

**NATIONAL ECONOMIC AND DEVELOPMENT AUTHORITY  
RESEARCH AND DEVELOPMENT AGENDA**

**Terms of Reference (TOR) for Consultancy Services on  
The Conduct of Updating, Re-estimation and Recalibration of NEDA's Input-Output  
Simulator Using the 2006 Input-Output Tables**

**A. Background/Rationale**

The Input-Output (I-O) Simulator of NEDA was developed in 2011 by Dr. Manabu Fujikawa with the assistance from the Japan International Cooperation Agency (JICA). The I-O Simulator is an additional tool for NEDA in conducting macroeconomic analyses and impact simulations that are essential to policy formulation and development planning. One limitation of the existing I-O Simulator model is relatively outdated since it currently uses the 2000 Input-Output Account of the Philippine economy.

Given the official release of the 2006 I-O Account of the Philippines on December 2013, NEDA recognizes the need to update, re-estimate and recalibrate its existing I-O Simulator using the 2006 I-O Account of the Philippines which was officially released by the Philippine Statistics Authority (PSA). Utilizing the latest I-O Account is expected to better capture the current economic structure of the Philippines that is more at pace with the recent economic developments. Furthermore, updating, re-estimating and recalibrating the current I-O Simulator would further strengthen NEDA's role in the areas of socioeconomic and physical planning and policy services, technical support and advisory services, as well as in monitoring and evaluation services.

**B. Objectives**

The aim of the study is to update, re-estimate and recalibrate the NEDA's I-O Simulator model using the latest I-O Account of the Philippines to make the model produce appropriate results in conducting macroeconomic analyses and impact simulations for effective policy making and development planning.

**C. Scope of Work**

Specifically, the study will entail the following activities, among others:

1. Undertake a comprehensive review of the existing I-O Simulator currently used by NEDA;
2. Update the I-O Simulator of NEDA using the 2006 I-O Account of the Philippines officially released by the Philippine Statics Authority (PSA) last December 2013;
3. Update, re-estimate and recalibrate the existing I-O Simulator of NEDA using MS Excel application as a platform. The simulator should be capable of simulating the sectoral effects of various shocks to the economy;
4. Re-estimate the computational relationships and equations that exist in the NEDA I-O Simulator model using a licensed statistical software/s;
5. At the minimum, the updated, re-estimated and recalibrated simulator should include the features of the existing Input-Output (I-O) Simulator of NEDA such as:
  - a. Final Demand Simulator;

- b. Price- cost Simulator;
  - c. Scenario Building; and
  - d. Projected Induced Employment
6. Engage and capacitate the NEDA personnel that will be assigned as counterpart staff to ensure technology transfer in the updating, re-estimating and recalibrating of the NEDA I-O simulator; and
  7. Prepare the operations manual for the updated, re-estimated and recalibrated NEDAI-O simulator.

#### **D. Deliverables/Timelines/Payment Schedule**

**Implementation Period.** The study shall be completed within 20 calendar weeks, commencing from the date of receipt by the consultant of the Notice to Proceed (NTP). The main output will be the updated, re-estimated, and re-calibrated of the input-output model and the development of an operations manual. Billing for non-reimbursable item, which includes fees for remuneration shall be in accordance with the delivery schedule below and subject to the usual government accounting and auditing requirements.

<b>Deliverables</b>	<b>Timeline</b>	<b>Payment Schedule of Consultant Fee</b>
<b>Inception Report</b> (3 hard copies with electronic copy), which includes, among others, the conceptual framework of the current model, its limitations, problems and the possible solution to the problems.	Within 2 weeks upon receipt of the Notice to Proceed (NTP)	15% upon acceptance of report by NEDA-NPPS
<b>Consultative Meetings</b> , which includes consultative discussion with NEDA staffs.	At least 5 times within 12 weeks upon receipt of the NTP	-----
<b>Interim Report</b> (3 hard copies with electronic copy), includes the initial results of the study, including necessary database and results for sample scenarios using the I-O Simulator model particularly showing impact on output & employment.	Within 13 weeks upon receipt of the NTP	15% upon acceptance of report by NEDA-NPPS
<b>Capacity Building</b> of NEDA personnel (24 hours), includes presentation of theory, estimation processes, trouble shooting and updating of the model, if necessary, and preparation of lecture materials and the initial operations manual.	Within 14 weeks upon receipt of the Notice to Proceed	20% upon accomplishment
<b>Presentation of the results</b> to the National Development Office (NDO) for policy and planning and other NEDA officials, including the preparation of presentation materials.	Within 15 weeks upon receipt of the NTP	15% upon accomplishment
<b>Draft Comprehensive Final Report</b> (3 hard copies with electronic copy), which integrates the inputs, comments and recommendations from the NDO for Policy and Planning, and contains the detailed specifications of the updated, re-estimated and recalibrated NEDA I-O Simulator Model and the draft final operations manual.	Within 16 weeks upon receipt of the NTP	25% upon acceptance of Draft Final Report by NEDA- NPPS
<b>Revised Comprehensive Final Report</b> (5 hard copies with electronic copy), which takes into account the final comments from NDO for Policy and Planning and other NEDA officials and includes the revised final operations manual.	Within 20 weeks upon receipt of the NTP	10% upon acceptance of Revised Final Report by NEDA-NPPS

The Consultant is expected to provide orientation/briefing on each of the output reports mentioned above to the concerned personnel of the NEDA, as needed.

A hard copy of each of the reports shall be submitted to the NEDA-Financial Planning and Management Staff (FPMS) of NEDA for payment purposes.

Billing for reimbursable items, which include expenses incurred for the production costs of manuals, for meeting and consultations, training and capacity building of NEDA personnel on the software simulation model, among others, may be requested not more than once a month based on the actual expenses incurred and supported by official receipt/documents. In the absence of official receipts/documents when claiming for reimbursable costs, the Consultant may also be allowed to submit a certification of actual disbursements made under the oath.

Since all the above payments shall be subject to the usual government accounting and auditing requirements, the Consultant is expected to be familiar with the Government Accounting and Auditing Manual (GAAM).

#### **E. Mode of Procurement and Approved Budget for the Contract (ABC)**

1. The mode of procurement for the consulting services shall be undertaken through public bidding in accordance with RA 9184 and its Revised IRR.
2. **The ABC for the proposed undertaking is TWO MILLION SEVEN HUNDRED PESOS (PHP2,700,000.00), of which PhP1.7 Million is for non-reimbursable/remuneration and PhP1 Million is reimbursable (detailed breakdown is shown below). The ABC is also inclusive of all applicable government taxes and charges, professional fees, and other incidental and administrative costs, which shall be paid on a reimbursement basis (e.g., communication expenses, office supplies and other expenses deemed necessary for the study as certified/approved by NEDA). The breakdown of the ABC is as follows:**

<b>Updating, Re-estimation and Re-calibration of NEDA's Input-Output (IO) Simulator using the 2006 I-O Table Account of the Philippines</b>		
<b>Particulars</b>	<b>Total Contract Price</b>	
	<b>Amount in (PhP)</b>	<b>Amount in (USD)</b>
1. Non-reimbursable Expenses	1,700,000.00	37,778
2. Reimbursable Expenses	1,000,000.00	22,222
a. At least five (5) consultation meetings		
b. Capacity Building for 3 days (including venue, food for 50 training participants, accommodation for at least 18 participants from NEDA Regional Offices)		
c. Purchase of computer and software for the duration of the project		
d. Training supplies, materials, and other incidentals		
e. Manuals (softcopy in PDF form and at least 10 hard copies)		
<b>GRAND TOTAL</b>	<b>2,700,000.00</b>	<b>60,000</b>

Considerations:

- a. Exchange rate: USD1.00=PhP45.00
- b. Post adjustment is a cost-of-living adjustment designed to preserve equivalent purchasing power for overseas work
- c. Total may not tally due to rounding off

3. Note that this consulting contract shall be a fixed price contract. Any extension of contract time shall not involve any additional cost to the government.
4. All manuals, reports, materials, references, equipment, software, among others acquired for the study shall be turned over to NEDA at the conclusion of the research project.

## **F. Implementation Arrangement**

### *F.1 Consultancy Services and Responsibilities of the Consultant*

The consultant shall be responsible for the following:

1. Render services equivalent to twenty (20) calendar weeks;
2. Ensure that appropriate technology transfer to the NEDA counterpart personnel by providing an overall guidance and direction for the updating and recalibrating of the NEDA I-O Simulator to the NEDA technical staff/s counterpart;
3. Submit a comprehensive plan approach and research techniques for the NEDA I-O study;
4. Develop and complete, but not limited to, the following:
  - i. Inception and Interim Reports which are to be prepared in consultation with the National Policy and Planning Staff (NPPS) and the National Development Office for Policy and Planning of NEDA;
  - ii. Draft Comprehensive Final Report (DCFR);
  - iii. Operations manual for the updated, re-estimated and recalibrated NEDA I-O Simulator; and
  - iv. Revised Comprehensive Final Report.
5. Present the simulation results to the NEDA management/officials for review, comments and/or approval;
6. Conduct a three (3)- day capacity building workshop within Metro Manila for at least fifty (50) NEDA staffs, including, but not limited to, the provision of venue (inclusive of food and accommodation), preparation of workshop materials/kits, acquisition of supplies, subject to approval of NEDA;
7. Purchase of computer and software (*by which specifications will be based on the agreement made between the consultant and end-user*) for the duration of the project, as necessary;
8. Submit to NEDA monthly billing statements, including official receipts/documents (reimbursable items); and
9. Be physically available for consultations at the NEDA Central Office (CO) at least once (1) a week during the duration of the research study.

### *F.2 Responsibilities of NEDA*

The NEDA, through the Program Management Unit (PMU), shall be responsible for the following:

1. Assist in coordinating with NPPS to solicit comments and input related to the study;

2. Provide technical and secretariat support to the study by coordinating meetings between the individual consultant and appropriate units in NEDA as well as in consolidating and processing of comments/recommendations/inputs;
3. Assign NEDA technical staff/s counterpart who will work closely with the consultant;
4. Provide working space for the consultant within the NEDA premises;
5. Assist the consultant in the reservation for hotel accommodation of at least 18 participants from the NEDA Regional Offices; and
6. Pay the consultant in accordance with the schedule provided in this TOR.

NEDA shall be the executing agency for the consultancy service. It shall define the acceptability of the deliverables and shall be the approving authority for all operations-related activities, including payment of individual consultant.

## **G. Qualifications and Criteria for Selection**

1. **Qualification Requirements.** The study shall be undertaken by a Consultant whose minimum qualifications are stated herein:

	<b>Qualifications</b>
<b>Education</b>	<ul style="list-style-type: none"> <li>o Educational attainment in economics, statistics, and/or applied mathematics. (with MA and/or PhD an advantage).</li> </ul>
<b>Experience</b>	<ul style="list-style-type: none"> <li>o Experience in using input-output models in any of the following: macroeconomic development planning, socio-economic analysis and projection, and valuation of economic impacts;</li> <li>o Has done actual consulting work in input-output model simulations. Previous engagement with Philippine government agency is an advantage.</li> <li>o Involvement in similar and/or relevant consulting or professional services of size, complexity and technical specialty comparable to the job under consideration.**</li> <li>o Good presentation and training facilitation skills with proven command in the use of written and spoken English and excellent communication skills;</li> <li>o Outstanding analytical skills and numeracy, proficiency with statistical/data analysis spread sheets or software packages (e.g., MS Excel, Powerpoint, STATA, among others)</li> </ul>
<b>Training</b>	<ul style="list-style-type: none"> <li>o Knowledgeable in macroeconomic analysis and economic modeling or economic valuation particularly involving Input-Output models. Strong analytical, facilitation, and communication skills, i.e., ability to effectively present in technical and high-level discussions</li> <li>o Capacity to do additional works, initiate innovation/improvement related to the project, other than proposed.</li> </ul>

\*\* Note:

- i. Similar contracts shall be defined as those contracts that involve the conduct of economic valuation, modeling, quantitative analysis, macroeconomic development planning, socio-economic analysis and projection, valuation of economic impacts using/encompassing compilation, development and utilization of input-output models particularly an I-O simulator costing at least 10% of ABC.

- ii. Relevant contracts shall be defined as those contracts that involve the conduct of economic valuation, modeling, quantitative analysis, macroeconomic development planning, socio-economic analysis and projection, valuation of economic impacts using input-output models costing at least 20% of ABC.
2. Selection of candidates for shortlisting shall be based on the criteria in **ANNEX A**.
  3. Prospective individual consultants are required to submit the following eligibility requirements:
    - a. Valid Tax Clearance Certificate;
    - b. PhilGEPS Online Registration Number; and
    - c. Curriculum Vitae (CV) highlighting all completed and ongoing contracts regardless of relevance/similarity to the subject undertaking within the last twenty (20) years;
    - d. At least one (1) Certificate of Project Completion and Acceptance or equivalent Certification from their previous related studies/projects within the past twenty (20) years;
  4. Prospective Consulting Firms are required to submit the following eligibility requirements:
    - a. Class “A” Documents

#### Legal Documents

- i. Registration certification from the Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives, or any proof of such registration;
- ii. Valid Mayor’s permit issued by the city or municipality where the principal place of business of the prospective bidder is located; and
- iii. Valid Tax Clearance Certificate per Executive Order (EO) No. 398, Series of 2005, reviewed and approved by the Bureau of Internal Revenue (BIR).

#### Technical Documents

- iv. Statement of the prospective bidder of all its ongoing and completed government and private contracts (properly labeled), including contracts awarded but not yet started, if any, whether similar, relevant or not similar/relevant in nature and complexity to the contract to be bid as defined in the EDS, within the relevant period.
- v. Statement of the consultant specifying its nationality and confirming that those who will actually perform the service are registered professionals authorized by the appropriate regulatory body to practice those professions and allied professions in accordance with Clause 1.2, including their respective updated curricula vitae (CVs) that show, at the very least, the consultant’s educational background, related training and relevant experience (in months and years with detailed description/discussion on the nature and scope of works/services rendered).
- vi. At least one (1) Certificate of Project Completion and Acceptance or equivalent Certification from their previous related studies/projects within the past twenty (20) years; and

#### Financial Document

The consultant’s audited financial statements, showing, among others, the consultant’s total and current assets and liabilities, stamped “received” by the BIR, or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission.

b. Class “B” Document

Valid JVA, in case a JV is already in existence. In the absence of a JVA, duly notarized statements from all the potential JV partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful, shall be included in the bid. Failure to enter into a JV in the event of a contract award shall be ground for the forfeiture of the bid security. Each JV partner shall submit the legal eligibility documents. The submission of technical and financial documents by any of joint venture partners constitutes compliance.

5. Participating shortlisted Consultants shall be evaluated using the Quality-cost Based Selection procedure under Republic Act No. 9184, or the Government Procurement Reform Act (GPRA), and its Revised Implementing Rules and Regulations (IRR), with the following weights:

- i. Technical Proposal : 80%
- ii. Financial Proposal : 20%

**H. Retention Payment**

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 progress payment until fifty percent (50%) of the value of the study, as determined by NEDA, is 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.
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 amount 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.

**I. Liquidated Damages**

1. Where the contractor 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 contract, the contractor shall pay NEDA for liquidated damages, and not by way of penalty, an amount, as provided in the conditions of the 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.
2. The maximum deduction shall be ten (10) percent of the amount of contract. Once the cumulative amount of liquidated damages reaches ten (10) percent of the amount of the contract, 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
3. To be entitled to such liquidated damages, NEDA does not have to prove that it has incurred actual damages. Such amount shall be deducted from any money due or which may become due the contractor under the contract.

## **J. Extension of Contract**

1. Extension of contract duration may be granted by NEDA in case of any necessary contract variation or additional work that would render the completion of the project as originally scheduled impossible, provided that the consultant is not at fault with respect to the circumstances causing the need for such contract extension. Any contract extension shall be at no cost to NEDA.
2. Any request for extension of contract duration shall be made by the Consultant in writing including the full details of the circumstances underpinning the request as well as the justification/s for such extension. NEDA, upon receipt of the Consultant's request, shall make a determination on the validity thereof, and shall agree with the Consultant on the appropriate amount of extension of contract duration should it find said request justifiable and meritorious.
3. No extension of contract time shall be granted the consultant due to inexcusable failure or negligence to provide the requirement;
4. No extension of contract time shall be granted when the reason given to support the request for extension was already considered in the determination of the contract time during the conduct of detailed preparation of the contract documents as agreed upon by the parties before contract perfection.



**ANNEX A: CRITERIA FOR SHORTLISTING FOR THE CONSULTING  
SERVICES FOR THE UPDATING, RE-ESTIMATION AND RECALIBRATION OF  
NEDA'S INPUT-OUTPUT (I-O) SIMULATOR**

	<b>For Individuals</b>	<b>For Firms</b>
<b>I. Applicable Experience of the Firm</b>		<b>30</b>
<b>II. Qualification of:</b> Individual Consultant or Officers, key/organic personnel of the Firm who may be assigned to the job	<b>80</b>	<b>60</b>
<i>a. Education</i>	<b>10</b>	<b>10</b>
<i>b. Training</i>	<b>20</b>	<b>20</b>
<i>c. Experience</i>	<b>50</b>	<b>30</b>
<b>III. Current workload relative to capacity</b>	<b>20</b>	<b>10</b>
<b>Grand Total</b>	<b>100</b>	<b>100</b>
<b>Hurdle Rate</b>	<b>70</b>	<b>70</b>
<b>Extra points: Previous engagement with Government</b>	<b>5</b>	<b>5</b>