

**Ministry of Finance, Planning and Economic Development
Trade and Investment Policy Department**

Trade National Single Window System Project (TNSWSP)

**Development of Functional & Technical Requirement Specification and
Preparation of Procurement documents**

Terms of Reference

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1. Introduction and background of the TNSWS

Government of Sri Lanka identified the need to reform its trade policies and practices to support a business-friendly environment, promote private sector growth and use the strategic position of Sri Lanka to benefit from foreign direct investment (FDI) and integration into global value chains as a catalyst for economic growth. Also, Sri Lanka has entered the World Trade Organization (WTO) Trade Facilitation Agreement (TFA), where has obligations to establish global rules, creating an enabling environment for international trade before 31.12.2030

Thereby government has decided to establish a **Trade National Single Window System** as a single-entry point for submission of documents and data requirements by the traders on their cross-border trade flows (Imports, Exports and Transshipments) and connecting the participating Border Trade Regulatory Agencies which have the mandate of issuing Certificates, License, Permits & Recommendation letter (CLPR) for such trade transactions. Further the result of such process shall also be notified to the applicants through the automated Trade National Single Window System and necessary supporting services including financial and logistic requirements to be integrated as well.

As initial step, the World Bank has carried out a high-level technical study and prepared a blueprint with recommendations for establishing a Trade National Single Window System including the Border Regulatory Agencies under a single platform.

Accordingly, the Ministry of Finance, Planning and Economic Development has decided to establish a dedicated Project Implementation Unit (PIU) to implement the proposed Trade National Single Window System Project.

2. Background and Introduction to the Consultancy

In 2018, the World Bank has carried out technical study and prepared a blueprint with recommendations for establishing a Trade National Single Window System for Sri Lanka connecting Traders, Border Regulatory Agencies, Port community systems and other financial and logistic entities under a single platform.

The Blueprint document of NSW consists of Eleven (11) pillars such as:

1. Governance and Operational Models and decision-making framework
2. Technical and functional Specifications

3. High-level BPR Model
4. Data Harmonization Strategy & Plan
5. Risk Management Strategy and Model
6. Strategy and Plan for Change Management, Communications and Capacity Building
7. Revenue Model and Fee Structure
8. Legal and Regulatory Review
9. Service Specifications for NSW Operator
10. Service Level Agreements model
11. NSW Implementation plan

The cabinet of ministers has approved 18 Government Agencies (GAs) who are involved with issuing certificates, licenses, permits and recommendations (CLPR) on imports, exports and transshipment and 05 private Sector Chambers of Commerce who facilitate import and export trade in Sri Lanka. (Annexure 01& Annexure 02). There are well-developed IT systems in a few of the Government Agencies whereas some Government Agencies do not operate any IT systems and carry out their business manually.

The project approach based on three stages such as; preliminary stage, implementation stage and operationalization and closure stage extending to the period of 36 months.

Further, considering the project period and time lines, direction has been given by the NSW Project Implementation Committee (PIC) to procure and adopt an **Off-The-Shelf Customizable** system with necessary modifications and improvements as needed.

Due to the technical complexity of multi domain single window systems in this nature and lack of local NSW expertise, TNSWSP Project Implementation Unit (PIU) seeking service from a reputed consultancy firm to **develop Functional & Technical Requirement Specification, Implementor TOR, Procurement documents (Bidding/RFP) and to obtain expert assistance to main procurement activities** as well.

3. Objectives of the Consultancy

Overall Objective

The main objective of this assignment is to conduct a detail requirement analysis on the implementation of a Trade National Single Window System in the Sri Lankan context and development of suitable Functional & Technical requirement specification, Vendor/Implementor TOR, Procurement documents and provide expert assistance to procurement process as well.

Specific Objectives

1. Based on the high-level recommendations of Blueprint and further findings from detailed requirement analysis, Development of functional & technical requirement specifications and systems architecture for the proposed Trade National Single Window system for Sri Lanka.

2. Preparation of RFP/Bid documents with full scope of work - including F&T Requirements, Implementor roles and responsibilities, implementation timelines, SLA, evaluation criteria etc. for the Supply, Develop and Implementation of NSW in Sri Lanka.
3. Provide expert assistance during the procurement proceedings.

4. Scope of the consultancy

To achieve the above objectives, the PIU would expect the service provider to focus on the following tasks.

- 4.1 ***Based on the high-level recommendations of Blueprint and further findings from detailed requirement analysis, Development of functional, nonfunctional & technical requirement specifications and systems architecture for the proposed system.***

Scope of work

- a) Review the Blueprint together with global best practices including UN/CEFACT Recommendation No.33 guidelines for design & implementation of the NSW systems.
- b) A requirement analysis is to be conducted covering 18 Government agencies (Annexure 01) to ***capture the functional requirements (As-is), existing systems & technologies and existing interagency communication and collaboration methods*** in the context of Sri Lankan import & export and border regulations/inspection activities. (PIU to provide currently available information and facilitate the consultations)
- c) Develop a Functional & Technical Requirement Specification covering all system areas (aligning with international standards) of the recommended NSW for Sri Lanka, including **but not limited to** below;

Functional Requirements

Should provide a use-case driven comprehensive functional specifications covering all essential features and functions of the proposed NSW system. Such as ;

- Key modules and components.
- User Interfaces
- User registration/User login and Access Controls
- Approach for single submission of trade documents for Import, Export and Transit Declaration with necessary details and formats and document validation mechanisms.

- Document submission and receiving – covering LPCO, manifest submission, Declaration submission etc.
- Implementation of necessary automated workflow for document processing and regulatory checks.
- Integrated risk management mechanisms.
- Approach and methods of Real-Time status update on document processing and clearance and alerts & notification services.
- Modalities and methods for relevant fees, duties, taxes, penalty calculations and Payment gateway integration approach.
- Reporting and analytics capabilities for trade statistics
- Data exchange and Integration Hubs - System interfaces and methods of Integrating with existing government and other partner systems.
- Governance & Admiralty requirements – System monitoring, performance monitoring
- Call center/Helpdesk facilities and tracking systems and support services
- Data validation and interoperability between different government agencies.

Main features and functions should be categorized and demonstrated by user roles and key use cases as applicable.

Non-functional requirements

- Usability recommendation – UI/UX
- Recommended Systems performance, Response time and Throughput indicators (under different load conditions)
- Data validation and error checking mechanisms.
- Data integrity, Data storage and security measures.
- Security measures to protect sensitive data, online payments and other digital assets from unauthorized access and distractions.
- System Audit facilities – technical and functional.
- System scalability/extendibility requirements - adding future OGAs (minimum 36), new process & business logics etc.
- Data capturing and migration/conversion methods.

Technical requirements

- High-level System architecture
- Database requirements and standards.
- Security standards – Protocols and Encryption levels etc
- Network and infrastructure standards.
- Backup, System availability and disaster recovery requirements.

4.2 Development of EOI/RFP/Bid documents for “Design, Develop and Implementation of Trade National Single Window System for Sri Lanka”

Scope of Work

- a) Bid document/RFP should cover all necessary technical, development and Implementation requirements. ‘Bid scope of work’ should including but not limited to;
 - Undertake initial assessment
 - Functional and Non-functional requirements
 - **Implementor rolls and responsibilities** (with all sub activities such as process improvement, harmonization, Prototyping, Configuration, Implementation, etc.)
 - Timelines
 - SLA conditions
 - Evaluation criterias
- b) Bid document should incorporate all necessary conditions, proposal submission guidelines, forms & formats and selection criteria’s as appropriate.;

4.3 Provide expert assistance during the procurement proceedings

Scope of Work

- a) Expert assistance and provide inputs for replying bidder inquiries and conducting pre-bid meetings
- b) Technical consultation for bid evaluation.
- c) Expert assistance for preparation of contracts.

5. Major Milestones and Deliverable and Payments

No		Major Milestones	Due Date	Deliverables / Inputs	Payments
1	Initiation	Study Initiation	0 week	-	-
		Inception Report	1 week	1. The inception report with detailed project plan.	10% total contract value (Upon accepting the deliverables)
2	Objective 01	Development of functional & technical specifications and systems architecture for the proposed system	08 Week	2. Draft Functional & Technical Requirement Specification Report 3. Draft EOI/BID/RFP documents	30% total contract value (Upon accepting the deliverables)
	Objective 02	Preparation of EOI/RFP/Bid documents for Supply, Develop and Implementation of NSW system in Sri Lanka	10 Week	4. Functional & Technical Requirement Specification - Final Report 5. EOI/BID/RFP documents – Final Document	40% total contract value (Upon accepting the deliverables)
3	Objective 03	Provide expert assistance during the procurement proceedings		6. Expert assistance for conducting pre-bid meeting and provide inputs/clarifications for bidder inquiries and issuing addendums. 7. Preparation of draft bid evaluation reports, expert assistance to the TEC/Procurement Committees and document validation. 8. Expert assistance for preparation of contracts, draft contract and document validation.	20% total contract value (Upon receiving inputs/clarification)

6. Definition of the Deliverables

Following are the definition and scope of the deliverables which are required for this assignment.

- a) Deliverable 1 : Inception Report**
Due date : 1 Weeks from the Signing of Contract

The inception reports should, at minimum, address the following for each of the key components identified in section 4:

- Detail Propose work plan, approach and resource allocation.
- Propose schedule with individual deliverables and milestones identified.

- b) Deliverable 2 & 4 : Functional and Technical Requirement Specification for NSW**
Due Date: Draft - 08 Weeks from the Signing of Contract (Deliverable 02)
Final - 10 Weeks from the Signing of Contract (Deliverable 04)

This report should, at minimum, address the following areas;

- Functional requirements
- Non-Functional requirements
- Technical requirements
- Flow chart diagrams, activity diagrams, network diagrams and UI elements as Applicable

- c) Deliverable 3 & 5 : EOI/RFP/Bid document for Supply, Develop, Implement and Operationalization of NSW System in Sri Lanka**
Due Date : Draft – 08 Weeks from the Signing of Contract (Deliverable 03)
Final – 10 Weeks from the Signing of Contract (Deliverable 05)

BID/RFPs should, at minimum, address the following areas;

- All relevant general and special conditions
- Functional and Non-functional requirements
- **Implementor rolls and responsibilities / scope of work**
- Timelines
- SLA conditions
- Evaluation criterias
- And any other requirements as per the GoSL Procurement guide line

- d) Deliverable 6,7 & 8 : Detailed clarifications, Draft Technical & Financial Bid Evaluation Report and Draft Contract**

Detailed Clarifications : At minimum, detailed answers for vendor questions

Draft TBER : Report should address, at minimum, All necessary evaluations as per the set criteria

Draft PBER : Report should address, at minimum, All necessary evaluations as per the set criterias

Draft Contract : Should address but not limited to, all necessary general conditions, special Conditions, Schedule of supply and SLA details

7. Expertise Required

7.1 Consultancy firm – Qualification and experience required.

The consulting firm should have the following qualification and experiences:

- (i) The Consultancy Firm should be based in Sri Lanka with valid registration.
- (ii) Minimum of ten (10) years' experience as a consultancy firm with experience in IT system developments, process improvements or similar nature of work.
- (iii) Expertise and experience in handling projects in cross-border trade, regulatory requirements in imports and export trade is a definite advantage.
- (iv) Experience in conducting requirement analysis, formulating complex IT system designs and specifications and IT project management.
- (v) Required very good experience working with public and private sector.
- (vi) Strong communication and interpretational skills; very good experience of time management and timely delivery of project milestones.
- (vii) Documentary evidence is required to prove their proficiency
- (viii) Need to submit minimum of three reference of similar projects handled in last five years period for the value of not less than SLR 5Mn

7.2 Team – Qualification and experience required

- i) Following table depicts the **minimum** core team members required for this assignment with relevant expected qualification and experience.
- ii) This is a outcomes-based contract and consultant shall submit a resource plan covering necessary and appropriate manpower resources to perform the required services in a productive manner within the given timelines.
- iii) Details must be provided to explain why the proposed resources are necessary/adequate for the required services.
- iv) Consultant should provide the curriculum vitae's of professionals and team organization which the validity of the validity and the accuracy of the CV's are very important.

No.	Key Professional Staff	Qualifications		Experience (No. of Years)
		Academic/ Professional	Role Specific	
1	Single Window Development Expert	Degree in Relevant field Preference will be given to the Masters or above.	<ul style="list-style-type: none"> - International project experience in design/development and implementation of NSW systems is a must. - Experience in analyzing requirements development of comprehensive Functional specifications. - Any other experience with trade facilitation systems is a definite advantage (CMS/PCS etc.) - High-level experience in IT system architecture design. - Excellent understanding and Experience in interoperability standards (WCO, UN / CEFACT) - Experience in harmonization procedures and data requirements across agencies - Understanding of cross-border trade regulations and procedures and international trade agreements (WTO TFA) 	10
2	System Architect/IT Expert	Degree in ICT/ Computer Science Preference will be given to the Masters or above.	<ul style="list-style-type: none"> - Experience in Enterprise application designing & development. - Experience in analyzing requirements development of comprehensive Functional and Technical Requirement Specification and Scope of Work/ Implementor roles /procurement documents of complex IT solutions. - In-depth knowledge in technology selection, System scaling, Performance optimization, Security, Networking and System Implementation. - Previous experience and domain knowledge in Customs, supply chain management systems is a definite advantage. 	10
4	Business Analyst / Functional analyst	Degree in ICT or relevant field with post graduate qualification in Business Management	<ul style="list-style-type: none"> - Experience in requirement gathering, Process mapping and documentation. - Proficiency in English and local languages (Sinhala or Tamil) is a must - Experience in working with Government sector organizations - Domain knowledge in Customs, supply chain management and trade facilitation is highly preferred. 	6

No.	Key Professional Staff	Qualifications		Experience (No. of Years)
		Academic/ Professional	Role Specific	
5	Procurement Specialist.	Degree in relevant field with specific procurement qualifications	<ul style="list-style-type: none"> - Experience in public and donor funded Procurements. - Hands on experience in preparing comprehensive bidding documents/RFPs for large IT systems, consulting services and Infrastructure - Experience in prior review of Tender, evaluation and contract negotiations of large scale technical/IT procurements - Basic understanding of system lifecycle, Technical Specs and IT procurement risks. 	10

Additional Expertise

Together, the Consultant team should also offer the following experience and skills

- At least 5 years experience in team management and project management.
- Excellent understanding on working environment and culture of leading public sector officials and GAs.

8. Reference Documents and facilities

Similarly, PIU will provide the required volumes of the Blueprint for the reference of the service provider upon the selection. Any other documents and information as relevant to the assignment will be provided to the consultants by the PIU when and where necessary and as available.

This assignment should be conducted in close coordination with relevant officials of PIU of the Trade National Single Window System (TNSWS) project.

9. Timeline for the assignment

The allocated timeline for the assignment is 10 weeks upon the signing of contract.

10. Reporting requirements

- For the reporting requirements, refer section 05 – “Major Milestones, Deliverables and Payments” and Section 06 – “Definitions of Deliverables”

- ii. This assignment should be conducted in close coordination with relevant officials of PIU of the Trade National Single Window System (TNSWS) project and Consultant's Project manager should communicate validate all reporting requirements accordingly.

11. Payment Conditions

Refer section 05 – “Major Milestones, Deliverables and Payments”

12. Annexures

01 - List of Government Agencies

02 – List of Private Sector Organizations

Chairman

Project Consultants Procurement Committee

Trade National Single Window System Project

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Annexure 01 - List of Government Agencies

1. Department of Animal Health & Production
2. Department of Fisheries & Aquatic Resources
3. Department of Excise
4. Food Control Administration Unit
5. Department Imports & Exports Control
6. National Medicines Regulatory Authority
7. National Plant Quarantine Service
8. Sri Lanka Standards Institution
9. National Gems & Jewelries Authority
10. Department of Customs (Lead Agency)
11. Inland Revenue Department
12. Department of Commerce
13. Telecommunication Regulatory Commission
14. Department of Export Agriculture
15. Department Fiscal Policy
16. Department of Trade and Investment Policy
17. Sri Lanka Ports Authority
18. Sri Lankan Cargo (Air Cargo Terminal)

Annexure 02 - Private Sector Agencies

1. Ceylon Chamber of Commerce
2. National Chamber of Commerce Sri Lanka
3. National Chamber of Exporters
4. Federation of Chamber of Commerce and Industry Sri Lanka
5. International Chamber of Commerce