

## IV. MAIN TYPES OF PSP ARRANGEMENTS

### A. Two broad PSP categories

The bulk of PSP transactions contemplated in this Toolkit may be broken down into two broad categories. Those categories include:

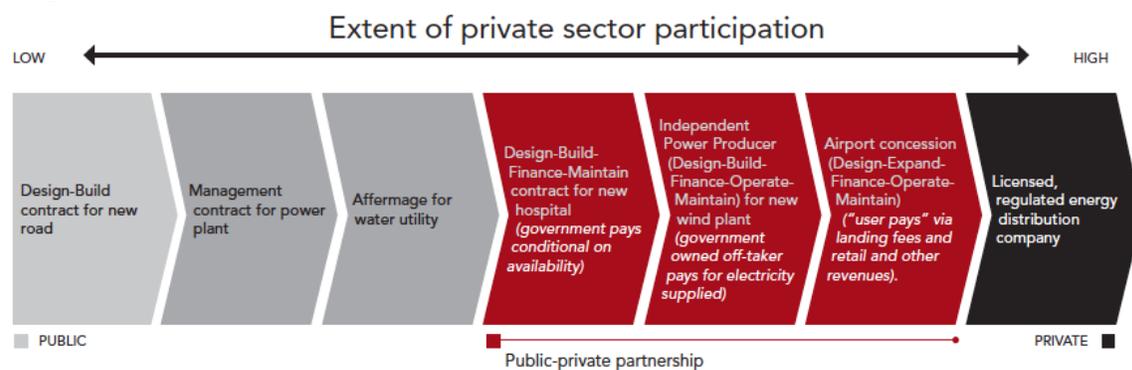
- (a) Operation of public assets or services that already exist – such arrangements are sometimes referred to broadly as “delegated management” contracts;
- (b) Development (i.e., designing and constructing) and operation of new assets.

**PSPs operated by SMEs in the FCV context are likely to involve existing public assets.** Because the investment outlay expected from the project company in the first category (operation of existing services and facilities) category is likely to be less substantial, even if it involves some rehabilitation, than in second category (development and operation of new assets), SME participation in PSPs in particular in the FCV context is more likely to be in one of the PSP forms falling under the first category. As illustrated in the case studies, however, there may be variants in which some extension of existing distribution networks is involved.

### B. Main types of PSP transactions

Bearing in mind the caveat mentioned at the outset about variations in use and understanding of terminology across country systems that is characteristic of the PSP/PPP field, outlined below in Table [4] are the main types of PSP arrangements in the two main PSP/PPP categories referred to in the linear graphic. It is important to note that the PSP models involve varying degrees of participation of the private sector, falling short to one extent or another of full privatization, as outlined below:

Figure IV.1



Source: *PPP Reference Guide, supra*, note 29, p. 9

The case studies cited in the Toolkit fall in different places in the above spectrum of PSP/PPP types, some of which have particular relevance to involvement of SMEs in FCV contexts. Table IV.1, below, provides an indication of where the various case study scenarios fit in the spectrum of different PSP/PPP types and models. It should be noted,

however, that, such classification of PSP/PPP models are not ironclad. To one extent or another, in practical application, especially in the SME/FCV context, there may be in individual cases some mix of elements from different types and models.

**Table IV.1 – PSP/PPP models in SME/FCV case studies**

PSP models	Role of operator	SME/FCV relevance
Provision of service	PO provides services traditionally provided by government; contracts of this type in which the private party has greater control, such as bringing in its own staff, are sometimes referred to as “operation and management contracts” and may have duration somewhat longer than the typical duration of a management contract, which is 1 to 5 years	Rwanda case study <ul style="list-style-type: none"> <li>• Grants provided to communities to finance construction of water and sanitation facilities</li> <li>• Involved private sector, NGOs as providers of goods, works, services; public sector as facilitators of sub-sector development and management process</li> <li>• Required technical assistance/capacity building</li> </ul>
Management contract	Private operator operates and maintains facility and is paid a management fee; some repair and rehabilitation obligations may be included	
Leasing/affermage (civil law) contract	Facility is leased to private operator, who pays a fee and operates and maintains, and obtains revenues from users; repair and replacement obligations may be greater in the lease (rather than affermage) context; in some systems affermage model may entail investment by the operator	<b>Benin (water)</b> <ul style="list-style-type: none"> <li>• Did not cater sufficiently to investment needs for rehabilitation works as well as for extending PWS networks</li> </ul>
Concession	Private operator granted an exclusive right to operate and must maintain facility for an extended period of time in accordance with stipulated performance levels; private party may be required to pay a fee; private party compensated by revenues drawn from users	<b>Somalia (water)</b> <ul style="list-style-type: none"> <li>• Ad hoc/home-grown company creation approach to overcome reluctance of urban water management companies to extend services to rural areas and low capacity of government to run water supply for rural populations</li> <li>• Need for back-up technical services for start-up companies</li> </ul> <b>Benin (water)</b> <ul style="list-style-type: none"> <li>• Subsidized concession approach</li> <li>• Introduces investment obligations for POs, thus transferring portion of risks to POs</li> </ul>

		<ul style="list-style-type: none"> <li>• Clustering of PWS introduced to increase economic attractiveness for POs and for commercial lenders</li> <li>• Public funds mobilized for network rehabilitation, extensions and densification</li> </ul>
Design-Build (DB)	Private party designs and builds facility; following completion, government operates and maintains	
Design-Build-Operate (DBO)	Private party designs, builds and operates facility; government retains ownership; operator may be responsible for replacement of expired assets; public party responsible for paying operator for costs of construction and operation	<p>Mali (energy)</p> <ul style="list-style-type: none"> <li>• Investment subsidy provided for construction of small scale mini-grids in rural areas and to ensure affordable tariffs and acceptable financial rate of return for Pos</li> </ul>
Build-Operate-Transfer (BOT)	Private party builds, operates, maintains facility; at end of operational period, facility transferred to government; may include design work (in which case the term “Design-Build-Operate-Maintain” (DBOM) may also be used	
Build-Lease-Transfer (BLT)	Private party builds facility and then leases/rents it, before ultimately transferring it back to government; may include design component (Design-Build-Lease)	<p>Cambodia</p> <ul style="list-style-type: none"> <li>• IPP approach</li> <li>• Largely self-financed, though private operators in rural areas have been supported by donors through targeted subsidy incentives and Design-Build-Lease contracts intended to reduce investment risk</li> </ul>
Design-Build-Finance-Operate/Maintain (DBFO or DBFM)	Private sector party designs, builds, finances and operates or maintains the facility for an extended duration, after which the facility is transferred to the government	
Build-Own-Operate (BOO)	Private sector party finances, designs, builds, operates and maintains facility and has ownership in it, with no required transfer back to government	
Build-Own-Operate-Transfer	Like BOO, but private sector party to transfer facility back to government after stipulated operational period	
Buy-Build-Operate (BBO)	Public asset sold to private sector party, which rehabilitates or expand the asset, and operates it	

Licenses	Private companies responsible for providing designated services, without any public sector investment in the projects; the licenses may be used to set output standards for private sector	
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**The range of PSP models that may be applicable will be subject to the constraints under which SMEs operate.** For SMEs, one must also consider their capital and resources and therefore the likely types of PSPs they are able to be involved in and what public sector support is needed to enable SME participation. Thus, one can easily see SMEs involved in user-pay O&M (where government is an unreliable counterparty) but they may not be able to provide expansion or rehabilitation of systems, etc.

**It should be noted that the above listing of PSP/PPP models is intended to be indicative and is subject to the above-mentioned caveat that the exact types of terms utilized and their meanings may differ from country to country, and from transaction to transaction.** Moreover, apart from terminological differences, there may be instances in which compound PSP forms are crafted that combine features of two or more PSP models.

### C. Variable features of PSP transactions

**As outlined in this section, the various PSP/PPP models outlined in Table [4] represent different approaches to key design issues of PSP transactions<sup>131</sup>.** At the same time, subject to any mandatory definitions and requirements in applicable policies and legislation, the types of PSP models and the different features attributable to each particular model are not necessarily cast in stone or understood in a uniform manner in all systems and transactions. The approach applied in a given PSP transaction, and some of its features with respect to certain key issues, may incorporate characteristics from more than one of the available models and customize the features to fit the function to be performed by the operator and other relevant circumstances of the parties and the transactions<sup>132</sup>.

**Fitness for purpose is a key principle in selecting an appropriate PSP model.** Together, the range of possible PSP/PPP models and the possibilities of adapting PSP contracts in a fit-for-purpose manner enable the selection of the PSP model and tailoring the contract to be responsive to the circumstances underlying the particular PSP transaction.

#### 1. Core function of private sector party

**Different PSP models reflect to one extent or another differences in the functions to be performed by the private sector party.** Depending upon how the PSP transaction is designed, the responsibilities of the private sector party range from, on one end of the

<sup>131</sup> For a more elaborated treatment of some of the issues outlined in this section, in particular, the characteristics of different types of PPP models, see PPP Reference Guide, *supra*, note 29, Module 1.

<sup>132</sup> For an analysis along these lines, see Delmon, *supra*, note 94, p. 11.

spectrum, merely managing or operating a facility (e.g., management contract, operation and management contract), to, on the other end of the spectrum, design, building and operating the facility (e.g., Design-Build-Operate model; licensing arrangements).

## 2. Repair and rehabilitation

**In particular in PSP arrangements dealing with existing infrastructure facilities, the allocation of repair and rehabilitation responsibility may be a key issue in assigning tasks and allocating risks.** PSP models differ as to the extent of any obligation of the private sector operator to repair and rehabilitate the infrastructure facilities (e.g., in management contracts such obligations tend to be minimal); there may also be differences displayed in certain forms of lease-type of PSP arrangements, with repair and rehabilitation obligations of the operator tending to be minimal in *affermage* contracts (lease-type of arrangements in civil law system) and lease contracts in other systems, where such obligations may be greater).

## 3. Existing or new assets

**Some PSP models are applicable to operation by the private sector party of an existing facility.** That is the case in particular with regard to leasing/*affermage* contracts, and concession). Other models are appropriate for PSP/PPP involving construction and operation of new facilities (e.g., DBO, BOT, DBFO).

## 4. Investment by private sector party

**In some PSP transactions, there is no requirement that the private sector party make any investment in the facility.** That is the case, for example, in management contracts, *affermage*, and leases (unless otherwise stipulated). In some other types of transactions there is an investment component (e.g., DBFO).

## 5. Payment of fee to operator

**A key question in designing a PSP project concerns how that operator will obtain remuneration.** PSP models differ as to whether a fee is to be paid by the private sector party. In some PSP models the private sector party is paid a fee (e.g., management contract).

## 6. Payment of fee by operator

**In some other PSP models, it is the private sector party that pays a fee for the right to exploit the infrastructure facility.** For example, in a lease or in a concession contract payment of a fee by the operator may be required. In such a case the payment risk of the operator includes not only obtaining the revenues needed to cover the fee, but also to recoup other costs and profit.

## 7. Payment to operator

**PSP arrangements differ as to the manner in which the private sector operator is remunerated for the services performed.** In some types of arrangements, the private sector party is remunerated by the payment of a fee (e.g., in a management contract). In some other types of transactions, the operator recoups its costs and earns its profit from the revenues collected from the operation of the facility. Depending upon the nature of the infrastructure facility, the public sector sponsor of the PSP may derive the money for the fee from revenue generated by the facility. In the FCV context, depending upon the degree of reliability of payment from users, the private sector operator may in fact prefer, so as not to bear demand risk, that payment be made by a governmental body (backstopped by a sovereign guarantee, IFI guarantee, minimum revenue guarantees). However, in FCV circumstances that may not necessarily be a viable option. When private sector operators have to bear that risk, there may be a tendency on the part of private sector operators to cherry-pick localities where there may be a greater assurance of users' willingness and ability to make payment.

## 8. Financing of construction and rehabilitation

**Depending upon the nature of the PSP transaction, the issues of financing may arise and need to be addressed in the contract.** That is the case in particular when significant construction, rehabilitation or expansion is involved in the PSP. Just because an operator is responsible for construction, does not necessarily mean that the operator is also responsible for financing the construction (such an allocation of responsibilities may be found, for example, in the DBO variant). To the extent that the public sector sponsor is providing such financing, which may be a particularly relevant option in the context of SME operators, the role of the public sector party in approving the operator's plans and designs would tend to be greater. In such arrangements, while the financial risk may be primarily shouldered by the public sector entity, the risk of design problems in the facility is primarily borne by the private sector party, who will not only design the facility but then also have to operate it.

## 9. Control over operations and staff

**In some forms of PSP, the operator typically has limited control over staffing and operations (management contracts).** In other forms, the operator may be accorded greater control (e.g., in the genre referred to as "Operation and Maintenance" , more control over staffing may be in the hands of the operator. There tends to be a correlation between the degree of staffing and operations control given to the operator and the duration of the contract.

## 10. Procurement selection criteria

**One of the characteristics of PSP contracting is that the bid evaluation criteria typically applied in public procurement proceedings (e.g., lowest-bid price or economically most advantageous bid) are not necessarily relevant in a classical sense.** The exact formulation of the main comparative evaluation criteria will depend on the type of PSP arrangement. For example,

- In a management or operation contract, proposals may be ranked on the basis of the management or operator's fee
- In PSP arrangements where the operator pays a fee to the public sector sponsor, the procurement competition may be centered on the level of the fee offered by bidders (e.g., in a lease contract)
- In PSPs in which there is a possibility of subsidization, a key criterion may be the level of the subsidy, with preferential scoring being awarded with respect to that criterion to proposals requiring lower subsidies
- In projects in which end users would pay a tariff, competitive factors could include the level of the tariff to be charged to the end-users

## 11. Allocation of risk

**The distribution of risk between the public sector and the private sector parties differs, depending upon the PSP model, and how risk allocation is specifically stipulated in the agreement.** Common categories of PSP risk include<sup>133</sup>:

- **Site risks** – e.g., project site availability or conditions
- **Design, construction and commissioning** – e.g., quality shortfalls or delays
- **Operation** – e.g., interruption of service
- **Demand, and other commercial risk** – e.g., level of usage lower than expected; changes in legal/regulatory framework

**Provisions on government payments may have risk allocation implications.** For example, in some PSP models, the risk that the facility will generate requisite levels of revenues is borne by the public sector party (e.g., management contract). In some other models the private sector operator bears that risk (e.g., in a lease or concession contract, or in the DBO). Other risks that may be allocated in a different manner depending upon the type of PSP model being applied include in particular that the facility will at some point or points during the period of operation by the private sector party require repair and replacement or rehabilitation to one extent or another. In an affermage contract no such responsibility is typically undertaken by the operator, whereas in a lease, or even in a management contract, such an obligation might perhaps be allocated to the operator.

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<sup>133</sup> For a more detailed discussion of risk identification, allocation and related issues, see *PPP Reference Guide, supra*, note 29, pp. 140-147..

## 12. Ownership of facility

**In some forms of PSP/PPP, the public sector retains ownership of the facility. That is the case, for example,** in the management contract, affermage, lease, and BLT models. In some other forms, ownership may vest in the private sector party for a period of time or, in some cases, permanently (e.g., BOOT, BOO, BBO).

## 13. Duration

**There is a potentially wide range of durations for PSP transactions, depending in particular on the PSP model being applied.** Models in which the private sector party has a limited financial obligation, if any at all, are likely to have a shorter duration (e.g., management, affermage and lease contracts). In other PSP models, in particular those in which there is a financing role for the private sector party, the duration is likely to be longer including to allow the operator to recoup the investment (e.g., concessions, contract). The duration of PSP arrangements involving SMEs as operators tends to reflect the extent to which the arrangement also involves financing responsibility and the shouldering of significant risk by the operator.

**Apart from the type of PSP model being applied, other factors may be relevant to determining the duration of a PSP arrangement.** Such other factors may include, for example, the extent of experience of operators, and the ability of operators<sup>134</sup>.

# V. PLANNING, PROCUREMENT AND IMPLEMENTATION

## A. Key steps in PSP project cycle

**Summarized below are the main stages and steps in the process of identifying, developing, procuring and implementing a PSP project<sup>135</sup>.**

### 1. Identification of PSP project

**In a “top-down” scenario, this stage involves identification by the public sector entity of possible projects and development of the PSP concept.** This stage may include conducting an inventory of existing infrastructure assets that might be possible candidates for PSP projects involving SMEs.

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<sup>134</sup> For a discussion of factors relevant to duration, see Delmon, *supra*, note 94, p. 21.

<sup>135</sup> *PPP Reference Guide*, *supra*, note 29, pp. 69 to 72; Delmon, *supra*, note 94, concerning drafting of PPP agreements for small-scale water projects.