

# **ICT Agency of Sri Lanka**

## **Terms of Reference (ToR)**

### **Country Wide ICT Survey (Survey on ICT Access and usage by Households And Individuals)**

**ICTA/GOSL/CON/QCBS/2016/46**

#### **1.0 BACKGROUND**

Information and communication technologies (ICTs) are increasingly being recognized as critical tools of development—an instrument that can empower disadvantaged segments of the society, enhance skills, increase efficiency and improve governance at all levels. The outcomes of ICT-based development (or e-development) will thus not only be measured by the diffusion of technology, but also by the achievements of development results such as economic growth and, ultimate, improvements of the living condition of the citizens.

The ICT sector can no longer be ignored or treated in isolation by the emerging economies or development practitioners. ICT is not only a dynamic economic sector and source of growth on its own, but also a driver or engine of efficiency and effectiveness of the whole economy and a critical tool for social and institutional transformations. ICTs can solve many problems of development and enhance competitiveness of the economy.

With an aim of achieving the vision of digitally inclusive Sri Lanka, the Government of Sri Lanka (GoSL) is in the process of implementing the National Digital strategy; a rapid and country wide development initiative.

As the main government apex institution, Information and Communication Technology Agency of Sri Lanka (ICTA), is the main responsible organization for implementing policies, strategies and projects towards achieving national vision of digital development of the country. The strategy include i) building necessary capacity of stakeholders to lead and implement an ambitious ICT program; (ii) rapidly developing the required digital infrastructure across the country to effectively serve all citizens; (iii) creating an enabling environment for the knowledge economy; (iv) developing specialized ICT skills and broad ICT literacy at all levels of education; (v) delivering faster, more efficient, and more transparent government services to all citizens and businesses; (vi) using ICT as a lever for social development; and (vii) creating jobs through a dynamic and competitive ICT sector and through diffusion of ICT across the nation.

According to the various international benchmark studies such as Networked Readiness Index (NRI), International Telecommunication Index (ITU) conducted recently, the Sri Lankan situation of ICT usage by individual level is comparatively weak, although the government and business usage of ICT are satisfactory. The available statistics shows that average ICT literacy of the country at present is below 25%, computer penetration is around 18% and the internet connected households is around 10%. Average internet usage of the country is also around 18% although the mobile phone availability is exceeded the country's population.

During last couple of years, the key development indicators of the country has improved though the available data shows that internet usage is still around 18% which is not sufficient situation to absorb the full benefit of ICT in the society. This situation is kind of a paradox that is needed to be further studied. It would be required to conduct further studies to examine as to whether the situation reflected from the available data is actually true and if so, what are the underline reasons for low usage of internet by citizens.

In recent years, many have argued that the real picture in terms of ICT literacy and internet penetration has not been captured from the surveys conducted by different organizations. Since 2009, a dedicated study has not been conducted to assess the ICT literacy, computer and internet penetration and usage of the country.

## **2.0 OBJECTIVE OF THE ASSIGNMENT**

The overall objective of the assignment is to conduct-a comprehensive country-wide representative survey to draw a clear picture on ICT skills/literacy of citizens, their readiness to use ICT as well as their level of actual ICT usage for improving their day to day life.

The survey will also focus;

- To assess the availability of ICTs and their use by households and individuals
- to assess the computers and , internet penetration and study the usage patterns and associated reason for not using
- to understand purpose and sources of using computers, internet and emails
- to provide an accurate reflection of the skills, behavior and views of citizens on ICT usage
- to examine usage pattern of mobile phones with special attention to smart phones,- availability of Smart devised, readiness of citizens for buying new smart mobile devices to use internet.
- to understand the demographic, social and motivational factors related to ICT usage

Some of the core indicators against which data should be gathered is given below as guidance for the consultant.

- ~ ICT skills: Level of computer and Internet skills. Channels of ICT skills acquisition.
- ~ Access to computer: Basic access to computer,. type of computer.
- ~ Access to Internet: Basic access to internet at home, with connection types and speed. Complementary questions relate access issues.- to distributed signal and reasons for non-access
- ~ Access to ICTs and Internet use: Use of different types of ICT equipment and frequency and place of use.
- ~ Questions relate to intensity (time) of use, type of connection and obstacles to mobile connection
- ~ Internet activities for private purposes: Activities online. questions relate to activities via mobile connection, to frequency by major online activity type and to intensity of use.

## **3 0 SCOPE OF WORK AND TASKS TO BE CARRIED OUT**

### **3.1 Task 1: Methodology, Sample Frame and Questionnaire Design**

- i) Consult representatives of ICTA and gather details on the requirements for survey design, questionnaire development and implementation time schedule. The Consultant in his bid Identify all necessary variables required to realistically assess the ICT literacy, ICT awareness and usage in all the segments of the society.
- ii) Develop survey tools for conducting interviews with relevant respondents. Provide all instruments and documentation to ICTA in electronic form and as hard copies. The survey tools has to be developed by the Consultant in English and after field tested, all questionnaires should be translated into Sinhala and Tamil. Consultants must use best practices of developing questionnaires and other survey tools matching with the type of respondent and research approach to be used. Consultant in his bid shall discuss and make proposals on the approach of developing survey tools, sample/ model questionnaire, data quality assurance etc
- iii) Recommend and develop an appropriate survey methodology that will allow to better capture data/information in excellent quality to achieve the specific survey objectives and to reflect the real ground situation.
- iv) Recommend and develop a representative sample of households to conduct the national ICT literacy survey. The Consultant must apply proven statistical methods when establishing the scientific sample. The consultant in his bid should submit specimen tools to assess ICT literacy, awareness and usage. Consultants must submit separate section on the sampling approach in the bid. Identify appropriate survey quality assurance techniques that can be applied in this particular survey to ensure the reliability, validity and accuracy of the survey data.
- v) Present team structure and the methods that the consultant will use to recruits and training the survey field staff.
- vi) Provide, in English, a detailed Survey Implementation Plan outlining all the steps involved in the design and implementation of the survey, including a project time schedule and resource plan, draft questionnaires (in English) and outlines of the instruction manuals to be developed. Submit the survey implementation plan to ICTA in electronic form and as a hard copy.

### **3.2 Task 2: Survey Field Testing and Implementation**

- (i) The Consultant must provide the appropriate training to enumerators, supervisors, and data entry personnel in order to safeguard the collection of accurate data with sufficient quality. Consultant must also present briefly the training approach, survey management methods and any other additional quality control elements that can be used to ensure the reliability and validity of data.
- (ii) Pre-test the questionnaire with appropriate sub sample. After the pre-test, if necessary, revise the questionnaire and documentation, and translate the questionnaire into Sinhala and Tamil. If necessary, adapt the sample size to ensure that final results will be of statistical valid. A test of data entry (data entry program and procedures) must also be included in the testing procedures. Provide ICTA with a summary of test results and relevant comments and suggestions.
- (iii) After approval by ICTA, conduct field operations and collect data in accordance with the plans and proposals developed previously. Measures should be in place to ensure the data quality.
- (iv) The Consultant will be responsible for appropriate awareness creation among respondents of the survey, to inform about its purpose, value and requirements, and how participants can benefit from contributing effectively during the data collection process.

- (v) The Consultant must be able to facilitate the survey in three languages – Sinhala, Tamil and English. Reporting requirements and other outputs of this assignment must be done in English. Survey tools must be printed in good quality paper and format and the print must be submitted to ICTA for approval
- (vi) Consultant will be responsible for managing this project, which will include taking care of administrative activities to structure and run the project effectively.
- vii) ICTA will own the questionnaires and final report, and all related data/information in respect of this assignment. Additionally, ICTA will also have the right to reproduce and circulate the survey questionnaire, report and findings as its discretion.

### **3.3 Task 3: Data Entry, Processing, Analysis and Reporting**

- i) Enter collected data into database software. The software must be able to verify ranges and consistency of the data and generate reports indicating missing data, data outside of the accepted ranges, and inconsistent answers. Clean data records and verify that the sample is still sufficient for reliable statistics. Provide a brief data entry report to ICTA in electronic form and as hard copy. Together with the report, deliver the data base in MS Excel format containing all entered data records.
- ii) Conduct data analysis. The Consultant will conduct exploratory data analyses (e.g. frequencies, percentage tabulations, and cross tabulations) of key survey variables and their correlations. Where necessary, statistical significance levels need to be calculated to enable proper interpretation of results.
- iii) Provide, in English, a Final Survey Report presenting the results of the survey. The report must contain descriptive statistics of all variables of the survey, cross tables, and graphs. Selected variables should be presented by graphs and/or correlation measures and sufficient interpretations for demonstrating reasons for the situation. A critical review of the methodology, realisation, and results should be given, together with recommendations for improvement. The report must be submitted in electronic form and as a hardcopy.
- iv) Conduct a presentation workshop at ICTA to present and discuss the findings of the Final Survey Report, when specified by ICTA. The Consultant will be expected to produce a report on the workshop deliberations, and make amendments to the Final Survey Report based on the workshop outcomes if necessary.
- v) Consultants are advised to present all requirements for effective carrying out of the assignment in their proposals.

## **4. 0 QUALIFICATIONS OF CONSULTANTS**

### **4.1 Staffing**

The key functions are (1) Survey design, Planning and development of survey tools, (2) Field Management, (3) Statistical Data Analysis, and (4) Project Management (5) Report Writing.

The suggested minimum number of key staff is as follows (please see the table below). The Consultant is free to propose the number and structure of experts appropriate to his implementation approach, provided that the team properly covers the above mentioned functions. The following functions should be covered by project personnel: Survey Planning and Design, Field Management, Data Collection Supervision, Data Collection, Data Management, Data Entry, Data Analysis, Project Management, and Quality Assurance.

An adequate number of experts, who can, within the limited timeframe, facilitate and conduct surveys as well as analyze and report on survey data must be proposed by the Consultant. *[Personnel proposed to cover the key functions (Key Experts) must be included into the proposal with their full CVs (in accordance with the format provided)]*. Positions to cover the other project functions must also be presented in the bid, including the number of staff, their input in terms of staff days, and their work schedule, but particular persons must not be nominated and their CVs not included into the proposal. A description of an appropriate team structure, team collaboration arrangements and project management functions must be included into the proposal.

Expert	Preferable Academic Qualification	Preferable Experience	Preferable number of similar assignments conducted
Team Leader/ Survey Specialist	Postgraduate diploma or higher qualifications from a recognized university	Demonstrated experience at least 5 years in designing surveys, developing questionnaires, analysing and interpretation data, and compiling report  Demonstrated knowledge of best practices in surveys and statistics  Excellent language skills (Sinhala or Tamil and English)	At least 5 national level surveys/evaluation studies specially in the areas of ICT for development
Statistician	Master degree from a recognized university	Minimum 5 years demonstrated experience in handling statistical analysis and implementing national level surveys /Project evaluations (Preferably for the public sector)	At least 5 national level surveys
Survey Design and planning expert	Postgraduate diploma or higher qualifications from a recognized university	Minimum 3 years demonstrated experience in handling designing and implementing surveys /Project evaluations/ Personal management	3 similar assignments specially in the areas of ICT for development
Project Manager	Degree from a recognized university	Minimum 5 years demonstrated experience in managing surveys	At least 3 similar assignments

Survey Enumerators: demonstrated experience in conducting face-to-face interviews at least in 3 surveys; language skills; experience with the particular type of respondents will be an added benefit. Excellent language skills (Sinhala, Tamil and English) of the relevant staff. Survey Enumerators should be undergraduates or graduates from a recognized university.

## 4.2 SURVEY ORGANIZATION

The organisation should be specialised and have relevant experience in designing and conducting national level surveys, preferably in the area of ICT for Development. The survey organisation should be able to provide a strong network of enumerators and office facilities to facilitate information gathering managing the survey successfully. Experience in similar assignments will be an added benefit.

## 5.0 OUTPUTS, DELIVERABLES AND PAYMENT SHEDULE

All reports and deliverables need to be prepared in English and submitted to ICTA in electronic form (DOC format and PDF) and one hard copy.

Questionnaire forms are to be prepared in English and translated into Sinhala and Tamil.

Upon completion of the project, ICTA will own all evaluation tools and reports, and all related Data/information in respect of this assignment. Additionally, ICTA will also have the right to reproduce and circulate the evaluation tools and report at its discretion.

<b>Phase / main reports</b>	<b>Task</b>	<b>Deliverable</b>	<b>Deadline</b>
Inception Report	Finalize work plan, survey sites schedule, survey sample, enumerator training and survey questionnaires	Report on the survey approach, sampling frame and the survey sample survey questionnaires Detailed work plan Report on field staff training	<b>Contract date + Week 3</b>
Interim Report I	completion 50 % of the survey	Field Monitoring Report 1 (Details of survey implementation, monitoring and quality assurance activities conducted))	<b>Contract date + Week 6</b>
Interim Report II	completion 100 % of the survey	Field Monitoring Report 2 (Details of survey implementation, monitoring and quality assurance activities conducted)	<b>Contract date + Week 9</b>
Survey Draft Report	Completion of Survey, Completion of data entering and cleaning Completing data analysis Presentation of draft survey report	Draft Survey Report	<b>Contract date + Week10</b>
Survey Final Report	Incorporating comments on the draft report Submission of final report	Final Survey Report Completed questionnaires Completed data base	<b>Contract date+ Week12</b>

## **6.0 CLIENT'S INPUTS:**

The clients will provide the following documents / information to the consultants

- letters of introduction for conducting the surveys
- a list of variables which are mandatory to include into the survey.
- Background information of ICTA projects relevant for the implementation of the survey.
- Venue facilities to hold workshops to present key findings of the report.

## **7. 0 PROCEDURES FOR REVIEW OF OUTPUTS**

Review committee will be appointed by ICTA