

TERMS OF REFERENCE

A. PROJECT

DEVELOPMENT OF AN ONLINE TOURISM INVESTMENT PORTAL

B. BACKGROUND

In 2019, the Philippine Statistics Authority reported that the contribution of tourism investment to the Philippine economy amounted to PHP 663.2 billion. The Philippine Tourism Satellite Account (PTSA) revealed that the tourism gross fixed capital formation (GFCG) or the investments made by the private sector amounted to PHP 569.1 billion. The Tourism GFCF covers fixed assets including cruise ships, sightseeing buses, hotel facilities, convention centers, and other non-tourism-specific fixed assets such as hotel and travel agencies, computer systems, laundry facilities, etc.

As the country gears toward its economic recovery from the pandemic, the Office of Tourism Standards and Regulation – Project and Investment Evaluation Division (OTSR-PIED) deemed it appropriate to make investing in tourism simpler and easier thru the Online Tourism Investment Portal, a web-based portal that will be catering to both Investors and Property Owners. The portal shall allow potential investors to have easy access to the database of properties ready and open for tourism investments. Property owners, on the other hand, shall be to enlist their properties, whether for sale or lease. The portal's main highlight is a map that uses geo-tagging technology of all properties listed, various Tourism Enterprise Zones (TEZs), Tourism Developments Areas (TDAs), and nearby tourism sites/ destinations. This feature will allow potential Investors to evaluate and scan the listed properties' suitability to the Investor's preference and its feasibility.

The portal shall also contain all relevant tourism-investment information including but not limited to the data bank of existing, ongoing, and proposed tourism-related investments, a comprehensive list of local and foreign developers focusing on tourism projects, investment trends in the Tourism Industry, Regional situationer, mapping and spatial analysis of tourism investment areas, among others. It will be a one-stop-portal that will provide potential investors with all the essential information one needs to know in investing in the Philippine Tourism Industry.

C. PURPOSE/OBJECTIVES

Embracing the latest trends in information technology in catering to the needs of potential tourism investors in the country, the Online Tourism Investment Portal is envisioned to be a website linked to the DOT main portal that will provide various features such as:

1. Property Listing of various Tourism Sites/ Projects open for Investment
2. Registration of Potential Investor
3. Online Processing of SIRV Applications
4. Mapping of Registered Tourism Site/Projects
5. Guide to Philippine Tourism Investment

To assist the Department in establishing the said portal, the DOT is in need of the services of an IT Consultant that is capable of providing professional consultancy and information technology services for the **development of a DOT Online Tourism Investment Portal**.

The selected IT Consultant shall undertake the planning, development, maintenance, and implementation of the said investment portal in accordance with the following objectives:

- a. To develop the system's user interface, web browser compatibility, features, and functionalities in the online tourism investment portal;
- b. To develop a property listing system for Tourism Sites/ Projects open for investment opportunities that will allow Property/Site Owners to register and upload essential information about the site such as location, topographical maps, direction, and accessibility options, details of the owner and its preferred type of development, condition of the site, property size among others;
- c. To allow potential investors to virtually evaluate various investment-ready properties listed thru the use of maps;
- d. To integrate data from various Tourism Enterprise Zones (TEZs) and Sites managed and operated by TIEZA including identified Tourism Development Areas (TDAs);
- e. To integrate online processing of SIRV applications;
- f. To populate the portal with data on tourism investment historical performance in the country as well as other relevant information, including but not limited to data on population, demographics, socio-economics, tourism, investment opportunities, steps in opening a business, national and local legislation, among others;
- g. To create an inquiry form that will allow external users to contact PIED thru form-to-email format;
- h. To establish safety and security features against unauthorized access and tampering of data and information;
- i. To devise a system report generation and report management on investment offerings, and investor inquiries made among others;
- j. To have a system that is interactive, effective, efficient, client-centered, and user-friendly; and
- k. To provide training for PIED Personnel and designated Regional Investment Officers on the new online tourism investment portal.

D. SCOPE OF WORK

The Contracted Consultant shall be able to:

- a. Develop a browser-based Tourism Investment Portal that is mobile-friendly
- b. Conduct scoping activity through a series of coordination meetings with the OTSR-

PIED to be able to better grasp the processes and procedure that needs to be translated to the digital platform

- c. Develop and submit Inception Report - defining the Project Scope, Development Approach, Project Composition, Project Schedule, and Acceptance Procedures.
- d. Systems Design Specifications - The defined project scope must be transformed into a Systems Design Specifications which includes the flowchart of the proposed system, data elements, screen and report layouts, menu navigation, and integration points.
- e. Program Coding - The systems Design Specifications at this stage be transformed into Functional Program Modules.
- f. Mapping of Properties / Geo-tagging – The portal must have a map dashboard that shows the exact location of all the properties. To achieve this, the portal will collect the GPS coordinates from geotagged photos taken on-site using the Geotagging Camera Application. Additionally, an Android geotagging camera application should be created with features like automatic photo watermarking and embedding QR codes onto the photos for enhanced security.
- g. User Acceptance Test - The objective of this phase is to conduct a simulation of the actual process of the system (function, performance, and security) to make sure that it operates according to the user requirements.
- h. Users Training - Conduct user training for OTSR-PIED, IT Division, and DOT Admin Account Users.
- i. Progress Report - Progress reports must be submitted regularly to the DOT as determined by both parties.
- j. Maintenance - Provide maintenance services for a period of two (2) years after acceptance (UAT). Maintenance includes on-site and remote support, database administration, and fixing of errors.
- k. Transfer of Knowledge - Program codes and other details of the system developed to be completely turned over to the DOT, necessary training on understanding the IT infrastructure, endorsements of essential information, such as source codes, technical manual, user manual, all assets used in building the system and all other essential data.
- l. Data Server - The IT Consultant shall define the specifications of the Data Server/s that correspond to the requirements of the system. The IT Consultant shall provide secured and sufficient Data Server requirements for at least 24-month period, both live and staging to ensure the smooth running of the portal.
- m. Manual of Operations – As part of the turnover of the system, the IT Consultant shall provide the DOT with the Manual of Operations that will serve as the DOT's guide in using the system even after the contract.

- n. Data Migration – The IT Consultant must be able to integrate DOT’s offline data into the portal.
- o. Integration to the DOT Website – The IT Consultant and the DOT IT shall collaborate closely to ensure that the DOT website includes a link that redirects users to the newly developed portal.

DELIVERABLES

The IT Consultant shall be able to develop a fully functional Online Tourism Investment Portal with the following technical requirements:

GENERAL REQUIREMENTS

1. The system must be accessible via known web browsers (Google Chrome, Mozilla Firefox, Internet Explorer, Safari, and other web browsers)
2. The system must have a responsive design for mobile or handheld devices
3. The system must use Graphical User Interface (GUI)
4. The system must have security in place such as user login and authentication to facilitate the administration of access rights to the system.
5. The system must allow various types of Users with varying facilities/activities such as System Admin Account, DOT Central Account, DOT Regional Account (Regional Investment Officers), Property owners, and Investors Account (Stakeholders).
6. The system must provide a facility to change passwords.
7. The system must provide alerts and notifications to the concerned users and as well as send e-mail notifications to the registered e-mail account.
8. The system must be able to recognize Investor’s preferences and match them with the Property Offerings.
9. The system must be able to map out various properties listed.
10. The system must be able to accept queries and generate printable forms.
11. The system must be able to send system-generated email/s whenever a new property that matches its preference is listed.
12. The system must be able to generate reports in any date range, both in Excel and PDF formats.
13. The system must have enhanced security and protection against hacking and data breaches. The portal should implement measures such as data encryption and the installation of an SSL certificate on the server. These steps will help safeguard sensitive information and ensure secure transmission of data.

FUNCTIONAL REQUIREMENTS

LANDING PAGE

This module shall display information on the status of the Philippine Tourism Industry, various tourism investment-related statistics, the business climate in the Philippines, Announcements,

a List of Services offered by PIED to Investors, FAQs, Downloadable forms, and national policies on local and foreign investments

WEB-BASED INVESTOR INQUIRY AND PROPERTY SEARCH

INVESTOR USER REGISTRATION – This facility shall allow the Investor to register/ sign-up to the Tourism Investment Portal by providing the following required information:

- ✓ Name
- ✓ Nationality
- ✓ Sex
- ✓ Email address
- ✓ Contact number (landline/mobile number)
- ✓ Investment Preferences
- ✓ Type of Property the Investor is looking for

The system shall send an email verification to the registered email address. The system shall have security features

LOG-IN PAGE - This page shall facilitate the authentication process of the system users.

DASHBOARD - The Investor Account Dashboard shall provide the facility to search, filter options (offer type, property type, location), and view property listings in the portal.

It shall provide the facility to initiate inquiries directly to property owners and initially suggested properties based on the Investor's preferences provided.

WEB-BASED PROPERTY LISTING

PROPERTY OWNER USER REGISTRATION – This facility shall allow Property Owner to register/sign-up to the Tourism Investment Portal by providing the following required information:

- ✓ Name
- ✓ Email address
- ✓ Contact number (landline/mobile number)
- ✓ Property Profile and Description

The system shall send an email verification to the registered email address.

LOG-IN PAGE - This page shall facilitate the authentication process of the system users.

DASHBOARD - The Property Owner Account Dashboard shall allow the user to view the status of requests to DOT for property listing, the number of reach/hits (number of views/ inquiries of the property listed), and to view and receive inquiries from a potential investor.

DOT USER ACCOUNT – DOT User Accounts shall include OTSR Accounts, OTSR Director, Assistant Secretary - TRCRG, and Undersecretary - TRCRG.

Each type of DOT user account user shall have varying functionalities as defined in the process flow.

BROWSER-BASED APPLICATION - This module shall be an online translation of the DOT Property Information Questionnaire (*Annex A – Property Information Questionnaire - OTSR-PIED Form 4*)

This shall also allow Property Owners to upload necessary documentary requirements and submit their request to be included in the listing.

APPLICATION PROCESSING - This shall allow OTSR PIED to evaluate applications and documentary requirements, upload due diligence inspection reports, geo-tagged photos for documentation, generation of templated documents (e.g., letters, certificates, etc.) and endorse property for listing OTSR Director Account. (*Annex B - Process flow*)

BROWSER-BASED INSPECTION CHECKLIST - This shall allow the OTSR-PIED to accomplish the online checklist. OTSR-PIED shall upload geo-tagged photos as part of the inspection report. Inspection checklists shall be based on the OTSR PIED Due Diligence Inspection Checklists.

DASHBOARD - The OSTR-PIED Account Dashboard shall provide national statistical data on property listing requests and their corresponding status, whether it is for evaluation, inspection, approval, or dormant.

Each OTSR-PIED Account Dashboard shall reflect all property listing requests assigned to the account of the specific user.

USER MANAGEMENT– This module allows the system administrator to manage users, groups, and roles as follows:

I.DOT Central Office Accounts

- Evaluator
- Inspector
- Division Chief
- OTSR Director

II.External Users

- Property Owner

DROPDOWN UTILITIES - The OTSR-PIED Account User shall encode options for dropdown utilities (e.g., Documentary Requirements, Checklists, etc.)

STATISTICS - The system must be able to generate reports in any date range (i.e., as of the date specified, monthly, quarterly, yearly, etc.) in Excel and/or PDF format.

The following system reports may be generated from the system:

- ✓ Properties Open for Investments listed
- ✓ No. of Inquiries received

DISCUSSION BOARD - The Discussion Board will allow concerned users to send messages, request updates and clarifications, and give feedback on the application. It shall also filter who can see the message posted. Chat Support will provide the following:

- ✓ Sending of messages from Investors to DOT-PIED
- ✓ Division Chief and OTSR Director can also initiate communication with the OTSR-PIED Account handler
- ✓ Tagging of Conversation is per property entry
- ✓ All conversations in the chat are captured in the Property Entry History

The Discussion Board may be exported using a defined template and may be printed directly from the system. It shall also have a search option to make searches of any subject in the discussion.

The Administrator shall be able to see all discussions and may filter the same per property, per user, etc., and shall also have the facility to authorize viewing certain messaging to certain User/s.

ACTIVITY LOG - This module is a system-generated report that includes all the actions taken in each application. It shall include the date and time stamps and specify what action was taken and who initiated it.

The Activity Log may be exported using a defined template and may be downloaded/printed directly from the system.

CLIENT FEEDBACK - This module shall allow clients to answer the feedback form consistent with the Department-wide Client Satisfaction Survey upon completing a transaction with the Department.

PRINTABLE DOCUMENTS - This module shall allow users to view and print forms such as Memorandum Circulars and other relevant DOT Issuance, Generation of System-generated and Official Certification, Downloadable/Printable list of listed properties, status history per property listing, feedback/survey.

WEB-BASED ISSUANCE OF ENDORSEMENT TO BUREAU OF IMMIGRATION/ CERTIFICATION FOR SIRV HOLDERS

INVESTOR USER REGISTRATION – This facility shall allow the Investor to register/sign-up by providing the following required information:

- ✓ Name
- ✓ Email address
- ✓ Contact number (landline/mobile number)
- ✓ Type and Amount of Investment

The system shall send an email verification to the registered email address.

LOG-IN PAGE - This page shall facilitate the authentication process of the system users.

DASHBOARD - The Investor Account Dashboard shall provide a facility to submit applications, upload documents and monitor the status of its application for Endorsement to the Bureau of Immigration and/or Certification

DOT USER ACCOUNT – DOT User Accounts shall include OTSR Accounts, OTSR Director, Assistant Secretary - TRCRG, and Undersecretary - TRCRG.

Each type of DOT user account user shall have varying functionalities as defined in the process flow.

BROWSER-BASED APPLICATION - This module shall be an online translation of the DOT Application Form for Endorsement to BI.

This shall also allow Applicants to upload necessary documentary requirements and submit their application for endorsement and/or certification.

APPLICATION PROCESSING - This shall allow OTSR-PIED to evaluate applications and documentary requirements, and generation of templated documents (e.g. letters, certificates, etc.) and proceed with the online processing as reflected in the DOT's Citizen's Charter

DASHBOARD - The OSTR-PIED Account Dashboard shall provide national statistical data on applications received, endorsed applications, and other statistical reports related to the processing of SIRV

Each OTSR-PIED Account Dashboard shall reflect all applications received and their corresponding assigned account processor.

USER MANAGEMENT– This module allows the system administrator to manage users, groups, and roles as follows:

1. DOT Central Office Accounts

- Evaluator
- Division Chief
- OTSR Director

2. External Users

- Applicant for SIRV

DROPDOWN UTILITIES - The OTSR-PIED Account User shall encode options for dropdown utilities (e.g., Documentary Requirements)

STATISTICS - The system must be able to generate reports in any date range (i.e., as of the date specified, monthly, quarterly, yearly, etc.) in Excel and/or PDF format.

The following system reports may be generated from the system:

- ✓ No. of Endorsed Foreign Nationals
- ✓ Statistics on Total Amount of Investment declared
- ✓ Distribution of Investment (by geographical location, type of business enterprise, nationality, etc.)

DISCUSSION BOARD - The Discussion Board will allow concerned users to send messages, request updates and clarifications, and give feedback on the application. It shall also filter who can see the message posted. Chat Support will provide the following:

- ✓ Sending of messages from Investors to DOT-PIED
- ✓ Division Chief and OTSR Director can also initiate communication with the OTSR-PIED Account handler
- ✓ Tagging of Conversation is per application
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PRINTABLE DOCUMENTS - This module shall allow users to view and print forms such as Memorandum Circulars and other relevant DOT Issuance, Generation of System-generated and Official Certification, Downloadable/Printable Listings or Reports generated, status history per application, feedback/survey.

E. TIMEFRAME/ DURATION OF THE CONTRACT

The duration of the contract for the development of the portal shall be for **four (4) months** excluding the two (2) year maintenance period commencing from the UAT.

Note: Considering the short development period, the IT Consultant shall ensure to warrant the portal is fully functional in the duration previously agreed upon (4 months) and may be required

to serve an additional two (2) months (post-payment) for the fine-tuning of the portal features and functionalities, system launching, and roll-out.

F. MINIMUM REQUIREMENT FOR BIDDER

The IT Consultant shall meet the following minimum requirements:

- a. Preferably an Individual IT Expert with a proven track record of developing government-owned web-based systems;
- b. Must have a minimum of five (5) years of relevant experience with a government and/or international agencies within the past six (6) years, previous successful projects with DOT is preferred;
- c. Must have successfully completed/finished at least five (5) projects with with institutions, may it be government or private;
- d. Must be able to complete the project based on the DOT's prescribed timeframe (4 months); and
- e. Must have introduced a new information technology platform that will aid the project/policy implementation of the concerned agency.

Minimum Qualification of the Individual Consultant/ Lead Consultant (*if company*)

- a. Must be at least computer science or any related IT course graduate, higher/ advanced education in IT is an advantage;
- b. Must have an applicable experience in the following language: PHP, Javascript, Java, R, CSS, HTML, Python, NodeJS, and Typescript;
- c. Must have a solid understanding of the following programming frameworks: Laravel, JQuery, ReactJS, ReactNative, Tailwind CSS, Wordpress, Bootstrap, Codeigniter;
- d. Must be accustomed to integration of the following Mapping APIs: Google, Leaflet, QGIS;
- e. Must have introduced a new information technology platform that will aid the project/policy implementation of the concerned agency;
- f. Must have developed geo-tagging applications;
- g. Must have developed a statistical modeling system for forecasting;
- h. Must have developed physical and financial monitoring systems; and
- i. Must have developed a community-based management information system.
- j. Must be able to complete the online portal within the timeframe provided.

G. BUDGET FOR THE CONTRACT:

Five Million Pesos (Php 5,000,000.00)

Payments shall be made in tranches based on the agreed milestone of the project.

H. PROJECT MILESTONES

PHASES	PERCENTAGE
I. Planning and Analysis <ul style="list-style-type: none">a. Identify Technical Requirements (15%)b. Develop Wireframes and Mockups (15%)c. System Architecture, Design & Work Plan (10%)d. Inception Report (10%)e. Data Gathering & Migration (25%)f. Base Site Design & Structure (25%)	20%
II. Design and Development <ul style="list-style-type: none">a. User Interface (UI) Design (10%)b. Database Design and Development (15%)c. Front-end Development (15%)d. Back-end Development (15%)e. Development of User Interface (UI) and User Experience (UX) (10%)f. Development of Application Programming Interface (API) (10%)g. User Management and Authorization (5%)h. Server Configuration and Website Integration (10%)i. Mapping APIs and Geo-tagging (5%)	50%
III. Testing and Quality Assurance <ul style="list-style-type: none">a. Test Planning (20%)b. Functional Testing (25%)c. Usability Testing (25%)d. Security Testing (15%)e. User Acceptance Testing (15%)	20%
IV. Deployment, Maintenance, and Backup (20%) <ul style="list-style-type: none">a. Deployment (10%)b. User Training and Documentation (15%)c. Launch and Monitoring (10%)d. Ongoing Maintenance and Updates (20%)e. Bug Fixes (15%)f. Backup Provisioning (30%)	15%
TOTAL	100%

I. PROJECT OFFICER/ CONTACT PERSON

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