



NATIONAL PUBLIC-PRIVATE PARTNERSHIPS GUIDELINES

Annex H – Value-for-money analysis guidelines

PPP Unit of the Ministry of Finance, Planning and Economic Development

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List of abbreviations

PPP	Public-private partnership
PSC	Public Sector Comparator
SPC	Special Purpose Company
VFM	Value-for-money

1. Introduction

1.1 Background

- 1.1.1. In 2010, the Government of Uganda adopted a PPP policy. The policy creates a framework for the involvement of the private sector in provision of public infrastructure and services.
- 1.1.2. The *Public Private Partnerships Act* came into force on 1 October 2015. The *PPP Act* establishes the legal and institutional framework for the concrete implementation of PPP projects. The *PPP Act* provides for the establishment of the Public Private Partnerships Committee, the Public Private Partnerships Unit and the Project Development Facilitation Fund. The *PPP Act* also sets out the procedure for the implementation of PPP projects across all steps of the project cycle from inception to the end date of the PPP agreement. Furthermore, the *PPP Act* defines the contents of the PPP agreement.
- 1.1.3. Pursuant to the *PPP Act*, the Minister responsible for finance issued the *Public Private Partnerships Regulations, 2019* and the *Public Private Partnerships (Meetings of the Committee) Regulations, 2019* (together, *the PPP Regulations 2019*). The *PPP Regulations* prescribe the bidding methods and procedures for the selection of a Private Party.
- 1.1.4. The *Guidelines* presented in this document are firmly grounded in the policy and legal framework that has been put in place by the Government for the implementation of PPP projects.

1.2 This document

- 1.2.1. The National Public-Private Partnership Guidelines consist of a Main Document and a set of Annexes.
- 1.2.2. This document is Annex H, which presents guidelines for conducting the value-for-money (VFM) analysis of PPP projects.

2. VFM analysis guidelines

2.1 Introduction

- 2.1.1. Value-for-Money (VFM) analysis is an exercise to justify the use of a PPP model over the conventional public procurement model. The results of the VFM analysis play a key role in the decisions on the approval of the Project as a PPP.
- 2.1.2. There are two levels of VFM analysis.
- (a) A qualitative VFM analysis consists of an assessment of the presence of qualitative VFM drivers in the project. If there are few or no VFM drivers present, then there is no justification to undertake the project as a PPP. The disadvantages of PPP (higher transaction costs, higher financing costs, loss of flexibility for the Contracting Authority) are then likely to outweigh the gains in efficiency and quality.
 - (b) In a quantitative VFM analysis the complete lifecycle costs of the project under the PPP option and under a conventional public procurement are compared. This allows the Contracting Authority to identify the most efficient option.
- 2.1.3. An advantage of a qualitative VFM analysis is that it only requires limited input data. The assessment is based on the evaluation of a limited set of basic data on the project characteristics. Furthermore, the results of a qualitative VFM analysis yields insights on the most suitable type of PPP agreement (i.e. the type of PPP agreement that makes most of use of the VFM drivers that are present in the project). The drawback of a qualitative VFM analysis is that it produces no monetary comparison of the PPP and non-PPP options.
- 2.1.4. Making such a monetary comparison is the objective of the quantitative VFM analysis. However, to do so, the quantitative VFM analysis requires quantitative data on the differences between the PPP and non-PPP options of the project being studied. Such data is often lacking, or insufficiently certain and precise, so that the reliability of the results of the analysis is reduced.
- 2.1.5. Both qualitative and quantitative VFM analysis have a role in the feasibility study. The qualitative VFM analysis yields useful information for the choice of the type of PPP agreement, and for the definition and optimization of the PPP arrangement. The quantitative VFM analysis provides a strong justification for PPP based on a quantitative comparison of the costs of the PPP and non-PPP options, on the condition, however, that sufficiently reliable input data for the analysis is available.

2.2 Qualitative VFM Analysis

- 2.2.1. The qualitative VFM analysis is conducted by considering the advantages and disadvantages of PPP compared to conventional public procurement, and the driving factors behind this. A methodological framework is provided by the table below, which contains a structured list of questions aimed at the assessment of (1) the value for money drivers of the PPP and (2) the feasibility drivers of the PPP. At the end of the table an overall conclusion is drawn with respect to the appropriateness of the proposed PPP model (and, the case being, suggestions for the optimization of the PPP model). More detailed information on the VFM drivers is presented in Annex A – Key PPP Concepts of the *Guidelines*.

Table 1: Qualitative VFM assessment

	Driver	Questions	Low	Medium	High
V	VFM drivers	The six drivers below assess the presence and strength of driving factors behind the advantages of PPP. On the basis of your answers to the questions, please indicate in the right columns of the table to what extent the driver is present in the project being studied.¹			
V1	Output-based contracting	Does the Private Party have some degree of flexibility in the nature of the technical solution/service and/or the scope of the project? Is the solution adequately free from the constraints of imposed by the procuring authority, legal requirements and/or technical standards? Is there scope for innovation by the Private Party in either the design of the solution or in the provision of the services?	O	O	O
V2	Optimal risk allocation	Is there scope for significant risk transfer to the Private Party (in accordance with the principle of optimal risk allocation)? Can the payment mechanism and contract terms incentivise good risk management by the Private Party?	O	O	O
V3	Private sector outsourcing	Does the private sector have significant cost advantages in comparison with the contracting authority in the delivery of the project services (owing to greater efficiency, economies of scale, greater experience/expertise, ...)? Could the private sector achieve a better commercial utilisation of the assets underpinning the project, resulting in higher revenues?	O	O	O
V4	Life-cycle optimisation	Does the project offer the potential to achieve efficiency gains from life-cycle optimisation? Is it possible to integrate the design, build and operation elements of the project? Are there significant ongoing operating costs and maintenance requirement? Are these likely to be sensitive to the type of construction?	O	O	O
V5	Performance-based payments	Can the outcomes or outputs of the Project be described in contractual terms, which would be objective and measurable? Would incentives for service delivery be enhanced through a performance payment mechanism as proposed in the PPP?	O	O	O
V6	Private financing	Is private financing necessary to undertake the project? Are there no or insufficient public funds available, so that the project cannot be undertaken (or only with large delays) unless private financing steps in?	O	O	O

¹ This table shows a scale with three levels: low, medium and high. Alternative scales may also be used, if they are found to be more convenient or suitable.

	Driver	Questions	Low	Medium	High
F	Feasibility drivers	The seven questions below assess the presence and strength of driving factors behind the feasibility of PPP (and absence of obstacles to PPP). On the basis of your answers to the questions, please indicate in the right columns of the table to which extent the driver is present in the project being studied.			
F1	Output specifications	<p>Is it possible to describe the services in clear, objective output- and result-based terms (and not in terms of activities), which can be included in a long term contract?</p> <p>Can the contractual outputs be defined so that they can be objectively measured?</p> <p>Can the quality of the service be objectively measured and assessed?</p> <p>Is a possible to establish an on objectively verifiable link between the output specifications, the monitoring of the actual performance and the payment mechanism?</p>	O	O	O
F2	Revenue base	<p>Is there an identifiable revenue base for the project?</p> <p>In case of user-pays project: are there sufficient users of the project services with the willingness and ability to pay of the services?</p> <p>In case of government-pays project: can the contracting authority commit to the payment of the availability fees.</p> <p>Is the revenue base stable and predictable?</p>	O	O	O
F3	Operational flexibility of contracting authority	<p>Will the PPP arrangement leave the contracting authority with sufficient operational flexibility to respond to future needs?</p> <p>What is the likelihood of large changes in service needs during the life of the PPP Contract that would require a change of the contract?</p> <p>If the services performed under the PPP Arrangement interfere with other services or other projects not covered by the PPP Contract, are these interfaces manageable?</p> <p>If the PPP Arrangement necessitates the transfer of public sector staff to the Private Party, will it be possible to accomplish this transfer without major problems or resistance?</p>	O	O	O
F4	Capacity of Implementing Agency	Does the contracting authority have sufficient human and financial resources to prepare and tender the PPP Project?	O	O	O
F5	Policy and regulatory barriers	<p>Is it the case that there are no legal or regulatory obstacles to delegating the provision of the services to a Private Party?</p> <p>Is the provision of the services under a PPP Arrangement compatible with the safeguarding of public interests (for instance with respect to environmental sustainability, workers' safety, fair competition, ...)?</p> <p>Is the provision of the services under a PPP Arrangement compatible with other policy goals (for instance with respect to land use, income distribution, economic development, ...)?</p>	O	O	O
F6	Large and uncontrollable risks	Is it the case that there are no large risks that are largely outside the control of the Private Party and that may make private finance unfeasible or very expensive?	O	O	O

	Driver	Questions	Low	Medium	High
		Examples are traffic risk (especially for greenfield projects and if macroeconomic conditions are highly uncertain), large uncertainties about the costs of meeting requirements imposed by environmental regulations, the use of unproven technology, difficult terrain conditions.			
F7	Private sector capacity and interest	Is there evidence that the private sector is technically and financially capable of implementing the project? Is there likely to be a sufficiently large number of bidders interested in the project to ensure effective competition? Is there evidence that financiers are willing to provide funds for investing in this type of projects?	O	O	O
VfM	Overall assessment	Given the answers to the questions above, are there enough indications that the proposed PPP arrangement yields Value for Money and is feasible. Are there opportunities for the optimization of the proposed PPP arrangement (in order to strengthen drivers of advantages and feasibility of PPP).			

2.2.2. Deliberately no weights have been assigned to the driving factors indicating their relative importance. Every PPP project has unique characteristics. It is therefore not possible to determine in advance the relative importance of the above drivers, which would apply in all projects. The overall assessment is by necessity based on an overall expert judgment on the advantages and the feasibility of PPP compared to the alternative mode for implementing the project (i.e. through conventional procurement).

2.3 Quantitative VFM Analysis

Approach

- 2.3.1. The quantitative estimation of VFM is based on the comparison of the risk adjusted lifecycle costs in case the government implements the project with conventional procurement and public funding, with the risk adjusted lifecycle costs of the Private Party.
- The conventional public procurement model is represented by the **Public Sector Comparator (PSC)**. The PSC is an estimate of the hypothetical, whole-of-life cost of a public sector project if delivered by conventional public procurement and government funding. The PSC is developed in accordance with the required output specification, the proposed risk allocation and is based on the most efficient form of government delivery, adjusted for the lifecycle risks of the project².
 - The PSC is compared with the risk adjusted cash flows if the private sector implements the project on PPP basis.

² Source: National Public Private Partnership Guidelines, Department of Infrastructure and Regional Development, Australian Government (December 2008)

Public sector comparator

- 2.3.2. The PSC is constructed from the following five components:
- (a) raw PSC;
 - (b) competitive neutrality;
 - (c) retained risks;
 - (d) transferred risks;
 - (e) discount factor.

Raw PSC

- 2.3.3. The raw PSC consists of the total cost that the public sector would incur to deliver the project through conventional public procurement, before making any adjustments for risks. The costs are estimated for the delivery of the reference project- which is the most likely and efficient way the public sector can achieve the output specifications.
- 2.3.4. The raw PSC is developed on the basis of the following costs:
- capital expenditure incurred for the development of the project facilities, including the cost of construction, design costs, expenses incurred in public procurement, etc.
 - operating and maintenance expenditures incurred by the public sector in operating the project facilities for the contract tenure and providing the services based on the output specifications. This also includes the cost of repair and maintenance, administrative costs and the staff costs for delivery of the output specifications. Depreciation and other accrual-based items (amortization etc.) are not included as part of the raw PSC. Finally, if there is a possibility of third-party revenues from the public funded projects, then the same has to be excluded from the operating and maintenance costs.
- 2.3.5. The raw PSC is obtained by adding the capital, operating and maintenance expenditures (net of third-party revenues), without adjustments for risks. The inputs for developing the raw PSC are obtained from the financial model.

Competitive neutrality

- 2.3.6. Competitive neutrality refers to adjustments made to ensure that the PSC is comparable to the private sector reference project, by removing any advantages that the government benefits from compared the private sector. These advantages consist among other of taxes and charges from which the government is exempt, such as like property tax, stamp duty (on purchase of land), municipal charges, corporate taxes etc. Similarly, any disadvantages incurred by the government compared to private sector must be removed for competitive neutrality.

Retained and transferred risks

- 2.3.7. One of the essential characteristics of PPP is the transfer of project risks from the public sector to the private sector. In fact, the VFM concept measures the value that is generated by the transfer of risks from the public sector to the private sector. Hence to develop the PSC, risks need to be identified and valued, as described below:

(a) Identification of all significant risks that the project is exposed to (see also Annex F- Feasibility study guidelines, section 2.3 (10) – Risk analysis).

(b) Valuation of risks

The valuation of the risk involves the estimation of the expected financial impact of the risk:

$$\text{expected value of risk} = \text{probability that the risk event occurs} * \text{financial impact if the risk event occurs}$$

The probability of the risk is the quantitative likelihood that it will materialise during the contract period. The financial impact of the risk is the loss that would occur if the risk event materializes. The product of the probability of occurrence and the loss equals the expected loss or value of the risk.

The valuation of risks is ideally based on empirical evidence from past projects of similar scale. For instance, the expected project cost escalation can be estimated on the basis of the average cost escalation that projects realized by the contracting authority have experienced in the past.

(c) Retained and transferred risk

In the proposed PPP arrangement some risks are allocated to the private party and the other risks are retained by the contracting authority. Both transferred and retained risks are valued using the approach described above.

Developing the full PSC

2.3.8. The full PSC is the sum of the following components:

- raw PSC;
- adjustments for competitive neutrality;
- retained risks; and
- transferred risks.

Discount rate

2.3.9. The expected cash flows of the government deriving from the sum of these components is then discounted to calculate the present value of the PSC. The discount factor is the interest rate at which the government can borrow long term funds on the financial market (with a tenure comparable to the duration of the proposed PPP Agreement), or the yield of government securities with a similar tenure.

Private Sector Reference Project

2.3.10. The discounted PSC as calculated above must then be compared to the discounted risk adjusted cash flows of the government if the project is procured as a PPP. The private sector reference project includes all expenses paid by the government to the Private Party, as well as the costs of the retained risks. While the approach for calculating the government cash flows is similar to the approach described above for the calculation of PSC, the expected value of the risks is calculated from the perspective of the private party. In other words, the risks are valued based on the probability and loss of the risk events if the Private Party is managing the risks.

Comparison of the PSC and the Private Sector Reference Project

- 2.3.11. The quantitative estimate of VFM is the difference between the PSC and the private sector reference project, as shown in the figure below. A positive VFM means that the private sector reference project has a lower risk adjusted present value of cash outflows for the public sector, as compared to the PSC. The positive VFM indicates that the PPP model will likely generate value for the government, and therefore the government should proceed with PPP procurement.
- 2.3.12. Figure 1 shows an example with a positive VFM.

