REPUBLIC OF CAPE VERDE

MINISTRY OF FINANCE AND ENTREPRENEURIAL DEVELOPMENT

TERMS OF REFERENCE

Consultancy Services to define a Tax and Customs information system architecture and conceptual Interoperability model definition

Framework

The Government of the Republic of Cape Verde has received funding from the International Development Association (IDA)/World Bank (WB) in the amount of twenty million dollars (US$20,000,000) to fund the implementation of the CABO VERDE DIGITAL PROJECT, which aims at contributing in the transforming of the country into a regional digital *hub* in order to accelerate its digital economy through an enhanced digital infrastructure and a strengthened demand for digital services and skills. The project will support the government's strategy in transforming the country into a digitally enabled service of economy, increasing its competitiveness and attracting more investment. Furthermore, increasing the supply and demand for broadband connectivity and data storage (digital infrastructure) is crucial to support the development of digital platforms, both public and private, and create new services for individuals, businesses, and governments.

In the Digital Public Services and Markets component 3, the Project will support the Government of Cabo Verde in its recent efforts to support activities so as to increase its capacity to better deliver digital public services in the domains of: G2G; G2B and G2P, in a context where the digital maturity of the user to access online services continues to pose challenges.

The Government of Cape Verde intends to transform the National Directorate of State Revenue (NDSR) into a Tax and Customs Authority, to consolidate the unification of the Directorate General of Contributions and Taxes (DGCT) and the Directorate General of Customs (DGC), aggregating the shared services, in line with international best practices and in order to grant the necessary agility and autonomies for effectiveness in the pursuit of its Mission, Vision and Strategic Objectives.

The computer and digital system of the NDSR services has had a growth over the years, with a path of more than 10 years of maturity. With this, an interoperability model is one of the great challenges of the tax and customs system for an effective implementation of the model that is developed, predictable and stable, which adds value, not only internally to the institution and employees, but also for businesses and society in general. Standardize data and information that can be read, understood and accessed from any entity, whether public or private.

Interoperability depends on a complex combination of standards with a communication architecture that creates necessary paths for effective collaboration (public and private) and information sharing, necessary for service delivery.

An integrated model and system should be aligned with an organizational development strategy.

The Government's guidelines for this legislature include the broadening of the tax base, based on the improvement of the efficiency and effectiveness levels of the Tax Administration, as ways of increasing tax revenue, to the detriment of a policy of increasing tax rates.

In this context, it is particularly important to provide the Tax and Customs Authority with a system of robust digital solutions, which integrate the entire architecture of the existing systems, enabling it to obtain the operational capacity for tax and customs inspection action, strengthening its effectiveness in combating highly complex offences and the informal economy, as well as in the prevention and repression of tax and customs fraud and evasion practices, especially in sectors and operations considered to be of high risk.

The NDSR is the entity with attributions and responsibility in matters of management of internal and customs taxes, as regulated by Decree-Law No. 76/2021, of November 2.

The NDSR, for the full performance of its duties, has at its service and interacts with a set of structuring technological systems, namely:

1. Revenue Management System **(GRE)** - computer system that feeds and supports the DGCT operations regarding the management of internal taxes;
2. Automated System for Customs Data **(ASYCUDA)** - an interoperable, multifunctional, evolving computer application that allows the dematerialization of customs processes and procedures, electronic transmission of data and networking of national services and operators among themselves and of the national customs administration with similar international customs institutions with which it cooperates to exchange data

electronically, of interest to the exercise of its functions. The system allows greater speed in the customs process, ensuring greater transparency and a dematerialized procedure. This system is under the responsibility of the DGC.

3. Integrated System of Budgetary and Financial Management **(SIGOF)** - instrument for the preparation, execution and monitoring of the General State Budget (OGE) at all levels - Central Power, Local Power and Autonomous Funds and Services, to improve the State's Budgetary and Financial Management, with transparency and celerity in decision-making and in the processing of analysis reports.

The digitalization process in the DGCT dates back to 2014, with the dematerialized submission of the VAT Return (Model 106). This was followed by the dematerialized submission of the Periodic Income Declaration (DPR) of individuals and companies, the Annual Income Declaration (Model 1B), as well as the Annual Return of Accounting and Tax Information (DAICF)[1] .

In parallel, a set of other dematerialized features are available and at the service of the taxpayer in Portondinosilha[2] .

The pandemic imposed by COVID-19 has significantly boosted digitalization in the NDSR. In this context, more online functionalities were developed to facilitate and simplify taxpayers' access to NDSR services, namely to obtain certificates attesting their tax situation and to request payment in installments.

In 2020, the NDSR launched the Digital Customs Tax Reform Project (RTAD)++[3] , which has as its main vector, enhancing the existing digital tools, and contemplates other initiatives, such as:

1. Electronic signature;
2. Electronic notification;
3. Electronic Invoice (EF)[4] ;
4. Standard Audit File for Tax Purposes (SAFT)[5] ;
5. Integrated Tax Inspection System (SIIT);

[1] As provided for in Articles 102 and 104 of the Corporate Income Tax Code in the version republished by Law No 116/IX/2021, of 2 February.
[2] https://portondinosilhas.gov.cv/portonprd/porton.portoncv_v3?p=B7B0B2BAC4C4C4
[3] https://expressodasilhas.cv/conteudo-patrocinado/2021/11/11/projeto-de-reforma-tributaria-e-aduaneira-digital/77455
[4] https://www.mf.gov.cv/web/NDSR/-/lan%C3%87amento-da-fatura-eletr%C3%93nica
[5] https://www.oecd.org/tax/forum-on-tax-administration/publications-and-products/45045602.pdf

6. Information System for Tax Security and Efficiency (SISEF)
7. Invoice Raffle.

The second phase of the RTAD++ Reform presupposes advanced functionalities, including automated completion of electronic declarations, *cross-checks* between the various sources of information (internal and external) necessary for the actual determination of the taxpayer's tax situation, mechanisms and devices to facilitate compliance with tax obligations and automated refunds.

That is, it is intended, in the medium term, to replace all tax documents on paper by electronic equivalents, aimed at facilitating compliance with tax and customs obligations and strengthening the control of the Tax Administration, particularly in the area of control of VAT and corporate income tax credits, which should result, in the medium term, in positive effects on the collection of state revenue.

From the taxpayer's perspective, there are numerous advantages, such as reduced compliance costs, reduced tax litigation, increased tax compliance and improved filing.

Thus, it is intended to raise Cape Verde to a level of maturity in terms of digitalization equivalent to *e-access*, in which the Tax Administration will be able to use the data to infer and calculate the taxes due and taxpayers have a time limit to validate them.

To this end, an integrated systems architecture will be created, based on the interoperability Platform to converge all the available tools, which should operate in a fully integrated manner with all internal information sources (FE, SAFT, SISEF, SIIT, ASYCUDA, SIGOF, GRE, etc.), as well as external ones (commercial, land and vehicle registers, financial information, social security, etc.).) that are available in public domain systems and are of interest for tax management.

This project, framed within the electronic governance domain, is supported by the Government of Cape Verde and supported by information and communication technologies, with a view to making governance and public administration more effective, efficient and less costly. In this context, the Government, in its Program, has committed to invest heavily in expanding the electronic network, design or improve a program to streamline tax administrative procedures, in order to accelerate, dematerialize and computerize procedures and "make the respective decisions more expeditious and efficient".

In this context of digital transformation, the Tax Authority sees in the RTAD++ project an opportunity to make the necessary qualitative leap that, in addition to the

social and economic impact, optimizes the collection of resources for investment in public policies in essential areas of Cape Verdean society.

Thus, the modernization strategy involves the preparation of the portfolio of all IT and digital systems of the Tax Authority through the adoption and integration of new technologies in order to outline the overall *roadmap of* the next to be developed, which will enhance the tax system and contribute to increased tax and customs revenues.

1. General Objectives

The purpose of this Terms of Reference is to hire a consulting technical assistance to define a Tax and Customs information system architecture and completeInteroperability framework. This assessment has the overall objective of mapping the digital ecosystem of NDSR services, which support the Tax and Customs Administration, and outline the global roadmap of the next services to be developed and the necessary integrations/interoperations, in a standardized framework.

The Interoperability conceptual design aims to create standards for the different data sources, considering the relevant aspects of security, integrations and accessibility.

1.1. Specific Objectives

Define a layered model, where each layer has a set of responsibilities for the system and integrates with the others in order to create compatibility and differentiate the responsibilities of the other layer. The architecture for the information system should allow flexibility, predictability and ease of maintenance.

The specific objectives comprise a:

1. Map all the structures and modules of the IT systems of the NDSR services, in the tax component of the DGCT and in the customs component of the DGC and how they relate to each other:
    - Asset inventory (IT equipment, services/applications, technical documentation);
    - Physical and logical architecture of the support infrastructure;
    - Integration points (protocol, message format, authentication);
    - Structure and operation of the application and its modules.
2. Carry out a full technical assessment of the systems already developed that support the Tax and Customs Administration, considering the following criteria:
    - Tax and Customs Legislation: Customs Code, Code of Tax Benefits, Customs Code Regulation, Customs Tariff 2022_Sixth

Amendment of the Harmonized System, Decree Law no. 39/2019 - Small Orders, Instruments relating to the requirements with which invoices and documents issued by Customs Agents must comply, General Tax Code, Tax Procedure Code, Code of Tax Enforcement, VAT Code, Personal Income Tax Code, Corporate Income Tax Code, Code of Tax Enforcement, Stamp Duty Code, REMPE Law, Tax Inspection Regime), among others that may be relevant; compliance of the modules with the legal or statutory requirements;

- OECD Guidelines (Multilateral Convention *on* Mutual Administrative Assistance in Tax Matters, OECD Model *Tax* Information *Exchange* Agreement, *Model Convention on Income and on Capital, Model for Double Taxation Convention*).
- Security and privacy standard for information systems: NIST 800-53 or ISO 27002;
- Compliance with the user manuals and respective application modules;
- Adequacy of the modules to the needs and (routine) operations of the stakeholders, including citizens;
- *Tax Policy Assessment Framework (TAPF)*

3. Outline a global *roadmap of* the next systems to be developed and necessary integrations:
   - Survey of the modules not implemented;
   - Relevance of the modules developed;
   - Deficiency of the developed modules.
4. Preparation of a concept note of the aspects that ensure the Interoperability of the IT and Digital System of the NDSR Services with programs at the Safety net level, taking into consideration:
   - OECD tax information exchange guidelines:
     - *Standard for Automatic Exchange of Financial Account Information in Tax Matters*
     - *Guide on the Protection of Confidentiality of Information Exchanged for Tax Purposes*
   - *open data* and *open government* guidelines for the financial sector;
   - Rules/Reporting Template for Digital Platforms for operators/vendors (*Primavera, SAP, WinMax, ...*)
5. Enable the collection, use of data obtained/shared within the framework of process controls, more efficient, and circulation of files and documents, open only to authorized persons and for security and management purposes, allowing for greater fluidity of procedures.

2. Duration

The duration for the consultancy is 20 (twenty) weeks from the date of signing the contract.

3. Timetable for submission and approval of reports

For the performance of this activity, the winning company will be remunerated in accordance with the rules and regulations of procedure, upon presentation and validation of the *drafts* and final products requested.

The table below shows the project schedule and execution of the work to be developed. If any changes to the schedule are required, they should be agreed and communicated at project meetings and in performance and status reports.

Output Calendar	Supporting documents	Date of disbursement of tranches	Payment after Client approval
R1. *Inception report.*	A time-bound work plan identifying the main operations, tools, information and analysis that will be carried out	From contract signature + 2 weeks	20%
R2. *Draft* report of result 1	System Map (SI) "*as is*". Ecosystem services operating model (DGCT + DGC + Shared Services) Asset inventory (IT equipment, services/applications, integrations, technical documentation) Technical documentation (data models, data dictionary, *workflows*, class and *sequence* diagrams, user manual,) Logical architecture of the application	From contract signature + 8 weeks	25%

	Physical architecture of the infrastructure Access Matrix (Users, Application/Profile/Functions) Installed Capacity Matrix (Application/Profile/Function, Duration [Bandwidth / RAM / CPU]) Report compliance against legislation, OECD guidelines and NIST 800-53 or ISO 27002 standard		
R3. *Draft* report of result 2	*Gap Analysis* and respective Corrective Action Plan Business Continuity Plan Conceptual model of an interoperability platform (based on *blockchain*)	From contract signature + 16 weeks	30%
R4. Result 1 and 2	Consolidation of the work results and presentation of the Final Report	From contract signature + 20 weeks	25%

4. Consulting Company Profile

Any company, with at least 10 (ten) years of legally proven experience in the field of Computer Engineering, Management Informatics, Systems Engineering and Computer Science, Computer Science or related areas. Must have experience in working on at least 3 (three) projects, preferably in countries/ jurisdictions with the same tax matrix in force in Cape Verde.

5. Qualification and professional experience of the team

The team should be composed of the following experts.

5.1.1. Team Leader Profile

a) The main consultant and team leader must have higher education (preferably Master's degree (PhD, will be a plus) in the following areas: Management

Informatics, Systems Engineering and Computer Science; Computer Science or related areas.

b) Senior Consultant with at least 8 (eight) years of effective experience in matters directly related to the subject of the call for tenders and that is relevant in the context of the study services requested.

c) Relevant professional experience in the field of tax and customs IT system; at least 3 (three) consultancy assignments related to the subject of the procedure;

d) Knowledge of the organization and functioning of the Tax and Customs Administration;

e) Knowledge of Cape Verdean tax legislation;

f) Excellent command of written and spoken Portuguese and English.

5.1.2 Specialists and Technicians

a) Higher education, minimum degree or equivalent in law, taxation, IT/software engineering, management, systems engineering and IT, tax and customs law, and other related areas, it is considered an asset if you have a master's or doctoral degree;
b) Proven experience, of at least 5 (five) years in consultancy or having carried out identical work, nature in the field of tax competitiveness and related;
c) Experience in conducting studies and analysis in public policy and governance;
d) At least five (5) years of professional experience in analysis and development of applications;
e) Domain of: information systems analysis; applications programming; web technologies and databases;
f) Good knowledge of: UML/SysML; database creation (data modeling); distributed application architecture; Web Services and XML and information systems security;
g) Knowledge of: *business intelligence* systems and information systems development methodologies; geo-referenced management applications and systems; personal data protection mechanisms;
h) Ability to work in a multisectorial context and communicate effectively with experts from other fields;
i) Excellent interpersonal and teamwork skills;
j) Critical analysis, analytical, practical and structured profile;
k) In-depth and consolidated knowledge of the Cape Verdean legal-tax system;
l) Proficiency in written and spoken Portuguese and English..

m) Knowledge in public finance and different tax systems (African, European);
n) Solid knowledge in tax and customs management;

6. Work Organisations

The consultant team shall perform the tasks under the guidance of e NDSR and shall throughout the process:

(i) hold working sessions with the following institutions/entities, namely:
   a) Operational Nucleus for the Information Society (NOSI);
   b) Technologies, Innovation and Cooperation Unit (UTIC);
   c) Other public entities with relevance to the Project, namely registries and notary, National Institute of Social Security (INPS), judicial and court systems, citizens' houses.

The Special Projects Management Unit (UGPE) intends that the contract be executed in a framework of trust between the parties, in order to facilitate the provision and use of information necessary for the exclusive purpose for which it was provided.

The reference workplace is the Ministry of Finance and Business Development, represented by the National Directorate of State Revenue, located at Avenida Amílcar Cabral, CP No. 563, City of Praia, Republic of Cape Verde, with technological guidance from UTIC.

The reports should be developed in English and the outputs should be sent to UGPE and a copy to NDSR in English and Portuguese, digital format and A4 paper.

7. Contract Type

The present procedure is subject to a written contract at a fixed value, payment under the contract will be upon approval and validation of the work performed.

The contract shall take effect on the date of its signature.