## **Terms of Reference**

## Support and Maintenance of e-Populations Register (e-PoPReg) for 2017

## ICTA-SG2-GOSL-CON-CQS-2017-001

## 1. Introduction

The Register General's office which is operated under the Ministry of Home Affairs was initially established in 1864 with the purpose of registering lands and legal documents pertaining to properties. From 1867 onwards up to date this Department is supposed to register Births, Marriages and Deaths of the Sri Lankan populace and thus operating with a view of safeguarding their fundamental rights.

While land registration processes are being carried out in 45 Land Registries that has been established on district level, the civil registration activities has been decentralized to 332 Divisional Secretariats island wide.

The Government of Sri Lanka (GoSL) has recognized ICT as a tool, which the social integration, peace and growth can be fostered and the poverty could be reduced by the means of improving the reach and responsiveness of public services, to reduce transaction costs of businesses, making government more transparent, accountable and addressing the urgent needs of poverty- stricken communities and isolated regions.

## 2. Background

The Birth, Marriage and Death Certificates (BMD) are critical and essential for all important aspects in life such as education and employment. Specially, when a relief effort is required to be carried out after a disaster, the need to have a robust, secured and centralized consolidated citizen information system is essential.

Therefore, Registrar General's Department with the technical assistance of Information and Communication Technology Agency (ICTA) of Sri Lanka developed an electronic Population Register which contains basic information of all the citizens of Sri Lanka (e-Population Register project). Hence, e-Population Register is called as "People's Hub" as it contains all most all the basic information of the citizens in Sri Lanka (information on their identity (name, date of birth, place of birth, marital status etc.) and information on family relationships (marriage, children etc).

By now in the 'e-Population Register, Birth Registration Module has been implemented and operate in all 332 DS divisions. Currently data in the Particulars for Registration of a Birth (CR1) and Declaration of Death – Normal and Sudden Death (CR2) forms are entered in a daily basis at the DS offices.

## 3. Objective of the assignment

ICTA intends to engage the consultancy firm to carry out support and maintenance (S&M) work of existing e-Population Register system (e-PoPReg) for a period of 9 months.

## 4. Scope of the service

- 4.1. Review and understand the overall architecture & design of the e-Population Register system [Refer Annex: 1 The e-Population Register system overall architecture & design].
- 4.2. Review and understand business/ technical documents of e-PopReg system to determine the overall functional and technical scope of the system.
- 4.3. The consultant should take over the Support and Maintenance of the existing services with the commencement of the contract.
- 4.4. All staff of the consultant who are engaging with the assignment are required to sign a Non-Disclosure Agreement (NDA) where applicable.
- 4.5. The consultant should provide support and maintenance while trouble shooting the existing e-Population system for 9 months.
- 4.6. The consultant should ensure efficient support to the e-Population Register System Help Desk.
- 4.7. The consultant should attend and resolve issues which may arise during the support and maintenance phase in accordance with the Service Level Agreement (SLA) [Annex 2]. The Support Level applicable to this project is "Medium".
- 4.8. The consultant should attend any configuration changes related to certain parameters proposed for the system (e.g. Tariff changes, etc).
- 4.9. The consultant should carryout minor changes, such as changes to the resource files/configurations.
- 4.10. Maintain and fix all issues through the Issue tracking system maintained by Help Desk (LGII).
- 4.11. Adopt a proper release procedure to release the patches/updates and deployment into the staging /production environments after completion of successful User Acceptance Test (UAT).
- 4.12. During the S&M period, the consultant should handover the source code and relevant documents to ICTA with a proper knowledge transfer session to the ICTA technology

team including following artifacts (DSRS, DSTD and deployment document).

- 4.13. The consultant should work collaboratively with all stakeholders and attend to weekly progress meetings and management meetings.
- 4.14. Adhere to ICTA project Management practices.
  - Annex 1 The e-Population Register system overall architecture & designs
  - Annex 2 Service Level Agreement for Support and Maintenance Services

## 5. Deliverables and timeline

The Consultancy firm will be engaged for a period of 9 months.

Deliverables	Duration	Deliverables	Payment
		Submission	
Successful acceptance of the following;	9 months	Commencement	Monthly, for
5.1. Monthly Support and		date + Monthly,	9 months
Maintenance Report.		for 9 months	
5.2. Final S&M report should consist			
with following artifacts:			
5.2.1. DSRS			
5.2.2. DSTD			
5.2.3. Deployment document			

Table 1.0 - Deliverables and timeline

## 6. Services and facilities provided by ICTA and RGD

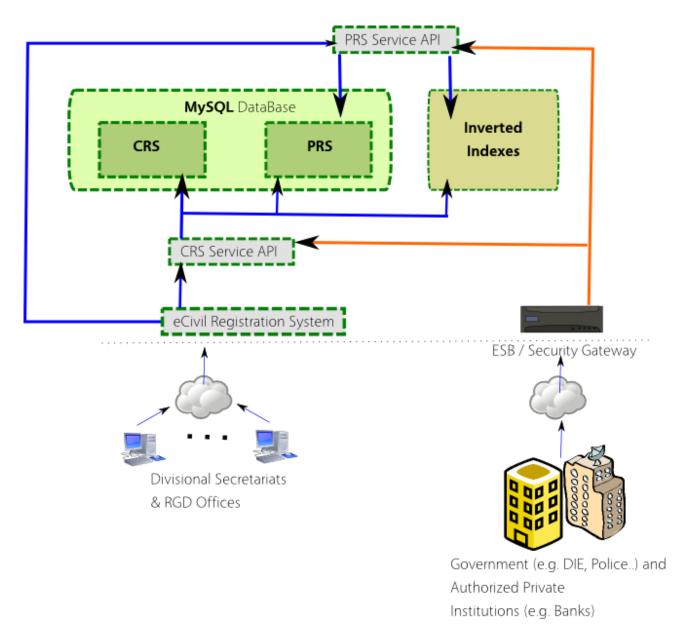
- 6.1. Access to staging/production environment.
- 6.2. Help desk ticketing system.
- 6.3. Project Technical Audit dashboard.
- 6.4. Source code

## 7. Review Committees and Review Procedures

7.1. All deliverables will be reviewed by the team appointed by ICTA.

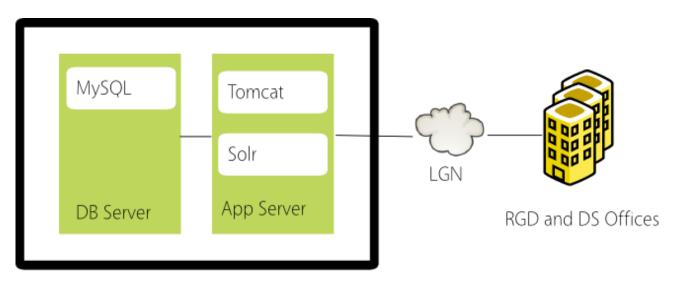
## **ANNEX 1**

The e-Population Register system Overall Architecture and Design



e-PoPReg system is operating within Lanka Government Network, over https protocol. It has 100% trilingual support with the online help. As depicted above it is built under the Service Oriented Architecture. It uses the Lucene Search engine.

## **Deployment Architecture**



# LGN Data Center Software Stack Used in ePR are:

a. Database : MySql

b. Application Server: apache tomcat

c. Web server : Apache : Solr d. Indexing e. Server OS : ubuntu f. Java : 1.6 g. Middleware : Spring

h. User Interface: JSP / Apache Struts 2.2 / Servlets / Jquery / JSON

i. Persistence : JPA Search Engine: Lucene j.

# ANNEX 2 SERVICE LEVEL AGREEMENT for

## SUPPORT AND MAINTENANCE SERVICES

### 1. Introduction

The aim of this agreement is to provide a basis for close co-operation between the Client and the Consultant for support and maintenance services to be provided by the Consultant, thereby ensuring a timely and efficient support service is available. The objectives of this agreement are detailed in Section (2).

This agreement is contingent upon each party knowing and fulfilling their responsibilities and generating an environment conducive to the achievement and maintenance of targeted service levels.

## 2. Objectives of Service Level Agreements

- 2.1. To create an environment conducive to a co-operative relationship between Client, Consultant and Client's representatives (government organizations) to ensure the effective support of all end users.
- 2.2. To document the responsibilities of all parties taking part in the Agreement.
- 2.3. To define the commencement of the agreement, its initial term and the provision for reviews.
- 2.4. To define in detail, the service to be delivered by each party and the level of service expected, thereby reducing the risk of misunderstandings.
- 2.5. To institute a formal system of objective service level monitoring ensuring that reviews of the agreement is based on factual data.
- 2.6. To provide a common understanding of service requirements/capabilities and of the principles involved in the measurement of service levels.
- 2.7. To provide for all parties to the Service Level Agreement a single, easily referenced document which caters for all objectives as listed above.

## 3. Service Level Monitoring

The success of Service Level Agreements (SLA) depends fundamentally on the ability to measure performance comprehensively and accurately so that credible and reliable information can be provided to customers and support areas on the service provided.

Service factors must be meaningful, measurable and monitored constantly. Actual levels of service are to be compared with agreed target levels on a regular basis by both Client

and Consultant. In the event of a discrepancy between actual and targeted service levels both Client and Consultant are expected to identify and resolve the reason(s) for any discrepancies in close co-operation.

Service level monitoring will be performed by Client. Reports will be produced as and when required and forwarded to the Consultant.

## 4. Support Levels

The consultant must provide support and maintenance services during Support Levels mentioned below:

Support Level: **Medium** 

Component/ Service Support and maintain and trouble shooting and on call

support

Support Hours From 08:30 AM to 05:30 PM Monday to Friday

(excluding public holidays)

## 5. On-Call Services Requirements

Consultant MUST make at least ONE qualified personnel available to the Client by telephone and email for the reporting and resolution of non-conformities or other issues, defects or problems. Dedicated telephone numbers and emails should be available for reporting issues. Client will nominate the personnel who are authorized to report non-conformities or other problems with the system from the departments. Reporting of non-conformities includes requests by the Client to apply critical software updates or patches.

Table-1 shows the response priority assigned to faults according to the perceived importance of the reported situation and the required initial telephone response times for the individual priority ratings. All times indicated represent telephone response time during specified Support Levels. The indicated telephone response time represents the maximum delay between a fault/request being reported and a Consultant's representative contacting the Client by telephone. The purpose of this telephone contact is to notify the Client of the receipt of the fault/request and provide the Client with details of the proposed action to be taken in respect of the particular fault/request.

Support Level	Business Critical	Business Critical	Non- Business Critical	Non- Business Critical
	Fatal	Impaired	Fatal	Impaired
Medium	120 minutes within Support Hours	150 minutes within Support Hours	150 minutes within Support Hours	180 minutes within Support Hours

*Table-1: Response Priority* 

*Note:* 

Fatal - Total system inoperability Impaired - Partial system inoperability

Business Critical - Unable to perform core business functions
Non-Business Critical - Able to perform limited core business functions

Consultant notification can occur outside Support Level time, and thus the response may occur after the next Support Level begins. Furthermore, "Time to Arrive On-Site (Table-3)" starts from Support Level starting time and "Time to Resolve the Problem" is Support Level time starting from the actual time of arrival on site.

## 6. Problem Resolution and Penalties

If problems have not been corrected within two (2) hours of the initial contact, the Consultant shall send qualified maintenance personnel to the respective Client's site to take necessary actions to correct the issue reported (defect, problem or non-conformity).

If faults are not corrected within the time limits specified in the Table-2, the Client shall be entitled to a penalty payment for each hour that the Consultant fails to resolve the fault. Maximum ceiling of penalty for a given month is 10% of the invoice amount for the month

The time to arrive on-site is specified in the Table-3.

Support Level	Business Critical	Business Critical	Non- Business Critical	Non- Business Critical
	Fatal	Impaired	Fatal	Impaired
Medium	8 Hours LKR 5,000.00 per hour	12 Hours LKR 3,000.00 per hour	12 Hours LKR 3,000.00 per hour	20 Hours LKR 2,000.00 per hour

Table-2: Resolution Time and Penalties

	<b>Business Critical</b>	Non-Business Critical
Fatal	2 Hours	3 Hours
Impaired	3 Hours	5 Hours

*Table-3: Time to arrive on-site*