Terms of Reference  
Version 1.0

Design and Development of NSC Human Resource Management System (HRMS)

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TERMS OF REFERENCE

Design and Development of Human Resource Management System (HRMS)

A. BACKGROUND

A.1 PROCURING ENTITY

The National Security Council (NSC) is the principal advisory body on the proper coordination and integration of plans and policies affecting national security. It coordinates the implementation of national security policies and directives and has the duty to carry out planning and coordination of national security related programs.

The NSC (the Agency) main office is located at 5 V. Luna Road, Quezon City. It manages the Presidential Situation Room (PSR) in Malacañang Park, Manila. To date, the Agency employs around 180 personnel, of which, some personnel are reporting for duty at the PSR. The two office locations are connected and share their information resources and systems through a wide area network (WAN) and Virtual Private Network (VPN). Also, the Agency maintains two data centers at the two sites mentioned to ensure High Availability (HA) of systems and information resources.

A.2 PROJECT OVERVIEW

The NSC Secretariat (NSCS) recognizes the need to improve or automate its processes and systems in order for the agency to meet its vision to become a national security institution that is responsive to the changing challenges and opportunities, within and outside the country, and a policy advisory body that effectively contributes towards an enabling environment that enhances socio-economic development and national governance.

In order for the agency to continuously improve its systems and processes to adapt to challenges and changing security environment, the NSC recognizes the need to improve the administration of its personnel and resources. To this end, the NSC undertakes the development of the NSC Human Resource Management System (HRMS). The HRMS aims to migrate and integrate its current web-based Biometric System (developed in MS SQL and PHP) and NSC InfoSys (developed MySQL/MariaDb and PHP) for the agency to automatically generate the NSC monthly payroll and other reportorial requirements of the Civil Service Commission (CSC), Department of Budget and Management (DBM) and Commission of Audit (COA).
The current Biometric System is capable of printing the Daily Time Record (DTR) of
the employees and summarizes the undertime and overtime services rendered by its
employees. Moreover, the NSC InfoSys is capable of maintaining employee records. It is
capable of printing Personal Data Sheet (PDS) and service record.

Functionalities or Features of the HRMS

This project specifically aims to design and develop an application system in the
LAMP (Linux, Apache, MySQL and PHP) platform with the following modules:

1. Employee Self Service Portal

Employee Portal. The Employee Portal is a self-service module that:

- Allows paperless application and approval of
  - Personal Data Sheet updates
  - HRDS Request Forms
    - Employment/Compensation Certificates
    - Optional Deductions (e.g., payments of loans, PAGIBIG savings
      contributions, Provident Fund, etc.)
    - Certificate of Appearance
  - Leave of Absence
  - Pass Slip/Official Business (OB)
  - Request for certification of eligibility to apply for loans (the system may
    automatically generate this certification based on the current net pay of the
    employee)
  - HRDS Feedback or Survey Form
  - Others

- Notifies employee about the status of their request/application
- Provides employees to view Daily Time Record (DTR) with automatic prompt of
  incomplete entries, Leave Record, Certificate of Employment and Compensation
- Attach and view scanned documents.
- Serves as channel where information relevant to employees can be distributed.
- Provide a link to download e-forms, announcements, calendar of activities,
  frequently ask questions and among others.

The system should have a facility for the Human Resource Development Services
(HRDS) to manually encode or modify entries. This is to accommodate transactions that
were accomplished manually or in hardcopy and override erroneous entries.
2. Employee Record Management

2.1 Personal Data Sheet. The following employee information can be managed through these facilities:
- Personal Information
- Identification
- Contact Information
- Family Background
- Educational Background
- Civil Service Eligibility
- Work experience (including service record and plantilla history)
- Profession
- Voluntary Work
- Trainings Attended
- Honors, Awards, Interests
- CSC Questionnaire
- Document Attachments (e.g., Scanned 201 document)

The output of the system is based on various reports prescribed by CSC. It should be able to generate reports such as:

a) PDS
b) Service Records (should be able to harvest data from PDS to personnel movement),
c) Certificate of Employment
d) Certificate of Employment and Compensation
e) Loyalty Awardees
f) List of employees by demographic information such as age and sex
g) List of employees with the date of next step increment
h) List of employees nearing retirement age (age 60 and age 65)
i) Employee Masterlist by Unit
j) Salary adjustment memo
k) List of separated employees with date of separation
l) Other Customized Reports

2.2. Filtering and advance search facility by field (i.e., residency at NSC, trainings attended, educational background, demographics (e.g., age, gender, town/municipality, province, etc.)
2.3 Personnel Movement. This facility allows the processing of the issuance of all types of action notices such as promotion, renewal of contract, transfer reinstatement, step increment, reassignment and Job rotation. The employees' service records are kept in this facility. This facility handles the following:

- Step Increments and Tracking (with notification)
- Appointments
- Promotions and tracking
- Transfers and tracking
- Separations and Retirement (with notification)
- Loyalty (Length of Service) Awardee tracking (with notification)

- It has a facility to capture, process and track the issuance of all type of action notices and appointments such as promotion, transfer, renewal of contract, reinstatement, step increment, reassignment, job rotation, change of status, salary adjustment, detailing, resignation and retirement.
- Generates customizable and user definable reports.
- Add Certified True Copy stamp on scanned document.
- It has a facility for viewing and printing of following:
  a) Number of Employees and Masterlist of Employees by Organizational Unit, Employment Status, etc.
  b) List of Employees who are currently in the office (with time in) or Employees Without Time In
  c) Birthday Celebrants for the Month
  d) List of Retiring Employees
  e) Contractual Employees with Expiring Contracts

3. Time and Attendance

This covers the collection of all the time in and time out records of the employees. Logs shall be transferred to the system in real time through application program interface (API). (Note: There is an existing Biometric System that generates the Daily Time Record of employees wherein official working hours, Overtime and Undertime of employees are computed. Thus, the HRMS should be able to integrate the functionalities and features of the current biometric system which was developed using PHP and Microsoft SQL Express.
3.1. Daily Attendance – The system should be able to generate Daily Time Record anytime. The system should be able to handle three (3) different employee’s schedule and tag the appropriate schedules of employees.

3.2 Overtime. The system should be able to compute overtime hours for processing of overtime payment and/or Compensatory Overtime Credits (COCs). It should be able to generate overtime report and certificate of compensation.

3.3 Monthly Report of Attendance (MRA). The system should be able to generate MRAs that will accurately reflect employees’ number of leaves, tardiness, and under time.

3.4. Summary Record of Tardiness and Absences. The system should be able to generate a report on the summary record of personnel’s tardiness and absences by specified categories (e.g., by employee, position, unit, year, etc.).

- It has a facility to assign employee’s work schedule per date range
- Keep the historical record of the employees’ work schedule
- User maintainable timekeeping set-up per employee
- User definable overtime types/settings (i.e., multiplier per day)
- User definable core office hours per work schedule
- With facility to record daily in and out manually
- Full integration with the biometric devices through a module with the option to upload employees attendance logs using text file, SQL or MS Access File
- Automatically computes the following: Regular Hours, Approved Overtime Hours, Absences, Excess Time, Tardiness, Undertime, Paid Leaves by type of leave, Pass Slips or Official Business, Absences Without Leave, etc.
- User Maintainable holidays using a Holiday Table or Calendar
- User Maintainable Table for Approved Overtime Requests per employee by date covered
- With Ledger for Compensatory Overtime Credits (COC)
- Facility for filing and processing of DTR corrections
- Generates the following reports and facility to print or save:
  a) Authorized Travel or Travel Order
  b) COC/CTO Availment and Non-Availment by Employee
  c) Custom Timekeeping Report
  d) Daily Time Correction Form
  e) Daily Time Record
  f) Disapproved Leave Applications
  g) Employees with less than the required number of logs
h) Employees with forgot to log requests/corrections
i) Forced Leave Record
j) Forfeited CTO’s
k) Late filed leaves record
l) Leave without pay
m) List of AWOL Employees
n) List of Employees with prolonged leaves
o) List of Employees with perfect attendance per month
p) List of Employees who are currently inside the office (currently logged in) and out of the office (did not log in or has log out already, applied for leave, has pass slip, etc.)
q) Monetization Claims
r) Official Business Report
s) Leave profile by employee
t) Tardiness and Undertime Report
u) Non-attendance to Mondays Flag Ceremonies
v) Etc.

4. Leave Management

The system keeps track of the leave credits, absences and tardiness of employees. This also involves the review of all daily time records (DTR) of employees and allows the authorized HRDS personnel to modify or adjust the DTR before submission to the payroll system.

4.1 Leave Processing. The system shall be able to manage different leave types such as Sick Leave, Vacation Leave, Special Privilege Leave, Maternity Leave, Paternity Leave etc. through crediting and monitoring of leave credit balances.

4.2. Filtering and Report Generation. The system should be able to filter records and generate reports such as leave record to reflect leave credits, report on leave credit balance, and monthly deduction of attendance.

4.3. Forecasting Monetization of Leaves. The system should be able to compute and forecast leave credits for forecasting of possible monetization of employees.

- Provides file maintenance per leave types
- User definable leave types with description to be printed at the back of Leave Forms
- Inclusion of facility to attach documents required for certain leave types
5. Payroll System

5.1 General Payroll. This module calculates the compensation of employees based on the generated mandatory/compulsory deductions (e.g., contributions, loans) and the Leave without Pay of the employees (e.g., undertime, unauthorized absences).

The employees’ compensation package (salary and PERA), recorded deductions and daily time records are used in the computation such as:

- Income Tax using annualized tax method to minimize huge tax deductions at the end of the year. Tax computation factors in items such as exemptions and other non-taxable items (e.g. De Minimis).
- Government statutory deductions such as withholding tax, GSIS contributions and loans, PhilHealth and PAG-IBIG contributions and loan payments.
- Voluntary deductions such as SSS, PAG-IBIG II, NSCEA, NSC provident fund, etc.

It provides suspension of loan deduction in the system if the take home pay is less than the minimum allowable take home pay or for any valid reason upon employee’s request.

5.2 Special Payroll. This facility computes payroll on scheduled dates. The employees’ compensation packages are considered to determine who will be included in the computation. Compensation packages set-up through the Compensations Packages module are automatically computed by the system (e.g. Performance Based Bonus, 13th Month Pay, RATA, etc.). There is also a dynamic user-friendly facility for other compensations granted across-the-board. Compensations and deductions are user-encoded or uploaded from an MS Excel file in pre-defined templates. The system should be able to preserve the record of deductions by type of deductions per employee.

5.3 Disbursement Vouchers. This facility allows users to disburse compensation through check or ADA. Some vouchers are automatically generated by the system (e.g. last pay computation, retroactive adjustment) while some are encoded by the users (e.g. reversal of incorrect deductions).
5.4 Remittances. This facility handles remittances to Philhealth, BIR, Pag-ibig, GSIS, SSS and other institutions with auto-deduct arrangement with NSC.

Payroll System Specifications / Requirements

- Allows automatic deduction, changes, and updating of deductions of all government required contributions (eg, GSIS, Philhealth, Pag-Ibig, Employees Association Shares, etc.);
- Automatic Computation of Statutory deduction such as Philhealth, GSIS, Pag-ibig, and withholding tax;
- Individual or mass set-up of compensations and deductions;
- Has automated loans and loan repayments monitoring and tracking;
- Facility to compute withholding tax due; With projection of withholding tax to be deducted for the year that eliminates withholding tax refund and tax deficit per employee;
- Able to process different pay types (salary, overtime, etc.); computes for service charges and other income and/or benefits (midyear, honoraria, etc.);
- Records and maintains Payroll history;
- Customized reports module;
- Maintenance facility on the parameters for the computation of deductions on GSIS, Philhealth and PAGIBIG;
- Assignment of Accounting Entries - codes and descriptions;
- Can handle multiple/unlimited bonuses and allowances;
- Limited editing and viewing of authorized users and staff. Authorized users should be able to update the deductions/contributions by type when the need arises;
- Loan Monitoring with automatic computation of loan balances, total amount paid and loan status;
- Employees should be able to view their own pay slip;
- Report on the total breakdown per denomination (bills and coins) per pay period and payroll;
- Provision for importing data to eNGAS (i.e., MS Excel Format);
- Allows setup of taxable or nontaxable compensation type;
- User can setup compensation and deductions of an individual employee or group of employees;
- Creation of reports with no additional programming or re-programming through custom report;
Compute and store final amounts in two decimal places to avoid rounding off numbers. All coins shall be placed in only one pay period (e.g., on every 30th of the month);

- Allows printing of pay slips and pay envelopes; and

- Generates the following reports and facility to print or save:
  a) Minimum Allowable Take Home Pay per Employee and the Difference to Actual Take Home Pay
  b) Summary of Loan Deductions List
  c) Payslip (with Certification)
  d) Pay Envelope
  e) Breakdown of Denomination per Employee per Pay Period
  f) General Payroll Register/Report (Monthly Salary, Performance Bonuses, Educational Assistance, Loyalty)
  g) List of employees who received loyalty award, educational assistance, performance bonuses, etc.
  h) General Payroll Summary
  i) GSIS Remittance Report
  j) GSIS Loan Remittance List by Type: Consoloan, Emergency, Educational, Policy
  k) GSIS Premium Remittance List
  l) GSIS Summary of Payments List
  m) GSIS Individual Voucher (I.V.) Loan List
  n) GSIS I.V Premium List
  o) GSIS Real Estate Loan List
  p) HDMF Premium Remittance Report
  q) HDMF Loan Remittance Report
  r) HDMF I.V Loan List
  s) HDMF I.V Premium List
  t) HDMF MP2 Remittance List
  u) HDMF Housing Loan Remittance List
  v) HDMF Summary of Payments List
  w) PhilHealth Premium Remittance Report
  x) PHIC Premium Remittance List
  y) PHIC IV (Individual Vouchers) Premium Remittance List
  z) PHIC Summary of Payments List
  aa) SSS Remittance
  bb) NSCS Provident Remittance
  cc) NSCEA Dues Remittance
dd) Alphalist (Terminated)
ee) Alphalist with Previous Employer
ff) Alphalist without Previous Employer
gg) BIR 2316
hh) Collective Negotiation Agreement Incentive Report
ii) Educational Assistance Allowance Report
jj) Withholding Tax Remittance
kk) List Authority to Debit Report
ll) Etc.

6. Voucher System (Individualized Compensation Packages)

This facility captures and stores various compensation components enjoyed by an individual employee that were not included in the payroll system. It handles the processing of adjustments, RATA, PERA, Loyalty Pay, Step Increment, monetization, maternity, awards and incentives, first/last salary, terminal leave benefits, etc. It allows the user to create and define qualification criteria to process other earnings and bonuses.

All compensations and deductions in this module shall be incorporated in the employees’ historical records to keep track of his/her records (e.g., Individual Vouchers).

7. Common Modules and Dashboard

7.1 Systems or Code Library. System shall include facilities where system or HR administrators shall be able to set-up the various parameters and system variables including bank codes, salary rates, income/deduction codes, allowance rates, Philhealth table, GSIS table, SSS table, remittance branches, etc.

7.2 Report Generation. It must have a separate Report Generation module for the advance search and processing of custom reports. All system generated reports must have an option to have a watermark.

7.3 File Sharing or KM Module. This module allows the users to share, distribute and download common office files, forms, pictures, videos and data.

7.4 Dashboard. It shall have a dashboard for the announcements, calendar of events, etc. Users should be able to see who are currently logged in to the system.
8. Systems Maintenance

The Maintenance System refers to System Administrator’s module or program for the maintenance of the HRMS. Adequate security features should be in place. Provisions should be made to secure front-end and back-end database and backup system through encryption. The system is compliant with the requirements of Data Privacy Act and ISO 20071.

8.1 Users. A facility to create and manage user accounts that have access to the system, with facility to view user status (whether offline or online) for security tracking.

8.2 Role. A facility to create and manage roles within the system. It allows multiple user roles.

8.3 Permissions. A facility to manage the privileges for each role in the system.

8.4 Organizations. A facility to manage the organizations/offices in hierarchical order.

8.5 Audit Trail Tracking. Administrators facility to filter, display and print user activities within the system. It can display and filter logs or audit trail on every transaction, updates/ revisions made with the person responsible, and documents downloaded; it should have an option to archive audit logs. Administrator can also view archived log thru the system.

8.6 Backup and Restore. A facility to automatically create password protected backup files per HRMS module and to restore it by module. It should have an option to create an encrypted backup (e.g., PGP) or a password protected backup. Option to copy said encrypted backup files to external device.

8.7 Security. Allows Multi-level or compartmentalized confidentiality access to records, files and modules. It has a facility to define password expiration and convention thru Password Policy setup.

A.3 PROJECT SCOPE

The HRMS covers the development of new application software, capable of integrating the current Biometric System. It also covers the migration of data from the NSC information system (or NSC InfoSys).

The HRMS will primarily facilitate the administrative work processes and sharing of ICT resources and databases. It shall incorporate following general features:
• Web-based and runs in an optimized RDBMS platform, preferably PHP and SQL-based. No licensing or subscription payments will be required or obligated in its installation and operation;

• It can be operated and managed from a web-based graphical user interface and must be multi-browser compatible with the latest versions of Google Chrome, Mozilla Firefox, and Internet Explorer;

• User-friendly screen designs which can be further innovated within the warranty period if warranted;

• Connected workflow and organizational processes, which ensures a single organizational process across NSC Units.

• Fully developed software application solutions, but flexible as to customization requirements;

• Software shall be OS and dB portability-ready;

• Secured and transparent transactions, wherein there will be a single sign on and detailed log events and audit trail of every transaction; Audit trail system is flexible and has an advanced search facility and filtering facility;

• Connected workflow and organizational processes, which ensures a single organizational process from its two sites;

• High Availability (HA) configuration;

• Generates reports on-screen and able to print to file with options using PDF, MSWord, MSExcel.

• Implementation of security restrictions and authorizations to enforce strict access control over sensitive personal information (adheres to data privacy law). Compartmentalize user access and/or centralized individual security access level on each sub-module;

• Application software shall show completeness & functionality based on government operation as per standards of the Civil Service Commission (CSC), Department of Budget and Management (DBM), Commission on Audit (COA) requirements & actual office operation as per specifications.

• It has a report filtering and data mining facility. It accepts search criteria and generates reports based on the search criteria.

• Mobile Device Ready. It can be viewed easily using browser of tablets and smart phones and it should be based on responsive web design;

Specifically, the Contractor shall cover, but not limited to the following:

i. Project Management

ii. Requirements Analysis
iii. Systems Analysis and Design

iv. Systems development and testing
   - Create a Quality Assurance module or HelpDesk that can be accessed by the NSC Technical Working Group (TWG) members to: (a) keep track of the progress of development of planned features/components/routines; (b) facilitate user testing, bug reporting and tracking; and (c) document system crashes/failures and corresponding fixes/solutions;

v. Data Migration
   - Migrate the available data from NSC InfoSys (MySQL);


vii. Implementation (Training and Deployment).
   - Facilitate the conduct of workshops and users’ training and provide training materials for PSR and NSC users;
   - Train and transfer the required knowledge to technical staff. The training for technical staff shall cover installation, configuration, backup, uninstallation, and restoration of the HRMS. It highlights the functionalities and architecture of the System that shall be developed;

viii. Documentation, Roll-out Support and other Management and Administrative Functions
   - Prepare and submit for approval an Inception Report which includes: a) the overall approach in undertaking the required tasks b) an indicative work plan (with milestones) listing all the activities to be undertaken under the Contract, the schedule, and the personnel of the Service Provider responsible in accomplishing the activities; and; c) the template of the monthly progress reports;
   - Prepare and submit for approval (or re-approval) a work plan (or a revised version to incorporate catch-up measures in case of delays, as may be necessary);
   - Coordinate with the NSC Technical Working Group and/or Project Management Committee and participate in monthly meetings for reporting progress of development and/or bug fixing, live system demonstration, etc.;
   - Submit Monthly/Final Progress Reports for verification/approval;
   - Submit Progress Billings (with the approved Monthly/Final Progress Report for the period covered);
   - Ensure that the system(s) is (are) properly installed and configured at NSC and PSR data centers to include High Availability (HA) features (i.e., MySQL Clusters);
Prepare and submit the following documentation/manuals in soft and hard copies: (a) system documentation manual; (b) user manual; and (c) training manual;
> Disclose and turn-over to the NSC Technical Working Group all source codes and architectural design, and agree to provide NSC all Intellectual Property rights for the systems developed;
> Develop a Web-enabled system to track project status and the problems encountered by NSC users and technical staff;

ix. **Provide Three (3) Biometric Devices, if needed.**
> Provide three (3) units of the recommended biometric devices in case the current Biometric Devices of the NSC is not compatible with the developed HRMS. The devices should have seamless connectivity with the HRMS and can be fully integrated.

x. **Provide the needed third party software.**

All the required software needed or recommended by the Contractor to implement the system shall be procured by them. The Contractor should provide first the technical specifications for the third party software for the System for NSC’s approval.

xi. **End-User Support, Warranty and Maintenance**
> Provide for a 24-month warranty and defects liability period to start after Go Live, wherein any system problem/bug encountered and minor enhancements (cosmetics, changing of report formats by CSC, DBM & COA, modify labels, system upgrades, reinstallation, etc.), within the approved program specifications, including revisions/amendments as may be agreed upon by both parties, shall be corrected/remedied/revised free of charge.
> A 8x5 technical support should be rendered to respond to system crashes or failures.
> Carry out corrective and adaptive maintenance in order to improve the application system when necessary.

**A.4 CONCEPT OF OPERATION**

The HRMS is intended to provide an efficient and integrated system to simplify and facilitate the processes involved in managing human resources and performance, time and attendance, leave management, and payroll. It shall be established within the NSC and PSR Wide Area Network (WAN). Units and offices within the WAN will use the HRMS while
selected users shall access the system through a secured virtual private network (VPN). The system is designed to access personnel and asset records in real-time.

All activities starting from the mobilization shall be properly documented. Policies shall be formulated to ensure alignment with the policies and standards of the NSC relative to human resource and performance management.

B. PROJECT ESTIMATES

B.1 APPROVED BUDGET COST

The ABC is Php 4,500,000.00 inclusive of all applicable taxes.

B.2 DURATION

The design and development of the system shall be completed for a period of four (4) months. Moreover, after the delivery and acceptance of the system, the Contractor shall provide another 24 months as warranty period to cover, technical support, bug fixing and minor enhancements (e.g., cosmetics, changing of report formats, modify labels, etc.).

C. GENERAL SCOPE OF WORK/BID REQUIREMENT

C.1 TECHNICAL SPECIFICATIONS/ARCHITECTURAL FRAMEWORK

The HRMS shall use an open-source Web-oriented design which should utilize the latest and most secure technological tools on the market. It shall provide support to at least six (6) general operative processes of the PSR: (i) user authentication, (ii) data migration and integration, (iii) data processing or report queries, (iv) report generation, (v) common module and knowledge management, and (vi) system maintenance module.

The Bidder shall also provide the third party software requirements of the HRMS and three (3) biometric devices, if needed. The HRMS must have seamless connectivity to the biometric devices.

C.2 OTHER SUPPORT SERVICES

In addition to the development milestones listed on the Gantt chart above, the Service Provider is also expected to submit/produce the following reports/outputs/deliverables:

i. Inception Report. It should include (a) the overall approach of the Service Provider; (b) an indicative work plan, (c) key staff deployment, and (d) template of progress report. Inception workshop to discuss with Client.
ii. **Business requirement document.** It should include a documentation of the database structure, indicators, functionalities, information flow, links and relationships and reporting requirements. It should also include hosting arrangements, hardware/software/data/connectivity requirements, institutional arrangements, privacy by design, etc.

iii. **Minutes/agreements of consultation meetings with concerned NSC staff.** Minutes, list of agreements, and persons consulted/met during consultations/meetings on: (1) identifying system requirements; (2) refining the draft system design & use case or mock-up; and (3) regular meetings of the Service Provider with NSC-PSR.

iv. **System Design Specifications and Use Case/Mock-up (with flowchart).** The Use Case or Mock-up should provide the simplified and graphical representation of what the system actually does. It depicts the different types of users and the various ways that they interact with the system. The System Design Specification should define the architecture, network design and layout, components, modules, and interfaces of the system, detailed functional design and other system operational requirements. It should also describe the data flows, inputs, outputs, and storage, processing and backup or recovery configurations. These should be submitted in electronic and hard copies (two sets).

v. **Detailed Work Plan.** It should contain a Gantt chart showing the activities to be undertaken by the Service Provider, indicating milestones, schedule, and personnel assigned and their respective roles. It should be submitted in electronic and hard copies (two sets).

vi. **Quality Assurance Module.** A module that can be accessed by the NSC Technical Staff (MID) to: (1) keep track/document the progress of development of the planned features/components/routines; (2) facilitate user testing/review, bug reporting and tracking; (3) document system crashes/failures and corresponding fixes/solution; and (4) penetration tests.

vii. **User Manuals.** Produced in two forms: (1) Operations manual (booklet) on how to use the system, which should cover all types of users and all types of system interaction; (2) e-Learning module (web-based and CD-based instructional training) complete with screenshots. These should be submitted in soft (2 CD copies) and hard copies (2 sets, for the operations manual only).

viii. **Training Manual.** A step-by-step guide on how to conduct training for first time users of the system. It should list and describe in detail the trainings to be conducted in terms of - Course Title and Description, Learning Objectives, Class Size and Composition, Course Duration and Training Sequence.
ix. Summary report on the training evaluation. Report consolidating and summarizing the evaluation forms accomplished by the participants during the user training. It should be submitted in electronic and hard copies (2 sets).

x. Third party software and Biometrics Device. The Bidder shall provide three Biometrics Devices and third party software, if any. Technical specifications shall be prepared in coordination with the NSC-MISD for the acquisition of needed third party software and hardware for the implementation of HRMS. It should list the software, hardware and other resources required by the system and describe its relevant characteristics and/or performance requirements. Describe the software, hardware and network products/solutions to be required in terms of: (1) functional requirement, (2) features, (3) number of units, and (4) expandability.

xi. Progress reports. Should be submitted in electronic and hard copies in the form agreed to by the NSC and the Service Provider.

xii. System's source codes. Including data files and other support files essential for the operation of the HRMS. It should be submitted in soft and hard copies (two sets).

xiii. System documentation manual. The manual shall include, but would not be limited to the following documentation requirements: (1) setup and configuration (scripts and procedures); (2) network protocols; (3) security and back-up procedures (4) database schema/structure (fields, tables, links/relationships); and (5) report queries. It shall be submitted in soft and hard copies (three sets).

xiv. Maintenance and support plan. The maintenance and support plan should include among others: (1) staffing plan and number of support staff, (2) operational processes, and (3) minimum service levels.

xv. Risk or vulnerability assessment and management plan. To comply with the provisions of RA 10173 or the Data Privacy Act and to prevent the occurrence of loss, the project contractor must provide a vulnerability assessment and management plan detailing the strategies and appropriate measures to be undertaken. Risk is defined as the probability of an unforeseen incident and its consequent penalty. Exposure to risk could lead to disaster or loss in the form of diminished quality of the product, increased costs, delays or failures and etc.

xvi. Breach Management and disaster recovery plan. The plan should describe the Breach Management and Disaster Recovery Plan requirement. The Plan must be detailed enough for all possible breaches or disasters. It must contain the comprehensive procedures necessary to resume business to its normal operation in the least possible time.

xvii. Terminal Report. A template-based report that describes, but not limited to the following: final overview of activities, review of information system use, user perspectives, issues, suggestions for improvement and sustainability.
D. PROJECT MANAGEMENT

Project direction shall be done by the NSC. All technical reports, designs, specifications, or recommendations shall be subject to review and approval by the agency. Should there be any disagreement; the NSC shall have the final say on the matter.

The working arrangement for the systems development and other management and administrative functions will comprise, but not limited to, the following:

i. The Project Management Team (PMT) will be responsible for providing direction and guidance in the overall conduct of the project, integrating and resolving conflicting ideas that may arise in the course of systems development.

ii. A PMT for the HRMS project shall be organized to serve as the NSC counterpart team to the Service Provider, responsible for monitoring the progress of the project, and validating and accepting the outputs of the project before elevation to the NSC Management Committee.

iii. The NSC TWG shall assist the Service Provider in securing information or data from other government agencies, officials or third parties concerned as may be necessary in the performance of services.

iv. The NSC TWG shall facilitate or manage the participation of NSC-PSR personnel involved in the process.

All information gathered by the Service Provider shall be protected with a Non-Disclosure Agreement (NDA). All products/outputs of the Service Provider relative to the Project shall be submitted to the NSC for safekeeping. The NSC will be the absolute owner of the developed information system and will have copyright ownership.

E. PAYMENT SCHEDULES/MILESTONES

Payments for the services rendered by the Service Provider shall be made in accordance to the schedule below. Note that payments to the Service Provider for each of the milestone/ output/ activity specified below shall be made after submission by the Service Provider of a billing statement, and upon acceptance and issuance of certificate of satisfactory service by NSC.

<table>
<thead>
<tr>
<th>Output/Milestone</th>
<th>Time Frame</th>
<th>Schedule of Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Submission of Inception Reports</td>
<td>Two to three weeks upon</td>
<td>10% of Total Contract Price (TCP)</td>
</tr>
<tr>
<td>and Business</td>
<td>receipt of Notice of</td>
<td>upon submission of</td>
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<td></td>
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<tr>
<td>Requirements Document</td>
<td>Award/Notice to Proceed (NTP)</td>
<td>inception report and BRD</td>
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<tr>
<td>--------------------------------------------------------------------------------------</td>
<td>---------------------------------</td>
<td>-----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2. Submission and Approval of Systems Design Documentations and Work Breakdown Schedule</td>
<td>Five to six weeks from NTP</td>
<td>30% of TCP upon delivery and acceptance of Systems Design documentations less 5% retention</td>
</tr>
<tr>
<td>3. Installation, submission of test plan and acceptance of HRMS</td>
<td>Four to five months from NTP</td>
<td>40% of TCP upon installation and acceptance of HRMS and conduct of Technical and User’s training less 5% retention</td>
</tr>
<tr>
<td>4. Users Training and Complete Documentation and Progress Reports</td>
<td>Five to six months from NTP</td>
<td>20% of TCP upon acceptance and turnover of systems’ documentation, source code and progress reports less 5% retention</td>
</tr>
<tr>
<td>5. Terminal Report and Final Acceptance</td>
<td>After 24 months</td>
<td>Retention Fee (5% of 90% of TCP)</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>