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Party Appointed Experts in International Arbitration—Asset or Liability?

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Abstract

The use of party appointed experts in international arbitration, as with domestic litigation, is widespread. However, their use too often comes at a significant expense, bringing challenges of partiality and ineffective deployment in proceedings. This article discusses leading international case management techniques in respect of party appointed experts, with a particular focus on methods addressing bias in party appointed expert evidence in domestic common law courts and international arbitration. Best practice directions are proposed and examples of expert protocol used by the author in his arbitration practice are appended to the article for further reference and to assist in maximising the value of party appointed expert evidence to parties and Tribunals.

1. Introduction

Expert evidence is designed to clarify but it can confound if improperly managed. Party appointed experts have become a common feature of international arbitration, but they present challenges for maintaining the independence and cost-effectiveness of the evidence. It has been said that party appointed experts are prone to lack impartiality,[1] and to act like "hired guns" who are "no more than paid advocacy of a party's cause".[2] It is only human nature to feel obliged, whether consciously or not, to those who provide employment and remuneration[3] but, with the right direction, experts can provide the tribunal with the necessary assistance to evaluate the evidence well.

The prevalence of party appointed experts in international arbitration highlights the differences between the approaches to presenting evidence in the common and the civil law. As party appointed experts are rarely used in domestic proceedings in civil law jurisdictions, counsel and arbitrators from the civil law may be unfamiliar with reforms to the use of party appointed experts in common law jurisdictions undertaken to maximise impartiality and efficiency.

This article begins with an overview of the role and utility of the expert witness and a discussion of the steps taken in domestic common law proceedings to address bias in party appointed expert evidence. It then considers the experience with experts in international arbitration and how the difficulties that have been encountered there might be addressed. The article finally provides a sample expert evidence procedural order, oral directions, and

* The author gratefully acknowledges the assistance in preparation of this article of Rebecca Zhong, Legal Assistant; and Professor Janet Walker for review of the draft.

[1] New South Wales Law Reform Commission, *Expert Witnesses* (Report No 109, June 2005).

[2] Jeffrey Waincymer, *Procedure and Evidence in International Arbitration* (Kluwer Law International 2012) Ch 12, 933.

[3] As observed by Sir George Jessel MR in Abinger v Ashton (1873–1974) 17 LR Eq 358 at 374.

a novel "Expert Access Protocol" developed by the author that have proved effective in a number of cases.

2. Role of the expert witness

Courts and tribunals often require the assistance of expert witnesses in disputes that are factually and technically complex, not to provide the factual evidence, but to provide their opinions based on facts that are presented by fact witnesses and the documents that comprise the evidentiary record in the case.[4]

There are generally three areas of expertise that tend to be needed: strictly technical expertise, legal expertise, and expertise related to delay, disruption, and quantum.[5] Technical experts are used where the dispute entails a specialist area of knowledge on which the tribunal must be educated. Legal experts are often used to explain aspects of a relevant domestic law with which the tribunal is unfamiliar. This may be awkward where one or more members of the tribunal are familiar with the law in question; it may be the case that counsel or co-counsel qualified in the particular law are directed to make submissions on the law.[6] Finally, delay, disruption and quantum experts are used to assist in evaluating claims for delay and disruption, particularly in construction related disputes; and quantum experts are used to assist in determining the quantum of damages claimed by parties in a wide range of disputes.

There are important differences between the use and perception of party appointed and court-appointed experts in the common and civil law. Party appointed experts are widely used in common law jurisdictions, in part as a result of the adversarial system, where the development of the factual record is primarily the responsibility of the parties. The general rationale is that advocates can present their case most effectively when they have control over the expert witnesses.

In contrast, court-appointed experts are typically used in civil law jurisdictions, where the ascertainment of facts and law is primarily the role of the court, and in which the court often takes the initiative in examining witnesses. The role of the expert is to assist the court in reaching the "objective truth".[7] Court-appointed experts may be selected with little regard to submissions from the parties, and they are remunerated by the court, although ultimately paid by the party who bears the costs of the litigation. This practice has been said to encourage experts to build favourable reputations with the court by rendering "a careful, succinct and well-substantiated report" so that they will be retained again in other matters.[8]

Despite the extensive involvement of counsel and arbitrators with civil law backgrounds in international arbitration, the use of party appointed experts has become the norm.[9] Accordingly, this article will focus on party appointed experts.

3. History of reform: The Woolf Report

It is instructive now to consider some of the major reforms undertaken by domestic common law courts in respect of party appointed experts to mitigate issues of partiality and inefficiency.

[4] Jeffrey Waincymer, *Procedure and Evidence in International Arbitration* (Kluwer Law International 2012) 931.
[5] Nigel Blackaby and Alex Wilbraham, "Practical Issues Relating to the Use of Expert Evidence in Investment Treaty Arbitration" (2016) 31 *ICSID Review* 655, 660.
[6] Nigel Blackaby and Alex Wilbraham, "Practical Issues Relating to the Use of Expert Evidence in Investment Treaty Arbitration" (2016) 31 *ICSID Review* 655, 661.
[7] Julian D M Lew, Loukas A Mistelis and Stefan Kröll, *Comparative International Commercial Arbitration* (Kluwer Law International 2003) Ch 22, 553–83.
[8] John H Langbein, "The German Arbitral Advantage" (1985) 52(4) *University of Chicago Law Review* 823, 838.
[9] Paul Friedland and Stavros Brekoulakis, *2012 International Arbitration Survey: Current and Preferred Practices in the Arbitral Process* (Survey, 2012) 29.

In 1994, Lord Woolf, then one of the UK's most senior jurists, was appointed to conduct a comprehensive review of the civil justice system. The output of that review is contained in a well-known set of Interim and Final Reports[10] in which Lord Woolf expressed concerns over the disproportionate cost, inefficiency and complexity of the existing civil procedure system. Although the value of a "full, 'red-blooded' adversarial approach" to civil justice was acknowledged, his Lordship also noted that this would be "appropriate only if questions of cost and time [were] put aside".[11]

The Woolf Report identified the proliferation of expert evidence as one source of these problems and as an area in need of major reform. Two issues were highlighted. First, there was a tendency for experts to be biased in favour of their appointing party, resulting in inefficiency where partisan experts adopted opposing opinions merely to support the case of their appointing party. Of course, conflicting expert evidence may be a natural consequence of dealing with complex areas, but when this conflict is due to the reluctance of experts to deviate from the "party line", the fundamental utility of the expert evidence may be called into question.[12]

Secondly, parties may be inclined to call multiple experts for aspects of the case where may be no need for experts at all, hoping that the quantity, and not the quality, of the expert witnesses will strengthen their case. This too can add unnecessary cost and delay to proceedings; and it can cause injustice where there is financial inequality between the parties.

Ultimately, Lord Woolf recommended active case management, and emphasised greater control of the litigation by the judges rather than the parties. On the issue of expert witnesses, Lord Woolf proposed a series of reforms, underpinned by the fundamental notion of the expert's overriding duty to assist the court impartially and independently, including that[13]:

- no expert evidence should be given on a subject unless it would be of assistance to the court;
- no expert evidence should be adduced without the leave of the court;
- the scope of expert evidence should be limited by court directions as to the issues upon which expert evidence can be led, limits to the number of experts allowed to be called and/or jointly or court appointed experts;
- the practice of ordering joint conferences of experts should be continued, and experts should be required to produce a joint report detailing issues agreed and not agreed upon; and
- single experts (jointly appointed by the parties or appointed by the court) should be used wherever possible.

4. Post-Woolf Report Reforms in the UK

The Civil Procedure Rules 1998 (CPR) Pt 35 and its supplementary Practice Direction implemented the recommendations proposed in the Woolf Report to curb bias in expert witness evidence, including providing that the expert's duty to the court overrides "any obligation to the person from whom experts have received instructions or by whom they are paid"[14] and, based on the case law,[15] that:

[10] Sir Harry K Woolf, *Access to Justice: Final Report to the Lord Chancellor on the Civil Justice System in England and Wales* (HMSO 1996). See also Sir Harry K Woolf, *Access to Justice: Interim Report to the Lord Chancellor on the Civil Justice System in England and Wales* (HMSO 1995).

[11] Woolf, *Access to Justice: Final Report to the Lord Chancellor on the Civil Justice System in England and Wales* [13.6].

[12] Doug Jones, "The Effective Use of Party Appointed Experts in International Construction Arbitration" (Speech, Chartered Institute of Arbitrators Thailand Branch Meeting, 6 July 2011) 6.

[13] Woolf, *Access to Justice: Final Report to the Lord Chancellor on the Civil Justice System in England and Wales*.

[14] CPR 35.3; 35 PD 2.2.

[15] *National Justice Compania Naviera SA v Prudential Assurance Co Ltd* [1995] 1 Lloyd's Rep 455 (*The Ikarian Reefer*); *Davies v Edinburgh Corp* (1953) SC 34, 1953 SLT 54.

- expert evidence should be the independent product of the expert uninfluenced by the pressures of litigation[16];
- experts should consider all material facts, including those which might detract from their opinions; and[17]
- experts should make it clear when a question or issue falls outside their expertise or when they are not able to reach a definite opinion.[18]

Other instances where the Woolf recommendations have been implemented include the *Code of Guidance on Expert Evidence*, published in 2002 by a Working Party established by the Head of Civil Justice,[19] which guides communication between experts and instructing parties. More recently, the Civil Justice Council published the *Guidance for the Instruction of Experts in Civil Claims*, which assists experts and litigants with best practice in complying with Practice Direction 35 and the CPR r 35.[20]

5. Reform in Australia

In Australia, reform of the procedure for using expert evidence has been driven by a number of domestic and international industry surveys and reports, including the Woolf Reports, which consistently note issues of inaccessibility and injustice. As a result, Australian courts and tribunals have undergone changes similar to those that occurred in the UK, emphasising the importance of strong judicial case management.[21]

In 1999, an empirical study was published by the Australian Institute of Judicial Administration outlining the perspectives of the Australian judiciary on expert evidence. The study showed that a key concern expressed by 35 per cent of Australian trial judges was the perception of bias in party appointed expert witnesses.[22] This was not limited to overt bias—an even greater concern was expressed at the number of experts who harboured a less obvious, subconscious form of bias.

The issue of bias was elaborated upon in 2005 in the New South Wales Law Reform Commission Report No 109 and Issue Paper No 25 (2004) on "Expert Witnesses", which addressed the relevant rules and procedures in New South Wales. The Report and Issue Paper made recommendations as to:

- impartiality, through the formulation of expert codes of conduct, prohibition of "no win, no fee" arrangements and sanctions for inappropriate or unethical conduct by experts[23];
- transparency, through the early exchange of expert reports and disclosure of instructions given to experts; and[24]
- efficient use of experts, by requiring experts to consult prior to the hearing and through the taking of concurrent evidence.[25]

6. How have these proposed reforms been implemented in practice?

Australian jurisdictions have sought to address industry concerns about partisanship in expert evidence through the Uniform Civil Procedure Rules (UCPR) of each state. The

[16] CPR 35 PD 2.1.
[17] CPR 35 PD 2.3.
[18] CPR 35 PD 2.4.
[19] Working Party Established by the Head of Civil Justice, "Code of Guidance on Expert Evidence: A Guide for Experts and those Instructing them for the Purpose of Court Proceedings" (2002) 8(2) *Clinical Risk* 60.
[20] Civil Justice Council, "Guidance for the Instruction of Experts in Civil Claims" (Guidance, 1 December 2014).
[21] New South Wales Law Reform Commission, *Expert Witnesses* (Report No 109, June 2005) 82.
[22] Ian Freckelton, Prasuna Reddy and Hugh Selby, *Australian Judicial Perspectives on Expert Evidence: An Empirical Study* (Australian Institute of Judicial Administration 1999) 37.
[23] New South Wales Law Reform Commission, *Expert Witnesses* (Issues Paper No 25, November 2004) 8.
[24] New South Wales Law Reform Commission, *Expert Witnesses* (Issues Paper No 25, November 2004) 13.
[25] New South Wales Law Reform Commission, *Expert Witnesses* (Issues Paper No 25, November 2004) 15.

focus on pro-active judicial case management has been a driving force behind the changes to the approach to expert evidence.[26] This has included the formulation of discrete expert codes or standards of practice, provisions for single and court-appointed expert witnesses, and provisions for the taking of concurrent evidence.

A common thread running through the UCPRs is the basic premise that the expert's overriding duty is to the court and not to the parties, although there are some variations in the way in which this is articulated in the rules and realised in practice. This section considers some of those jurisdictions.

Queensland

In Queensland, the UCPR 1999 (Qld) Ch 11 Pt 5 deals specifically with expert evidence. One of the main purposes is to "declare the duty of an expert witness in relation to the court and the parties".[27] In July 2004, the Queensland UCPR was amended to curb expert bias in Supreme Court proceedings by establishing a presumption in favour of the appointment of a single expert, either by agreement between the parties or appointed by the court[28] and, uniquely in Queensland,[29] by providing for the appointment of experts before proceedings have started.

A single expert may be appointed by agreement of the parties; by application to the court; or by the court's own initiative, if it considers that expert evidence may be of assistance in resolving a substantial issue in the proceedings.[30] Where a single expert is appointed, that expert becomes the only expert permitted to give evidence on the issue, unless otherwise ordered by the court.[31] This seeks to reduce the risk of adversarial bias. Where parties have retained more experts than is necessary on a particular issue, cost sanctions may apply.[32]

Where there is a dispute between parties that "will probably result in a proceeding and obtaining expert evidence immediately may help in resolving a substantial issue in the dispute", an expert may be appointed by agreement of the parties or by the court on application.[33] This may mitigate the risk of unnecessary cost and delay where one or both parties have already retained experts by the time a joint or court-ordered appointment is made.[34]

New South Wales

As a result of the NSWLRC Report, reform in NSW has been particularly robust, with the most detailed expert witness regime of any jurisdiction. In NSW, expert witnesses must comply with a code of conduct set out in the UCPR 2005 Sch 7,[35] which includes the following statement:

> "An expert witness is not an advocate for a party and has a paramount duty, overriding any duty to the party to the proceedings or other person retaining the expert witness, to assist the court impartially on matters relevant to the area of expertise of the witness."[36]

[26] The Hon Justice Peter McClellan, "Concurrent Expert Evidence" (Keynote Address, Medicine and Law Conference Law Institute Victoria, 29 November 2007) 9.
[27] UCPR 1999 (Qld) r 423(a).
[28] See Uniform Civil Procedure Rules 1999 (Qld) r 423(b); New South Wales Law Reform Commission, *Expert Witnesses* (Report No 109, June 2005) 49–50.
[29] New South Wales Law Reform Commission, *Expert Witnesses* (Report No 109, June 2005) 52.
[30] UCPR 1999 (Qld) r 429G.
[31] UCPR 1999 (Qld) r 429H(6).
[32] UCPR 1999 (Qld) r 429D, although the Direction does not give guidance as to how this is to be assessed.
[33] UCPR 1999 (Qld) rr 429R–429S.
[34] New South Wales Law Reform Commission, *Expert Witnesses* (Report No 109, June 2005) 52.
[35] UCPR 2005 (NSW) r 31.23.
[36] UCPR 2005 (NSW) Sch 7(2).

The code of conduct is heavily influenced by common law principles.[37] It was most recently updated in 2016 to conform with the harmonised rules by the Council of Chief Justices.[38]

Federal Court

In 1998, the *Practice Direction: Guidelines for Expert Witnesses in Proceedings in the Federal Court of Australia* was produced by the Federal Court in conjunction with the Law Council of Australia, in response to concerns within the profession. The directions were inspired by the Woolf recommendations, aiming to clarify the roles and duties of experts to make their evidence more effective and efficient. The Explanatory Memorandum further outlines that the guidelines were designed to help experts to avoid bias or partiality, and the amended 2016 practice direction, the *Expert Evidence Practice Note*, explicitly states that "parties and their legal representatives should never view an expert witness retained (or partly retained) by them as that party's advocate or 'hired gun'".[39]

The 2016 *Practice Note*, replaced the previous guidelines. retaining the substantive content of the old guidelines, but expanding its reach and annexing a Harmonised Expert Witness Code of Conduct. The 2016 *Practice Note* also includes detailed provisions for the taking of concurrent evidence and hot-tubbing further reflecting the emphasis on judicial case management.

Among other things, the expert must give details of[40]:

- their qualifications, and the material or literature used to prepare the report to ensure that the court knows the extent of witness's expertise, and the information upon which the opinion is based;
- the reasons for each opinion stated to enable the court to assess the method of reasoning used to draw each conclusion (this is also required, in any event, by the Evidence Act s 79)[41];
- the issues that the expert has been asked to address when giving evidence, the alleged facts upon which the opinion is based and any other materials that the expert has been instructed to consider, which help the court to place the opinion in context and assess its relevance and value to the proceedings; and
- any inaccuracy or incompleteness in the report, whether due to insufficient data or otherwise, which help the court to weigh the value of the opinion and to ascertain to the extent to which it is based on research or on speculation.

7. Issues in expert evidence in international arbitration

International arbitrations often involve practitioners with backgrounds in the civil law and the common law and those with different backgrounds from within these two traditions, making the process an amalgam of different traditions. Despite this, the use of party

[37] *Richie's Uniform Civil Procedure NSW* vol 1 para 31.23.5 (service 107).
[38] *Richie's Uniform Civil Procedure NSW* vol 1 para 31.23.5 (service 107).
[39] Federal Court of Australia, *Expert Evidence Practice Note* 25 October 2016 [3.1].
[40] Federal Court of Australia, *Expert Evidence Practice Note* 25 October 2016 [3.1].
[41] *Makita (Aust) Pty Ltd v Sprowles* (2001) 52 NSWLR 705 at [743]–[734] (Heydon JA); *HG v The Queen* (1999) 197 CLR 414 at 427 [39] (Gleeson CJ); *Dasreef Pty Ltd v Hawchar* (2011) 243 CLR 588 at 605 [42] (French CJ, Gummow, Hayne, Crennan, Kiefel and Bell JJ); *Bone v Wallalong Investments* [2012] NSWSC 137 at [26] (McDougall J). See Justice Robert McDougall, "The Utility of Expert Evidence in Dispute Resolution" (Paper, Resolution Institute, 2 November 2016) [24].

appointed experts predominates.[42] The 2012 International Arbitration Survey revealed that, where expert witnesses were involved, they were party appointed 90 per cent of the time.[43]

As a result, the concerns surrounding the independence of party appointed experts in common law domestic court systems have also been experienced in international arbitration. These concerns have been exacerbated by the use of party appointed arbitrators by counsel from civil law backgrounds who are unfamiliar with the problems that have driven reform in domestic common law systems. It is, therefore, essential for arbitrators, arbitral institutions and practitioners to address these issues to maximise the value of expert evidence.

Indeed, these issues have been recognised by members of the arbitral community. Less than half of the respondents to the 2012 International Arbitration Survey found expert witnesses more effective when appointed by the parties.[44] The interviewees who preferred tribunal appointed experts said that, in their experience, party appointed experts often act as partisan advocates for the party who appointed them resulting in the appointment of a third expert by the tribunal and additional expense that might have been avoided by the appointment of an expert by the tribunal in the first place.[45]

8. Current practice on taking of expert evidence in international arbitration

Most institutional rules deal only very generally with the process of taking evidence,[46] leaving this to be determined by the parties and the tribunal. However, the International Bar Association (IBA) and the Chartered Institute of Arbitrators (CIArb) have developed international standards of conduct for counsel, dealing specifically with party appointed experts.

IBA Rules on the Taking of Evidence in International Arbitration

The IBA Rules on the Taking of Evidence in International Arbitration 1999, amended in 2010, provide detailed procedures for party appointed and tribunal appointed experts. The IBA Rules provide guidelines for parties and tribunals to facilitate the efficient and economical conduct of the arbitral process, including evidentiary procedure. While the Rules are not exhaustive,[47] partly due to the wide scope of their intended operation, they are a "tried and tested" basis on which tribunals can establish the process for taking expert evidence.[48]

The 2010 amendments regarding party appointed experts echo the findings in the Woolf Report. They now require experts to provide a description of the instructions that they have received from the parties,[49] consistent with Lord Woolf's recommendations as to transparency of evidentiary proceedings[50]; and they require that party appointed experts reports contain

[42] Klaus Sachs and Nils Schmidt-Ahrendts, "Protocol on Expert Teaming: A New Approach to Expert Evidence", in Albert Jan van den Berg (ed), *Arbitration Advocacy in Changing Times* (ICCA Congress Series, Kluwer Law International 2011) vol 15, 136.

[43] Paul Friedland and Stavros Brekoulakis, *2012 International Arbitration Survey: Current and Preferred Practices in the Arbitral Process* (Survey, 2012) 29.

[44] Paul Friedland and Stavros Brekoulakis, *2012 International Arbitration Survey: Current and Preferred Practices in the Arbitral Process* (Survey, 2012).

[45] Paul Friedland and Stavros Brekoulakis, *2012 International Arbitration Survey: Current and Preferred Practices in the Arbitral Process* (Survey, 2012).

[46] Klaus Sachs and Nils Schmidt-Ahrendts, "Protocol on Expert Teaming: A New Approach to Expert Evidence", in Albert Jan van den Berg (ed), *Arbitration Advocacy in Changing Times* (ICCA Congress Series, Kluwer Law International 2011) 137.

[47] eg there is some question as to how they operate in regards to hearsay: see S I Strong and James J Dries, "Witness Statements under the IBA Rules of Evidence: What to Do about Hearsay?" (2005) 21(3) *Arbitration International* 301.

[48] Doug Jones, "The Effective Use of Party Appointed Experts in International Construction Arbitration" (Speech, Chartered Institute of Arbitrators Thailand Branch Meeting, 6 July 2011) 7.

[49] International Bar Association, "Rules on the Taking of Evidence in International Arbitration" (2010) art 5(2)(b).

[50] Woolf, *Access to Justice: Final Report to the Lord Chancellor on the Civil Justice System in England and Wales*.

the expert's statement of independence from the parties, their legal advisors and the arbitral tribunal,[51] emphasising the overriding duty of the experts to the tribunal and not to their retaining party.

Other revisions include an express provision for consultation between the tribunal and parties at the earliest appropriate time "with a view to agreeing on an efficient, economical and fair process for the taking of evidence".[52] The consultation should include issues such as the "scope, timing and manner" of "the preparation of witness statements and expert reports", among other things.[53] This emphasises the importance of efficiency and economy in the evidence procedure whilst still balancing the ability of the parties and tribunal to formulate a bespoke procedure suitable to the particular arbitration at hand.

It has been suggested, however, that the prescription for a statement of independence "conflate[s] 'impartiality' and 'objectivity' with 'independence'".[54] The Rules do not themselves explain how an expert can in fact *be* independent, and not merely *show* independence, from a party with whom they have worked closely and who pays their fees.

The CIArb Protocol for the Use of Party-Appointed Expert Witnesses in International Arbitration

The 2007 CIArb Protocol for the Use of Party-Appointed Expert Witnesses in International Arbitration is similar to the IBA Rules and to reforms in domestic common law courts. It emphasises the importance of independence of experts by setting out the ethical principles of independence, duty and opinion which should guide the expert's evidence, including specifically that "[a]n expert's opinion shall be impartial, objective, unbiased and uninfluenced by the pressures of the dispute resolution process or by any Party".[55] Article 8 provides for the expert declaration,[56] including statements regarding the expert's foremost duty to assist the Tribunal[57] and the impartiality and objectivity of the evidence, which has not been influenced by "the pressures of the dispute resolution process or by any party to the arbitration".[58]

The Protocol also provides guidance on the procedure for tendering expert evidence, including that experts must first enter into a discussion for the purpose of identifying and agreeing on the issues on which they are to provide an opinion, as well as agreeing on the tests or analyses to be applied on the facts.[59] This forms the basis for the production of much of the evidence[60]; with the experts proceeding to prepare their reports on the terms that they have agreed. The Protocol allows the tribunal wide scope to direct the proceedings, for example, by directing the experts to confer further[61] or to hold preliminary meetings with the experts.[62]

[51] International Bar Association, "Rules on the Taking of Evidence in International Arbitration" (2010) art 5(2)(c).
[52] International Bar Association, "Rules on the Taking of Evidence in International Arbitration" (2010) art 2(1).
[53] International Bar Association, "Rules on the Taking of Evidence in International Arbitration" (2010) art 2(2)(b).
[54] Mark Kantor, "A Code of Conduct for Party-Appointed Experts in International Arbitration" (2013) 26(3) *Arbitration International* 323, 329.
[55] Chartered Institute of Arbitrators, "Protocol for the Use of Party-Appointed Expert Witnesses in International Arbitration" (September 2007) art 4(1).
[56] Chartered Institute of Arbitrators, "Protocol for the Use of Party-Appointed Expert Witnesses in International Arbitration" (September 2007) art 4.5(n).
[57] Chartered Institute of Arbitrators, "Protocol for the Use of Party-Appointed Expert Witnesses in International Arbitration" (September 2007) art 8.1(a).
[58] Chartered Institute of Arbitrators, "Protocol for the Use of Party-Appointed Expert Witnesses in International Arbitration" (September 2007) art 8.1(b).
[59] Chartered Institute of Arbitrators, "Protocol for the Use of Party-Appointed Expert Witnesses in International Arbitration" (September 2007) art 6.
[60] Chartered Institute of Arbitrators, "Protocol for the Use of Party-Appointed Expert Witnesses in International Arbitration" (September 2007) art 6.1(c).
[61] Chartered Institute of Arbitrators, "Protocol for the Use of Party-Appointed Expert Witnesses in International Arbitration" (September 2007) art 7.2.
[62] Chartered Institute of Arbitrators, "Protocol for the Use of Party-Appointed Expert Witnesses in International Arbitration" (September 2007) art 7.3.

Despite the amendments and reforms in the institutional rules, it is unclear whether the regulation of evidence procedure itself, through codes of conduct and protocols actually reduces partiality and bias of many party appointed experts. For example, Mark Kantor has raised concerns as to the "appearance versus reality" of impartiality where codes of conduct and statements of independence are concerned.[63] Kantor is sceptical that an expert, even acting in good faith, can ever be entirely free from pressures from their employing party or from the case itself. He argues that "no protocol or code can regulate the ability of a party to hire an expert who is just a good actor or actress",[64] and who is able to appear objective while delivering fundamentally partisan evidence.[65] Whether or not this is the case, the concern is shared by many.

9. Limiting the differences and proposed best practice directions

In light of these concerns, this article suggests a practical framework for the taking of party appointed expert evidence that goes beyond a statement of independence. In addition to ensuring the appearance of independence of experts, valuable evidence can be tendered by improving the efficiency of the evidentiary procedure. The practice directions to be discussed aim to maximise efficiency by focussing on limiting the differences between experts *prior* to the giving of evidence. This allows evidentiary hearings to be conducted more expeditiously and therefore with less expense. The directions are aimed at reducing the amount and scope of expert evidence to be tendered at the hearing to that which is really necessary. At each stage of the process, the issues or topics requiring expert evidence are streamlined, and the variables between the experts and their opinions are reduced. As a result, at the hearing stage, it is ensured that only the relevant issues are ventilated. Put colloquially, it helps ensure that each party appointed expert's report squarely engages with the issues raised by the other, rather than passing like ships in the night.

Above all, the effectiveness of the proposed best practice directions depends on consistent preparation and active case management from the Tribunal. It also requires an honest acknowledgment of the difficulties of adducing expert evidence by the arbitral tribunal, and open communication with the parties on those issues. As a matter of general guidance, the tribunal should raise this issue with the parties at the earliest practical stage of the proceedings, to ensure that all involved are aware of the ensuing process.

The following process is proposed:

- first, identify disciplines in need of expert evidence and experts proposed;
- secondly, establish within each discipline a common list of questions;
- thirdly, defer the production of all expert reports until all factual evidence (documentary and witness) is available;
- fourthly, require the experts within each discipline to produce a joint expert report identifying areas of agreement and disagreement;
- fifthly, require the experts within each discipline to produce individual expert reports on areas on disagreement only; and
- sixthly, require the experts to produce "reply" expert reports conducted on a "figures-as-figures" basis.

For guidance within a practical framework, an extracted procedural order detailing the above process has been appended to this article in Appendix A.[66] References will be made

[63] Mark Kantor, "A Code of Conduct for Party-Appointed Experts in International Arbitration" (2013) 26(3) *Arbitration International* 323, 333.
[64] Mark Kantor, "A Code of Conduct for Party-Appointed Experts in International Arbitration" (2013) 26(3) *Arbitration International* 323, 335.
[65] Mark Kantor, "A Code of Conduct for Party-Appointed Experts in International Arbitration" (2013) 26(3) *Arbitration International* 323, 335.
[66] See Appendix A.

to the sections of the procedural order relevant to each step. Of course, the example provided is not prescriptive and should simply be noted as a guideline that can be altered to suit the needs of the arbitration at hand.

The deployment of these techniques has proved valuable. In a recent substantial (US$1bn+) dispute concerning a four-unit nuclear power plant, in which there were more than six separate areas of expert evidence, in the area of disruption, a vexed area of evidence, the parties' experts reached agreement on how to measure and quantify disruption. At the hearing, they gave a joint presentation on their joint findings with no cross examination needed. This was a particularly dramatic example of this approach to the use of experts, but virtually all instances of the use of these techniques have produced impressive results.

The proposed steps will be considered in some more detail.

First, it is necessary to identify early on in the arbitration the disciplines for which expert evidence is required and, with tribunal approval, to identify and appoint the relevant experts.[67] This ensures that, from the outset, evidence is tendered only on the relevant issues, and any objections to the proposed experts can be addressed in good time. It is not uncommon for there to be objections against particular individuals proposed, or against the need for experts on particular issues. Parties may find that, in the process of determining the issues requiring expert evidence, the scope, or value of their dispute on those issues does not in fact warrant the production of such evidence. In a similar vein, in principle, only one expert on each side should opine on any given issue.

Once the experts have been appointed and the relevant disciplines selected, the tribunal must establish within each expert discipline a common list of questions for the appointed experts to answer.[68] The tribunal should maintain an active oversight role throughout this process, assisting where parties are unable to agree, for instance, on the questions to be asked.

Next, it is essential that experts providing opinions do so on the basis of the same facts. An expert should not have any more or any different information from the other experts in the same field. Thus, the reports should be deferred until the production of the factual evidence (both documentary and lay witness) to them to be produced in light of the fullest knowledge of the facts and circumstances of the matter. Furthermore, the experts' analysis should be prepared using a common database to limit the variables that could cause differences in outcome resulting from opposing expert reports. Should a problem arise, the experts should inform the tribunal of the differential in information so that it can be corrected or taken into account. Only then are the true areas of expert contention revealed. Where the facts are mutually understood (even if disputed), differences in outcome can be attributed to the expert's genuine analysis, rather than use of different facts or documents.

Following this, the experts within each discipline should, after detailed "without prejudice" conferral, and exchanges of "without prejudice" drafts, provide joint reports identifying areas of agreement and disagreement between themselves, with reasons for disagreements.[69] Individual expert reports should also be produced thereafter, but only on the areas of disagreement.[70]

Another benefit of experts producing joint reports before individual reports is that it allows experts to discuss their positions on a provisional basis, without having committed themselves to a particular position in their individual reports. In this respect, to the extent that the parties agree, it critical for the experts to meet periodically in person, without the presence of the parties' representatives.[71] Importantly, the tribunal must emphasise that these discussions are to be held in camera between them. If there is to be any possibility of

[67] See Appendix A cl 1.2–1.3.
[68] See Appendix A cl 1.4.
[69] See Appendix A cl 1.8.
[70] See Appendix A cl 1.9.
[71] See Appendix A cl 1.12.

common ground between the experts, it is much more likely to be achieved before the experts have declared positions from which they must retreat.

Of course, it is to be expected that experts may adopt different views. Where these differences are attributable to particular factual assumptions, it is critical for the experts also to provide their opinions on the basis of the other factual assumptions if adopted. The tribunal should ensure that each expert conducts an analysis of their counter-expert's methodology and assumptions. Essentially, this asks experts to consider whether, if they adopted all of the same factual assumptions as their counter-expert, they would reach the same outcome, or different outcome, and if different, what that difference would be.

This approach is useful because the value of the experts' evidence is often contingent on the tribunal's findings on certain issues. The approach therefore prevents a situation where, if the members of the tribunal decide a particular factual issue one way, they are left with the assistance of only the expert who relied on that assumption. The process proposed here ensures that experts from both sides consider all the possible factual assumptions and methodologies that may be adopted by the tribunal. As a result, their final expert reports will be of maximum utility regardless of the position eventually taken by the tribunal.

It is also important that the tribunal caution the parties that reply expert reports should respond only to the expert reports served by the opposing party and should not refer to any new issues not already addressed. This reduces the risk of a proliferation of unnecessary or irrelevant evidence.

It will go without saying that it is critical that the tribunal remain proactively engaged throughout the entire process. Key to the success of each of these steps is constant review of the process and the product by the tribunal in case management conferences.

It is only then that real value can be gained from the "hot-tubbing" process at the evidentiary hearing stage. It is to that issue that this article now turns.

Hot-tubbing

Expert "hot-tubbing", or witness conferencing, is a technique often adopted by arbitral tribunals and courts. It refers to the practice of taking evidence from experts from similar disciplines simultaneously, allowing each expert to engage with the Tribunal and each other in a forum-like discussion as to their differences.

Hot-tubbing may not always be the most appropriate way of taking of expert evidence, but it can be especially effective in complex arbitrations where there are a number of difficult factual and technical issues and where the parties rely on evidence from multiple expert witnesses. In those circumstances, traditional methods of examination of witnesses from each side in a linear fashion can lead to confusion in the tribunal's and counsel's understanding of the issues. This is particularly so in arbitrations where there are a large number of witnesses and opposing expert witness statements are heard days apart. By taking expert evidence via hot-tubbing, experts can engage with opposing views directly and in succession, thus facilitating deeper examination of the most contentious issues. The experts can hold one another to account for their opinions, and are less likely to present strongly partisan opinions in the presence of their peers who are able challenge those opinions directly. As a result, hot-tubbing and witness conferencing are seeing increasing application in international arbitration, frequently with positive results.

Joint conferences of expert witnesses have also been successful in common law courts, and guidance can be found in the procedures developed by the courts. The NSW Supreme Court Practice Note SC Gen 11 on "Joint Conferences of Expert Witnesses" states that the objectives of joint conferences include[72]:

- "the just, quick and cost-effective disposal of the proceedings;

[72] Supreme Court of New South Wales, *Practice Note SC Gen 11: Joint Conferences of Expert Witnesses*, 17 August 2005, [5].

- the identification and narrowing of issues in the proceedings during preparation for such a conference and by discussion between the experts at the conference. The joint report may be tendered by consent as evidence of matters agreed and/or to identify and limit the issues on which contested expert evidence will be called;
- the consequential shortening of the trial and enhanced prospects of settlement;
- apprising the court of the issues for determination;
- binding experts to their position on issues, thereby enhancing certainty as to how the expert evidence will come out at the trial. The joint report may, if necessary, be used in cross-examination of a participating expert called at the trial who seeks to depart from what was agreed; and
- avoiding or reducing the need for experts to attend court to give evidence."

These objectives are equally applicable to arbitrations and should be kept in mind when utilising witness conferencing.

In 2001, Justice James Wood of the NSW Supreme Court observed that his joint conference experiences had been "entirely positive" because it brought the disputed issues into sharper focus.[73] He noted that the practice of hot-tubbing frequently inspired discussion of facts that were unknown or underappreciated by one or more of the experts, while simultaneously allowing experts to dismiss peripheral issues that were identified as being of no consequence. Furthermore, he suggested that the discussion between the experts themselves would more likely be conducted on a more appropriate, scientific way than if it was led by counsel unfamiliar with the areas of expertise.

Justice Steven Rares of the Australian Federal Court, a court that has adopted specific guidelines for hot-tubbing and concurrent taking of expert evidence,[74] considered the use of hot-tubbing in a number of matters before him.[75] He recognised that "a great advantage" of concurrent evidence was that the experts were more likely to be on the same page, adopting the same assumptions and being able to diffuse any uncertainty immediately.[76] This greatly reduced hearing time and costs in comparison to the conventional cross-examination process.[77]

In the arbitration sphere, there are no standard guidelines or rules provided by the leading arbitral institutions to facilitate witness conferencing or hot-tubbing. This can primarily be attributed to the nature of the arbitral process being particularly dependent on the specifics of the matter. The CIArb Protocol does not provide specifically for witness conferencing or hot-tubbing, only that the tribunal may conduct expert testimony in such a manner as to assist the tribunal to narrow the issues between the experts, and to understand and use the expert witnesses efficiently. Similarly, the IBA Rules considers the ability of tribunals to order party appointed experts to confer to reach agreement on contested issues before or after the first draft expert reports. Despite this, a majority of respondents (62 per cent) in the 2012 International Arbitration Survey believed that expert witness conferencing should take place more often, due to the benefits of hot-tubbing outlined above.[78]

Hot-tubbing and witness conferencing can be an efficient and effective tool when deployed correctly. However, this depends on the care and initiative taken by the tribunal to ensure the proceedings are conducted in a manner that will result in the most accurate evidence.

[73] Justice James Wood, "Expert Witnesses: The New Era" (Paper, Eighth Greek Australian International Legal and Medial Conference June 2001).

[74] Federal Court of Australia, *Expert Evidence Practice Note* 25 October 2016.

[75] Justice Steven Rares, "Using the 'Hot Tub': How Concurrent Expert Evidence Aids Understanding Issues" (Summer 2010–2011) *Bar News* 64.

[76] Justice Steven Rares, "Using the 'Hot Tub': How Concurrent Expert Evidence Aids Understanding Issues" (Summer 2010–2011) *Bar News* 64, 68.

[77] Justice Steven Rares, "Using the 'Hot Tub': How Concurrent Expert Evidence Aids Understanding Issues" (Summer 2010–2011) *Bar News* 64, 70.

[78] Paul Friedland and Stavros Brekoulakis, *2012 International Arbitration Survey: Current and Preferred Practices in the Arbitral Process* (Survey, 2012) 28.

Crucially, Tribunals wishing to use this method of adducing expert evidence should consider the best practice directions proposed above, particularly in requiring the conferral of experts and joint reports to narrow the scope of the dispute prior to the hearing. This will ensure that the yield from the evidentiary hearing is as productive and valuable as possible.

10. Experts Access Protocol

This article now considers the involvement of experts after their oral evidence at the main evidentiary hearing. On one view, this is a radical consideration. After all, it might be asked, what role remains for expert witnesses after their testimony has been given? The answer, this article suggests, is that there is a highly valuable role to be played by the experts—and particularly quantum experts—in assisting the tribunal's calculations that underpin the final orders that the tribunal will make.

This idea is embodied in an Experts Access Protocol, which takes the form of a tripartite agreement between the tribunal, the parties, and the relevant set of experts (typically quantum experts, although the same approach can be used for other expert disciplines such as delay). A model agreement can be found at Appendix C.

It will be seen that the Protocol involves a mutual agreement for the Tribunal to confidentially communicate with the Experts "for the purpose of their performing calculations on the basis of existing material contained in their expert reports forming part of the evidentiary record".[79] Those communications with the Experts are to be kept entirely confidential from the Parties,[80] up until the time of the Award where the final calculations relied upon by the Tribunal will be provided together with the Award for the Parties' information.[81] Importantly, the Protocol expressly states that the Tribunal will not engage in any communications with the Experts that requires "the provision of expert opinion, rather than the performance of calculations".[82]

The utility of such a Protocol is readily apparent in complex disputes. In such cases, many quantum issues are not straightforward, but are rather multi-factorial and can vary based on the various assumptions that are entered into the valuation. To take an example about change orders in construction disputes, there may be arguments regarding the base line of a change, whether certain line items are within or outside of a contractor's scope of work, and what methods of valuation are contractually permissible. In some instances, it can be appropriate to require the quantum experts to prepare a valuation "model" that permits the Tribunal to select certain inputs and receive a valuation output. In other instances, and particularly in more complex disputes, the creation of such a model would be disproportionately time-consuming and expensive. Instead, the more efficient approach is for the tribunal to decide each of the factual matters, and then provide that information confidentially to the quantum experts for them to agree on the consequential valuation.

It might be asked why the Tribunal would take this route, as opposed to simply publishing its reasons and requesting the Parties to attempt to agree on the consequential orders to be made. There are at least three reasons why an Experts Access Protocol approach should be preferred.

First, in some cases, concerns regarding asset preservation loom large. In those instances, limiting the period of time between when the Parties can infer the outcome of the Arbitration and the time of making actual orders helps mitigate that risk.

Secondly, in arbitrations involving publicly listed corporations, there are often considerations regarding continuous disclosure obligations relating to share market issues. If information is provided which can be translated into potential outcomes, there can then

[79] Appendix C cl 1.1.
[80] Appendix C cl 3.1.
[81] Appendix C cl 3.3.4.
[82] Appendix C cl 1.1.

be arguments relating to whether there has been a failure for one party or the other to meet those disclosure requirements.

Thirdly, and on a practical level, this approach ensures that the parties (both the client and its legal representatives) are simultaneously provided with a complete and comprehensive statement of their rights and liabilities, as finally determined by the Tribunal.

As a concluding remark on this issue, it should be noted that the author's experience regarding such a proposal has been universally positive. No party in any arbitration to date has refused to enter into such an agreement, and the experts have always been able to provide very helpful assistance to the respective tribunal.

11. Conclusion

The taking of evidence from party appointed experts is an area fraught with difficulties, but ripe with opportunities. In circumstances where expert evidence is so widely used and is of such importance, there is real benefit to taking up the challenge to maximise its value. This article has sought to identify the way forward in efficiently and effectively navigating the process of taking expert evidence. At their heart, the proposals made in this article are aimed at reducing the differences between experts prior to the hearing and making the remaining differences clear to the tribunal and, in this way, increasing the relevance and probity of the evidence and decreasing the risk of bias (whether conscious or not) from the witness's role as a party appointed expert. It is hoped that adopting this approach will help parties and tribunals maximise the value gleaned from party appointed expert evidence and guide those from jurisdictions unfamiliar with the practice.

Appendix A—Example Expert Witness Procedural Order

1. **Experts**

1.1 Dealings with any Party appointed experts shall be carried out with the applicable provisions of the CIArb Protocol for the Use of Party appointed Expert Witnesses in International Arbitration (CIArb Protocol serving as a guideline, subject to the laws of the Seat.

1.2 On or before [DATE], each Party shall provide the Arbitral Tribunal and the other Parties with details of the expert disciplines and the identity of the experts within those disciplines whom it proposes to call, together with an identification of the topics upon which the experts in each discipline will be asked to opine.

1.3 In response to the information referred to in para 1.2 above each Party shall provide the Arbitral Tribunal and the other Parties with details of any further expert disciplines and the identity of the experts within those disciplines whom it proposes to call, together with an identification of the topics upon which the experts in each such additional discipline will be asked to opine on or before [DATE].

1.4 The Parties shall confer and try to come to an agreement as to the principal topics and issues that the experts are to address by reference to the Parties' respective cases, and, in the case of disagreement, revert to the Tribunal for the

resolution of any disagreement, before the experts prepare their joint reports. If necessary, a case management conference shall be held, via teleconference, on [DATE] for the resolution of any issues arising in respect of expert evidence.

1.5 Any expert report shall:

(a) be prepared in accordance with the applicable provisions of the CIArb Protocol;

(b) have attached a photograph of the expert, set out the name and address of the expert, his or her relationship with any of the Parties, if any, and a description of his or her qualifications, including his or her competence to give evidence;

(c) commence with a summary of matters intended to be established by the expert;

(d) be signed and dated by the expert;

(e) take the form of a declaration under oath or affirmation; and

(f) contain numbered paragraphs and page numbers.

1.6 The experts will undertake co-operative work, as early as possible, on the basis of the material available, bearing in mind the need to work economically and efficiently for the purpose of developing joint reports. Any issues arising in respect of this cooperation may be referred to the Tribunal for directions, if necessary.

1.7 On or before [DATE], the Parties' experts shall confer and produce a statement of matters agreed and disagreed before the exchange of the joint expert reports, and limit the content of their joint expert report to those matters on which there is disagreement.

1.8 On or before [DATE], joint expert reports shall be provided.

1.9 On or before [DATE], the Parties may file and simultaneously exchange between themselves individual expert reports dealing with areas of disagreement identified in the joint reports. Without limiting its contents, any individual expert report shall include a statement of what the expert's opinion would be on an area of disagreement if the Arbitral Tribunal accepted the assumptions and/or methodology adopted by the other Party's expert in the same area of disagreement.

1.10 The Arbitral Tribunal may, upon notice to the Parties and with the Parties' consent, hold meetings with any expert at any reasonable time with the Parties' representatives present at such meetings.

1.11 Meetings between the Parties' experts, and any draft reports prepared by those experts prior to the finalisation of joint reports, shall be without prejudice to the Parties' respective

positions in this Arbitration and shall be privileged from production to the Arbitral Tribunal.

1.12 Although the Parties shall arrange for the meetings referred to in this section to be scheduled, it is expected that experts of like disciplines are to be otherwise unaccompanied at such meetings.

Appendix B—Example Oral Teleconference Directions to Experts

The following extract is taken from an address given by the author to the experts and parties during a case management conference of a recent arbitration. It has been anonymised and edited for clarity.

A few preliminary comments might be appropriate for the experts, in particular, and also for counsel.

The first, and very important, point is that, although the experts are engaged by and paid by the parties who have engaged them, they are experts who primarily owe a duty to the Tribunal to assist the Tribunal in deciding the matters on which they provide their opinions. And, therefore, we do not expect that the experts will be advocates for the causes advanced by the parties who have engaged them. We expect the experts to be independent. We expect them to tell us everything that they consider to be relevant to assist us in making the determinations we have to make, whether what they tell us happens to assist or not the party who is paying them.

Now, this is, so far as an adversarial process is concerned, a little bit counter-intuitive; and it is something with which common law procedure, in domestic jurisdictions, has struggled for a long time with party appointed experts. Those of you who come from a civil law background, will know that party appointed experts are rare breeds, because, in a civil law context, the expert is normally engaged by the Tribunal, the court, to provide an opinion. And some of you from the Continent will, no doubt, have performed that role, from time to time.

But, in the common law world, experts appointed by tribunals, in a domestic context, have been rare. The process in the common law has been that parties appoint experts and call them as part of their case; and tribunals, domestically, have had to struggle with experts who think that their job is to win the case for their party. The courts in this country and in many other common law jurisdictions have had a lot of trouble trying to obtain, from party appointed experts, genuinely independent views and have devised rules and procedures which have been designed to try and limit the extent of the partiality of party appointed experts, with, I might say, from my personal experience, limited success.

This has also been a significant problem in international commercial arbitration because civil law advocates have thought the concept of party appointed experts to be a wonderful one. So, the civil lawyers who appear in international arbitrations are often as enthusiastic in deploying party appointed experts, to match their common law opponents, as the common law advocates have been. And, therefore, the civil law advocates come without the long history of trouble which the common law courts have had with party appointed experts; and they do not necessarily appreciate the issues that jurisdictions in the common law have had, and continue to have, with this process.

Nevertheless, despite this counter-intuitive concept of someone paid by a party actually helping the Tribunal independently, this is something which this Tribunal, and most other international arbitral tribunals, is very keen to achieve, because one of the problems with party appointed experts who advance a particular position of their party is that Tribunals are left with a rather unfortunate choice. That is, where they do not have the true benefit of the opinion of both experts opining on a particular issue, their only choice is to pick one or the other: "I accept the evidence of Ms X rather than the evidence of Mr Y, because they seem to me to make more sense". That means that the value of distinguishing between the nuances which often genuinely lie between the opinions of experts to make an informed judgment on the issue is lost.

So, we are seeking, with all of you experts, to try and get the benefit of your real expertise in a way such as I describe. And that is why we are seeking to engage proactively with the experts, and with counsel. We are in no way intending to exclude counsel, in any relevant sense, from this process, but rather to engage with the experts so that they understand our expectations, and we can design a process whereby they help the Tribunal in a genuine way. Then, we can make a judgment on the issues on which the experts are opining.

At this point, I will pause to ask whether any of the experts in the room or on the conference call have any questions about this general statement of principle?

The way in which we are seeking to take advantage of your expertise is an iterative one. First, we want those of you that are providing opinions within common areas to do so on a common database. We do not want one expert having more information or different information to the others. So if, at any point, any of you feel that your counterpart or counterparts has access to different or further information, you should let us know that, so that we can ensure that that differential of information is corrected. The common data set will be the documents relied upon by the parties and disclosed in the process of disclosure and the witness statements.

The second thing we want to ensure is that each expert answers the same questions. One of the frustrating aspects of party appointed expert evidence in the past has been that each party's counsel asks their expert a particular set of questions that happen to be the questions they consider relevant to their case theory. The other party follows by asking *their* experts a different set of questions consistent with *their* case theory.

What then happens is that ships pass in the night. So the Tribunal gets two different opinions on two different sets of questions. That is why we are now seeking to have established some agreed standard questions that the experts will all answer, which are consistent with the case theories of all the parties.

For example, say there is an argument that the design was inadequate. Now, insofar as that happens to be the subject of expert opinion, the aspects of inadequacy in design alleged by one party need to be taken account of in the questions; and the aspects of the adequacy of design contended for by the other party also needs to be incorporated in the questions. That exercise of getting the questions established can prove to be challenging, and it is something that the tribunal, parties and experts will have to work together to overcome.

Then what the tribunal seeks for the experts to do, once you know the questions you have to answer, is to have you work cooperatively with a view to reaching some joint views on what the answers to those questions are, operating within an environment where discussions that you have between each other, and material that you might exchange by way of drafts and the like, will never see the light of day with us. This is so you have the chance to formulate views, change your mind, reach a genuine opinion, without having expressed something about an issue that the Tribunal will see.

The process that sometimes occurs in international commercial arbitration is that the experts, even on common questions, produce their own reports and nail their colours to the mast. Then they talk to see whether they can reach any agreement on their differences. Now, human nature being what it is, it is always harder to change one's mind after having carefully thought through and developed a genuinely held view. If there is to be any possibility of common ground, that is much better achieved before there is something said from which a party or an expert may or may not wish to retreat.

That is not to say, of course, that experts cannot or should not express their own views. We would expect that there will be differences of view, usually arising from either assumptions of fact which have been different or arising from genuinely held differences of technical opinion.

However, where there is an assumption made as to fact, where an expert's opinion is based on a particular witness statement as a fact and there is another witness who says the opposite, it assists the tribunal to know the state of the expert's opinion on both assumptions, not just the assumption of the witness deployed by the party who has engaged the expert. So, the expert puts him or herself in the other shoe and says, "Well, if that happened to me, then my opinion would be whatever it might be".

If, at any point, any experts, once deployed in doing their reports, have any doubt about what they should be doing or how to do it, we would expect that they would, through counsel, ask the tribunal to clarify our views. We are available to the experts, through counsel, to ensure that what they do is of value to us and, ultimately, to the parties.

Appendix C—Expert Access Protocol

1 **Assistance to be provided**

1.1 The Parties agree that the Arbitral Tribunal will be given access to two of the Parties' experts, [insert] and [insert] (the Quantum Experts, on a confidential basis, for the purpose of performing calculations on the basis of existing material contained in their expert reports forming part of the evidentiary record, adopting assumptions to be provided to them by the Arbitral Tribunal (the Calculations). For the avoidance of doubt, the Arbitral Tribunal will not engage in confidential communications with the Quantum Experts about matters that require the provision of expert opinion, rather than the performance of calculations.

2 **Confidential Information**

2.1 In this Agreement, Confidential Information means: (i) all information supplied or made available to the Quantum Experts by the Arbitral Tribunal; (ii) all information supplied or made available to the Arbitral Tribunal by the Quantum Experts; (iii) all correspondence, discussions or queries raised between the Arbitral Tribunal and the Quantum Experts; (iv) all correspondence and discussions between the Quantum Experts; and (v) all material and working papers and spreadsheets prepared by, amended by or examined by the Quantum Experts in that context, all from the date of this agreement forward, for the purpose of the Quantum Experts assisting the Arbitral Tribunal with any and all Calculations.

3 **Undertakings regarding Confidential Information**

3.1 **Disclosure and Use:**

The Quantum Experts will keep all Confidential Information confidential and will not, except as permitted by this agreement, disclose or distribute Confidential Information, or permit it to be disclosed or distributed, or disclose its substance, to any person including the Parties to the arbitration or their legal representatives.

3.2 **Security of Information:**

The Quantum Experts will at all times effect and maintain adequate security measures to preserve the confidential nature of the Confidential Information, at least equivalent to the measures they would prudently effect and maintain for their own valuable and sensitive confidential information.

3.3 **Exceptions:**

The following disclosures only are permitted by this agreement:

3.3.1 **Arbitral Tribunal's Agreement:**

Confidential Information may be disclosed to the extent that the Arbitral Tribunal has expressly directed in writing that the Quantum Experts need not keep it confidential or may disclose it.

3.3.2 **Required by law:**

Confidential Information may be disclosed to the extent required by law.

3.3.3 **Quantum Experts' Staff:**

Confidential Information may be disclosed to members of the staff working for each of the Experts only to the extent necessary to assist the Experts in their interactions with the Arbitral Tribunal and each other and on the basis that such members of staff provide an equivalent undertaking to the relevant Quantum Expert.

3.3.4 **Final Calculations:**

The final calculations performed by the Quantum Experts which are relied upon by the Arbitral Tribunal for determining the quantum awarded shall either be attached to, or provided at the same time as, the Tribunal's Award. Thereafter any calculation errors that may be identified by any of the Parties shall be dealt with in accordance with [the applicable rules governing Award correction].

4 **Costs**

4.1 The Party who engaged each of the Quantum Experts for the arbitration will remain responsible for each of their costs, including staff costs and other direct costs, and the Arbitral Tribunal will have no responsibility for any costs of the Quantum Experts. The Quantum Experts will submit all applicable invoices to the Arbitral Tribunal for approval and the Arbitral Tribunal will confirm within 15 days that the sums invoiced have been properly incurred.

4.2 The Arbitral Tribunal may allocate as costs of the arbitration the costs of the Quantum Experts arising from their assistance to the Arbitral Tribunal.

5 **Disputes**

5.1 All disputes arising out of or in connection with the present agreement shall be finally settled under the Rules of Arbitration of the London Court of International Arbitration by one or more arbitrators appointed in accordance with the said Rules. The seat of the arbitration shall be London and the language of the arbitration shall be English.