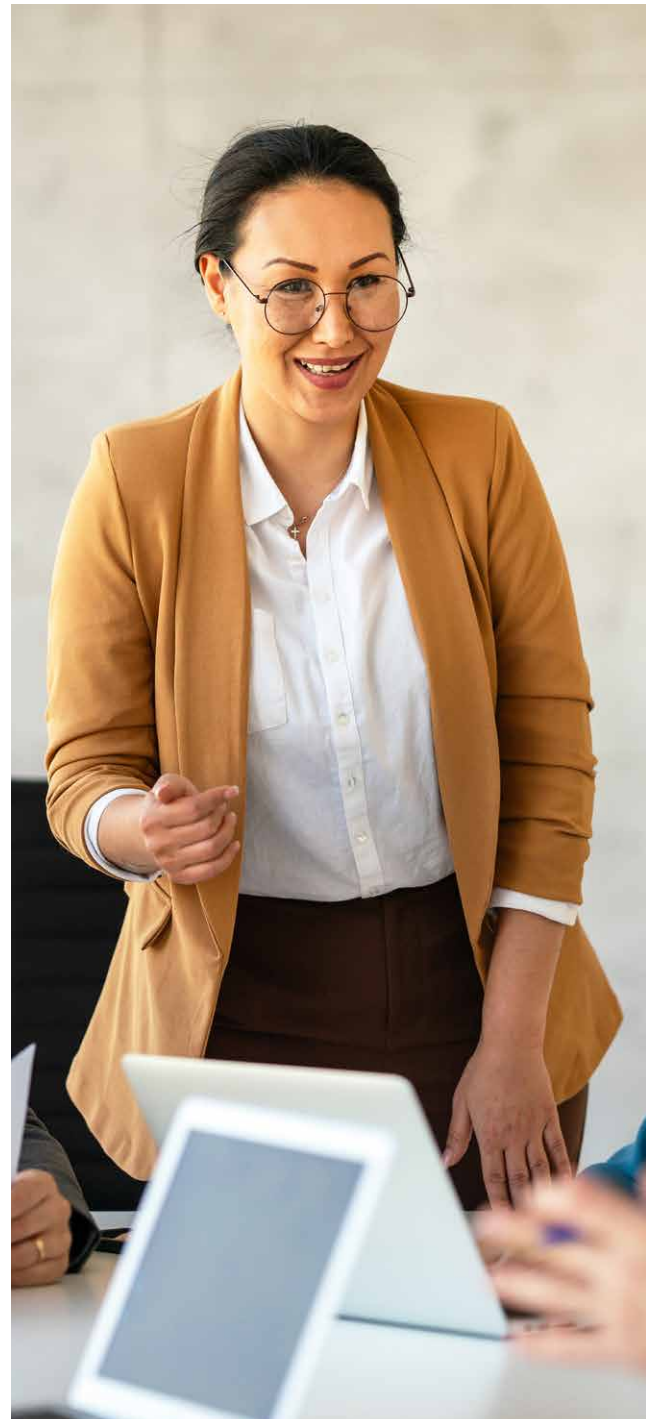
33.1.10 Conversely, some arbitrator respondents to the survey were concerned about the risk of challenges to an award if a party was unable to present expert witness evidence from a fact witness.

33.1.11 The prevailing view among experienced arbitrators and counsel is that expert witness evidence should be separated from factual evidence where possible. Experts should be independent, and factual witnesses should confine themselves to matters within their direct knowledge.

33.1.12 The circumstances of each case should be considered in determining whether witnesses of fact are invited to give expert witness evidence. For example, where the witness of fact is the most knowledgeable person on an expert issue, it may be appropriate for them to give expert witness evidence. Tribunals and parties might also consider using witnesses of fact for expert issues in lower-value cases.

33.1.13 Where a witness of fact is permitted to provide expert witness opinion, the tribunal should clearly

identify the basis for their expertise, identify the issues on which such opinion will be given, and require the witness of fact to provide full disclosure of potential conflicts to ensure that their evidence is presented transparently and that their evidence can be weighed accordingly.



34. How prevalent is expert witness conferencing?

34.1.1 The survey results showed that witness conferencing remains less common than traditional cross-examination, though experience varies across respondent groups. Among arbitrators, 29% reported never having been involved in witness conferencing and 45% reported involvement “less frequently than not”, with only 3% reporting very frequent involvement. Expert witnesses reported a similar pattern: 26% reported no experience, 50% reported involvement less frequently than not, and 5% reported very frequent participation. External counsel reported the highest proportion among the respondents, with 33% reporting no experience of conferencing and 42% involved less frequently than not.

34.1.2 As to the prevailing method of testing expert witness evidence, traditional examination was reported as dominant. Among arbitrators, 76% identified traditional examination as the prevailing method, compared with 13% identifying witness conferencing. Among expert witnesses, 84% identified traditional examination as prevailing.

34.1.3 The survey results support the conclusion that witness conferencing is not yet a routine feature of international arbitration, notwithstanding that it is an

increasingly recognised procedural option. The reported experience across respondent groups suggests that conferencing is used selectively, and that many practitioners encounter it only occasionally.

34.1.4 A further feature of the responses is that “witness conferencing” is not perceived as a single standardised process. Rather, it is understood as an umbrella term describing the concurrent taking of evidence from multiple witnesses, which may be implemented in a number of different forms. Its deployment appears most closely associated with disputes involving highly technical subject matter, where simultaneous tribunal engagement with multiple expert witnesses can assist with side-by-side comparison of competing methodologies and assumptions.

34.1.5 The survey responses also indicate that prevalence is influenced by jurisdictional and sectoral contexts.²⁴ In many jurisdictions with strong common law procedural traditions, traditional cross-examination remains the default method for testing expert witness evidence, whereas conferencing appears more frequently in contexts where arbitral practice (or domestic procedural culture) has normalised

²⁴ Witness conferencing is more established in some jurisdictions and sectors than others, and its use may require additional procedural guidance or party reassurance where it is less familiar.

more concurrent or tribunal-led modes of evidence-taking. Respondents also indicated that certain sectors – particularly those involving technical density such as construction and engineering – are more likely to adopt conferencing, consistent with the perceived need for comparative evaluation of complex expert opinion.

34.1.6 Overall, the survey findings suggest that witness conferencing is

best characterised as a developing and context-dependent practice rather than an established norm. Traditional cross-examination remains the prevailing method for testing expert witness evidence, but witness conferencing is used with increasing recognition as a potentially valuable tool in appropriate cases—particularly where it facilitates efficient clarification of the real points of divergence between expert witnesses.

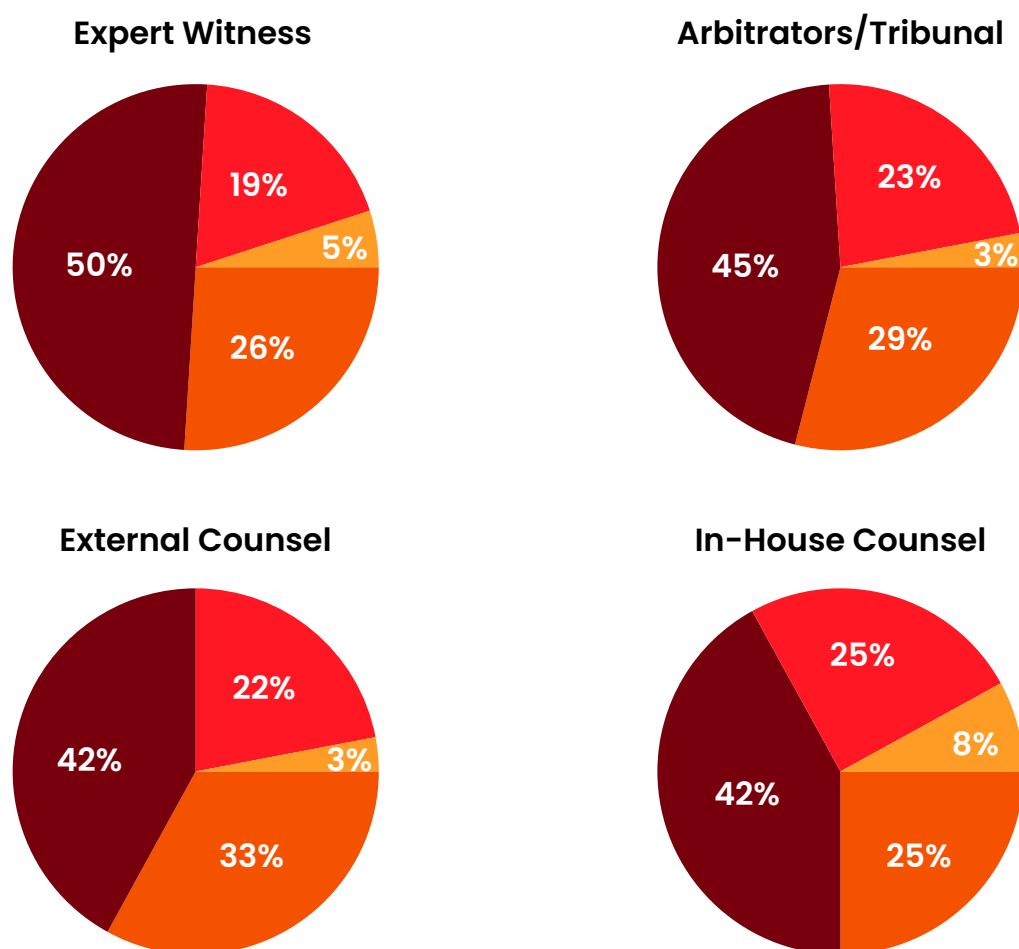
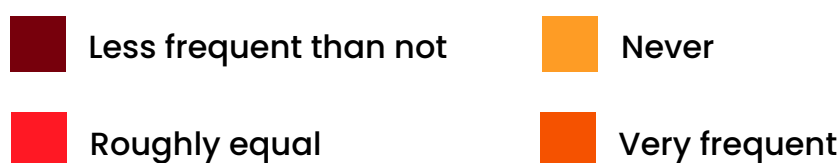


Chart 32. How prevalent is expert witness conferencing?

35. Does witness conferencing of expert witnesses better assist the tribunal than cross-examination?

35.1.1 The survey results showed a near-even split among practitioners regarding whether traditional cross-examination or witness conferencing better assists the tribunal. Among arbitrators, 55% favoured cross-examination and 45% preferred conferencing. Among expert witnesses, 51% considered conferencing more helpful and 49% favoured cross-examination. External counsel favoured cross-examination by 57% to 43%. In-house counsel favoured cross-examination by 67% to 33%.

35.1.2 The distribution of responses suggests that neither method is regarded as inherently superior; rather, effectiveness depends on the nature of the issues, the preparation of the tribunal, and the way the procedure is managed. Respondents consistently framed the choice as case-specific, with an emphasis on aligning the method of testing evidence to the dispute context and the tribunal's needs.

35.1.3 Witness conferencing was generally viewed as capable of materially assisting the tribunal in certain appropriate cases, particularly where the objective is to identify, compare, and clarify points of agreement and disagreement between expert witnesses. Respondents emphasised its potential efficiency

and its value in enabling real-time comparison of expert witness reasoning on discrete technical issues. However, the perceived effectiveness of conferencing was consistently linked to the tribunal's level of preparation and its ability to actively lead the process. Where the tribunal is well-briefed on the expert witness reports and joint statements, and clearly focused on the evidential issues requiring clarification, conferencing was seen as capable of sharpening the tribunal's understanding and narrowing the matters in dispute. Conversely, respondents cautioned that, without careful management, conferencing may risk imbalance, allow more experienced expert witnesses to exert disproportionate influence, or dilute the evidential discipline achieved through written reports.

35.1.4 Traditional cross-examination continued to command strong support, particularly for its perceived role in testing the robustness, assumptions, and credibility of expert witness opinion within an established adversarial framework. Respondents regarded cross-examination as especially valuable where credibility issues arise, where expert witness reasoning calls for rigorous challenge, or where counsel-led testing is necessary to expose weaknesses in methodology or factual foundations.



In-House Counsel



Arbitrators/Tribunal



External Counsel



Expert Witness



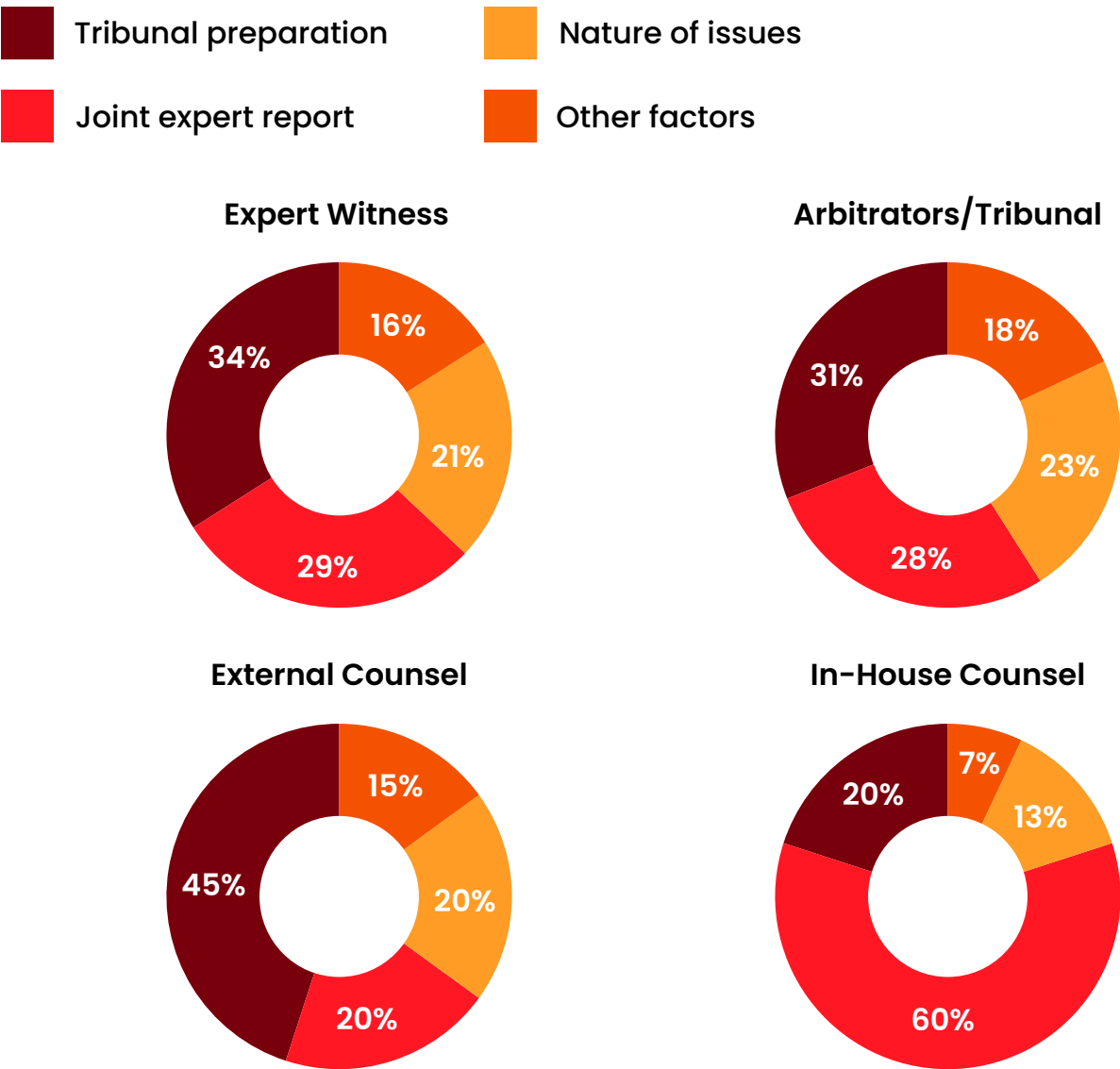
Chart 33. Does witness conferencing of expert witnesses better assist the tribunal than cross-examination?

Many respondents favoured a flexible or hybrid approach, deploying cross-examination to test expert witness evidence and using conferencing selectively to clarify remaining technical differences or areas of divergence.

Overall, the responses favoured procedural adaptability over prescriptive hierarchy, with effectiveness dependent on issue selection, tribunal preparedness, and clear procedural objectives rather than the inherent superiority of one method over the other.



36. What are the key components for successful witness conferencing of expert witnesses?



conferencing assists the tribunal in practice. Where witness conferencing is adopted, tribunals should ordinarily ensure they are adequately prepared, that issues are clearly defined, and that procedural ground rules are established in advance.

36.1.3 Tribunal preparation and engagement. Tribunal preparation is the dominant success factor in successful expert witness conferencing. Conferencing is most effective where the tribunal is thoroughly familiar with the expert witness reports, the joint expert witness report, and the underlying technical, factual, and legal issues. Without that preparation, conferencing risks becoming unfocused, with missed opportunities to clarify key points of divergence. The responses indicate that effective conferencing also requires active tribunal management, including setting the agenda, maintaining focus, and intervening where necessary to preserve balance and procedural efficiency.

36.1.4 Expert witness mindset. The effectiveness of conferencing depends materially on the expert witnesses' ability to engage constructively in the format. Conferencing differs from adversarial cross-examination in that it requires expert witnesses to focus on assisting the tribunal rather than "winning" a debate. The survey responses indicate that where expert witnesses adopt defensive or

adversarial postures, or where there is a marked disparity in experience or communication skill, the tribunal may need to intervene to ensure that the process remains fair and useful.

36.1.5 Joint expert witness report.

A well-prepared joint expert witness report was identified as a key foundation for successful conferencing. The survey responses indicate that a joint report should enumerate areas of agreement and disagreement, provide reasons (particularly for disagreement), and reference relevant material so that the tribunal can identify the real issues in dispute. Where joint reports are vague or superficial, conferencing is less likely to assist the tribunal and more likely to introduce confusion or inefficiency.

36.1.6 Clearly defined issues. The suitability and definition of the issues selected for conferencing is a further key component. Conferencing is most effective where the issues are capable of side-by-side technical comparison and where the tribunal and parties have clearly defined the scope of the discussion. The survey responses indicate that conferencing is less suitable in the presence of diffuse, highly contentious, or credibility-driven issues that are not amenable to structured concurrent comparison.

36.1.7 Procedural clarity. The survey responses emphasised the importance of clear ground rules and procedural

direction in advance of the conference. Uncertainty about who may ask questions, the order of questioning, timing, the role of counsel, or the admissibility of new material may create contention or perceptions of unfairness. Effective conferencing therefore requires a defined procedural framework, ideally established early and reflected in procedural direction. In this regard, the Ciarb Guidelines for Witness Conferencing in International Arbitration (April 2019), including the Standard Directions set out therein, provide a useful reference for establishing such a framework.

36.1.8 Duty to assist the tribunal. A recurring theme is that conferencing is most effective where expert witnesses understand and adhere to their overriding duty to assist the tribunal. The survey responses indicate that conferencing is undermined where expert witnesses act as advocates or seek to use the process to advance partisan narrative rather than to clarify technical issues objectively. Reinforcing the duty to assist the tribunal – through procedural directions and reminders at the outset of the conference – was identified as an important success factor.

36.1.9 Early and ongoing engagement. The survey responses also link successful conferencing to earlier stages of expert witness engagement, including early agreement on issues, data, and methodology, as well as

regular procedural touchpoints as the expert witness evidence develops. Early engagement supports a more coherent joint report, clearer identification of issues, and more focused conferencing at the hearing.

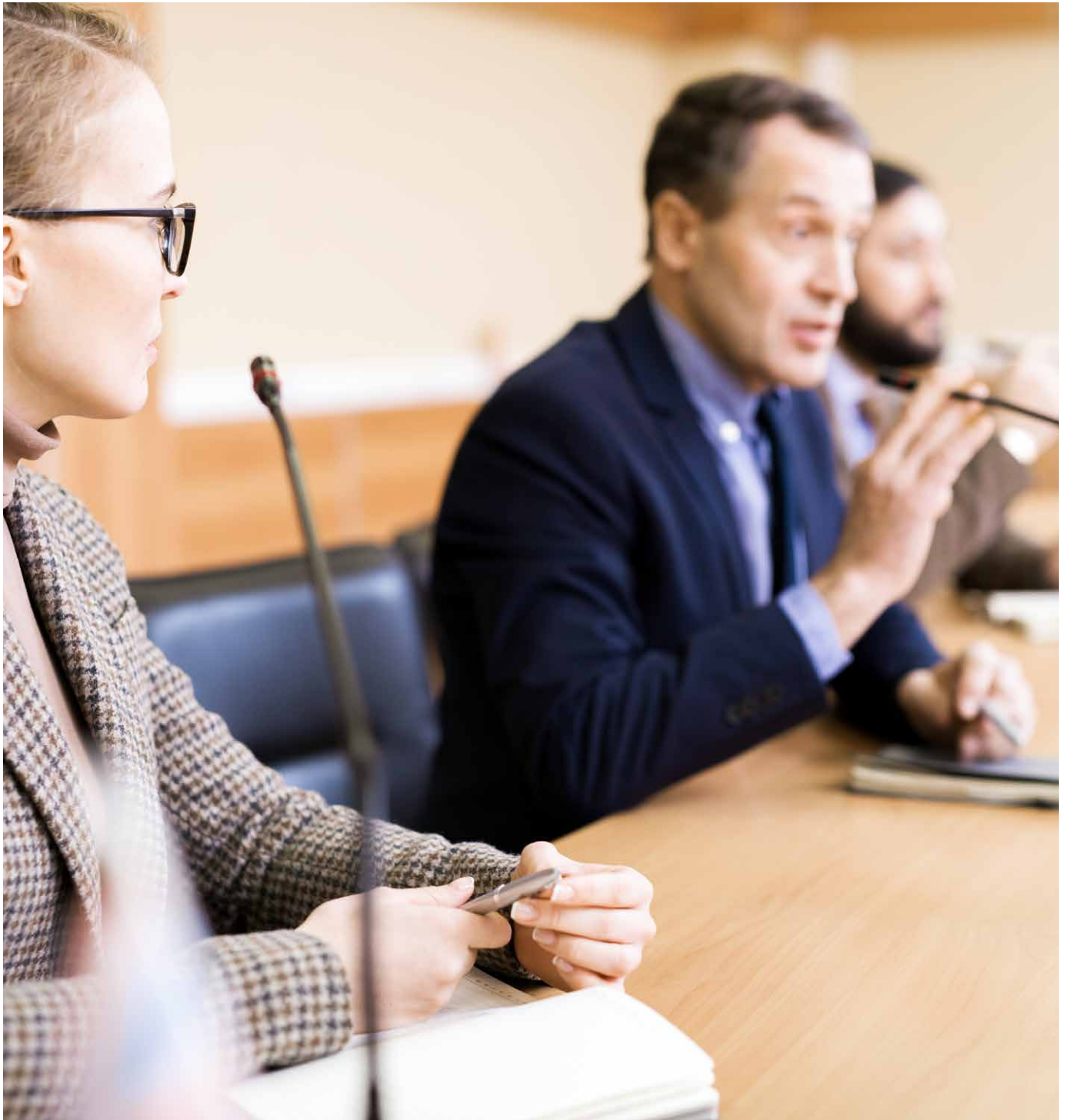
36.1.10 Cultural and sectoral sensitivity. Differences in procedural culture and sectoral practice affect both the willingness to adopt conferencing and its effectiveness in practice. The survey responses indicate that in contexts where conferencing is less familiar, additional procedural guidance and reassurance may be required to mitigate concerns about fairness, loss of party control, or unfamiliarity with concurrent formats.

36.1.11 Expert witness qualifications and experience. Finally, the survey responses highlight the expert witness's qualifications. Witness evidence should be delivered by professionals from distinct disciplinary backgrounds, with differing conceptual frameworks and data reliance. In such circumstances, conferencing may be less effective unless the tribunal and parties delineate the scope of each expert witness's discipline and the premises underlying each analysis, to ensure that points of divergence are commensurable and clearly understood.

36.1.12 Implications. The survey evidence indicates that witness conferencing can materially assist

the tribunal where it is used in appropriate cases and supported by strong preparation, clear procedural structure, and disciplined participation. Conversely, where these conditions are absent, conferencing may fail to achieve its intended benefits and may introduce risks relating to imbalance,

lack of focus, and procedural contention. The key implication is that conferencing is not self-executing: its effectiveness depends on deliberate design, active tribunal management, and alignment with the nature of the issues in dispute.



37. How prevalent is the use of Ciarb Guidelines On Witness Conferencing in international arbitration?

37.1.1 The survey results showed that consultation of the *Ciarb Guidelines on Witness Conferencing* is not extensive. Among arbitrators, 46% reported having consulted the Guidelines, whilst 54% had not. Expert witnesses showed a lower rate of consultation, with only 30% having referred to them. External counsel fell between these positions, with 45% having consulted them. In-house counsel reported a consultation rate of 33%.

37.1.2 The findings indicate that consultation of the *Ciarb Guidelines on Witness Conferencing* is not universal; the majority of those surveyed had not consulted them. For those who did consult them, the Guidelines are valued for providing clarity, structure, and a procedural framework, especially for those less experienced with expert witness conferencing or working in unfamiliar jurisdictions. They are most often used as a reference for drafting procedural orders, for training, and to facilitate party agreement on conferencing procedures. Practitioners agree that the Guidelines promote consistency and support tribunal preparation, but they are most effective when adapted to the specific needs of each case. The Guidelines provide different frameworks according to how the expert witness conferencing is to be structured.

37.1.3 The *Ciarb Guidelines on Witness Conferencing* are a widely recognised resource intended to provide practical guidance and recommendations for the effective use of witness conferencing.

37.1.4 Use of the Ciarb Guidelines is not consistent across jurisdictions. In regions where witness conferencing is a well-established or familiar practice, practitioners are less likely to consult the Guidelines, relying instead on local custom, institutional rules, or their own experience. In jurisdictions where traditional cross-examination remains the prevailing method for testing expert witness evidence, the Guidelines are referenced less frequently. Conversely, in jurisdictions where witness conferencing is newer or less common, the Guidelines are more likely to be used by respondents as a reference point to ensure procedural clarity and to align with international recommendations.

37.1.5 Arbitrators tend to consult the Guidelines more frequently when they are less experienced with witness conferencing or when they are operating in a jurisdiction or case context where the process is less familiar. The Guidelines are valued for providing a neutral procedural framework, which can be particularly useful for tribunal preparation and for

managing the process in a transparent and consistent manner. However, more experienced arbitrators, or those with established practices, may rely on their own protocols or institutional rules and consult the Guidelines less often.

37.1.6 Counsel is more likely to consult the Guidelines when drafting or negotiating procedural orders, especially in cases where the

parties or tribunal wish to adopt a recognised international standard. Counsel operating in international or unfamiliar jurisdictions may also use the Guidelines to bridge differences in procedural expectations. However, those with significant experience or those working within institutions with their own established protocols may not see the need to refer to the Guidelines.

■ Consulted ■ Not consulted

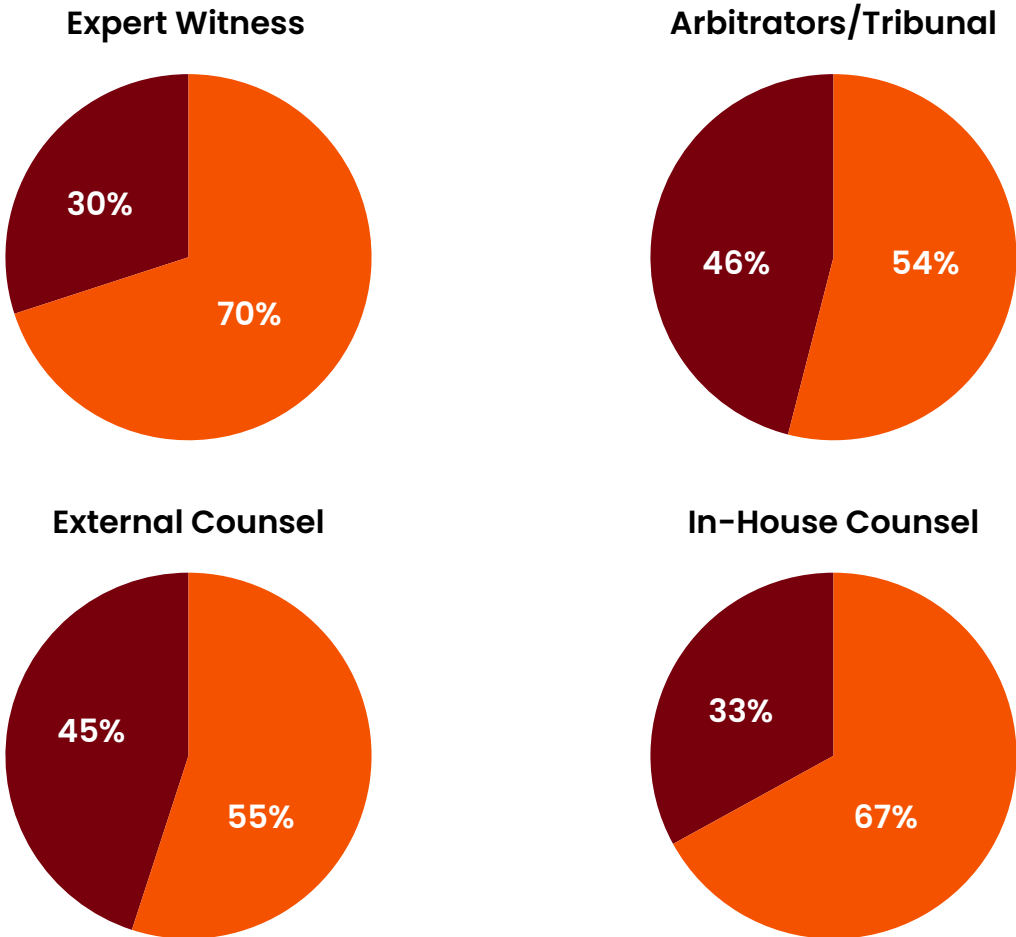


Chart 35. How prevalent is the use of the Ciarb Guidelines on Witness Conferencing in international arbitration?



37.1.7 Expert witnesses may consult the Guidelines for training and familiarisation, particularly if they are new to the process or if the case involves conferencing in a jurisdiction where it is not the norm. The Guidelines are seen as a useful resource for understanding expectations and recommendations. More seasoned expert witnesses, however, may rely on their own experience or on the directions provided by the tribunal.

37.1.8 In-house counsel are generally less likely to consult the Guidelines directly, often relying on external counsel or the tribunal to set the procedural framework. However, in-house counsel involved in cases with complex or unfamiliar procedural elements may reference the Guidelines to ensure their team is aligned with international standards.

37.1.9 The complexity and profile of a case also influence the likelihood of the Guidelines being consulted. In cases involving significant technical complexity, multiple expert witness disciplines, or parties from different legal traditions, the Guidelines are more likely to be referenced. This is because they provide a structured approach that can help manage the procedural challenges inherent in such cases, promote consistency, and facilitate agreement between parties. In more straightforward cases, or where the issues are familiar to all respondents, the Guidelines are less

likely to be consulted. Practitioners may feel that established practices or simple procedural orders are sufficient.

37.1.10 The consensus of those who have used the Guidelines is that they are a helpful resource. Some practitioners note that the Guidelines are most effective when adapted to the specific needs of the case, rather than applied rigidly. The Guidelines help to ensure a consistent approach to witness conferencing, reducing uncertainty and procedural disputes. They also assist tribunals in preparing for and managing the process, especially where the tribunal is less familiar with the technique. Finally, the Guidelines can serve as a neutral reference point to facilitate agreement between parties on the conduct of conferencing.



38. Are expert witness presentations as part of parties' opening submissions at the hearing helpful?

38.1.1 The survey results showed strong support for expert witness presentations as part of the hearing process. Among expert witnesses, 81% agreed that party opening submissions with expert witness presentations are helpful. External counsel was similarly positive, with 74% supporting presentations. Arbitrators were more divided, with 59% considering presentations helpful. In-house counsel was the most supportive group, with 83% in favour.

38.1.2 As to the appropriate duration of such presentations, most respondents favoured a timeframe of 15–30 minutes: 49% of expert witnesses, 40% of external counsel, and 38% of arbitrators selected this option. A significant minority across all groups – ranging from 15% to 30% – considered that duration should be at the expert witnesses' or counsel's discretion. There was strong consensus that guidance on expert witness presentations should be expressed in the first procedural order, with 77% of expert witnesses, 66% of external counsel, and 72% of arbitrators agreeing.

38.1.3 The first procedural order should set clear, early guidance on expert witness presentations to ensure fairness and efficiency.

Opening expert witness presentations should be concise, focusing on key points to orient the tribunal and clarify complex issues. Presentations must prioritise substance over volume, using visual aids sparingly and avoiding dense, text-heavy slides. Advance exchange and tribunal oversight are essential to prevent misuse, ensure fairness, and avoid the introduction of new evidence.

38.1.4 Procedural order 1.

The first procedural order is the foundational procedural document in most arbitrations. It sets the tone for the conduct of the proceedings, establishes the timetable, and addresses key procedural matters, including the use of expert witness evidence. Survey responses and professional commentary consistently highlight the importance of early and clear procedural direction. Early guidance helps manage expectations, reduces the risk of procedural disputes, and ensures that all parties are on an equal footing.

38.1.5 In light of this importance, the first procedural order would be an ideal place to provide initial guidance on the format, timing, and scope of expert witness presentations. Where possible, the



In-House Counsel



Arbitrators/Tribunal



External Counsel



Expert Witness



Chart 36. Are expert witness presentations as part of parties' opening submissions at the hearing helpful?

first procedural order should provide guidance on opening expert witness presentations. Such guidance need not be overly prescriptive, but it should provide a clear framework within which the parties and their expert witnesses can operate. It should address the following key points:

- a) Whether expert witness presentations are permitted and, if so, at what stage of the hearing.
- b) The duration of any opening expert witness presentation.
- c) Expectations regarding the use of slides or other media.
- d) The requirement for advance exchange of materials, with a timetable for objections and responses.

e) A prohibition on the introduction of new evidence or arguments not contained in the expert witnesses' report.

38.1.6 There are circumstances in which it may not be possible to set out the foregoing guidance in the first procedural order (for example, where it is not yet clear if expert witness evidence will be produced). In that event, guidance should be provided by the time of the pre-hearing or case management conference and should be set out in a procedural order that follows it.

38.1.7 The purpose and value of opening expert witness presentations.

Opening expert witness presentations serve as an opportunity for expert witnesses to summarise and focus

on the key points of their evidence, providing the tribunal with a clear roadmap before cross-examination or conferencing begins. The aim is to orient the tribunal, highlight the most important aspects of the expert witnesses' reports, and facilitate early clarification of complex technical issues.

38.1.8 Opening expert witness presentations should be concise and focused. The prevailing view is that a presentation lasting between 15 and 30 minutes is appropriate in most cases. An alternative view is between 30 and 45 minutes.

38.1.9 The rationale for a limited time frame is twofold. First, a concise presentation ensures that the tribunal's attention is directed to the most critical issues, avoiding information overload; and second, it keeps the hearing on track. While 15–30 or 30–45-minute time frames are generally seen as sufficient, some flexibility may be warranted in particularly complex or technical cases. However, even in such cases, the emphasis remains on clarity and relevance rather than on exhaustive detail.

38.1.10 As to the format of such presentations and the volume of demonstrative materials, many practitioners advocate for some form of limitation or guidance from the tribunal, but not necessarily a strict numerical cap: the emphasis must be on substance over volume.

38.1.11 Arbitrators and expert witnesses alike stress that slides should be used only to clarify and illustrate key points, not to reproduce the entire report. Without time limits, there is a risk that presentations become excessively long or may even be used to introduce new evidence. There was broad consensus that factors in the presentation be agreed on well before the hearing, including content, the presenter, and duration. This was to enable objections to be resolved before the hearing.

38.1.12 By way of recommendation:

a) Clear time limit. Tribunals should specify that opening expert witness presentations should last approximately 15–30 minutes but should not exceed 45 minutes, with exceptions for particularly complex matters.

b) Tribunal preparation. Tribunals should be sufficiently prepared to receive the presentations and to engage with the expert witnesses as required.

c) Focused visual presentations. Expert witnesses should be encouraged to use slides sparingly, focusing on graphics, charts, and other visual aids that clarify key points, rather than dense text or lengthy bullet lists.

d) Exchange in advance. Presentations should be exchanged in advance, allowing parties to raise objections and the tribunal to ensure compliance with procedural directions.

e) No new evidence or arguments.

Presentations should summarise and clarify the expert witnesses' report, not introduce new material or arguments.

f) Tribunal to retain discretion.

The tribunal should retain discretion to curtail presentations that become repetitive, irrelevant, or unduly lengthy.



39. If requested by the tribunal, are private meetings between the tribunal and experts after the hearing helpful or harmful?

39.1.1 The survey results showed significant scepticism across all respondent groups regarding private post-hearing meetings between tribunals and expert witnesses. Only 16% of arbitrators considered such meetings more helpful, while 30% regarded them as more harmful and 54% considered they could be both. Expert witnesses were more evenly divided (33% more helpful, 7% more harmful, 60% both), while external

counsel expressed the strongest opposition (21% more helpful, 28% more harmful). An overwhelming majority of respondents – 82% of arbitrators, 75% of expert witnesses, and 71% of external counsel – reported that such meetings are not becoming more common, and the most frequent response across all groups was that they were neither necessary nor desirable.

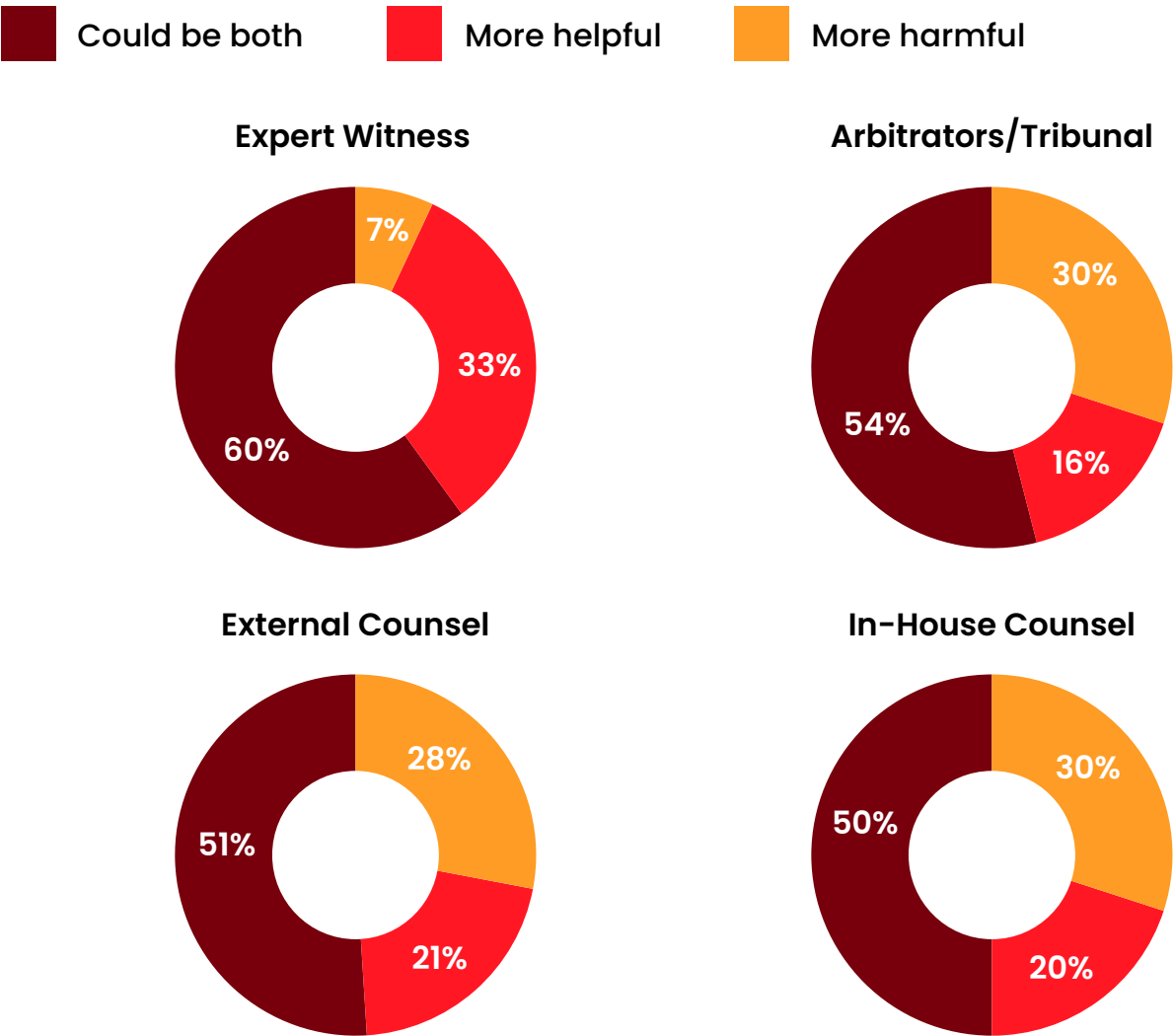


Chart 37. If requested by the tribunal, are private meetings between the tribunal and experts after the hearing helpful or harmful?



39.1.2 Private post-hearing meetings between tribunals and expert witnesses, conducted without the presence of the parties, are uncommon and widely controversial. Most practitioners expressed principled opposition, rooted in concerns about fairness, transparency, independence, and procedural integrity, with a strong preference for mechanisms that preserve party involvement, such as written questions or reconvened hearings. Where post-hearing meetings do occur, they are most often encountered in complex cases involving technical or quantum issues, particularly where tribunals seek clarification on calculations or assistance in applying their findings to detailed models or spreadsheets. The rationale advanced is typically practical rather than evidential. Despite isolated suggestions that such meetings may feature in large international arbitrations, most respondents reported little or no personal experience of them, and it was consistently emphasised that any communication should involve both expert witnesses together, rather than individual engagement.

39.1.3 While scepticism predominates, a minority across all respondent groups accepted that there may be limited, case-specific circumstances in which private post-hearing meetings could offer practical benefits. These were most often linked to clarification of technical or quantum calculations,

where tribunals may lack the technical facility required to operate complex models unaided, provided that such engagement is strictly confined to implementation and does not involve new opinion or evidence. A small number of respondents also pointed to potential efficiency gains in large construction or engineering disputes, where direct expert witness assistance may reduce the risk of computational error and facilitate timely completion of the award. In rare instances, post-hearing meetings were also identified as a means of addressing unanticipated technical matters arising during deliberations or assisting where expert witness evidence remains fundamentally divergent and difficult to reconcile on the written record alone.

39.1.4 Notwithstanding these limited perceived benefits, the consensus from the survey was that private post-hearing meetings give rise to risks that generally outweigh those advantages. The principal concern relates to transparency and due process: excluding parties and their counsel from post-hearing interactions undermines the adversarial process and creates a risk of perceived procedural unfairness or bias. A further concern is the risk of procedural irregularity, including the introduction of new evidence or argument after the close of proceedings, thereby exposing the award to challenge. Respondents also noted the danger of actual or

perceived ex parte communications and the broader risk that private meetings may undermine confidence in the integrity of the process. Expert witnesses themselves frequently expressed discomfort, emphasising that such meetings may compromise their perceived independence or expose them to undue influence.

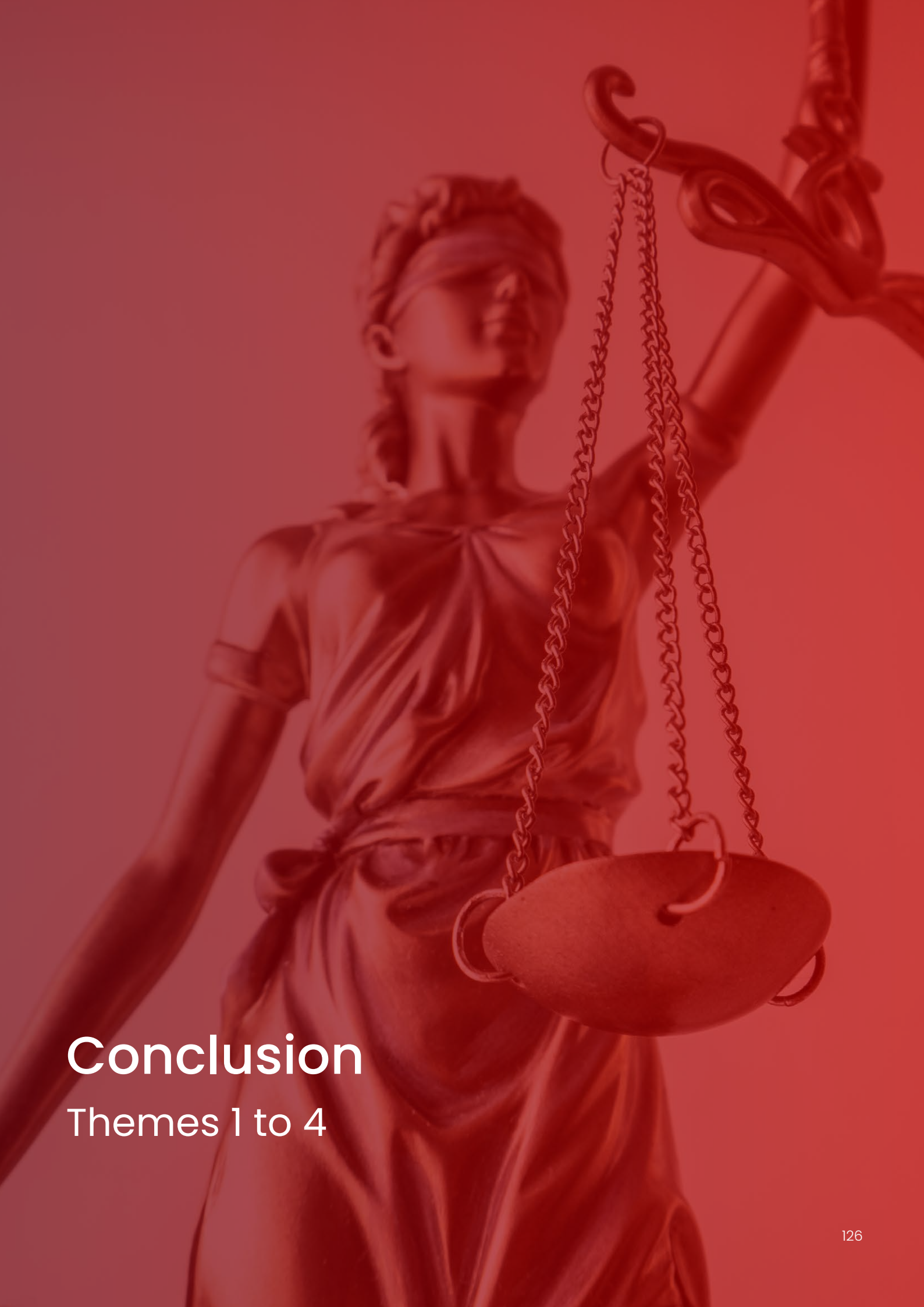
39.1.5 Respondents consistently identified established alternatives that preserve transparency and party participation where further expert witness input is required post-hearing, including: (i) circulation of written questions to expert witnesses with party comment; (ii) reconvened hearings, whether in person or virtual; and (iii) supplementary joint expert witness statements addressing specific tribunal questions.

39.1.6 By way of conclusion on this matter, private post-hearing meetings should be approached with extreme caution and should not proceed where any party objects. Any post-hearing engagement with expert witnesses should be conducted transparently, with parties and counsel notified and afforded an opportunity to participate, observe, or comment. In the exceptional circumstances where a private meeting is nevertheless considered unavoidable, robust procedural safeguards should be agreed in advance, including defined scope, recording of the interaction, disclosure to the parties, and an

opportunity for submissions on any new material.

39.1.7 While limited circumstances exist in which private meetings between tribunals and party-appointed expert witnesses may appear expedient—most notably in complex quantum matters—the prevailing view is that such meetings are generally neither necessary nor desirable. In most cases, the risks to transparency, due process, and the integrity of the arbitral process will outweigh any perceived benefits. Open, party-inclusive procedures, supported by a clear record, remain the approach most consistent with procedural fairness and enforceability.





Conclusion

Themes 1 to 4

40.1 Generally

40.1.1 This Report has examined the effectiveness of expert witnesses in international arbitration through four principal themes, drawing upon survey data from arbitrators, expert witnesses, external counsel and in-house counsel, supplemented by community-led discussions. The findings reveal areas of strong consensus alongside notable divergences, which collectively inform a series of practical recommendations for enhancing the quality, efficiency and reliability of expert witness evidence. What follows is a synthesis of the principal conclusions arising under each theme.

40.1.2 Across all themes, the data points consistently in one direction: expert evidence is most effective where it is structured early, aligned technically, and actively managed by the tribunal. The opportunity for arbitration is therefore not to change the model of party-appointed experts, but to improve how the process is directed.

40.2 Areas of divergence and why they matter

40.2.1 While the consultation exercise revealed several areas of strong convergence, it also exposed persistent and sometimes sharp divergences between stakeholder groups. These reflect differences in professional roles, incentives, procedural culture, and proximity to particular stages of the

arbitral process, and provide important insight into both the possibilities and limits of reform.

40.2.2 One of the most striking divergences concerns over-instruction of expert witnesses by counsel. In-house counsel reported unanimous concern that expert witnesses are frequently over-instructed, while a substantial majority of expert witnesses reported that this occurs rarely or not at all. This disconnect highlights the difficulty of identifying over-instruction from within the expert-counsel relationship and underlines the importance of procedural transparency and tribunal-led clarification of expectations.

40.2.3 A second divergence arises in relation to tribunal proactivity. Arbitrators and in-house counsel were more likely to consider tribunals sufficiently proactive during early case management, while expert witnesses and external counsel reported the opposite. This misalignment matters because insufficient early guidance on scope, format and methodology can lead to unfocused expert witness evidence and inefficiencies that become apparent only later in the proceedings.

40.2.4 Divergent views were also evident on the timing of tribunal-expert engagement prior to first expert witness reports. Expert witnesses favoured earlier and more direct

engagement, while arbitrators and counsel expressed concerns grounded in party autonomy and due process. This tension between assistance and adjudication explains why this Report approaches early engagement with deliberate caution, framing it as context-dependent rather than as a default practice.

40.2.5 Similar differences appear in relation to timetabling. Expert witnesses were significantly less likely to consider that sufficient time is afforded for expert witness work and were more supportive of direct expert witness input into procedural timetables. This divergence matters because unrealistic timetables can undermine the quality and reliability of expert witness evidence in ways that may not be immediately visible to those setting them.

40.2.6 These divergences are treated in this Report not as obstacles to consensus, but as substantive findings in their own right. They demonstrate that there is no single vantage point from which the effectiveness of expert witness evidence can be fully assessed. The Report accordingly avoids prescribing uniform solutions where views are divided, instead emphasising calibrated, transparent and tribunal-led processes capable of accommodating differing perspectives while preserving party autonomy, procedural fairness and international diversity.

40.3 Theme 1: Communication between expert witnesses, the tribunal and counsel

40.3.1 The survey findings under this theme reveal a persistent disconnect between the direction that tribunals believe they are providing and the experience of those receiving it. Whilst a majority of arbitrators and in-house counsel consider that tribunals are sufficiently proactive in their early-stage case management of expert witness evidence, a clear majority of expert witnesses and external counsel disagree – with practical consequences for the quality and focus of expert witness evidence. A further divergence concerns direct tribunal–expert communication: whilst expert witnesses favour earlier engagement, other groups are generally opposed to unprompted pre-hearing contact, though near-universal support exists for tribunals putting questions to expert witnesses after the submission of their first reports. The data therefore suggests that such engagement should be structured, transparent and appropriately timed rather than precluded altogether.

40.3.2 The findings on over-instruction of expert witnesses by counsel expose one of the starkest role-based divergences in the data set, with counsel reporting frequent over-instruction and expert witnesses reporting the opposite. This disconnect underscores the need for clearer

procedural boundaries and supports the adoption of mechanisms – such as requiring expert witnesses to identify assumptions provided by counsel and to present alternative analyses where instructions appear unrealistic – that reinforce the expert witnesses’ overriding duty to the tribunal. The near-universal support for early and ongoing case management conferences, together with strong support for frequent expert witness meetings throughout the arbitration process, points toward a model of proactive, tribunal-led case management in which expert witness engagement is embedded as an integral component of the procedural framework.

40.4 Theme 2: Timetables and timing of involvement of expert witnesses

40.4.1 The survey findings under this theme demonstrate a clear and consistent preference for the early instruction of expert witnesses, with a substantial majority favouring appointment during the pre-arbitration stage. Early appointment enables expert witnesses to conduct preliminary reviews, identify gaps, assist in formulating realistic claims, and contribute to establishing a reasonable procedural timetable. Notwithstanding this consensus, the survey reveals a material disconnect on whether expert witnesses are afforded adequate time: only a minority of expert witnesses consider

that they are given sufficient time, and a majority favour direct expert witness input when procedural timetables are being set. The Report recommends that tribunals proactively consult expert witnesses – or at a minimum require the parties to confirm that expert witness input has been sought – when establishing procedural timetables. Cost pressures remain a significant barrier to early instruction, and the Report proposes that parties consider including express provisions in their arbitration agreements confirming the recoverability of reasonable pre-arbitration expert witness costs, alongside procedural costs budgeting and adverse cost orders to focus parties on what expert witness evidence is truly required.

40.5 Theme 3: Ensuring the tribunal understands

40.5.1 The dominant pattern under this theme is high cross-role support for structured mechanisms designed to improve the comparability and comprehensibility of expert witness evidence. The very strong consensus in favour of tribunals requiring early expert witness meetings to agree upon common data sets and methodologies – with agreement levels exceeding 80% across all respondent groups – represents one of the most significant findings of the survey. Equally strong support exists for tribunals reading expert witness reports as they are served and preparing lists of

questions in advance of the hearing, pointing toward a model in which the tribunal takes active ownership of its understanding of the technical issues in dispute. The survey also reveals strong support for joint expert witness reports as a normative practice, serving to delineate areas of agreement and genuine disagreement and to enable the tribunal to focus on the issues requiring determination. Whilst the survey does not support a rigid standardised template, there is significant support for the standardisation of certain elements — such as declarations, key conclusions, and structured summaries — and for tribunal guidance on format and structure to ensure comparability and comprehensibility.

40.6 Theme 4: The hearing and Post-hearing

40.6.1 The survey findings under this theme reveal a more evenly distributed set of views than under the preceding themes. Support for cross-examination versus witness conferencing is broadly balanced, and the data does not support the proposition that either method is inherently superior; rather, effectiveness depends on the nature of the issues, tribunal preparation, and procedural culture. Where witness conferencing is adopted, tribunal preparation, a well-structured joint expert witness report, clearly defined issues, and procedural clarity are identified as the key components for

success. Strong support is recorded for opening expert witness presentations, which should be concise, focused on key points, and subject to clear procedural guidance in the first procedural order. In the post-hearing context, broad scepticism is recorded regarding private meetings between the tribunal and expert witnesses, with the overwhelming majority citing concerns over fairness, transparency and procedural integrity. Where further expert witness input is required after the hearing, well-established alternatives — including written questions, reconvened hearings, or supplementary joint statements — are strongly preferred, and any post-hearing engagement should be party-inclusive and fully transparent.

40.7 Overarching conclusions

40.7.1 Across all four themes, the survey identifies a consistent overarching pattern: expert witness effectiveness is widely perceived to improve when tribunals adopt a more proactive role in managing expert witness evidence — encompassing early issue identification, direct engagement with methodology and data, contemporaneous reading of expert witness reports, advance preparation of questions, and clear procedural guidance on format, timing and scope. The findings point toward a collaborative framework in which the tribunal, the parties, counsel and the expert witnesses each play a

defined and complementary role. The procedural tools set out in this report – including suggested procedural order language, recommendations and proposed contractual provisions – are designed to be adapted to the

specific needs of each case, with the overriding objective of promoting early engagement, transparency, procedural clarity and mutual understanding in the management of expert witness evidence.



A photograph of a man and a woman in a professional setting, overlaid with a semi-transparent orange filter. The man, on the left, is looking down at a laptop. The woman, on the right, is looking up and smiling. Both are wearing business casual attire.

Appendix A

Suggested Language for Procedural Order(S)

1. This Appendix consolidates, for ease of reference, the suggested language for procedural orders and directions that appears throughout this Report. The wording is grouped below by the theme from which it is drawn, with a short descriptive heading and a brief note on the content of each clause. As elsewhere, these formulations are merely illustrative and may be adapted to suit the procedural demands and expectations of each case.

Theme 1 – Communication Between Expert Witnesses, the Tribunal and Counsel

Party-Initiated clarification conference

2. This clause allows either the expert witnesses or counsel to propose, at any time, that the tribunal convene a conference to clarify the scope of the expert reports or other matters as expert opinions develop.

3. The following could be inserted in the terms of reference or the first procedural order:

“Expert witnesses or counsel may themselves suggest (copying both sets of counsel and expert witnesses), at any time, that a conference with the tribunal is warranted to discuss the scope of the expert witness reports or to address any issue arising in connection with the development of expert witness opinions. The intention is to promote efficiency, transparency, and the early clarification of technical matters. The intention is not to address substantive issues. The tribunal may decide on whether a conference is warranted after hearing the views of the parties.”

Structured tribunal questioning after the first report exchange

4. This recommendation sets the default expectation that, once first-round reports are exchanged, the tribunal will put structured, transparent questions to the expert witnesses, always copying counsel, to clarify methodology, scope and any limitations imposed by counsel’s instructions.

5. By way of recommendation, the following could be included in the terms of reference or the first procedural order:

“Following the exchange of the first round of expert witness reports, the Tribunal should ordinarily expect to engage with expert witnesses (always copying counsel) through structured and transparent questioning for the purpose of seeking clarification on technical matters, methodology, or the scope of the expert witnesses’ opinions, as well as limitations resulting from counsel’s instructions.

Such communications shall not extend to matters of substance that have not been addressed in the expert witness reports as filed. The Parties shall have the opportunity to comment on any questions posed by the Tribunal. Nothing in this provision shall prevent the Parties or the expert witnesses from requesting, at any time, that the Tribunal convene a short procedural conference to address issues arising in connection with the expert witness process.”

Time-limited review and consolidated tribunal questions

6. This clause builds a timetable into early tribunal engagement. It requires the tribunal to review all expert reports within a fixed period of filing and then to circulate a single consolidated list of questions or topics shortly afterwards. The aim is prompt, organised engagement rather than ad hoc correspondence.

7. For example:

“Within [14] days of the filing of all expert witness reports by the Parties, the Tribunal shall undertake a preliminary review of such reports for the purpose for identifying issues requiring clarification or elaboration. No later than [7] days following the conclusion of this review, the Tribunal shall circulate a consolidated list of questions and/or topics which it considers appropriate for the expert witnesses to address in any subsequent reports or submissions.”

Scope of tribunal–expert witness communications

8. This clause defines the permitted scope and mechanics of tribunal–expert communication. All such communication must copy counsel and is confined to clarifying technical matters arising from the reports. The tribunal may direct that questions be answered individually or jointly, balancing efficiency against procedural fairness.

9. For example:

“Tribunal–expert witness communications shall copy the Parties’ counsel and shall be limited to clarification of technical matters arising from the expert witness reports. Questions posed by the Tribunal may be addressed singly or jointly by the expert witnesses, as the Tribunal may direct, having regard to the nature of the issues and the interests of efficiency and procedural fairness.”



Technical teach-ins

10. This clause sets out the parties' agreement to include a "teach-in" where the expert witnesses could inform the tribunal on technical matters in complex disputes.

This could be either after the exchange of first reports or whenever the tribunal feels "at sea" on technical matters:

"At any time following the exchange of expert witness reports, or, exceptionally, at such earlier stage as the Tribunal considers appropriate, the Tribunal may convene a technical teach-in session at which the expert witnesses shall present to the Tribunal on relevant technical matters arising in the dispute. Such sessions shall be conducted in the presence of the Parties' counsel."

For the avoidance of doubt, a teach-in session shall not constitute an evidentiary hearing: no findings of fact or law shall be made by the Tribunal on the basis of the session, and no material introduced during the session shall form part of the evidential record unless formally submitted by a Party at a later stage of the proceedings in accordance with the applicable procedural rules."

The purpose of the teach-in session shall be limited to enhancing the Tribunal's understanding of the technical issues in dispute and assisting the Tribunal and the expert witnesses in the preparation of any subsequent evidentiary hearing."

No new material should be introduced. The Tribunal shall provide reasonable advance notice of any teach-in session and may give directions as to its format, duration and scope."

Joint reports prepared independently of counsel

11. This clause safeguards the independence of joint expert work by excluding counsel from its substance.

Counsel may assist only with procedure and logistics; they may not draft, negotiate or comment on joint reports, save in exceptional circumstances agreed by the tribunal and copied to all experts. The provision preserves the integrity of the joint process.

12. Appropriate language such as the following could be included in the terms of reference or the first procedural order:

“The expert witnesses shall prepare any joint expert witness report or statement independently of counsel. Counsel shall have no involvement in the drafting, negotiation or substantive content of any joint expert witness report.

Counsel’s role shall be limited to procedural and logistical assistance only, including the identification of issues to be addressed and the coordination of meetings.

For the avoidance of doubt, counsel shall not provide comments on, or seek amendments to, any draft joint expert witness report or statement, save in exceptional circumstances and only with the agreement of the tribunal and with all expert witnesses copied.

The purpose of this provision is to preserve the independence of the expert witnesses and the integrity of the joint expert witness process.”

Expert witnesses of like discipline to meet and confer

13. This clause requires experts of like discipline to meet and confer at appropriate stages to identify points of agreement and disagreement, discuss data and methodology, and prepare any joint statements.

14. By way of recommendation, the following could be included in the terms of reference or the first procedural order:

“The expert witnesses of like discipline shall meet and confer at appropriate stages throughout the arbitration process for the purpose of identifying areas of agreement and disagreement, discussing relevant data sets and methodologies, and preparing any joint expert witness statements or reports required by the Tribunal.

Such meetings shall occur at intervals directed by the Tribunal or as otherwise agreed by the expert witnesses, acting consistently with their overriding duty to assist the Tribunal.

The expert witnesses shall conduct these meetings independently of counsel. Counsel’s role shall be limited to procedural or logistical coordination and shall not extend to directing, influencing, or participating in the substantive discussions between expert witnesses.

The purpose of this provision is to promote clarity, efficiency, and the integrity of expert-to-expert dialogue, while preserving the independence of the expert witnesses and the Tribunal’s confidence in the joint expert witness process.”

Theme 2 — Timetables and Timing of Involvement of Expert Witnesses

Recovery of pre-arbitration expert witness costs

15. Responding to the survey finding that an agreement on recoverability would encourage earlier expert involvement, this clause treats reasonable, properly incurred pre-arbitration expert costs as recoverable costs of the arbitration. The successful party may recover them. The tribunal retains full discretion over reasonableness, proportionality, and good faith in the parties' conduct.

16. Parties could consider including the following wording in their arbitration agreements:

"The Parties acknowledge that circumstances may require a Party ("Instructing Party") to engage an expert witness to prepare a report prior to the commencement of arbitration for the purposes of evaluating, substantiating, or narrowing the issues in dispute.

The Parties agree that any reasonable and properly incurred costs and expenses relating to such independent expert witness engagement (including but not limited to expert witness fees, analysis, testing, site investigations, and preparation of preliminary or full expert witness reports) constitute recoverable costs of the arbitration, notwithstanding that they were incurred before formal proceedings commenced.

The Instructing Party shall be entitled to recover these costs if it is the successful Party in the arbitration, as determined by the arbitral tribunal in the final award. For the avoidance of doubt, "successful Party" includes a Party that substantially prevails on its claims or defences, even if not successful on all issues.

Nothing in this clause limits the arbitral tribunal's discretion to assess: (a) the reasonableness, necessity, and proportionality of the expert witness costs claimed; (b) whether such costs were incurred in good faith, for a legitimate purpose connected to the dispute; or (c) any conduct of the Parties relevant to the allocation of costs."

Theme 3 — Ensuring the Tribunal Understands

Early agreement on documents and data

17. This clause directs experts of like discipline to identify and, where possible, agree at their first meeting the documents and data on which both will rely.

Agreements are recorded in a joint statement and disagreements are referred to the tribunal with reasons. Any new relevant documents must be shared promptly so the experts always work from the same materials.

18. Parties could therefore agree on the following in the terms of reference or the first procedural order:

“During the first meeting of expert witnesses of like discipline, the expert witnesses shall discuss and if possible, agree upon the documents and data that will be relied upon by both expert witnesses.

Any agreements shall be recorded in a joint statement, and any disagreements shall be raised to the tribunal with reasons within [7] days of the date of the joint statement.

If one expert witness receives new documents which are relevant, then they are required to share these documents with the other expert witness expeditiously. Expert witnesses shall always have access to the same documents.”

Early agreement on expert methodology

19. This clause addresses methodology in parallel with documents and data. Where methodology can be agreed at the first meeting it is recorded in a joint statement, including any agreed samples and ranges.

20. Parties could therefore agree on the following to be included in the terms of reference or the first procedural order:

“During the first meeting of expert witnesses of like discipline, the methodology that the expert witnesses will use shall be discussed and if possible agreed.

If the methodology is agreed then the methodology should be recorded as such in a joint statement, including in relation to the specific samples and ranges to be adopted (if appropriate).

If the methodology is not agreed, then the expert witnesses shall be obliged to promptly notify the tribunal as to whether the difference in methodology: a) may create a substantial difference in their final opinions, b) may incur substantial expert witness fees, and c) anything else of relevance for the tribunal’s consideration at this time.

What is “substantial” should be considered in the context of this [arbitration].

Any disagreements shall be raised to the tribunal with reasons. If the tribunal considers it appropriate, it will provide direction/instruction on the proposed methodologies.”

Expert opinions across all liability scenarios

21. Where facts, methodologies or liability outcomes diverge, this clause requires the experts, within reason, to opine on all relevant scenarios. The scenarios are agreed between the experts as early as possible and reported to the tribunal.

22. Parties could therefore agree on the following to be included in the terms of reference or the first procedural order:

“Where there are differing facts, methodologies and liability scenarios, the tribunal requires the expert witnesses, within reason, to prepare their opinions in relation to all scenarios.

Those scenarios should be agreed upon between the expert witnesses as early in the process as possible and reported to the tribunal in order to elicit any comments, along with any disagreed scenarios (i.e., whichever party succeeds on liability on each claim). The expert witnesses should prepare joint wording explaining the basis of each scenario and the facts, assumptions, and liability upon which they are based.”



Tribunal encouraged to question expert reports early

23. This clause reflects the survey view that tribunals under-engage before hearings. It records the parties' agreement that the tribunal is permitted and encouraged to write with comments and questions on the expert reports at any time. Such questions are expressly not to be treated as leading, indicative or conclusive but are shared in the interests of efficiency.

24. Parties could therefore agree on the following to be included in the terms of reference or the first procedural order:

"The parties and tribunal concur that expert witness evidence will be beneficial for the tribunal's understanding of certain matters in dispute.

The tribunal wishes to ensure that the expert witness evidence addresses the issues in dispute and is easily comparable as between the expert witness reports for each party.

To this end, the parties agree that the tribunal is permitted and encouraged to write to the parties with comments and questions arising from the expert witness reports at any time.

The parties agree that such questions or comments will not be construed as leading, indicative or conclusive, and are shared with the parties in the interests of efficiency and to serve both parties' best interests."

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