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Environmental and Social Studies and Standards

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Potential damage to the environment and the impact on populations are key issues when planning infrastructure projects. Besides the cost-benefit analysis that determines whether the expected benefits of a project outweigh potential detrimental environmental and social (E&S) impacts, there is increasing recognition that the success of a project depends on managing E&S risks and impacts effectively in addition to managing its technical and financial aspects.

Investment decisions increasingly include an assessment of the management of E&S risks and impacts—not only when MDBs and international financial institutions are involved but also when commercial banks and private equity funds are the source of financing. Furthermore, in many developing countries international players require compliance with both national laws and international E&S standards developed by MDBs, which are sometimes more stringent than those imbedded in national legislation.

A key element in E&S risk management is the *mitigation hierarchy*, whereby priority is given to avoidance and minimization of impacts. Where residual risks or impacts remain, a compensation or offset is provided to support relocated persons and affected communities, or to mitigate risks to the environment. E&S studies are necessary to determine how to mitigate these risks and impacts and how to compensate those affected by them. For example, if people living on or near a proposed construction site of a PPP project will be displaced, E&S studies should consider ways to minimize displacement and propose specific measures to compensate relocated persons fairly.

There are cases where the need for compensation is not as obvious as in the case of displaced people. For example, building a new bridge may benefit passengers, but could also prevent a ferry operator from

collecting monopoly fees. Loss of a monopoly position does not necessarily require compensation. If the livelihood of ferry employees is greatly affected, solutions such as skills training and job search support could be provided to reduce social impacts, or ensure that they do not fall disproportionately on the most vulnerable.

The E&S studies should address the whole life cycle of the project, including design, construction, operation, and decommissioning. The assessment should consider sectoral and national policies, legislation and regulations, governance frameworks, and environmental capacity. These studies should be conducted early in the project preparation phase so that the findings can be considered in the decision-making process. In the PPP context, this translates into assessing E&S risks and developing mitigations during PPP preparation and procurement.

Introducing E&S risk management steps when structuring a PPP project can improve the quality of the project, help it achieve political, social and environmental sustainability, prevent conflicts, and avoid delays. Impacts to PPP timeline and related cost implication could be avoided when stakeholders impacted by the project (or perceived to be impacted) are adequately engaged and risks and impacts are recognized at a stage that allows integration of mitigation strategies in the project design. Examples of this include:

- **Manila Light Rail, Philippines, 2014.** The design, construction and operation of a 12-kilometer extension of railway transit and ancillary facilities in the densest part of Manila, and the operation of the existing line, implied the displacement of over 1,000 households with no land title and a significant number of small firms. IFC commissioned an analysis to identify gaps between relevant national legislation and IFC E&S Performance Standard 5 (PS5), estimate the costs of closing these gaps, and make recommendations on allocating associated risks ([WB 2015b](#)).
- **New port in Tibar Bay, Timor Leste, 2016.** A greenfield container port in a region with significant biodiversity, including mangrove and coral habitats of protected species). The early E&S studies led to a change in site location within the selected harbor. A biodiversity offset program is being formulated by the concessionaire and the public authority to compensate for the impacts on mangroves and corals. The operator will apply IFC E&S Performance Standards (PS) to its construction and operation activities with third party monitoring ([TL 2016](#)).

Environmental and social assessments

Countries have found advantages in creating their own framework for E&S assessment in several stages of the PPP project cycle. These frameworks include provisions for:

- Assessing E&S impacts when selecting PPP projects to mitigate negative project impacts and optimize social welfare
- Engaging with stakeholders during project preparation to communicate government concerns and solutions regarding environmental and social impact, and to receive useful feedback and suggestions—[Stakeholder Communication and Engagement](#) discusses stakeholder engagement
- Defining the specific E&S standards to be included in the PPP contract
- Monitoring E&S issues during the contract term (design, construction, and operation)

Several countries have found it effective to define **E&S mitigation requirements** prior to tendering projects. This approach allows bidders to factor the cost of these measures into their bid. Good practice consists of including the E&S constraints in the Call for Tender documents, thereby allowing bidders and concessionaires to design and implement projects at their own risk, subject to the satisfaction of those constraints.

This approach is followed by IFC when providing advice to governments on structuring PPP projects. During the appraisal stage an **E&S due diligence** is undertaken to:

- Assess major E&S risks and impacts of the project
- Identify gaps between the relevant national legislation and international E&S standards
- Provide a preliminary indication of possible mitigation measures and associated high level costs
- Evaluate for each measure which party will be best placed for its implementation
- Map key stakeholder groups and design an engagement plan
- Develop Terms of Reference (ToRs) for further, detailed E&S studies, such as Environmental and Social Impact Assessment or a Resettlement Action Plan to be undertaken by the responsible party (usually included in bidding documents to ensure the responsible party adequately covers the identified risks and impacts)

E&S due diligence enables government officials, bidders, and other stakeholders to understand key E&S issues affecting PPP projects. It also supports development of projects in line with national legislation and international E&S standards.

The outcomes of the E&S due diligence also feed into specific steps of the PPP project appraisal stage such as the assessment of technical feasibility and the assessment of commercial viability which needs to include the cost estimate of identified mitigation measures. They also inform risk allocation during PPP structuring (see [Structuring PPP Projects](#)) and the E&S specific provisions of the draft contract.

E&S studies should distinguish between mitigation measures to be implemented by the PPP operator and by the contracting authority before contract award. For example, stakeholder engagement (see [Stakeholder Communication and Engagement](#)) should often be started by the contracting authority in the PPP preparation stage, and then taken over by the private partner.

A good example of this approach is found in the guidance notes on screening ([EC 2001c](#)), scoping ([EC 2001b](#)) and review ([EC 2001a](#)) of the **European Environmental Impact Assessment** (EIA) scheme. This requires governments to submit the EIA to the environmental authority before the project is implemented. Based on the assessment, the authority will issue an environmental license identifying the constraints affecting the project. In a second phase, a more detailed project design that explains how the constraints will be mitigated is submitted for approval. This process allows for the government to establish limits prior to tendering, and for the potential concessionaire to present the detailed project.

Effective use of environmental and social standards

It is good practice to include E&S standards in the draft PPP project agreement. Certain standards may be required by national legislation, or by international finance institutions and major commercial banks (for example, signatories of the Equator Principles) as a financing condition. The contracting authority will need to detail how the service provider will be monitored to ensure compliance with these standards. The consequences for failure to meet these standards also need to be established. The E&S-related provisions of the draft project agreement should reflect the allocation of responsibilities for the design and implementation of E&S mitigation. Depending on the level of E&S risks of the project, and complexity associated with the design and implementation of the mitigation measures, the (pre) qualification criteria might benefit from the introduction of E&S-related criteria.

For large projects, the contracting authority may also supplement the national environment-protection framework with contractual provisions in the PPP contract discouraging the service provider from damaging the environment.

MDBs and other international development institutions are attentive to E&S issues when they co-finance an infrastructure project. The World Bank's **Environmental and Social Framework** rules ([WB 2016c](#)) are often more stringent than the host country's national legislation. The World Bank may accept the country's E&S standards or require that the utilization of the Bank's own E&S safeguards standards. Then they must apply over the entire project, even if they are only financing a portion of it. There are ten World Bank E&S standards:

- Standard 1: Assessment and Management of Environmental and Social Risks and Impacts
- Standard 2: Labor and Working Conditions
- Standard 3: Resource Efficiency and Pollution Prevention and Management
- Standard 4: Community Health and Safety
- Standard 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement
- Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources
- Standard 7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities
- Standard 8: Cultural Heritage
- Standard 9: Financial Intermediaries
- Standard 10: Stakeholder Engagement and Information Disclosure

These standards were approved by the Board in August 2016, to be implemented after a preparation and training period. According to the World Bank ([WB-Safeguards](#)), the new E&S framework introduces comprehensive labor and working condition protection; an over-arching non-discrimination principle; community health and safety measures that address road safety, emergency response and disaster mitigation; and a responsibility to include stakeholder engagement throughout the project cycle. Other MDBs have their own corresponding standards. For example, the Asian Development Bank ([ADB-Safeguards](#)) and Asian Infrastructure Investment Bank ([AIIB 2016](#)) use three safeguard categories: (1) Environment; (2) Involuntary Resettlement; and (3) Indigenous Peoples.

IFC has developed a risk management methodology ([IFC 2012](#)) consisting of eight Performance Standards (PS). Compliance with these standards is required for projects financed by IFC. Since 2012, all PPP projects where the IFC had an advisory mandate are screened against the Performance Standards and, where gaps are identified, recommendations are made to align them with the standards. IFC's Performance Standards are a global benchmark to determine, assess, and manage E&S risks in project financing. Eighty-four private financial institutions in 35 countries have adopted the ten **Equator Principles** ([EP 2017](#)), which are based on IFC's Performance Standards. The Equator Principles have been accepted as a move towards establishing an industry norm for managing environmental issues.

In summary, a proper assessment and mitigation of E&S risks will likely have a significant impact on the perceived value of a project, increasing its probability of success. The value for several categories of stakeholders is highlighted below:

- **Directly impacted communities** will perceive the project more positively following the analysis of the E&S risks of a project and the presentation of proposed mitigation measures.
- **Donors and commercial banks** who are members of the **Equator Principles Association** ([EP 2017](#)) will discard projects that do not comply with international E&S standards. Project sustainability will be strengthened from this methodology, thereby improving the bankability of a project.
- **Bidders** concerned about the reputational risk posed by E&S issues, particularly international bidders, can be reassured by preliminary E&S assessment and will have less uncertainties to factor in their offer.
- **Governments** can protect the public interest by requiring bidders to adopt best practices for managing E&S issues. This approach allows for a leveling up of competition for both local and international

bidders and guarantees that E&S standards rise for all stakeholders.

Key References

Environmental and Social Studies and Standards

- [WB. 2016c. *Environmental and Social Framework: Setting Environmental and Social Standards for Investment Project Financing*. Washington, DC: World Bank.](#) Highlights the World Bank E&S safeguards for investment project finance.
- [EP. Accessed March 6, 2017. "Equator Principles." Essex, England: The Equator Principles Association](#) Risk management framework adopted by financial institutions for determining, assessing and managing environmental and social risk in projects.
- [ADB-Safeguards. Accessed March 2, 2017. "Safeguards." Asian Development Bank.](#) Presents an overview of ADB's E&S safeguards, including frameworks and relevant publications.
- [AIIB. 2016. *Environmental and Social Framework*. Beijing: Asian Infrastructure Investment Bank.](#) Presents an overview of AIIB's E&S policies and safeguards.
- [IFC. 2012. *Performance Standards on Environmental and Social Sustainability*. Washington, DC: International Finance Corporation.](#) Presents the IFC's sustainability framework which applies to all investment and advisory clients.
- [EC. 2001c. *Guidance on Environmental Impact Assessment: Screening*. Luxembourg: European Commission.](#) Presents EU guidance on EIA screening.
- [EC. 2001b. *Guidance on Environmental Impact Assessment: Scoping*. Luxembourg: European Commission.](#) Presents EU guidance on EIA scoping.
- [EC. 2001a. *Guidance on Environmental Impact Assessment: EIS Review*. Luxembourg: European Commission.](#) Presents EU guidance on EIA, and is designed principally for use by authorities, developers and EIA practitioners.

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- [Key References - PPP Cycle](#)

Additional Resources

- [World Bank Group Climate Toolkits for PPPs](#)
- [Municipal Public-Private Partnership Framework](#)

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