



INFORMATION AND COMMUNICATION TECHNOLOGY AGENCY OF SRI LANKA

EXPRESSIONS OF INTEREST

Dear Sir/Madam,

Consultant for Carrying out the Study on Implementing an Unified Transport Card Solution (ICTA/GOSL/CON/IC/2016/41)

Information and Communication Technology Agency of Sri Lanka (ICTA) is empowered to implement ICT development strategies and programms, in both the government and private sectors, including Legal & Policy reforms in Sri Lanka. The agency functions under direct purview of the Ministry of Telecommunication and Digital Infrastructure.

ICTA wishes to obtain the services of an individual consultant to Study on Implementing an Unified Transport Card Solution.

Accordingly ICTA has decided to invite CVs from qualified and eligible individual experts in this area of work who can take up this assignment.

Terms of Reference of the assignment is given in Annex A

Duration of the assignment shall be: **70 days (calendar days)**

If you are interested in this consultancy assignment, please response to this request by submitting the following information in English language;

- (1) Detailed CV/Resume (Annex B)
- (2) One page cover letter highlighting the relevant experience, expertise etc in the respective areas
- (3) Description of approach to the task (one page)
- (4) Expected consultancy fee

You may forward your response electronically to; <u>procurement@icta.lk</u> or by hand delivery or by post to Director-Procurement and Head of Administration, C/o Managing Director, 160/24, 2nd Floor, Kirimandala Mawatha, Colombo 05 to be received at or before **1500 Hrs on July 12th, 2016.** The Envelope containing your response should be marked "Consultant for Carrying out the Study on Implementing an Unified Transport Card Solution -ICTA/GOSL/CON/IC/2016/41"

Managing Director Information and Communication Technology Agency of Sri Lanka 160/24, Kirimandala Mawatha, Colombo 05. June 28th, 2016

Terms of Reference for Consultant for Carrying out the Study on Implementing an Unified Transport Card Solution (ICTA/GOSL/CON/IC/2016/41)

1. Introduction

The government has recognized the critical role that Information and Communication Technology (ICT) can play in fostering social integration, peace, growth, and poverty reduction. Accordingly, the Government intends to use ICT to improve the reach and responsiveness of public services, reduce transaction costs to business, make government more transparent and accountable, and address the urgent needs of poor communities and isolated regions.

The key elements and objectives of the ICT program articulated by the government are to (i) develop the necessary capacity to lead and implement an ambitious ICT program; (ii) rapidly develop the required digital infrastructure across the country to effectively serve all citizens; (iii) create an enabling environment for the knowledge economy; (iv) develop specialized ICT skills and broad ICT literacy at all levels of education; (v) deliver faster, more efficient, and more transparent government services to all citizens and businesses; (vi) use ICT as a lever for social development; and (vii) create jobs through a dynamic and competitive ICT sector and through diffusion of ICT across the nation.

In order to achieve above broad objectives in a rapid manner aligned with the national policy of 'Digitization of Economy', Government of Sri Lanka (GoSL) takes multiple initiatives covering all the areas including the transport sector. Transport sector is a key component of the economy of any country. Investments on related infrastructure developments including building of new expressways and railways are high in Sri Lanka. More attention has to be given for public transportation since social, economic and environmental aspects are directly linked with this. Convenience and efficiency of the public transportation have to be increased encouraging the public to use public transport, and ICT can be leveraged significantly on this.

2. Background

Aligned with above objectives and strategies, the Ministry of Transport and Civil Aviation (MoT), the National Transport Commission (NTC) and the Information and Communication Technology Agency (ICTA) in collaboration with the relevant stakeholders had a series of discussions to see the possibility of implementing an "Unified Transport Card Solution" with

best practices and latest state-of-the-art technologies. This has now become an urgent national need. General public, related government organizations and private businesses will be benefited in numerous ways by this initiative.

In this context, an "Unified Transport Card Solution" can prove a convenient transport card to the citizen with simple and multiple top-up and tap-in, tap-out capabilities. Moreover, both private bus owners and government owned transport authorities will be benefited by greater visibility and control on the income and organizations like NTC will be benefited from passenger information flow data to take future strategic decisions and to model better transport mechanisms and solutions.

In order to achieve these broader objectives, MoT, NTC and ICTA have planned to implement an "Unified Transport Card Solution". This would be a critical project, and as a strategic approach for ensuring smooth implementation of the project, it was decided to first carryout a comprehensive study. This study will cover the current situation and future of passenger transportation, existing initiatives and their outcomes, failures, lessons learned, etc., similar cases in the globe and the region, related technologies and best practices, standards and specifications, risks and risk mitigation strategies, implementation approach and related areas.

In order to carry out this comprehensive study, and it is intended to hire an individual consultant.

3. Objective of the Assignment

To carry out a comprehensive study on objectives of implementing a Unified Transport Card solution, lessons from world, region and country, best practices, standards and technologies, implementation, operation and governance, analyze and document the findings and provide necessary recommendations.

4. Scope of Work

The consultant is expected to carry out tasks as listed below (but not limited to)

a) Work closely with all stakeholders and get ideas, suggestions, recommendations, best practices etc with regard to all related areas such as implementation, operational, technical and governance matters.

Key Stakeholders (but not limited to):

- Commuters of public transport
- Ministry of Transport and Civil Aviation
- National Transport Commission
- Sri Lanka Transport Board
- Department of Motor Traffic
- Sri Lanka Railways Department
- Information and Communication Technology Agency of Sri Lanka
- Ministry of Finance
- Central Bank
- Road Development Authority
- Ministry of Provincial Councils and Local Government
- Academia
- Private bus owners and workers
- Mobile Operators, Hardware/Software Vendors, Card Issuing Companies, Banks, Lanka Clear (Pvt) Ltd., Government Organizations such as Postal Department, Small Retail Shop Owners
- Taxi Operators
- Related Trade Unions
- b) Work closely with the Expert Panel which will be comprising of five (05) individuals having different and related expertise, competencies and experience. ICTA and NTC will appoint the panel in timely manner.
- c) Study the related initiatives such as National Payment Platform (NPP), National Digital Identity (NDI) an Digital Transaction Card (DTC) and provide recommendations as required
- d) Study the similar and/or related initiatives which have been implemented in the country so far. The background, current status with reasons for success/failures, technologies used to be studied. Wherever possible, the consultant is expected to visit the relevant places and meet the people including the users.Research and find out similar systems, relevant legal frameworks implemented in other countries, and provide a comprehensive analysis on effectiveness of those initiatives, and lessons that can be learned from those initiatives. (five cases including two in Asia-pacific region at minimum).
- e) Study the governing laws and regulatory requirements in Sri Lanka and provide necessary recommendations.
- f) Study and recommend possibilities of integrating the system for toll gates
- g) Study payment related matters including top-up facilities, collections, transfers and provide recommendations as required.
- h) Study and recommend fare policy for government workers, school children, senior citizens and disable people etc.
- i) Analyze the requirements and related arrangements in provincial council levels.
- j) Define, propose and provide recommendations as listed below;

- Recommend the best practices and state-of-the-art technologies to be used.
- Recommend and propose the approach aligned with one card initiative (one card for government).
- Define the common standards for the cards allowing any party who adheres to the standards and conditions to enter in to this Eco-system.
- Define the common standards and specifications for devices such as hand-held devices, card readers mounted on public transport, railway checkout gates, etc.
- Study and recommend the physical implementation arrangements at railway stations, bus-stops etc.
- Define the security standards and specifications.
- Define the open standards and open protocols of the core solution to be implemented and maintained by MoT, NTC and ICTA.
- Define high-level architecture for the core system and overall solution.
- Provide recommendations on implementation approach and phases.
- Propose governance procedures and mechanisms and regulatory procedures to ensure fair play among every stakeholder.
- Propose strategies to achieve win-win situation among stakeholders when migrating to the proposed solution (Ex: Government Organizations, Passengers, Bus Owners, Bus Drivers, Bus Conductors etc.).
- k) Define operational procedures and arrangements as listed below;
 - Card issuing and management procedures including card prices, operational arrangements for lost ,stolen or damaged cards
 - Services to be provided to the card holder.
- 1) Create documents required for procurement of consultancy firm for implementing the core solution.
- m) Identify human resources requirements and related training requirements for maintaining the core solution.
- n) Identify the risks and propose mitigation strategies and/or measures.
- o) Propose strategies to encourage migration to the proposed unified transport card.
- p) Identify and propose proper mechanisms to enhance the technologies of the existing hand-held devices and ticketing machines in order to adopt to the proposed solution.
- q) High-level cost estimation for the implementing of the core solution.

4.1 General Requirements

- a) The consultant should sign a Non-Disclosure Agreement (NDA).
- b) Adherence to the latest revisions of the e-Government Policy of Sri Lanka.
- c) Adherence to Lanka Interoperability Framework.

- d) Participation for the meetings/discussions of project committees, governance committees such as Project Steering Committee (PSC) and Project Review Committee(PRC) as and when required.
- e) Adherence to any other governing laws and regulations in the country.

5. Deliverables, Payment Schedule and Time-line

The consultant is required to submit the following list of deliverables.

No	Key Deliverable	Duration	Payments
1	Work Plan and Inception	Commencement Date + 3 days	10%
	Report		
2	Initial Draft Report	Commencement Date + 20 days	20%
3.1	Draft Report covering all	Commencement Date + 30 days	20%
	areas in the format of a		
	'Project Proposal'		
4	Second Draft Report	Commencement Date + 50 days	20%
5	Final Report	Commencement Date + 70 days	30%

6. Qualifications of the KEY CONSULTANT

Preferred Qualifications;

Academic	Experience as a consultant in consultancy assignments (as a member of a team, local and international)	Experience as a key consultant in assignments of similar magnitude (local and international)	Experience as a consultant in assignments of similar nature (Ex: transport sector, national level initiatives)
MBA, MSc or equivalent MPhil or PhD would have added advantage	8projects	3 projects	1 project

7. Review Committees and Review Procedures

The consultant is required to work closely with the any review committee(s) as appointed/decided by MoT/ NTC/ ICTA.

All versions of deliverables will be reviewed and the acceptance is given once the deliverables meet the acceptance criteria. A deliverable audit process may be adopted.

Annex (B)

CURRICULUM VITAE (CV)

{Notes shown in brackets { } in italic should not appear on the final document to be submitted}

Position /Title	
Name of Consultant:	{Insert full name}
Date of Birth:	{day/month/year}
Country of Citizenship/Residence	

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, contract amount, 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	Country	Summary of activities performed relevant to
	information for references		the Assignment
{e.g., May	{e.g., Ministry of,		
2012-	Advisor/Consultant to		
present}			
	For references: Tel/e-		
	mail; Mr.Abbbbbb, Director		
	General}		
{e.g., From			
Jan 2010 to			
May 2012}			

Memberships in Professional Associations and Publications:

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

Adequacy for the Assignment:

Detailed Tasks Assigned on Consultant:	Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks
Experience as a consultant	
Experience as a key consultant in assignments of similar magnitude (local and international)	
Experience as a consultant in assignments of similar nature (Ex: transport sector, national level initiatives)	
Experience in working with government stakeholders and with multiple stakeholders	
Experience in working in a team environment with expert groups	
Experience in documentation (creating project proposals, specifications, tender documents etc.)	

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

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience, and I am available to undertake the assignment in case of an award. I understand that any misstatement or misrepresentation described herein may lead to my disqualification or dismissal by the Client, and/or sanctions by the Bank.

{day/month/year}

Name of Consultant Date Signature