# **Terms of Reference**

# Support of the Tax Committee Information and Communication Infrastructure

# I. BACKGROUND

The tax reform is one of the top-priority tasks of the Government of the Republic of Tajikistan and an important foundation for achieving the country's development goals. The need for tax administration reform was defined by the Government of the Republic of Tajikistan in a number of documents such as the National Development Strategy 2012 – 2015, the Poverty Reduction Strategy 2010-2012 and the Public Finance Management Strategy 2009-2018.

In December 2010, the Government of the Republic of Tajikistan passed resolution No. 626 on comprehensive Tax Reform Programme (the TRP) for 2012 - 2015 in accordance with the recommendations of the IMF and the World Bank. To implement the TRP the Tax Committee (the TC) launched the Tax Administration Reform Project (the TARP) financed by the World Bank and is also supported by other International Financing Institutions.

The main TRP goal is to reform the tax administration to become more efficient and effective system in collecting revenue; to enhance the level of voluntary compliance; and to improve taxpayer services.

One of the factors having impact on achieving the above goal is development of information and communication technologies being used by the TC for automation of tax return processing and tax accounting; expansion of electronic kiosks network; implementation of risk management information system, integrated tax management system (the ITMIS) and human resources management information system (the HRMIS). Besides, the information and communication infrastructure of the Tax Committee and regional offices is currently being improved that is aimed to support operation of the said management information systems and execution by the TC of its duties, e.g., implementation of videoconference facilities (the VC), the data centre (the DC), including engineering infrastructure, and the call centre (the CC). These measures provide the possibility to the taxpayers for e-access to tax information and facilitate voluntary compliance.

To successfully implement the above activities the TC need specialist support for information and communication infrastructure (the ICI) commissioning and operation and training of the TC's staff to perform their duties.

# II. OBJECTIVES OF THE ASSIGNMENT

The main purposes of the assignment are:

- (a) support to the TC with establishing and maintaining the flexible and effective TC ICI, including the DC, the CC and the VC, through, among other things, optimising information and computing resources of the TC and improving reliability and IT security;
- (b) support of secure and continuity of operation of the ITMIS, the HRMIS and other TC systems and subsystems;

(c) training of the staff of the TC IT Department and the State Unitary Enterprise "Programming Centre of Tax Administration" under the TC (SUE).

# III. SCOPE OF SERVICES

This assignment includes, but not limited to, to the tasks for the following work streams:

## 1. IT SECURITY

The main objectives of this work stream are to implement and to reengineer the system of IT security management and to support information confidentiality, integrity, accessibility, reliability and authenticity and information processing facilities as well as supporting infrastructure (security and maintenance personnel). In this context, the Consultant has to:

- (a) Undertake a review of the current security features used in the current ICI utilized by the TC identifying areas that are insufficiently protected.
- (b) analyse IT security threats, level of protection of resources and components of the TC ICI environment. It includes access control, platform and ICI securing, services of third parties, security monitoring;
- (c) participate in development of internal guidelines and regulations on IT security (policies, procedures and instructions) and coordination of operation of territorial offices in this area in accordance with the legislation of the Republic of Tajikistan in force and, if applicable, international standards on IT security (e.g., ISO27001). It also concerns rules of conduct for TC employees in case of their transfer, resignation and communication with outside organizations;
- (d) provide support in planning IT security activities and assessing their efficacy;
- (e) participate in development, implementation, reengineering, documenting and maintenance of technical solutions and architecture of IT security systems, including participation in development and verification of equipment and software technical requirements; preparation of comments and conclusions on design specifications, designs of newly established or reengineered facilities (e.g., the DC, the VC, the CC) and others in terms of ICI security; technologies and products testing;
- (f) provide support in carrying out mandatory certification of technologies and products in accordance with the schemes defined by the Government of the Republic of Tajikistan;
- (g) provide support in developing operating manuals regarding IT security services and their central administration;
- (h) provide support in investigation of IT security incidents;
- (i) provide support in developing and maintaining partnership relations with manufacturers and suppliers of IT security technologies;
- (j) participate in preparing and holding seminars, distance learning and on-the-job training for the TC and SUE's staff. Besides, the TC will appoint two specialists to work with the Consultant on a full-time basis and to be trained to gain all necessary skills for unsupervised work in the area of IT security, including operating procedures in crisis situations for senior management and other officials responsible for core ICI systems. Preparation of recommendations on professional development of TC and SUE's staff, including the abovementioned specialists, in IT security.

# 2. NETWORK INFRASTRUCTURE SUPPORT

Core components of network infrastructure are currently based on Cisco equipment (routers, switches, firewall, etc.). In addition, the TC is deploying the VC facilities on Avaya platform. Taking into account the equipment in use and network infrastructure technologies, the Consultant would:

- (a) Review the existing network infrastructure in use in the TC and make recommendations on its configuration and capacities.
- (b) provide support in developing, implementing, maintaining and documenting network architecture;
- (c) provide support in developing, maintaining, supporting, optimising and documenting local and wide-area networks, including maintenance and support of routers, voice gateway, switches, firewall, VoIP facilities, etc.;
- (d) provide support in maintaining and optimising network monitoring system and central network management;
- (e) participate in developing and implementing technical solution on network security and effective incidents and problem management;
- (f) provide support in commissioning and accepting new network equipment (configuration, installation, setting) and participate in acceptance testing in accordance with the developed programmes;
- (g) provide support in commissioning and acceptance of the VC facilities and the Call Centre;
- (h) provide support in maintaining necessary quality of communication services;
- (i) provide support in establishing network infrastructure suitable for existing and new IT services;
- (j) participate in preparing and holding seminars, distance learning and on-the-job training for the TC and SUE's staff. Besides, the TC will appoint two specialists to work with the Consultant on a full-time basis and to be trained to gain all necessary skills for unsupervised work with network equipment and technologies. Preparation of recommendations on professional development of TC and SUE's staff, including the abovementioned specialists, in network infrastructure.
  - 3. **RESOURCES VIRTUALISATION**

The TC ICI development assumes its consolidation and increase in server capacity under quite a few legacy applications based on obsolescent operating systems and hardware platforms. In these circumstances, it is planned to apply IT resources virtualisation that would, first of all, concern server virtualisation but, when necessary, it may be extended to software, workstations and applications. Therefore, the Consultant shall:

- (a) participate in infrastructure analysis and preparation of functional requirements to software and hardware platforms of virtual infrastructure;
- (b) provide support in developing draft and detailed designs and the acceptance test programmes for virtual infrastructure and participate in its deployment and configuration in accordance with the detailed design;
- (c) provide support in developing operational documentation and detailed acceptance test programmes;

- (d) participate in virtual infrastructure management, provide its support, preventive maintenance and troubleshooting, including remotely, and cooperate, when necessary, with product support services of manufacturers/suppliers of firmware regarding service requests;
- (e) participate in preparing and holding seminars, distance learning and on-the-job training for the various staff of the TC and the SUE. Besides, the TC will appoint two specialists to work with the Consultant on a full-time basis and to be trained to gain all necessary skills for unsupervised work with deployed virtual infrastructure. Preparation of recommendations on professional development of TC and SUE's staff, including the abovementioned specialists, in this area.

# IV. TIMING

The assignment covers a two-year period. It is expected that the assignment may commencement in November 2015 and will last until December 2017.

The contract will be partially implemented in Tajikistan with distance support of the TC from the Consultant's home office.

Schedule and duration of Consultant's visits to Tajikistan will be agreed annually based on the annual plans for development of the TC information and communication technologies. The Consultant shall be present at presentation to the TC of technical solutions and designs, commissioning and acceptance of the IT systems/subsystems and other activities as may be agreed by the parties.

#### V. QUALIFICATIONS REQUIREMENTS

The Consultant will be an organization of sufficient resources and expertise to perform the services described in these Terms of Reference. The Consultant will be able to demonstrate:

- long-term and short-term expertise complying with all the requirements of these Terms of Reference;
- capacity in the management of similar activities;
- experience in implementing similar activities in Eastern Europe and/or CIS;
- certificate of compliance with requirements of the standard ISO9001 is desirable;

#### PERSONNEL

#### 1. TEAM LEADER

- (a) university degree in the area of information technologies;
- (b) at least 5-year working experience in the area of information technologies;
- (c) implementation of at least two similar projects;
- (d) managing and developing multi-disciplinary project teams;
- (e) experience in implementing projects in the CIS countries and/or Eastern Europe;
- (f) fluent in Russian; knowledge of English is desirable.

#### 2. IT SECURITY

- (a) university degree in the area of information technologies;
- (b) at least 3-year experience in the area of IT security;
- (c) knowledge of regulatory documents, international standards and technologies in IT security, cryptography, encryption, etc.

- (d) knowledge of main IT security threats, skills for their identification, analysis and elimination, experience in development of in-line documentation and assessment of skill level of IT security personnel;
- (e) knowledge of up-to-date corporate networks architecture and principles;
- (f) understanding of information system and software life cycle and experience in risk analysis;
- (g) knowledge of Microsoft and network (DNS, DHCP, VLAN, VPN) services, experience in server operating system administration, virtualization platforms and database management systems (e.g., MS SQL, Oracle, etc.);
- (h) practical experience in firewall, DLP, SSO, IAM, PKI and other technologies;
- (i) fluent in Russian and knowledge of English sufficient for comprehension of technical texts;
- (j) certification by manufacturers and/or suppliers of information security products is desirable.

3. Network

- (a) university degree in the area of information technologies or similar areas;
- (b) at least 3-year experience in working with and configuring network equipment (switches, routers, firewall, wireless LAN controllers, etc.);
- (c) knowledge of Cisco equipment at least at the CCNA level, availability of certificates;
- (d) network security (firewall, IPS, VPN, ACL, 802.1x);
- (e) experience in implementing network products for large-scale projects and networks;
- (f) experience in establishing and maintaining communication channels with remote offices;
- (g) experience in system administration of network equipment;
- (h) knowledge of technologies for the CC and Avaya for videoconference facilities is desirable;
- (i) fluent in Russian and knowledge of English sufficient for comprehension of technical texts;
- (j) experience in acceptance testing of network infrastructure.
  - 4. **RESOURCES VIRTUALISATION**
- (a) university degree in the area of information technologies or similar areas;
- (b) at least 2-year experience in performing similar tasks and at least 5-year experience in information technologies;
- (c) knowledge of products of servers, workstations and applications virtualisation (e.g., VMware, Citrix, Microsoft) as well as experience in implementation of projects (installation, configuration, optimization and maintenance) using such products and migration of services to virtual environment;
- (d) understanding of thin client technology and knowledge of thin client equipment line (e.g., Hewlett Packard);
- (e) knowledge of server system of x86/x64 architecture, SAN technologies and specificity of their application in building software and hardware platforms;
- (f) experience in development of detailed acceptance testing programmes and operating manuals and carrying-out acceptance testing in accordance with the developed programmes;
- (g) fluent in Russian and knowledge of English sufficient for comprehension of technical texts;
- (h) availability of certificate(s) issued by manufacturers of virtualisation products is desirable.

# VI. RESTRICTIONS

On the commencement of the assignment, the Consultant and the TC will jointly prepare a statement of confidentiality that will bind the Consultant to nondisclosure of any sensitive information that the Consultant may become knowledgeable of during the course of the assignment. The terms of this agreement shall be made consistent with the legislation of the Republic of Tajikistan.

# VII. EXPECTED RESULTS

- (a) report on analysis of IT security threats, level of protection of resources and components of the TC ICI environment;
- (b) developed policies, procedures and instructions forming the TC internal guidelines and regulations on IT security;
- (c) plan of activities on IT security;
- (d) recommendations, conclusions and comments on technical solutions, architecture of IT security system, design specifications, designs of new and/or reengineered facilities and other developments on IT securities, testing, technologies and products;
- (e) developed operating manuals regarding IT security services;
- (f) held investigations of IT security incidents;
- (g) training of the TC and SUE staff on IT security, training materials and presentations;
- (h) documentation on network architecture, local and wide-area networks, network technical solutions based on Cisco;
- (i) availability of network monitoring and central network administration;
- (j) recommendations, conclusions an documents on network solution, its acceptance and testing;
- (k) network infrastructure ensuring operation of existing IT services and development of new ones;
- (1) training of the TC and SUE staff on network infrastructure, training materials and presentations;
- (m) report on analysis of IT infrastructure and technical requirements to virtual infrastructure;
- (n) recommendations, conclusions and comments on draft and detailed designs and acceptance testing programmes for virtual infrastructure, its testing and acceptance;
- (o) developed technical and operational documentation on virtual infrastructure;
- (p) training of the TC and SUE staff on virtual infrastructure, training materials and presentations.

# VIII. ORGANIZATIONAL AND REPORTING ARRANGEMENTS

On a day-to-day basis, the contract performance will be monitored, supervised and coordinated by the WG on IT Infrastructure in coordination with the Project Implementation Team (PIT). The Project Director, who is the First Deputy Chairman of the Tax Committee, together with the WG will be responsible for approving the Consultant's deliverables and reports. The WG will be the main contact point for all official communications between the Consultant and the TC concerning the implementation and management of the assignment. The Consultant and the TC will regularly hold coordination meetings.

# **1. REPORTING REQUIREMENTS**

(a) **Inception Report**. This report is required not later than 1 month from the Commencement Date. This report will describe activities during the inception phase of

the contract and include an updated Work Plan with milestones. It will identify any problems experienced or foreseen and recommendations for their solution.

(b) **Monthly reports** are required every month after the submission of the Inception Report. They will describe materials (technical reports, trainings, implementation reports, etc.) prepared in accordance with the requirements of the Terms of Reference over the reporting period. All existing and potential problems identified, recommendations for problems solving and, if necessary, requests for changes are included in such reports.

The monthly reports shall be submitted together with the itemized invoices not later than fifteen (15) days after the end of each calendar month during the period of the Services as specified in GCC Clause 45.1 (b).

- (c) A draft Final Report. This report will be prepared not later than 2 months before the contract completion date. The Final Report will be delivered not later than 1 month before the project completion date. The Final Report will detail all the Contract activities, a full performance analysis of the results achieved in the course of the Contract, the conclusions drawn, and recommendations for the future.
  - 2. SUBMISSION AND APPROVAL OF REPORTS AND DELIVERABLES

The Consultant will submit the Project Director 6 printed copies of the above Reports and Deliverables to the TC, 2 copies in Tajik, 2 copies in Russian and 2 copies in English. A Tajik, Russian and English copies will also be supplied in electronic format(s) agreed with the TC.

In case of disagreement of the WG with the report results, the WG provides its comments and suggestions to the Consultant within 5 working days from the date of receipt of the report. Reports should be prepared by the Consultant taking into consideration the comments and suggestions of the subject WG within 5 working days from the date of receipt of comments and suggestions.

The final report will be adopted by the WG after consideration of remarks mentioned above.

# IX. MONITORING AND EVALUATION

Contract Performance will, on a regular basis, be monitored by the WG in coordination with the PIT through directly contacting the Team Leader, reviewing reports, and regularly evaluating the results achieved.

The Contract will be considered as having been satisfactorily implemented if the objectives and specified results have been achieved, the activities have been carried out as required by these terms of reference, and the required reports have been produced on time.

# X. FACILITIES TO BE PROVIDED BY THE CLIENT AND THE CONSULTANT

# 1. FACILITIES TO BE PROVIDED BY THE CLIENT.

**The Client** will provide adequate counterpart support throughout the Contract, regular access to TC premises, facilities, systems, equipment, processes, procedures, records, and relevant tax officials.

Additionally, the Client will make available suitably qualified and experienced experts for each subject area under this Contract who will work with the Consultant's team on a full-time basis.

The Client will provide office space for the Consultant's team and premises to hold training, workshops and seminars for trainers and TC's staff.

# 2. FACILITIES TO BE PROVIDED BY THE CONSULTANT.

The Consultant will be responsible for:

- The administrative and financial management of the Contract;
- The performance and conduct of the Team Leader and experts assigned (team members);
- Arranging living accommodation for the team members and other involved staff;
- Arranging international and local transportation for the team members and other involved staff;
- The services related to interpretation and translation of the contract deliverables in accordance with the Terms of Reference and the TC's requirements;
- Arranging and obtaining visas for the team members and other involved staff.

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