

EXPRESSION OF INTEREST (EOI)

Title of Consulting Service: 01-NTA-2078/79

Method of Consulting Service: National

**Project Name : Consultancy Service to prepare the Master Action Plan for
Implementation and Promotion of 5G in Vertical Sectors**

EOI : 01-NTA-2078/79

Office Name: Nepal Telecommunications Authority

Office Address: Kathmandu Kathmandu

Funding agency : Internal Resources

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A. Request for Expression of Interest

Request for Expression of Interest

Government of Nepal (GoN)

Name of Employer: Nepal Telecommunications Authority

Date: 24-12-2021 17:05

Name of Project: Consultancy Service to prepare the Master Action Plan for Implementation and Promotion of 5G in Vertical Sectors

1. Government of Nepal (GoN) has allocated fund toward the cost of Consultancy Service to prepare the Master Action Plan for Implementation and Promotion of 5G in Vertical Sectors and intend to apply portion of this fund to eligible payments under the Contract for which this Expression of Interest is invited for National consulting service
2. The Nepal Telecommunications Authority now invites Expression of Interest (EOI) from eligible consulting firms (“consultant”) to provide the following consulting services: Identification and recommendation on the roles and responsibility of the Authority, Government, Public Sector, and other stakeholders to ensure the effective and efficient use of 5G for digital transformation. Also develop action plan with timeline, deliverables and tentative budget for each initiative
3. Interested eligible consultants may obtain further information and EOI document free of cost at the address Nepal Telecommunications Authority, EGP during office hours on or before 09-01-2022 12:00 or visit e-GP system www.bolpatra.gov.np/egp or visit the client’s website <https://nta.gov.np/en/category/public-notice-en/>
4. Consultants may associate with other consultants to enhance their qualifications.
5. Expressions of interest shall be delivered online through e-GP system www.bolpatra.gov.np/egp EGP on or before 09-01-2022 12:00
6. In case the last date of obtaining and submission of the EOI documents happens to be a holiday, the next working day will be deemed as the due date but the time will be the same as stipulated.
7. EOI will be assessed based on Qualification 40.0 %, Experience 50.0 %, and Capacity 10.0 % of consulting firm and key personnel. Based on evaluation of EOI, only shortlisted firms will be invited to submit technical and financial proposal through a request for proposal.
8. Minimum score to pass the EOI is 60

B. Instructions for Submission of Expression of

Instructions for Submission of Expression of Interest

1. Expression of Interest may be submitted by a sole firm or a joint venture of consulting firms.
2. Interested consultants must provide information indicating that they are qualified to perform the services (descriptions, organization and employee and of the firm or company, description of assignments of similar nature completed in the last 7 years and their location, experience in similar conditions, general qualifications and the key personnel to be involved in the proposed assignment).
3. This expression of interest is open to all eligible consulting firm/person/ company/ organization.
4. In case, the applicant is individual consultant, details of similar assignment experience, their location in the previous 4 years and audited balance sheet and bio data shall be considered for evaluation.
5. The assignment has been scheduled for a period of [Insert time, period in years and/or months]. Expected date of commencement of the assignment is 16-01-2022.
6. A Consultant will be selected in accordance with the QCBS method.
7. Expression of Interest should contain following information:
 - (i) A covering letter addressed to the representative of the client on the official letter head of company duly signed by authorized signatory.
 - (ii) Applicants shall provide the following information in the respective formats given in the EOI document:
 - EOI Form: Letter of Application (Form 1)
 - EOI Form: Applicant's Information (Form 2)
 - EOI Form: Work Experience Details (Form 3(A), 3(B) & 3(C))
 - EOI Form: Capacity Details (Form 4)
 - EOI Form: Key Experts List (form 5).
8. Applicants may submit additional information with their application but shortlisting will be based on the evaluation of information requested and included in the formats provided in the EOI document.
9. The Expression of Interest (EOI) document must be duly completed and submitted in sealed envelope and should be clearly marked as "EOI Application for Short-listing for the Consultancy Service to prepare the Master Action Plan for Implementation and Promotion of 5G in Vertical Sectors. The Envelope should also clearly indicate the name and address of the Applicant. Alternatively, applicants can submit their EOI application through e-GP system by using the forms and instructions provided by the system.
10. The completed EOI document must be submitted on or before the date and address mentioned in the "Request for Expression of Interest". In case the submission falls on public holiday the submission can be made on the next working day. Any EOI Document received after the closing time for submission of proposals shall not be considered for evaluation.

C. Objective of Consultancy Services or Brief TOR

Consultancy Service to prepare the Master Action Plan for Implementation and Promotion of 5G in Vertical Sectors

A. Background

In order to make the telecommunications service reliable and easily available to the public, involve private sector as well in telecommunications service and to regularize and systematize such service, Nepal Telecommunications Authority (NTA) is established pursuant to Telecommunications Act, 1997 and Telecommunications Regulation, 1997 as an autonomous body. The act has given the responsibility to the Authority to carry out the research about the development and use of new technology in the field of Telecommunications.

5th generation mobile network (5G) enables a new kind of network that is designed to connect virtually everyone and everything together including machines, objects, and devices. It is well proven that telecommunications play a vital role in the overall development of the country. In this regard, it is necessary to encourage other sectors to maximize the use of 5G technology in order to increase their productivity and reduce the cost. The Authority has a study program under the budget for the identification and prioritization of potentially relevant sectors. The identification and prioritization of the potential sectors that can get benefit from the 5G technology and services is very crucial as well as utmost important.

B. Introduction

The earlier network generations (2G to 4G) were designed as one-size-fits-all, general-purpose connectivity platforms with limited differentiation capabilities in the form of Voice, Data and Internet. 5G networks are emerging not only as the foundation for advanced communication services, but also as the infrastructure supporting socio-economic development and driving industrial digital transformation. 5G technology is meant to deliver higher multi-Gbps peak data speeds, ultra-low latency, more reliability, massive network capacity, increased availability, and a more uniform user experience to more users.

5G equally aims for industrial communications in vertical sectors such as automotive, healthcare, manufacturing, energy, food and agriculture, city management, government, public transportation, media and more to help digitize the economy and contribute towards global digital transformation.

5G will serve a large portfolio of applications with various requirements ranging from high reliability to ultra-low latency going through high bandwidth and mobility enabling an ecosystem for technical and business innovation involving vertical markets. With more and more 5G networks up and running, and commercial 5G services now available in multiple markets, mobile operators are turning their attention to seeking out new business opportunities that can help deliver the best return on their investments and make the most of their new network capabilities. In this sense, developing and delivering specific 5G-enabled services that are tailored for enterprises in specific vertical sectors provide new opportunities to all the stakeholders.

The 2030 Agenda for Sustainable Development, adopted by United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. The agenda has 17 Sustainable Development Goals (SDGs). Once everyone is connected, extraordinary progress can be achieved towards each and every one of the SDGs through emerging technologies such as the Internet of Things (IoT); Artificial Intelligence (AI); robotics; and data-driven innovation. Therefore, there emerges cross-cutting enabling role of ICTs for SDGs.

Digital Nepal Framework has identified One Nation, Eight Sectors and 80 Digital Initiatives to enable Nepal to harness its growth potential by leveraging disruptive technologies and driving socioeconomic growth. The key sectors acknowledged by the Framework are digital foundation, agriculture, health, education, urban infrastructure, energy, tourism and finance. The Framework recognizes Internet as the backbone of Digital Nepal initiative and connectivity for all is critical for the success of Digital Nepal program. It has recommended to take a lead in 5G, rather than be a follower to put Nepal at the forefront of ongoing digital transformation.

Numerous studies by international entities have identified many vertical sectors and prioritized them differently based on unique criteria. The ranking of the vertical sectors for 5G integration based on immediate impact may vary from country to country. Apart from the key players and large industries, some SMEs may also gain the benefits, where their technological achievements make a difference. Based on the socio-economic status, the sectors may get different priority of implementation as well. However, Nepal can set its own priority by analyzing present context, assessing future requirements and reviewing Digital Nepal Framework, SDGs, WSIS Action Lines, Connect 2030 Agendas, Industry 4.0 and other relevant documents. For the implementation

and promotion of 5G in vertical sectors, it is recommended to prepare a Master Action Plan. A detailed study is necessary for achieving this objective. With this in mind, the Authority has decided to procure a Consultancy Service to conduct the detailed study and prepare a master action plan for effective implementation and promotion of 5G in Vertical Sectors.

C. Terms of Reference for Consultancy Service

1. Objectives

- 1.1 To study the development and growth trend of 5G use cases.
- 1.2 To identify and prioritize the key vertical sectors for the practical integration of 5G technology and services
- 1.3 To prepare a detail action plan for the implementation of 5G models in identified key vertical sectors

2. Scope of the Work

- 2.1 To study the international practices of 5G use cases in detail, including their applications and applicable vertical sectors considering possible eMBB (enhanced Mobile Broadband), uRLLC (ultra-Reliable Low Latency Communications), & mMTC (massive Machine Type Communications) services.
- 2.2 To study and forecast the growth pattern of each 5G use cases in Nepal.
- 2.3 To study how the 5G technology impacts social, economic and technological growth and helps for digital transformation by analyzing national and international scenarios.
- 2.4 To identify the key sectors including but not limited to, city management, education, energy, food and agriculture, government, healthcare, public transportation, and tourism which can be boosted by 5G applications in Nepalese context and rank (prioritize) them by studying and analyzing Digital Nepal Framework, SDGs, WSIS Action Lines, Connect 2030 Agendas, Industry 4.0 and other relevant documents.
- 2.5 To explore all identified sectors, consultant has to conduct the following supporting activities.
 - SWOT Analysis, considering Nepalese and International context
 - Need assessment (connectivity/ technological/ digitization/ hard and soft skills)
 - Recommendation on the type of 5G use cases and network architecture that will help to enhance the productivity and efficiency of the sector

- Demand and growth forecast of possible applications based on current usage trends and needs (current possible applications/uses and near future possible applications)
- Study the readiness of the service providers
- Recommendation on the type of service providers that can provide services to the different identified sectors
- Suggestion on the techniques to improve telecommunication network footprint and connect the disconnected
- Skill Need Assessment of all identified related stakeholders
- Recommendation of the possible plan/way to create awareness and enhance the skills of the stakeholders on the basis of Skill Need Assessment
- Identification and recommendation on the initiatives (based on priority)
- Identification and recommendation on the roles and responsibility of the Authority, Government, Public Sector, and other stakeholders to ensure the effective and efficient use of 5G for digital transformation.
- Action plan with timeline, deliverables and tentative budget for each initiative
- Recommendation on the data protection and security related issues including the required infrastructure and policy

2.6 Recommendation on the necessary action to be taken for digital innovation.

2.7 To perform other necessary tasks and assignments provided by the NTA from time to time in relation to the subject.

3. Deliverables, timelines and payment schedule

a. Inception Report

- Shall be submitted by the Consultant within 1 month from the date of contract.
- 15% of the contract amount will be paid to the Consultant after acceptance of Inception Report by the Authority.

b. Midterm Report

- Shall be submitted by the Consultant within 3 months from the date of contract.
- 30% of the contract amount will be paid to the Consultant after acceptance of Draft Final Report (Draft Master Action Plan) by the Authority.

- c. Draft Final Report (Draft Master Action Plan)
 - Shall be submitted by the Consultant within 6 months from the date of contract.
 - 35% of the contract amount will be paid to the Consultant after acceptance of Draft Final Report (Draft Master Action Plan) by the Authority.
- d. Final Report with Master Action Plan including initiatives, WBS, stakeholder register, role and responsibility map, timeline, etc.
 - Shall be submitted by the Consultant within 8 months from the date of contract.
 - 20% of the contract amount shall be paid to the Consultant after completion of the tasks assigned and acceptance of the Final Report with Master Action Plan by the Authority.

4. Study Methodologies (including but not limited to)

- a. Literature study and analysis of international trends
- b. Literature study, data collection and analysis of national scenario
- c. Discussion/ workshop with the stakeholders: Discussions and meetings with the stakeholders shall be carried out while preparing the report and Master Action Plan. A workshop will be conducted after the Draft Final Report and Master Action Plan submitted by the Consultant has been approved by the Authority.
- d. The workshop shall incorporate stakeholders/ experts from all the sectors identified, related officers/ experts from the Government, the Authority, other regulators and telecommunications industries.
- e. The workshop will be organized by NTA, in coordination with the Consultant.

5. Qualification and Experience of Experts

The consulting firm shall include at least following personnel to carry out the assignment.

- a. Team Leader (1): Minimum of Bachelor's Degree in the Electronics/ Communication/ Computer/ IT Engineering or in related field with a minimum of 15 years' experience in mobile industry (international experience is preferable) and has completed a minimum of 10 similar research projects in the mobile telecommunication sector.
- b. Telecom Expert (1): Minimum of Bachelor's Degree in the Electronics/ Communication/ Computer / IT Engineering or in related field with a minimum of

12 years' experience in telecommunication/ mobile industry and has completed a minimum of 10 projects in the telecommunication sector.

- c. Economist (1): Minimum of Master's Degree in Economics or in related field with a minimum of 10 years' experience as an economist and has completed a minimum of 10 projects related to economics analysis.
- d. Data Analyst (1): Minimum of Bachelor's Degree in data analytics or related subjects (with at least one subject related to data science or data analytics) with a minimum of 10 years' experience as data analyst and has completed a minimum of 10 projects related to data analysis.
- e. Domain Experts (Experts of each domain/sector/field identified in Section C-2.4): Minimum of Bachelor's Degree in the related subjects with a minimum of 8 years' experience in the related domain and has completed a minimum of 5 projects in the related domain.

The Expert's CVs should be submitted as per the format specified in the RFP.

6. Company/ Consultant Requirements:

- a. Should be VAT registered,
- b. Must submit the Firm Registration and Tax Clearance Certificates.
- c. Should have minimum 3 years of experience in the related field (Mobile/ Telecommunication/ Network/ ICT/ IT/ Data Analysis/ Economic Analysis).
- d. Should have completed minimum of 10 analysis/ research projects in the related fields.
- e. The Consultant's Experience should be submitted as per the format specified in the RFP.

D. Evaluation of Consultant's EOI Application

Evaluation of Consultant's EOI Application

Consultant's EOI application which meets the eligibility criteria will be ranked on the basis of the Ranking Criteria.

i) Eligibility & Completeness Test

Sl. No.	Criteria Title	Compliance
1	Corporate Registration	
2	Tax Clearance/Tax Return Submission of FY 2077/78	
3	VAT/PAN Registration	
4	EOI Form 1: Letter of Application	
5	EOI Form 2: Applicants Information Form	
6	EOI Form 3: Experience (3(A) and 3(B))	
7	EOI Form 4: Capacity (Minimum Average Annual Turnover NPR 50,00,000)	
8	EOI Form 5: Qualification of Key Experts as per TOR	
9	In case of a natural person or firm/institution/company which is already declared blacklisted and ineligible by the GoN, any other new or existing firm/institution/company owned partially or fully by such Natural person or Owner or Board of director of blacklisted firm/institution/company; shall not be eligible consultant.	
10	If the corruption case is being filed to Court against the Natural Person or Board of Director of the firm/institution /company or any partner of JV, such Natural Person or Board of Director of the firm/institution /company or any partner of JV shall not be eligible to participate in procurement process till the concerned Court has not issued the decision of clearance against the Corruption Charges.	

ii) EOI Evaluation Criteria

A. Qualification

Sl. No.	Criteria	Minimum Requirement
1	Qualification of Key Experts	As Per TOR
2	Experience of Key Experts	As per TOR

Score: 40.0

B. Experience

Sl. No.	Criteria	Minimum Requirement
1	General Experience of consulting firm	3 years of experience in the related field (Mobile/ Telecommunication/ Network/ ICT/ IT/ Data Analysis/ Economic Analysis).
2	Specific experience of consulting firm within last 7 years. In case of person, specific experience of the person within last 4 years.	10 analysis/ research projects in the related fields.

Score: 50.0

C. Capacity

Sl. No.	Criteria	Minimum Requirement
1	Financial Capacity.[Average turnover required shall not exceed 150% of cost estimate]	NRs 50,00,000

Score: 10.0

Minimum score to pass the EOI is: 60

Note : If the corruption case is being filed to Court against the Natural Person or Board of Director of the firm/institution /company or any partner of JV, such Natural Person or Board of Director of the firm/institution /company or any partner of JV such consultant's proposal shall be excluded during the evaluation.

E. EOI Forms & Formats

E. EOI Forms & Formats

Form 1. Letter of Application

Form 2. Applicant's information

Form 3. Experience (*General, Specific and Geographical*)

Form 4. Capacity

Form 5. Qualification of Key Experts

Standard EOI Document

1. Letter of Application

(Letterhead paper of the Applicant or partner responsible for a joint venture, including full postal address, telephone no., fax and email address)

Date:

To,

Full Name of Client: _____

Full Address of Client: _____

Telephone No.: _____

Fax No.: _____

Email Address: _____

Sir/Madam,

1. Being duly authorized to represent and act on behalf of (hereinafter "the Applicant"), and having reviewed and fully understood all the short-listing information provided, the undersigned hereby apply to be short-listed by **[Insert name of Client]** as Consultant for **[Insert brief description of Work/Services]**.
2. Attached to this letter are photocopies of original documents defining:
 - a) the Applicant's legal status;
 - b) the principal place of business;
3. **[Insert name of Client]** and its authorized representatives are hereby authorized to verify the statements, documents, and information submitted in connection with this application. This Letter of Application will also serve as authorization to any individual or authorized representative of any institution referred to in the supporting information, to provide such information deemed necessary and requested by yourselves to verify statements and information provided in this application, or with regard to the resources, experience, and competence of the Applicant.
4. **[Insert name of Client]** and its authorized representatives are authorized to contact any of the signatories to this letter for any further information.¹
5. All further communication concerning this Application should be addressed to the following person,

[Person]

[Company]

[Address]

[Phone, Fax, Email]
6. We declare that, we have no conflict of interest in the proposed procurement proceedings and we have not been punished for an offense relating to the concerned profession or

¹ Applications by joint ventures should provide on a separate sheet, relevant information for each party to the Application.

Standard EOI Document

business and our Company/firm has not been declared ineligible.

7. We further confirm that, if any of our experts is engaged to prepare the TOR for any ensuing assignment resulting from our work product under this assignment, our firm, JV member or sub-consultant, and the expert(s) will be disqualified from short-listing and participation in the assignment.
8. The undersigned declares that the statements made and the information provided in the duly completed application are complete, true and correct in every detail.

Signed :

Name :

For and on behalf of (name of Applicant or partner of a joint venture):

Standard EOI Document

2. Applicant's Information Form

(In case of joint venture of two or more firms to be filled separately for each constituent member)

1. Name of Firm/Company:
2. Type of Constitution (*Partnership/ Pvt. Ltd/Public Ltd/ Public Sector/ NGO*)
3. Date of Registration / Commencement of Business (*Please specify*):
4. Country of Registration:
5. Registered Office/Place of Business:
6. Telephone No; Fax No; E-Mail Address
7. Name of Authorized Contact Person / Designation/ Address/Telephone:
8. Name of Authorized Local Agent /Address/Telephone:
9. Consultant's Organization:
10. Total number of staff:
11. Number of regular professional staff:

(Provide Company Profile with description of the background and organization of the Consultant and, if applicable, for each joint venture partner for this assignment.)

Standard EOI Document

3. Experience

3(A). General Work Experience

(Details of assignments undertaken. Each consultant or member of a JV must fill in this form.)

S. N.	Name of assignment	Location	Value of Contract	Year Completed	Client	Description of work carried out
1.						
2.						
3.						
4.						
5.						
6.						
7.						

Standard EOI Document

3(B). Specific Experience

Details of similar assignments undertaken in the previous seven years

(In case of joint venture of two or more firms to be filled separately for each constituent member)

Assignment name:	Approx. value of the contract (in current NRs; US\$ or Euro) ² :
Country: Location within country:	Duration of assignment (months):
Name of Client:	Total No. of person-months of the assignment:
Address:	Approx. value of the services provided by your firm under the contract (in current NRs; US\$ or Euro):
Start date (month/year): Completion date (month/year):	No. of professional person-months provided by the joint venture partners or the Sub-Consultants:
Name of joint venture partner or sub-Consultants, if any:	Narrative description of Project:
Description of actual services provided in the assignment: Note: Provide highlight on similar services provided by the consultant as required by the EOI assignment.	

Firm's Name: _____

² Consultant should state value in the currency as mentioned in the contract

Standard EOI Document

3(C). Geographic Experience

Experience of working in similar geographic region or country

(In case of joint venture of two or more firms to be filled separately for each constituent member)

No	Name of the Project	Location (Country/ Region)	Execution Year and Duration
1.			
2.			
3.			
4.			
5.			
6.			
7.			

Standard EOI Document

4. Capacity

4(A). Financial Capacity

(In case of joint venture of two or more firms to be filled separately for each constituent member)

Annual Turnover	
Year	Amount Currency

- **Average Annual Turnover**

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(Note: Supporting documents for Average Turnover should be submitted for the above.)

Standard EOI Document

4(B). Infrastructure/equipment related to the proposed assignment³

No	Infrastructure/equipment Required	Requirements Description
1.		
2.		
3.		
4.		
5.		

³ Delete this table if infrastructure/equipment for the proposed assignment is not required.

Standard EOI Document

5. Key Experts *(Include details of Key Experts only)*

(In case of joint venture of two or more firms to be filled separately for each constituent member)

SN	Name	Position	Highest Qualification	Work Experience (in year)	Specific Work Experience (in year)	Nationality
1						
2						
3						
4						
5						

(Please insert more rows as necessary)

FORM TECH-7

CURRICULUM VITAE (CV)

Position Title and No.	{e.g., K-1, TEAM LEADER}
Name of Firm	<i>Insert name of firm proposing the expert</i>
Name of Expert:	{Insert full name}
Date of Birth:	{day/month/year}
Citizenship	

Education: {List college/university or other specialized education, giving names of educational institutions, dates attended, degree(s)/diploma(s) obtained}

Employment record relevant to the assignment: {Starting with present position, list in reverse order. Please provide dates, name of employing organization, titles of positions held, *type of employment (full time, part time, contractual)*, types of activities performed and location of the assignment, and contact information of previous clients and employing organization(s) who can be contacted for references. Past employment that is not relevant to the assignment does not need to be included.}

Period	Employing organization and your title/position. Contact information for references	Country	Summary of activities performed relevant to the Assignment
[e.g., May 2005-present]	[e.g., Ministry of, advisor/consultant to... For references: Tel...../e-mail.....; Mr. Bbbbbb, deputy minister]		

Membership in Professional Associations and Publications:

Language Skills (indicate only languages in which you can work): _____

Adequacy for the Assignment:

Detailed Tasks Assigned on Consultant's Team of Experts:	Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks
{List all deliverables/tasks as in TECH- 5 in which the Expert will be involved}	

Expert's contact information: (e-mail....., phone.....)

Certification:

I, the undersigned, certify to the best of my knowledge and belief that

(i) This CV correctly describes my qualifications and experience

(ii) I am not a current employee of the GoN

(iii) In the absence of medical incapacity, I will undertake this assignment for the duration and in terms of the inputs specified for me in Form TECH 6 provided team mobilization takes place within the validity of this proposal.

(iv) I was not part of the team who wrote the terms of reference for this consulting services assignment

(v) I am not currently debarred by a multilateral development bank (In case of DP funded project]

(vi) I certify that I have been informed by the firm that it is including my CV in the Proposal for the {name of project and contract}. I confirm that I will be available to carry out the assignment for which my CV has been submitted in accordance with the implementation arrangements and schedule set out in the Proposal.

(vii) I declare that Corruption Case is not filed against me.

I understand that any willful misstatement described herein may lead to my disqualification or dismissal, if engaged.

_____ Date: _____
[Signature of expert] Day/Month/Year

_____ Date: _____
[Signature of authorized representative of the firm] Day/Month/Year

Full name of authorized representative:
