

TERMS OF REFERENCE

A. Project Title:

SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF A FULLY INTEGRATED ADMINISTRATIVE SOFTWARE SYSTEM FOR THE PHILIPPINE CENTER FOR ECONOMIC DEVELOPMENT (PCED)

B. Background:

The Philippine Center for Economic Development (PCED), a Center created through Presidential Decree No. 453, is mandated to provide financial and moral support to the research, teaching, training and other programs of the University of the Philippines School of Economics (UPSE).

At present, PCED aims to improve its operations through the use of Information Technology (IT) in order to facilitate the delivery of quality, fast and efficient services for the benefit of UPSE students, faculty, research and administrative staff, and external stakeholders. To this end the PCED intends to procure software systems to support its operations, together with any services needed to ensure that such systems will meet the organization's needs. Such services may include requirements gathering, analysis, design and customization of the system. This engagement is crucial in order, first, to identify and analyze the functional, technical and reportorial requirements of PCED. This will then be the basis for the subsequent development or customization, implementation and roll-out. To meet all the user requirements, PCED will require the technical expertise of a Solutions Provider capable of implementing the following major activities:

1. requirements analysis
2. development or customization of software components
3. system installation (standard and customized features)
4. testing and quality assurance
5. training of users and technical staff
6. documentation
7. turn-over/delivery of warranty and support services.

This term of reference (TOR) is provided for the purpose of documenting the requirements of PCED and to define all the activities for the successful implementation of the needed integrated system.

C. Project Objectives:

The main objective of the project is for PCED to acquire an efficiently working, secure, web-based, integrated administrative software system that fit its needs. This may include customized components of a commercially available software system. The required software system will consist of the following modules:

- Module 1 - Accounting and Finance
- Module 2 - Human Resource Management
- Module 3 - Inventory Management
- Module 4 - Procurement Management
- Module 5 - Room and Vehicle Reservation

The Solutions Provider shall:

1. Analyze all relevant user processes and requirements.
2. Design and develop/customize an online system for efficient processing and information management.
3. Deliver working software modules that will address both technical and functional requirements of the users (students, faculty, research and administrative staff) including all of its stakeholders (parents, external offices/units, etc.).

4. Deliver and install any necessary support software and hardware.
5. Submit timely and accurate project plans, activity reports, system designs and other documentation needed for project management and monitoring.
6. Provide specifications for servers and other hardware to be used by the system. Assist in their configuration and set-up.
7. Test, install and commission the system (including related external hardware and software) based on the requirements of the users. Assist in the migration of data as needed. Testing shall include security testing.
8. Provide timely warranty and support services for a period of 12 months.

D. Scope of Work

D.1. General Works

1. The integrated system will consist of software modules required by PCED users. The functional and technical requirements are specified in the following Annexes:

Annex A: Module 1 - Accounting and Finance

Annex B: Module 2 - Human Resource Management

Annex C: Module 3 - Inventory Management

Annex D: Module 4 - Procurement Management

Annex E: Module 5 - Room and Vehicle Reservation

2. Features of the system must be as follows:
 - Must be suitable in cost (acquisition cost and operating cost), size and complexity for PCED. PCED currently has less than 35 staff, small inventory, and low volume of transactions.
 - Preferably, open, non-proprietary standards and development platforms.
 - Web-based system and preferably with fully documented web services/API endpoints.
 - Has data import/export using industry standard file formats (e.g. CSV, Excel, XML, JSON) or similar functionality to enable data sharing with other PCED or UPSE systems.
 - Secure system incorporating secured logins, access control, encrypted storage at rest and encrypted data during transmission (HTTPS/TLS).
 - Preferably, the system should support SAML for authentication, specifically with Google Workspace.
 - Aesthetically user-friendly and accessible designs incorporating visual graphics when necessary with no deceptive design patterns.
 - Able to generate timely and accurate reports as required by users for submission of requirements to oversight agencies, evaluation of financial and operational performance, efficient planning, and decision-making.
 - Provision of user assistance, such as pop-up screens to display instructions, or online assistants.
 - Ability to track user actions through an audit trail.
 - Administration module with back-up and restore utility.
3. The provision of the necessary user, administrative and technical training that will cover system usage, database administration, and others.
4. The provision of all necessary documentation, including design documents, technical specifications, and user and system administration manuals.

D.2. Specific Works:

With respect to above, the following specific works are expected for all Modules:

1. Submission of the proposed project management document as deliverable.
Deliverable: Project Management Document/Inception Report with detailed timeline.
2. Submission of initial design documents including integrated system architecture and detailed user requirements (with functionalities and reports to be implemented). Data assessment and alignment plan should also be addressed.
Deliverable: Initial Design Documents
3. Coding, building and quality testing of system components using PHP and/or any other non-proprietary language selected for the purpose of software development. Agile, rapid, or spiral software development methodology should be used for this project together with computer-based software engineering toolset. Development and test servers are to be provided by the vendor.
Modules or major functionalities may be deployed once they are fully tested and accepted, at the discretion of PCED.
Deliverable: First Prototype of the system, customized as needed.
4. Revision, stabilization and final testing of the system to meet the needs of PCED and its stakeholders. Installation of the complete system, including new physical databases and file repositories as needed, on the server facility to be provided by PCED. The Solutions Provider will assist in the specification, configuration and testing of the server facility.
Deliverables:
 - a. **Installation & Acceptance of systems, including functioning databases and file repositories**
 - b. **Migration of initial data**
 - c. **Final testing report**
5. Submission of complete system documentation, including system architecture and design documents, technical specifications, and installation, user and system administration manuals.
Deliverables:
 - a. **Program documentation:**
 1. **users' manual**
 2. **installation/configuration and administration manual**
 - b. **Database documentation including but not limited to, data schema and data dictionary.**
6. **Training** of users and stakeholders in system usage / administration / maintenance (Train-the-Trainer scheme).
Deliverables: Outputs are
 - a. **Training syllabi and materials.**
 - b. **Training Certificates issued to participants.**
7. **Warranty and Technical Support** for **twelve (12) months** commencing after acceptance of the modules of the systems, or a day after populating the database with live data so as to enable the production instance of the modules, whichever comes earlier. If a module is committed to its production instance, the warranty and technical support for said module shall commence a day after it has been committed to its production instance.
8. Upon completion, the system will be licensed for lifetime use by Philippine Center for

Economic Development and such will not be subject to recurring or other payments in the future.

E. General Requirement Specifications

1. The solutions providers must have implemented in the last 10 years similar projects/s for a government agency or agencies either as individual system projects or as an integrated system.
2. Systems must be secure and must not expose user information, confidential/restricted documents and information without proper authorization.
3. Systems must be developed, implemented and integrated within a period of three (3) months.
4. Third-party outsourcing is not allowed.
5. Each deliverable/milestone will be subjected to PCED's reviews and acceptance.
6. Systems delivered must be certified to have passed third-party (or internal) vulnerability and penetration testing
7. During the warranty/support period, documentation and issue/bug reports must be provided by the Solutions provider.
8. System documentation, administration and end-user manuals must be submitted.
9. Program data files and other support files essential for the operation of the system must be completely turned-over to PCED. The grant of licenses to PCED by the Solutions Provider must be perpetual.
10. One (1) year full warranty/technical support must be provided and these shall include free technical service and support to address various system concerns including, but not limited to the following:
 - a. Fixes bugs and/or errors that may arise from the intended use of the systems. This, however, will not include major revisions to the source codes of the systems.
 - b. Immediate technical support to system crashes or failure.
 - c. Support for security issues, including vulnerability fixes.
 - d. Documentation of all bugs, errors and/or system failure and corresponding fixes/solutions to be part of the troubleshooting guide of the systems after warranty period.
11. The system must support an unlimited number of users.

F. Manpower Requirements

The proposed project team must be composed of experts and specialists as may be required in the implementation of project activities. Overlapping of roles (functions) is allowed provided such functions are related. The proposed project team must be committed to the project for the whole project duration and must be composed of experts and specialists with the appropriate Information Technology roles that will be provided to PCED to perform the various activities for the duration of this engagement. An individual may play one-or-more roles, however, and the Provider has the option to add more personnel depending on their work strategy. Curriculum Vitae of the project team must be provided to PCED upon request.

G. Approved Budget for the Contract (ABC)

The Approved Budget for the Contract (ABC) is Ten Million Three Hundred Thousand Pesos (Php10,300,000.00), inclusive of applicable taxes and out of pocket expenses.

Note: Inclusive of 12% VAT and all other charges.

H. Project Schedule

The systems shall be implemented for a period of **three (3) months** commencing upon issuance of the Notice to Proceed (NTP) by the PCED. Hosting and support shall be provided for a period of **twelve (12) months** after implementation, as specified in the SCOPE OF WORK/Specific Works section of

this ToR.

I. Payment Milestones

The payment shall be based on the Specific Works as defined above. The payment deliverables/milestones are as follows:

Deliverable/Milestone	% Payment
Project Management Document/Inception Report	10%
Initial Design Documents	10%
First Prototype/Configuration of Systems Breakdown of 25%: Module 1 - Accounting and Finance - 10% Module 2 - Human Resource Management - 5% Module 3 - Inventory Management - 5% Module 4 - Procurement Management - 2.5% Module 5 - Room and Vehicle Reservation - 2.5%	25%
Installation & Acceptance of Systems Breakdown of 25%: Module 1 - Accounting and Finance - 10% Module 2 - Human Resource Management - 5% Module 3 - Inventory Management - 5% Module 4 - Procurement Management - 2.5% Module 5 - Room and Vehicle Reservation - 2.5%	25%
Final Deliverables	
Program documentation (requirements gathering and requirements analysis report/documentation, final design documents, users' manual and technical manual)	10%
Training Sessions, Syllabi and materials, and training certificates.	10%
Completion of Warranty/Support	10%

Note: All the above-listed deliverables must be accepted by PCED in writing. Acceptance Certificates shall be issued by PCED and will be made as a requirement for processing any payments.

J. WORK PLAN/SCHEDULE

ACTIVITY	Month 1				Month 2				Month 3			
	1	2	3	4	5	6	7	8	9	10	11	12
Mobilization												
<i>Submission - Project Management Document</i>												
Requirements Analysis and System Design												
<i>Submission - Design Documents</i>												
Implementation												

<i>Submission - First Prototype</i>																				
Review and Acceptance of First Prototype																				
Implementation and Refinement																				
<i>Submission - Installation and Acceptance</i>																				
Testing and Acceptance																				
<i>Submission - Documentation</i>																				
Training Activities																				
<i>Submission - Training documents</i>																				
<i>Completion of Hosting and Support - 12 months after Go Live</i>																				

Annex A: Module 1 - Accounting and Finance

The Solutions Provider will deliver an Accounting and Finance Module for PCED that conforms to the standards, regulations, processes, reports and outputs specified by the Philippine Government, including the Unified Account Coding Structure (UACS) as prescribed by DBM/COA. The module should contain the following sub-modules and functionalities. Note that functionalities may, alternatively, be included in other modules of the integrated system.

1. General Ledger
 - a) Chart of Accounts Maintenance
 - b) Journal Entry and Posting
 - c) Closing of Income Statement Accounts
 - d) Reports
 - i. Financial Statements
 - ii. General Ledger
 - iii. Cash Receipts
 - iv. Cash Disbursements Journal
 - v. Check Disbursements Journal
 - vi. Journal Entry Vouchers
 - vii. Subsidiary Ledger
2. Receivables and Collections
 - a) Billing of Collectibles – generation of Statement of Accounts
 - b) Recording of Collections from
 - i. Donations
 - ii. Rentals
 - iii. Appropriations/Allotments
 - iv. Others
 - c) Issuance of Official Receipts
 - d) Payment Modes
 - i. Cash
 - ii. Check
 - iii. Direct Deposit
 - e) Reports/Forms
 - i. Report of Collections and Deposits
 - ii. Report of Bank Deposits
 - iii. Aging Reports
 - iv. Statement of Accounts
 - v. Official Receipts
3. Payables and Disbursements
 - a) Procurement
 - i. Supplier Maintenance
 - ii. Purchase Requisition – recording of PR number
 - iii. Purchase Order

- iv. Reports/Forms
 - a. Purchase Requisition
 - b. Purchase Order
 - c. List of Suppliers
 - b) Disbursement Vouchers
 - c) Petty Cash Management
 - d) Cash Advance Management
 - e) Withholding Tax Codes (Creditable and Final Taxes - VAT and non-VAT)
 - f) Payment Methods
 - i. Check
 - ii. Advice to Debit Account (ADA)
 - iii. Wire Transfer
 - g) Bank File for FINDES
 - h) Reports/Forms
 - i. Disbursement Vouchers
 - ii. BIR 2307 - Certificate of Tax Withheld at Source
 - iii. Summary of Taxes Withheld from Creditors
 - iv. Alphalist 1604-E
 - v. Quarterly Alphalist of Payees (QAP)
 - vi. Report of Checks Issued (RCI)
 - vii. Report of Advices to Debit Account Issued (RADAI)
 - viii. Advice to Debit Account (ADA - cover letter)
- 4. Treasury Management
 - a) Cash and Bank Account Management
 - b) Investments Management
 - c) Bank Reconciliation
 - d) Reports/Forms
 - i. Bank Reconciliation Statement
 - ii. Investment Report
- 5. Payroll Processing
 - a) Payroll Groups
 - b) Earnings and Deductions
 - c) Payroll Cut-offs
 - d) Leaves and Overtime Pay
 - e) Other Payroll Rules
 - i. Minimum Net Pay
 - ii. Reversals
 - iii. Payroll Adjustments
 - f) Payment Methods
 - i. Check
 - ii. ADA
 - g) Reports/Forms
 - i. Payroll Sheet
 - ii. Payslip
 - iii. Remittance Reports
 - iv. BIR 2316 - Certificate of Compensation Payment/Tax Withheld
 - v. BIR 2307 - Certificate of Taxes Withheld at Source
 - vi. Report of Cash Advances
- 6. Budget Management
 - a) Procurement and Budget Planning
 - b) Budget Monitoring
 - c) Reports/Forms
 - i. DBM Forms
 - ii. Budget Utilization Reports

Annex B: Module 2 - Human Resource Management

The Solutions Provider will deliver a Human Resource Management Module for PCED that conforms to the standards, regulations, processes, reports and outputs specified by the Philippine Government through the Civil Service Commission, and other government agencies such as DBM, GSIS, Philhealth and Pag-ibig. The system should contain the following sub-modules and functionalities. Note that functionalities may, alternatively, be included in other modules of the integrated system:

- A. Employee Information Management (201 File and PDS, individual employee card)
 - a) Onboarding
- B. Employee Self-Service Portal
 - a) Viewing and updating of records
 - i. Uploading of required documents
 - ii. Approval by HR
 - b) Leaves - application for leave, viewing of balances
 - c) Payroll information
 - d) Overtime and OB
 - e) Filing of SALN
- C. Payroll, Benefits and Compensations
 - a) Government mandated deductions
 - b) Payments and deductions
- D. Time and Attendance and Leave Management
 - a) Attendance recording - onsite using biometrics and for other work arrangements
 - b) DTR
 - c) Leave accrual, use, monetization

Note: Provision of Time and Attendance recording system (hardware and software) is included. PCED requires at least two (2) units of Biometrics units.

- E. Staff Management
 - a) Plantilla management
 - b) Hiring and Deployment
 - c) Promotion and Regularization
 - i. Flagging of loyalty and longevity
 - d) Statistics and Reports
- F. Performance Management
 - a) IPCR
 - b) OPCR
- G. Staff Development Management
 - a) Coaching and Mentoring
 - b) Training
 - c) Succession Planning
- H. Reports
 - a) BIR Reports
 - b) Civil Service Reports
 - c) Statistics

Annex C: Module 3 - Inventory Management

The Solutions Provider will deliver an Inventory Management Module for PCED that conforms to the standards, regulations, processes, reports and outputs specified by the Philippine Government including COA. The system should contain the following sub-modules and functionalities. Note that functionalities may, alternatively, be included in other modules of the integrated system:

- A. Receiving and Recording of Supplies, Materials and Equipment
 - a) Delivery
 - b) Receipt

- c) Inspection and Acceptance
- B. Maintenance of Supplies and Materials
 - a) Recording of Information - category, status, costing
 - b) Issuance and Reorder Points
 - c) Physical Count
- C. Maintenance of PPE and Semi-Expendable Property
 - a) Labeling and tagging (use of RFID is preferred)
 - b) Transfers
 - c) Maintenance and Repairs of Equipment
 - d) Depreciation and Lapsing Schedule
 - e) Revaluation
 - f) Disposal/Retirement
 - g) Physical Count
- D. Reports/Forms
 - a) Asset Master File
 - b) Property Acknowledgement Receipt (PAR)
 - c) Inventory Custodian Slip (ICS)
 - d) Inspection and Acceptance Report (IAR)
 - e) Requisition and Issuance Slip (RIS)
 - f) Inventory and Inspection Report of Unserviceable Property (IIRUP)
 - g) Pre-Inspection Report
 - h) Waste Materials Report
 - i) Report of Physical Count - inventory and PPE
 - j) Property Accountability Report (for each employee/end user)
 - k) Adjustments of asset information
 - l) Receipt of returned property
 - m) Property Transfer Report
 - n) Stock Card
 - o) Property Card

Annex D: Module 4 - Procurement Management

The Solutions Provider will deliver a Procurement Management Module for PCED that conforms to the standards, regulations, processes, reports and outputs specified by the Philippine Government. The system should contain the following sub-modules and functionalities. Note that functionalities may, alternatively, be included in other modules of the integrated system:

1. Planning
 - a) Project Procurement Management Plan (PPMP)
 - b) Annual Procurement Plan (APP)
2. Standard Procurement
 - a) Purchase Request (PR)
 - b) Agency Procurement Request (APR)
 - c) BAC Resolution
 - d) Create Request for Quotation (RFQ)
 - e) Abstract of Quotations (AOQ)
 - f) Create Purchase Order
3. Public Bidding
 - a) Purchase Request (goods, infrastructure, consultancy)
 - b) Create Invitation to Bid (ITB)
 - c) Abstract of Bids (AOB)
 - d) BAC Resolution
 - e) Contracts
4. Reports/Forms
 - a) PPMP
 - b) APP
 - c) Changes to APP

- d) Procurement Monitoring Report
- e) Agency Procurement Compliance and Performance Indicator (APCPI)
- f) PR
- g) PR
- h) PO
- i) APR
- j) RFQ
- k) AOQ
- l) ITB
- m) AOB
- n) Notice to Proceed (NTP)
- o) Notice of Award (NOA)
- p) BAC Resolution Documents
- q) Summary Reports

Annex E: Module 5 - Room and Vehicle Reservation

The Solutions Provider will deliver a Room and Vehicle Reservation Module for PCED that conforms to the standards, regulations, processes, reports and outputs specified by the Philippine Government. The system should contain the following sub-modules and functionalities. Note that functionalities may, alternatively, be included in other modules of the integrated system:

1. Online booking and payment
 - a) Room reservation
 - i. Checking for conflicts
 - ii. Billing and collection
 - b) Vehicle reservation
 - i. Checking of availability
 - ii. Assignment of drivers and vehicles
 1. Allowances
 - c) Reservation management
 - i. Cancellation
 - ii. Override
2. Calendar of reservations
3. Vehicle and Driver Management
 - a) Vehicle acquisition
 - b) Vehicle monitoring and maintenance
 - c) Vehicle disposal
 - d) Driver hiring and separation
 - e) Driver schedule management
 - f) Assignment of drivers to vehicles
4. Room Management
 - a) Room information
 - b) Adding and removing rooms
5. Trip Management
 - a) Trip ticket
 - b) Gasoline
 - c) Misc expenses
6. Reports
 - a) Daily, weekly and monthly report
 - b) Gas allowance report
 - c) Billing statement