Dispute Settlement in Space Law

Professor Maureen Williams

Abstract en español (seguido del texto completo en inglés)

NOTA: *Como anexo a este trabajo se agrega al final el texto oficial en idioma inglés de las Normas sobre Arbitraje para la Solución de Controversias relativas a Actividades en el Espacio Ultraterrestre elaboradas por un Grupo de Expertos encabezado por el Juez Fausto Pocar en el marco de la Corte Permanente de Arbitraje de las Naciones Unidas (CPA) (2010-2011).*

Esta presentación, en idioma inglés, se referirá a las principales características de las Normas de Arbitraje para la Solución de Controversias relativas a actividades en el espacio ultraterrestre adoptadas por la Corte Permanente de Arbitraje de La Haya (CPA) el 6 de diciembre de 2011 y a las que en adelante nos referiremos como 'las nuevas normas'.

Su objetivo fue cubrir vacíos dejados por los tratados internacionales vigentes en cuanto a mecanismos de solución de controversias ya que éstos solamente incluían como partes a los estados y organismos internacionales intergubernamentales pero no a las empresas privadas que hoy son importantes actores en el espacio ultraterrestre. Más aún, esos mecanismos elaborados en las primeras fases de la exploración y utilización del espacio eran lentos, complejos y sus decisiones meramente recomendatorias. De todos modos, al referirse al derecho internacional y Carta de Naciones Unidas dejaron entreabierta la puerta para procedimientos más específicos, ágiles y simples, y por cierto que menos costosos tales como los diseñados por la Corte Permanente de Arbitraje.

El grupo de Trabajo de la CPA designado para la elaboración de estas nuevas Normas, en su trabajo preliminar, llegó a la conclusión de que, en el campo de las tecnologías espaciales (observación de la tierra, comunicaciones satelitales y multiplicidad de otros ejemplos) el arbitraje aparecía como la mejor opción como medio de solución pacífica de controversias. Entre las principales razones figuran las siguientes.

1. Según estas Normas el arbitraje está abierto para todas las partes activas en el campo, sean sujetos de derecho público (estado u organismos internacionales intergubernamentales) y empresas privadas.

2. El Art 1 de las Normas, de naturaleza procesal, establece que se trata de un procedimiento voluntario basado en el consentimiento de las partes y que simplemente requiere la inserción de una cláusula de arbitraje en el instrumento jurídico que vincula y define los derechos y obligaciones de las partes.

3. Los laudos son finales y obligatorios (art. 34, 2, de las Nuevas Normas) lo que contrasta con el sistema de decisiones meramente recomendatorias establecido en el Convenio de Responsabilidad por Actividades Espaciales (1972) que es, actualmente, el derecho aplicable únicamente a los estados quienes tiene el deber de fiscalizar las actividades espaciales emprendidas por entidades privadas que operen en estos campos.

4. Los laudos son reconocidos internacionalmente y ejecutables en todos los estados parte de la Convención de Nueva York (hoy 146).

5. Las partes eligen a quiénes habrán de decidir la controversia y podrán elegir árbitros especializados en el tema que podrá versar sobre economía, tecnologías espaciales de punta y muchos otros campos interdisciplinarios.

6. El procedimiento arbitral es flexible y puede modificarse por acuerdo de partes (Art. 1 de las Nuevas Normas).

7. En el arbitraje es posible mantener la confidencialidad de la información sensitiva. Las audiencias no tiene que ser públicos ni los laudos deben necesariamente publicarse (Arts. 28(3) y 34 (5) de las Normas.

Sobre esta base resaltamos, en esta presentación, dos aspectos llamativos de las Normas:

A. No es preciso que las partes determinen la naturaleza de la controversia para establecer la jurisdicción. Esto obviará, sin duda, confusiones y ambigüedades (p ej, un abastecimiento de combustible de un satélite en tierra). Vale decir que la ratione materiae depende de la voluntad de las partes y no de definiciones sobre qué debe entenderse por 'tecnología espacial'. Podrían ser tecnologías espaciales en su origen pero hoy aplicables a una diversidad de ámbitos.

B Si bien las partes son libres de elegir a quiénes habrán de laudar el Secretario General de la CPA tiene la obligación de compilar una lista de árbitros especialistas en el campo de tecnologías espaciales y su aplicación (lista que será optativa, Art.10.4). Además, el tribunal arbitral podrá nombrar expertos asesores tomados de una lista (asimismo optativa) de expertos en el tema.

En síntesis, estas Normas están cubren un buen número de lagunas que, en materia de solución de controversias, existen en los tratados internacionales que hoy nos rigen. . Principales aplicaciones: satélites de observación de la Tierra (EOS), controversias internacionales sobre límites (en las que se suele producir, en la etapa de prueba, imágenes satelitales) y el caso de daños producidos por residuos espaciales.

La creciente comercialización de las actividades espaciales y utilización de tecnologías de esta naturaleza tanto por países industrializados como en desarrollo, permiten anticipar que las nuevas Normas, por las características mencionadas, serán de suma utilidad en este campo.

Dispute Settlement in Space Law (full text)[1]

Professor Maureen Williams

The 1998 ILA Convention and the role of the ILA in the work of the Permanent Court of Arbitration (PCA)

An important landmark in the field of dispute settlement was 6 December 2011 when the *PCA Optional Rules for Arbitration of Disputes Relating to Outer Space Activities* - hereinafter the PCA Rules on Outer Space, or simply the 'PCA Rules'- were adopted as a follow up to the *PCA Rules for Arbitration of Disputes Relating to Natural Resources and /or the Environment*, an area of close points of contact with the use of space technologies in the current international scenarios. The official text of these rules is available in English and French on the PCA website (www.pca-cpa.org)and as an Annex to this presentation.

One of the main characteristics of these Rules is that, unlike the 1972 Convention on International Liability for Damage caused by Space Objects, not only states and international intergovernmental organisations may de parties thereof, but also private parties.

1 The drafting history

If we turn the pages of history to the end of the 19th century, the examples given by the Hague Conventions on the Peaceful Settlement of Disputes (1899 and 1907) come to mind. By extending their application to private parties these Conventions were already indicating, the way opinion was moving in those days.

[1] This paper is based on one of the chapters of the *Fifth Report of the Space Law Committee to the 75th Conference of the International Law Association* (Sofia, 26-30 August 2012), by the present writer. Further developments have been added for submission to the UN/CONAE Workshop, Buenos Aires, 5-8 November 2012.

The approach of the *PCA Outer Space Rules* is remindful of the one taken by the ILA both in its first *Draft Convention on the Settlement of Disputes related to Space Activities* (adopted by its Sixty-First ILA Conference, Paris 1984) and in the Final Text of a *Revised Convention on the Settlement of Disputes related to Space Activities*[2] (adopted at its Sixty-Eighth Conference in 1998).

In both ILA Conventions Article 10 (b) provides, in no uncertain terms, that the dispute settlement procedures specified in that instrument shall be open to entities other than States and international intergovernmental organisations unless the matter is submitted to the ICJ in accordance with Article 6 of the Conventions (choice of procedure).These provisions should be read together with Article VI of the 1967 Outer Space Treaty concerning the international responsibility of States for national activities in outer space, the moon and other celestial bodies, which entails the obligation to authorise and supervise the activities of non-governmental entities in those areas.

2 The PCA Project

This Project was set in motion in 2009 by its then Secretary-General, Mr Christiaan M.J. Kröner, in response to a perceived need for specialised dispute resolution procedures in the rapidly evolving fields of outer space activities. The text was developed by the International Bureau of the PCA in conjunction with what was called an 'Advisory Group of leading experts in air and space law'[3], chaired by Judge Fausto Pocar, Judge of the International Criminal Court for the former Yugoslavia. Its members were Tare Brisibe, Frans von der Dunk, Joanne Gabrynowicz, Ram Jakhu, Armel Kerrest, Justine Limpitlaw, Francis Lyall, V.S. Mani, Jose Montserrat Filho, Haifeng Zhao, Stephan Hobe and Maureen Williams.

Work developed without interruption in the framework of the PCA during 2010-2011. The Rules took as basis the *PCA Environmental Rules* and the *2010 UNCITRAL Arbitration Rules* but departed from them in certain cases to make them more specific and consistent with the new international context in which the Advisory Group was involved and the distinctive features of the law of outer space. A final meeting of the Advisory Group was held at the Peace Palace on 5-6 December 2011 when the 184th Administrative Council of the PCA adopted the Rules. They became effective from 6 December 2011.

3 The structure and substance of the Rules

The PCA Rules on Outer Space are procedural in nature as are the previous sets of specific rules adopted by the PCA since 1992. They stand out for their flexibility regarding the applicable law and show a realistic equilibrium among the different elements and interests

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[2] The idea of revising the text of the 1984 ILA Convention was that the use of outer space for commercial purposes had grown considerably in the recent years and the need to have a realistic framework for disputes arising from activities in that area was clear. See *Report of the Sixty-Eighth Conference of the ILA* (1998) on '*Dispute Settlement related to Space Activities. Revised Draft Convention, Final Text'*, Space Law Committee, 239-277.

[3] See http://www.pca-cpa.org

involved. The need for these rules, and their objectives, appeared very clearly from the outset. In fact, they go a long way in avoiding the frustration of arbitration procedures being interfered with by claims of sovereign immunity. This objective was, by and large, a priority in the view of the PCA Advisory Group and its Chair.

As observed by Judge Pocar in his statement to the LSC of COPUOS (March 2012) when introducing the new Rules, the current dispute settlement procedures in international space law showed a number of gaps due to limitations in their personal or material scope which made them unavailable to private parties or only available for restricted ranges of disputes[4]. In fact, in 1984 the ILA Convention on the matter had detected those gaps in the law, a position later confirmed in its 1998 ILA Revised Text[5].

Likewise, in addition to disputes between sovereign states, the *PCA Outer Space Rules* clearly apply to disputes between international intergovernmental organisations and private parties. It is essential to highlight this fact and to have in mind that we are dealing with *ad hoc* arbitration. This approach, as noted above, eases the way to dispute settlement mechanisms and minimises the risk of sovereign immunity exceptions being brought up at some stage and upsetting the normal course of dispute settlement procedures.

In addition to the ILA precedent another important source of inspiration in the drafting of the PCA Rules was the *2010 UNCITRAL Arbitration Rules*, with certain adjustments in order to:

[(i) reflect the particular characteristics of disputes having an outer space component involving the use of outer space by States, international organisations and private entities;

(ii) to reflect the public international law element that pertains to disputes that may involve States and the use of outer space, and international practice appropriate to such disputes;

(iii) to indicate the role of the Secretary-General and the International Bureau of the Permanent Court of Arbitration (PCA) at The Hague;

(iv) to provide freedom for the parties to choose an arbitral tribunal of one, three or five persons;

(v) to provide for the establishment of a specialised list of arbitrators mentioned in article 10 and a list of scientific and technical experts mentioned in article 29 of these Rules and

(vi) to provide suggestions for establishing procedures aimed at ensuring confidentiality.

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[4] Pocar's statement on 28 March 2012 at the LS of COPUOS, Vienna.

[5] In its first draft (1984) the ILA introduced an innovating section (Article 10) to enable private parties to avail themselves of the mechanisms laid down in that text for sovereign states. This approach was fully confirmed in the *ILA 1998 Revised Text* on the subject. See article 10 of the *Revised Text of a Convention on the Settlement of Disputes related to Space Activities...1998*, 242-243.

The drafting experience carried out by the Group in 2010-2011 was most rewarding and debates among its members -who reflected a good cross-section- most enlightening. The same can be said of the exchange of views between the Croup and the PCA member states –one hundred and fifteen of them at the time.

The comments from the PCA member states were indeed valuable, both in essence and form, and worthy of the deep consideration given to them by the Advisory Group and its leader. As experience has often shown, flexibility and general principles are usually less brittle and more likely to survive the times than detailed regulation. Hence the idea of the Advisory Group to begin at a low level of compulsion and, at a later stage, to gradually move forward by means of international standards or guidelines giving more precision to the provisions of the *PCA Rules on Outer Space*.

These *Rules* provide an interesting example of progressive development of the law by going further than the *PCA Environmental Rules,* its nearest precedent. Moreover, its language seems clearer than that of the *2010 Arbitration Rules*. The *Outer Space Rules* are very much inspired in these *Arbitration Rules* but on many other PCA procedural rules as well, albeit not entirely.

For example, by leaving out the words 'intentional wrongdoing' in Article 16 of the *PCA Outer Space Rules* -a formula which appears expressly in the *2010 UNCITRAL Rules*- a realistic step forward was given. The inclusion of that term seemed likely to unchain a string of accusations of the wrongdoing being 'intentional' and perhaps open the door to a myriad of accusations of the kind. The Advisory Group on the Outer Space Rules considered that any words to that effect were unnecessary and could lead to unwanted complications hindering the development of a an agile dispute settlement procedure.

When introducing the *Outer Space Rules* to the United Nations at the Fifty-first Session of the LSC of COPUOS last March 2012, the main reasons for arbitration being particularly indicated in the field of space law disputes were summed up in the following terms.

- Arbitration is open to all parties active in the field, both public and private.

- As reflected in Article I of the *PCA Outer Space Rules*, arbitration is a voluntary mechanism based on the consent of all parties, which can be provided by insertion of an arbitration clause in the legal instrument that defines the parties' relationship, as confirmed in Article 1 (1) of the Rules[6].

[6] Article 1 (1) states: *Where parties have agreed that disputes between them in respect of a defined legal relationship, whether contractual or not, shall be referred to arbitration under the Permanent Court of Arbitration Optional Rules for Arbitration of Disputes relating to Outer Space Activities, then such disputes shall be settled in accordance with these Rules subject to such modification as the Parties may agree. The characterisation of the dispute as relating to outer space is not necessary for jurisdiction where parties have agreed to settle a specific dispute under these Rules*.

- This is of particular importance where states are concerned, as they may be better prepared to agree to a binding dispute resolution under discrete agreements than to enter into a new significant multilateral treaty.

- Arbitration results in final and binding decisions, as set forth in Article 4 (2) of the Rules, in contrast with the recommendatory nature of decisions under, the 1972 Liability Convention, for example.

- Arbitral awards are internationally recognised and enforceable in all signatory states of the New York Convention, currently one hundred and forty-six.

- Parties to arbitration choose their own decision makers. Unlike in a court, parties in arbitration have the option of selecting arbitrators with specialised competences in the relevant fields, which may be as diverse as economics, cutting-edge space technology, and a tangle of related scientific branches.

- Arbitral procedure is flexible and can be modified by agreement of the parties, as provided in Article 1 (1) of the Rules, and

- Arbitration can serve to preserve the confidential nature of sensitive information. Hearings need not be public and awards need not be published, as provided in Articles 28 (3) and 34 (5) of the Rules[7].

Conclusions, perceptions and suggestions

In the first place, there is much to be said for the great flexibility of the Rules and their procedural nature. Moreover, it is submitted that, rather than weakening the force of the dispute settlement clauses embodied in the UN Space Treaties, the PCA Rules are likely to have a constructive role in revitalising and enriching the existing procedures.

If we look at the *PCA Outer Space Rules* nearest precedent, i.e. *the Optional Rules for Arbitration of Disputes Relating to Natural Resources and/or the Environment*, it is manifest that the subject matter is very close to that of space activities.

Both areas are highly influenced by technological development of which glaring examples are the use of satellites for monitoring compliance with international agreements, particularly concerning climate change and the protection of the ozone layer. In the latter example, space technologies -because of their extreme precision- are a powerful tool in

[7] Article 28 (3) provides that *Hearings shall be held 'in camera' unless the parties agree otherwise. The arbitral tribunal may require the retirement of any witness or witnesses, including expert witnesses, during the testimony of such other witnesses, except that a witness, including an expert witness, who is a party to the arbitration shall not, in principle, be asked to retire*. Article 34 (5) states *that An award may be made public with the consent of all parties or where and to the extent disclosure is required of a party by legal duty, to protect or pursue a legal right or in relation to legal proceedings before a court or other competent authority.*

establishing the alterations in the ozone layer in different parts of the stratosphere and at any time of the year.

The figures provided by earth observation satellites -in Dobson units- are showing that the international agreements in force concerning the protection of the ozone layer are proving successful. It follows that the dimension of this problem can now be measured with precision. And when a problem can be measured the way to realistic solutions is certainly eased.

Therefore a fruitful interaction between both sets of Rules is expected in a not too distant future. In this framework the ILA is glad to have been asked to contribute to the PCA work on dispute settlement related to space activities with a number of members of its Space Law Committee.

Finally it may be added that a general opinion is currently perceived in the sense that the Permanent Court of Arbitration would provide a most appropriate forum for the settlement of disputes arising from the exploration and use of outer space and celestial bodies, as well as from the exploitation of those areas which seems to be a current objective in the not too distant future in connection with planet Mars.

AN ANNEX follows with the text of the PCA Rules http://www.pca-cpa.org

PERMANENT COURT OF ARBITRATION

OPTIONAL RULES
FOR ARBITRATION OF DISPUTES
RELATING TO OUTER SPACE ACTIVITIES

Effective December 6, 2011

Section I. Introductory rules

Scope of application*

Article 1

1. Where parties have agreed that disputes between them in respect of a defined legal relationship, whether contractual or not, shall be referred to arbitration under the Permanent Court of Arbitration Optional Rules for Arbitration of Disputes Relating to Outer Space Activities, then such disputes shall be settled in accordance with these Rules subject to such modification as the parties may agree.

The characterization of the dispute as relating to outer space is not necessary for jurisdiction where parties have agreed to settle a specific dispute under these Rules.

2. Agreement by a party to arbitration under these Rules constitutes a waiver of any right of immunity from jurisdiction, in respect of the dispute in question, to which such party might otherwise be entitled. A waiver of immunity relating to the execution of an arbitral award must be explicitly expressed.

3. The International Bureau of the Permanent Court of Arbitration (the 'International Bureau') shall serve as registry for the proceedings and provide secretariat services.

* A model arbitration clause for contracts can be found in the annex to the Rules.

Notice and calculation of periods of time

Article 2

1. A notice, including a notification, communication or proposal, may be transmitted by any means of communication that provides or allows for a record of its transmission.

2. If an address has been designated by a party specifically for this purpose or authorized by the arbitral tribunal any notice shall be delivered to that party at that address and if so delivered shall be deemed to have been received. Delivery by electronic means such as facsimile or email may only be made to an address so designated or authorized.

3. In the absence of such designation or authorization, a notice is:

(a) received if it is physically delivered to the addressee; or

(b) deemed to have been received if it is delivered at the place of business, habitual residence or mailing address of the addressee.

4. If, after reasonable efforts, delivery cannot be effected in accordance with paragraphs 2 or 3, a notice is deemed to have been received if it is sent to the addressee's last-known place of business, habitual residence or mailing address by registered letter or any other means that provides a record of delivery or of attempted delivery.

5. A notice shall be deemed to have been received on the day it is delivered in accordance with paragraphs 2, 3 or 4, or attempted to be delivered in accordance with paragraph 4. A notice transmitted by electronic means is deemed to have been received on the day it is sent, except that a notice of arbitration so transmitted is only deemed to have been received on the day when it reaches the addressee's electronic address.

6. For the purpose of calculating a period of time under these Rules, such period shall begin to run on the day following the day when a notice is received. If the last day of such period

is an official holiday or a non-business day at the residence or place of business of the addressee, the period is extended until the first business day which follows. Official holidays or non-business days occurring during the running of the period of time are included in calculating the period.

Notice of arbitration

Article 3

1. The party or parties initiating recourse to arbitration (hereinafter called the "claimant") shall communicate to the other party or parties (hereinafter called the "respondent") and the International Bureau a notice of arbitration.

2. Arbitral proceedings shall be deemed to commence on the date on which the notice of arbitration is received by the respondent.

3. The notice of arbitration shall include the following:

(a) A demand that the dispute be referred to arbitration;

(b) The names and contact details of the parties;

(c) Identification of the arbitration agreement that is invoked;

(d) Identification of any rule, decision, agreement, contract, convention, treaty, constituent instrument of an organization or agency, or relationship out of, or in relation to which, the dispute arises;

(e) A brief description of the claim and an indication of the amount involved, if any;

(f) The relief or remedy sought;

(g) A proposal as to the number of arbitrators, language and place of arbitration, if the parties have not previously agreed thereon.

4. The notice of arbitration may also include:

(a) A proposal for the appointment of a sole arbitrator referred to in article 8, paragraph 1;

(b) Notification of the appointment of an arbitrator referred to in articles 9 or 10.

5. The constitution of the arbitral tribunal shall not be hindered by any controversy with respect to the sufficiency of the notice of arbitration, which shall be finally resolved by the arbitral tribunal.

Response to the notice of arbitration

Article 4

1. Within 30 days of the receipt of the notice of arbitration, the respondent shall communicate to the claimant and the International Bureau a response to the notice of arbitration, which shall include:

(a) The name and contact details of each respondent;

(b) A response to the information set forth in the notice of arbitration, pursuant to article 3, paragraphs 3 (c) to (g).

2. The response to the notice of arbitration may also include:

(a) Any plea that an arbitral tribunal to be constituted under these Rules lacks jurisdiction;

(b) A proposal for the appointment of a sole arbitrator referred to in article 8, paragraph 1;

(c) Notification of the appointment of an arbitrator referred to in articles 9 or 10;

(d) A brief description of counterclaims or claims for the purpose of a set-off, if any, including where relevant, an indication of the amounts involved, and the relief or remedy sought;

(e) A notice of arbitration in accordance with article 3 in case the respondent formulates a claim against a party to the arbitration agreement other than the claimant.

3. The constitution of the arbitral tribunal shall not be hindered by any controversy with respect to the respondent's failure to communicate a response to the notice of arbitration, or an incomplete or late response to the notice of arbitration, which shall be finally resolved by the arbitral tribunal.

Representation and assistance

Article 5

Each party may be represented or assisted by persons chosen by it. The names and addresses of such persons must be communicated to all parties, to the International Bureau and to the arbitral tribunal. Such communication must specify whether the appointment is being made for purposes of representation or assistance. Where a person is to act as a representative of a party, the arbitral tribunal, on its own initiative or at the request of any party, may at any time require proof of authority granted to the representative in such a form as the arbitral tribunal may determine.

Appointing authority

Article 6

1. The Secretary-General of the PCA shall serve as appointing authority.
2. In exercising its functions under these Rules, the appointing authority may require from any party and the arbitrators the information it deems necessary and it shall give the parties and, where appropriate, the arbitrators, an opportunity to present their views in any manner it considers appropriate. All such communications to and from the appointing authority shall also be provided by the sender to all other parties.
3. The appointing authority shall have regard to such considerations as are likely to secure the appointment of an independent and impartial arbitrator and shall take into account the advisability of appointing an arbitrator of a nationality other than the nationalities of the parties.

Section II. Composition of the arbitral tribunal

Number of arbitrators

Article 7

1. If the parties have not previously agreed on the number of arbitrators, and if within 30 days after the receipt by the respondent of the notice of arbitration the parties have not agreed that there shall be only one arbitrator, three arbitrators shall be appointed.
2. Notwithstanding paragraph 1, if no other parties have responded to a party's proposal to appoint a sole arbitrator within the time limit provided for in paragraph 1 and the party or parties concerned have failed to appoint a second arbitrator in accordance with articles 9 or 10, the appointing authority may, at the request of a party, appoint a sole arbitrator pursuant to the procedure provided for in article 8, paragraph 2 if it determines that, in view of the circumstances of the case, this is more appropriate.

Appointment of arbitrators (articles 8 to 10)

Article 8

1. If the parties have agreed that a sole arbitrator is to be appointed and if within 30 days after receipt by all other parties of a proposal for the appointment of a sole arbitrator the

parties have not reached agreement thereon, a sole arbitrator shall, at the request of a party, be appointed by the appointing authority.
2. The appointing authority shall appoint the sole arbitrator as promptly as possible. In making the appointment, the appointing authority shall use the following list-procedure, unless the parties agree that the list-procedure should not be used or unless the appointing authority determines in its discretion that the use of the list-procedure is not appropriate for the case:
(a) The appointing authority shall communicate to each of the parties an identical list containing at least three names;
(b) Within 15 days after the receipt of this list, each party may return the list to the appointing authority after having deleted the name or names to which it objects and numbered the remaining names on the list in the order of its preference;
(c) After the expiration of the above period of time the appointing authority shall appoint the sole arbitrator from among the names approved on the lists returned to it and in accordance with the order of preference indicated by the parties;
(d) If for any reason the appointment cannot be made according to this procedure, the appointing authority may exercise its discretion in appointing the sole arbitrator.

Article 9
1. If three arbitrators are to be appointed, each party shall appoint one arbitrator. The two arbitrators thus appointed shall choose the third arbitrator who will act as the presiding arbitrator of the arbitral tribunal. If five arbitrators are to be appointed, the two party-appointed arbitrators shall choose the remaining three arbitrators and designate one of those three as the presiding arbitrator of the tribunal.
2. If within 30 days after the receipt of a party's notification of the appointment of an arbitrator the other party has not notified the first party of the arbitrator it has appointed, the first party may request the appointing authority to appoint the second arbitrator.
3. If within 30 days after the appointment of the second arbitrator the two arbitrators have not agreed on the choice of the remaining arbitrators and/or the presiding arbitrator, the remaining arbitrators and/or the presiding arbitrator shall be appointed by the appointing authority in the same way as a sole arbitrator would be appointed under article 8.

Article 10
1. For the purposes of article 9, paragraph 1, where three or five arbitrators are to be appointed and there are multiple parties as claimant or as respondent, unless the parties have agreed to another method of appointment of arbitrators, the multiple parties jointly, whether as claimant or as respondent, shall appoint an arbitrator.
2. If the parties have agreed that the arbitral tribunal is to be composed of a number of arbitrators other than one, three, or five, the arbitrators shall be appointed according to the method agreed upon by the parties.
3. In the event of any failure to constitute the arbitral tribunal under these Rules, the appointing authority shall, at the request of any party, constitute the arbitral tribunal and, in doing so, may revoke any appointment already made and appoint or reappoint each of the arbitrators and designate one of them as the presiding arbitrator.
4. In appointing arbitrators pursuant to these Rules, the parties and the appointing authority are free to designate persons who are not Members of the Permanent Court of Arbitration at The Hague. For the purpose of assisting the parties the Secretary-General will make

available a list of persons considered to have expertise in the subject matters of the dispute at hand for which these Rules have been designed.

Disclosures by and challenge of arbitrators** (articles 11 to 13)

Article 11

When a person is approached in connection with his or her possible appointment as an arbitrator, he or she shall disclose any circumstances likely to give rise to justifiable doubts as to his or her impartiality or independence. An arbitrator, from the time of his or her appointment and throughout the arbitral proceedings, shall without delay disclose any such circumstances to the parties and the other arbitrators unless they have already been informed by him or her of these circumstances.

** Model statements of independence pursuant to article 11 can be found in the annex to the Rules.

Article 12

1. Any arbitrator may be challenged if circumstances exist that give rise to justifiable doubts as to the arbitrator's impartiality or independence or if he or she does not have the qualifications agreed by the parties in their arbitration agreement.
2. A party may challenge the arbitrator appointed by it only for reasons of which it becomes aware after the appointment has been made.
3. In the event that an arbitrator fails to act or in the event of the *de jure* or *de facto* impossibility of his or her performing his or her functions, the procedure in respect of the challenge of an arbitrator as provided in article 13 shall apply.
4. If an arbitrator on a three- or five-person tribunal fails to participate in the arbitration, the other arbitrators shall, unless the parties agree otherwise, have the power in their sole discretion to continue the arbitration and to make any decision, ruling or award, notwithstanding the failure of one arbitrator to participate. In determining whether to continue the arbitration or to render any decision, ruling or award without the participation of an arbitrator, the other arbitrators shall take into account the stage of the arbitration, the reason, if any, expressed by the arbitrator for such non-participation, and such other matters as they consider appropriate in the circumstances of the case. In the event that the other arbitrators determine not to continue the arbitration without the non-participating arbitrator, the arbitral tribunal shall declare the office vacant, and, subject to article 14(2), a substitute arbitrator shall be appointed pursuant to the provisions of articles 8 to 11.

Article 13

1. A party that intends to challenge an arbitrator shall send notice of its challenge within 30 days after it has been notified of the appointment of the challenged arbitrator, or within 30 days after the circumstances mentioned in articles 11 and 12 became known to that party.
2. The notice of challenge shall be communicated to all other parties, to the arbitrator who is challenged and to the other arbitrators. The notice of challenge shall state the reasons for the challenge.
3. When an arbitrator has been challenged by a party, all parties may agree to the challenge. The arbitrator may also, after the challenge, withdraw from his or her office. In neither case does this imply acceptance of the validity of the grounds for the challenge.

4. If, within 15 days from the date of the notice of challenge, all parties do not agree to the challenge or the challenged arbitrator does not withdraw, the party making the challenge may elect to pursue it. In that case, within 30 days from the date of the notice of challenge, it shall seek a decision on the challenge by the appointing authority.

Replacement of an arbitrator
Article 14
1. Subject to paragraph 2, in any event where an arbitrator has to be replaced during the course of the arbitral proceedings, a substitute arbitrator shall be appointed or chosen pursuant to the procedure provided for in articles 8 to 11 that was applicable to the appointment or choice of the arbitrator being replaced. This procedure shall apply even if during the process of appointing the arbitrator to be replaced, a party had failed to exercise its right to appoint or to participate in the appointment.
2. If, at the request of a party, the appointing authority determines that, in view of the exceptional circumstances of the case, it would be justified for a party to be deprived of its right to appoint a substitute arbitrator, the appointing authority may, after giving an opportunity to the parties and the remaining arbitrators to express their views, appoint the substitute arbitrator.

Repetition of hearings in the event of the replacement of an arbitrator
Article 15
If an arbitrator is replaced, the proceedings shall resume at the stage where the arbitrator who was replaced ceased to perform his or her functions, unless the arbitral tribunal decides otherwise.

Exclusion of liability
Article 16
The parties waive, to the fullest extent permitted under the applicable law, any claim against the arbitrators and any person appointed by the arbitral tribunal based on any act or omission in connection with the arbitration.

Section III. Arbitral proceedings

General provisions
Article 17
1. Subject to these Rules, the arbitral tribunal may conduct the arbitration in such manner as it considers appropriate, provided that the parties are treated with equality and that at an appropriate stage of the proceedings each party is given a reasonable opportunity of presenting its case. The arbitral tribunal, in exercising its discretion, shall conduct the proceedings so as to avoid unnecessary delay and expense and to provide a fair and efficient process for resolving the parties' dispute.
2. As soon as practicable after its constitution and after inviting the parties to express their views, the arbitral tribunal shall establish the provisional timetable of the arbitration. The arbitral tribunal may, at any time, after inviting the parties to express their views, extend or abridge any period of time prescribed under these Rules or agreed by the parties.
3. If at an appropriate stage of the proceedings any party so requests, the arbitral tribunal shall hold hearings for the presentation of evidence by witnesses, including expert

witnesses, or for oral argument. In the absence of such a request, the arbitral tribunal shall decide whether to hold such hearings or whether the proceedings shall be conducted on the basis of documents and other materials.
4. All communications to the arbitral tribunal by one party shall be communicated by that party to all other parties and the International Bureau. Such communications shall be made at the same time, except as otherwise permitted by the arbitral tribunal if it may do so under applicable law.
5. The arbitral tribunal may, at the request of any party, allow one or more third persons to be joined in the arbitration as a party provided such person is a party to the arbitration agreement, unless the arbitral tribunal finds, after giving all parties, including the person or persons to be joined, the opportunity to be heard, that joinder should not be permitted because of prejudice to any of those parties. The arbitral tribunal may make a single award or several awards in respect of all parties so involved in the arbitration.
6. A party invoking the confidentiality of any information it wishes or is required to submit in the arbitration, including to an expert appointed by the arbitral tribunal, shall make an application to have the information classified as confidential by notice containing the reasons for which it considers the information confidential to the arbitral tribunal, with a copy to the other party and the International Bureau.
7. The arbitral tribunal shall determine whether the information is to be classified as confidential and of such a nature that the absence of special measures of protection in the proceedings would be likely to cause serious harm to the party or parties invoking its confidentiality. If the arbitral tribunal so determines, it shall decide and communicate in writing to the parties and the International Bureau under what conditions and to whom the confidential information may in part or in whole be disclosed and shall require any person to whom the confidential information is to be disclosed to sign an appropriate confidentiality undertaking.
8. The arbitral tribunal may also, at the request of a party or on its own motion, appoint a confidentiality adviser as an expert in accordance with article 29 in order to report to it on the basis of the confidential information on specific issues designated by the arbitral tribunal without disclosing the confidential information either to the party from whom the confidential information does not originate or to the arbitral tribunal.

Place of arbitration
Article 18
1. If the parties have not previously agreed on the place of arbitration, the place of arbitration shall be determined by the arbitral tribunal having regard to the circumstances of the case. The award shall be deemed to have been made at the place of arbitration.
2. The arbitral tribunal may meet at any location it considers appropriate for deliberations. Unless otherwise agreed by the parties, the arbitral tribunal may also meet at any location it considers appropriate for any other purpose, including hearings.

Language
Article 19
1. Subject to an agreement by the parties, the arbitral tribunal shall, promptly after its appointment, determine the language or languages to be used in the proceedings. This determination shall apply to the statement of claim, the statement of defence, and any

further written statements and, if oral hearings take place, to the language or languages to be used in such hearings.
2. The arbitral tribunal may order that any documents annexed to the statement of claim or statement of defence, and any supplementary documents or exhibits submitted in the course of the proceedings, delivered in their original language, shall be accompanied by a translation into the language or languages agreed upon by the parties or determined by the arbitral tribunal.

Statement of claim
Article 20
1. The claimant shall communicate its statement of claim in writing to the respondent, to the International Bureau, and to each of the arbitrators within a period of time to be determined by the arbitral tribunal. The claimant may elect to treat its notice of arbitration referred to in article 3 as a statement of claim, provided that the notice of arbitration also complies with the requirements of
paragraphs 2 to 4 of this article.
2. The statement of claim shall include the following particulars:
(a) The names and contact details of the parties;
(b) A statement of the facts supporting the claim;
(c) The points at issue;
(d) The relief or remedy sought;
(e) The legal grounds or arguments supporting the claim.
3. A copy of any rule, decision, agreement, contract, convention, treaty, constituent instrument of an organization or agency, or relationship out of, or in relation to which, the dispute arises and of the arbitration agreement shall be annexed to the statement of claim.
4. The statement of claim should, as far as possible, be accompanied by all documents and other evidence relied upon by the claimant, or contain references to them.

Statement of defence
Article 21
1. The respondent shall communicate its statement of defence in writing to the claimant, to the International Bureau, and to each of the arbitrators within a period of time to be determined by the arbitral tribunal. The respondent may elect to treat its response to the notice of arbitration referred to in article 4 as a statement of defence, provided that the response to the notice of arbitration also complies with the requirements of paragraph 2 of this article.
2. The statement of defence shall reply to the particulars (b) to (e) of the statement of claim (article 20,paragraph 2). The statement of defence should, as far as possible, be accompanied by all documents and other evidence relied upon by the respondent, or contain references to them.
3. In its statement of defence, or at a later stage in the arbitral proceedings if the arbitral tribunal decides that the delay was justified under the circumstances, the respondent may make a counterclaim or rely on a claim for the purpose of a set-off provided that the arbitral tribunal has jurisdiction over it.
4. The provisions of article 20, paragraphs 2 to 4 shall apply to a counterclaim, a claim under article paragraph (2)(e) and a claim relied on for the purpose of a set-off.

Amendments to the claim or defence
Article 22
During the course of the arbitral proceedings, a party may amend or supplement its claim or defence, including a counterclaim or a claim for the purpose of a set-off, unless the arbitral tribunal considers it inappropriate to allow such amendment or supplement having regard to the delay in making it or prejudice to other parties or any other circumstances. However, a claim or defence, including a counterclaim or a claim for the purpose of a set-off, may not be amended or supplemented in such a manner that the amended or supplemented claim or defence falls outside the jurisdiction of the arbitral tribunal.

Pleas as to the jurisdiction of the arbitral tribunal
Article 23
1. The arbitral tribunal shall have the power to rule on its own jurisdiction, including any objections with respect to the existence or validity of the arbitration agreement. For that purpose, an arbitration clause that forms part of a contract shall be treated as an agreement independent of the other terms of the contract. A decision by the arbitral tribunal that the contract is null shall not entail automatically the invalidity of the arbitration clause.
2. A plea that the arbitral tribunal does not have jurisdiction shall be raised no later than in the statement of defence or, with respect to a counterclaim or a claim for the purpose of a set-off, in the reply to the counterclaim or to the claim for the purpose of a set-off. A party is not precluded from raising such a plea by the fact that it has appointed, or participated in the appointment of, an arbitrator. A plea that the arbitral tribunal is exceeding the scope of its authority shall be raised as soon as the matter alleged to be beyond the scope of its authority is raised during the arbitral proceedings. The arbitral tribunal may, in either case, admit a later plea if it considers the delay justified.
3. The arbitral tribunal may rule on a plea referred to in paragraph 2 either as a preliminary question or in an award on the merits. The arbitral tribunal may continue the arbitral proceedings and make an award, notwithstanding any pending challenge to its jurisdiction before a court.

Further written statements
Article 24
The arbitral tribunal shall decide which further written statements, in addition to the statement of claim and the statement of defence, shall be required from the parties or may be presented by them and shall fix the periods of time for communicating such statements.

Periods of time
Article 25
The periods of time fixed by the arbitral tribunal for the communication of written statements (including the statement of claim and statement of defence) should not exceed 45 days. However, the arbitral tribunal may extend the time limits if it concludes that an extension is justified.

Interim measures
Article 26
1. The arbitral tribunal may, at the request of a party, grant interim measures.

2. An interim measure is any temporary measure by which, at any time prior to the issuance of the award by which the dispute is finally decided, the arbitral tribunal orders a party, for example and without limitation, to:
(a) Maintain or restore the status quo pending determination of the dispute;
(b) Take action that would prevent, or refrain from taking action that is likely to cause, (i) currentor imminent harm or (ii) prejudice to the arbitral process itself;
(c) Provide a means of preserving assets out of which a subsequent award may be satisfied; or
(d) Preserve evidence that may be relevant and material to the resolution of the dispute.
3. The party requesting an interim measure under paragraphs 2 (a) to (c) shall satisfy the arbitral tribunal that:
(a) Harm not adequately reparable by an award of damages is likely to result if the measure is not ordered, and such harm substantially outweighs the harm that is likely to result to the party against whom the measure is directed if the measure is granted; and
(b) There is a reasonable possibility that the requesting party will succeed on the merits of the claim. The determination on this possibility shall not affect the discretion of the arbitral tribunal in making any subsequent determination.
4. With regard to a request for an interim measure under paragraph 2 (d), the requirements in paragraphs 3 (a) and (b) shall apply only to the extent the arbitral tribunal considers appropriate.
5. The arbitral tribunal may modify, suspend or terminate an interim measure it has granted, upon application of any party or, in exceptional circumstances and upon prior notice to the parties, on the arbitral tribunal's own initiative.
6. The arbitral tribunal may require the party requesting an interim measure to provide appropriate security in connection with the measure.
7. The arbitral tribunal may require any party promptly to disclose any material change in the circumstances on the basis of which the interim measure was requested or granted.
8. The party requesting an interim measure may be liable for any costs and damages caused by the measure to any party if the arbitral tribunal later determines that, in the circumstances then prevailing, the measure should not have been granted. The arbitral tribunal may award such costs and damages at any point during the proceedings.
9. A request for interim measures addressed by any party to a judicial authority shall not be deemed incompatible with the agreement to arbitrate, or as a waiver of that agreement.

Evidence
Article 27
1. Each party shall have the burden of proving the facts relied on to support its claim or defence.
2. Witnesses, including expert witnesses, who are presented by the parties to testify to the arbitral tribunal on any issue of fact or expertise may be any individual, notwithstanding that the individual is a party to the arbitration or in any way related to a party. Unless otherwise directed by the arbitral tribunal, statements by witnesses, including expert witnesses, may be presented in writing and signed by them.
3. At any time during the arbitral proceedings the arbitral tribunal may require the parties to produce documents, exhibits or other evidence within such a period of time as the arbitral tribunal shall determine.

4. The arbitral tribunal may request the parties jointly or separately to provide a non-technical document summarizing and explaining the background to any scientific, technical or other specialized information which the arbitral tribunal considers to be necessary to understand fully the matters in dispute.
5. The arbitral tribunal shall determine the admissibility, relevance, materiality and weight of the evidence offered.

Hearings
Article 28
1. In the event of an oral hearing, the arbitral tribunal shall give the parties adequate advance notice of the date, time and place thereof
2. Witnesses, including expert witnesses, may be heard under the conditions and examined in the manner set by the arbitral tribunal.
3. Hearings shall be held *in camera* unless the parties agree otherwise. The arbitral tribunal may require the retirement of any witness or witnesses, including expert witnesses, during the testimony of such other witnesses, except that a witness, including an expert witness, who is a party to the arbitration shall not, in principle, be asked to retire.
4. The arbitral tribunal may direct that witnesses, including expert witnesses, be examined through means of telecommunication that do not require their physical presence at the hearing (such as videoconference).

Experts appointed by the arbitral tribunal
Article 29
1. After consultation with the parties, the arbitral tribunal may appoint one or more independent experts to report to it, in writing, on specific issues to be determined by the arbitral tribunal. A copy of the expert's terms of reference, established by the arbitral tribunal, shall be communicated to the parties.
2. The expert shall, in principle before accepting appointment, submit to the arbitral tribunal and to the parties a description of his or her qualifications and a statement of his or her impartiality and independence. Within the time ordered by the arbitral tribunal, the parties shall inform the arbitral tribunal whether they have any objections as to the expert's qualifications, impartiality or independence. The arbitral tribunal shall decide promptly whether to accept any such objections.
3. After an expert's appointment, a party may object to the expert's qualifications, impartiality or independence only if the objection is for reasons of which the party becomes aware after the appointment has been made. The arbitral tribunal shall decide promptly what, if any, action to take.
4. The parties shall give the expert any relevant information or produce for his or her inspection any relevant documents or goods that he or she may require of them, subject to the provisions for confidentiality in article 17, paragraphs 6 to 8. Any dispute between a party and such expert as to the relevance of the required information or production shall be referred to the arbitral tribunal for decision.
5. Upon receipt of the expert's report, the arbitral tribunal shall communicate a copy of the report to the parties, which shall be given the opportunity to express, in writing, their opinion on the report. A party shall be entitled to examine any document on which the expert has relied in his or her report, subject to the provisions for confidentiality in article 17, paragraphs 6 and 7.

6. At the request of any party, the expert, after delivery of the report, may be heard at a hearing where the parties shall have the opportunity to be present and to interrogate the expert. At this hearing, any party may present expert witnesses in order to testify on the points at issue. The provisions of article 28 shall be applicable to such proceedings.
7. The Secretary-General will provide an indicative list of persons considered to have expertise in the scientific or technical matters in respect of which these Rules might be relied upon. In appointing one or more experts pursuant to paragraph 1 above, the arbitral tribunal shall not be limited in its choice to any person or persons appearing on the indicative list of experts.

Default
Article 30
1. If, within the period of time fixed by these Rules or the arbitral tribunal, without showing sufficient cause:
(a) The claimant has failed to communicate its statement of claim, the arbitral tribunal shall issue an order for the termination of the arbitral proceedings, unless there are remaining matters that may need to be decided and the arbitral tribunal considers it appropriate to do so;
(b) The respondent has failed to communicate its response to the notice of arbitration or its statement of defence, the arbitral tribunal shall order that the proceedings continue, without treating such failure in itself as an admission of the claimant's allegations; the provisions of this subparagraph also apply to a claimant's failure to submit a defence to a counterclaim or to a claim for the purpose of a set-off.
2. If a party, duly notified under these Rules, fails to appear at a hearing, without showing sufficient cause for such failure, the arbitral tribunal may proceed with the arbitration.
3. If a party, duly invited by the arbitral tribunal to produce documents, exhibits or other evidence, fails to do so within the established period of time, without showing sufficient cause for such failure, the arbitral tribunal may make the award on the evidence before it.

Closure of hearings
Article 31
1. The arbitral tribunal may inquire of the parties if they have any further proof to offer or witnesses to be heard or submissions to make and, if there are none, it may declare the hearings closed.
2. The arbitral tribunal may, if it considers it necessary owing to exceptional circumstances, decide, on its own initiative or upon application of a party, to reopen the hearings at any time before the award is made.

Waiver of right to object
Article 32
A failure by any party to object promptly to any noncompliance with these Rules or with any requirement of the arbitration agreement shall be deemed to be a waiver of the right of such party to make such an objection, unless such party can show that, under the circumstances, its failure to object was justified.

Section IV. The award

Decisions
Article 33
1. When there is more than one arbitrator, any award or other decision of the arbitral tribunal shall be made by a majority of the arbitrators.
2. In the case of questions of procedure, when there is no majority or when the arbitral tribunal so authorizes, the presiding arbitrator may decide alone, subject to revision, if any, by the arbitral tribunal.

Form and effect of the award
Article 34
1. The arbitral tribunal may make separate awards on different issues at different times.
2. All awards shall be made in writing and shall be final and binding on the parties. The parties shall carry out all awards without delay.
3. The arbitral tribunal shall state the reasons upon which the award is based, unless the parties have agreed that no reasons are to be given.
4. An award shall be signed by the arbitrators and it shall contain the date on which the award was made and indicate the place of arbitration. Where there is more than one arbitrator and any of them fails to sign, the award shall state the reason for the absence of the signature.
5. An award may be made public with the consent of all parties or where and to the extent disclosure is required of a party by legal duty, to protect or pursue a legal right or in relation to legal proceedings before a court or other competent authority.
6. Copies of the award signed by the arbitrators shall be communicated to the parties by the International Bureau.
7. Separate or dissenting opinions (if any) shall be in writing and signed by the dissenting arbitrator or arbitrators.

Applicable law, *amiable compositeur*
Article 35
1. In resolving the dispute, the arbitral tribunal shall apply the law or rules of law designated by the parties as applicable to the substance of the dispute. Failing such designation by the parties, the arbitral tribunal shall apply the national and/or international law and rules of law it determines to be appropriate.
2. The arbitral tribunal shall decide as *amiable compositeur* or *ex aequo et bono* only if the parties have expressly authorized the arbitral tribunal to do so.
3. In all cases, the arbitral tribunal shall decide in accordance with the terms of the contract, if any, and shall take into account any usage of trade applicable to the transaction.

Settlement or other grounds for termination
Article 36
1. If, before the award is made, the parties agree on a settlement of the dispute, the arbitral tribunal shall either issue an order for the termination of the arbitral proceedings or, if requested by the parties and accepted by the arbitral tribunal, record the settlement in the form of an arbitral award on agreed terms. The arbitral tribunal is not obliged to give reasons for such an award.
2. If, before the award is made, the continuation of the arbitral proceedings becomes unnecessary or impossible for any reason not mentioned in paragraph 1, the arbitral tribunal

shall inform the parties of its intention to issue an order for the termination of the proceedings. The arbitral tribunal shall have the power to issue such an order unless there are remaining matters that may need to be decided and the arbitral tribunal considers it appropriate to do so.
3. Copies of the order for termination of the arbitral proceedings or of the arbitral award on agreed terms, signed by the arbitrators, shall be communicated by the arbitral tribunal to the parties. Where an arbitral award on agreed terms is made, the provisions of article 34, paragraphs 2, 4 and 5 shall apply.

Interpretation of the award
Article 37
1. Within 30 days after the receipt of the award, a party, with notice to the other parties and the International Bureau, may request that the arbitral tribunal give an interpretation of the award.
2. The interpretation shall be given in writing within 45 days after the receipt of the request. The interpretation shall form part of the award and the provisions of article 34, paragraphs 2 to 6, shall apply.

Correction of the award
Article 38
1. Within 30 days after the receipt of the award, a party, with notice to the other parties and the International Bureau, may request the arbitral tribunal to correct in the award any error in computation, any clerical or typographical error, or any error or omission of a similar nature. If the arbitral tribunal considers that the request is justified, it shall make the correction within 45 days of receipt of the request.
2. The arbitral tribunal may within 30 days after the communication of the award make such corrections on its own initiative.
3. Such corrections shall be in writing and shall form part of the award. The provisions of article 34, paragraphs 2 to 6, shall apply.

Additional award
Article 39
1. Within 30 days after the receipt of the termination order or the award, a party, with notice to the other parties and the International Bureau, may request the arbitral tribunal to make an award or an additional award as to claims presented in the arbitral proceedings but not decided by the arbitral tribunal.
2. If the arbitral tribunal considers the request for an award or additional award to be justified, it shall render or complete its award within 60 days after the receipt of the request. The arbitral tribunal may extend, if necessary, the period of time within which it shall make the award.
3. When such an award or additional award is made, the provisions of article 34, paragraphs 2 to 6, shall apply.

Definition of costs
Article 40
1. The arbitral tribunal shall fix the costs of arbitration in the final award and, if it deems appropriate, in another decision.

2. The term “costs” includes only:
(a) The fees of the arbitral tribunal to be stated separately as to each arbitrator and to be fixed by the tribunal itself in accordance with article 41;
(b) The reasonable travel and other expenses incurred by the arbitrators;
(c) The reasonable costs of expert advice and of other assistance required by the arbitral tribunal;
(d) The reasonable travel and other expenses of witnesses to the extent such expenses are approved by the arbitral tribunal;
(e) The legal and other costs incurred by the parties in relation to the arbitration to the extent that the arbitral tribunal determines that the amount of such costs is reasonable;
(f) The fees and expenses of the International Bureau, including the fees and expenses of the appointing authority.
3. In relation to interpretation, correction or completion of any award under articles 37 to 39, the arbitral tribunal may charge the costs referred to in paragraphs 2 (b) to (f), but no additional fees.

Fees and expenses of arbitrators
Article 41
1. The fees and expenses of the arbitrators shall be reasonable in amount, taking into account the amount in dispute, the complexity of the subject matter, the time spent by the arbitrators and any other relevant circumstances of the case.
2. Promptly after its constitution, the arbitral tribunal shall inform the parties as to how it proposes to determine its fees and expenses, including any rates it intends to apply. Within 15 days of receiving that proposal, any party may refer the proposal to the appointing authority for review. If, within 45 days of receipt of such a referral, the appointing authority finds that the proposal of the arbitraltribunal is inconsistent with paragraph 1, it shall make any necessary adjustments thereto, which shall be binding upon the arbitral tribunal.
(a) When informing the parties of the arbitrators’ fees and expenses that have been fixed pursuant to article 40, paragraphs 2 (a) and (b), the arbitral tribunal shall also explain the manner in which the corresponding amounts have been calculated;
(b) Within 15 days of receiving the arbitral tribunal’s determination of fees and expenses, any party may refer for review such determination to the appointing authority;
(c) If the appointing authority finds that the arbitral tribunal’s determination is inconsistent with
the arbitral tribunal’s proposal (and any adjustment thereto) under paragraph 2 or is otherwise manifestly excessive, it shall, within 45 days of receiving such a referral, make any adjustments to the arbitral tribunal’s determination that are necessary to satisfy the criteria in paragraph 1.
Any such adjustments shall be binding upon the arbitral tribunal;
(d) Any such adjustments shall either be included by the arbitral tribunal in its award or, if the award has already been issued, be implemented in a correction to the award, to which the procedure of article 38, paragraph 3 shall apply.
4. Throughout the procedure under paragraphs 2 and 3, the arbitral tribunal shall proceed with the arbitration, in accordance with article 17, paragraph 1.
5. A referral under paragraph 3 shall not affect any determination in the award other than the arbitral tribunal’s fees and expenses; nor shall it delay the recognition and enforcement

of all parts of the award other than those relating to the determination of the arbitral tribunal's fees and expenses.

Allocation of costs

Article 42

1. The costs of the arbitration shall in principle be borne by the unsuccessful party or parties. However, the arbitral tribunal may apportion each of such costs between the parties if it determines that apportionment is reasonable, taking into account the circumstances of the case.

2. The arbitral tribunal shall in the final award or, if it deems appropriate, in any other award, determine any amount that a party may have to pay to another party as a result of the decision on allocation of costs.

Deposit of costs

Article 43

1. The International Bureau, following the commencement of the arbitration, may request the parties to deposit an equal amount as an advance for the costs referred to in article 40, paragraphs 2(a), (b), (c), and (f). All amounts deposited by the parties pursuant to this paragraph 1 and paragraph 2 of this article shall be directed to the International Bureau, and disbursed by it for such costs, including, *inter alia*, fees to the arbitrators, the appointing authority, and the International Bureau.

2. Security for the costs of interim measures shall be directed to the International Bureau and disbursed by it upon order from the arbitral tribunal.

3. During the course of the arbitral proceedings the International Bureau may request supplementary deposits from the parties.

4. If the requested deposits are not paid in full within 60 days after the receipt of the request, the International Bureau shall so inform the parties in order that one or more of them may make the required payment. If such payment is not made, the arbitral tribunal may order the suspension or termination of the arbitral proceedings.

5. After a termination order or final award has been made, the International Bureau shall render an accounting to the parties of the deposits received and return any unexpended balance to the parties.