1. RATIONALE

1.1. The National Government (NG) is continuously pursuing the most cost-efficient and cost-effective measures in supporting broad-based economic / inclusive growth in the country by maximizing the utilization of NG’s limited financial resources without compromising the attainment of the country’s development goals and thrusts under the 2011-2016 Philippine Development Plan (PDP).

1.2. Considering the major contribution of infrastructure development in achieving inclusive growth, NG has introduced, as one of its strategic measures, Value Engineering/Value Analysis (VE/VA)1 as a way of optimizing investments in major public infrastructure projects/programs to: (a) ensure that these projects/programs are not overdesigned or over-specified; (b) minimize cost overruns, project implementation delays and changes in scopes of works; and (c) ensure that the projects' full functionalities are achieved at the most appropriate designs and least costs.

1.3. In accordance with the PDP, the National Economic and Development Authority (NEDA) proposes to institutionalize VE/VA within the Implementing Agencies (IAs), beginning with IAs with large infrastructure projects. In line with this, NEDA engaged the services of Consultants to undertake the On-the-Job Training (OJT) and Capacity Building on VE/VA of Infrastructure Projects of three (3) government agencies selected from among the following: Department of Health (DOH), National Irrigation Administration (NIA), Maritime Industry Authority (MARINA), Subic Bay Metropolitan Authority (SBMA), Bases Conversion and Development Authority (BCDA), Philippine Ports Authority (PPA), and Department of Public Works and Highways (DPWH).

1.4. However, the funds allocated in 2015 for VE/VA was only enough to capacitate three (3) IAs. Thus, NEDA deems it necessary to continue with the OJT and Capacity Building on VE/VA of Infrastructure Projects to ensure that the VE/VA Process is institutionalized in other major agencies through hands-on conduct of VE/VA of their projects.

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1 VE/VA, as defined by the Society of American Value Engineers International (SAVE International), is the systematic application of recognized techniques by a multi-disciplined team that identifies the functions of a product or service; establishes a worth for that function; generates alternatives through the use of creative thinking; and provides the needed functions, reliably at the lowest cost.
2. OBJECTIVES

The objective of this activity is to capacitate additional implementing and oversight agencies through training and mentoring by way of close observation and active participation in the VE/VA process.

3. SCOPE OF CONSULTANCY SERVICES

The Consultant shall provide on-call advisory support and deliver capacity building workshops for two (2) infrastructure projects.

3.1. On-Call Advisory Support

Undertake VE/VA advisory services for each of the two (2) major infrastructure projects of Implementing Agencies (IAs) that were not covered under the OJT and Capacity Building on VE/VA of Infrastructure Projects Phase 1. The two (2) infrastructure projects shall be identified by NEDA based on the proposed prioritization criteria during Phase 1.

3.2. Capacity Building VE/VA Workshops

Facilitate VE/VA workshops for each of the two (2) infrastructure projects selected for advisory support. The workshops are to be designed as a learning-by-doing for NEDA, delivery agencies and other relevant stakeholders.

In addition to the general scope of works mentioned above, the consulting services shall involve, but not necessarily be limited to, the following activities:

3.3. Preparation of the general and detailed work plan for the conduct of the advisory services, capacity building workshops, and the VE/VA study of the selected infrastructure projects identified under item 3.1. The work plan shall include the timetable/schedule for each of the activities (i.e., Gantt Chart).

3.4. Preparation of the VE/VA Report for each of the 2 infrastructure projects. The VE/VA Report should be in accordance with the standards/formats provided by NEDA, and with the NEDA VA Handbook (2009).

The Report shall also include the associated costs, benefits, and risks involved vis-à-vis the proposed options, highlighting the best options for delivering the intended outputs, which would yield the highest value for money (VfM), e.g., lowest lifecycle/whole-of-life costs based on secondary data or estimates.

The Report shall also include an analysis of possible financing schemes, e.g., whether National Government (NG) funding, Official Development Assistance (ODA), Public-Private Partnership (PPP), or hybrid arrangement, including an analysis of financing risks.

3.5. Conduct of coordination meetings with concerned agencies/institutions, as needed.
3.6. Conduct of meetings/presentations of VE/VA Reports to NEDA or to relevant committees such as the NEDA Board-Committee on Infrastructure (INFRACOM).

3.7. Conduct of other activities, as needed, prior to the formulation of the above-mentioned reports.

The Consultant may propose additional works/services to enhance the Study, provided it shall bear no additional cost to the Government.

4. APPROVED BUDGET FOR THE CONTRACT (ABC)

4.1. The Approved Budget for the Contract (ABC) of Consultancy Services is Twelve Million Pesos and 00/100 (Php12,000,000.00), for a period of not more than one (1) year, inclusive of tax, accommodation, plane fare, other incidental expenses and printing of the original reports (Inception Report, Preliminary Report, etc.). See attached Annex B for breakdown of ABC. The proposed budget shall be sourced from the 2016 NEDA VE/VA Funds.

4.2. Note that this consulting contract shall be a fixed price contract. Any extension of contract time shall not involve any additional cost to NEDA.

5. TIMELINES, DELIVERABLES, & PAYMENT SCHEDULE

5.1. Commencement Date and Period of Implementation

The Advisory Services shall be completed within a period of not more than one (1) year reckoned from the issuance of the Notice to Proceed (NTP) or commencement of the undertaking as indicated in the NTP, or until contract amount has been fully disbursed/expended in accordance with the contract terms and conditions.

5.2. Reporting/Deliverables and Payment Schedule

The deliverables for the subject study as enumerated below shall be submitted by the Consultant in 2 hard and soft copies to NEDA for review on the day/date specified below and based on the agreed detailed work schedule:

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Timeline</th>
<th>Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inception Report</td>
<td>Within three (3) weeks from the Consultant’s conforme/signature on the Notice to Proceed (NTP) issued by NEDA to commence the study</td>
<td>15% of Contract Amount upon NEDA Approval of the Inception Report</td>
</tr>
</tbody>
</table>

Terms of Reference: 3 of 11
as of 4/14/2016
<table>
<thead>
<tr>
<th>Project 1 VE/VA Report</th>
<th>On delivery of the first project’s VE/VA Report</th>
<th>30% of Contract Amount upon NEDA Approval of the VE/VA Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project 2 VE/VA Report</td>
<td>On delivery of the second project’s VE/VA Report</td>
<td>30% of Contract Amount upon NEDA Approval of the VE/VA Report</td>
</tr>
<tr>
<td>Draft Final Report</td>
<td>Two (2) weeks after completion of the Project 2 VE/VA Report</td>
<td>10% of Contract Amount upon NEDA Approval of the Draft Final Report</td>
</tr>
<tr>
<td>Final Report</td>
<td>Two (2) weeks after completion of services</td>
<td>15% of Contract Amount upon NEDA Approval of the Final Report including documentation of the Study</td>
</tr>
</tbody>
</table>

The Inception Report shall include the detailed work program for the scope of work of study. It shall outline the approach to facilitating each VE/VA workshop and the content of each project’s VE/VA report.

The Project VE/VA Reports shall describe each project, the methodology applied for undertaking VE/VA, the outcomes of each VE/VA workshop and any recommended actions. The VE/VA Reports shall contain the required format/information as indicated in the standards/formats to be provided by NEDA and should be in accordance with the format provided for in the NEDA Value Analysis (VA) Handbook (2009). The VE/VA study proper shall cover the following phases:

- **Information Phase** - the Consultant shall review the project design, objectives, and the preliminary cost information. The team should understand the limitations of the project as well as the expected benefits.

- **Function Analysis Phase** - the Consultant shall define the project functions and review and analyze these functions to determine which need improvement, elimination, or creation to meet the project’s goals.

- **Creativity Phase** - the Consultant shall employ professional creative techniques to identify other ways to perform the project’s function(s).

- **Evaluation Phase** - the Consultant shall follow a structured evaluation process to select those ideas that offer the potential for value improvement while delivering the project’s function(s) and considering performance requirements and resource limits.

- **Development Phase** - the Consultant shall develop the selected ideas into alternatives (or proposals) with a sufficient level of documentation to allow decision-makers to determine if the alternative should be implemented.

- **Presentation Phase** - the Consultant shall develop a workshop report and/or presentation that document and convey the adequacy of the alternative(s) developed by the Consultant to the Steering Committee.
The two (2) draft Project VE/VA Reports shall be presented separately to the NEDA Board-Committee on Infrastructure (INFRACOM) at the earliest available schedule of the said committee upon receipt by NEDA of the draft reports.

The *Draft Final Report* shall include the preliminary outcome of the capacity building and the 2 VE/VA Reports.

The *Final Report* shall include the outcome of the capacity building integrating the comments by the NEDA and the INFRACOM on the VEVA Studies, lessons learned, and incorporating suggestions to further institutionalize the VE/VA Process within the IAs.

6. QUALIFICATIONS OF THE CONSULTANT

6.1. The Consultant is to put together a core team, comprising a Chief Technical Advisor, Civil Engineer, and Infrastructure Specialists. The Chief Technical Advisor shall be responsible for the project and shall be NEDA’s point of contact for the project. The Civil Engineer, and Infrastructure Specialists shall provide additional technical support in their respective areas of expertise.

6.2. Individuals in the core team must have expertise in undertaking VE/VA on any of the following infrastructure subsectors: transportation (e.g., road, port and rail), water resources (e.g., water supply), social infrastructure (e.g., housing, hospitals), power/energy (e.g., transmission), and information and communications technology (e.g., internet). The core team should also have at least five (5) years of experience undertaking public infrastructure project appraisals using VE/VA techniques.

6.3. The Consultant shall be expected to engage local and international sector specialists on an as needed basis, depending on the nature of each infrastructure project selected for advisory support.

6.4. Local consultants may associate or tie-up with foreign consultants.

7. IMPLEMENTATION ARRANGEMENT / RESPONSIBILITIES

7.1. Responsibilities of NEDA

7.1.1. Shall act as the executing agency and main recipient for the Advisory Services with the NEDA-Infrastructure Staff (IS) as focal unit in implementing the services.

7.1.2. Shall extend assistance in the coordination meetings to be conducted between the NEDA, the concerned implementing agency, and the Consultant for the duration of the activity, as may be needed, the expenses of which are to be charged to the Contract.
7.1.3. Shall provide, upon the request of the Consultant, available information/data and also, if available, copies of previous related studies subject to the execution of a Non-Disclosure Agreement, if necessary.

7.1.4. Shall evaluate all request for payment/billings and determine the acceptability/correctness of the same.

7.2. Responsibilities of the Consultant

7.2.1. Shall be responsible for the conduct of the Study and the timely delivery of results/outputs as indicated above.

7.2.2. Shall shoulder all expenses required in the conduct of the Study, including travel costs and lodging of Government personnel (maximum of two (2) personnel) during field visits, except for their salaries.

7.2.3. Shall not assign nor sub-contract any part of the professional engineering services under this TOR to any person or firm, except with prior written consent of NEDA. The approval by the Government to the assignment of any part of said services or to the engagement by the Consultant of sub-contractors to perform any part of the same shall not relieve the Consultant of any obligations under this TOR.

7.2.4. Shall provide on-the-job training and capacity building/technology transfer to the Government’s personnel detailed to the Project.

7.2.5. Shall not at any time communicate to any person or entity any information disclosed to them for the purpose of this services, nor shall the Consultant make public any information as to the recommendations formulated in the course of or as a result of the services, except with prior consent of NEDA.

8. CRITERIA FOR SHORTLISTING\(^2\)

The Consultant shall be rated based on the following criteria:

8.1. Qualifications of the Consultant – 20%
8.2. Key Personnel – 60%
8.3. Job Capacity – 20%

9. CRITERIA FOR THE EVALUATION OF THE TECHNICAL AND FINANCIAL PROPOSAL

The Consultant shall be evaluated using the Quality-Cost Based Evaluation/Selection (QCBE/QCBS) procedure under the Revised Implementing Rules and Regulations

\(^2\) See Annex A for minimum requirements
(IRR) of the Republic Act (RA) 9184, otherwise known as the Government Procurement Reform Act (GPRA), with the following allocations:

9.1. Technical Proposal (80%)

9.1.1. Experience and Capability of the Consultant – 10 points
9.1.2. Qualification of Key Personnel – 50 points
9.1.2.1. Chief Technical Advisor – 40 points
9.1.2.2. Other key staff – 10 points

9.1.3. Plan, Approach and Methodology – 40 points

9.2. Financial Proposal (20%)

The prospective Consultant shall follow the guidelines in the preparation of eligibility requirements pursuant to Section 24.1 and Section 24.2 of the Revised IRR of the GPRA.

10. RETENTION PAYMENT

10.1. A retention payment of ten percent (10%) shall be withheld. It shall be based on the total amount due to the Consultant prior to any deduction and shall be retained from every payment until fifty percent (50%) of the value of study, as determined by NEDA, are completed. If, after fifty percent (50%) completion, the study is satisfactorily done and on schedule, no additional retention shall be made; otherwise, the ten percent (10%) retention shall be imposed.

10.2. The total "retention money" shall be due for release upon approval of the Final Report. The Consultant may, however, request the substitution of the retention money for each progress billing with irrevocable standby letters of credit from a commercial bank, bank guarantees, or surety bonds callable on demand, of amounts equivalent to the retention money substituted for and acceptable to NEDA, provided that the project is on schedule and is satisfactorily undertaken. Otherwise, the ten percent (10%) retention shall be made. Said irrevocable standby letters of credit, bank guarantees and/or surety bonds, to be posted in favor of NEDA shall be valid for the duration of the contract.

11. LIQUIDATED DAMAGES

Where the Consultant refuses or fails to satisfactorily complete the work within the specified contract time, plus any time extension duly granted and is hereby in default under the contract, the Consultant shall pay NEDA for liquidated damages, and not by way of penalty, an amount, as provided in the conditions of contract, equal to at least one tenth (1/10) of one (1) percent of the cost of the unperformed portion of the works for every day of delay. Should the amount of liquidated damages reach fifteen percent

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3 Per Annex “E” of the Revised IRR of RA No. 9184
4 Per Annex “E” of the Revised IRR of RA No. 9184
(15%) of the contract amount, NEDA shall, at its own discretion, terminate the contract without prejudice to any further action it may take to recover whatever losses incurred due to non-performance of the Consultant.
Annex A

A. Minimum Information Requirement for the Consultant

<table>
<thead>
<tr>
<th>CONSULTANT</th>
<th>Year Estab.</th>
<th>Country</th>
<th>Type of Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Indiv.</td>
</tr>
</tbody>
</table>

1) NAME

2) AFFILIATED FIRMS

3) HOME OFFICE/BUSINESS ADDRESS/TEL. NOS./CABLE ADDRESS

4) FORMER CONSULTANT’S NAME & YEAR ESTABLISHED FIRM OWNERSHIP

5) NARRATIVE DESCRIPTION OF FIRM (Use other sheet if necessary)

6) PARTNERS, DIRECTORS, OFFICERS, KEY PERSONNEL OF FIRM

<table>
<thead>
<tr>
<th>NAME AND TITLE</th>
<th>DEGREE(S)</th>
<th>YEARS WITH FIRM</th>
<th>AGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD CURRICULUM VITAE SHOWING EXPERIENCE, PROFESSIONAL AFFILIATION AND LANGUAGE CAPABILITY</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7) NAMES OF NOT MORE THAN TWO (2) PRINCIPALS TO CONTACT TITLE AND TELEPHONE NUMBER

8) NUMBER OF PERSONNEL IN PRESENT ORGANIZATION

<table>
<thead>
<tr>
<th>DISCIPLINE</th>
<th>NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRINCIPAL</td>
<td></td>
</tr>
<tr>
<td>KEY TECHNICAL</td>
<td></td>
</tr>
<tr>
<td>a. Civil Engineers</td>
<td></td>
</tr>
<tr>
<td>b. Structural Engineers</td>
<td></td>
</tr>
<tr>
<td>c. Electrical Engineers</td>
<td></td>
</tr>
<tr>
<td>d. Mechanical Engineers</td>
<td></td>
</tr>
<tr>
<td>e. Architects</td>
<td></td>
</tr>
<tr>
<td>f. Economists</td>
<td></td>
</tr>
<tr>
<td>g. Others (Specify)</td>
<td></td>
</tr>
</tbody>
</table>

SUPPORT TECHNICAL (Indicate as in above)

ADMINISTRATIVE STAFF (Indicate type e.g. (TVNIST)
B. Minimum Information Requirement for the Curriculum Vitae (CV) of Each Personnel

1. Position (Official/Key) and/or Proposed Position for the Study;
2. Name of Expert;
3. Date of Birth;
4. Citizenship;
5. Contact Address;
6. Contact Nos.;
7. Educational Attainment (e.g., Bachelor, M.S., PhD, etc.) including course taken and name of university and year graduated;
8. Professional Association/s, if any;
9. Trainings/Workshop Attended: *(Provide description, including date/s, among others)*;
10. Countries of Work Experience;
11. Language and Degree of Proficiency;
12. Employment Record, including:
   a) Employer;
   b) Position held
   c) Date of employment (month and year); and
   d) Description of work undertaken;
13. Experience/Projects undertaken, including:
   a) Company name;
   b) Position held;
   c) Date (month and year) and actual duration of service rendered;
   d) Project description;
   e) Description of work/activities undertaken by the consultant/personnel;
   f) Project location; and
   g) Name of client
### Annex B

**Breakdown of the Approved Budget for the Contract (ABC)**

<table>
<thead>
<tr>
<th>Consulting Services for On-the-Job Training (OJT) and Capacity Building on Value Engineering/Value Analysis (VE/VA) of Infrastructure Projects Phase 2</th>
<th>Components</th>
<th>Amount (in PhP)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Remuneration</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chief Technical Advisor</td>
<td></td>
<td>9,200,000.00</td>
</tr>
<tr>
<td>Other Experts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Pool of Experts</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B. Reimbursable</strong></td>
<td></td>
<td>2,800,000.00</td>
</tr>
<tr>
<td>Round trip airfare for Expatriate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per Diem expenses for Expatriate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshops (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meetings, Trainings, Office Supplies, Communications, Printing, etc. (lump-sum)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>12,000,000.00</td>
</tr>
</tbody>
</table>