

cemaj

Centre de recherche
sur les modes amiables et
juridictionnels de gestion des conflits

Christoph Müller | Sébastien Besson |
Antonio Rigozzi (Eds)

New Developments in International Commercial Arbitration 2016

Université
de Neuchâtel

unine

Schulthess §

Expert Witness: Role and Independence

SEBASTIANO NESSI

Contents

- I. Introduction
- II. The Role and Duties of Experts in Domestic Litigation
 - A. Civil Law Jurisdictions - The Prevalence of Court-appointed Experts
 - B. Common Law Jurisdictions – The Prevalence of Party-appointed Experts
 - C. The ALI/UNIDROIT PRINCIPLES
- III. Experts in International Arbitration
 - A. Arbitration Rules
 - 1. Tribunal-appointed Experts
 - 2. Party-appointed Experts
 - B. Best Practices
 - 1. The IBA Rules on the Taking of Evidence
 - 2. The CIArb Protocol
 - 3. The UNCITRAL Notes
 - C. Professional Codes of Conduct
- IV. Testing the Independence and Impartiality of Expert Witnesses
 - A. Cross-examination / Questions by the Arbitral Tribunal
 - B. Disclosure of Conflicts
 - C. The *Sachs* Protocol ("Expert Teaming")
 - D. Joint Report by Party-appointed Experts
 - E. Expert Conferencing
 - F. Disclosure of Communications between Counsel and Party-appointed Experts
- V. Sanctions for the Breach of Expert Witness's Duties of Independence and Impartiality
 - A. Disqualification of the Expert Witness
 - B. Costs Allocation
 - C. Weighing the Evidence
 - D. Reputational Damage
- VI. Conclusions

I. Introduction

John Langbein wrote in 1985: "those of us who serve as expert witnesses are known as 'saxophones'. This is a revealing term, as slang often is. The idea is that the lawyer plays the tune, manipulating the expert as though the expert were a musical instrument on which the lawyer sounds the desired notes [...]. Opposing counsel undertakes a similar exercise, hiring and schooling another expert to parrot the contrary position. The result is our familiar battle of opposing experts. The more measured and impartial an expert is, the less likely he is to be used by either side".¹

Whether simply valuable or truly necessary, experts play a crucial role in every dispute resolution system, including in the arbitral process. Typically, experts are appointed in disputes in which complex issues relating to the quantum of damages or industry conduct arise. Although party-appointed experts² clearly dominate in international arbitration, arbitral tribunals may also appoint their own experts. That is actually the norm in the court system of civil law jurisdictions.

Despite the fact that the rules and procedures governing expert evidence in international arbitration tend to vary in any given case, it is fair to say that these rules do not provide much information when it comes to defining the role and duties of party-appointed experts vis-à-vis the parties and the arbitral tribunal. More specifically, while a number of international arbitration rules require that tribunal-appointed

¹ LANGBEIN, *The German Advantage in Civil Procedure*, 52 U. CHI. L. REV. 823, 835-36 (1985). The author would like to thank Ms Sinem Mermer, registered with the Istanbul bar and trainee lawyer at Schellenberg Wittmer, for kindly assisting in the preparation of this contribution.

² Throughout this article, the terms "*party-appointed expert*" and "*expert witness*" will be used interchangeably. Where explanations are provided with respect to court- or arbitral tribunal-appointed experts specifically, this will be specified.

experts must be independent and impartial, the role of party-appointed experts is less clearly delineated.

This article proposes to explore the role and duties of experts in international arbitration, with a focus on party-appointed experts. With that in mind, this article starts by recalling briefly the role and duties of experts in domestic litigation (Chapter II), before considering in greater detail the rules that have developed in international arbitration with regard to the experts' duty of independence and impartiality (Chapter III). It then considers some of the methods that are commonly used in practice to test the independence and impartiality of party-appointed experts (Chapter IV), before turning to some of the sanctions that can be imposed on such party-appointed experts for failing to act independently (Chapter V). Finally, we set out some concluding remarks in Chapter VI.

II. The Role and Duties of Experts in Domestic Litigation

This section presents briefly the development of the use of experts and expert witness testimony in both common law and civil law jurisdictions.³ For the purpose of this section, Swiss law and German law are compared to the relevant legal principles applicable to expert testimony in the United States and the United Kingdom.

³ For a discussion of the main differences between common law and civil law jurisdictions, see generally ELSING/TOWNSEND.

A. Civil Law Jurisdictions - The Prevalence of Court-appointed Experts

When confronted with technical problems, civil law courts follow the so-called *inquisitorial* system, where the court is actively involved in investigating the facts of the case.

In this system, the expert is usually not a witness chosen by the parties but someone appointed by the court, and it falls primarily on the judge to examine the expert, most of the time without cross-examination by the parties.⁴ By owing his or her duty exclusively to the court, the court-appointed expert is expected, and trusted, to remain independent, impartial and neutral vis-à-vis the parties.

Under Swiss law, for instance, a court may seek the opinion of a court-appointed expert upon request or *ex officio*, and after hearing the parties. It is the court that will instruct the expert. The parties will however be granted the possibility to comment on the questions to be asked to the expert. Finally, it is the court that will examine the expert at the hearing, sometimes with follow-up questions from the parties.

Court-appointed experts in civil law legal systems are usually considered to be auxiliary organs of the court. As such, these experts are under a duty to the court to provide an objective and independent opinion. As a result, both the Swiss and German Codes of Civil Procedures give the parties the right to object to the appointment of an expert on the ground of lack of independence.⁵

In essence, under both Swiss and German law, the same rules as those applying to court members regarding duties of

⁴ DE BERTI, p. 55.

⁵ Article 406 (1) of the German Code of Civil Procedure (ZPO) reads, in relevant part, as follows: "*the appointment of an expert can be challenged for the same reasons a party is entitled to challenge a judge*". See also TIMMERBEIL, p. 174; SCHNEIDER P. 457; Article 183 (2) of Swiss Civil Procedure Code (CPC).

independence and impartiality will apply to tribunal-appointed experts.⁶ Successful challenges have been mounted, for example, in the case of (i) a close relationship (either personal or professional) between an expert and a party;⁷ (ii) negative opinions articulated by an expert towards one of the parties before conducting his or her investigation;⁸ and (iii) experts having an interest, financial or otherwise, in the outcome of the case.⁹

This does not mean that parties are not free to submit reports prepared by their own experts. However, such reports will not be given more evidentiary weight than party allegations.¹⁰

B. Common Law Jurisdictions- The Prevalence of Party-appointed Experts

One of the most obvious features of the common law system is its adversarial nature. Unlike in the civil law system, party appointment of experts is rooted in the common law tradition, wherein each party presents an expert to testify on its behalf.

Unlike claim consultants, whose task is to prosecute their clients' case, expert witnesses are to act as advisors to the court on those matters within the experts' particular expertise. Put differently, the expert witness is not supposed to act as an advocate of the party, but has an overriding duty

⁶ Article 183 (2) of the Swiss Code of Civil Procedure (CPC); Article 406 (1) ZPO.

⁷ BECKOK/SCHUECH ZPO para. 406 Rn. 22-22.6; Decision of the Higher Regional Court of Frankfurt am Main [OLG Frankfurt am Main], 1 U 104/96 of 28 April 2005, para. 3.

⁸ Decision of the Higher Regional Court of Saarland [OLG Saarland], 5W 42/08-16 of 11 March 2008, para. 26.

⁹ BECKOK/SCHUECH ZPO para. 406 Rn. 20.

¹⁰ Decision of the Swiss Federal Supreme Court, 4A_178/2015 of 11 November 2015 consid. 2.6; Decision of the Federal Court of Germany [BGH], V ZB 124/10 of 2 December 2010, para. 12. See also TIMMERBEIL, p. 178; BECKOK ZPO/SCHUECH ZPO para. 402 Rn. 6.

vis-à-vis the court, and more specifically, a duty to assist the court in making an informed determination of facts.

The role and duties of expert witnesses vis-à-vis the court is crucial, because the degree to which an expert is independent and impartial will impact on the evaluation of the probative value of the expert evidence. More importantly, these duties are also aimed at putting to rest the criticisms that expert witnesses are simply "*hired guns*".¹¹

In the United Kingdom, Lord Woolf published a comprehensive interim report on Access to Justice in June 1995, in which he identified, amongst others, the use of expert evidence as a major source of expense, delay and complexity in civil litigation. This report precipitated the Civil Procedure Rules ("**CPR**"), which came into force in England and Wales on 26 April 1999.

These rules clearly seek to avoid the effects of partisan expert evidence. More specifically, Rule 35 of the CPR sets out the duties of expert witnesses vis-à-vis the court.¹² Rule 35.3 emphasises that the expert's primary duty is to "*help*" the court. This duty is stated to override any obligation the expert may (or may perceive to have) to those instructing him or her.¹³ Finally, a violation by an expert of his or her duties is likely to lead to sanctions, such as, amongst others, costs allocation sanctions, and, in extreme cases, the disqualification of the entire expert's report.¹⁴

¹¹ TIMMERBEIL, p. 168; KANTOR, A Code of Conduct, p. 325. See also KANTOR, Valuation for Arbitration, p. 294 ("*If court or arbitral rules require impartiality and independence from the party-appointed experts, parties may be encouraged to seek experts who are partisan but appear impartial and independent.*")

¹² JONES, pp. 138-139; KANTOR, Valuation for Arbitration, pp. 287-288.

¹³ Rule 35.3 reads as follows: "(1) *It is the duty of experts to help the court on matters within their expertise. (2) This duty overrides any obligation to the person from whom experts have received instructions or by whom they are paid.*"

¹⁴ In the case of *Cala Homes (South) Ltd v. Alfred McAlpine Homes East Ltd* [1995] EWHC 7 (Ch), the judge dedicated the final part of his judgment to criticising the defendant's expert – an "*eminent architect*" – who had written, some years prior

Equally, the UK Civil Justice Council's Guidance for the instruction of experts in civil claims ("**CJC Guidance**"), which replaced in 2014 the "*Protocol for the Instruction of Experts to give evidence in civil claims*"¹⁵ ("**CJC Protocol**"), emphasises that experts have an overriding duty to help and assist the court, and that this duty prevails over any obligation to their clients.

Item 11 of the CJC Guidance provides, in pertinent part, that "*experts must provide opinions that are independent, regardless of the pressures of litigation. A useful test of 'independence' is that the expert would express the same opinion if given the same instructions by another party. Experts should not take it upon themselves to promote the point of view of the party instructing them or engage in the role of advocates or mediators.*"

In *London Underground Ltd v. Kenchington Ford Plc & Others*¹⁶, a case decided under the CJC Protocol, which contained a provision similar to that of Item 11 of the CJC Guidance, HHJ Wilcox strongly criticised the lack of independence of one expert, and stated, in no unclear terms, that this expert had "*ignored his duty to both the court and*

to this case, an article on his perception of the duties of an expert witness, which advocated a completely adversarial approach. This article was summed up by the judge when he described the expert's use of the term "*pragmatic flexibility*" as a euphemism for "*misleading selectivity*".

¹⁵ Although the CJC Protocol applies to court proceedings, it is likely to be followed, in principle, by some arbitral tribunals applying English procedural law.

¹⁶ *London Underground Ltd v. Kenchington Ford Plc & Others* [1998] 63 ConLR 1. In *Gareth Pearce v. Ove Arup* [1997] 2 WLR 779, a case concerning copyright issues, the court stated: "[...] *in my Judgment Mr. W.'s 'expert' evidence fell far short of the standards of objectivity required of an expert witness. He claimed to have appreciated the seriousness of what he was saying but made blunder after blunder. [...] He showed his biased attitude by looking for triangles in the early stages of the Kunsthal design ('keen to find the triangle' as it was 'an element alleged to have been copied'). His keenness resulted in his misreading a drawing and finding a vertical trapezium.*" The judge concluded scathingly: "*so biased and irrational do I find his 'expert' evidence that I conclude he failed in his duty to the court.*"

his fellow experts" and "continued to assume the role of advocate of his client's cause".

In the United States, Rule 26 of the Federal Rules of Civil Procedure provides that any appointed expert should disclose his or her expert report three months before a hearing, stating not only the expert's terms of reference, but also listing any expert report he or she has previously produced in the past four years and any article authored in the past ten years.

In addition, since 1993, the US Supreme Court has developed a test, the *Daubert*¹⁷ test, for assessing the reliability and admissibility of expert testimony in federal trials.¹⁸ The *Daubert* test provides that an expert may testify on (1) scientific knowledge that (2) will assist the trier of fact to understand or determine a fact in issue.¹⁹ Although the US Supreme Court did not directly deal in the *Daubert* case with the issue of objectivity of party-appointed experts, it set out the criteria for admissibility of expert reports in court proceedings and shifted *"the examination of the validity of scientific expert evidence from juries towards the control of the court"*.²⁰

In *Feduniak v. Old Republic Nat'l Title Co*, the District Court of San Jose went as far as to exclude the expert's opinion and testimony, citing, among several reasons, the *"very significant fact' that [the expert's] methodology was developed for this litigation"*, that the expert's methodology had not been *"reliably or independently verified"*, and that the

¹⁷ *Daubert v. Merrell Dow*, 509 U.S. 579 (1993).

¹⁸ Before 1993, the standard in federal courts for the admissibility of expert testimony was the *Frye* Standard, so called after the case that set the standard, *Frye v. United States*, 293 Fed. 1013 (D.C. Cir. 1923). In short, the *Frye* Standard required that a theory have *"general acceptance"* in the field of science before expert testimony would be admissible in court.

¹⁹ KANTOR, A Code of Conduct, p. 325.

²⁰ KANTOR, Valuation for Arbitration, p. 294; TIMMERBEIL, p. 181.

index was *"developed by a person with absolutely no experience in valuing real property"*.

C. The ALI/UNIDROIT PRINCIPLES

The ALI/UNIDROIT Principles of transnational civil procedure (the **"ALI/UNIDROIT Principles"**), adopted in 2004 by the Governing Council of UNIDROIT, are standards for the adjudication of transnational commercial disputes.²¹ These principles aim at reconciling the differences between various national rules of civil procedure, taking into account the peculiarities of transnational disputes as compared to purely domestic ones.²² The ALI/UNIDROIT Principles are accompanied by a set of Rules of Transnational Civil Procedure (the **"Rules"**), which were not formally adopted by either UNIDROIT or ALI, but constitute the Reporters' model implementation of these principles.

Article 22 (4) of the ALI/UNIDROIT Principles provides that the court may appoint its own expert to give evidence on any relevant issue for which expert testimony is appropriate. This provision then goes on to state that the parties have the right to present their own expert evidence.²³ Importantly, these experts, irrespective of whether they have been appointed by the court or a party, owe their duty to the court only. Article 26 of the Rules further provides that court-appointed experts have to be neutral and independent from the parties and from any other influence. Similarly, party-appointed experts are

²¹ The ALI/UNIDROIT Principles of Transnational Civil Procedure was first published as a draft in 1996 and amended in 2005, available at: <http://www.unidroit.org/english/governments/councildocuments/2005session/relrela/s-76-13-e.pdf>.

Since 2013, the European Law Institute and UNIDROIT are working on a joint project regarding transnational civil procedure rules; see Website of UNIDROIT on Transnational Civil Procedure, available at: <http://www.unidroit.org/about-unidroit/work-programme?id=1625#a1>.

²² BARCELO III, pp. 493-494.

²³ ALI/UNIDROIT Principles of Transnational Civil Procedure, Article 22.4.3.

subject to the same standards of neutrality and independence as court-appointed experts.²⁴

As such, the ALI/UNIDROIT Principles (supplemented by the Rules) adopt an intermediate position between the common law and civil law systems discussed earlier. The court may then appoint experts, but the parties may also present experts irrespective of whether the court has appointed its own expert. However, and this is the most salient feature of this set of rules, party- and court-appointed experts ultimately owe their duty exclusively to the court and are subject to the same standards and obligations in terms of independence.

III. Experts in International Arbitration

A. Arbitration Rules²⁵

Most arbitration rules expressly permit parties to present expert evidence.²⁶ This right is usually in addition to the arbitral tribunal's inherent power to appoint an expert.

As will emerge from the discussion below, while arbitration rules set out very specific (and strict) requirements for tribunal-appointed experts, in particular stringent requirements of independence and impartiality, the same

²⁴ ALI/UNIDROIT Principles of Transnational Civil Procedure, p. 59.

²⁵ For the purpose of this article, the following arbitration rules have been considered: ICC Rules, London Court of International Arbitration Rules 2014 (LCIA Rules), Singapore International Arbitration Center Arbitration Rules 2016 (SIAC Rules), UNCITRAL Arbitration Rules 2013 (UNCITRAL Arbitration Rules), International Centre of Dispute Resolution Arbitration Rules 2014 (ICDR Rules), Swiss Rules of International Arbitration 2012 (Swiss Rules), Stockholm Chamber of Commerce Arbitration Rules 2010 (SCC Rules).

²⁶ For example, see ICC Rules Article 25 (3); Swiss Rules, Article 25 (2); SIAC Rules, Article 25. See also BORN, p. 2278.

arbitration rules are either silent or say very little on the requirements for party-appointed experts.²⁷

1. Tribunal-appointed Experts

Tribunal-appointed experts are usually subject to a strict screening process.

In general, arbitration rules dealing with tribunal-appointed experts will specifically cover the following points: (i) the appointment of the expert; (ii) the duty of independence and impartiality of the expert; (iii) the duty of the parties to give the expert information or to produce any documentation or material that the expert may require; (iv) the right of the parties to comment on the expert report; and (v) the presence of the expert at the hearing.²⁸

Concerning the requirement of independence and impartiality, the LCIA Rules, for example, provide that the expert shall be and remain impartial and independent of the parties and shall sign a written declaration to that effect, delivered to the arbitral tribunal and copied to all parties.²⁹ Similarly, the UNCITRAL Arbitration Rules provide that the tribunal may appoint one or more "*independent*" experts "*after consultation with the parties*", and that the expert so appointed must submit a description of his or her qualifications and a statement of his or her impartiality.³⁰

2. Party-appointed Experts

Most arbitration rules allow party-appointed experts. In particular, most of these rules codify the well-established

²⁷ KANTOR, A Code of Conduct, pp. 327-328.

²⁸ See, for example, ICC Rules, Article 25 (4); LCIA Rules, Article 21; SIAC Rules, Article 26; UNCITRAL Arbitration Rules, Article 29; ICDR Rules, Article 25; Swiss Rules, Article 27; SCC Rules, Article 29.

²⁹ LCIA Rules, Article 21 (2).

³⁰ UNCITRAL Arbitration Rules, Article 29 (2).

principle that a party can present its own expert witnesses to testify on the points at issue.

However, unlike rules applicable to tribunal-appointed experts, the most prominent arbitration rules, including the ICC, LCIA, SCC, UNCITRAL or SIAC Rules do not address specifically the responsibilities of party-appointed experts, nor do they set out the ethical duties of those experts.

B. Best Practices

1. The IBA Rules on the Taking of Evidence

The International Bar Association Rules on the Taking of Evidence in International Arbitration of 2012 ("**IBA Rules**") – a composite of civil and common law practices – allow parties to follow the common law practice of calling their own experts,³¹ while also providing for the civil law tradition of the tribunal appointing its own expert.³²

Regarding party-appointed experts, Article 5.2(a) of the IBA Rules requires disclosure with respect to any and all relationships the expert may have with the parties, their legal advisors, and the arbitral tribunal.³³ Article 5.2(c) in turn requires a statement of the expert's "*independence*".³⁴ As such, the expert is required to evaluate any such relationships and attest that he or she is "*independent*".

Regarding tribunal-appointed experts, Article 6.1 of the IBA Rules makes clear that the arbitral tribunal is to consult with the parties before appointing one or more "*independent*" experts. The parties also have an opportunity, pursuant to Article 6.2, to identify any potential conflict of interests and state any objections they may have (e.g., based on a lack of

³¹ IBA Rules, Article 5.

³² IBA Rules, Article 6.

³³ IBA Rules, Article 5 (2) (a).

³⁴ IBA Rules, Article 5 (2) (c).

independence, insufficient qualifications, or lack of availability).³⁵ Finally, the expert is also requested to file a statement of his or her independence from the parties, their legal advisors, and the arbitral tribunal.³⁶

2. The CIArb Protocol

In 2007, the Chartered Institute of Arbitrators issued its Protocol for the Use of Party-Appointed Expert Witnesses in International Arbitration ("**CIArb Protocol**"). As its name suggests, the CIArb protocol applies only to party-appointed experts.

It provides a comprehensive regime for the giving of expert witness evidence as well as a procedure for identifying the issues to be dealt with by way of expert evidence, with a clear view towards enhancing the independence of party-appointed experts in arbitration.

The CIArb Protocol has been structured along the same lines as the IBA Rules and has been aligned with those parts of the IBA Rules that deal with party-appointed experts. The CIArb Protocol also has the same characteristics as the CPR.³⁷

The key provision regarding the duties of party-appointed experts reads as follows:

"Article 4 – Independence, Duty and Opinion

An expert's opinion shall be impartial, objective, unbiased and uninfluenced by the pressures of the dispute resolution process or by any Party.

Payment by the appointing Party of the expert's reasonable professional fees for the work done in giving

³⁵ IBA Rules, Article 6 (1) and (2).

³⁶ IBA Rules, Article 6 (2).

³⁷ See supra Chapter II (B).

such evidence shall not, of itself, vitiate the expert's impartiality.

An expert's duty, in giving evidence in the Arbitration, is to assist the Arbitral Tribunal to decide the issues in respect of which expert evidence is adduced. [...]"

The CIArb Protocol also provides that the party-appointed expert shall sign a declaration confirming, amongst others, his or her independence from the appointing party and his or her obligation towards the arbitral tribunal.³⁸

Notably, this protocol specifies that a party's instructions to its appointed expert are not privileged and that the tribunal may order that they be disclosed, upon good cause (see Section IV.F below).³⁹ However, drafts, working papers, and any other documentation produced by an expert for the purpose of his or her expert evidence are privileged from disclosure.⁴⁰

Finally, the CIArb Protocol makes clear not only that party-appointed experts have to be independent, but also that their overriding duty is to the tribunal and not to the parties.⁴¹ As to the consequences attached to breaches of those duties, Article 7.4 of the CIArb Protocol provides that the arbitral tribunal shall disregard the expert's written opinion and testimony either in whole or in part, as it considers appropriate depending on the circumstances of each case.

³⁸ CIArb Protocol, Article 8.

³⁹ JONES, p. 153.

⁴⁰ JONES, p. 153.

⁴¹ The overriding duty towards the tribunal is also expressed in Article 7 (1) of the CIArb Protocol, which reads, in relevant part, as follows: "[...] *the expert's testimony shall be given with the purpose of assisting the Arbitral Tribunal to narrow the issues between the experts and to understand and efficiently to use the expert evidence*".

3. The UNCITRAL Notes

Initially adopted by UNCITRAL in 1996 and updated in 2016, the UNCITRAL Notes on Organizing Arbitral Proceedings of 2016 (the "**UNCITRAL Notes**") are designed to assist arbitration practitioners by providing an annotated list of matters on which arbitral tribunals may wish or need to decide during the course of arbitral proceedings.

Those Notes spell out the duty of independence of tribunal-appointed experts in arbitration proceedings.⁴² Article 15(c) provides in this respect that before appointing an expert, the arbitral tribunal will ensure that the expert has the required qualification and obtain a statement of his or her impartiality and independence. This article then goes on to state that "*the arbitral tribunal usually gives the parties an opportunity to comment on the expert's proposed mandate, qualification, impartiality and independence*".

The Notes are however silent on the duty of independence of party-appointed experts, but provide the tools available to the arbitral tribunal to test their independence, albeit indirectly. For example, Article 15(b) of the Notes provides the arbitral tribunal with the right to:

- invite party-appointed experts who are addressing the same topic to submit a joint report identifying the points on which they agree and disagree, with a view to narrow down the issues to be dealt with later in the proceedings;
- request the party-appointed experts to exchange their reports, and then hold an informal meeting where the points on which the experts agree or disagree are discussed. With this approach, the experts may respond to each other's questions

⁴² UNCITRAL Notes on Organizing Arbitral Proceedings of 2016, paras. 92-106.

more effectively, find common ground or take the time to discuss any specific issues. The reports can then be modified accordingly or the outcome of such procedure can be communicated by the experts at the hearing; and

- clarify the nature and extent of communication between the parties or their representatives and their experts, and decide whether a party might be requested to disclose such communications.

C. Professional Codes of Conduct

Both party- and tribunal-appointed experts may be bound in their presentation of evidence by a specific code of conduct imposed by their own professional bodies. Those codes of conduct usually request that professionals giving expert evidence be and remain independent.⁴³

For example, the American Institute of Certified Public Accountants (AICPA) issued a Code of Professional Conduct, requiring "*objectivity*" in the performance, by its members, of all professional services, including when providing litigation support for a client. This code also specifies that "*objectivity*" imposes the obligation to be impartial, intellectually honest, disinterested and free from conflict of interests.⁴⁴

In addition, the UK-based Academy of Experts and Expert Witness Institute, and the Luxembourg-based EuroExpert,

⁴³ Other professional rules set specific standards in terms of independence of their members such as the Institute of Chartered Accountants in England and Wales, the American Society of Appraisers, the Institute of Certified Bankers, the Institution of Civil Engineers, the National Society of Professional Engineers, the Society of Petroleum Evaluation Engineers, the American Society of Civil Engineers, the Institution of Engineers Australia and the Law Society of England and Wales; see Kantor, pp. 341-374.

⁴⁴ AICPA Code of Professional Conduct, p. 6 available at: <http://www.aicpa.org/Research/Standards/CodeofConduct/>.

have jointly adopted a Code of Practice for Experts.⁴⁵ This Code clearly states that "[e]xperts shall not do anything in the course of practising as an Expert, in any manner which compromises or impairs or is likely to compromise or impair any of the following: the Expert's independence, impartiality, objectivity and integrity [...]".⁴⁶

In 2015, the ICC issued a new edition of its Expert Rules.⁴⁷ These new rules replaced the 2003 ICC Rules for Expertise. The Expert Rules have reinforced the duty of impartiality and independence of experts. Under all three new sets of rules, the expert (or neutral) must now not only be "*independent*," in keeping with the previous rules, but also "*impartial*".⁴⁸

The duty of independence and impartiality has also been strengthened in ways specific to each set of rules. In particular, under the ICC Rules for the Appointment of Experts and Neutrals, if a party is not satisfied that the expert or neutral is independent or impartial, it can file a written objection with the ICC that may lead to the replacement of the expert.⁴⁹

⁴⁵ Code of Practice for Experts, available at: <https://www.academyofexperts.org/guidance/expert-witnesses/code-practice-experts/tae-code-practice-experts>.

⁴⁶ Code of Practice for Experts, Rule 1 (a).

⁴⁷ There are three distinct services and sets of rules relating to experts and neutrals offered under the 2015 Expert Rules: (1) ICC Rules for the Proposals of Experts and Neutrals (where the ICC puts forward the names of one or more experts or neutrals at the request of one or more parties or an arbitral tribunal); (2) ICC Rules for the Appointment of Experts and Neutrals (where the ICC makes an appointment that is binding upon the requesting parties); and (3) ICC Rules for the Administration of Expert Proceedings (where the ICC is chosen to administer and supervise the expert proceedings).

⁴⁸ ICC Rules for the Proposal of Experts and Neutrals, Article 2; ICC Rules for the Appointment of Experts and Neutrals, Article 3 (3); ICC Rules for the Administration of the Proceedings, Article 4.

⁴⁹ The 2003 version of the rules did not contemplate the possibility of a party objecting to an expert's appointment; nor did they provide for the replacement of an expert in the context of appointment proceedings.

IV. Testing the Independence and Impartiality of Expert Witnesses

A. Cross-examination/Questions by the Arbitral Tribunal

The most obvious tool to probe the independence (or lack thereof) of an expert witness is cross-examination by counsel. Depending on the legal and cultural background of the parties, counsel, and the arbitrators, examination by the arbitral tribunal will serve the same purpose.

This article will not cover this technique, in any detail, mainly for two reasons. First, they are extensively described and commented in general advocacy literature. Secondly, a truly biased expert witness is unlikely to confess his or her lack of independence on the stand. Beyond that, cross-examination or examination by the arbitral tribunal generally reveals a lack of independence only in rather egregious circumstances.

There are other, more subtle, ways of detecting, and in the best of cases, overcoming the lack of independence of an expert witness. These will now be discussed.

B. Disclosure of Conflicts

The proximity of an expert to a party or pre-existing links with a case are likely to affect the credibility of an expert witness, although it is not always clear evidence of a lack of independence. In order to be placed in a position to carry out this assessment, the arbitral tribunal should ideally be made aware of any relevant circumstances that might influence the independence of the expert witness.

Although several arbitration rules require tribunal-appointed experts to submit a statement of independence and

impartiality, those rules do not provide for the same obligation for party-appointed witnesses.⁵⁰

However, under Article 5.2 of the IBA Rules, party-appointed expert reports are required to include a declaration of current and past relationships with the parties and the parties' counsel. According to the Commentary of the IBA Rules, the declaration of relationships is a requirement for disclosure, while the declaration of independence is a requirement for the expert witness to evaluate any such relationship and attest that he or she is independent. The emphasis seems to be more on ensuring that the expert is capable of an impartial opinion, rather than prohibiting the existence of a relationship with the parties.

C. The *Sachs* Protocol ("Expert Teaming")

At the 2010 ICCA Congress in Rio de Janeiro, Dr Klaus Sachs proposed a method of appointing experts which was received rather enthusiastically.⁵¹ This method (also known as Expert Teaming) sought to combine the advantages of party-appointed and tribunal-appointed experts.

In short, instead of relying exclusively on party-appointed experts or appointing its own expert of choice, the tribunal would usually consult with the parties at an early stage in the proceedings and invite them each to provide the tribunal and the opposing party with a list of candidates who they consider could serve as an expert to give evidence.

The tribunal would then invite the parties to comment briefly on the experts proposed by the other party, in particular as to whether there are any conflicts of interest. Thereafter, the tribunal would choose two experts, one from each list, and

⁵⁰ LCIA Rules, Article 21.2; UNCITRAL Arbitration Rules, Article 29(2); IBA Rules, Article 6; UNCITRAL Notes, Article 15.

⁵¹ See generally SACHS/SCHMIDT-AHRENDTS.

appoint these experts jointly as an "expert team". These experts would be compensated out of the common fund of deposits for the arbitration paid by the parties. Following such appointment, the tribunal would meet with the expert team and the parties, in order to establish a protocol on the expert team's mission.

Additionally, this method envisages that at least one session be held for both parties' counsel to question the expert team in the presence of the tribunal.

The Sachs Protocol also sets out the duties of the members of the expert team, including duties of impartiality and independence commonly expected from tribunal-appointed witnesses. Further, it provides that the two members of the expert team would not have *ex parte* communications following appointment, in much the same manner as party-appointed arbitrators and tribunal-appointed experts act in international arbitration.

One of the most interesting features of this method is that, although they have been proposed by the parties, experts are ultimately appointed by the tribunal.⁵² As a result, it bridges the divide between party-appointed and tribunal-appointed experts and, more importantly, puts to rest any debate on possible diverging standards of impartiality and independence between these two categories of experts. In addition, because the experts are ultimately appointed by the tribunal, the parties will usually employ their best efforts to propose someone whose competence, independence and impartiality is beyond doubt. As such, the Sachs Protocol may allow for certain benefits from both civil and common law approaches and may ensure that an expert neither operates nor is seen to operate as the extension of the parties. Naturally, from the perspective of arbitration practitioners acquainted with

⁵² SACHS/SCHMIDT-AHRENDTS, p. 146; SCHMIDT-AHRENDTS, Expert Teaming, p. 658. See also BORN, p. 2280; KANTOR, A Code of Conduct, p. 338.

traditional arbitral procedure, the method proposed by Klaus Sachs might prove a bit disorienting. Not to mention that the parties may feel that they are losing control over "their" experts.

D. Joint Report by Party-appointed Experts

Another way to test the level of independence and impartiality of expert witnesses is to request the party-appointed experts to submit a joint report detailing, for instance, issues agreed and not agreed upon (with reasons for disagreement).⁵³ Arbitral tribunals are likely to seek the submission of joint reports when the expert reports filed in the first place are much more diverging than one would expect them to be.

It is indeed expected that in preparing the joint report, the experts will confer and genuinely endeavour to reach agreement on any matters at issue within their field of expertise to narrow any points of difference between them.

While experts are free to disagree, such disagreement must come from the free exercise of their own independent and professional judgment. The preparation of the joint report is therefore intended to allow experts to reconsider and revise their opinions where appropriate in a professional and non-confrontational environment if new evidence and relevant material become available.

This method, which is expressly promoted by the IBA Rules in Article 5(4),⁵⁴ is said to have proven highly useful. Most of the time, the experts are in a position to narrow the number and scope of disputed issues. Even where they do not, the meeting may prompt the experts to join issue, resulting in more focused final reports.

⁵³ WAINCYMER, pp. 961-962; BORN, pp. 2281-2282.

⁵⁴ This method is also promoted in the UNCITRAL Notes, see 2016 UNCITRAL Notes, paras. 1-3, 95-98.

While joint reports aim primarily at narrowing down the number and scope of disputed issues, they can also cast light on the independence (or lack thereof) of the expert witnesses. When the expert witnesses reach broad agreement in a joint report, this is generally almost evidence that they have understood their duty of independence towards the parties as well as their duty to assist the tribunal.⁵⁵

Conversely, where there is little or no agreement, or no agreement on important issues, in the joint report, this is frequently an indication that one of the experts (or all of them) is lacking independence. In that case, it can become even more important for counsel and the arbitral tribunal to test the expert's (or the experts') independence using other tools at their disposal (such as experts hot-tubbing sessions, as explored below).

E. Expert Conferencing

Expert conferencing, also referred to as "hot-tubbing"⁵⁶ is undoubtedly gaining popularity in international arbitration and many arbitrators are supporters and proponents of this method.

Traditionally, witnesses and experts are examined at the (evidentiary) hearing one after another. Expert conferencing involves experts from opposing sides sitting together for

⁵⁵ This was recently noted in a DIAC Award, in which the arbitral tribunal commended the experts in the following terms: *"during the proceedings, the experts were extremely helpful and their efficient collaboration greatly assisted the Arbitral Tribunal. The Arbitral Tribunal considers that this is an example of how expert evidence should work. [...] The Arbitral Tribunal is particularly appreciative of the way the Parties and their counsel managed the evidence of the quantum experts, and of the work performed by the experts themselves. In all aspects, the manner in which expert evidence was led in this case was exemplary and assisted the Arbitral Tribunal immensely in rendering its award"* (Excerpts from a DIAC award rendered in 2016).

⁵⁶ JONES, pp. 147-149.

examination by the arbitral tribunal and, in some instances, the parties.⁵⁷

This technique has been successful in narrowing, clarifying and, in some cases, resolving the issues in dispute between expert witnesses.⁵⁸ More importantly, expert conferencing is said to compel experts to present their opinions more independently and objectively, although one cannot avoid the tendency of some experts to focus solely on avoiding hurting "their" party's case, rather than genuinely seeking agreement or guiding the arbitrators. Despite the popularity of expert conferencing, there is however little formal guidance issued by arbitral institutions on this subject.⁵⁹

In terms of its mechanics, expert conferencing may involve the preparation of a defined list of issues (on which the experts may or may not agree) on the basis of which the expert conferencing will proceed.⁶⁰ Both the arbitral tribunal and the parties will then have the possibility of examining the experts together.⁶¹ As such, expert conferencing can be used not only to maximise procedural efficiency, but also to test the independence and impartiality of party-appointed experts.⁶²

When expert witnesses are hot-tubbed, this should result in an exchange of professional opinions given by persons of the same discipline (for example engineering, chemistry, life sciences, etc.). Even if the arbitrators may not have any expertise in engineering, chemistry, or life sciences, the dynamic of that exchange can often be revealing and assist

⁵⁷ WAINCYMER, p. 967; HUNTER, pp. 821-822.

⁵⁸ HUNTER, p. 822.

⁵⁹ Article 8.3(f) of the IBA Rules expressly refers to expert conferencing. Similarly, the ICC Arbitration Commission Report on Techniques for Controlling Time and Costs in Arbitration contemplates expert conferencing as a procedural option for parties.

⁶⁰ EHLE, p. 84.

⁶¹ HUNTER, pp. 821-822. For more information on how to organise expert conferencing, see WAINCYMER, pp. 970-972.

⁶² WAINCYMER, p. 969; JONES, pp. 147-148. See also HUNTER, p. 822.

the tribunal in assessing the credibility (and the independence of mind) of those expert witnesses.

F. Disclosure of Communications between Counsel and Party-appointed Experts

Whether or not written communications between party-appointed experts and counsel may be subject to disclosure is a very controversial topic. In international arbitration, and although this issue is not dealt with in any of the rules of major arbitral institutions, there is a presumption of non-disclosure of counsel-expert communications.⁶³

FRIEDLAND/BROWN DE VEJAR explains in this respect: "[p]roduction of documents reflecting such communications is rarely sought – almost all of the arbitrators questioned on the subject replied that they had never faced the question – and the overwhelming view among experienced international arbitrators is that, in the ordinary situation, production would not be warranted".⁶⁴

There are some potential exceptions to this principle: for instance, the documents relied upon by the expert in forming his or her opinion (which the expert will usually attach to the expert report), as well as the documents expressly referenced by the expert in the report are usually subject to disclosure.⁶⁵ A second potential exception comprises those communications that deal with the scope of the expert's engagement, and more specifically the instructions from counsel, although requests to produce such documents are rare in practice.⁶⁶

⁶³ FRIEDLAND/BROWN DE VEJAR, p. 2.

⁶⁴ FRIEDLAND/BROWN DE VEJAR, p. 3.

⁶⁵ FRIEDLAND/BROWN DE VEJAR, pp. 5-8.

⁶⁶ FRIEDLAND/BROWN DE VEJAR, pp. 5-8.

The CIArb Protocol supports this view, and goes even further, as its Article 4 provides that the expert report should contain a statement setting out all of the instructions the expert witness has received from the appointing party, while its Article 5 provides that all instructions to an expert shall not be privileged against disclosure in the arbitration. Having said that, Article 5(1)(b) of the same precludes questioning of an expert regarding his or her instructions unless the tribunal is satisfied that there is good cause. In the same vein, the UNCITRAL Notes, referred to earlier, provide the arbitral tribunal with the possibility to clarify the nature and extent of the communications between an expert and the party that has appointed him or her by seeking the production of those communications.⁶⁷

While counsel-expert communications may be relevant to assist in evaluating the credibility and independence of an expert, a word of caution is however needed. Just like anyone who is involved in a project or a dispute (e.g. engineers, lawyers, or arbitrators), a party-appointed expert will be, at least in the first months, on a learning curve. As such, he or she may form tentative opinions that are very likely to change as the expert witness's understanding of the facts is supplemented by information, documents, and explanations provided by the party or its counsel. As a result, it is perfectly normal for an expert to change his or her opinion as he or she progresses on the learning curve. In other words, it is not a change of mind that may be suspect, it is the manner and the circumstances in which it occurs that may give rise to doubts to the expert witness's independence.

Be that as it may, we consider that it would be highly unlikely that an arbitral tribunal grant the production of communications between counsel and party-appointed experts on the mere chance that some of the communications

⁶⁷ UNCITRAL Notes, para. 100.

might eventually shed light on the independence of the expert.

V. Sanctions for the Breach of Expert Witness's Duties of Independence and Impartiality

A. Disqualification of the Expert Witness

Disqualification of a party-appointed expert for lack of independence and impartiality is a rather rare occurrence in court litigation.

As party-appointed experts are not usually labelled as "experts" in countries with a civil law tradition, no such kind of sanctions is likely to arise. In common law countries, disqualification of an expert for lack of independence and impartiality does not receive much more attention from courts and commentators. Yet, recently, the Supreme Court of Canada considered whether the independence and impartiality of an expert witness would bear on the admissibility of that expert's evidence, or only on the weight to be given to the evidence, once it is admitted.⁶⁸ The Supreme Court concluded that judges should have the discretion to disqualify biased reports and expunge the testimony of partisan experts.

In the context of arbitration proceedings, can an arbitral tribunal, upon request or on its own motion, decide to

⁶⁸ Similarly, in *White Burgess Langille Inman v. Abbott and Haliburton Co.* (2015 SCC 23), relating to the assessment of the impartiality and independence of expert witnesses, the Supreme Court of Canada concluded on 30 April 2015 that the dominant approach in Canadian common law is to treat independence and impartiality as bearing not just on the weight, but also on the admissibility of the evidence.

disqualify and remove a party-appointed expert for lack of independence and impartiality?

We are not aware of many decisions dealing with this kind of sanction. BORN observes that, even in situations where the expert witness is an employee of the party that has appointed him or her, arbitral tribunals would not go as far as to disqualify that expert.⁶⁹

In *Flughafen Zürich AG and Gestión e Ingeniería IDC SA v. Bolivarian Republic of Venezuela*, an ICSID tribunal considered the claimants' application to disqualify an expert appointed by the respondent and to exclude his expert report.⁷⁰ In that case, the claimants had considered appointing an expert witness and had sent him documents and information. The claimants eventually decided not to retain him and the expert was later appointed by the respondent in the same arbitration.⁷¹

The arbitral tribunal rejected the application to disqualify the expert witness. The tribunal noted that the claimants had not marked the information sent to the expert as confidential, nor had they made any other reservations as to its confidentiality. More importantly, the tribunal accepted that the expert had not accessed the information sent to him and therefore had no knowledge of its content.

Finally, we have been made aware of an ongoing arbitration case where information was presented to the arbitral tribunal that gave rise to justifiable doubts as to the independence and impartiality of an expert witness.⁷² Interestingly, the arbitral tribunal did not disqualify the expert, but strongly urged the

⁶⁹ BORN, p. 2281.

⁷⁰ Decision on Claimants' proposal for disqualification of one of Respondent's expert witnesses, and request for inadmissibility of evidence of 29 August 2012, ICSID Case No. ARB/10/19.

⁷¹ GARCÍA, p. 25.

⁷² Due to confidentiality reasons, the author is not at liberty to provide more information on that case.

party that had appointed that expert to consider replacing its expert by another one who would offer all the guarantees of independence and impartiality.

B. Costs Allocation

Arbitration rules increasingly include specific reference to an obligation of "*good faith*" of the parties in the conduct of the arbitration proceedings,⁷³ or expressly link the parties' behaviour to costs allocation.⁷⁴

For example, Article 37 (5) of the ICC Rules provides that "*in making decisions as to the costs, the arbitral tribunal may take into account such circumstances as it considers relevant, including the extent to which each party has conducted the arbitration in an expeditious and cost-effective manner*".

Similarly, Article 15(7) of the Swiss Rules provides that "[a]ll participants in the arbitral proceedings shall act in good faith, and make every effort to contribute to the efficient conduct of the proceedings and to avoid unnecessary costs and delay [...]".

In light of these provisions, there is no reason that an arbitral tribunal could not sanction a party, when allocating costs, for using the evidence of a partisan expert.

Interestingly, a recent ICC Commission Report on the Decisions on Costs in International Arbitration revealed that a number of arbitral tribunals had decided not to give any weight (or very little weight) to expert witness evidence and, for this reason, dismissed entirely the claims for reimbursement of costs related thereto.⁷⁵

⁷³ Swiss Rules, Article 15(7); JAMS, Rule 29. See also BÉDARD/NELSON/KALANTIRSKY, p. 755.

⁷⁴ ICC Rules, Article 37(5); ICDR Rules, Articles 28 and 31.

⁷⁵ ICC COMMISSION REPORT, p. 26.

C. Weighing the Evidence

The vast majority of arbitration rules provide arbitral tribunals with broad discretion to assess and weigh the evidence adduced by the parties.⁷⁶

There is therefore a wide recognition of the discretion of arbitral tribunals to admit any relevant evidence deemed to have probative value, as well as of their power to reject evidence that is irrelevant or unsuitable to prove the facts allegedly supported by that evidence.

In this context, arbitral tribunals have undoubtedly full discretion to give evidentiary weight or not to expert reports prepared by partisan witness experts.⁷⁷

We were made aware of a case governed by the Swiss Rules where an arbitral tribunal decided not to give any particular evidentiary weight to the evidence presented by the expert witness of a party due to the long-standing business relationship between the expert and the party that had retained him as an expert witness.⁷⁸ In that case, the entity that employed the expert witness had provided professional advisory services to the appointing party on the very project that was the subject matter of the arbitration. The arbitral tribunal further noted that the relationship was not disclosed during the proceedings; this omission was also taken into account by the tribunal in the final award.⁷⁹

⁷⁶ LCIA Rules, Article 22 (1)(vi); UNCITRAL Arbitration Rules, Article 27.4; SIAC Rules, Article 19.2; SCC Rules, Article 26.

⁷⁷ BORN takes the view that the admissibility of an expert report should not be used as a sanction, but that the lack of independence and impartiality of an expert witness should affect the weight given to the credibility of that expert witness; see BORN, p. 2279.

⁷⁸ Due to confidentiality reasons, the author is not at liberty to publish the details of this award.

⁷⁹ Idem.

We were also made aware of a case, an arbitration under the ICC Rules, where one of the parties was represented in the arbitration proceeding by a claim consultancy company, which appointed as expert witnesses its own employees.⁸⁰ The arbitral tribunal informed the parties that although they were entirely free to retain the experts of their choice, proceeding with such a choice would likely have an impact on the degree of evidentiary weight the tribunal would ultimately give to these reports. Interestingly, the tribunal eventually found that the experts' findings and opinions were clear and helpful towards educating the arbitral tribunal, even though the independence of those experts could have been legitimately questioned in the first place.

D. Reputational Damage

Expert evidence must be and be seen to be an independent view of the expert witness, and not partial, prejudiced or biased.

Expert witnesses must be careful in what they write in their reports. They must be presumptively truthful. The expert's reputation for professional integrity must be above suspicions, and his or her report has to be the product of his or her honest and unbiased belief.

One of the greatest fears for most professionals who make their living as testifying experts is to see their reputations as experts tainted, after being referred to in arbitral awards as being "*partisan*" and a "*hired gun*".

Although one cannot deny that expert witnesses have an incentive to please their clients, so that they will be hired again, partisanship is likely to have completely the opposite effect. As a matter of fact, the prospect that the (past)

⁸⁰ Due to confidentiality reasons, the author is not at liberty to give further details of this case.

partisanship of an expert be exposed to an arbitral tribunal would almost certainly lower demand for that expert.

VI. Conclusions

There is a broad consensus among arbitration practitioners that the assistance of expert witnesses is often useful, and sometimes essential, in disputes involving professional expertise that counsel or arbitral tribunals are not in a position to fully grasp. Having said that, there is also a consensus in the arbitration community that, in order to be helpful, expert witnesses need to be truly independent. Here, we are just stating the obvious.

The true question is how to reach that goal.

First, there should be no ambiguity that expert witnesses have to be independent and impartial in very much the same way as tribunal-appointed experts. There seems to be a soft consensus on this principle, but the picture is fuzzier. In most jurisdictions, we have not found any clear statutory basis for this duty. The duty of independence (and impartiality) of expert witnesses exists mainly in certain texts of a private nature. One suggested way forward would be to make the existence and the content of that duty clearer, for example in arbitration rules.

Secondly, we should determine how to test best those duties of independence and impartiality. Arbitration practice is scattered in this respect. The arbitration community is unlikely to be able to establish fail-safe rules, principles or methods to guarantee the independence of expert witnesses. In these circumstances, it is via the development (and the increasing use) of techniques such as expert conferencing or expert teaming that the independence and impartiality of experts shall continue to be tested, and, it is hoped, ensured to the broadest extent possible.

Thirdly, and most importantly, what can arbitral tribunals do about bad conduct? Since arbitral tribunals derive their powers from the agreement of the parties, institutional rules referred to by the parties (where applicable), and the statutory framework governing the proceedings, any sanctions they can impose will normally be determined by reference to those sources. Major arbitration rules and the IBA rules all contain provisions that give arbitrators the discretion to decide the admissibility, relevance or weight given to evidence, including expert evidence. This does not constitute however a sanction "per se". A tribunal may also decide to sanction a party that appointed a "hired gun" in its decision on costs. Would that constitute a sanction sufficiently severe to give a clear signal to the arbitration community? One need only state the proposition to undermine it. In light of this, we believe that the time may have come for the arbitration community to open a real debate on this issue and consider whether arbitral tribunals should not be provided with more tools to sanction the appointment of partisan expert witnesses.

Bibliography

- 2016 UNCITRAL NOTES ON ORGANIZING ARBITRAL PROCEEDINGS, available at: <http://www.uncitral.org/pdf/english/texts/arbitration/arb-notes/arb-notes-2016-e-pre-release.pdf>
- BARCELO III JOHN J., Introduction to Geoffrey C. Hazard Jr., and Michel Taruffo, *Transnational Rules of Civil Procedure*, pp. 493-494
- BÉDARD JULIE/NELSON TIMOTHY G./RAYMOND KALANTIRSKY AMANDA, *Arbitration in Good Faith and Protecting the Integrity of the Arbitral Process*, *The Paris Journal of International Arbitration* 3, 2010, pp. 737-756
- BORN GARY B., *International Commercial Arbitration* (2nd edition), Kluwer Law International, 2014
- EHLE BERND, *Practical Aspects of using Expert Evidence in International Arbitration*, *Yearbook on International Arbitration Volume II*, 2012, pp. 75-84
- ELSING SIEGFRIED H./TOWNSEND JOHN M., *Bridging the Common Law Civil Law Divide in Arbitration*, *Arbitration International* 18 (1), 2002, pp. 1-7
- FRIEDLAND PAUL D./BROWN DE VEJAR KATE, *Discoverability of Communications Between Counsel and Party-Appointed Experts in International Arbitration*, in: van den Berg (ed.), *Arbitration Advocacy in Changing Times*, ICCA Congress Series, 2010 Rio Volume 15, Kluwer Law International, 2011, pp. 160-178
- GARCÍA LUIS GONZÁLEZ, *Case Comment Flughafen Zürich AG v Venezuela*, *ICSID Review* 28 (1), 2013, pp. 21-26
- HUNTER J. MARTIN, *Expert Conferencing and New Methods*, in: Van den Berg (Ed), *International Arbitration 2006: Back to Basics?*, ICCA Congress Series 13, 2007, pp. 820-828
- ICC COMMISSION REPORT, *Decisions on Costs in International Arbitration*, *ICC Dispute Resolution Bulletin* 2, 2015, available at: <http://www.iccwbo.org/Advocacy-Codes-and-Rules/Documentcentre/2015/Decisions-on-Costs-in-International-Arbitration---ICC-Arbitration-and-ADR-Commission-Report/>

- ICC COMMISSION REPORT, Controlling Time and Costs in Arbitration, 2012, available at: <<http://www.iccwbo.org/Advocacy-Codes-and-Rules/Document-centre/2012/ICC-Arbitration-Commission-Report-on-Techniques-for-Controlling-Time-and-Costs-in-Arbitration/>>
- JONES DOUG, Party Appointed Expert Witnesses in International Arbitration: A Protocol at Last, *Arbitration International* 24 (1), 2008, pp. 137-155
- KANTOR MARK, A Code of Conduct for Party-Appointed Experts in International Arbitration – Can One be Found?, *Arbitration International* 26 (3), 2010, pp. 323-380 [cited: KANTOR, Code of Conduct]
- KANTOR MARK, Valuation for Arbitration: Compensation Standards, Valuation Methods and Expert Evidence, Kluwer Law International, 2008 [cited: KANTOR, Valuation for Arbitration]
- KUITKOWSKI DIANA, The Law Applicable to Privilege Claims in International Arbitration, *Journal of International Arbitration* 32 (1), 2015, pp. 65-106.
- PROTOCOL FOR THE INSTRUCTION OF EXPERTS TO GIVE EVIDENCE IN CIVIL CLAIMS, 2005 (AMENDED 2009), available at: https://www.justice.gov.uk/courts/procedure-rules/civil/contents/form_section_images/practice_directions/pd35_pdf_eps/pd35_prot.pdf
- SACHS KLAUS/SCHMIDT-AHRENDTS NILS , Protocol on Expert Teaming: A New Approach to Expert Evidence, in: Van den Berg (Ed), *Arbitration Advocacy in Changing Times*, ICCA Congress Series 15, 2010 Rio, pp. 135-148
- SCHMIDT-AHRENDTS NILS, Expert Teaming – Bridging the Divide between Party-Appointed and Tribunal-Appointed Experts, *Victoria University Wellington Law Review* 43, 2012, pp. 653-659
- SCHNEIDER MICHAEL E., Technical Experts in International Arbitration, *ASA Bulletin* 11 (3), 1993, pp. 446-465
- TIMMERBEIL SVEN, The Role of Expert Witnesses in German and U.S. Civil Litigation, *Annual Survey of International & Comparative Law* 9 (1), 2003, Article 8

- VORWERK VOLKERT/WULF CHRISTIAN, *Beck'scher Online-Kommentar ZPO (21st Ed.)*, Verlag C.H. Beck München, 2016
- WAINCYMER JEFF, *Procedure and Evidence in International Arbitration*, Kluwer Law International, 2012