

PART 1: Per Section 2.10 of the Revised 2022 IRR of the BOT Law, the Approving Body shall be guided by the following criteria in approving projects. The provisions below provide further details as guidance for compliance with the particular criteria.

a. The proposed project is technically feasible and is optimal.

- I. The objectives of technical validation shall be as follows:
 - i. To determine if the project is technically feasible, project design is technically sound and workable and that its operations and maintenance can be sustained.
 - ii. To ascertain if the proposed technology is cost-effective.
 - iii. To ensure that the project does not adversely affect the environment and/or that appropriate measures are taken to protect the environment.
 - iv. To ensure that the project has proposed measures to mitigate risks associated with identifiable impacts of climate change.
- II. In terms of the procedure, the technical aspects of the project shall be validated. Inputs or comments from other experts and consultants from the relevant industry or academe may also be solicited as necessary. The technical review shall cover, among others, the following:
 - i. Review of conceptual or preliminary engineering design proposed including site and location surveys, construction phasing and technology proposed for the construction and operations of the project.
 - ii. Evaluation of the minimum design standards and specifications identified to be used and primary design criteria that are compatible with requirements of the Agency/LGU and practical for implementation in the project area.
 - iii. Review of the alternative layouts to determine feasible PPP options including determining physical limitations restricting the design layout, if any.

For (1) greenfield projects; and (2) brownfield projects with road or rail extensions, review of the outline design under alternative sites/alignments shall be done as well.

- iv. Review of cost estimates (i.e., capital expenditures and operating and maintenance costs) prepared for the alternative layouts (and alternative sites/alignments, if applicable) that clearly identifies all major elements including engineering works, environmental mitigation works, service diversion costs, accommodation works, land costs, and resettlement costs.

ICC EVALUATION CRITERIA FOR THE REVIEW OF PUBLIC – PRIVATE PARTNERSHIP PROJECTS

- v. Assessment of the appropriateness of the technical specification and determining whether it provides a cost-effective solution to meet the projected demand for the service (phased if necessary) and other objectives.
- vi. Assessment of the advantages and limitations of any technology proposed for the project with empirical evidence of success rate in other countries, in the case of new technology; also, determining the applicability of the new technology to conditions in the Philippines, specifically in the proposed project area.
- vii. Assessment of the environmental impact that would arise out of using the proposed design for the project.
- viii. Assessment of the climate change-related risks that could impact the project using the proposed design for the project.

b. Value-for-money analysis shows that PPP modality is the most viable procurement option

The value-for-money (VfM) analysis shall compare the net present cost (NPC) of an alternate project delivery model - one using the public procurement route and the other the estimated PPP NPC to determine which procurement option provides the lowest NPC for the project. The appraisal process will involve an assessment of the following aspects:

- i. Determining the unadjusted cost of public procurement.
- ii. Adjusting the above for expected cost and time overruns from a public procurement.
- iii. Adjusting for any benefits that will accrue to a government agency for a public procurement.
- iv. Risks retained by the government.

The NPC of the public procurement will need to be represented in the form of a Public Sector Comparator (PSC) which will be calculated as given in the following table.

+	Capital costs
+	Operating costs
-	Revenues, if applicable
=	Raw PSC
+	Competitive neutrality
+	Retained risks
=	Total PSC

The NPC of the total PSC will be compared to the prospective PPP bid to determine whether the prospective PPP bid delivers VfM (i.e. PPP NPC < PSC NPC)

- c. **The outputs of the project are clearly specified. This means by which the technical solution proposed by different bids shall be evaluated are specified.**

The general performance standards and targets should be assessed if such are sufficient for proposed scope and intended objectives.

- d. **The project is economically viable, based on the guidelines set by the ICC.**

The economic appraisal of PPP projects shall be made to ascertain the project's desirability in terms of its net contribution to the economic and social welfare of the country as a whole. It shall consider the following, among others:

- I. ***Appraisal of project costs and benefits.*** Since projects are usually evaluated in terms of their effect on national income, costs and benefits identified must necessarily reflect the additions to and reductions from national income as a result of project implementation. These include the following:

- i. **Economic Costs** - The basic guidelines in identifying the costs of a project stems from the definition of cost itself, or activities that involve use of real resources. Cost items are usually classified into capital costs¹ and operating and maintenance costs².

Sunk costs, on the other hand, are defined as all those costs incurred on the project prior to the preparation of the feasibility study. Since these expenses have already been incurred, they shall no longer be subject to investment decision-making. As such, this component of project cost should not be included in the analysis.

- ii. **Benefits** - A benefit constitutes an increase in output or savings in resource use. Such benefit shall be directly attributable from the project. In the case of transport projects for instance, the set of benefits may include: reduced vehicle operating costs; lower maintenance costs; fewer accidents, savings in time for passenger and freight; and in the case of developmental transport infrastructure, production increases. Of these cases, only the first two benefits and the last are easily quantifiable. However, to the extent possible, the effects of other benefits on national income should be quantified (e.g., value of each human life saved in terms of the capacity to earn during productive life, reduction of greenhouse gas emissions, benefits arising from mitigating gender inequality, benefits arising from mitigating the impacts of climate change).

¹ **Capital Costs** include land; detailed engineering design; preparatory installation work; cost of equipment; raw materials and supplies for construction; cost of buildings and auxiliary installations; engineering and administrative cost during construction; organization cost.

² **Operating and Maintenance Costs** include raw materials and other supplies; energy and fuels; labor; rent and insurance; depletion of natural resources.

- iii. Externalities - In several instances, project effects may be positive or negative and extend beyond the contours of the project, but not reflected in the financial analysis of the project. If these effects, known as "externalities," involve a significant economic cost or confer a significant economic benefit, these should be considered in evaluating the overall economic impact of the project.
- iv. Secondary benefits - refer to the beneficial effects on activities that are technologically linked to the project's direct users. These benefits should, whenever possible, be incorporated into the analysis and the appraisal process.

The robustness and reasonableness of the assumptions used in the economic costs, benefits, externalities, and secondary benefits shall be assessed.

- II. ***Economic valuation of costs and benefits.*** This process involves adjustment of the financial prices of goods and services of both costs and benefits to reflect economic values. Market prices may not be an acceptable measure of the true costs and benefits due to distortions (i.e., taxes, subsidies, quotas, regulatory measures, or monopolistic practices). To deal with this problem, shadow prices are employed to measure the value of a commodity from the economy's viewpoint. The valuation of project costs and benefits should be in constant prices at the current year's level. In the case of projects where price levels are not in current year's levels, appropriate price indices shall be applied to inflate or deflate prices accordingly.
- III. ***Measurement of economic desirability, sensitivity analysis and selection of projects based on economic feasibility indicators.*** The indicator to be used for estimating the economic desirability of projects shall be the economic internal rate of return (EIRR), which is defined as the discount rate which equates the net present social value (NPSV) of the benefits and costs of the project such that the NPSV is zero and the benefit cost ratio (BCR) is one. The NPSV is the discounted net economic benefit accruing to the project. The decision rule is to accept projects where the NPV is greater than zero.
- IV. The following parameters shall be used for estimating the economic stream of costs and benefits:
 - i. Shadow Exchange Rate (SER) - the SER is applied to correct the distortion in the prevailing exchange rate due to balance of payments disequilibrium and the projection structure. The SER currently adopted is 1.20 of the prevailing exchange rates, and shall be applied to all direct and indirect foreign exchange costs of a project and those benefits which may be expressed in foreign exchange.
 - ii. Shadow Wage Rate (SWR) - the SWR is used to reflect the true economic value of labor employed in a project. The SWR is applicable

only to the unskilled labor component of wages paid and is currently estimated at 60% of legislated wage rates.

- iii. Social Discount Rate (SDR) - the SDR shall be used to discount the stream of economic costs and benefits to their present values. It is the rate at which the social value of project costs and benefits decline over time. The SDR, currently set at ten (10%) percent or as may be changed, amended or updated, shall likewise be used as the hurdle rate for a project's EIRR.

- V. **The sensitivity parameters** used during the financial appraisal shall likewise be applied in the economic appraisal of projects. The basis will be the cost-benefit flows (adjusted to economic terms). Probability weights for the above sensitivity analysis may later be assigned.

- e. **The Agency's/LGU's plans for mitigating social and environmental impacts will enable the project to comply with existing legal requirements.**

- I. The social appraisal of the PPP project shall be undertaken to determine if the proposed project is responsive to national objectives of poverty alleviation, employment generation and income redistribution. The project benefits beyond those that are simply financial and economic shall be taken into consideration, whenever possible. The following aspects, among others, may be considered in the qualitative assessment of the social benefits of the project:

- i. *Income Distribution.* The extent to which the income of the poorest sector of the population is improved as a result of the project may be quantified. Reference must be made to the relative improvement in comparison with other groups in the country.
- ii. *Employment.* The extent to which the project reduces underemployment may be assessed. This may be quantified in terms of work years created by the project, with distinction made between permanent employment and employment during the investment or construction phase. The number of jobs created may be compared with the expected increase in the labor force of the project area.
- iii. *Access to Land.* If the project includes land settlement or land reform aspects, the distribution of land rights with and without the project should be demonstrated.
- iv. *Internal Migration and Resettlement.* It may be useful to note the possible effect of the project on rural-urban migration and to identify any resettlement issues that the Project faces.

- v. *Nutrition and Health.* If the project is located in an area where serious nutrition or health problems exist, or if the project is directed toward groups with nutrition and health deficiencies, the expected effects of the project on these problems might be mentioned.
 - vi. *Other Indicators of the Quality of Life.* Some projects may have a significant effect on the quality of rural life through improvements in access to domestic water supplies, electricity, schools, and other facilities. These may be mentioned and the quantities of the new amenities noted.
 - vii. *Gender and Other Appropriate Social Safeguards.* All social impacts, including gender, rehabilitation and resettlement activities, proposed mitigation and their related costs would be assessed.
- II. The environmental appraisal of the project shall be undertaken to ensure that the project does not adversely affect the environment and/or that appropriate measures are taken to protect the environment. Assessment of the following shall be considered:
 - i. The environmental impact that would arise out of using the proposed design for the project.
 - ii. The proposed measures to mitigate the environmental impact of the project.
 - iii. The project's compliance with environmental laws, rules, and regulations.
- III. The appraisal of the project's climate change resiliency and sustainability shall be undertaken to ensure that the project could withstand identifiable impacts of climate change. Assessment of the following shall be considered:
 - i. Risks associated with identifiable impacts of climate change (e.g., rising sea levels, heat waves, drought, and typhoons).
 - ii. The proposed measures to mitigate the climate change-related risks that might affect the project.
 - iii. The project's compliance with climate change-related laws, rules, and regulations.
- f. **The Project Cost is sufficient to achieve the technical requirements of the project, including the general performance standards and targets set for the project, and those components needed to meet social and environmental standards.**

To determine if the Project Cost³ is sufficient, the following, among others, shall be assessed:

- i. Review of the completeness of disclosed Project Cost items in the economic and financial models. Project Cost items shall include capital expenditures for the proposed mitigating measures for the social, environmental, and climate change-related risks associated with the project.
- ii. Assessment of the reasonableness and robustness of the amount of Project Cost based on the assumptions and reference data used.

g. The operating costs are sufficient to achieve the operational requirements.

To determine if the operating and maintenance costs is sufficient, the following, among others, shall be assessed:

- i. Review of the completeness of disclosed operating and maintenance cost items in the economic and financial models. Project Cost items shall include capital expenditures for the proposed mitigating measures for the social, environmental, and climate change-related risks associated with the project.
- ii. Assessment of the reasonableness and robustness of the amount of operating and maintenance costs based on the assumptions and reference data used.

h. The project is financially viable for investors at the project level.

- I. The objectives of financial appraisal shall be as follows:
 - i. To assess the financial viability of a PPP project.
 - ii. To provide a reasonable return on the project.
 - iii. To assess financial commitments of the government.
- II. In terms of the procedures, the financial appraisal process to be undertaken for determining the financial viability of the PPP project, will include the following assessments, among others:
 - i. Review of the project viability that covers the whole of project life, including the construction and operations phases, to assess the project viability from an appraisal of the following aspects:
 1. Tariff structure for 'user pays' concession model, or annual 'availability payments' model with proposed periodic escalations, thereof.
 2. Review of financing plan and debt-to-equity structure.
 3. Assessment of the reasonableness and robustness of the financial revenues and financial costs based on the assumptions and reference data used.
 4. Determination of the financial viability of the project from the free cash flow to firm viewpoint, which looks at the discounted

³ As defined by Section 1.3 (bb) of the Revised 2022 IRR of the BOT Law

returns to all real investment flows for the project from all private finance, irrespective of whether these come from equity or from loans. The resulting financial internal rate of return (FIRR) should at least be equal to the weighted average cost of capital (WACC) while the net present value (NPV) should at least be equal zero using the same WACC as the discount rate.

5. Application of sensitivity analysis to the appraisal process by determining whether the project will remain feasible if changes in the assumptions or project structure used in the calculation/projections were to take place according to the degree in which they are likely to vary from the estimated or projected values.
 - ii. Assessment of the proposed level of financial support required from the government in the form of Viability Gap Funding (VGF) and other forms of guarantees and revenue enhancements to make the project commercially attractive, and assessing the fiscal prudence of providing these forms of financial support.
- i. **The project's cash flows are healthy and sufficient to service debt obligations, in accordance with the guidelines set by the ICC.**

To determine the private proponent's ability to meet its debt-service obligations, the following assessments, among others, shall be done:

- i. Review of the debt costs and repayment structure and its impact on the cash flows by reviewing the adequacy of cash flows to meet debt repayment commitments (principal + interest) during the tenor of the debt using debt service coverage ratio (DSCR).
 - ii. Application of sensitivity analysis to determine whether the project's cash flows will remain healthy and sufficient to service debt obligations if changes in the assumptions or project structure used in the calculation and projections were to take place according to the degree in which they are likely to vary from the estimated or projected values.
- j. **The risk allocation complies with the Generic Preferred Risk Allocation Matrix as determined by the ICC. Any deviation must be justified by the Agency/LGU and shall be up for approval of the concerned Approving Body.**

To determine if all risks relevant to the project is allocated to the party that can best manage the risk, the following, among others, shall be done:

- i. Assessment of the deviations to the Generic Preferred Risk Allocation Matrix to evaluate whether such deviations make the project more feasible.
- ii. Assessment of the risk analysis to evaluate whether:

1. all risks relevant to the project, including government exposure, have been identified in the risk allocation matrix prescribed by the ICC.
 2. identified risks have been allocated to the party best able to manage them.
 3. the proposed strategy is sufficient to mitigate retained risks.
- k. **The firm payments are justified by the Agency/LGU, if included in the proposed project structure.**

In assessing the financial viability of the project pursuant to Section 2.10(h), a financial sensitivity analysis shall be conducted to determine the reasonable amount of firm payments to be given by the government. The firm payments, if any, to be made by the government shall only be up to the amount that would make the project financially viable.

- l. **The proposed bid parameter generates the most value-for money for the public and fosters competition, fairness, and transparency.**

In determining the most advantageous bid for the government, the proposed bid parameter should be assessed if such is consistent with the implementing agency's overall policy on the project (e.g. setting the lowest possible charge to users, incurring the lowest possible present value of government payments, or earning a highest possible present value of proposed payments to the government.)

The PPP Governing Board guidelines on setting the bid parameter⁴ may be used as reference.

- m. **The Agency/LGU has the capability to deliver its assumed obligations for the project.**

To ascertain the ability of the Agency/LGU to implement the project as proposed and scheduled, the following, among others, shall be assessed:

- i. The feasibility of delivering assumed obligations as scheduled based on the preparedness of agencies tasked to deliver such obligations.
- ii. When relevant, the arrangements made to address the concern of those who may oppose the project (e.g., environmental conservation groups and those who may be relocated)
- iii. Past performance of the Agency/LGU on related and similar projects.

⁴ PPP Governing Board Resolution No. 2017-12-06: Guidelines on Setting Financial Bid Parameters For The Selection Of Project Proponent in PPP Projects (https://ppp.gov.ph/wp-content/uploads/2018/04/PPP_GBRESO_Guidelines-Setting-Fin-Bid-Parameters.pdf)

PART 2: Determining the Reasonable Rate of Return (RROR)

For unsolicited proposals and negotiated proposals, determination of the reasonable rate of return (RROR) pursuant to Section 1.3 (ff)

The RROR shall be set at WACC, unless otherwise set by the ICC, based on prevailing market rates. If the RROR is set at WACC, the RROR shall be computed as follows:

- i. Cost of debt, which is the sum of the following:
 1. Risk-free rate based on loan tenor (e.g., PHPBVAL)
 2. Credit spread
- ii. Cost of equity, which is the sum of the following:
 1. Risk-free rate based on the project duration (e.g., PHPBVAL)
 2. Relevered beta based on the project's debt-to-equity ratio * equity risk premium
- iii. $RROR \text{ set at WACC} = \text{cost of debt} * (100\% - \text{corporate tax rate}) * \text{debt ratio} + \text{cost of equity} * \text{equity ratio}$

Data sets for the WACC components shall be derived from reputable sources of financial data (e.g., PDS Group, Bloomberg, Philippine Stock Exchange, Damodaran Online).

Should the RROR be set at more than the determined WACC, the justification for such increment shall be assessed.