

EXPRESSION OF INTEREST (EOI)

On Re-engineering of PPIS

**Department of Police Personnel Record Management
Lainchaur, Kathmandu, Nepal**

Application for
EXPRESSION OF INTEREST (EOI)

Consulting Firm/Joint Venture:

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Prime Consultant (in case of a JV):

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Employer:

Kathmandu, Nepal

Government of Nepal
Ministry of Home Affairs
Department of Police Personnel Record Management
Lainchaur, Kathmandu, Nepal
Notice No: 02/2072/73
First Date of Publication: 2073/01/24 BS (6 May, 2016 AD)

Expressions of Interest

1. The Government of Nepal invites Expressions of Interest (**EOI**) for the purpose of short listing the qualified, eligible and experienced domestic Consultants/Consulting Firm(s) for Re-engineering of PPIS
2. Consulting Firms experienced in the above works and willing to provide the services are here by invited to submit their 'Expressions of Interest (**EOI**)'. The **EOI** shall be submitted in a sealed envelope and must reach the **Department of Police Personnel Record Management** no later than the 12:00 hours on the 16th day of first publication of this notice.
3. In case the day of submission of the **EOI** falls on a public holiday, the **EOI** shall be submitted on the following working day. Only those short listed Consultants/Consulting Firm(s) shall be invited to submit the 'Request for Proposal (RFP)' for the mentioned job. The firm(s) shall include in their Expressions of Interest following information in measurable terms and any other information that they may feel will support their application.
 - a. Financial Capacity and Annual Turnover of last 3 years
 - b. General Experience of the Firm(s)
 - c. Work Experience in Similar Works
 - d. Manpower Resources
 - e. Infrastructure and Technical Competency
 - f. If two or more or companies are to be provided consultancy services as a group, organizations or a joint venture, the name, address, profile of such firms or company, the name of lead firm or company and mutual agreement between the companies.
4. The experiences of Government of Nepal's projects or GoN owned institutions only to be counted in General and similar works and the firm/s shall produce certified evidences of completion of the job from concerned agencies of Government of Nepal.
5. A Firm is permitted to submit one EOI either single or in a joint venture, failing which such Firm shall not be shortlisted. The Department reserves the right to shortlist or not to shortlist any or all of the Firms without assigning any reasons what so ever. Further information or clarification on the EOI can be obtained from the Department during office hours. The EOI can also be downloaded from the website dppr.gov.np, moha.gov.np
6. The **EOI** Documents shall be Addressed to:
Department of Police Personnel Record Management
Lainchaur, Kathmandu, Nepal
Phone: +977-1-4436823
Fax: +977-1-4428534

INFORMATION TO THE CONSULTING FIRM

1. General Information

Purpose of inviting the EOI:	The main purpose shall short-list suitable consulting firm for the Re-engineering of PPIS
Minimum eligibility of the firm:	Established Company, Firm or Institution having: At least 5 (Five) years of experience in the field of <u>Software Development task</u> in Nepal.
Dead line for submission of EOI:	16 th day from the first date of publication of the Invitation notice for EOI
Number of copies to be submitted:	One
Joint Venture:	A firm may apply to be short-listed alone or in joint venture with other firms. However once short-listed, JV partners are unchangeable.
Duration:	The work shall be completed within <u>90 (Ninety)</u> days from the date of signing of the contract.
Information from the Client:	The shortlist shall be published on the Client's notice board, at the web-site: http://www.dppr.gov.np within two week from the last date of submission of the EOI . The Client shall mail the short-list to each of the firms/JV submitting the EOI and initiate the process of RFP without waiting for the receipt from the firms that they have received the short-list.

2. General Mandatory Requirement

- Certificate of VAT/PAN Registration, Firm Registration
- Tax Clearance of Fiscal Year 2071/72
- Company Registration should be minimum five years or more
- Experience on software development with successful execution of project
- Firm should have done at least one project having value more than NRs. 2 Million in last 3 years.
- Firm should have done Software (Application) development project having database system.
- Firm should be registered for Information Technology Solution/ Software Development
- The average transaction of the firm should be at least NRs. 4 Million

1 Background

Police Personnel Information System (PPIS) is a computerized database application that maintains and manages all the demographic and service profile of security employee. The PPIS maintains the vital information of an employee such as Sheet Roll Number, name, date of birth, gender, father's and grandfather's name, nominee, permanent address, PF number, CIT number. Similarly, the system also keeps track of all the service events of an employee during his career within the service such as appointments, transfers, promotions, placements, educational background, awards, training details, medical allowances, disciplinary actions. With such feature rich application, the system maintains the complete organizational structure of the Government of Nepal and security related organizations, and is classified by various service groups, posts and positions. In addition, is able to generate the entire payroll details (Talabi Pratibyaden) for an employee based on his/her PPIS data.

2 Objectives:

The primary goal of this project is to design and develop new application in such a way that it adheres all the current demands of the application. The unmanageable condition of all the files, and their management, less upgraded data, lack of proper cleansing of the application are the major problem seen in the application. Hence, Future software re-engineering is done in such a way that it adheres all this solution, so as to overcome various limitations of the existing PPIS. The main objectives of this project report are as following:

- Keeps track of an entire service history of security personnel/employee
- Maintain the appointment, transfer, promotion, retirement and punishment record of the employees
- Maintains Organizational structure classified by various service groups, posts, ranks and positions
- Maintain record for the transfer from persons inside the offices as per the format provided by the department.
- Maintains a complete sanctioned posts and positions
- Gender based information
- Vacancy and retirement forecasting
- Employees complete demographic profile
- Sanctioned versus Occupied posts within the offices
- Automatically generates letters of Appointments, transfers, promotions, retirements, placements, pension & gratuity authorization letters
- Upload scanned copy of the employee's records.
- Online help and discussion forum

3 Scope of work:

The bidder should develop new Police Personal Information System (PPIS) as per the requirement mentioned in Functional and Non Functional requirements. All the system should be developed based on rules and regulations of Nepal Police/Armed Police Force/National Investigation Personnel and others. After the development of the system the bidder should migrate all the existing data in the previous system to new developed system. DPPRM will provide the requirement of system to the following specific tasks to be accomplished but not limited to extend and adopt modules and technological requirement in order to achieve the main goal.

3.1 Functional Requirement

The firm should develop web based application which should contain the following functional modules.

- Registration Process Module (Employee Profile Update/Management Process, New Appointment Process, Retirement Process, Service Change Management Process)
- Workforce Management Module
- Darbandi Management Module
- Office Management Module
- Payroll Management Module
- Pension Management Module
- Central Filing Module
- Asset Declaration Module
- Children Scholarship Module
- Master Setup Module
- Audit Module
- Report Type
- Localization Module
- Dashboard Module
- User Management Module
- SMS/Email Notification (Messaging) Module
- OPTIONAL MODULES
- Change Request Module
- Document Scanning Module
- Business Intelligence Module
- Notification Module
- SMS Integration Module
- Duplicate data cleaning Module
- Re-appointment Module
- Data Migration module import data from the previous system and the data migration should be done by the bidder

- API to import data between Nepal Police, Armed Police force etc
- ✓ Bidder should create dynamic reporting module based on the requirements
- ✓ After the development of the system the bidder should migrate all the previous data of employee to the new system
- ✓ Bidder should enter the family history of the employee (40,000 data)
- ✓ Bidder should enter the pension history of the employee (40,000 data)
- ✓ Bidder should provide training to 10-20 staff for the operation of the training and system administration training to 2-5 technical staffs
- ✓ Bidder should provide one technical support personnel for the changes in the system for one year after final acceptance of the system
- ✓ Bidder should add any module as required by the department for three year. One Engineer should be physically present at the Department for one year for the implementation and supports of the system.
- ✓ After development of the software bidder should install the system in the Department and GIDC server.

The different modules related should have following functional groups.

Group	Type
Appointment	First Appointment, Promotion Appointment, Acting Appointment, Appointment and Placement, Appointment Cancel, Re-Appointment, Re-Instate
Transfer	Transfer, Kaj Saruwa, Fazil Sruwa, Transfer Thamauti, Transfer Cancel, Kaj Phirta, Lean Padama Phirta, Saruwa Samsodhan, Samuhikrit, Transfer and Placement
Promotion	Promotion, Auto Promotion, promotion Adjustment, Officiating/ Nimitta Deo, Level Increase, Level Milan, Acting/Kayam Mukayam promotion, Atirikta Man, Promotion with Placement, Promotion With Service and post Change, Adjustment And Placement
Retirement	Compulsory Retirement, Voluntary Retirement/Rajinama, Voluntary Retirement with Scheme, Bepatta/Disappeared, Retired with Qualified for Future Service, Retired with non-qualified for Future Service, Death Vacant/Mrityu Khali, Retirement With Promotion

3.2 Non Functional Features

In designing the Software the consultant shall focus on the following key attributes:-

3.2.1 Content:

This will be developed in close consultation with, and with major input from, the DPPRM.

3.2.2 Usability:

The software should be user friendly with the interface and simple navigation, content quick to access.

3.2.3 Appearance

The graphics, buttons, text and style should be consistent throughout the software. The styles used should be professional, appealing and relevant, in order to encourage operators and other to access and use the system. The software should have pictures, different size and colour fonts that are applicable to the various pages and consistent with the style of the overall system.

3.2.4 Visibility and Accessibility

The site should have high visibility and form should be easily accessible.

3.2.5 Compatibility

The site must adhere to xhtml standards and proper CSS coding standards to facilitate cross browser compatibility. The web based application must be compatible with all major web browsers including Internet Explorer, Netscape, Opera, Firefox, Google Chrome and Safari based browsers.

3.2.6 Interoperable

The system should use the standard coding standard and NeGIF, NASCII system and GEA architecture to support the interoperability.

3.2.7 Scalable Architecture

The system should adopt the architecture so that other system subsystem could be pluggable and system supports the scalability.

3.2.8 Security

The developed software should be secured from security threats. The code used to develop the website must be written carefully in order to avoid any threats.

3.2.9 Readability

The code should be highly readable and cleanly commented.

4 Development Methodology

The task as outlined in the Scope of Work will be carried out in 5 phases by following the procedures/methodologies described below. The system development should be done based on standard methodology, the consultant has to generate reports and output documents as given below, however the consultant can adopt to develop the system parallel in advance.

4.1 Inception Phase:

This phase of work is expected to require one week. In this phase, the consultant shall be required to prepare understanding of the Terms of Reference and the approaches and modalities, which are to be followed in the performance of consulting work. A detailed work plan and methodology to carry out the consulting work should also be included in the Inception Report. The consultant shall be entitled to start the next phase of the work after getting approval of DPPRM on the inception report submitted.

4.2 Study, Analysis and Design Phase:

The report should be completed with System Architecture. Identify detailed system modules/components, Identify the reporting and analysis format, Complete with Use Case Diagram, E-R diagram (Normalized), Database Schema, Naming Conventions to be used during development, system interfaces.

4.3 Study:

The study phase of the work is expected to review and analysis of the existing system and its functioning should be carried out in consultation with DPPRM officials and expert/s assigned by DPPRM for the purpose. This phase is very crucial since the success or failure of this project largely depends on the quality of work done or efforts made by the consultant in this phase of work.

The analysts should be very specific to find the difference between manual, existing system System and new customization or development requirement and the extent of time and manpower to be involved in these two systems. The System Analyst should also be aware of the difficulties related to time, resources, and manpower required to produce the output in the manual system and easiness to produce the same in the computerized system.

4.4 System Analysis and Design:

The System Analysis and Design phase is expected to be completed within a period of two weeks. The consultant shall submit to and discuss the proposed preliminary design with DPPRM. The consultant shall be required to obtain the formal approval of the DPPRM on the work done during the design phase of the work.

4.5 Development and Testing Phase:

Upon approval of the design, the consultant shall start the development of the new system. The development of the system should confirm to the system design report. Any deviation in the system design during the development phase must be well reflected in the system design report as well. The duration of the development and testing will be period of one weeks.

4.6 Post Delivery Maintenance Phase:

The nursery period of the system implementation faces problem and lots of error and bug occurs. The system should be maintained, all issues and bug should be fixed immediately upon information provided by DPPRM. This system is critical and important project of the government, so bidder should provide the maintenance and bug fixing in real time. Hence, the Post Delivery maintenance period will be for one year from the acceptance of the software.

5 Technical Specification

The technical specification of the proposed system should confirm the listed standards and specification requirement.

5.1 Application Software:

The software should be developed in very reliable programming languages and programming standard must be generic data acquisition, access coding using web based application technology.

5.2 Programming Language

The software should be Web Based Application. So, the bidder should use languages like JAVA, PHP, C#, Perl is desirable or any other language. The chosen programming language must have readily available compiler and host environments for common operating system like Centos Linux, Red hat Linux operating system and windows operating system.

5.3 Software Interface Language

The web based application software for system will have both Nepali and English Languages, words and characters. The application should use Nepali Language for Interface, instructions and messages. English Language should be used where Nepali language is not possible.

The system should have provision to use both Nepali and English Date values in standard format. There should be a module to change date from Nepali to English Date format and vice versa.

5.4 Input Data Language

The input data consists of data values both in Nepali and English language. So the forms and related interfaces should be designed to input, store and process both Nepali and English languages. For Nepali language input data values, Nepali Unicode should be used.

5.5 Parameter Driven

The Application should be highly configurable; there should be minimal hard coded options. The developed application should be parameter driven. The options, choices, popup for various data should be configurable using software option and database configuration.

5.6 Compatibility with Operating System

The developed system should be compatible and could be hosted and compatible to any widely used operating system. The Linux, UNIX, Windows system is more preferable and should avoid any vendor specific system. The bidder should provide the detail hardware specification required to install the system.

5.7 Client System

The developed system should be compatible and run in Linux and windows machine in client side.

5.8 Browser

The developed web based system should be run at client end using most popular browsers. The system should be compatible with the browsers like Mozilla Firefox, Internet Explorer, Google Chrome, Opera, and Safari etc

5.9 Development Tools

The bidder will be responsible for development software and tools required to develop the proposed task. The license and any requirement should be fulfilled by bidder themselves. There should not be any cost in the implementation of the system.

5.10 Open Standard

The developed system should be open standard where possible. It should not be vendor specific and depend on some vendor specific technology. There should not be implementation of any vendor specific component, software, middleware, firmware to avoid the vendor locking situation. The proposed architecture, database, programming language and any technology used to develop and implement system should use 'Open Standard' whenever such standards are available and applicable to meet the specification.

5.11 Compliance with standard and government framework

The GoN has recently published set of standards for development and implementation of ICT systems. The bidder should adopt, comply and adhere with the recommended standards for data, design, architecture, security architecture etc. The main system, subsystem, component, design, document and any part that is implemented and used for this task should comply with following guideline documents where applicable.

Government Enterprise Architecture (GEA) framework.

The main system, subsystem, component, design, document and any part that is implemented and used should comply with Nepal Government Interoperability Framework (NeGIF). Adopt the coding standards given in Nepal Analysis Standard Code for Information Interchange (NASCI). The bidder should list and provide valid logic and justification if such recommendations could not be implemented, technology changed and other methods are of higher performance and better for this purpose.

5.12 Multi User Environment

The developed application should be multi user web based application. The application should support multiple user login and work on the system concurrently.

6 Expertise and minimum team of consultants

For carrying out this consultancy, a firm, with expertise in the implementation of Information systems for various programs during the last 3 years, is required. The minimum team of consultants needed comprises: DPPRM is seeking from the consultant the services of a core team of experts. The team shall comprise but not limited to experts from the following field:

SN	Position	Requirement
1	Team Leader/Project Manager	1
2	Programmer	3
3	Database Expert	2
4	Quality Assurance and Testing Expert/System Expert	2

7 Application Release and Deployment

All required documents and deliverables should be delivered to DPPRM for final approval before deployment. After the demonstration, approval from Quality Assurance Team and DPPRM acceptance the system should be deployed at place and infrastructure designated by DPPRM.

8 Training

The company should provide training to staff of DPPRM to operate, configure and troubleshooting of the system. The training should include

- User Administration
- System Administration
- System Troubleshooting Guideline
- System Setup, Database Setup, Software setup
- System Architecture and system Analysis and Design with respect to the SAD

9 Reports:

It is highly recommended that Department of Police Personnel Record Management needs reports on every work carried out by the consultant in due course of the development of work in the form of well documented report on both inception report and final report. Inception report should be submitted within the 1 weeks from the signing the contract. Final report should be submitted after completion of the purposed work. Final report should comprise documentation of

- User operating manual
- Software installation manual
- Troubleshooting guide (if any)
- Source code of the software(3 (three) Media Pack)
- 3 (three) number of media packs containing deployment package of the software.

10 Facilities to be provided by the Department of Police Personnel Record Management:

Department of Police Personnel Record Management will facilitate technical personnel for local services to assist consultant to complete the work whenever required to solve and co-ordinate technical issues at various level and phases of Software Development Life Cycle (SDLC). DPPRM will also provide the source code, database, documentation and other related document of the previous system

11 Key Deliverables

- Inception Report
- System Report including System Analysis and Design and coding report
- System Software
- Complete manual and troubleshooting guide
- System Setup
- System Source Code

12 Support

The firm will be responsible for any changes necessary in the software for a period of three year from the date of acceptance of the software. The bidder must provide system maintenance and support service without any cost to DPPRM for three year and during post maintenance phase.

13 Ownership

- DPPRM will have the full ownership of the source code and any other documents.
- DPPRM will have the full and sole authority to license, copyright, modify, re- engineering and distribute without binding any obligation to any other institution.

14 Warranty

The firm should provide one year warranty to make necessary changes and maintenance of the software without additional cost.

15 Duration

The firm has to complete the work within 90 days after signing the contract.

16 Evaluation Criteria

S.N.	Description	Marks	Form
1	General experience of the consultants related to the assignment	10	Form 1
1.1	Years of General Experience of the firm in software development task (From the date of delivery of the first successful assignment)		
1.2	Enterprise Level Web Based Software Development task on Single contract in last 3 years		
2	Specific experience of the consultants related to the assignment	10	Form 1
2.1	Specific Experience of the Firm having total successful software development projects in developing Enterprise Level Web Based Application System Design /Development RDBMS for large volume database with at least 1 (One) National Project. (except website)		
2.2	Specific Experience in similar works in at least 1 (One) Project		
3	Availability of Full time staff and their Qualifications and Experience	50	Form 2
3.1	Team Leader /Project Manager - 1 Nos.		
	a) General Qualifications		
	b) Experience in years		
	c) Specific Experience in providing solution in related domain		
3.2	System Analyst - 1 Nos.		
	a) General qualifications		
	b) Year of Experience		
	c) Specific Experience in providing solution in related domain		
3.3	Programmer- 2 Nos.		
	a) General qualifications		
	b) Year of Experience		
	c) Number of Project involved as programmer		
3.4	Database Expert- 2 Nos.		

	a) General qualifications		
	b) Year of Experience		
	c) Number of Project involved as Database Expert		
	d) Certification in the Database		
3.5	<i>Application Deployment Expert(System Expert) -1 No.</i>		
	a) General qualifications		
	b) Year of Experience		
	c) Number of Project involved as Application Deployment (System Expert)		
	d) Certification in the System (Unix, Linux, Windows Server Administration)		
3.6	<i>Designer- 1 Nos.</i>		
	a) General qualifications		
	b) Number of Project involved as Designer		
3.7	Quality Assurance and Technical Documentation Expert-1 Nos.		
	a) General qualifications		
	b) Adequacy for the project		
4	Availability of Key Professional Staffs	10	Form 3
4.1	Number of Full time Office staffs (except keeper, security like low level staff)		
5	Qualifications & Financial Capability of the firm	15	
5.2	Availability of Infrastructure (Office including Number of computer, Lab)		Form 4
5.1	Financial Capability (Annual turnover in last three consecutive years)		Form 5
5.3	Company Assets as in the latest audit Report		Form 6
6	Documentation	5	
	Total Marks	100	
	Note: The minimum technical score required to pass	70	

Abbreviation Used

CS= Computer Science
System

IT=Information Technology

IS=Information

B.E. = Bachelors in Engineering

CA=Computer Application

CE=Computer En

Form-1 (Experience)

All individual firms and all partners of a Joint Venture must complete the information in this form with regard to the management of Information Services contracts generally. (Add more sheets as per requirement)

SN	Project Name	Description	Organization	Start Date	End Date	Amount

Note: Bidder must submit the experience letter from the Employer to prove their experience. Any Project without experience letter will not be considered in the evaluation.

Form No.2 (Summary of proposed staff)

The company should submit their staff details (as mentioned in the evaluation criteria) in the following format with their certified CV.

SN.	Name	Proposed Position	Qualification	Area of specialization	Certification	Years of experience	No. of Projected completed for the proposed position

Form No.3 (Availability of Key Staff)

The company should submit availability of their staff.

SN.	Name	Position	Qualification	Years of experience	Availability (Full Time/Part Time)

Form No.4 (Availability of Infrastructure)

The company should provide the following details.

SN.	Item Name	Quantity	Description
1	Computer		
2	Laptop		
3	Server		

4	Printer		
5	Internet		
6	Office Area		

Form No.5 (Financial Capability)

The company should provide the annual turnover for the last three consecutive years.

SN.	Year	Annual Turn Over
1		
2		
3		
	Average Annual Turn Over

Note: The bidder should submit the audit report/balance sheet etc to prove their claim

Form No.6 (Company Assets)

The company should provide the certified company assets as per the latest audit report.

SN.	Year	Assets
1		
2		
3		