

**TEMPLATE FOR FEASIBILITY STUDY REPORT FOR  
PUBLIC PRIVATE PARTNERSHIP PROJECTS  
Per the PPP Act, 2020 (ACT 1039) (Section 37 (1))**

*NB: This template is referential and only meant to serve as a guide for the preparation of the Feasibility Study Report. Do not therefore limit your study to the content of this template only*

| <b>SECTION 1: PROJECT PROFILE</b>                                                                                                                                                   |        |                                                                                                                                                                                                         |                   |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------|
| Project ID:                                                                                                                                                                         |        | IBP Code                                                                                                                                                                                                |                   |                 |
| Project Name:                                                                                                                                                                       |        | Same as approved by MoF after project registration                                                                                                                                                      |                   |                 |
| Date of Approval:                                                                                                                                                                   |        | Date of approval of PCN/IBC                                                                                                                                                                             |                   |                 |
| Type of Project:                                                                                                                                                                    |        | <input type="checkbox"/> Greenfield <input type="checkbox"/> Brownfield                                                                                                                                 |                   |                 |
| Project Objective:                                                                                                                                                                  |        | As stated in PCN/IBC/PFS                                                                                                                                                                                |                   |                 |
| Estimated Project Cost (GHS/USD):                                                                                                                                                   |        | State the revised investment cost of the project                                                                                                                                                        |                   |                 |
| Project Geographic Location including geo-spatial information i.e., GPS Coordinates<br>(Insert additional rows as required for projects with multi locations)                       |        |                                                                                                                                                                                                         |                   |                 |
| No.                                                                                                                                                                                 | Region | District                                                                                                                                                                                                | City/Town/Village | GPS Coordinates |
| 1.                                                                                                                                                                                  |        |                                                                                                                                                                                                         |                   |                 |
| 2.                                                                                                                                                                                  |        |                                                                                                                                                                                                         |                   |                 |
|                                                                                                                                                                                     |        |                                                                                                                                                                                                         |                   |                 |
| Planned expected start date:                                                                                                                                                        |        | Project planned execution start date                                                                                                                                                                    |                   |                 |
| Planned expected end date:                                                                                                                                                          |        | Project planned execution end date                                                                                                                                                                      |                   |                 |
| Implementing /Contracting Authority:                                                                                                                                                |        | The initiating institution of the project                                                                                                                                                               |                   |                 |
| Principal Spending Officer:                                                                                                                                                         |        | Chief Director, Chief Executive Officer, or the most senior administrative head responsible for producing outputs.<br>Public Financial Management Act, 2016(ACT 921)                                    |                   |                 |
| Official Contact Details:                                                                                                                                                           |        | Provide email, telephone number, postal and physical address                                                                                                                                            |                   |                 |
| Appraising Authority:                                                                                                                                                               |        | Sector Ministry (EPC)/RCC/FCTC/PPPC                                                                                                                                                                     |                   |                 |
| Name of Transaction Advisor                                                                                                                                                         |        |                                                                                                                                                                                                         |                   |                 |
| Official Contact Details                                                                                                                                                            |        |                                                                                                                                                                                                         |                   |                 |
| Alignment with National Priorities                                                                                                                                                  |        | Coordinated Programme of Economic and Social Development Policies (CPESDP), National Medium-Term Development Policy Framework (NMTDPF), National Infrastructure Plan(NIP), Medium Term Development Plan |                   |                 |
| Thematic Area /Development Dimension:                                                                                                                                               |        | Medium Term Plan                                                                                                                                                                                        |                   |                 |
| Focus Area:                                                                                                                                                                         |        | Medium Term Plan                                                                                                                                                                                        |                   |                 |
| Policy Objective:                                                                                                                                                                   |        | Medium Term Plan                                                                                                                                                                                        |                   |                 |
| Sustainable Development Goal(s):                                                                                                                                                    |        | Describe and indicate the number of SDGs                                                                                                                                                                |                   |                 |
| Project Impact towards Gender:                                                                                                                                                      |        | Indicate how your project will impact gender roles and how it intends to mainstream and address gender related issues.                                                                                  |                   |                 |
|                                                                                                                                                                                     |        |                                                                                                                                                                                                         |                   |                 |
| <b>EXECUTIVE SUMMARY</b>                                                                                                                                                            |        |                                                                                                                                                                                                         |                   |                 |
| <i>Summarize and present key headline information from each component of the feasibility study report, project alternatives evaluated, key decision points and recommendations.</i> |        |                                                                                                                                                                                                         |                   |                 |
| Section 1: Introduction                                                                                                                                                             |        |                                                                                                                                                                                                         |                   |                 |
| Section 2: Project Alternatives Analysis                                                                                                                                            |        |                                                                                                                                                                                                         |                   |                 |
| Section 3: Market / Demand /Ability to Pay Analysis                                                                                                                                 |        |                                                                                                                                                                                                         |                   |                 |
| Section 4: Technical or Engineering Analysis                                                                                                                                        |        |                                                                                                                                                                                                         |                   |                 |

Section 5: Environmental and Social Impact Analysis  
 Section 6: Human Resources and Administrative Support Analysis  
 Section 7: Institutional, Legal and Regulatory Due Diligence  
 Section 8: Financial Viability Analysis  
 Section 9: Fiscal Impact Analysis  
 Section 10: Value For Money Analysis  
 Section 11: Economic and Social Analysis  
 Section 12: Distributional Analysis  
 Section 13: Risk Analysis and Appropriate Risk Portioning to Parties

## **SECTION 1: INTRODUCTION**

*(This must be consistent with the PCN, IBC and Pre-feasibility study)*

### **Describe the following:**

- a) Project Background: Rationale and origin of the problem.
- b) Objectives of the feasibility study.
- c) Approach and methodology of the feasibility study.
- d) Organization/ structure of the feasibility study.

## **SECTION 2: PROJECT ALTERNATIVES ANALYSIS AND PPP STRUCTURE**

Provide a brief report on the project alternatives that were considered prior to the decision on the desired project alternative.

- Provide a brief overview of each technical option for delivering the project including key features and core components.
- Describe the specific objective of each technical option, explaining how it is designed to meet the project's goals.
- Provide a detailed justification for selecting the preferred technical option over others, considering factors such as cost-effectiveness, risk management, stakeholder alignment, and long-term sustainability.
- Highlight the key advantages of the preferred option and how it best meets the project's requirements and objectives within the PPP framework.
- Evaluation of PPP options/models;
- Justification for preferred PPP option;
- Proposed and preferred PPP Payment Mechanism;
  - Specify how the private partner will be remunerated for the service it provides—that is, through user charges, availability payments, both, or through other means.
  - Specify who will pay the private partner for the service it provides—the government, or users or both.
  - If user charges apply, specify who will collect the charges from users.
- Determination of government support required for the PPP project - make recommendation {in line with Section 81 and 82 of PPP Act 2020, Act 1039}

## **SECTION 3: MARKET / DEMAND ANALYSIS**

*(This is the market and demand analysis for the preferred Alternative using primary sources of information)*

This section assesses the need for the public investment which will involve the elements listed below:

### **a) Problem Statement:**

Describe the problem to be addressed in terms of challenges, constraints and gaps giving the

- Nature of the problem;
- Scope of the problem (the magnitude of the problem or how widespread it is); and

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| <ul style="list-style-type: none"> <li>• State the likely causes and effects of the problem, both direct and indirect.</li> </ul> <p>b) <b>Relevance of the Project Idea:</b><br/>Justify the need for the proposed project by:</p> <ul style="list-style-type: none"> <li>• Linking the project to the medium term National / District Development Plan strategic goals and objectives;</li> <li>• Linking the proposed project to Sector strategic objectives and strategies by describing the sector outcomes that the project is expected to contribute to;</li> <li>• Showing the need for the project by analysing and describing the quantitative indicators of demand for the services or goods to be delivered by project.</li> </ul> <p>c) <b>Proposed Project Interventions:</b><br/>Describe the project investments/outputs that need to be undertaken to address the problem<br/><b>Stakeholders:</b> Identify the key stakeholders that are likely to be affected by the interventions.</p> <p>d) <b>Demand analysis:</b> Identify the need for the public investment by assessing:</p> <ol style="list-style-type: none"> <li>1. Current demand of each stakeholder (based on statistics provided by service suppliers/ regulators/ ministries / national and district statistical offices for the various types of users);</li> <li>2. Future demand of each stakeholder (based on reliable demand forecasting models) in both scenarios “with” and “without” the project; and</li> <li>3. The factors that constrain demand including government regulations, technological developments etc.</li> <li>4. Assess the willingness to pay or ability to pay by users of the project output/services.</li> </ol>                                                                                                                                                                                                                                                                                                                                 |
| <p style="text-align: center;"><b>SECTION 4: TECHNICAL OR ENGINEERING ANALYSIS</b></p> <p style="text-align: center;"><i>(This is the technical or engineering analysis for the preferred Alternative using primary sources of information)</i></p> <p>A summary of the proposed project solution shall be presented with the following headings.</p> <ol style="list-style-type: none"> <li>a) <b>Location:</b> provide the geographical coordinates of the location of the project including a graphical illustration (map). Availability of land is a key aspect: evidence should be provided that the land is owned (or can be accessed) by the sponsor, who has the full title and permit to use it, or has to be purchased (or rented) through an acquisition process. In the latter case, the conditions of acquisition should be described. The administrative process and the availability of the relevant permits to carry out the works should also be explained.</li> <li>b) <b>Technical design:</b> description of the main works components, technology adopted, design standards and specifications. Key output indicators, defined as the main physical quantities produced (example kilometres of pipeline, number of overpasses, number of trees planted, etc.), should be provided.</li> <li>c) <b>Production plan:</b> description of the infrastructure capacity and the expected utilization rate. These elements describe the service provision from the supply side. Project scope and size should be justified in the context of the forecasted demand.</li> <li>d) <b>Costs estimates:</b> Estimation of the financial needs for project realization and operations. Provide the basis for the cost estimates.</li> <li>e) <b>Implementation plan:</b> a realistic project timetable together with the implementation schedule should be provided including, for example, a Gantt chart (or equivalent) with the works planned. A reasonable degree of detail is needed to enable an assessment of the proposed schedule.</li> </ol> |
| <p style="text-align: center;"><b>SECTION 5: CLIMATE CONSIDERATIONS, ENVIRONMENTAL AND SOCIAL IMPACT ANALYSIS</b></p> <p style="text-align: center;"><i>(This is the environmental and social impact analysis for the preferred Alternative using primary sources of information)</i></p> <p>Describe and specify the socio-economic and environmental effects/ impacts as a result of the project and indicate possible mitigations for ecological and other damages.</p> <p>Key questions to address:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

- a) What are the likely environmental impacts from undertaking the project?
- b) Would the project reduce, remove, or avoid greenhouse gas emissions, or is it carbon neutral according to Ghana's latest submission to the United Nations Framework Convention on Climate Change (UNFCCC)?
  - How would the project ameliorate the impacts of climate change in Ghana?
  - What metrics will you use to measure the intervention's success?
  - How have the impacts of climate change on women, youth and at-risk communities been considered? Have the ameliorating interventions been discussed with the intended beneficiaries?
  - How will the project contribute to providing green and sustainable jobs?
- c) How does the project help Ghana adapt to and withstand the impacts of climate change? What metrics will be used to gauge its success?
- d) What is the cost of reducing or mitigating the negative impacts?
- e) Evaluation of the environmental impacts and climate risks with and without the project.
- f) What technical measures are taken to reduce these impacts?
- g) Are there alternative ways of delivering the required service or the good without incurring these environmental costs? What are the costs of these alternatives?
- h) What is the cost of an environmental impact assessment?
  - What are the costs of permits and approvals required from environmental protection agencies
  - Will resettlement be required, what is the cost of resettlement? provide Resettlement Action Plan (RAP).
  - What financial contingencies are expected?
- i) What contractual provisions are needed to reset the project in cases of environmental effects escalating beyond control?
- j) What are the non-market costs and benefits that need to be considered in the viability analysis?
- k) How will the project impact Small and Micro Enterprises, local community income, health, land value and social welfare? How would the project contribute to creating environmentally friendly jobs?
- l) Has the project considered and addressed issues on women, youth, and at-risk communities affected by climate change? Have they been consulted regarding the interventions? cd

## **SECTION 6: HUMAN RESOURCES AND ADMINISTRATIVE SUPPORT ANALYSIS**

*(This is the human resources and administrative support analysis for the preferred Alternative using primary sources of information)*

Point out the human resource requirements for implementation and operation in this Alternative in terms of quantities, specialties, and sources of the workforce. Determine the management capacity and the functional structure of the operating entity.

### **Key issues to be addressed:**

- What are the labour needs of the project? Does the organization have the labour skills needed?
- What are the wage rates for the required labour skills?
- Are manpower requirements by category reconciled with availabilities and project timing?
- What are the staff labour requirements during operation post project delivery and what are their wage rates

## **SECTION 7: INSTITUTIONAL, LEGAL AND REGULATORY DUE DILLIGENCE**

*(This is the institutional, legal and regulatory analysis for the preferred Alternative using primary sources of information)*

- Is the entity responsible for managing the project well-structured and adequately resourced to handle the project effectively? Are its capabilities and facilities being fully and efficiently utilized.
- Does the institution have requisite skills and capacity in line with the project requirements?
- Does the contracting authority have the legal backing to undertake the project?
- Does the legal framework allow private sector involvement in the project.
- What are the legal or regulatory issues that could be detrimental or assist the project?

- What are the legal and regulatory requirements expected before the project is implemented?
- Is there a need for changes in the policy and institutional set up?
- Outside this entity, what changes may be needed in policies of the National and local Governments?
- Are there suitable incentives or penalties in place to ensure project delivery is on time and within the budget?
- Are there critical governance issues that may affect implementation?
- What are the risks, legal and regulatory obligations that could increase costs or decrease the benefits?
- Analysis of the applicable legal framework to identify legal requirements and impediments. The frameworks to be analyzed include:
  - Constitution
  - PPP Act and Regulations
  - Public procurement law
  - Law referring to foreign investment, property, and labor
  - Legislation relating to land use planning and environmental law
  - Sector specific legislation
  - relevant approvals, permits, licences, no objections, etc.
  - Legal opinion
- Legal analysis of project specific issues, for instance:
  - Financial aspects of the project, including the ability/right to charge users
  - Use of existing land and assets
  - Tax and accounting issues considered in the financial model.
  - National security concerns

The legal due diligence should note whether the Contracting Authority needs to take any actions to make the project legally feasible before the project can proceed further such as getting regulatory approvals.

## SECTION 8: FINANCIAL ANALYSIS

*(This is the financial analysis for the preferred Alternative using primary sources of information)*

Present a financial model that:

- Clearly highlights the assumptions underlying the model.
  - Estimates the capital costs and reinvestment cost over the life of the project.
  - Estimates the yearly operations/maintenance costs in both nominal and real terms, over the project life
  - Indicates the expected sources of financing, the financing terms and cost of financing, and other fees/charges.
  - Indicates the expected level of user charges/fees
- Projects Revenue over the life of the project.

The model should calculate the:

- The private partner's break-even revenue requirements
- Returns to the shareholders as well as returns to the project
- Basic financial ratios
- Debt service coverage ratios, if project debt financing is envisaged
- Level of viability gap funding or other support envisaged from Government.

The model should demonstrate financial viability (expressed in terms of NPV and IRR) and affordability.

The model must also show the sensitivity of key variables to the project decision points (NPV/IRR), using risk simulation methods where possible.

### SECTION 9: VALUE FOR MONEY ANALYSIS

Examine whether the project will deliver more value when delivered as a PPP than it would as a publicly financed project procured under the Public Procurement Act (PPA), using qualitative and quantitative methods.

#### What is done:

- (1) Conduct a qualitative and quantitative value for money assessment to demonstrate that there is greater value for money than the best realistic public sector project designed to achieve similar service outputs.
- (2) Ensure that a net benefit accrues to the contracting authority in terms of cost, price, government support in the form of viability gap funding and tax exemptions, quality, timeliness and risk transfer as compared to the public sector comparator.

### SECTION 10: FISCAL IMPACT ANALYSIS

*(This is the fiscal impact analysis for the preferred Alternative using primary sources of information)*

- Precisely state the direct and contingent liability the government will assume should the project be implemented
- Estimate the fiscal impact of the project in terms of the direct and contingent liabilities on the government budget
- Demonstrate compliance with applicable laws and regulations governing accounting standards for direct and contingent liabilities

### SECTION 11: ECONOMIC AND SOCIAL ANALYSIS

*(This is the economic and social analysis for the preferred Alternative using primary sources of information)*

Economic adjustments from financial data using conversion factors<sup>1</sup>; after that costs and benefits are appraised from the point of view of the entire economy.

#### What is done:

- a) Examine the project using the whole country as the accounting entity
- b) Evaluation of externalities
- c) What is the expected value of economic net benefits?
- d) What are the primary economic costs and benefits of the project?
- e) Describe the sources of costs and benefits?
- f) What are the macro-economic growth effects, spill-over effects, or distributional impacts of the project?
- g) What is the Net Present Value of economic benefits (ENPV)? (GHS)
- h) What is the Economic Internal Rate of Return (EIRR)?

### SECTION 12: DISTRIBUTIONAL ANALYSIS

*(This is the Distributional analysis for the preferred Alternative using primary sources of information)*

The project is appraised from the point of view of stakeholders receiving economic benefits or costs. Economic externalities must be calculated and distributed among different actors (stakeholders)

#### What is done:

- a) Identification and quantification of extra-economic impacts of project
- b) Distributive Appraisal
- c) Income, Cost, and Fiscal Impacts on various stakeholders
- d) Poverty Alleviation and Political Necessities
- e) Basic Needs: Evaluate the impact of project on achieving basic needs objectives.

<sup>1</sup> [National Parameters and conversion factors \(https://national-parameters.mofep.gov.gh/\)](https://national-parameters.mofep.gov.gh/)

**Key Questions**

- a) In what ways does project generate beneficial and cost impacts on stakeholders?
- b) What stakeholders could the project impact?
- c) Who benefits and who pays the costs?
- d) What are the basic needs of the society that are relevant in the country?
- e) What impact will the project have on basic needs?
- f) What alternative ways are there to generate desirable social impacts?
- g) Is the project relatively cost effective in generation of desirable social impacts?

**Stakeholders:** Identify the key stakeholders that are likely to be affected by the interventions:

**What is done:**

- a) Develop a detailed Stakeholder Engagement Plan (SEP)
- b) Develop a stakeholder engagement map
- c) Identify proposed set of engagement activities throughout the project cycle, alongside key objectives of these activities
- d) Articulate how stakeholders will be kept engaged during the project progress and any grievance mechanism
- e) Describe the stakeholder engagement monitoring plan and associated key performance indicators

**SECTION 13: RISK ANALYSIS AND APPROPRIATE RISK ALLOCATION TO PARTIES**

*(This is the risk analysis for the preferred Alternative using primary sources of information)*

Risk analysis is a critical component of developing a feasibility study report for Public Private Partnership (PPP) projects. It involves identifying, assessing, and planning for potential risks that could impact the project's success. A thorough risk analysis helps stakeholders understand the uncertainties involved and develop strategies to mitigate them, ultimately ensuring that the project is viable and sustainable. Here's how risk analysis is typically approached in a feasibility study for PPP projects:

**1. Identification of Risks**

- Identify all potential risks that could affect the project.

**2. Risk Assessment**

- **Probability and Impact Analysis:** Evaluate the likelihood of each identified risk occurring and the potential impact it would have on the project. This often involves creating a risk matrix that categorizes risks based on their severity and likelihood.
- **Quantitative Analysis:** Use financial modeling and sensitivity analysis to quantify the impact of key risks on the project's financial performance. This might include stress testing to see how the project fares under adverse conditions.

**3. Risk Allocation/sharing**

- Allocating risks to the party best able to manage or mitigate them.

**4. Risk Mitigation/ Management Strategies**

- **Preventive Measures:** Develop strategies to prevent risks from materializing. For example, thorough site investigations can mitigate construction risks, while fixed-price contracts can limit cost overruns.
- **Contingency Planning:** Prepare contingency plans for risks that cannot be entirely prevented. This might involve setting aside financial reserves or having alternative operational strategies in place.

**5. Risk Monitoring and Review**

- **Ongoing Monitoring:** Establish a framework for continuous monitoring of risks throughout the project lifecycle. This includes regular updates to the risk management plan and periodic reassessment of risks.
- **Reporting:** Develop mechanisms for reporting on risk status to stakeholders, ensuring transparency and accountability.

(Refer to “*Manual for Integrated Preparation and Appraisal of Investment Projects*” for further guidance )