TERMS OF REFERENCE

TECHNICAL SUPPORT FOR THE ENHANCEMENT OF THE ADVANCED PASSENGER INFORMATION SYSTEM - INTEGRATION OF FAL CONVENTION DATA ELEMENTS

1.   BACKGROUND

1.01   Trade facilitation[1] is important for member countries of the Organisation of the Eastern Caribbean States (OECS), which have a high dependence on trade. Limited natural resources and lack of scale make the OECS highly dependent on imported food, fuel, and medicines, while their export profiles are characterised by a narrow range of exports and export markets. The small size of their production base and domestic markets makes intra-regional trade and trade with third countries critical for growth.

1.02   Despite market access opportunities created by membership in the CARICOM Single Market and Economy (CSME), and other trade agreements such as the European Union (EU) - CARIFORUM Economic Partnership Agreement (EPA), a major complaint of OECS exporters, especially small and medium-sized enterprises, has been the cumbersome hurdles they face when seeking to export to foreign markets. These hurdles include not just complex customs procedures but also stringent Sanitary and Phyto-sanitary standards (SPS) and technical barriers to trade (TBT), these latter two are covered in World Trade Organisation (WTO) agreements (i.e. the SPS and TBT Agreements).

1.03   The WTO Trade Facilitation Agreement entered into force on February 22, 2017, following its acceptance by two-thirds of the WTO membership, including all member countries of the OECS. Through the Trade Facilitation Agreement (TFA), OECS countries have committed to implement measures to expedite the movement, release, and clearance of goods, including goods in transit. These include measures on transparency and governance, border procedures, fees and formalities, cooperation between customs, and other authorities on trade facilitation, and customs compliance issues, among others. The OECS Commission, in collaboration with the CARICOM Secretariat, developed a regional strategy for the implementation of the TFA. The regional approach and strategy were approved by the 45th Meeting of the CARICOM Council for Trade and Economic Development (COTED) in November 2017.

1.04   Concomitantly, OECS Member States are signatories to the International Maritime Organisation (IMO) Convention on the Facilitation of International Maritime Traffic (FAL Convention 1965), which aims to facilitate maritime transport by simplifying and minimising the formalities, documentary requirements and procedures with the arrival, stay and departure of ships engaged on international voyages. According to Standard 1.3 of the FAL Convention, public authorities were to establish systems for the electronic exchange of information by April 8, 2019, with an additional 12 months allowed for the transition. A new IMO recommended practice encourages the use of the "single window" concept, to enable all the information required by public authorities in connection with the arrival, stay and departure of ships, persons and cargo, to be submitted via a single portal without duplication.

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[1] For the United Nations Conference on Trade and Development (UNCTAD), any measure that eases a trade transaction and leads to time and cost reductions in the transaction cycle fits into the category of trade facilitation. The latter can be effected through more efficient procedures and operations, or through removing any deadweight economic loss and redundancies. It may cover measures regarding (a) formalities, procedures and documents and the use of standard and electronic messages for trade transactions; (b) the physical movement of goods through improvements and the use of standard and electronic messages for trade transactions; (c) the physical movement of goods through improvements in services, the legal framework, and the transport and communications infrastructure, as well as the use of modern information technology tools by services providers and users; and (d) the timely discussion and dissemination of trade-related information to all concerned parties.

1.05   Using data generated in the Doing Business 2017: Equal Opportunity for All Report by the World Bank Group, the assessment concluded that overall, the OECS Member States ranked higher compared to non-OECS members who are part of the Caribbean Community (CARICOM). The average rank for the OECS Member States is 93 compared to 106 for all CARICOM Member States. The average time to complete "Documentary Compliance" in the OECS is 36 hours for exports and 28 hours for imports, compared to 45 hours for exports and 43 hours for imports in CARICOM. Equally, the average time to complete "Border Compliance" in the OECS is 51 hours for exports and 46 hours for imports, compared to 56 hours for exports and 61 hours for imports in CARICOM.

1.06   Notwithstanding the above, the report made reference to a number of challenges which stymie trade facilitation and potentially hamper progress towards the free circulation of goods as required by the Revised Treaty of Basseterre[2]:

(a)   While cargo manifests and declarations are all submitted electronically to ASYCUDA World[3], either by entering the information online or by uploading an XML file, in terms of customs' core Information Communication and Technology (ICT) functions, the submission of arrival and departure notifications are currently being done manually, and integration of this process with seaport/airport authorities varies across the OECS membership.

(b)   There are variations in the procedures for submitting arrival and departure notifications between the Member States. For example, in St. Vincent and the Grenadines carriers (or their agents) are obliged to submit notifications **24 hours before arrival and departure**. However, in Dominica, notifications for vessels must be submitted 24 hours before arrival, and notifications for flights must be submitted 15 minutes before departure in the foreign port. There is no specified timeframe for departure notifications in Dominica.

(c)   The procedures for submitting cargo manifests are also not consistent across the Region. For example, in Grenada, carriers (or their agents) are obliged to submit cargo manifests **24 hours before** arrival. However, in St. Vincent and the Grenadines, cargo manifests must be submitted **within 24** hours of arrival.

(d)   Several concerns have arisen in relation to the integration between Customs and the Port/Airport Authorities. In fact, most of the Port/Airport Authorities have their own "cargo management" systems, developed by third-party software providers. The three systems that were identified are KLEIN, which is being used in Dominica; UNITRACK, which is being used in Grenada, Saint Lucia; and ADVANTUM which is being used in St. Kitts and Nevis. Although, from a technical point of view, the systems are integrated or can be integrated, a number of business-related issues were highlighted in terms of the quality of the data being exchanged. In many cases, the Port/Airport Authorities are still asking for hard copies of the cargo manifests because; they have not received sufficient information from Customs, especially for "Less than Container Load (LCL)" containers or the weights are not accurate.

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[2] The Revised Treaty was signed on June 18, 2010, in Saint Lucia during the 51st Meeting of the OECS Authority. The Treaty established a single financial and economic space where goods, people, and capital, move freely creating an economic union, which is an agreement between countries where barriers to trade are reduced or removed for a single market with a customs union.

[3] ASYCUDA is a computerised customs management system, which covers most foreign trade procedures. The system handles manifests and customs declarations, accounting procedures, transit, and suspense procedures.

Advanced Cargo Information System

1.07   In April 2008, the Thirteenth Special Conference of Heads of Government of the Caribbean Community (CARICOM) re-affirmed the Caribbean Community Standing Committees of Immigration and Customs decision that "Advanced Cargo Information System" (ACIS) will be used as the centralised processing and maintenance facility with emphasis placed on the trade consultation component, to facilitate Customs in more expedited processing of cargo, as well as for the receipt of intelligence that would be used to monitor, track and apprehend persons and shipment that may be linked to criminal activity[4].

1.08   Through funding from the 10th European Development Fund (EDF) Crime and Security Program, the CARICOM Implementing Agency for Crime and Security (IMPACS) has developed and piloted the ACIS. The information technology infrastructure is available for the implementation of Electronic Manifest Management ASYCUDA (EMMA) in participating member states. Currently, there are five countries participating in the pilot: Antigua and Barbuda, Barbados, Dominica, Grenada, and St. Vincent and the Grenadines. EMMA has been successfully receiving manifests, performing risk analysis, and submitting risk alerts to these participating member states. Six (6) Member States have the appropriate legislation enacted to enable the sharing of the ACIS data through the single window portal. The system is currently being operated by IMPACS personnel who are in turn supported by staff from the Customs Departments of Member States who are seconded to the Joint Regional Communication Centre (JRCC)[5].

Advanced Passenger Information System

1.09   The Advanced Passenger Information System (APIS) was established by CARICOM pursuant to a decision of the Twenty-Seventh Meeting of the Conference of Heads of Government in July 2006 and has been implemented and managed by CARICOM IMPACS. Currently, all 15 CARICOM Member States are participating in the system. The APIS, which is governed by legislation, facilitates the provision of advanced information relating to passengers and crew members of an aircraft or vessel and the sharing of the information with other States with a view to identifying the persons who may pose risks to security. This information is used to conduct screening against watch lists of crew members and passengers on aircraft and vessels that enter into, depart from, and travel within the regional space in order to provide information to assist participating countries in securing their territories.

1.10   By way of letter dated July 19, 2019, the OECS Commission submitted a request to the Bank for technical assistance (TA) to establish a Regional Maritime Single Window (MSW) in compliance with the aforementioned amendment to the FAL Convention. Given the architecture already advanced for the CARICOM APIS and the fact that some data required for the MSW is already being collected by IMPACS on behalf of participating Member States, the request was subsequently amended to reflect the establishment of the MSW using the APIS platform already in existence in all CARICOM Member States as well as to support the augmentation of the ACIS Platform to enhance OECS Member States risk management capability. During the launch of the CARIFORUM-EU EPA and CSME Standby Facility for Capacity Building in February 2020, countries were invited to consider allocating a percentage of their country allocation to assist them with meeting national level obligations including equipment, legislation, and training. The following countries Grenada, Saint Lucia and St. Vincent and the Grenadines by way of a letter to the Bank requested that EUR100,000 of their Standby Facility allocation be assigned to the regional project.

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[4]   https://caricom.org/statement-issued-by-the-conference-of-heads-of-government-of-the-caribbean-community-at-its-thirteenth-special-meeting-4-5-april-2008-trinidad-and-tobago-2/.

[5]   JRCC is a sub agency of IMPACS. It is responsible for the operations and management of the APIS and ACIS.

ICT support and Business Continuity

1.11   A critical ingredient to the success of border systems is the ability of both Member States and IMPACS to sustain and further enhance their ICT capabilities to collect and collate data from multiple sources. Additionally, they must-have technologies to replicate real-time data in geographically dispersed locations to facilitate business continuity in times of natural or man-made disasters at the primary data centre sites while adhering to industry best practices and/or standards on information security. Business continuity processes should also be tested regularly to ensure that there are functional and efficient. The IMPACS Headquarters in Trinidad and Tobago currently serves as the Disaster Recovery Site for its Border Security Systems located at the JRCC in Barbados. There is also a layer of in-country redundancy to prevent a full-scale transition of systems for small failures.

1.12   Due to the Region's vulnerabilities to external threats such as natural disasters, cyberattacks, and disease outbreaks, among others, business continuity is crucial. This requires operations, which focus on resilience, recovery, and contingency. The Member States must be supported in designing critical functions and infrastructures with various disaster possibilities in mind, including redundancy strategies and adequate network backup capacity.

Coronavirus (COVID-19)

1.13   At the recently convened Association of Caribbean States (ACS) Meeting of Transport Stakeholders, held in May 2020, concerns were highlighted by a number of Caribbean Port and Maritime Authorities regarding:

    (a)   lack of coordination among agencies;

    (b)   limited role of port health;

    (c)   high overtime costs;

    (d)   high agents costs; and

    (e)   reduced productivity.

1.14   While these concerns pre-dated COVID-19, they have been further exacerbated by the impact of the pandemic on the transportation logistical supply chain and operations at the ports. This is most evident with regard to the consolidation of shipping lines and the impact on maritime and port-related costs. In light of these concerns raised, there is an urgent need for technological advancements/digitisation in Maritime and Port operations, such as the MSW system.

2.   <u>OBJECTIVES OF CONSULTANCY</u>

2.01   To upgrade the APIS web portal to facilitate the capturing of additional data elements in support of national MSW for ship clearance.

3.   <u>EXPECTED OUTCOME</u>

3.01   The enhancement of the current APIS web portal to ingest expanded advanced passenger information, which will include FAL Requirements to enable integration with national MSW.

4.   SCOPE OF CONSULTANCY SERVICES

4.01   The consultant will support the IMPACS software development team through the following project activities:

(a)   Responsive User Interface XML (UIX) design for interface.

(b)   Internationalisation (multilingual support).

(c)   Ensure industry standard application security.

(d)   Support email and web service submissions.

(e)   Ensure file handling/transformation as part of process flow.

(f)   Auditing and e-commerce management.

(g)   Reporting management.

(h)   Automated unit testing.

(i)   Automated deployment of production & User Acceptance Testing (UAT) environment in Barbados (primary site).

(j)   Support automated deployment of production & UAT environment in Trinidad & Tobago (Disaster Recovery Site).

(k)   Development of Technical manuals.

5.   DELIVERABLES AND REPORTING REQUIREMENTS

5.01   The consultant will report to the ICT Manager based at CARICOM IMPACS and will be required to submit/deliver the following:

(a)   Within two weeks, a Discovery Session Report, which will also include a detailed Work Plan.

(b)   Monthly Progress Reports throughout the duration of the assignment.

(c)   At least 14 days before the end of the assignment, a Final Report including stakeholders' sensitisation and training report.

Deliverables	When
Discovery Session Report including detailed work plan	Two weeks after commencement of assignment
Technical manuals	As per approved schedule
IMPACS capacity building sessions completed	As per approved schedule
Business Continuity Plan and installation of Disaster Recovery Site.	As per approved schedule

Deliverables	When
Scrum ceremonies	As per approved schedule
User Acceptance Testing	As per approved schedule
APIS portal enhanced to capture additional FAL datasets and deployment of application in both primary and disaster recovery sites.	Eight Months after commencement of assignment
Technical documentation	Nine Months after commencement of assignment
Final Report	Ten Months after commencement of assignment

6. QUALIFICATIONS/EXPERIENCE OF THE CONSULTANT

6.01   The consultant must have a minimum of three (3) years' experience developing web-based applications in support of aviation and maritime advanced passenger information submissions. The Software Developer (FAL) should have at minimum Bachelor's Degree in Computer Science or related field and/or relevant experience and be proficient in:

(a)   Modern Internet and web technologies.

(b)   Relational database technology.

(c)   Messaging applications.

(d)   Responsive User Interface (UI) technologies.

7. SUPERVISION OF THE CONSULTANT

7.01   The overall authority will be the Executive Director of CARICOM IMPACS or his/her delegate. The Consultant contracted will have a direct reporting relationship with the ICT Manager based at CARICOM IMPACS.

7.02   The reports referred to in sections 5 and 6 must be submitted to the ICT Manager and Project Manager, identified in the contract. The ICT Manager will be responsible for approving reports. The project's Oversight Committee will review and provide comments on the inception, draft final and final reports.

7.03   It is estimated that this consultancy will be carried out over a period not greater than 200 days over ten (10) calendar months.