2. **Technical experts in international arbitration**, introductory comments to the materials from arbitration practice

Michael E. Schneider

1. Disputes submitted to international arbitration often require expertise in fields other than law. The required qualifications may relate to natural sciences or engineering, to accounting, economics, surveying or many other fields; they are generally described as "technical expertise".

2. Such technical expertise may be introduced in the procedure through the choice of technically qualified arbitrators. Indeed, a number of arbitration rules or institutions, for instance in the commodity trade or in certain branches of engineering, provide that, preferably or exclusively, "professional men", qualified in the field to which the transactions relate and not necessarily trained in law, sit as arbitrators. Even in proceedings where no such requirements are stipulated, non-lawyers are occasionally appointed as arbitrators, although international commercial arbitration is largely dominated by lawyers.

3. Where the technical expertise required for the settlement of the dispute is not or, in the view of the parties, insufficiently present in the arbitral tribunal, the parties often present oral or written opinions by technical and sometimes also legal experts. The presentation of such opinion is frequent, to the extent that recently an engineer observed: "Lawyers prefer experts' opinion over common sense".*

4. As a third form of introducing technical expertise in the arbitration, experts may be appointed by the arbitral tribunal itself to report on specified technical issues or to provide other assistance in understanding and resolving the case. This form is widely used in court and arbitration proceedings as practiced in civil law countries** and, in the past, was little known in

---


** See e.g. L. Matray: *Les traits caractéristiques de l’administration de la preuve dans certaines procédures de type romaniste*, in *Taking Evidence in International Arbitral Proceedings*, the Dossiers of the Institute, Paris (ICC) 1990, 113, 126 - 139, with English summary.
proceedings of a common law tradition*. It is with this form of introducing technical expertise that the following materials and explanations are primarily concerned. They are preceded by a few observations on party-appointed experts.

2.1 **Party-appointed experts**

5. When such experts are retained and presented by the Parties in support of their case, they are generally described as expert witnesses. Unlike that of other witnesses, their testimony primarily relates not to observations of fact but to opinions.

Experts are presented by the parties "to explain technical and scientific issues which the arbitrators may not understand without assistance"**. Insofar their statements resemble argument by the party having retained them. This resemblance is most evident where the expert’s opinion concerns questions of law, for instance on issues or legal systems with which the arbitrators are not familiar.

Nevertheless, in international arbitration, the opinion of party-appointed experts is not merely argument but has its own weight depending on the competence and credibility of the expert***. The position of these experts, thus, can be situated somewhere between that of a witness of fact and that of the parties’ counsel. The precise situation may vary from case to case and even within the same procedure. Thus it may occur that an expert sits on a party’s team and, together with legal counsel, provides explanations to the arbitral tribunal. Later in the same proceedings he may give expert testimony. This situation is dealt within Document 15.


*** In this sense P. Schlosser: Das Recht der Internationalen Privaten Schiedsgerichtsbarkeit, Tübingen, 2nd ed. 1989, 485.
6. The opinions of party-appointed experts often are expressed in writing and produced with the pleadings. Often such opinions, also described as experts' statements, are treated in the same fashion as witness statements: to the extent their content is challenged by the other party, they can be relied upon only if the expert appears at the hearing and is available for cross examination (for such an assimilation of witnesses and party-appointed experts see Document 16).

While the parties' right to comment and counter such expert opinions must always be respected, this right need not necessarily be exercised through cross examination at the hearing. It may well be sufficient - and perhaps both more effective and more cost efficient - to respond by another expert opinion or in the pleadings. If a party's expert, despite a request for cross-examination from the other party, does not appear at the hearing, it is suggested that his opinion may still be taken into account by the arbitral tribunal as part of the party's written argument.

If experts from both parties appear at the hearing it often is useful to hear them at the same time and to allow a confrontation*. The procedure of hearing all witnesses on the same issue in the presence of each other (see ASA Bull. 1993/2, p. 310, No. 30; further documents on this procedure will be published in the next issue), can be applied very usefully with respect to experts. In such confrontations of party-appointed experts, the arbitral tribunal can benefit from the advice of its own expert (see below No. 40).

7. In England, a party-appointed expert may have an additional function, that of meeting the expert of the opponent party, with the aim of reaching agreement on disputed issues, especially on quantum, or at least of reducing the scope of disagreement. Ideally, the parties agree on joint instructions to their respective experts. The following example has been given for directions to such party-appointed experts:

"The experts to meet and to attempt to narrow the issues and in particular the number of items on the Scott Schedule**. They shall prepare, date and

---

* See Redfern and Hunter, op. cit., 341.

** A document used in English court proceedings, especially before Official Referees, and in construction arbitration which, in tabulatory form, sets out the claims and the parties' position on them. See M.E. Schneider in Böckstiegel (ed): Contracts and Dispute Settlement in Civil Engineering and Construction of Plants, D.I.S. Schriftenreihe, vol. 4,
sign a note of the facts and opinions upon which they are agreed and the
issues upon which they are not. A copy of such note to be exchanged and
delivered to me within 14 days of their final meeting, but in any case, not
later than 14 days before the hearing**.

Occasionally, this procedure can be found in international arbitration
(see Document 16, § 4.5).

8. Party-appointed experts may also be used to present what may be called
"processed evidence". Especially where the evidence is voluminous, it might
be produced in the form of a report by an expert, summarizing for instance
certain cost items on the basis of his inspection of the original evidence such
as salary records, invoices, bank statements, etc. The process is not without
pitfalls as the Avoco Corp. v. Iran case has shown**. If such reports are
challenged, they may have to be confirmed by an expert appointed by the
arbitral tribunal.

2.2 Scope assignment for tribunal-appointed expert’s

9. When appointing an independent expert, an arbitral tribunal seeks to
obtain "technical information that might guide it in the search for the truth".
This description of an independent expert’s function in the proceedings, given
by the International Court of Justice in the Corfu Channel Case***, has been
relied on in other international proceedings****, and referred to by learned
authors on international commercial arbitration*****. There is probably
consensus among international arbitration practitioners that the quoted passage
correctly describes the basic function of the independent expert.

________________________

Cologne, 1984, 187, 223 with an example at 240.

* Cato and Menzies, loc. cit.

** Award of Chamber Three (Virally, Brower, Ansari) in 19, Iran-US CTR (1988)
200; enforcement refused by a US Court of Appeals (980 F.2d 141 (2d Cir. 24 November
1992)).

*** UK v. Albania, 1949 ICJ, 4 at 20.

**** Starrett Housing Corp. v. Iran, 16, Iran-US CTR, (1987), 196.

***** A. Redfern and M. Hunter, op. cit., 338.
10. Now, if one looks at the materials published here and examines the specific assignments given to the experts, one notes that, in many cases, the expert's tasks go much beyond that just quoted. To illustrate the wide scope of the tasks assigned to independent experts, it might be useful to paraphrase some of those that can be found in the published materials: Thus, the experts are called upon for instance to determine

- the technical characteristics of an industrial plant such as its production capacities (Documents 18 and 26),
- the existence and causes of alleged defects (Documents 18 and 26),
- the correct performance of specified items of contractual or remedial work (Document 26),
- the effect, in terms of time and money, attributable to specified events (Document 28),
- the occurrence of variations in the work and their valuation (Document 28),
- volume and value of specified transactions over a certain period of time and their commercial result (Document 23),
- the valuation of certain losses (Documents 23 and 25),
- the marketing prospects of a certain product (Document 25).

In some cases, the arbitral tribunal assigned to the expert the task of establishing the facts of the case or, more specifically, that of identifying the evidence provided for certain claims and of assessing its probative value (unpublished document). In others, it called upon the expert to determine the occurrence of certain events (Document 26 § 12 and Document 28 item MS42 & A 3) or invited the expert to express his opinion on a claim without identifying any specific aspects to be addressed.

Some of these assignments go much beyond mere technical information as guidance to the arbitral tribunal in understanding the facts of the case. For some arbitration practitioners, especially those with a common law background, they may appear as unusual and possibly exceeding the powers of an arbitrator.
11. The far-reaching scope of the expert's assignement in some of the materials must be seen against the background of court practice in some civil law countries, especially in the French tradition. In these countries, court-appointed experts have wide mandates and powers of investigation*. As a practical effect of such expert investigation in the French style, "the Parties and the Court obtain from the expert the same type of material as they would in England by discovery!"**. While the appointment of the independent expert by the courts is a feature in the law and practice of proceedings in the courts of most countries on the European continent, there are considerable differences from one country to another with respect to the scope of the investigation and the frequency with which the courts require their intervention***.

The description of the expert's assignments in a number of the documents published here, clearly shows the influence of such rules and practices in judicial proceedings. In some cases, this influence of court practices has perhaps been stronger than one might wish it to be in international arbitration.

12. In any event, the scope of the tasks which the arbitral tribunal assigns to its experts is limited by that of its own duties and by those of the parties.

In this later field, arbitral tribunals should bear in mind that it is not for the experts appointed by them to provide the basis for a case which a party failed to make. As the Iran-US Claims Tribunal pointed out in the Rockwell case,

* see in particular Articles 242 to 244 of the New French Code of Civil Procedure. On the role of experts in arbitrations in France, see e.g. M. de Boisséon: Le Droit français de l'arbitrage interne et international, Paris 1990, 247 - 249 (domestic) and 748 - 749 (international).

** Claude Reymond: Civil Law and Common Law Procedures: Which is More Inquisitorial? A Civil Lawyer's Response, 5, Arbitration International (1989), 357 at 364. See also Schlosser who states that in these systems the expert has powers of investigation which are not merely equal to those of a court but occasionally even go beyond them (op.cit., 485).

"the question whether to appoint an expert need only be reached in a case where the party requesting the appointment has sufficiently substantiated its claims or defense. It is not the task of an expert appointed by the Tribunal to argue a party’s case".

13. The other limit which arbitral tribunals should observe when defining the assignments of the expert results from their own terms of reference. The parties have chosen the arbitrators specifically for deciding the dispute at hand. While this does not imply that the arbitrators must be equally knowledgeable and experienced in all issues raised by the dispute, one might expect of them particular efforts (probably going beyond those expected of a non-specialized judicial body) to resolve the dispute themselves, rather than referring the critical substance of the dispute to technical experts.

The published materials provide some good examples for careful scrutiny of the parties’ case with the aim of identifying clearly and restrictively the "technical" aspects for which the tribunal needs reference to an independent expert. In some other cases, it is less evident that the tribunal, before defining the expert’s assignments, went as far in analyzing the case as it might have done.

14. In this context, one hears occasionally complaints from arbitral tribunals that experts overstep their limits and pronounce themselves on matters which are for the arbitral tribunal to decide. Often these complaints appear well-justified. Occasionally, however, the arbitral tribunal, by defining too broadly the expert’s assignments, may itself have laid the grounds for such extensive interpretation by the expert of his assignement.

15. Finally in this discussion of the expert’s assignments, two tasks should be mentioned which have been identified specifically in some of the documents:

One of these tasks consists in attempting a settlement between the parties or seeking agreement on certain issues (Document 26, § 2D). Clauses of this type in an expert’s terms of reference probably are inspired by an earlier practice of French courts to which the New Code of Civil Procedure

put an end*. While a settlement always should be welcomed, one might hesitate to require efforts to this effect from the expert. However, if the parties require or agree with such an assignment to the expert, there is no reason why it should not be recorded in his or her terms of reference.

16. The other type of assignment which deserves specific mention is that of making proposals for remedial action (Document 26, § 2B 12). Provided it is covered by its own terms of reference, there is, indeed, no reason why the matters on which an arbitral tribunal seeks the expert’s advice should be limited to observations concerning the past. Recommendations for solutions to problems encountered by the parties may be a useful feature of the expert’s report and may assist the arbitrators in settlement attempts which they might undertake.

2.3 Appointing the expert and setting out his terms of reference

17. Often it is the arbitral tribunal which feels that it needs the assistance of an independent expert for deciding the case. Not infrequently, however, one or sometimes both parties request such an appointment (e.g. Document 29).

18. There has been some controversy about the question whether an arbitrator must appoint an expert if so requested by one or both parties. For some authors the arbitrator has discretion whether to order an “expertise" or not**. For others there is, as part of the right to be heard, a right to produce evidence which may include the appointment of an independent expert***.

There have been cases where arbitrators refused requests for the appointment of independent experts and in some cases their awards have

---

* Article 240; on the reasons for this change, see Solus and Perrot, Droit Judiciaire Privé, Tome 3, Paris, 1991, section 917.


*** Poudret: Expertise et droit d’être entendu dans l’arbitrage international in Études de droit international en l’honneur de Pierre Lalive, Geneva 1993, 607, at 613 et seq.
nevertheless been enforced”. The reasons for the Iran-US Claims Tribunal to refuse such appointment in American Bell International Inc. v. Iran deserves to be quoted:

"With regard to the necessity of experts, the Tribunal notes that the parties have had more than adequate time to prepare their case and engage their own experts. Having studied the case, the Tribunal concludes that any possible benefits to be derived from the appointment of an expert are not in proportion to the delays and consequential prejudice to all parties which would ensue"**.

Now it is conceivable that an arbitral tribunal finds as relevant for its decision a contested fact which could be established only by hearing an independent expert. If the arbitral tribunal, in such a situation, would refuse to appoint such an expert and, despite that parties’ request for the appointment, finds against the party having the burden of proof for this fact, it may have violated that party’s right to be heard; but situations of this type can be expected to be rare.

It would appear, therefore, that a right of a party to the appointment of an independent expert, if it exists at all, would arise only in quite exceptional circumstances.

19. A different question arises when both parties either require or prohibit the arbitrator to appoint an independent expert. It has been argued that, in such cases, the arbitrator is bound to act as requested by the parties***. If the requirement or exclusion of independent experts were expressed in the terms of reference or otherwise formally agreed by the parties, one would have to accept such a binding effect****.


** Chamber Three (Virally, Brower, Ansari), 12, Iran-US CTR (1986), 170, 228; see also Chamber One (Lagergren, Ameli, Holtzmann, in PepsiCo Inc. v. Iran, 13, Iran-US CTR (1986) 3, at 17 (1986), the decision on which Craig, Park, Paulsson rely in support of the arbitrators’ discretion with respect to the appointment of an expert.


**** See Obergericht Zurich in 78, Schweizerische Juristen-Zeitung (1982) 185; Poudret, op.cit., 616; Schlosser also mentions the case where the parties have fixed a limit for the costs of experts’ opinions and states that, in such a case, an arbitrator would be
However, if the parties merely made joint or concurrent requests, the situation would probably be different. Of course, if both parties request that a certain issue be submitted to an independent expert, an arbitrator should give much weight to such a request. Nevertheless, he may have serious reasons for not acceding to it, in particular, if he comes to the conclusion that the issue is not decisive for his award.

Cost effectiveness and speed are considerations which an arbitrator must make, in addition to those aiming at the "correct" decision. These considerations were expressed by the Iran-US Tribunal in Gruen Associates, Inc. v. Iran Housing Co., when it awarded an amount of US$ 500'000.−, stating the following:

"The Tribunal acknowledges that this amount is an estimate, but it could be made more precise only through additional evidence, including the appointment of an expert, the cost of which in money and time seems of doubtful wisdom in a case of this type and magnitude"*.

Such consideration also apply when one or both parties have requested the appointment of an expert. However, it is submitted that, faced with such a request, the arbitrator should discuss the matter with the parties and, if they wish to have an expert despite the loss of time and money, the arbitrator should appoint him.

20. Once it has been decided that an independent expert be appointed, his profile should be defined, i.e. the necessary technical qualifications, language requirements, possible exclusions for reasons of nationality or affiliation with competitors, etc. The parties should be consulted in this respect (see Documents 21 and 29). Sometimes the full scope of the qualifications required of the expert becomes apparent only in the course in the appointment process. It may then become necessary that several experts are commissioned. In such situations, the tribunal might appoint one expert and authorize him to consult other specialists in certain areas (see Documents 23 and 30); or the tribunal might appoint several experts (see Documents 25 and 26). If several experts are appointed, it may be advisable to designate a coordinator (Document 26, § 3).

------

* Chamber Two (Bellet, Shafeiei, Aldrich) 3, Iran-US CTR (1983), 97 at 107.
21. Traditionally, experts are appointed as individuals. However, there are distinct advantages in assigning certain expert’s tasks to an institution or a company (see for instance Documents 25 and 30)*. Especially for more complex assignments, an institution or company often has greater and more suitable resources than the individual expert. In other situations, the experts who are most competent for the assignment may be in the employment of a company and may be available only through their employer.

If the expert’s assignment is given to an institution or company, the person responsible for the work must be identified. This identification is necessary, in particular, in order to protect the parties’ right to question the expert (see below No 2.4).

22. Finding a person or company which meets the expert’s profile as defined, often is a difficult task. When the subject matter for the expertise relates to the professional activities of the parties, they may be in a better position than the arbitral tribunal to identify possible candidates. Therefore, the tribunal might invite the parties to agree on an expert** or each of them to make proposals (Document 21).

In practice, joint proposals by the Parties or the acceptance by one party of an expert proposed by the other seem to be rare (see Documents 24, § 6 and 27, recording the inability of the parties to agree on an expert). Blessing suggests a procedure in which the parties submit simultaneously experts list from which the arbitral tribunal may choose***. Often, the most suitable course for the arbitrator to take is a request for proposals to a specialized institution such as the International Centre for Technical Expertise of the International Chamber of Commerce in Paris.

23. Irrespective of the method by which the arbitral tribunal has identified the expert, the parties should be notified of the choice and be given an opportunity to comment before the appointment is made (see Documents 20, 1st § and 24).

---


** As proposed by Redfern and Hunter: op.cit., 340.

24. Experts appointed in judicial proceedings in some countries can be challenged on the same or similar grounds as judges*. The rules in this respect apply to experts as auxiliary organs of the courts**. As such, they are not directly applicable to experts appointed by an arbitral tribunal. One might consider applying the rules on challenge procedures by analogy***. It is doubtful that such an analogy would be justified. In particular, in international arbitration, the functions of experts appointed by the arbitral tribunal vary considerably from one case to another and are not always comparable to those of an expert in court proceedings.

The arbitrator would be well-advised to examine carefully the objections which a party may raise against his choice of an expert. But rules and formal procedures for the challenge of experts appointed in international commercial arbitration probably are neither necessary nor desirable; any formalism should be avoided. As pointed out by Poudret, the essential aspect is the parties’ right to be heard by the arbitrator****. If they are given a proper opportunity to express themselves both on the expert’s qualification and impartiality and on his report, this right would seem to be adequately protected without there being a need for a right of the parties to challenge the appointment of the expert itself.

* In Switzerland, Article 58 of the Federal Civil Procedure Act; in France, Article 234 of the New Code of Civil Procedure; in Germany, Art. 406, para 1 of the Code of Civil Procedure (ZPO). However, the rule is not of universal application: as pointed out by Matray, in some civil law countries experts may not be challenged (op. cit., 131).

** In this sense, see Solus, Perrot: op. cit., 769 et seq.

*** Pierre C. Weber, La responsabilité de l’expert à l’égard des Parties et du tribunal arbitral in 11, ASA Bulletin (1993) 190 at 197 seems to be of the opinion that rules on the challenge of court-appointed experts also apply to experts appointed by an arbitral tribunal; in the same sense for France: de Boisséson, op. cit., 249; following him Schlosser, op. cit., 484; Fouchard in his comments on the decision of the Cour de Cassation in Louppe v. Thomas is more cautious, Revue de l’Arbitrage (1979), 355 at 357.

**** Loc. cit. 617 - 618.
25. The tasks assigned to the expert generally are defined in writing. The document is sometimes described as the expert’s "terms of reference" or in French as "mission de l’expert" (Documents 25 and 18), but it may also be a procedural order (e.g. Documents 28 and 26) or a letter to the expert which he may have to countersign (see Document 20), thus stressing the contractual nature of the relationship (the experts’ signatures were requested also in Document 25).

These terms of reference often are prepared in consultation with the parties (see Documents 16, 17, 22 and 27 § 1). Sometimes the parties are invited to suggest questions to be submitted to the expert (Document 16 § 5.2 and Documents 19 and 20) but, as pointed out in Document 16, the final decision on the questions to be put to the expert is that of the arbitral tribunal (§ 5.4).

Occasionally the terms of reference are prepared by the tribunal prior to the appointment of the expert (see Document 17); this may facilitate the search for the person to act as expert. However, those cases seem to be more frequent where the expert is consulted in the preparation of his terms of reference (Documents 20, 24 and 22). This consultation may take the form of a discussion between the tribunal or his chairman and the expert (Document 20); or the tribunal may prepare draft terms of reference and invite both parties and the expert to comment on them before issuing them in their final form (Document 22, § 5 and 6).

In one case, the tribunal appointed an expert before it had been decided whether and on what matters an opinion would be required from him*. The expert was invited to attend the first hearing with the parties so as to assist the tribunal in the identification of critical technical issues and in its decision on the question whether a written expert opinion was required (Document 24). At the end of that hearing, the arbitral tribunal had reached an understanding of the technical issues at stake sufficient for it to conclude that the dispute could be decided without such an expert opinion.

* Indeed, Blessing recommends to appoint the expert as soon as possible so that he may acquaint himself with the case at the hearing (op.cit., 33).
In another case, the arbitral tribunal, when preparing the terms of reference, envisaged already the possibility of their subsequent revision and invited the expert to make the necessary proposals if, in the course of his investigation, he found that modifications in the terms of reference were required (Document 22 § 10).

In addition to defining the expert’s assignment, a number of other points must be settled in the terms of reference or in separate documents. These concern, in particular, financial matters and the expert’s programme.

26. Some arbitral tribunals, no doubt influenced by the practice of domestic courts, fix the expert’s remuneration in a procedural order (Document 26). Others request the expert to submit a budget or cost estimates (see e.g. Documents 22 and 27). Occasionally, more detailed budgets, including estimates of hours and specified rates are identified (see Document 25).

It is general practice that both parties, or exceptionally one of them (see Document 26), are required to pay advances to the expert’s costs and fees. The commencement of the expert’s work normally is conditioned on the payment of these advances (see Document 17, § 3, Documents 22 and 25). The expert is invited to notify the arbitral tribunal in time, if the volume of work exceeds the budget and payments beyond the advance become necessary (Document 26, § 4 and Document 20). Prudent arbitrators specify to the expert that "the arbitral tribunal is in no position to guarantee the payment of your expenses and fees beyond the deposits received" (Document 20).

In some cases, the financial arrangements with the expert specify his hourly rates (e.g. Documents 24 and 25); occasionnally they even contain rules on reimbursement of expenses (Document 25, § 10).

In ICC proceedings, payments to the expert are handled by the Secretariat of the International Court of Arbitration. In other proceedings, advances are paid to the arbitral tribunal which then makes payments to the expert (Document 22 § 3). It is probably not very frequent that a payment schedule is agreed with the expert in advance (Document 25). Direct settlement of payments of costs and fees from the parties to the expert are probably an exception (Document 25).
27. As to time and programme, most terms of reference fix a time limit for the expert to complete his work. In the published documents, these time limits vary in a range from two to six months (see Documents 18, 20, 23, 25 and 26).

In some cases, the expert proceeds in two stages: During the first of these stages, he prepares a programme and possibly also a budget which then, after approval by the tribunal, is carried out in a second stage (see Documents 22 and 27, § 5).

28. In addition, the terms of reference occasionally deal with a number of other aspects. Thus, they may remind the expert of his duties of keeping confidential all information received and of acting impartially (Document 25, § 10 and Document 20). Sometimes his attention also is drawn to possible criminal sanctions (Documents 20 and 30).

2.4 The conduct of the reference by the expert

29. The first basis for the expert's enquiry are the documents and pleadings produced by the parties in the arbitration. These are transmitted in toto (Documents 26 and 22, § 4) or in extracts, identified by the arbitral tribunal or the parties. Sometimes this communication is left to the parties (Documents 26 in fine); in other cases, the tribunal identifies specific documents and pleadings (Document 27, § VI). Sometimes the parties are invited to communicate to the expert other documents which they may consider relevant for the assignment (Document 26 in fine). In Document 28, the parties were invited not to produce the documents but describe them to the expert who then was to decide whether he wished to receive them or not (§ 2).

In addition, many terms of reference entitle the expert to request on his own initiative the production of additional documents (Documents 23, § 1, 25, 26 in fine, 28, § 2 and Document 30).

It is, of course, important that each party knows which documents have been communicated to the expert by its opponent. Some arbitrators, therefore, take care to prescribe that the other party and the arbitral tribunal must be informed of such communications by copy of the documents (see Documents 17, 22, § 9 and 28, § 2) or otherwise (Document 30).
30. In some cases, the expert’s opinion is to be based on the documents alone (e.g. Document 20). In other cases, the expert is expressly authorized to meet witnesses or other persons knowledgeable about the relevant facts (Documents 23 and 22, § 8). Sometimes the expert is instructed to invite the parties to attend such meetings (Document 22, § 8). In other cases, he is merely required to record the information thus obtained and to communicate it to the other party.

31. A number of documents also specify that the expert may visit the site or the plant where the contract works were performed (Documents 18, 26, 28 and 30). He must give prior notice to the parties and, as in one case the tribunal took care to point out to him, obtain the necessary permissions from the local authorities (Document 26).

32. Perhaps the most delicate aspect from a procedural point of view is the expert’s contact with the parties. In one case, the tribunal sought to avoid possible complications in this context by instructing the expert not to contact the parties (Document 20). However, such restrictions in the expert’s enquiry seem to be the exception*. In many documents, it is expressly provided that the expert should or may hear the parties (Documents 23 and 30). Occasionally he is required specifically to record the observations made by the parties (Document 23) or to keep minutes (Document 22, § 8).

33. In some proceedings, further details are prescribed to the expert in his contact with the parties. Thus, a notice period may be prescribed (Document 22, § 8 and Document 25, § 7) or a contact person may be identified (Document 25, § 5). In one case, the arbitral tribunal specified that, unless expressly requested by the expert, the parties’ lawyers should not intervene in the expert’s enquiry (Document 20).

34. Normally the work must be performed by the designated expert himself. However, in some cases, the expert is authorized to consult specialists in certain fields (Documents 23 and 30, § 3).

* Blessing seems to have doubts about the advisability of allowing direct contact of the expert with the parties’ personnel (op. cit., 611 seq., 618 seq.)
35. Some arbitral tribunals seem to expect the expert to work on his own. Others require regular reporting from him on the progress of his work (Document 30, § 6). In other documents, the expert is expressly invited to address himself to the arbitral tribunal in case of difficulties (Document 23, § II and Document 22, § 10).

2.5 The expert’s advice to the arbitral tribunal

36. It is normally through a written report that the expert provides his advice to the arbitral tribunal. Some terms of reference state this expressly (e.g. Documents 22, 23 and 25).

The expert’s terms of reference or the instructions given to him by the arbitrators specify the number of copies and occasionally a few other practical matters, but rarely prescribe the manner in which the expert should present his report. An exception can be found in Document 20 where the arbitral tribunal took care to explain to the expert that he should clearly state the assumptions made, the data relied upon and the method used in the report so that the parties can analyse all aspects of it.

37. The expert’s report, directly or through the tribunal, must be communicated to the parties for their comment. The parties’ right to comment on the report is expressly reserved in a number of documents (e.g. Document 17, § V and Document 19). The importance of this right has been recognized by judicial decisions* and stressed by legal writers**. In one case, the expert was required to finalize his report only after having received and having taken account of the parties’ written comments on his draft report (Document 22, § 12). This practice has also been followed in proceedings before the Iran-US Claims Tribunal***.

* See Swiss Supreme Court in Chrome Resources SA v. Leopold Lazarus Ltd., 102 Semaine Judiciaire (1980) 65 at 74; for France, see Cour de Cassation in Louppe v. Thomas, Revue de l’Arbitrage, 1979, 355; further references in the note of Fouchard, on this decision at 357.

** Poudret, op.cit., p. 621; de Boisséson, op.cit, 248, 375, 748; Matray, op.cit. 134 seq.

*** See e.g. the expert’s terms of reference in R.D. Haza v. Iran in 2, Iran-US CTR (1983) 68 at 75 (Chamber Two: Bellet, Shafeiei, Aldrich).
38. Many documents also confirm the parties’ right to question the expert (Documents 16, § 5.5, 19, 20 and Document 22, § 14). This right is expressly set out in Article 25.4 of the UNCITRAL Rules. These rules also specify that, at the hearing where the tribunal’s expert is interrogated, "either party may present expert witnesses in order to testify on the points at issue".

39. The tribunal then will have to reach its findings. The expert’s conclusions may have considerable weight in this process but the arbitral tribunal is not bound by them. The role of an expert’s opinion in the decision of international tribunals has been analysed with particular care in the Starrett Housing Corp, v. Iran award of the Iran-US Claims Tribunal. The Tribunal explained:

"No matter how well qualified an expert may be, however, it is fundamental that an arbitral tribunal cannot delegate to him the duty of deciding the case. Rather, the Expert’s Report is simply one element to be considered and weighed by the Tribunal along with all of the other circumstances of the Case".

Reviewing international cases and legal writers, the Tribunal established "recognized principles" in considering an expert’s report and stated its position as follows:

"Thus, the Tribunal adopts as its own the conclusion of the Expert on matters within his area of expertise when it is satisfied that sufficient reasons have not been shown that the Expert’s view is contrary to the evidence, the governing law, or common sense. On the other hand, the Tribunal does not hesitate to substitute its own judgement of what is reasonable with respect to matters that do not require expertise as to accounting or valuation methodology".

---

* Marriott rightly stresses the usefulness of confronting the tribunal-appointed expert with those retained by the parties (op.cit., 289); for the summary of such confrontation before the Iran-US Claims Tribunal, see Starrett Housing Corp, v. Iran, Award of 14 August 1987 in 16, Iran-US CTR, 112 at 120.

** Chamber One (Lagergren, Ameli, Holtzmann) 16, Iran-US CTR (1987) 112 at 197.

*** ibid., 199.
40. Apart from his report, the expert may provide advice to the arbitral tribunal on other occasions, too. It has been mentioned already that the expert may be consulted in drafting his terms of reference. He also may attend hearings. In particular, he may advise the tribunal, for instance, in the discussion of certain technical documents and at the hearing of witnesses and of the parties' experts. It is essential that, on such occasions, the advice given by the expert to the tribunal be made known to the parties so that they may comment on it.

41. A particularly delicate situation arises if the arbitrators seek the expert's assistance in the drafting of their award. The discussion of the ASA conference on 25 June 1993 in Geneva has shown that, on occasions, such advice is sought. This was justified primarily by the arbitrators' desire to avoid technical errors in the drafting of the award.

Since the arbitrators must form their own opinion on the issues dealt with in the expert's report, their award inevitably will contain explanations on issues for which they have retained the expert. It is understandable for the arbitrators to seek reassurance from the expert so as to avoid technical errors or incorrect terminology in their award. Such a mere review probably is not objectionable.

However, if the expert meets with the tribunal and discusses the award with its members, the limits of mere drafting advice are easily overstepped. There would seem to be a serious risk that the expert through his explanations contributes to the formation, confirmation or modification of the tribunal's opinion. Such contributions must not be made without the possibility of the parties to comment them.

It would appear, therefore, that Craig, Park and Paulsson are correct when they state that "in no case, should the neutral expert(s) participate in the deliberation of the arbitrators on the merits of the case"**.

* Craig, Park, Paulsson, op.cit. 416.

** op.cit. 416; in the same sense, Poudret op.cit. 624 and Blessing op.cit. 37.
In any event the arbitrators should not hesitate to re-open the proceedings and allow the parties to comment if a post-hearing discussion with their expert raises points or views relevant to the award which were not clearly made known to the parties before. The loss of time, thus created, probably will be negligible compared to that which will occur if, in the absence of such an opportunity for the parties to comment, their award is attacked for a violation of the parties' right to be heard.

3. Documents

**Document 15: Extract from a procedural order in Arbitration N° 4 (1991); other extracts of this order were published as Document 9; referred to above in the introductory comments at N° 5.**

"5. Experts

5.1 No written statements need be procured with respect to those points with which the Parties' experts have dealt in their oral explanations during the May 1991 Hearing.

5.2 By 7 June 1991, each Party will produce a Summary of Points which its experts intend to address in response to the explanations by the other Party's experts as a further development of their own initial explanations.

5.3 By 28 June 1991, the Parties will produce full statements of all explanations which their experts wish to add (Experts Statements). These statements may include new points not previously dealt with; in particular, they should deal with issues relating to the [XY issue] and with the conclusions to be drawn from [the Z documents] and from other evidence produced during or after the May 1991 Hearing.

5.4 At the opening of his examination, each expert must state the extent to which he confirms as expert witness the explanations which, as a member of a Party's team, he has given to the Arbitral Tribunal during May 1991 Hearing. Explanations thus confirmed shall form part of the evidence given by the expert and shall be subject to cross-examination.

5.5 This confirmation and the Expert Statement shall stand as evidence in chief."