

## ANNEX: Background materials and information

### Methodology and Research Design

The consultant should apply a rigorous and methodologically sound mix of qualitative and quantitative methods. The methodology for the research project should meet high academic standards, but also be designed towards accessible outputs that can be applied in policy-making and advocacy strategizing.

The quantitative component should consider advanced quasi-experimental methods such as regression discontinuity design and matching estimators by comparing the period before the reform with the period after the reform.

The qualitative component should consider rigorous application of methods for causal analysis, such as process tracing, which includes careful attention to risks of equifinality and confounding factors.

The interaction of qualitative and quantitative methods should be theoretically and contextually justified.

Variables and indicators are suggested below, distinguished between use in different phases of analysis, for adaptation in the consultant's proposed methodology.

#### Independent Variables:

Contextual and programmatic factors that may contribute to the output of dependent variables can be considered as "input variables," and are below grouped for use in quantitative and qualitative analysis.

#### *Outcome Variables for Quantitative Analysis*

- Data format relates to how procurement data is published: PDF vs. HTML vs. open & structured format. OCDS is an open & structured format, and there are further questions as to whether OCDS has any added value beyond publishing open data in a spreadsheet.
- Data type considers what types of information are made public. Does publishing tenders alone have the same impact as publishing tenders with linked awards? Is data from the planning, tender and award stages publicly linked? Do governments publish additional documents or semi-structured information such as tender/technical specifications, implementation documents, amendments, or selection criteria?

#### *Outcome Variables for Qualitative Analysis*

Qualitative analysis should emphasize contextual factors that will likely not be revealed in quantitative procurement data. Before-after analysis should explicitly justify which factors are included, potentially drawing on the list below, and assess whether they are best considered as independent "input" variables, or as confounding or intervening variables.

- Regulatory requirements: Do formal regulations or informal rules specify particular ways in which data and information should be provided publicly, such as timeliness, technical capacity, centralized publication, or end-user-oriented publication plans?
- Stakeholder engagement: Do procurement authorities engage with stakeholders (NGOs, journalists, bidding companies) by sharing assessments and studies, holding consultations during planning, holding trainings, or facilitating stakeholder feedback?
- Process capacity and communications: Do procurement processes include trainings for civil servants, communication across agencies, or direct communication between buyers?

## Dependent Variables

Concrete “outcome” variables for both groups of stakeholders will be determined through interviews, desk research and analysis, but may include items in the below, illustrative lists:

- For government actors:
  - increased competition for tenders,
  - decreased costs of goods and services,
  - enhanced institutional efficiency,
  - reduced corruption risks, etc.
- For private sector actors: improved market access,
  - reduced time and resources required to bid for contracts,
  - mitigated economic risk in procurement processes, and
  - opportunities to innovate.

## Operational Indicators

In order to operationalize the above variables, specific indicators will need to be identified. Where feasible, the same indicators should be used across countries, in order not to obstruct any potential for comparative analysis. See the Call for Proposals text on the website for links to an initial list of indicators that have been operationalized in other contexts.