

## Annexes

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### Basic Options

A variety of instruments can be used to define and regulate concession-type arrangements. They include public law instruments (which form a hierarchy of norms ranging from constitutions to laws and secondary legislation, such as decrees), licenses (unilateral and nonnegotiable acts of the administration that take effect when a private party agrees to their terms), private contracts (negotiated by both parties), and decisions by regulatory authorities. The table below illustrates the range of possible options.

### Choosing an Instrument

The choice of instruments will be dictated, in large part, by the legal traditions of the country. Norms of a certain rank might also have to be adopted to modify provisions that would hinder the adoption or implementation of concession arrangements. In addition, the different options can be evaluated against the following criteria:

#### Ease with which the government can unilaterally change the rules

Laws require the cooperation of the executive and the legislature to effect a change. Decrees or subordinate legislation provide less protection against unilateral modifications, since they can generally be modified by the executive alone. Contracts, for their part, cannot normally be modified unless both parties give their consent. There are some exceptions to that principle, however. In France, for example, concession-type arrangements can be unilaterally amended by public authorities, under certain conditions, provided that

appropriate compensation is given to the operator (see box 3.16). Finally, when a separate entity has been entrusted with regulatory responsibilities, much will depend on the degree of insulation it enjoys from political pressures.

#### Flexibility to tailor commitments to specific investors

General legislation that applies to whole categories of service providers is usually unsuitable when adaptation to specific circumstances is required. Even if there is only one firm (and if a law would apply therefore to only one service provider), contractual agreements can usually be negotiated in a more flexible environment. As to the ability of regulators to tailor decisions to specific investors, that will depend on the degree of discretion that they enjoy. In the United States, for example, the constitution has been interpreted as requiring that investors get a fair rate of return, compared with other industries of similar risk. This leaves the regulators with enormous latitude to make rules and set prices.

#### Adaptability to changing circumstances

Laws are generally relatively difficult to modify, while decrees can be changed more easily since, as mentioned above, the executive alone can effect a modification. Contracts can be renegotiated by the parties. Regulators' power to modify contracts will depend on the degree of discretion that they enjoy and on the procedural rules that they must follow in that regard. For example, the terms of British Telecom's license can be modified by the regulator with the agreement of the company. Moreover, the regulator can undertake unilateral

modifications, against the company's will, but must first seek a recommendation from the Monopolies and Mergers Commission and approval by the secretary of state for trade and industry.

### Consistency

General norms, such as laws and decrees, can enhance certainty for investors, especially when they are interpreted by a single forum, such as a cross-sectoral regulator. Use of standard contracts or licenses might promote consistency. Licenses in the U.K. water industry, for example, are fairly standardized. Among the standard provisions are formulas for calculating price limits for service. Each company is required to produce an annual statement for the regulator demonstrating its adherence to the specified limits. The licenses also provide for regular price reviews and adjustments. Standard conditions include service quality requirements and customer relations rules, as well as requirements for the provision of reports and accounting information to the regulator, and the levying of license fees.

### Sustainability

The sustainability of concession arrangements depends on a variety of factors. One important element is the degree of transparency with which such arrangements are devised. Public debate or deliberation will generally reduce the risk of backlash from the legislature or from consumers. The legislative process, for example, usually involves greater transparency than contractual agreements, especially when such contracts are not competitively bid (see annex box 1.1). Concessions might also

be unsustainable when legal requirements to devise and conclude such arrangements are unclear. This could be the case, for example, when procedural requirements are undefined, or when questions of competency are unresolved. In such situations high-level instruments, such as laws or presidential decrees, might constitute a "safer" option. In Guinea, for instance, the president ratified several privatization agreements, including the water lease. It was not clear, at the time, who was authorized to sign the concessions or, indeed, whether the law allowed concessions of this kind. In effect, the president settled the question by issuing a presidential decree with the force of law. Ultimately, however, it is impossible to make absolutely sure that a given project will not come under attack after conclusion of the agreements. This only underlines the importance of establishing a clear overall legal framework for private participation in infrastructure.

In many cases different rules will be embodied in different types of instruments. This approach can help set up a framework exhibiting more advantages and less disadvantages than any single instrument (see the example of telecommunications in Peru, annex box 1.2).

Annex table 1.1 Examples of Instruments Embodying Regulatory Norms

Constitution	The Constitution of <i>Colombia</i> provides for proper indemnification for the expropriation of private property (Art. 58). It also specifically gives the state control of the electromagnetic spectrum and the mandate of combating monopolistic practices in the use of the spectrum (Art. 75).	Ministerial decree	In some cases a decree may be issued by a sector ministry, such as <i>Costa Rica's</i> decree by the Ministry of Natural Resources, Energy and Mines in 1989 (Decree No. 18.947), which established parameters for private investor participation in some power projects.
Parliamentary laws	In <i>Chile</i> the 1982 Mining, Electric Power Services Law (DFL-1) provided the basis for the regulation of electricity generation, transmission, and distribution and sets out the provisions for rate setting.	Licenses	In <i>Jamaica</i> the license for the national telecommunications operator includes provisions fixing the rate of return to be earned by the company.
Decree-laws	In <i>Peru</i> the 1992 Decree-Law of Electric Concessions (Decree-Law 25.844) was adopted by the government (president and cabinet ministers), acting under emergency powers, and replaced previous electricity laws.	Contractual arrangements	A concession contract for the operation and maintenance of the water and wastewater systems in Cancún, <i>Mexico</i> sets out service efficiency standards and the tariff regime.
Presidential decree	In <i>Argentina</i> the creation of the Comisión Nacional de Telecomunicaciones, the telecommunications regulator, came in a presidential decree (Decreto 1185/90). In addition to the structure of the agency, it described procedures for the award of licenses, control of prices, and interconnection rules.	Decisions by regulatory agencies	In <i>Colombia</i> the Comisión de Regulación de Energía y Gas, a specialist regulatory agency, plays an active role in implementing competition regulation in the sector. The Comisión imposed a system of free access to the electricity network and issued decisions requiring the state oil company to divest its gas transportation assets.

Source: World Bank Staff.

### Annex Box 1.1 Transparency of the Policy Framework for the Electricity Sector—Contrasting Indian and Pakistani Approaches

Enron's Dhabol power project in Maharashtra State, India—one of a series of "fast-track projects"—was concluded between Enron and the state government in 1993. The original deal provided for the construction and operation of a 2,015 megawatt, \$2.8 billion gas-fired plant. The nationalist Hindu party which won the subsequent state election, campaigned against the Dhabol project and canceled the agreement when it took power.

The party claimed that the award process lacked transparency and had resulted in a project that was too expensive and a power tariff that was too high. The deal was eventually renegotiated, and the tariff was cut by more than 20 percent, the capital cost reduced by \$300 million, and capacity increased to 2,450 megawatts.

In Pakistan, on the other hand, the government approved and published, in March 1994, a Policy Framework and Package of Incentives for Private Sector Power Generation Projects. The power policy framework, considered overly generous by many, promised investors an average tariff of 6.5 US cents per kilowatt hour and exemption from corporate income tax and import duties on equipment. The policy was successful in attracting almost 2,100 megawatts of new power development. Subsequently, the government moved to tighten its policy and negotiate lower rates, but expressly stated that existing commitments would remain intact.

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*Source: World Bank staff.*

### Annex Box 1.2 Regulatory Instruments Used in the Telecommunications Sector in Peru

Multiple instruments of different ranks are used to set up the regulatory framework for telecommunications in Peru: laws are relied on to ensure stability and consistency of the main principles concerning private participation, market structure, and regulatory institutions, while more technical rules are embedded in decrees (or Reglamentos), which also apply to all parties but are easier to modify. Concession contracts and regulatory decisions specify the particular rights and obligations of individual parties. The most important of these instruments are listed below:

- *Decreto Supremo-Ley de Telecomunicaciones* of April 28, 1993 (decree with rank of law adopted by the president and the minister of transport and communications). The Decreto identifies the different types of telecommunications services, it defines the different instruments that can be used to promote the private provision of telecommunications services, it lists the functions of the Ministry of Transport and Communication with respect to telecommunications, and it establishes a separate regulatory entity—El Organismo Supervisor de Inversion Privada en Telecomunicaciones (OSIPTEL).
- *Ley Disponen la Démonopolización Progresiva de los Servicios Públicos de Telecomunicaciones*, adopted by congress on January 12, 1994. This law outlines the progressive démonopolization of local and long distance telecommunications services in the country. It also provides for the award of telecommunications concessions and identifies the main types of information (duration, types of services, coverage, and price regime) that must be provided by such contracts. Finally, it states that OSIPTEL must be autonomous from an "administrative, functional, technical, economic and financial" point of view.
- *Reglamento de la Ley de Telecomunicaciones* adopted by the president and by the minister of transport and communications on February 18, 1994. The Reglamento identifies the different telecommunications services, establishes connection rules, and defines the various licenses, permits, or contractual arrangements enabling the private provision of telecommunications services.
- *Reglamento de OSIPTEL*, adopted by the president and by the prime minister on August 5, 1994. The Reglamento defines, in detail, the legal status, objectives, functions, powers, and organizational structure of OSIPTEL.
- *Concession Contracts with Compañía Peruana de Telefonos S.A. and with ENTEL S.A.* These contracts define the scope of the delegated services, the rights and obligations of the concessionaire and the ministry, the price and interconnection regimes, and the rules pertaining to contract modifications and dispute settlement.
- *Various decisions of OSIPTEL*, fixing, for example, maximum prices for various types of telecommunications services.

Source: World Bank staff.

This annex provides an overview of issues that should be addressed in a Power Purchase Agreement (PPA) between a Purchaser (often a state-owned electricity utility) and a privately owned power supplier (the "Company") constructing a power plant.<sup>1</sup> It emphasizes issues that might be of concern to lenders. The paper does not address all issues that might arise in negotiating a PPA, but provides examples of ways in which they were addressed in existing power projects. In this example, the project is assumed to be a base load thermal plant financed partly with foreign loans and equity (it could be modified to accommodate mid-range or peaking thermal or hydro plants). This example does not cover credit enhancements that might be required if the power purchaser is not creditworthy. The discussion is organized by the section headings that might be found in a typical PPA. Much of the detail of a PPA is often contained in annexes; a list of those commonly found is also provided.

### Article I—Definitions

Defines all the capitalized terms used in the PPA and annexes, or cross-references to the section in the PPA where the term is defined. Often, complex terms (for example, force majeure, monthly tariff) are defined in the text of the PPA.

### Article II—Sale Of Capacity And Energy

#### 2.1 Obligations to Provide Contract Capacity and Electrical Output.

Specifies that the Company must make available to the Purchaser, not later than the specified commercial operation

date (COD), the contracted capacity of each unit and deliver energy to the Purchaser in accordance with the PPA. The Company will commit to making each unit available by the COD to ensure that each unit meets specified operating characteristics, to operate and maintain the plant over the term of the PPA, and to comply with the Purchaser's dispatch instructions (see section 8.2).

#### 2.2 Obligation to Pay for Available Capacity and Electrical Output.

The Purchaser will be required to pay a monthly tariff for the available capacity and the electrical output generated by the plant. The most common approach is a "two-part" tariff, separated into capacity and energy components. The capacity charge is designed to recover the plant's fixed costs and the energy charge covers fuel costs.<sup>3, 4</sup> Energy costs are usually incurred only if the plant is dispatched by the Purchaser, whereas fixed charges are payable if the capacity is available but not dispatched and, under specified force majeure events, even where capacity is not available. The detailed tariff provisions are often contained in an annex.

The tariff methodology should satisfy several objectives if the PPA is to be bankable: (1) be sufficiently clear to allow potential investors to calculate the project's likely cash flows; (2) generate sufficient revenues to cover the fixed and variable costs of the project, including debt service; and (3) generate sufficient revenue to yield a minimum ratio of earnings to payments of principal and interest to satisfy lenders' criteria. The tariff methodology should also meet the country's regulatory

requirements and result in an economically satisfactory and politically acceptable price of electricity.

### 2.3. Third-party sales

Generally, the ability to make third-party sales, particularly where the Purchaser's creditworthiness is questionable, enhances the financeability of a project.<sup>5</sup> It may benefit both the Purchaser and the Company if the Company were permitted (but not obligated) to sell excess capacity and energy not dispatched by the Purchaser. Because the PPA generally constitutes a take-or-pay obligation of the Purchaser, the proceeds of third-party sales can reduce the Purchaser's monthly tariff payments. Alternatively, the Company, as agent for the Purchaser, might sell available capacity and energy to a third party in return for a negotiated agency fee from the Purchaser.

Another approach would be to allow the Company, after it has delivered a notice of termination to the Purchaser based on the failure of the Purchaser to comply with payment or other obligations under the PPA, to sell part of the plant's contracted capacity and energy to any third party. The revenue would be set off against amounts due to the Company from the Purchaser under the PPA.

### 2.4 Deemed commissioning; deemed generation

Developers and lenders expect a mechanism in a PPA that enables a deemed commissioning to occur where a unit is ready but cannot be commissioned because of specified events. These events are typically breaches by the Purchaser of

its obligations (for example, failure to complete interconnection or transmission facilities or to provide energy for commissioning) and certain force majeure events. The capacity payments are generally determined on the basis of a specified deemed availability. The PPA should set out the point at which deemed commissioning occurs and at which it ceases. These provisions often require an independent engineer to certify when a unit would have passed the relevant test, but for the occurrence of specified events.<sup>6</sup> In addition, PPAs often include a "deemed generation" provision whereby the Purchaser makes capacity payments to the Company for capacity that would have been available, but for specified force majeure events, generally political events.

### 2.5 Liquidated Damages

#### 2.5.1 Damages for delays

If a unit fails to pass its performance tests by the commercial operation date, the Company may be required to pay the Purchaser liquidated damages of an agreed amount per day up to a cap.<sup>7</sup> Sometimes the damages increase after a specified number of days of delay. Lenders will examine the impact of liquidated damages on debt coverage ratios. The Company should not be required to pay damages if the delay results from events beyond the control of the Company, such as certain force majeure events or failure by the Purchaser to comply with specified obligations.

Another approach is to provide that inordinate delay by the Company, that if not excused, should allow the Purchaser to

terminate the PPA. From the independent power developer's point of view, however, the power seller should receive and be required to apply liquidated damages from the contractor to either complete the units or to redeem project debt in order to adjust fixed charges payable thereafter under the PPA.

### 2.5.2 Damages for underperformance

Liquidated damages are often payable when a plant fails to meet specifications, particularly contracted capacity tests. The relationship between liquidated damages and provisions allowing the Purchaser to terminate the agreement for failure to meet such tests needs to be carefully considered. The parties may wish to consider, for example, whether the Company's failure to meet a contracted capacity test could lead the Company to terminate the tests and pay liquidated damages to the Purchaser. The liquidated damages could be measured by the difference between contracted capacity and the actual percentage of contracted capacity demonstrated in testing. The Purchaser might prefer an underperforming unit to a termination right, which would require the Purchaser to buy out the project (see section 5.3).

### 2.6 Testing performance

Testing should be objective and designed to confirm levels of contracted capacity, reliability, and fuel efficiency or heat rate. Testing should be certified by an independent engineer. Receipt of the engineer's certificate should become the trigger for the commencement of capacity payments unless an earlier "deemed" commissioning has occurred (see section 2.4). The

PPA should specify the consequences of any inability to complete testing due to unavailability of testing power or transmission facilities.

### 2.7 Company's purchase of power; pre-commissioning power.

These provisions oblige the Purchaser to provide to the Company energy required for construction, commissioning, maintenance, and start-up. Often the tariff for electricity supplied to generating companies for such purposes is the applicable tariff for industrial companies. In addition, the Company would look to the Purchaser to purchase "pre-commissioning power"—power generated by a unit during testing after its synchronization—generally at a price that would cover the Company's fuel cost associated with producing such pre-commissioning power.

### Article III—Conditions Precedent

PPAs often set out conditions precedent to the effectiveness of each party's obligations under the PPA (and certain other obligations may not be additional).<sup>8</sup> Conditions to the Company's obligations under the PPA may include (1) receipt of good, enforceable leasehold interest to the site; (2) receipt of certain governmental authorizations and clearances; (3) obtaining comfort regarding the receipt of approvals not received as of the date of execution of the PPA; (4) if applicable, government assurances relating to currency convertibility, the availability of fuel and the like (5) if applicable, receipt of government guarantee of the payment performance of the Purchaser; and (6) execution of the construction contract and certain other project agreements. Conditions precedent to the Purchaser's

obligations may include receipt by the Purchaser of (1) corporate documents (for example, articles of association and board resolutions) and (2) evidence of the Company's receipt of necessary governmental approvals.

The Company will usually wish to make financial closing a condition precedent to its obligations, whereas the Purchaser will expect that any conditions precedent to the Company's obligations be satisfied within a certain period or the Purchaser shall have the ability to terminate the PPA without liability. Lenders will require that the PPA specify when the obligations of the parties commence. There should be no ambiguity as to whether any provision in the PPA is effective and enforceable. Accordingly, lenders will prefer to make all obligations effective as of the date of execution of the PPA. Open-ended commitments for either party can be avoided by including provisions allowing termination if, after specified dates, certain key events have not occurred (such as financial closing).

#### Article IV—Pre-operation Period

Pre-operation obligations frequently include a "reasonable efforts" obligation by the Company to obtain necessary consents and approvals, and by the Purchaser to provide reasonable assistance to the Company in obtaining the consents and approvals. The Company's other pre-operation obligations may include (1) appointing the construction contractor and an operator; and (2) providing copies of the construction and O&M contracts to the Purchaser. The Purchaser may be required to provide the Company with title to the site and construction, water, power and other services.

Some advisers have recommended that a Purchaser should have the right, under a PPA, to approve project contracts. Developers and lenders will prefer to avoid this, as the Purchaser may not have sufficient resources to review these agreements in detail. The Purchaser is perhaps better served by clear construction and operational performance criteria in the PPA for the Company to adhere to; the PPA could also include appropriate incentives. It will be the obligation of the Company to contract with construction contractors and operators to see that these criteria are met. The Purchaser's concerns about the enforceability of the Company's obligations can also be addressed through requirements for performance bonds under the PPA in favor of the Purchaser. The pre-operations provisions generally also provide the Purchaser with the right to observe the construction progress of the project.

A PPA will often provide, as part of the pre-operating obligations, for the Purchaser and the Company to agree on operating procedures. These include methods of day-to-day communication, key personnel lists, clearances and switching practices, outage scheduling, and capacity energy reporting. If the parties are able to agree on such operating procedures before the execution of the PPA, they could be included in a schedule to the PPA.

#### Article V—Term and Termination

##### 5.1 Term

Defines the date on which the agreement becomes effective and the period after which it will terminate. The provision will

also provide extensions for specified force majeure events and may also include procedures for a request by either party for an extension (in which case tariff calculations should be defined for the extended term). Lenders will insist that the PPA's term be a few years beyond the period, permitting the Company to generate sufficient cash flow to retire the project's debt.

### 5.2 Termination

In the event of default, the nondefaulting party will have the right, subject to certain cure rights for the defaulting party and lenders and other limitations, to terminate the agreement and exercise certain other rights.<sup>9</sup> In addition, continuation of force majeure events beyond a specified period (see Article XI) could also trigger a right of either the Company or the Purchaser to terminate the PPA. Lenders will generally prefer to limit the number of the termination events.

Events giving rise to a termination and/or buy-out right for the Company typically include (1) dissolution of the Purchaser; (2) failures by the Purchaser to observe payment obligations and maintain letters of credit or other security; (3) breaches of other obligations by the Purchaser under the PPA; (4) government guarantees (if any) or implementation agreements ceasing to remain in force; and (5) repudiation by the Purchaser of the PPA. The Purchaser typically has the right to terminate the PPA and/or exercise its buyout rights if: (1) the Company fails to achieve financial closing by a specified date; (2) the Company fails to achieve commercial operations of the units by specified deadlines (generally subject to extensions for certain events); (3) the Company abandons the project; (4) the

Company breaches its obligations under the PPA; and (5) the Company is dissolved.

Termination provisions generally include requirements for notice by the party wishing to invoke termination and/or buyout, followed by a consultation period between the parties and a period during which the defaulting party may attempt to cure the default. Such a cure right is usually accompanied by a cure period (in addition to the cure period provided to the nondefaulting party) in favor of the lenders if the Company defaults.

### 5.3 Buyout price

Generally, the termination provisions lead to a buyout by the Purchaser which can be triggered by either party depending on the termination event. Lenders will wish to ascertain that all outstanding debt be included in the buyout price. However, where the Purchaser's credit is in question, buyout will be considered of limited value by developers and lenders, unless supported by government guarantees.

The PPA should provide a methodology for calculating the buyout price. In some PPAs this is specified as a combination of: (1) a discounted cash flow valuation based on the estimated net present value of the Company's expected cash flows over the remainder of the PPA plus a specified residual value of the plant; (2) a construction period evaluation consisting of a specified percentage of equity subscriptions paid into the Company plus an allowed return on the equity at a specified rate; (3) a terminal evaluation set at a specified percentage of the plant's depreciated replacement cost; (4) the Company's outstanding long- and short-term loans and any accrued

interest and financing fees; and (5) transfer costs. Each component is scaled according to the reason for termination, with the highest buyout price following a Purchaser default and generally none in the event of expiry of the PPA. Intermediate buyout prices can be negotiated for terminations caused by different force majeure events. An appraiser may be appointed by the parties to calculate the buyout price.

#### Article VI—Representations and Warranties

The representations and warranties in a PPA typically include the organization and valid existence of the Purchaser and the Company, the legal and binding nature of the obligations constituted by the PPA, the absence of certain legal proceedings that might adversely affect the ability of the parties to meet their obligations, and the due authorization of the PPA by the parties. Sometimes a project might require additional representations and warranties, frequently covering environmental issues, or on land owned by the Purchaser, for example.

#### Article VII—Undertakings

A PPA generally contains additional undertakings/covenants from each party. The Company's undertakings might include obligations to: (1) use reasonable efforts to obtain financing for the project; (2) use reasonable efforts to negotiate fuel supply agreements, a construction contract and financing documents;<sup>10</sup> (3) use reasonable efforts to obtain government authorizations; and (4) operate the plant in accordance with the Purchaser's dispatch instructions and prudent utility practices.

Typical covenants of the Purchaser include (1) to provide, by or before a specified commercial operation date, interconnection and transmission facilities; (2) to assist in identifying and preparing applications for government authorizations; (3) to assist the Company in negotiating and executing the financing documents; and (4) to cooperate with the Company with respect to the Company's obligations and rights under the PPA. The PPA should set forth the consequences of a failure to comply with any such obligations.

#### Article VIII—Project Operation

Issues typically include scheduled outages and maintenance outages, operations and maintenance, emergencies and record keeping.

##### 8.1 Scheduled outages and maintenance outages.

Prior to the commercial operation date (COD), the Company will be required to submit its desired schedule of scheduled outage periods for the first full maintenance year after commissioning. The PPA should also provide for a date by which the Company must submit its desired schedule of outage periods for each subsequent year. Generally, longer notice is required for years subsequent to the COD. The PPA may also set parameters within which the scheduled outage periods should occur.

The PPA will generally provide for a period during which the Purchaser may object in writing to a requested schedule and propose an alternative schedule. The Company will often insist that scheduled outages should occur only at times determined in accordance with this procedure and that the

Purchaser should not require the Company to schedule outages in a manner or time outside the technical limits of the plant, or inconsistent with prudent utility practices or manufacturer recommendations, or which would pose risk of damage to the plant. The Purchaser's maintenance program for interconnection facilities and transmission facilities should also be coordinated with the approved scheduled outages for the plant. Frequently, the Purchaser will also be prohibited from discriminating against the Company in favor of other plants when the Purchaser schedules and reschedules outages.

The PPA will also address "maintenance outages," defined as an interruption or reduction of generating capability (excluding scheduled outages) that cannot be postponed until the next scheduled outage. An abbreviated set of procedures requiring oral notice within 24 hours (or a similar period) to the Purchaser usually is provided for maintenance outages.

### 8.2 Operation; dispatch

This sets out procedures for issuance by the Purchaser of dispatch instructions to the Company and for the degree of dispatchability allowed to the Purchaser, if any. These provisions usually provide that the plant's dispatch procedures shall be in accordance with dispatch procedures for similar plants on the Purchaser system. Typically the dispatch instructions should take into account the characteristics of the plant, the overall system condition and requirements, and the conditions and characteristics of other power sources available to the purchaser, in setting out appropriate and equitable dispatch instructions. The PPA can also provide the Purchaser with the

right to request that the plant be shut down. In turn, the Company will expect limitations on this right as well as indemnification for costs incurred in shutting down and restarting the plant and any increased costs incurred in connection with the shut down. The Company will also reasonably ask for a lead time in which to restart the plant, in accordance with the relevant unit specifications.

These provisions may also provide that the Company shall not be required to operate the plant other than in accordance with prudent utility practices and specified technical limits. The Company may also be asked to use best efforts to employ disqualified personnel from the country and to institute training programs for such personnel.

### 8.3 Emergency plans; supply of power and emergency

The PPA will generally call for each party to establish plans for an emergency, such as local or widespread electric blackout and voltage reduction to effect load curtailment. During an emergency the Company may be required, as soon as possible after a request from the Purchaser, to supply such power as the plant is able to generate, consistent with prudent utility practices and specified technical limits of the plant, and, at the Purchaser's expense, make reasonable efforts to reschedule any outages or to complete work during the outage to restore power as soon as possible. Other limitations and parameters on the ability of the Purchaser to direct the Company to perform emergency-related operations (such as cold starts and emergency maximum loading or deloading) may be included.

#### 8.4 Record maintenance

Each party will be required to keep the records necessary to administer the PPA, including an accurate and up-to-date operation log, at the plant. The provisions will generally require maintenance of such records for an agreed period after their creation.

#### 8.5 Interconnection, metering standards, and testing

The PPA should contain provisions providing for exchanges of information concerning the plant's design, the interconnection and transmission facilities, the allocation of responsibility for construction, and interconnection, easements and rights-of-way, protective devices and the testing of interconnection and transmission facilities. Specifications for the meters to be used for the project should be set forth, as well as responsibility for maintaining the meters, providing regular metering results, checking meter accuracy, and so on.

### Article IX—Payment

This specifies procedures for invoicing, the method and amount of payment, resolving disputes relating to invoices, security for payment, and rights to set off.

#### 9.1 Invoicing

This section should establish a payment date by which the Purchaser must pay the Company the monthly tariff payment for a given month. It should also specify the manner in which invoices are to be provided by the Company. Generally, commencing with a month following the date on which synchronization for the first unit occurs, the Company will be

required to submit to the Purchaser by a specified date an invoice stating the available capacity, the energy delivered to the Purchaser, the aggregate variable charges, and the total monthly tariff payment. The invoice should include reasonably detailed calculations, in accordance with the PPA; an example of a tariff calculation in a schedule to the PPA is often helpful. Other charges, fees, and reimbursements payable by the Purchaser to the Company are generally billed separately. If the tariff calculation procedures call for an annual adjustment, such as for fluctuations in foreign exchange rates, the provisions will generally provide for invoicing at a specified time(s) each year for such amounts.

The agreement will provide for the form of payment, such as direct payment or wire transfer to an account designated by the Company to the Purchaser.<sup>11</sup> Any delayed payment charges should also be specified. Notice of disputes relating to an invoice should be given promptly. Lenders often expect the agreement to provide that the Purchaser pay the invoice when due, though it may be entitled to a repayment after any invoice dispute is resolved. The waiver of set off rights may also be included.

#### 9.2 Security for payment

The PPA may require the Purchaser to cause a bank acceptable to the Company to issue to the Company one or more irrevocable, unconditional standby letters of credit to ensure short-term liquidity. The PPA will generally provide that the letter of credit shall at all times be in a specified amount, usually tied to projected tariff payments for a specified period,

using certain assumptions regarding load factors and other elements of the tariff calculation to calculate the amount. Typically, the Company may draw upon such a letter of credit if the due date for an invoice has passed without payment or if a replacement letter of credit has not been delivered to replace an expiring or partially drawn letter of credit.<sup>12</sup> Failure to replace a letter of credit fully could result in addition of interest to the invoice until such time as the letter of credit is fully restored.

#### Article X—Liability And Indemnification

These provisions state that neither party shall be liable to the other for damages, except as specified. The Article also requires for each party to indemnify the other for losses resulting from negligent acts of the indemnifying party, except to the extent that (1) such losses are caused by any act of the indemnified party and (2) the indemnified parties are compensated by insurance or specified agreement. The parties may also agree not to assert claims for indemnification until the aggregate amount of all claims exceed a minimum amount. The indemnity provisions will generally provide the indemnifying party with the option to assume and control the defense of claims for which the indemnifying party acknowledges its obligation to provide indemnification.

#### Article XI—Force Majeure

Treatment of force majeure in PPAs is highly contentious and many approaches have been used. A PPA should clearly classify force majeure events, specifying the impact of each

event on the obligations of the parties, in particular on the payment obligations of the Purchaser and the construction, completion, and operational obligations of the Company. The parties might consider the following approach:

##### 11.1 Categories

An event of force majeure is any event that prevents any party in the performance of its obligations under the PPA, but only to the extent that the events are not within the reasonable control of the affected party and could not have been avoided with reasonable care. A nonexhaustive list includes:

- (1) Specified nonpolitical events: such as natural disasters, labor difficulties, and contractor failure;<sup>13</sup>
- (2) Domestic political events, including war, revolution, terrorism, political sabotage, changes in the law affecting the project, expropriation, unjustified denials of governmental authorization, and certain interruptions in fuel supply (if fuel risk is borne by the utility);<sup>14</sup>
- (3) Foreign political events, including generally the same events in category (2) but occurring outside the country concerned.

Generally, the following conditions shall not constitute an event of force majeure unless the existence of such condition is the result of an event of force majeure:

- a. late delivery of plant, machinery, equipment, materials, spare parts or consumables for the project, or
- b. a delay in the performance of any contractor.

### 11.2 Notices/duty to mitigate

This provides procedures for notification by the party claiming force majeure to the other party and imposes a duty on the party affected by the force majeure to use reasonable efforts to mitigate the effects of the force majeure.

### 11.3 Effect on obligations

The Article provides that neither party shall be liable for any failures in complying with its obligations under the PPA (though the obligation to make payments which are payable should be excluded) if the failure was caused by force majeure events.<sup>15</sup> The period allowed for performance by the affected party of its obligations under the PPA is extended day-for-day (plus additional periods to compensate for demobilization and remobilization).

### 11.4 Buyout consequences of force majeure events

If the construction or operation of the plant is adversely affected, for a certain continuous period, due to the occurrence of a domestic political event, either party can deliver a notice to the other party and, subject to dispute resolution procedures and time limits, terminate the PPA. Upon termination, the Purchaser will be obligated to buy out the project (see Article V).

### Article XII—Taxes

Taxes are generally passed through to the Purchaser under the tariff. In addition, there should be provisions addressing administrative matters relating to taxes, including requirements for the Purchaser to support all applications by the Company for

exemptions from domestic taxes and an obligation on the part of the Company to take reasonable steps to ensure that its liability on taxes is minimized, and procedures for resolving any dispute of claims by the Company for a payment in respect of taxes under the tariff provisions.<sup>16</sup>

### Article XIII—Change In Law

The PPA should address the impact on the tariff in the event of a change in applicable law or its interpretation that affects the Company. 'Applicable law' is frequently defined to include any act, decree, regulation, notification, or order having the force of law. "Change in law" is defined to include any new enactment, amendment, modification, or repeal of any applicable law as well as any change in the interpretation of the applicable law (either through decisions by courts or by government). Some PPAs in such circumstances have required an automatic adjustment of the tariff, subject to the approval of the regulatory agencies; other PPAs may require that the parties meet to attempt to amend the PPA to pass on the impact in the tariff payment. In the absence of agreement, the dispute resolution procedures in the PPA would apply. While various approaches to the allocation of risk of change in law are taken in PPAs, lenders will require that the cash flows of a project required for debt service be protected against such changes through tariff modifications.

### Article XIV—Dispute Resolution

Dispute resolution provisions should generally provide for good faith negotiations followed by arbitration under internationally

accepted rules in a third country.<sup>17</sup> The provision should specify the applicable rules, the number of arbitrators, the place of arbitration, the language of the arbitration proceedings, the nature and enforceability of the award, and the appointing and administering authority. In addition to arbitration, the PPA may also allow referral of technical matters to an expert for quicker resolution.

#### Article XV—Notices

This Article sets forth the details for providing notices under the PPA, as well as provisions for changing notice addresses for the parties.

#### Article XVI—Miscellaneous

These may include an assignment provision restricting assignment by either party to the PPA. Lenders will generally require that the Company assign its rights under the PPA to lenders and that the Purchaser enter into a direct agreement with the lenders relating to such assignment and certain other issues. The Purchaser or the regulatory agencies may wish to provide for an assignment of the PPA to an entity that results from future privatization of the Purchaser. Because of concerns for the privatized entity's operational criteria and credit-worthiness, lenders often attempt to spell out the operational and financial parameters of the privatized entity in hopes of ensuring that the Purchaser's payment obligations under the PPA will be properly assumed and performed. The miscellaneous provisions should also address the governing law of the agreement, a severability clause, a waiver of immunity by the Purchaser, and confidentiality provisions.

#### Sample Annexes/Schedules

Permits and authorizations  
 Technical limits and parameters  
 Interconnection  
 Commissioning and testing specifications  
 Metering standards and testing  
 Buyout price  
 Insurance  
 Determination of availability  
 Outages and emergencies  
 Tariff calculations

#### Notes

1. International Finance Corporation. 1996. Financing Private Infrastructure. Washington, D.C., pp. 118-26.
2. The commercial operation date is often based on the financial closing date and should be extended by delays caused by the Purchaser's breach of obligations and certain force majeure events.
3. Fixed charges in a two-part tariff usually include all fixed costs associated with the project, including fixed O&M costs, insurance costs, administrative costs, financial costs, taxes, and return on equity. (The fixed component of fuel transport charges may also be included.) It could be expressed in local currency and/or foreign currency.
4. The energy charge is also known as the "variable charge" and may include variable operating and maintenance costs.
5. Third-party sales also promote the interchange of power, the expansion of transmission systems, and improve

overall system efficiency. All such direct sales could be interruptable by the Purchaser, unless the Purchaser notifies the Company of a reduction in the Purchaser's system demand for an extended duration. In such a case, the Company could contract to make its excess capacity available for the corresponding duration.

6. Lenders often require the Company to engage an independent engineer to report on construction progress and to provide certification on construction, testing (usually a condition of loan disbursement), and operations. Sometimes the independent engineer also mediates technical disputes between the parties.
7. If liquidated damages are imposed, they should reflect the actual damages expected to be suffered by the Purchaser (for example, in respect of its outlay on the interconnection and transmission facilities).
8. Such obligations include, for the Company, using its best efforts to achieve financial closing, to obtain consents and approvals, to conduct preliminary studies and the like, and, for the Purchaser, the transfer of title to the site, obtaining consents and approvals and assisting the Company in doing the same.
9. The lenders will expect to enter into a direct contractual relationship with the Purchaser, whereby the Purchaser agrees (i) to make payments to the Company directly into an account designated by the lenders without right of credit or right of set-off; (ii) to provide to the lenders reasonable notice and cure rights; (iii) to accept in the event of a default, as a substitute for the Company

under the PPA, any reasonable agent for the lenders or any reasonable Purchaser of the Company upon a foreclosure sale, provided that such person shall assume all of the Company's obligations under the PPA; and (iv) to afford the lenders an opportunity to remedy the event giving rise to a termination notice prior to termination of the PPA. Also, it may be necessary to negotiate with the Purchaser further provisions to address issues of concern to the lenders arising after the PPA is signed.

10. Lenders will focus on fuel supply risks and how such risks should be managed and mitigated. They will consider the reliability and credit of the fuel supplier, the adequacy of the fuel source, the existence of an alternative fuel supplier, the consequences of non-supply (for example, whether this should be a force majeure event under the PPA), and also transportation, storage, and disposal risks. The liquidated damages payable under the fuel supply agreement will also be relevant. Finally, lenders may investigate whether fuel or alternate fuel could be imported into the country.
11. Lenders will generally require that payments of invoices be made directly to an account controlled by a trustee or security agent or over which the lenders hold some form of security.
12. Some PPAs look to the establishment of escrow accounts funded by the Purchaser's receivables (or liens over such receivables) from specified customers for additional liquidity security.

13. To the extent that insurance is available at a reasonable cost to cover the occurrence of any of the natural events, the Company will be asked to undertake to insure against such risks.
14. Lenders will also examine whether the force majeure arrangement under the fuel supply agreement is properly reflected in the force majeure section of the PPA, in order to leave no gap in the allocation of fuel risks. If, for example, the fuel supplier will be excused from its obligation to supply fuel under the fuel supply agreement due to government actions, the lenders are likely to require that the unavailability of fuel be a political force majeure event for the Company in the PPA.
15. Although the occurrence of a force majeure event may prevent a payment obligation from arising, once a sum does become payable, the payment obligation will not be excused by force majeure.
16. The developers will also be considering the tax implications under their home tax regime.
17. The most often used arbitration rules are those of the International Chamber of Commerce (ICC) and the United Nations Commission on International Trade Law (UNCITRAL). Depending on the parties involved in a dispute, the arbitration rules under the Convention on the Settlement of Investment Disputes between States and Nationals of Other States (through the International Centre for Settlement of Investment Disputes-ICSID) may also be suitable.

### Organization of American States Members of ICSID, New York, and Panama Conventions

Country	ICSID Convention	New York Convention	Panama Convention	Country	ICSID Convention	New York Convention	Panama Convention
Antigua & Barbuda		X		Haiti	*	X	
Argentina	X	X	X	Honduras	X		X
Bahamas, The	X			Jamaica	X		
Barbados	X	X		Mexico		X	X
Belize	*			Nicaragua	X		*
Bolivia	X	X	*	Panama	X	X	X
Brazil			X	Paraguay	X		X
Canada		X		Peru	X	X	X
Chile	X	X	X	St. Kitts & Nevis	X		
Colombia	*	X	X	St. Lucia			
Costa Rica	X	X	X	St. Vincent & the Grenadines	X		
Cuba		X		Suriname			
Dominica		X		Trinidad & Tobago	X	X	
Dominican Republic			*	United States	X	X	X
Ecuador	X	X	X	Uruguay	*	X	X
El Salvador	X	*	X	Venezuela	X	X	X
Grenada	X			<i>Total parties/members</i>			
Guatemala	*	X	X	OAS (35)	21	20	16
Guyana	X			<b>Global</b>	<b>126</b>	<b>108</b>	<b>16</b>

X denotes parties/members of conventions.

\* denotes signatories.

Note: Members of the ICSID and New York Conventions as of April 1, 1997, and of the Panama Convention as of December 19, 1996.

Source: World Bank Staff.

Limited or nonrecourse transactions are typically characterized by the establishment of a special-purpose entity, whereby lenders look to the cash flow and assets of the project company to secure repayment of their loans. A lender's security package consists of a variety of collateral rights pertaining to these assets and cash flow. The various elements commonly included in such packages are listed in the box below.

As defined in the intercreditor agreement, the security package is typically shared pro rata between senior lenders of each individual debt tranche as well as with any currency, interest rate, or commodity swap parties. However, depending on the project's financial structure, some lenders/investors may be subordinated to others regarding security interests in project cash flow and/or assets. Likewise, it is not uncommon for offtake parties, which provide fixed or front-end loaded payments (payments that are expected to be above market), or input providers, which provide their goods at below-market prices, to receive a second lien on project assets. Under such circumstances senior debt providers will have priority with respect to subordinate lenders or third-party contractual participants over project cash flow and/or any proceeds from the liquidation or transfer of any assets until their loans, pending interest and fee payments and any other costs (such as legal), are paid in full. Also, senior lenders will not allow subordinate lenders to accelerate their loans without their prior written consent.

Lenders will generally require a full collateral assignment of all rights of the borrower. In other words, they will want the right to "step into the shoes" of the borrower in a default situation and have the ability to perform the obligations of the

#### Annex Box 4.1 Lenders' Security Packages

A lender's security package quite often consists of the following components:

- A first security interest in the borrower's interest on project assets, including a mortgage or fixed charges (that is, charges relating to specific assets without the possibility of substitution) over land, buildings, and other fixed assets.
- Floating charges over moveable assets, including project inventory and receivables, production/work in progress, intangibles, and other personal property and interests.
- A pledge of the shareholders' equity participation in the borrower, including charge over dividend rights.
- Escrow accounts to control and, when necessary, retain cash flow relating to the project, including all monies owing or pending under, for example, the operating, debt service reserve, and major overhaul account.
- A pledge of the borrower's interest in the major project agreements (for example, partnership/shareholder/joint venture, offtake, construction, input supply, operation and management, technical assistance), including, but not limited to, entitlement to payments, liquidated damages, indemnities, retainage accounts, performance bonds, insurance and brokerage undertakings, and warranty provisions specified under such agreements.
- Assignment of rights underlying major project authorizations, including licenses (such as environmental), permits (such as construction), notices, consents, acknowledgments, and endorsements.
- Specification of the lenders as loss payees on all insurance policies relating to the project.

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*Source: World Bank staff.*

borrower (including curing defaults) and enforce the right of the borrower to transfer the project agreements, in their entirety, to a new company that intends to acquire the project from the borrower. Lenders seek a full collateral assignment in order to bring in a new borrower who assumes the responsibilities and obligations as outlined in the concession agreement without assuming prior liabilities (tax, environment, labor), as would be the case with an assignment of the shares of the borrower. This effectively increases the net value of the concession as transferred/sold to a third party.

As such, lenders will require the parties to the project contracts other than the borrower to execute consents to the collateral assignments. This is required to establish between the lenders and these third-party contractual participants certain rights of the lenders with respect to the contract. This often includes the obligation of the contracted party to notify lenders in the case of a borrower breach/default under the contractual arrangements, lenders' rights (not obligation) to cure defaults by the borrower, lenders' ability to object to amendments or termination of the contract without their consent, and lenders rights to transfer the contract rights to new purchasers (subject to appropriate restrictions as to the qualification and financial capability of the purchasers).

Often, governmental counterparts are unwilling or unable, because of legal restrictions, to grant lenders full collateral rights and seek to limit the rights of lenders to project cash flows. But a collateral assignment limited to the borrower's rights to receive payment under a project agreement does not adequately protect the lenders' interests. Indeed, if the borrower

is unable or unwilling to perform as stipulated under the project agreement, its right to receive payment will quickly cease through early termination clauses. In a financing situation in which lenders are providing the majority of the capital for a project on a limited-recourse basis, lenders insist on the right "to become the borrower" in every respect and to operate the project directly or through a transferee without further action. Solutions that have been devised to give satisfaction to lenders have included defining certain quantifiable criteria based on net worth, number of projects of similar size and technology, and so on, against which new "borrowers" would be evaluated or, in certain cases, formulation of lists of automatically approved third-party substitutes. It is in any case essential that lenders be sufficiently comfortable with the security package they are being offered and with the overall legal and regulatory environment in which the project company has to operate. Otherwise, projects will simply not be "bankable" and will not come to financial closure (annex box 4.2).

In addition to payment defaults and remedies allowed for under such circumstances, lenders will also seek to further protect repayment of their loans through:

- The imposition of covenants, both positive (maintaining certain debt-equity and working capital ratios and reporting requirements) and negative (not incurring any additional indebtedness above certain amounts, or not amending or terminating any major project agreement without prior lender consent). Should the borrower not comply with the stated covenants beyond a pre-

### Annex Box 4.2 "Bankability" of Mexican Power Projects

Under the Carbon II power project a BOT contract for a multiunit, coal-fired plant was awarded to Mission Energy. However, the government refused to give commercial lenders step-in rights and other security interests in the project, which was thus unable to secure financing. The deal eventually fell through over these issues and other disputed matters.

Since then, financing has been closed on the first privately built power plant in Mexico, Samalayuca II, under a Build-Lease-Transfer (BLT) contract. A BOT contract for the Merida III project was awarded in January 1997. In addition to the passage of a new electricity law and creation of an energy regulator, Mexico has actively sought to encourage private financing for independent power projects by improving the environment for project lenders, including through changes in the Civil Code that facilitate bankruptcy procedures.

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*Source: World Bank staff.*

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established cure period (which can vary from 0 to 5 days for payment defaults to more than 180 days for technical problems arising from force majeure events), then, as with a payment default, lenders have the right to declare an event of default, accelerate in full their loans, and exercise any and all of their collateral rights.

- Inclusion of contingent restrictions on dividend distributions should, for example, the borrower not achieve certain debt service coverage ratios. In certain cases, if the borrower falls below the required ratio for an extended period of time (for example, two consecutive quarters), "trapped" cash flow may be applied to prepay debt in inverse order of maturity.
- Lenders will also have certain approval rights, as related, for example, to operating and capital expenditure budgets (approval could be automatic if not above the expected rate of inflation), construction change orders above certain amounts, and the sale or transfer of borrower equity to third parties.
- Likewise, lenders will look to secure their ability to sell off or assign participations in their loans to other debt providers. Issues related to permitted timing of such sale or assignment, minimum amounts to be held by the originating lenders, participating bank voting rights with respect to the borrower, and so on will be outlined in the credit agreement.

Finally, quite often because of problems with registration, perfection, and enforcement of collateral rights, many projects never make it to financial closing (annex box 4.3).

**Annex Box 4.3 Legal and Regulatory Issues in Securing Transactions**

While collateral is of key importance in enabling private lenders to offer loans and reduce interest rates, legal and regulatory impediments in some countries make it difficult for the lenders to acquire collateral interests. These obstacles are related to the creation, perfection, and enforcement of lenders' security interests in a project.

In order to create a security interest, the collateral pledged must be identified. In some systems, for example in Uruguay, the law requires that the physical property be specifically enumerated and determined, and no substitution is permissible. This creates difficulties and expense in monitoring the loan to ensure that the specified property has not been exchanged or sold. In the United States, by contrast, lenders can obtain a floating security interest for the value of the property rather than identified physical assets and can automatically get a continuing security interest in the proceeds of any sale of the property.

The perfection of a security interest involves obtaining an assurance that no prior superior claims exist on the offered collateral. However, lenders

often encounter difficulties in checking which liens may be outstanding on project collateral because of the state of disarray of many public registries. In Bolivia, for example, pledges are filed chronologically, rather than under the name of the borrower or a description of the pledged asset, so that the entire registry must be searched to discover a prior pledge. In addition, there may be unclear procedures for registering government pledges or support agreements to projects. These conditions can result in high transaction costs, including notary costs, relating to the perfection of the lenders' rights.

Enforcement of a security interest involves the ability of the lender to repossess and sell the collateral. In some systems, where private parties and government officials cannot contract to repossess property, this requires a lengthy legal process. In addition, the lenders may not be permitted to attach other property of the borrower, such as proceeds from the sale of collateral.

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*Source: Fleisig (1995).*

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Investment Insurance Programs				
	MIGA	Germany (C&L Deutsche Revision AG)	Japan (EID/MITI)	United States (OPIC)
Eligible investments	New investments (including expansion, modernization, financial restructuring of existing projects).  Must promote economic growth and development in the host country, be financially, economically, and environmentally sound.	New (including expansion and modernization of existing projects).  Must be sufficiently legally protected, for example, under a bilateral protection agreement, intensify and foster the relationship with the host country.	New (including expansion and modernization of existing projects).	New (including privatization, expansion, and modernization of existing projects).  Must demonstrate a potential for positive effects on U.S. employment and economy, be environmentally sound, promise significant benefits to the social and economic development of the host country; must not contribute to violations of internationally recognized worker rights.
Types/Forms of Investment	Equity, shareholder loans, shareholder guarantees of third-party loans; loans to unrelated borrowers (project lending); leases, contractual arrangements (licensing, franchising, technical assistance, and management agreements)—minimum 3 years.	Equity investment (shares in foreign enterprises). Loan of an investment type (long-term loan)—shareholder loans or loans to unrelated borrowers (project lending). Capital provided to an overseas branch.	Equity, loans, property rights, surety obligations.	Equity, loans to unrelated borrowers, third-party loan guarantees, construction and service contracts, production-sharing agreements, leases, contractual arrangements (licensing, franchising, technical assistance agreements)—minimum 3 years.

continued...

Investment Insurance Programs (continued)				
	MIGA	Germany (C&L Deutsche Revision AG)	Japan (EID/MITI)	United States (OPIC)
Types/Forms of Investment (continued)	Cash, machinery and equipment, consigned inventory, debt-equity swaps, reinvested earnings.	Cash, machinery and equipment, services, licenses, debt-equity swaps, reinvested earnings.		Cash, machinery and equipment, consigned inventory, debt-equity swaps.
Eligible Investors	Natural or juridical person who is a national of a MIGA member country other than host country, or juridical person not incorporated or domiciled in a member country but majority-owned by nationals of MIGA member countries.	German citizens and corporations established under German law and domiciled in Germany.	Japanese citizens and corporations or other institutions established under Japanese law. Domestic investor could be majority-owned by foreign individuals.	Citizens of the United States, corporations, partnerships, other associations created under U.S. law and owned more than 50 percent by U.S. citizens, foreign corporations owned at least 95 percent by U.S. citizens, corporations, and the like.
Eligible Countries	Developing member countries as host countries and industrialized and developing countries as countries of investor.	Host country that ensures the legal protection of the investment, for example, by means of a bilateral investment protection agreement.	Host country's legal system must adequately provide for foreign investment inflows (existence of bilateral agreements not required).	With some exceptions, no insurance if host country's income per capita exceeds US\$4,269 (1986); bilateral agreements must exist.
	Host country's approval for the issuance of a MIGA guarantee contract is required.	Some bilateral investment protection agreements require the host country's approval on the investment to be guaranteed as a prerequisite for the applicability of the bilateral agreement, some	Host country's approval for the issuance of a guarantee contract is required.	A Foreign Government Approval (FGA) process is required, which varies, depending on the host country.

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Investment Insurance Programs (continued)				
	MIGA	Germany (C&L Deutsche Revision AG)	Japan (EID/MITI)	United States (OPIC)
Eligible Countries (continued)		require a simple notification (or not even this) to the host country.		
Risks covered	Political risks only.	Political risks only.	Political and commercial risks	Political risks only.
a) Inconvertibility/ nontransfer	Acts that restrict the investor's or lender's ability to convert local currency returns into foreign exchange for transfer outside the host country for more than 90 days.	Acts that restrict the investor's ability to convert amounts paid into a bank account and/or the transfer of such amount to Germany for more than 60 days. In addition: payment prohibition or moratorium.	Acts that restrict the investor's or lender's ability to repatriate funds for more than 60 days.	Acts such as new currency restrictions or failure by exchange control authorities to act on an application for hard currency for more than 60 days (in some cases more than 90 days).
b) Political violence	Damage to, or destruction or disappearance of, tangible assets caused by politically motivated acts of war or civil disturbance, including revolution, insurrection, coups d'etat, sabotage, and terrorism.	Total loss of whole of the investment due to actions such as civil disturbance, war, domestic armed conflicts, revolution, or riots.	Occurrences such as: <ul style="list-style-type: none"> <li>• Inability to continue business</li> <li>• Bankruptcy or some other reason of similar nature</li> <li>• Suspension of transaction by the bank or some other reason of similar nature</li> <li>• Suspension of business for a period exceeding 6 months attributable to war, revolution, civil war, riot, or civil disturbance.</li> </ul>	Two types of loss compensation coverage are available: <ul style="list-style-type: none"> <li>• Business income coverage</li> <li>• Assets coverage due to war, revolution, insurrection, or politically motivated civil strife, terrorism, and sabotage.</li> </ul> Actions undertaken to achieve labor or student objectives are not covered.
c) Expropriation	Partial or total loss of insured investment as a result of acts	Total loss of parts or whole of the investment due to	Total loss of insured investment as a result of acts that deprive	Total loss of the investment due to acts that i) are attributable to

continued...

## Investment Insurance Programs (continued)

	MIGA	Germany (C&L Deutsche Revision AG)	Japan (EID/MITI)	United States (OPIC)
c) Expropriation (continued)	by host government (outright nationalization and confiscation) causing reduction or elimination of ownership of, or control over, rights to the insured investment and continuing for 1 year. Creeping expropriation is covered if a series of acts, over time, have an expropriatory effect.	nationalization, expropriation, or other events of interventions or noninterventions by the host government whose effects are similar to an expropriation. Creeping expropriation covered if the series of events have the same effect of an expropriation (and lead to a total loss of the investment).	the investor of the investment by the host government. Creeping expropriation is covered where the insured has objectively assessed an infringement by the host government.	the foreign governing authority, ii) violate international law, iii) deprive the investor of fundamental rights, iv) continue for 6 months. Actions that lead to creeping expropriation such as outright nationalization arising from decrees or a series of events that have the same effect of an expropriation are covered.
	Lawful actions by the host government (exercise of regulatory authority) are not covered.			Coverage excludes losses due to lawful regulatory or revenue actions by the host governments.
d) Breach of contract	Protects against losses arising from the host government's breach or repudiation of a contract with the investor. In the event of an alleged breach or repudiation, the investor must be able to invoke an arbitration clause in the underlying contract and obtain an award for damages. If the investor has not received payment, MIGA will compensate.	Breach of commitments by the host government or government-controlled entities of a contractual (bilateral) or noncontractual (unilateral) obligation is covered if it is politically motivated. The bi- or unilateral "commitments" must be stated in the guarantee document.	Breach by the host government of a contractual obligation is covered. Suspension of the insured business operations has to occur for more than 6 months.	In some cases OPIC may cover the breach by the host government of a contractual obligation if it meets the requirements for expropriation (total loss) and either i) the insured must have successfully demonstrated that the actions could not have been justified under the terms of the underlying commercial arrangement, or ii) the failure to

continued...

Investment Insurance Programs (continued)				
	MIGA	Germany (C&L Deutsche Revision AG)	Japan (EID/MITI)	United States (OPIC)
d) Breach of contract (continued)				perform must be the subject of an arbitral award in favor of the investor that remains unpaid for a period of 3 months.
Commercial insolvency			Bankruptcy of the party in which the insured investment was made and which cannot be imputed to the insured.	
Scope of Coverage				
a) Duration	Minimum 3 years and maximum 15 years for equity (20 years under certain circumstances). For loans, leases, and transactions the term is generally equal to the duration of the underlying contract or agreement.	Up to 15 years, with gradual roll-overs of 5 years.	Minimum 3 years and up to 15 years, with possible extension for projects with long construction periods.	Maximum 20 years (equity). For loans, leases, and transactions the term is generally equal to the duration of the underlying contract or agreement.
b) Limits/ ceilings	Maximum amount of coverage for a single project is US\$50 million. Maximum coverage ratio of debt (to unrelated borrowers) to shareholder investment in the same project is 6:1. Country ceiling US\$225 million per country.	No written limits of coverage or country ceiling restrictions (case-by-case).	Per-project limit is 50 billion Yen. No country ceilings.	Maximum amount of political risk insurance for a single project is US\$200 million. No country ceiling but per-country exposure is limited to 15 percent of global portfolio.
c) Maximum percentage of coverage	Although to date MIGA has maintained a 90 percent limit,	Ninety-five percent. Earnings are eligible up to 10 percent	Ninety-five percent for political and 40 percent for commercial	Ninety percent of eligible investment. Loans and leases

continued...

## Investment Insurance Programs (continued)

	MIGA	Germany (C&L Deutsche Revision AG)	Japan (EID/MITI)	United States (OPIC)
c) Maximum percentage of coverage (continued)	it can insure up to 95 percent of the investment. For equity investments: up to 95 percent of investment and up to an additional 450 percent to cover future earnings. For loans and loan guarantees: up to 95 percent of principal and up to an additional 150 percent of the principal for interest to accrue over the term of the loan. For technical assistance contracts, and the like: 95 percent of the total value of payments due.	per year, but limited to a maximum of 50 percent on the value of the equity/capital investment and 100 percent of the shareholder loans; if reserves are transferred into shares, the coverage can be increased to 300 percent of original investment.	risks. Ninety percent of earnings up to 10 percent of invested amount up to 100 percent of principal in total are insured.	from financial institutions to unrelated third parties may be insured for 100 percent of principal and interest.
Risk premium	Premiums are determined on predefined "base rates" in relation to the type of industry such as: 1) Manufacturing and Services 2) Natural Resources (including agribusiness and forestry) 3) Oil and Gas/ Infrastructure and the type of coverage (currency transfer, expropriation, breach of contract, war and civil disturbance) and range from	For all types of coverage 0.5 percent per year on total insured amount. Handling fee 0.1 percent flat investment < DM10 million plus 0.05 percent flat for amounts exceeding DM10 million (capped to DM20,000).	Combined premium rate of 0.55 percent- 1.75 percent per year (depending on host country) is charged for all risks.	Premiums are determined based on the characteristics of the coverage provided, the project, the host country, and the type of industry period. Base rates are defined in relation to the type of industry such as: 1) Manufacturing and Services 2) Institutional Loans and Leases 3) Oil and Gas 4) Natural Resources 5) Contractors and Exporters,

continued...

Investment Insurance Programs (continued)				
	MIGA	Germany (C&L Deutsche Revision AG)	Japan (EID/MITI)	United States (OPIC)
Risk premium (continued)	0.25 percent to 1.25 percent per year. No differentiation between equity and debt. Base rates may be adjusted depending on project's risk profile (economic and political conditions of host country). Application fee: US\$5,000 investment < US\$25million, US\$10,000 investment > US\$25million (fee is credited against first year's premium). Optional processing fee of US\$25,000 depending on complexity of the project and/or the environmental sensitivity to cover unusual MIGA underwriting costs. Unused portion of the processing fee will be deducted from the first-year premium.			and the type of coverage (inconvertibility, expropriation, political violence) and range from 0.20 percent to 1.50 percent per year. Base rates can be adjusted up or down by 30 percent, depending on the risk profile of the project.
Indemnification/recovery: Inconvertibility/ nontransfer	Compensation paid upon receipt of blocked local currency and in the currency stated in the guarantee contract.	Compensation is based on the gross amount of the loss of an investment. The gross amount of the loss on an investment is with respect to a participation	Compensation is paid up to the insured amount limit (actual-loss) and based on the following formula: loss x 95 percent (political)	Compensation is paid on the basis of the prevailing rate of exchange for the blocked local currency.

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## Investment Insurance Programs (continued)

MIGA	Germany (C&L Deutsche Revision AG)	Japan (EID/MITI)	United States (OPIC)
Indemnification/recovery: Inconvertibility/ nontransfer (continued)	or, in the event of total loss, the actual value of the investment at the time of the occurrence of the guarantee contingency but not more than the contribution value. With respect to partial loss, the decrease in value calculated as the difference between the actual value of the participation at the time of the occurrence of the guarantee contingency but not more than the contribution value on the one side and the residual value of the participation on the other. Compensation on the insured portion of earnings is paid on the payments of earnings outstanding.	<contracted insured amount <uncollected portion of total investment.	
Recovery: Local currency to be transferred to MIGA or sold to World Bank or other international financial institutions.	Recovery: C & L Deutsche Revision AG may require the subrogation of rights to the investment.	Recovery: MM may require the subrogation of rights to the investment.	Recovery: Local currency to be transferred to OPIC.

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Investment Insurance Programs (continued)				
	MIGA	Germany (C&L Deutsche Revision AG)	Japan (EID/MITI)	United States (OPIC)
Political violence	Equity: compensation is paid on the lesser of the book value of the assets or the cost to repair or replace the damaged assets. Loans/ loan guarantees: compensation is paid on the insured portion of the principal and interest payments in default as a direct result of damage to the assets of the project.			1) Business Income Coverage: Compensation is based on what the project would have realized in net income but for the damage, plus the project's continuing, normal operating expenses, which must be paid during the time the damage is being repaired (renting a temporary facility is included). 2) Asset coverage: Compensation is based on the investor's share of the adjusted (least of the original cost of the item, fair market value at the time of loss, or the cost to repair the item) cost of the property or replacement cost. Replacement costs are paid up to twice the investor's share of the lost or damaged property's original cost, provided the property is replaced within 3 years.
	Recovery: Subrogation of any claims to MIGA			Recovery: Subrogation of any claims to OPIC.
Expropriation (including breach of contract)	Equity: Compensation is paid on the net book value of the insured investment.			Equity: Compensation is based on the book value of the investment.

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Investment Insurance Programs (continued)				
	MIGA	Germany (C&L Deutsche Revision AG)	Japan (EID/MITI)	United States (OPIC)
Expropriation (including breach of contract) (continued)	Loans/loan guarantees: compensation is paid on the outstanding principal and any accrued and unpaid interest on the loan.  Recovery: Assignment to MIGA of the investor's or lender's right, title, and interest in the expropriated investment (for example, equity shares or loan agreement).			Loans/loan guarantees: compensation is based on outstanding principal and accrued interest.  Recovery: Assignment of all rights, titles, claims, and so on, together with all securities evidencing the insured investment.
Waiting periods: Inconvertibility/ nontransfer	90 days	60 days	60 days	60-90 days plus (depending on host country).
Political violence	None (for direct physical damage); 365 days (if war/civil disturbance prevent the project from operating for at least 365 consecutive days).	None	None (unless suspension of business is concerned, which has to last for a period of 6 months).	Equity: None Debt: 1 month
Expropriation: (including breach of contract)	365 days 180 days for funds	None	None	Equity: 6 months Debt: 3 months
Dispute settlements between host country and the insured	Local or international court judgments/ arbitral awards not required if claim is valid. Except for breach of contract, the arbitral award must be	If claim is valid and came into existence without any objection, a court judgment is not required. In the case of any objection or unfair justice, the bilateral	Local or international court judgments/ arbitral awards not required if claim is valid.	Local or international court judgments/arbitral awards not required for filing a claim. Except for breach of contract, arbitration under the dispute

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## Investment Insurance Programs (continued)

	MIGA	Germany (C&L Deutsche Revision AG)	Japan (EID/MITI)	United States (OPIC)
Dispute settlements between host country and the insured (continued)	given by a local or international court, depending on the provision in the breached contract.	investment protection agreements provide for the investor or the federal government to choose immediate international arbitration.		mechanism in the contractual arrangement is required.

## Sources:

1. Responses to questionnaires, compiled by Anita Helstern.
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6. Trade and Investment Insurance in Japan, EID/MT; Program Handbook, OPIC.
7. Malcom D. Rowat, 1992, CMultilateral Approaches to Improving the Investment Climate of Developing Countries: The Cases of ICSID and MIGA, "Harvard International Law Journal 33(1): 103-44.