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Public-private partnerships (PPPs): Proposed updates to the UNCITRAL Legislative Guide on Privately Financed Infrastructure Projects (revised chapter V)

Note by the Secretariat

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V. Duration, extension and termination of the PPP contract

A. General remarks

1. Most PPP contracts have a fixed term, at the end of which, depending on the type of project, the private partner transfers to the contracting authority the responsibility for the operation of the service or infrastructure facility, or the contract authority chooses to rebid the contract. Section B deals with elements to be considered when establishing the duration of the PPP contract. Section C deals with the question of whether and under what circumstances the PPP contract may be extended. Section D considers circumstances that may authorize termination of the PPP contract prior to the expiry of its term. Lastly, section E deals with the consequences of the expiry or termination of the PPP contract, including the transfer of project assets and the compensation to which either party may be entitled upon termination, and the winding-up of the project.

B. Duration of the PPP contract

2. The laws of some countries contain provisions that limit the duration of infrastructure concessions or PPPs to a given number of years. Some laws establish a general limit for most infrastructure or PPP projects and special limits for projects in particular infrastructure sectors. In some countries there are maximum duration periods only for certain infrastructure sectors.

3. The desirable duration of a PPP contract may depend on a number of factors, such as the operational life of the facility; the period during which the service is likely to be required; the expected useful life of the assets associated with the project; the likelihood that the technology required for the project will change; and the time needed for the private partner to repay its debts and amortize the initial investment. The notion of economic “amortization”, in this context, refers to the gradual charging of the investment made against project revenue on the assumption that the facility would have no residual value at the end of the project term. Given the difficulty of establishing a single statutory limit for the duration of infrastructure projects, it is advisable to provide the contracting authority with some flexibility to negotiate, in each case, a term that is appropriate to the project in question. In some cases, the duration of the contract is a factor of a formula (“least present value of revenue”) used as a basis for determining the winning bidder during the selection process (see chap. III, “Contract award”, paras. ...). Where this system is used, the parties agree on such a contract duration to allow the private partner to achieve the overall level of revenue anticipated in its bid. All these options call for a flexible legislative approach to contract duration. Countries that have established institutional mechanisms for monitoring PPP contracts and capacity-building in PPP negotiation and management (see chap. II, “Project planning and preparation, paras. ...) may develop guidelines or advice to contracting authorities on desirable or adequate contract duration according to the nature of the project taking past experience into account.

4. Some legal systems achieve the desired flexibility through laws that require all PPP contracts to be subject to a maximum duration period, without specifying any number of years. Sometimes the law only indicates which elements are to be considered for determining the duration of the PPP, which may include the nature and amount of investment required to be made by the private partner and the normal amortization period for the particular facilities and installations concerned. Some project or sector-specific laws provide for a combined system setting the maximum duration of the PPP contract either at the end of a certain period or when the debts of the private partner have been fully repaid and a certain revenue, production or usage level has been achieved, whichever is the earliest. A flexible legislative approach to the duration of PPP contracts may permit tailor-made solutions to meet the particular needs and financial parameters of the project, such as when the contracting authority

and the private partner agreed on a variable or floating project term allowing for automatic extensions under specific circumstances (see below, para. 9).

5. However, where it is found necessary to adopt statutory limits, the maximum period should be sufficiently long to allow the private partner to repay its debts fully and to achieve a reasonable profit. Furthermore, it may be useful to authorize the contracting authority, in exceptional cases, to agree to longer contract periods, considering the amount of the investment and the required recovering period, and subject to special approval procedures.

C. Extension of the PPP contract

6. In the contracting practice of some countries, the contracting authority and the private partner may agree on one or more extensions of the PPP period. More often, however, domestic laws only authorize an extension of the PPP contract under exceptional circumstances. In this case, upon expiry of the PPP contract the contracting authority is normally required to select a new private partner, normally using the same procedures applied to select the incumbent private partner (for a discussion of selection procedures, see chap. III, “Selection of the private partner”).

7. A number of countries have found it useful to require that PPP contracts, in particular those that involved exclusive concessions for the provision of a public service, be rebid from time to time rather than freely extended by the parties. Periodic rebidding may give the private partner strong performance incentives. The period between the initial award and the first (and subsequent) rebidding should consider the level of investment and other risks faced by the private partner. For example, for solid waste collection PPPs not requiring substantial fixed investments, the periodicity may be relatively short (three to five years, for example), whereas longer periods may be desirable for those that require high levels of investment, such as power or water distribution PPPs in which the private partner would have built new facilities or networks, or done extensive work in expanding or refurbishing existing ones. In most countries, rebidding coincides with the end of the project term, but in others a contract may be awarded for a long period (say 99 years), with periodic rebidding (for instance, every 10 or 15 years). In the latter mechanism, which has been adopted in a few countries, the first rebidding occurs before the private partner has fully recouped its investments. As an incentive to the incumbent operator, some laws provide that the private partner may be given preference over other bidders in the award of subsequent PPP contracts for the same activity. However, the private partner may have rights to compensation if it does not win the next bidding round. Requiring that the winning bidder should pay off the incumbent private partner for any property rights and for the investment not yet recovered reduces the longer-term risk faced by investors and lenders and provides them a valuable exit option (see paras. 41 and 42).

8. Notwithstanding the above, it is advisable not to exclude entirely the option to negotiate an extension of the PPP period under certain specified circumstances. The duration of an infrastructure project is a central element for a project’s feasibility and “value for money” assessment (see chap. II, “Project planning and preparation”, paras. ...). The duration is also one of the main factors considered in the negotiation of financial arrangements and has a direct impact on the price of the services provided by the private partner. The parties may find that an extension of the PPP contract (as a substitute for or combined with other compensation mechanisms) may be a useful option to deal with unexpected impediments or other changes of circumstances arising during the life of the project. Such circumstances may include any of the following: extension to compensate for project suspension or loss of profit due to the occurrence of impeding events (see chap. IV, “PPP implementation: legal framework and PPP contract”, paras. 131-139); extensions as a compensation for unexpected downside revenue flows, including those due to regulatory price and tariff control measures exceeding the margin contemplated in the contract (see chap. IV, “PPP implementation: legal framework and PPP contract”, paras. ...); extension to compensate for project suspension brought about by the contracting authority or other

public authorities (see chap. IV, “PPP implementation: legal framework and PPP contract”, paras. 140 and 141); or extension to allow the private partner to recover the cost of construction delay or cost overruns due to unanticipated adverse conditions on the construction site (e.g. geological or meteorological) or of additional work required to be done on the facility and which the private partner would not be able to recover during the normal term of the PPP contract without unreasonable tariff increases (see chap. IV, “PPP implementation: legislative framework and PPP contract”, paras. 73–76).

9. A contract extension to cover such situations may be the object of an automatic mechanism set forth in the contract, or the result of the parties’ agreement, when the contract contemplates that possibility. The former possibility, particularly where the contract links the extension to a pre-agreed level of present value of income over the PPP lifecycle, may have the advantage of limiting the scope for discretion or subjective judgment in determining the appropriate length of an extension. In any event, in the interest of transparency and with a view to reducing opportunities for corrupt practices, the contract should clearly set out the circumstances that might authorize a contract extension and the private partner’s performance should have been properly monitored (see chap. IV, “PPP implementation: legal framework and PPP contract”, paras. ...). For the same reasons, in some countries the extension of the PPP period is subject to a global cumulative limit or requires the approval of a specially designated public authority.

D. Termination

10. Domestic laws often deal with the grounds for termination of the PPP contract before the expiry of its term and the consequences of such termination. Usually the law authorizes the parties to terminate the PPP contract following the occurrence of certain types of event. The main interest of all parties involved in a PPP is to ensure the satisfactory completion and operation of the facility and, in case of concession-PPPs, the continuous and orderly provision of the relevant public service. In practice, termination is a frequent cause of dispute and litigation and a recurrent argument for international investment claims (see chap. VI, “Settlement of disputes”, paras. ... and chap. VII, “Other relevant areas of law”, paras. ...). Given the serious consequences of termination, as provision of the service may be interrupted or even discontinued, and the cost of ensuing litigation, termination should under most circumstances be regarded as a measure of last resort. The conditions for the exercise of this right by either party should be carefully considered. While they may not need to be identical, it is generally desirable to achieve an equitable balance of rights and conditions regarding termination for both parties.

11. In addition to identifying the circumstances or types of events that may give rise to a right to terminate the PPP contract, it is advisable for the parties to consider appropriate procedures to establish whether there are valid grounds for terminating the PPP contract. Of particular importance is the question whether the PPP contract may be unilaterally terminated or whether termination requires a decision by a judicial or other dispute settlement body.

12. The private partner is usually not allowed to terminate the PPP contract without cause and in some legal systems termination by the private partner even in the event of breach by the contracting authority requires a final judicial decision. However, in some countries, pursuant to rules applicable to contracts with government entities, such a right may be exercised by public authorities, subject to payment of compensation to the private partner. In other countries, however, an exception is made in the case of public service concessions, whose contractual nature is found to be incompatible with unilateral termination rights. Lastly, some legal systems do not recognize unilateral termination rights for public authorities. However, investors and lenders would be concerned about the risk of premature or unjustified termination by the contracting authority, even where a decision to terminate might be subject to review through the dispute settlement mechanism. It should also be noted that giving

the contracting authority the unilateral right to terminate the PPP contract would not be an adequate substitute for well-designed contractual mechanisms of performance monitoring or for appropriate guarantees of performance (see chap. IV, “PPP implementation: legal framework and PPP contract”, paras. 80–97 and 108–120).

13. Provisions concerning termination should therefore be brought into line with the remedies for breach provided in the PPP contract. In particular, it is useful to distinguish the conditions for termination from those for step-in by the contracting authority (see chap. IV, “PPP implementation: legal framework and PPP contract”, paras. 143–146). It is also important to consider the contracting authority’s termination rights against the background of the financing agreements negotiated by the private partner with its lenders. In most cases, events that may lead to the termination of the PPP contract would also constitute events of default under the loan agreements, with the consequence that the entire outstanding debt of the private partner may fall due immediately. It would thus be useful to attempt to avoid the risk of termination by allowing the lenders to propose another private partner when termination of the PPP contract with the original private partner appears imminent (see chap. IV, “PPP implementation: legal framework and PPP contract”, paras. 108–120).

14. In the light of the above, it is generally advisable to subject the termination of the PPP contract to a final finding by the dispute settlement body provided in the contract. Such a requirement would reduce concerns about premature or unjustified recourse to termination. At the same time, it would not preclude the taking of appropriate measures to ensure the continuity of the service, pending the final decision of the dispute settlement body, as long as contractual remedies for breach, such as step-in rights for the contracting authority and the lenders, are provided in the PPP contract. In countries where such a requirement would not be consistent with general principles of administrative law applicable to government contracts, it might be important to ensure, at least, that the contracting authority’s right to terminate the PPP contract should be without prejudice to the private partner’s right to seek subsequent judicial review of the contracting authority’s decision to terminate.

1. Termination by the contracting authority

15. The contracting authority’s termination rights usually relate to three categories of circumstances: serious breach by the private partner; insolvency of the private partner; and termination for reasons of public interest.

(a) Serious breach by the private partner

16. Where the contract involves the provision of public services by the private partner under some form of “concession” (see “Introduction and background information”, paras. ...), the contracting authority has the duty to ensure that public services are provided in accordance with applicable laws, regulations and contractual provisions. Thus, a number of domestic laws expressly recognize the contracting authority’s right to terminate the PPP contract in the event of breach by the private partner. Because of the disruptive effects of termination and in the interest of preserving the continuity of the service, it is not advisable to regard termination as a sanction for every instance of unsatisfactory performance by the private partner. On the contrary, it is generally advisable to resort to such an extreme remedy only in instances of “particularly serious” or “repeated” failures to perform, especially in cases where it can no longer be reasonably expected that the private partner will be able or willing to perform under the PPP contract. Many legal systems use specific technical expressions to refer to situations where the degree of breach by one contracting party is of such a nature that the other party may terminate their contractual relation before the expiry of its term (for example, “fundamental breach”, “material breach” or similar expressions). Such situations are referred to in the *Guide* as “serious breach”.

17. Circumscribing the possibility of termination to cases of serious breach may give assurance to lenders and investors that they will be protected against

unreasonable or premature decisions by the contracting authority. The law may generally provide for the contracting authority's right to terminate the PPP contract upon serious breach by the private partner and leave it for the PPP contract to define further the notion of serious breach and, as appropriate, provide illustrative examples of it. From a practical point of view, it is not advisable to attempt, by statute or in the PPP contract, to provide a list of the events that justify termination. Typically, the seriousness and implications of breach of the private partner's obligations will depend on the project phase in which the breach occurs (see below, paras. 20–25).

18. One category of breach that domestic laws usually treat as sufficiently serious to justify the termination of the PPP contract regardless of the project phase in which they are detected are serious violations of the country's criminal laws by the private partner and its agents, or a conviction under the private partner's national law or a third country's law. Corruption and bribery of public officials in connection with the award or management of public contract or issuance of licences or permits, whether or not specifically related to the PPP contract are widely recognized grounds for termination of a PPP contract. Since the entry into force of the United Nations Convention against Corruption,¹ States have assumed an international obligation to fight such practices and many States would persecute corruption and bribery even if committed abroad to the extent that the perpetrators are their nationals, or the corrupt practices cause damage to domestic interests. Additional examples of criminal offences that often justify termination under domestic laws include: (a) participation in a criminal organization; (b) fraud; (c) terrorist offences or offences linked to terrorist activities; (d) money-laundering or terrorist financing; or (e) other serious crimes in the meaning of article 2, subparagraph (b), the United Nations Convention against Transnational Organized Crime.² Termination in such cases would be justified whenever the private partner as a legal entity has committed such crimes, but also in instances where the person convicted by final judgment is a member of the administrative, management or supervisory body of the private partner or has powers of representation, decision or control therein.

19. Apart from the situation described in the preceding paragraph, which may call for immediate sanction, as a rule, it is desirable for the contracting authority to grant the private partner an additional period to fulfil its obligations and to avert the consequences of its breach prior to resorting to remedies. For example, the private partner should be given notice specifying the nature of the relevant circumstances and requiring it to rectify them within a certain period. The possibility might also be given for the lenders and sureties, as the case may be, to avert the consequences of the private partner's breach, for instance by temporarily engaging a third party to cure the consequences of breach by the private partner, in accordance with the terms of the performance bonds provided to the contracting authority or the terms of a direct agreement between the lenders and the contracting authority (see chap. IV, "PPP implementation: legal framework and PPP contract", paras. 108–120 and 147–150). The PPP contract may also provide that, if the circumstances are not rectified before the expiry of the relevant period, the contracting authority may then terminate the PPP contract, subject to first notifying the lenders and giving them an opportunity, within a certain period, to exercise any right of substitution that the lenders might have in accordance with a direct agreement between them and the contracting authority. However, reasonable deadlines need to be set, since the contracting authority cannot be expected to bear indefinitely the continuing cost of a situation of breach of the PPP contract by the private partner. Furthermore, the procedures should

¹ The Convention was adopted by the United Nations General Assembly resolution [58/4](#) of 31 October 2003 and entered into force on 14 December 2005.

² That is "conduct constituting an offence punishable by a maximum deprivation of liberty of at least four years or a more serious penalty" (United Nations Convention against Transnational Organized Crime, adopted by General Assembly resolution [55/25](#) of 15 November 2000, entered into force on 29 September 2003). Common examples of serious crimes under domestic laws include murder, rape, abduction, theft, robbery, burglary, handling stolen property, extortion, trafficking in drugs, embezzlement, bribery, fraud, counterfeiting of money, money-laundering, smuggling of firearms, child labour and other forms of trafficking in human beings.

be without prejudice to the contracting authority's right to step in to avert the risk of disruption of service by the private partner (see chap. IV, "PPP implementation: legal framework and PPP contract", paras. 145 and 146).

(i) *Serious breach before the beginning of construction*

20. The private partner typically needs to accomplish a series of steps prior to undertaking construction works. Some of these requirements may even constitute conditions precedent to the entry into force of the PPP contract. Examples of events that often justify the cancellation of the contract award at an early stage include the following:

(a) Failure to secure the required financial means, to sign the PPP contract or to establish the project company within the established deadline;

(b) Failure to obtain licences or permits required for pursuing the activity that is the object of the PPP;

(c) Failure to undertake the construction of the facility, to commence development of the project or to submit the plans and designs required within a set period from the award of the PPP contract.

21. Termination should in principle be reserved for situations where the contracting authority may no longer reasonably expect that the selected private partner will take the necessary measures to commence execution of the project. In that connection, it is important for the contracting authority to consider any circumstances that may excuse the private partner's delay in fulfilling its obligations. Furthermore, the private partner should not suffer the consequences of inaction or error on the part of the contracting authority or other public authorities. For instance, the termination of the PPP contract would not normally be justified if the private partner's failure to obtain government licences and permits within the agreed schedule was not attributable to the private partner's own fault.

(ii) *Serious breach during the construction phase*

22. Examples of events that may justify the termination of the PPP contract during the construction phase include the following:

(a) Failure to observe building regulations, mandatory labour laws and standards, specifications or minimum design and performance standards and inexcusable failure to complete work within the agreed schedule;

(b) Failure to observe labour laws or social security laws and related public policy standards;

(c) Failure to provide or renew the required guarantees in the agreed terms;

(d) Violation of other essential statutory or contractual obligations.

23. Termination should be commensurate with the degree of breach by the private partner and the consequences of breach for the contracting authority. For instance, the contracting authority may have a legitimate interest in specifying a date when the construction must be completed and may therefore be justified in regarding a delay in completion as an event of breach and hence a ground for termination. However, delay alone, in particular if it is not excessive in relation to the specifications of the PPP contract, might not be sufficient reason for termination when the contracting authority is otherwise satisfied with the private partner's ability to complete the construction in accordance with the required quality standards and its commitment to doing so.

(iii) *Serious breach during the operational phase*

24. Instances of breach that typically justify the termination of the contract during the operational phase include any of the following, as appropriate:

(a) Serious failure to provide services in accordance with the statutory and contractual standards of quality, including disregard of price control measures applicable to a concession-PPP;

(b) Inexcusable suspension or interruption of the provision of services required under the contract without prior consent from the contracting authority;

(c) Serious failure by the private partner to maintain the facility, its equipment and appurtenances in accordance with the agreed standards of quality or inexcusable delay in carrying out maintenance works in accordance with the agreed plans, schedules and timetables;

(d) Failure to comply with sanctions imposed by the contracting authority or the regulatory agency, as appropriate, for infringements of the private partner's duties.

25. The possibility of termination of the PPP contract if the private partner fails to comply with regulatory decisions or sanctions imposed by the contracting authority underscores the need for effective dispute avoidance and settlement mechanisms in the PPP contract (see chap. VI, "Settlement of disputes", paras. ...). The same holds true for termination of the PPP contract when the private partner is found guilty of tax fraud or other types of fraudulent acts, or if its agents or employees are involved in bribery of public officials and other corrupt practices (see above, para. 18). The latter situation also emphasizes the importance of designing effective mechanisms to combat corruption and bribery and to afford the private partner the possibility to file complaints against demands for illegal payments or unlawful threats by officials of the host country (see also chap. VII, "Other relevant areas of law", paras. 50–52).

(b) Insolvency of the private partner

26. Infrastructure services typically need to be provided continuously and for that reason most domestic laws require the termination of the PPP contract if the private partner is declared insolvent or bankrupt. In order to ensure the continuity of the service, the assets and property required to be handed over to the contracting authority may be excluded from the insolvency proceedings and the law may require prior governmental approval for any act of disposition by a liquidator or insolvency administrator of any categories of assets owned by the private partner in the framework of the PPP project.

27. In legal systems that allow the establishment of security interests over the concession itself (see chap. IV, "PPP implementation: legal framework and PPP contract", para. 57), the law provides that the contracting authority may, in consultation with the secured creditors, appoint a temporary administrator so as to ensure the continued provision of the relevant service, until the secured creditors participating in the insolvency proceedings decide, upon the recommendation of the insolvency administrator, whether the activity should be pursued or whether the right to exploit the concession should be put to a bidding process.

(c) Termination for reasons of public interest

28. In the contracting practice of some countries, public authorities procuring construction works traditionally retain the right to terminate the construction contract for reasons of public interest (that is, without having to provide any justification other than that the termination is in the Government's interest). In some common law jurisdictions, that right, which is sometimes referred to as "termination for convenience", can only be exercised if expressly provided by statute or in the relevant contract. Several legal systems belonging to the civil law tradition also recognize a similar power of public authorities to terminate contracts for reasons of "public interest" or "general interest". In some countries, such a right may be implied in the

Government's contracting power, even in the absence of an explicit statutory or contractual provision to that effect. The Government's right to terminate for reasons of public interest, in those legal systems which recognize it, is regarded as essential to preserve the Government's unfettered ability to exercise its functions affecting the public good.

29. Nevertheless, the conditions for the exercise of this right, and the consequences of doing so, should be carefully considered. The authority to determine what constitutes public interest may lie within the Government's discretion, so that the contracting authority's decision to terminate the PPP contract could only be challenged under specific circumstances (for instance, improper motive, "*détournement de pouvoir*"). However, a general and unqualified right to terminate the PPP contract for reasons of public interest may represent an imponderable risk that neither the private partner nor the lenders may be ready to accept without sufficient guarantees that they will receive prompt compensation for the loss sustained. The possibility of termination for reasons of public interest, where contemplated, should therefore be made known to prospective investors on the earliest possible occasion and should be expressly mentioned in the draft PPP contract circulated with the request for proposals (see chap. III, "Selection of the private partner", para. 67). The compensation due for termination for reasons of public interest may, in practice, cover items that are considered when calculating the compensation that is due for termination for serious breach by the contracting authority (see para. 49). Furthermore, it is generally advisable to limit the exercise of the right to terminate the PPP contract to situations where such termination is needed for a compelling reason of public interest, which should be restrictively interpreted (for example, where major subsequent changes in governmental plans and policies require the integration of a project into a larger network or where changes in the contracting authority's plans require major project revisions that substantially affect the original design or the project's commercial feasibility under private operation). In particular, it is not advisable to regard the right of termination for reasons of public interest as a substitute for other contractual remedies in case of dissatisfaction with the private partner's performance (see chap. IV, "PPP implementation: legal framework and PPP contract", paras. 140–150).

2. Termination by the private partner

30. While the contracting authority in some legal systems may retain an unqualified right to terminate the PPP contract, the grounds for termination by the private partner are usually limited to serious breach by the contracting authority or other exceptional situations and do not normally include a general right to terminate the PPP contract at will. Moreover, some legal systems do not recognize the private partner's right to terminate the PPP contract unilaterally, but only the right to request a third party, such as the competent court, to adjudicate the termination of the PPP contract.

(a) Serious breach by the contracting authority

31. Generally, the private partner's right to terminate the PPP contract is limited to situations where the contracting authority is found to be in breach of a substantial part of its obligations (such as failure to make agreed payments to the private partner, or failure to issue licences required for the operation of the facility for reasons other than the private partner's own fault). In those legal systems where the contracting authority has the right to request variations or alterations to the project, the private partner may have the right to terminate the PPP contract if the contracting authority alters or modifies the original project in such a fashion as to cause a substantial increase in the amount of investment required and the parties fail to agree on the appropriate amount of compensation (see chap. IV, "PPP implementation: legal framework and PPP contract", paras. 73–76).

32. In addition to serious breach by the contracting authority itself, it may be equitable to authorize termination by the private partner should the latter be rendered unable to perform its obligations because of acts of public authorities other than the

contracting authority, such as failure to provide certain measures of support required for the execution of the PPP contract (see chap. II, “Project planning and preparation”, paras. 35–60).

33. Although termination by the private partner may not always require a final finding by a judicial or other dispute settlement body, there may be limits to the remedies available to the private partner in the event of breach by the contracting authority. Pursuant to a rule of law followed in many legal systems, a party to a contract may withhold performance of its obligations in the event of breach by the other party of a substantial part of its obligations. However, in some legal systems that rule does not apply to government contracts and the law provides instead that government contractors are not excused from performing solely on the ground of breach by the contracting authority unless and until the contract is rescinded by a judicial or arbitral decision.

34. Limitations on the private partner’s right to withhold performance are typically intended to ensure the continuity of public services (see chap. IV, “PPP implementation: legal framework and PPP contract”, paras. 86 and 87). Nevertheless, it should be noted that while the contracting authority may mitigate the consequences of breach by the private partner by using its right to step in, the private partner does not usually have a comparable remedy. In the event of serious breach by the contracting authority, the private partner may sustain considerable or even irreparable damage, depending on the time required to obtain a final decision releasing the private partner from its obligations under the PPP contract. These circumstances underscore the importance of government guarantees in respect of obligations assumed by contracting authorities (see chap. II, “Project planning and preparation”, paras. 45–50) and the need to allow the parties to choose expeditious and effective dispute settlement mechanisms (see chap. VI, “Settlement of disputes”, paras. 3–42).

(b) Changes in conditions

35. Domestic laws often allow the private partner to terminate the PPP contract if the private partner’s performance has been rendered substantially more onerous by the occurrence of an unforeseen change in conditions and the parties have failed to agree on an appropriate revision to adapt the PPP contract to the changed conditions (see chap. IV, “PPP implementation: legal framework and PPP contract”, paras. 126–130). The private partner would also have a right to terminate the contract if the contracting authority fails to comply with contractual provisions aimed at preserving the economic balance of the contract (such as adjustment and indexation clauses).

3. Termination by either party

(a) Impediment of performance

36. Some laws provide that the parties may terminate the PPP contract if the performance of their obligations is rendered permanently impossible because of a circumstance defined in the PPP contract as an exempting impediment (see chap. IV, “PPP implementation: legal framework and PPP contract”, paras. 132–139). In that connection, it is advisable to provide in the PPP contract that if the exempting impediment persists for a certain period or if the cumulative duration of two or more exempting impediments exceeds a certain time, the agreement may be terminated by either party. If the execution of the project is rendered impossible on legal grounds, because of changes in legislation or because of judicial decisions affecting the validity of the PPP contract, for instance, such a termination right might not require any period to elapse and might be exercised immediately upon the change of legislation or other legal obstacle becoming effective.

(b) Mutual consent

37. Some domestic laws authorize the parties to terminate the PPP contract by mutual consent, usually subject to the approval of a higher authority. The contracting

authority may need specific legislative power in legal systems where the termination by mutual consent might amount to a discontinuation of the public service for which the contracting authority could be held accountable.

E. Consequences of expiry or termination of the PPP contract

38. The consequences of expiry or termination of the contract will vary depending on the type and structure of PPP (i.e. “concession” or “non-concession” PPP) and the nature of the project (for an overview of various types of PPP arrangements, see “Introduction and background information on PPPs”, paras. ...). For concession-type PPPs, the expiry or termination of the contract typically extinguishes the concessionaire’s right to operate the facility, to provide the relevant service and to receive payments therefor. In those cases, unless the infrastructure is to be permanently owned by the concessionaire, the expiry or termination of the PPP contract often requires the transfer of assets to the contracting authority or to another concessionaire who undertakes to operate the facility. The situation may be different in non-concession PPPs, in particular where the private partner retains ownership of project assets. There may be important financial consequences that the parties will need to address in detail in the PPP contract, in particular in the event of termination by either party. The parties will also need to agree on various wind-up measures to ensure the orderly transfer of the responsibility for operating the facility and providing the service.

1. Transfer of project-related assets

39. In most cases, the assets and property originally made available to the private partner and other goods related to the PPP are to revert to the contracting authority upon expiry or termination of the PPP contract (see chap. IV, “PPP implementation: legal framework and PPP contract”, paras. 23–29). In a typical “build-operate-transfer” project, the private partner would also be obliged to transfer to the contracting authority the physical infrastructure and other project-related assets upon expiry or termination of the PPP contract. The assets required to be transferred to the contracting authority often include intangible assets, such as outstanding receivables and other rights existing at the time of transfer. Depending on the project, the assets to be transferred may include specific technology or know-how (see paras. 51–55). It should be noted that in some PPPs the assets are transferred directly and automatically to the newly selected private partner who will succeed the incumbent private partner in the provision of the service.

(a) Transfer of assets to the contracting authority

40. Different arrangements may be needed, depending on the type of asset to be transferred (see chap. IV, “PPP implementation: legal framework and PPP contract”, para. 28):

(a) *Assets that must be transferred to the contracting authority.* In the legal tradition of some countries, at the end of the PPP project, the private partner is required to transfer such assets free of any liens and encumbrances and at no cost to the contracting authority, except for compensation for improvements made to, or modernization of, the property for the purpose of ensuring the continuity of the service the cost of which has not yet been recovered by the private partner. In practice, such a rule presupposes the negotiation of a contract period sufficiently long, and a level of revenue high enough, to enable the private partner to fully amortize its investment and to repay its debts in full. Other laws allow for more flexibility by authorizing the contracting authority to compensate the private partner for the residual value, if any, of assets built or other investment in physical facilities or systems made by the private partner;

(b) *Assets that may be purchased by the contracting authority, at its option.* If the contracting authority decides to exercise its option to purchase those assets, the

private partner is normally entitled to compensation corresponding to their fair market value at the time. However, if those assets were expected to be fully amortized (that is, if the private partner's financing arrangements do not envisage any expectation of residual value of the assets), then the price paid would be only nominal. In the contracting practice of some countries, it is usual for contracting authorities to be granted some security interest in such assets as a guarantee for their effective transfer;

(c) *Assets that remain the private property of the private partner.* Typically, these assets may be freely removed or disposed of by the private partner.

(b) Transfer of assets to a new private partner

41. As indicated earlier, the contracting authority may wish to rebid the PPP contract at the end of its term, rather than to operate the facility itself (see para. 7). For that purpose, it may be useful for the law to require the private partner to make the assets available to a new private partner. In order to ensure an orderly transition and continuity of the service, the private partner should be required to cooperate with the new private partner in the handover. The transfer of assets between the successive private partners may require that some compensation be paid to the incumbent private partner, depending on whether or not the assets have been amortized.

42. One important element to consider in this connection is the structure of the financial proposal formulated by the private partner during the selection process (see also chap. IV, "PPP implementation: legal framework and PPP contract", para. 27). In public infrastructure PPPs, one of the basic assumptions of the bidders' financial proposals is that all assets required to be built or acquired for the PPP will be fully amortized (that is, their cost will be recovered in full) in the life of the PPP. Thus, the financial proposals will not normally include an expectation of residual value for the assets at the end of the PPP period. In such cases, there may not be a prima facie reason for requiring a successor private partner to pay any compensation to the original private partner, which may be required to make all assets available to its successor at no cost or only for a nominal consideration. Indeed, if the private partner has achieved its expected return, a transfer payment from a successor private partner would be an additional cost that would ultimately have to be remunerated by the prices charged by the successor under the second contract. However, if the tariff level contemplated in the private partner's original proposal assumed some residual value of the assets at the end of the PPP period or if the financial proposal assumed significant revenue from third parties, the private partner might be entitled to compensation for assets handed over to a successor private partner.

(c) Condition of assets at the time of transfer

43. Where assets are handed over to the contracting authority or transferred directly to a new private partner upon the expiry of the PPP period, the private partner is typically obliged to transfer them, free of liens or encumbrances, and in such condition as would be necessary for normal functioning of the infrastructure facility, considering the needs of the service. The contracting authority's right to receive those assets in such operating condition is complemented in some laws by the obligation imposed upon the private partner to keep and transfer the assets in such proper condition as prudent maintenance requires and to provide some sort of guarantee to that effect (see chap. IV, "PPP implementation: legal framework and PPP contract", para. 118). Where the contracting authority requires the assets to be returned in a prescribed condition, the required conditions should be reasonable. While it may be reasonable for the contracting authority to require that the assets have some defined period of residual life, it would not be reasonable to expect them to be as new. Furthermore, these requirements may not be applicable in the event of termination of the PPP contract, in particular termination prior to successful completion of the construction phase.

44. It is advisable to devise clear procedures for evaluating and ascertaining the condition of the assets that should be transferred to the contracting authority. It may

be useful, for example, to establish a committee comprised of representatives of both the contracting authority and the private partner to establish whether the facilities are in the prescribed condition and conform to the relevant requirements set forth in the PPP contract. The PPP contract may also provide for the appointment and terms of reference of such a committee, which may be given authority to request reasonable measures by the private partner to repair or eliminate any defects and deficiencies found in the facilities. It may be advisable to provide for a special inspection to take place at an appropriate stage well before the termination of the contract (at the latest one year, but in some cases even earlier), following which the contracting authority may require additional maintenance measures by the private partner so as to ensure that the goods are in proper condition at the time of the transfer. The contracting authority may wish to require in the PPP contract that the private partner provide special guarantees for the satisfactory handover of the facilities (see chap. IV, “PPP implementation: legal framework and PPP contract”, para. 118). The contracting authority might draw on such guarantees to pay the repair cost of damaged assets or property.

2. Financial arrangements upon termination

45. Termination of the PPP contract may occur before the private partner has been able to recover its investment, repay its debts and yield the expected profit, which may cause significant loss to the private partner. The contracting authority may also sustain loss, as it may need to make additional investment or incur considerable expense, for instance, to ensure the completion of the facility or the continued provision of the relevant services. In view of these circumstances, PPP contracts typically contain extensive provisions dealing with the financial rights and obligations of the parties upon termination. Contingent liabilities following termination of a PPP contract may be significant and need to be properly assessed in the contracting authority’s risk matrix at the very early stages of project planning (see chap. II, “Project planning and preparation”, paras. ...). Moreover, actual payments by the contracting authority — be they as compensation for termination or as regular payment for transfer of assets — may require sufficient budgetary allocation, which the contracting authority may need to seek well in advance of the time when payments may become due.

46. The following paragraphs deal with the various factors that contracting authorities and private partners usually consider when determining the standards of compensation to which either party may be entitled in the event of termination of the PPP contract. In this context, it is important to distinguish contractually agreed compensation standards from damages payable for wrongful termination. In the latter case, payments are a substitute for full restitution and serve the purpose of placing the injured party in essentially the same situation in which it would have found itself, had the other party not wrongfully terminated the contract.³ Contractually agreed compensation payments, in turn, do not typically have a restitution or punitive or character, and normally reflect what the parties regard as equitable compensation of investment made and possible frustrated profit or benefit due to the early termination of the contract.

47. There are essentially three approaches for determining compensation payments: (a) an income-based approach value an undertaking on the basis of its current and

³ The standard of damages under customary international law was generally defined by the Permanent Court of International Justice in the following terms: “The essential principle contained in the actual notion of an illegal act — a principle which seems to be established by international practice and in particular by the decisions of arbitral tribunals — is that reparation must, as far as possible, wipe out all the consequences of the illegal act and re-establish the situation which would, in all probability, have existed if that act had not been committed. Restitution in kind, or, if this is not possible, payment of a sum corresponding to the value which a restitution in kind would bear; the award, if need be, of damages for loss sustained which would not be covered by restitution in kind or payment in place of it”. (*Factory at Chorzow (Germany v. Poland), Merits*, 1928 PCIJ (Ser.A) No. 17 (13 September), p. 125).

prospective income using either discounted cash flow, adjusted present value or capitalized cash flow methods; (b) a market-based approach entails a comparison between the relevant project and the market value of a similar business or ownership interest as evidenced for the price for which it was sold; (c) lastly, an asset-based approach uses either the accounting value or the replacement value of the assets for which compensation is due. All three approaches may be used to set the parameters for calculating compensation for termination of a PPP contract, and they typically vary according to the stage in which termination occurs and the various grounds for termination. Nevertheless, the following factors usually play a central role in determining compensation parameters:

(a) *Outstanding debt, equity investment and anticipated profit.* Project termination is typically included among the events of default in the private partner's loan agreements. Since loan agreements usually include a so-called "acceleration clause", whereby the entire debt may become due upon the occurrence of an event of default, the immediate loss sustained by the private partner upon termination of the PPP contract may include the amount of debt then outstanding. Whether and to what extent such a loss might be compensated for by the contracting authority usually depends on the grounds for terminating the PPP contract. Partial compensation may be limited to an amount corresponding to the value of works satisfactorily performed by the private partner, whereas full compensation would cover the entire outstanding debt. Another category of loss that is sometimes considered in compensation arrangements refers to loss of equity investment by the private partner, to the extent that such an investment has not yet been recovered at the time of termination. Lastly, termination also deprives the private partner of future profits that the facility may generate. Although lost profits are not usually regarded as actual damage, in exceptional circumstances, such as wrongful termination by the contracting authority, the current value of expected future profit may be included in the compensation due to the private partner;

(b) *Degree of completion, residual value and amortization of assets.* Contractual compensation schemes for various termination grounds typically include compensation commensurate with the degree of completion of the works at the time of termination. The value of the works is usually determined on the basis of the investment required for construction (in particular if the termination takes place during the construction phase), the replacement cost or the "residual" value of the facility. The residual value means the market value of the infrastructure at the time of termination. Market value may be difficult to determine or even non-existent for certain types of physical infrastructure (such as bridges or roads) or for facilities whose operational life is close to expiry. Sometimes the residual value may be estimated taking into account the expected usefulness of the facility for the contracting authority. However, difficulties may be found in establishing the value of unfinished works, in particular if the amount of the investment still required by the contracting authority to render the facility operational would exceed the amount actually invested by the private partner. In any event, full payment of residual value seldom takes place, in particular where the project's revenue constitutes the sole remuneration for the private partner's investment. Thus, instead of full compensation for the facility's value, the private partner often receives compensation only for the residual value of assets that have not yet been fully amortized at the time of termination.

(a) Termination due to breach by the private partner

48. The private partner is not usually entitled to damages in the event of termination due to its own breach. In fact, the private partner may be under an obligation to pay damages to the contracting authority, although, in practice, a defaulting company whose debts are declared due by its creditors would seldom have sufficient remaining financial means for actual payment of such damages, which underscores the importance of bonds and other guarantees of performance that the private partner may

be required to provide (see chap. IV, “PPP implementation: legal framework and PPP contract”, paras. ...).

49. It should be noted that termination due to breach, even where it is regarded as a sanction for serious performance failure, should not cause unjust enrichment of either party. Thus, even in those PPPs in which the private partner builds an infrastructure facility intended to be ultimately transferred to the contracting authority, termination does not necessarily entail a right for the contracting authority to take over assets without making any payment to the private partner. An equitable solution for dealing with this issue may be to distinguish between the different types of asset, according to the arrangements envisaged for them in the PPP contract (see para. 40):

(a) *Assets that must be transferred to the contracting authority.* Where the PPP contract requires the automatic transfer of project assets to the contracting authority at the end of the PPP contract, termination on breach does not usually entail the payment of compensation to the private partner for those assets, except for the residual value of work satisfactorily performed, to the extent that it has not yet been amortized by the private partner;

(b) *Assets that may be purchased by the contracting authority, at its option.* Financial compensation may be adequate in cases where the contracting authority has an option to buy the assets at market value on expiry of the PPP contract or the right to require that such an option be given to the winner of a new project award. However, it may be legitimate to envisage financial compensation that is less than the full value of the assets so as to stimulate performance by the private partner. By the same token, such compensation may not need to cover the full cost of repaying the private partner’s outstanding debt. It is advisable to set forth the details of the formula for financial compensation in the PPP contract (that is, whether it covers the break-up value of the asset or the lesser of the outstanding debt and the alternative use value);

(c) *Assets that remain the property of the private partner.* Assets owned by the private partner that do not fall under (a) or (b) above may usually be removed and disposed of by the private partner, so that the need for compensation arrangements seldom arises. However, a different situation may arise in the case of fully privatized projects, where all assets, including those essential for the provision of the services, are owned by the private partner. In such cases, in order to ensure the continuity of the services, the contracting authority may find it necessary to take over the assets, even though not contemplated in the PPP contract. In such cases, it is generally accepted that the contracting authority should compensate the private partner for the fair market value of the assets. The PPP contract may, however, provide that the compensation should be reduced by the costs incurred by the contracting authority in operating the facility or engaging another operator.

(b) Termination due to breach by the contracting authority

50. The private partner is usually entitled to full compensation for loss sustained because of termination on grounds attributable to the contracting authority. The compensation due to the private partner usually includes compensation for the value of the works and installations, to the extent they have not already been amortized, as well as for the loss caused to the private partner, including lost profits. Those are usually calculated on the basis of the private partner’s revenue during previous financial years, when termination occurs during the operational phase, or on the basis of a projection of the expected benefit during the duration originally envisaged. The private partner may be entitled to full compensation of debt and equity, including the cost of debt servicing and lost profits.

(c) Termination on other grounds

51. When considering compensation arrangements for termination due to circumstances unrelated to breach by either party, it may be useful to distinguish exempting impediments from termination declared by the contracting authority for reasons such as public interest or other similar reasons.

(i) *Termination due to exempting impediments*

52. By definition, exempting impediments are events beyond the parties' control and, as a general rule, termination under such circumstances might not give rise to claims for damages by either party. However, there may be circumstances where it might be equitable to provide for some compensation to the private partner, such as fair compensation for works already completed, in particular where, because of the specialized nature of the assets, they cannot be removed by the private partner or meaningfully used by it, but may be effectively used by the contracting authority for the purpose of providing the relevant service (a bridge, for instance). However, since termination in such cases cannot be attributed to the contracting authority, the compensation due to the private partner may not necessarily need to be "full" compensation (that is, repayment of debt, equity and lost profits).

(ii) *Termination for reasons of public interest*

53. Where the PPP contract recognizes the contracting authority's right to terminate for reasons of public interest, the compensation payable to the private partner usually covers compensation for the same items included in compensation payable upon termination for breach by the contracting authority (see para. 46), although not necessarily to the full extent. In order to establish the equitable amount of compensation due to the private partner, it may be useful to distinguish between termination for reasons of public interest during the construction phase and termination during the operational phase:

(a) *Termination during the construction phase.* If the PPP contract is terminated during the construction and investment phase, the compensation arrangements may follow the standard practice in connection with large construction contracts that allow termination for convenience. In those cases, the contractor is usually entitled to the portion of the price that is attributable to the construction satisfactorily performed, as well as for expenses and losses incurred by the contractor arising from the termination. However, since the contracting authority does not normally pay a price for the construction work carried out by the private partner, the main criterion for calculating compensation would typically be the total investment effectively made by the private partner up to the time of termination, including all sums actually disbursed under the loan facilities extended to the private partner for the purpose of carrying out construction under the PPP contract, and expenses related to the cancellation of loan agreements. The risk of termination during the construction phase is a major risk for the financing of PPP projects. Some countries seek to mitigate this risk and enhance bankability of projects in which the contracting authority pays for the works performed by the private partner by issuing periodically negotiable certificates reflecting the amount of investment made in the relevant period (see chap. IV, "PPP implementation: legal framework and PPP contract", paras. ...). In such schemes, any amounts acknowledged but not yet paid by the contracting authority are automatically included in the residual sum due by the contracting authority as unamortized investment payment in case of early termination of the PPP contract. The overall financial implication of this form of indirect assumption of construction risk by the contracting authority, which is found in some PPP models, needs to be carefully considered at the project planning stage (see chap. II, "Project planning and preparation", paras. ...). One additional question is whether and to what extent the private partner may be entitled to recover lost profit for the portion of the contract that has been terminated for reasons of public interest. On the one hand, the private partner might have foregone other business opportunities in anticipation of completing and operating the facility through the anticipated duration of the PPP contract. On the other hand, an obligation of the contracting authority to compensate the private partner for its lost profit might make it financially prohibitive for the contracting authority to exercise its right of termination for convenience. One approach may be for the PPP contract to establish a scale of payments to be made by the contracting authority as compensation for lost profits and the amount of the

payments depending upon the stage of the construction that has been completed when the PPP contract is terminated for convenience;

(b) *Termination during the operational phase.* As regards the construction work satisfactorily completed by the private partner, the compensation arrangements may be the same as for termination during the construction phase. However, equitable compensation for termination during the operational phase might require fair compensation for lost profits. The higher standard of compensation in this case may be justified by the fact that, unlike termination during the construction phase, when the contracting authority might need to undertake to complete the work at its own expense, upon termination during the operational phase the contracting authority might be able to receive a completed facility capable of profitable operation. Compensation for lost profits is often calculated on the basis of the private partner's revenue during a certain number of previous financial years, but in some cases other elements, such as the anticipated profit on the basis of the agreed tariffs, may need to be taken into account, since the expected revenue is a central element in the feasibility studies and financial structuring of the project (see chap. II, "Project planning and preparation", paras. ...). This is so because in some infrastructure projects such as toll roads and similar projects, which are characterized by high financial costs and relatively low income at the early stages of operation, termination may occur before the project has a history of profitability.

3. Winding-up and transitional measures

54. Where the facility is transferred to the contracting authority at the end of the contract term, the parties may need to make a series of arrangements in order to ensure that the contracting authority will be able to operate the facility at the prescribed standards of efficiency and safety. The PPP contract may provide for the private partner's obligation to transfer certain technology or know-how required to operate the infrastructure facility. The PPP contract may also provide for the continuation, for a certain transitional period, of certain obligations of the private partner in respect of the operation and maintenance of the facility. It may further include an obligation, on the part of the private partner, to supply or facilitate the supply of spare parts that may be needed by the contracting authority to carry out repairs in the facility. It should be noted, however, that the private partner might not be able to undertake itself some of the transitional measures referred to below, since in most cases the private partner would have been established for the sole purpose of carrying out the project and would need to procure the relevant technology or spare parts from third parties.

(a) Transfer of technology and know-how

55. In some cases, the facility transferred to the contracting authority will embody various technological processes necessary for the generation of certain goods, such as electricity or potable water, or the provision of the relevant services, such as telephone services. The contracting authority will often wish to acquire a knowledge of those processes and their application. The contracting authority will also wish to acquire the technical information and skills necessary for the operation and maintenance of the facility. Even where the contracting authority has the basic capability to undertake certain elements of the operation and maintenance (for example, building or civil engineering), the contracting authority may need to acquire knowledge of special technical processes necessary to effect the operation in a manner appropriate to the facility in question. The communication to the contracting authority of that knowledge, information and skills is often referred to as the "transfer of technology". Obligations concerning the transfer of technology cannot be unilaterally imposed on the private partner and, in practice, these matters are the subject of extensive negotiations between the parties concerned. While the host country has a legitimate interest in gaining access to the technology needed to operate the facility, due account should be taken of the commercial interests and business strategies of the private investors.

56. Differing contractual arrangements can be adopted for the transfer of technology and the performance of the other obligations necessary to construct and operate the facility. The transfer of technology itself may occur in different ways, for example, through the licensing of industrial property, through the creation of a joint venture between the parties or the supply of confidential know-how. The *Guide* does not attempt to deal comprehensively with contract negotiation and drafting relating to the licensing of industrial property or the supply of know-how, as this subject has already been dealt with in detail in publications issued by other United Nations bodies.⁴ The following paragraphs merely note certain major issues concerning the communication of skills necessary for the operation and maintenance of the facility through the training of the contracting authority's personnel or through documentation.

57. The most important method of conveying to the contracting authority the technical information and skills necessary for the proper operation and maintenance of the works is the training of the contracting authority's personnel. In order to enable the contracting authority to decide on its training requirements, in the request for proposals or during the contract negotiations the contracting authority might request the private partner to supply an organizational chart showing the personnel requirements for the operation and maintenance of the works, including the basic technical and other qualifications the personnel must possess. Such a statement of requirements should be sufficiently detailed to enable the contracting authority to determine the extent of training required in relation to the personnel available to it. The private partner will often have the capability to provide the training. In some cases, however, the training may be given more effectively by a consulting engineer or through an institution specializing in training.

58. Technical information and skills necessary for the proper operation and maintenance of the facility may also be conveyed through the supply of technical documentation. The documentation to be supplied may consist of plans, drawings, formulas, manuals of operation and maintenance and safety instructions. It may be advisable to list in the PPP contract the documents to be supplied. The private partner may be required to supply documents that are comprehensive and clearly drafted in a specified language. It may be advisable to obligate the private partner, at the request of the contracting authority, to give demonstrations of procedures described in the documentation if the procedures cannot be understood without demonstrations.

59. The points in time when the documentation is to be supplied may be specified. The PPP contract may provide that the supply of all documentation is to be completed by the time fixed in the contract for completion of the construction. The parties may also wish to provide that transfer of the facility is not to be considered completed unless all documentation relating to the operation of the works and required under the contract to be delivered prior to the completion has been supplied. It may be advisable to provide that some documentation, such as operating manuals, is to be supplied during construction, as such documentation may enable the contracting authority's personnel or engineer to obtain an understanding of the working of machinery or equipment while it is being erected.

⁴ The negotiation and drafting of contracts for the licensing of industrial property and the supply of know-how is dealt with in detail in World Intellectual Property Organization, *Licensing Guide for Developing Countries* (WIPO publication No. 620 (E), 1977). The main issues to be considered in negotiating and drafting such contracts are set forth in the *Guidelines for Evaluation of Transfer of Technology Agreements*, Development and Transfer of Technology Series, No. 12 (ID/233, 1979), and in the *Guide for Use in Drawing Up Contracts Relating to the International Transfer of Know-How in the Engineering Industry* (United Nations publication, Sales No. E.70.II.E.15). Another relevant publication is the *Handbook on the Acquisition of Technology by Developing Countries* (United Nations publication, Sales No. E.78.II.D.15). For a discussion of transfer of technology in the context of contracts for the construction of industrial works, see the *UNCITRAL Legal Guide on Drawing Up International Contracts for the Construction of Industrial Works* (United Nations publication, Sales No. E.87.V.10), chap. VI, "Transfer of technology".

(b) Assistance in connection with operation and maintenance of the facility after its transfer

60. The degree of assistance from the private partner needed by the contracting authority will depend on the technology and skilled personnel available to the contracting authority. If the contracting authority lacks personnel sufficiently skilled for the technical operation of the facility, it may wish to obtain the private partner's assistance in operating the facility, at least for an initial period. The contracting authority may, in some cases, wish the private partner to provide the personnel to occupy many of the technical posts in the facility, while in other cases the contracting authority may wish the private partner only to provide technical experts to collaborate in an advisory capacity with the contracting authority's personnel in the performance of a few highly specialized operations.

61. In order to assist the contracting authority in operating and maintaining the facility, the PPP contract may require the private partner to submit, prior to the transfer of the facility, an operation and maintenance programme designed to keep the facility operating over its remaining lifetime at the level of efficiency required under the PPP contract. An operation and maintenance programme would include matters such as an organizational chart showing the key personnel required for the technical operation of the facility and the functions to be discharged by each person; periodic inspection of the facility; lubrication, cleaning and adjustment; and replacement of defective or worn-out parts. Maintenance may also include operations of an organizational character, such as establishing a maintenance schedule or maintenance records. The private partner may also be required by the contracting authority to supply operation and maintenance manuals setting out appropriate operation and maintenance procedures. Those manuals should be in a format and language readily understood by the contracting authority's personnel.

62. An effective means of training the contracting authority's personnel in operation and maintenance procedures may be to provide in the PPP contract that the personnel of the contracting authority are to be associated with the personnel of the private partner in carrying out the operation and maintenance for a certain time prior to or beyond the transfer of the facility. The positions to be occupied by the personnel employed by the contracting authority can then be identified and their qualifications and experience specified. In order to avoid friction and inefficiency, it is desirable that any authority to be exercised by the personnel of each party over the personnel of the other during the relevant period be clearly described.

(c) Supplies of spare parts

63. In projects that provide for the transfer of the facility to the contracting authority, the contracting authority will have to obtain spare parts to replace those which are worn out or damaged and to maintain, repair and operate the facility. Spare parts may not be available locally and the contracting authority may have to depend on the private partner to supply them. The planning of the parties with respect to the supply of spare parts and services after the transfer of the facility would be greatly facilitated if the parties were to anticipate and provide in the PPP contract or in a subsequent agreement for the needs of the contracting authority in that regard. However, given the long duration of most PPPs, it may be difficult for the parties to anticipate and provide in the PPP contract for the needs of the contracting authority after the transfer of the facility.

64. A possible approach may be for the parties to enter into a separate contract regulating these matters.⁵ Such a contract may be entered into closer in time to the

⁵ The Economic Commission for Europe has prepared a *Guide on Drawing Up International Contracts for Services Relating to Maintenance, Repair and Operation of Industrial and Other Works* (ECE/TRADE/154), mutatis mutandis, which may assist parties in drafting a separate contract or contracts dealing with maintenance and repair of the facility after its transfer to the contracting authority.

transfer of the facility, when the contracting authority may have a clearer view of its requirements. If spare parts are manufactured not by the private partner but by suppliers, the contracting authority may prefer to enter into contracts with those suppliers rather than to obtain them from the private partner or, alternatively, the contracting authority may wish to have the private partner procure them as the contracting authority's agent.

65. It is desirable for the contracting authority's personnel to develop the technical capacity to install the spare parts. For this purpose, the PPP contract may oblige the private partner to supply the necessary instruction manuals, tools and equipment. The instruction manuals should be in a format and language readily understood by the contracting authority's personnel. The contract may also require the private partner to furnish "as built" drawings indicating how the various pieces of equipment interconnect and how access can be obtained to them to enable the spare parts to be installed and to enable maintenance and repairs to be carried out. In certain cases, it may be appropriate to require the private partner to train the contracting authority's personnel in the installation of spare parts.

(d) Repairs

66. It is in the contracting authority's interest to enter into contractual arrangements that will ensure expeditious repair of the facility in the event of a breakdown. In many cases, the private partner may be better qualified than a third person to effect repairs. In addition, if the PPP contract prevents the contracting authority from disclosing to third persons the technology supplied by the private partner, this may limit the selection of third persons to effect repairs to those who provide assurances regarding non-disclosure of the private partner's technology that are acceptable to the private partner. On the other hand, if major items of equipment have been manufactured for the private partner by suppliers, the contracting authority may find it preferable to enter into independent contracts for repair with them. In defining the nature and duration of repair obligations imposed on the private partner, if any, it is advisable to do so clearly and to distinguish them from obligations assumed by the private partner under quality guarantees to remedy defects in the facility.

IV. Duration, extension and termination of the PPP contract PPP contract

1. Duration and extension of the PPP contract

Model provision 48. Duration and extension of the PPP contract

The PPP contract shall set forth its duration, which shall take into account the following factors:

- (a) The nature and amount of investment required to be made by the private partner;
- (b) The normal amortization period for the particular facilities and installations to be built, expanded, refurbished or renovated under the contract;
- (c) The contracting authority's needs and requirements in relation to the facilities or services concerned;
- (d) Any relevant policies concerning the competition and market structure for the infrastructure or service sector concerns, as laid down in applicable laws and regulations.

Model Provision 49. Extension of the PPP contract

The contracting authority may not agree to extend the duration of the PPP contract except as a result of the following circumstances:

- (a) Delay in completion or interruption of operation due to circumstances beyond the reasonable control of either party;
- (b) Project suspension brought about by acts of the contracting authority or other public authorities;
- (c) Increase in costs arising from requirements of the contracting authority not originally foreseen in the PPP contract, if the private partner would not be able to recover such costs without such extension; or
- (d) [*Other circumstances, as specified by the enacting State*].⁴⁵

2. Termination of the PPP contract

Model provision 50. Termination of the PPP contract by the contracting authority

The contracting authority may terminate the PPP contract:

- (a) In the event that it can no longer be reasonably expected that the private partner will be able or willing to perform its obligations, owing to insolvency, serious breach or otherwise;

⁴⁵ The enacting State may wish to consider the possibility of having the law authorize a consensual extension of the PPP contract pursuant to its terms, for reasons of public interest, as justified in the record to be kept by the contracting authority pursuant to model provision 26.

(b) For compelling⁴⁶ reasons of public interest, subject to payment of compensation to the private partner, the terms of the compensation to be as agreed in the PPP contract;

(c) [*Other circumstances that the enacting State might wish to add*].

Model provision 51. Termination of the PPP contract by the private partner

The private partner may not terminate the PPP contract except under the following circumstances:

(a) In the event of serious breach by the contracting authority or other public authority of its obligations in connection with the PPP contract;

(b) If the conditions for a revision of the PPP contract under model provision 40, paragraph 1, are met, but the parties have failed to agree on a revision of the PPP contract; or

(c) If the cost of the private partner's performance of the PPP contract has substantially increased or the value that the private partner receives for such performance has substantially diminished as a result of acts or omissions of the contracting authority or other public authorities, for instance, pursuant to model provision 28, subparagraphs (h) and (i), and the parties have failed to agree on a revision of the PPP contract.

Model provision 52. Termination of the PPP contract by either party

Either party shall have the right to terminate the PPP contract in the event that the performance of its obligations is rendered impossible by circumstances beyond either party's reasonable control. The parties shall also have the right to terminate the PPP contract by mutual consent.

3. Arrangements upon termination or expiry of the PPP contract

Model provision 53. Compensation upon termination of the PPP contract

The PPP contract shall stipulate how compensation due to either party is calculated in the event of termination of the PPP contract, providing, where appropriate, for compensation for the fair value of works performed under the PPP contract, costs incurred or losses sustained by either party, including, as appropriate, lost profits.

Model provision 54. Wind-up and transfer measures

The PPP contract shall provide, as appropriate, for:

(a) Mechanisms and procedures for the transfer of assets to the contracting authority;

(b) The compensation to which the private partner may be entitled in respect of assets transferred to the contracting authority or to a new private partner or purchased by the contracting authority;

⁴⁶ Possible situations constituting a compelling reason of public interest are discussed in the Legislative Guide, chap. V, "Duration, extension and termination of the project agreement", para. 27.

- (c) The transfer of technology required for the operation of the facility;
- (d) The training of the contracting authority's personnel or of a successor private partner in the operation and maintenance of the facility;
- (e) The provision, by the private partner, of continuing support services and resources, including the supply of spare parts, if required, for a reasonable period after the transfer of the facility to the contracting authority or to a successor private partner.
