

# Develop & Define the LIFe 3.0 Interoperability Data Standards for the LAND Domain.

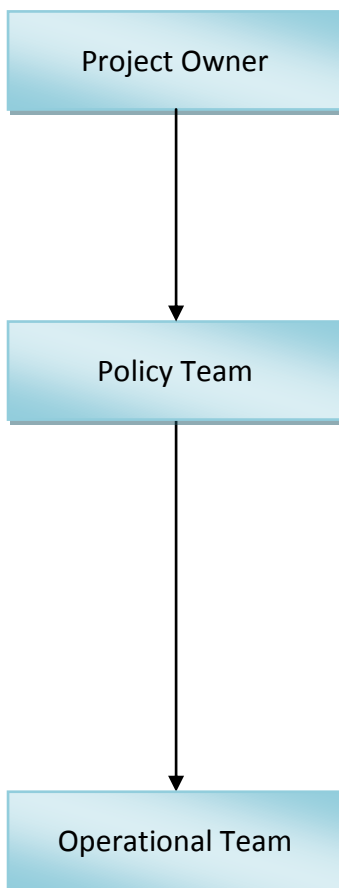
## 1. OBJECTIVE OF THE PROJECT:

The Objective of the assignment was to define the Data Elements which are shared among the various stakeholders within the above mentioned domain – in a manner the data could be exchanged and used without ambiguity among different systems within the given domain.

## 2. PROJECT OWNER:

National Administration Reform Council (NARC)

## 3. STRUCTURE OF THE PROJECT



### Responsibilities

#### *Project Owner:*

- To agree on the necessity to define the LIFe Standards for the Land Domain.
- To appoint the Policy Team to guide the new initiative

#### *Policy Team*

- Headed by the Secretary to Ministry of Lands
- To appoint the Operational Team to define the Interoperability Data and Standards.
- To define the purpose and boundary of the domain.
- To approve the Standards defined by the Operational Team.

#### *Operational Team*

- To agree on the Boundary of the Domain.
- To agree upon the data elements within the boundary.
- To map the data elements to the Stakeholder Data Category Matrix and Data Category Life Cycle Matrix.
- To define the interoperability standards for the data elements.
- To validate and identify any new information the falls within the domain.

#### 4. PURPOSE OF DEFINING INTEROPERABILITY STANDARDS

The interoperability data standards are defined:

- To ensure the data is not captured in multiple locations.
- To ensure the data captured has a single owner.
- To ensure the data is always current & accurate.
- To ensure the data is shared only with other authorized systems.
- To ensure the shared data could be easily understood and used

#### 5. SCOPE OF THE ASSIGNMENT

Define Land related information that would be required to identify the Land together with the properties of the Land (including ownership and usage) and keeping such information up to date and usable to other stakeholders..

#### 6. NAME OF THE DOMAIN

The name of the domain based on the information element being defined has been termed: ***Land Identification Domain***.

#### 7. BOUNDARIES OF THE DOMAIN

All Land related information (for its identification) from the point of;

- creating (or already created) Land parcel to
- capturing the changes in Ownership, use of the Land and any Restrictions placed on the land
- Including the sub-division and amalgamation of land parcels.

**Note1:** Properties of the land below the surface (4 feet below the ground) will be outside the boundary.

**Note2:** Information or data required by a specific process within the domain will not be considered data elements to be defined within the Interoperability Framework.

#### 8. PURPOSE STATEMENT FOR THE ASSIGNMENT

The information within *Land Identification Domain* has a major impact on many transactions done by the government, individuals and organizations in the country. The data within this domain is shared among many stakeholders. The purpose of defining standards for this domain was identified as:

- To identify the location of a land parcel
- To identify the owner and usage of the land parcel.

**9. THE POLICY INTEROPERABILITY TEAM COMPOSITION:**

<b>Position</b>	<b>Organization</b>
Secretary	Ministry of Public Administration & Home Affairs
Secretary	Ministry of Lands & Land Development
Secretary	Ministry of Lands (Western Provincial Council)
Registrar General	Registrar General's Department
Survey General	Survey General's Department
Commissioner General	Land Commissioner Generals' Department
Director General	Urban Development Authority
Commissioner General	Land Settlement Department
Commissioner	Land Reforms Commission
Municipal Commissioner	Municipal Council - Moratuwa
Director	ICTA, Re-engineering Government Programme
Chief Technology Officer	ICTA
Programme Specialist	ICTA (Project Manager –LIFe)

Table 1: Interoperability Policy Team

**10. THE OPERATIONAL INTEROPERABILITY TEAM COMPOSITION:**

Institution	Position	Name
Ministry of Lands & Land Development	Senior Asst. Secretary	Mr. PMP Udayakantha
Ministry of Lands & Land Development	IT Assistant	Mr. Nalin Pradeep
Registrar General's Department	Asst. Registrar General	Mr. Ranjith Dayananda
Registrar General's Department	Asst. Registrar General	Mr. Wasantha Sandiligama
Survey General's Department	Deputy Survey General	Ms. Shyamalie Perera
Survey General's Department	Deputy Survey General	Mr. WMS Weerasignhe
Valuation Department	Deputy Chief Valuer	Mr. SP Weerarathne
Provincial Land Commissioner's Department (Western Province)	Provincial Land Commissioner	Ms. EAR Renuka
Provincial Land Commissioner's Department (Western Province)	Provincial Land Asst. Commissioner	Mr. ADPI Prasanna
Urban Development Authority	Director - Lands	Mr. GWG Abeygunawardhane
Urban Development Authority	Deputy Director	Ms. Pushpa Gamage
Urban Development Authority	Information Technologist	Ms. IK Wijerathne
Land Commissioner Generals' Department	Deputy Land Commissioner	Mr. Asantha Gunasekera
Municipal Council - Moratuwa	Chief Valuations Officer	Mr. SC Sivaharan
Divisional Secretariat, Rathmalana	Divisional Secretary	Mr. Pradeep Yasarathne
Divisional Secretariat, Rathmalana	Asst. Divisional Secretary	Ms. HMTP Herath
Department of Local Government	Chief Innovations Officer	Mr. Bandula Ranathunga
ICTA, Re-engineering Government Programme	Programme Specialist	Mr. Thushara Suraweera
ICTA, Re-engineering Government Programme	Project Manager	Mr. Chinthake Ranasinghe

Table 2: Interoperability Operational Team

## 11. METHODOLOGY ADOPTED

### Stage 1: Project Initiation

- a. Presentation of the proposed Government Interoperability Framework to the Project owner and the Policy Team.
- b. Obtain the approval from the Project Owner & the Policy Team to define the Interoperability standards for the domain.
- c. Obtaining the approval to re-convene the Policy Committee to finalize the defined standards .

### Stage 2: Policy Team define the members for the Operational Team

- a. With the assistance of the Policy Team the members for the Operational Team was identified.

### Stage 3: Detailed Study of the Domain

- a. The domain stakeholders were identified and meetings were conducted with the following domain stakeholders – to understand the interoperability stakeholders of the data elements being interoperated.
  - Secretary – Ministry of Lands
  - Registrar Generals Department
  - Surveyor General and Survey Department
  - Additional Secretary Ministry of Lands
  - Additional Secretary Ministry of Lands – Bimsaviya Project
  - Mahaweli Authority
  - Land Commissioner
  - Commissioner Title Registration
  - Commissioner Land Reform Commission
  - Urban Development Authority
  - Valuation Department
  - Local Government Authorities
  - Divisional Secretariat - Ratmalana

### Stage 4: Detailed Action by the Operational Team

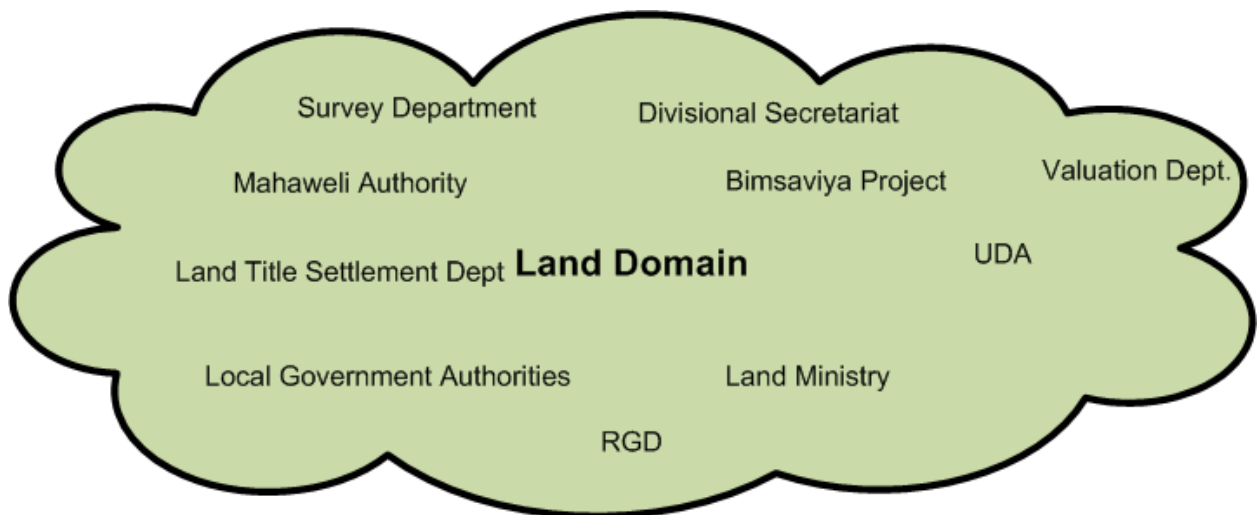
- a. Initial briefing of the Operational Team on the concepts of the need for an Interoperability Framework.
- b. Together with the Operational Team to define the Domain Name, Boundaries of the Domain and the Purpose of the domain were finalized.
- c. The following Data Categories were identified within the domain;
  - i. **Land Parcel Identification Information:** The purpose of this category of information is to identify the physically identify the land parcel.
  - ii. **Land Ownership Information:** The purpose of this category of information is to identify the current owner or multiple owners related to the land parcel.

- iii. **Land Usage Information:** The purpose of this category of information is to identify the current usage of the land.
- iv. **Land Restriction Identification Information:** This category of information will identify the restrictions placed on the specific land parcel by different entities.
- d. The data elements for each category were there after identified.
- e. Developed the 'Data Category Life Cycle Matrix'. (**Note:** This step will identify the Life Cycle of the information and different stakeholders affecting the Data Category).
- f. Next the 'Data Elements' that is required to be shared with other stakeholders. (**Note:** This step will only identify data elements that are shared with other stakeholders).
- g. The Data Standards for the identified data elements were defined.

**Stage 5: Define the Pseudo Technical Standards & Interoperability Standards for each Data Element.**

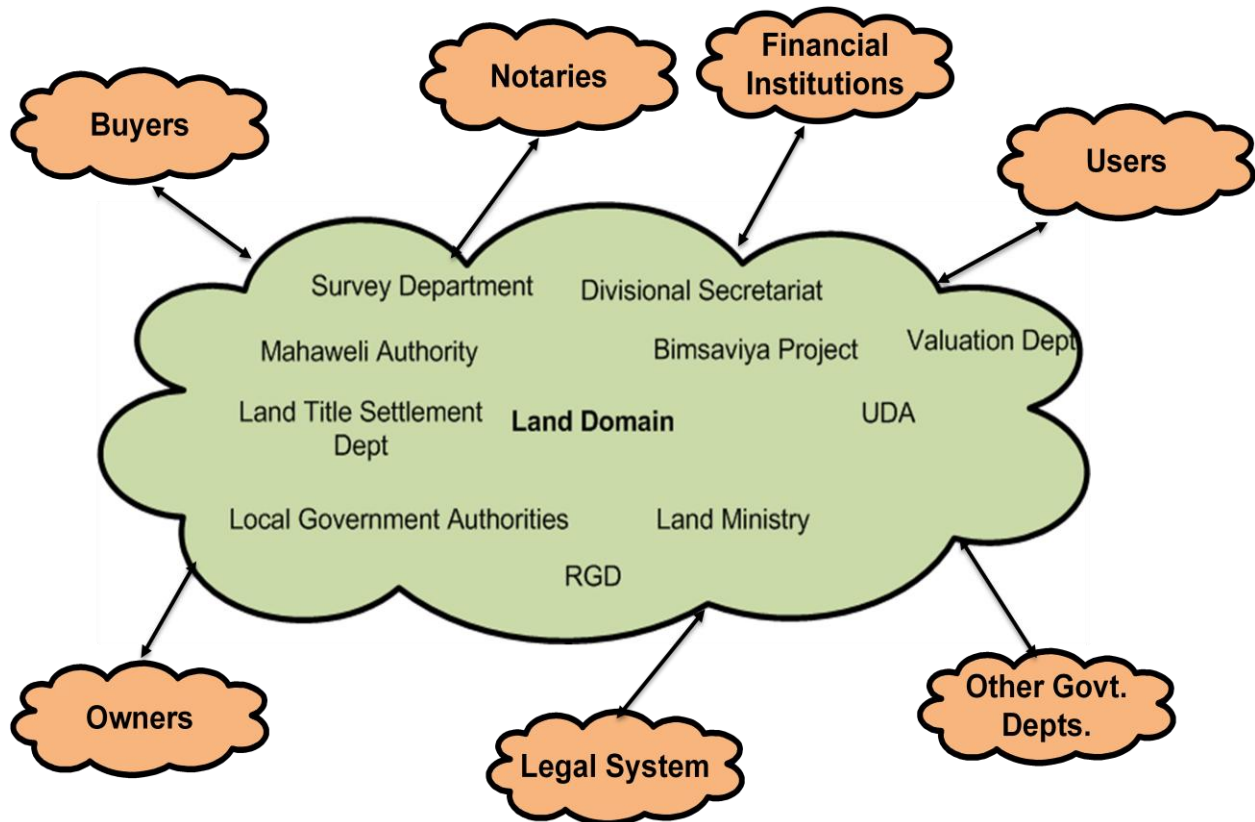
**Stage 6: To receive the acceptance of the Policy Team and publish information on the Web.**

**12. MAJOR PLAYERS WITHIN THE LAND DOMAIN**



### 13. DOMAIN INTERACTIONS

The interaction of entities external to the domain were identified as follows:



### 14. CONCLUSION

The actions with regards to stages 1 – 3 have been completed and this report is being submitted as an Interim Report – currently the balance operational workshops need to be completed.

### 15. ANNEXURE LISTING

- Annexure 1 - Data Category by Stakeholder Matrix
- Annexure 2 - Data Categories and their Boundaries
- Annexure 3 - Data Elements
- Annexure 4 - Data Category Life Cycle Matrix
- Annexure 5 - High Level Data Flow Diagram for the Domain
- Annexure 6 - Information Sharing Methodology
- Annexure 7 - Modification of Information
- Annexure 8 - Web Layout Suggestions

## Annexure 1: Data Category by Stakeholder Matrix

<b>Data Category</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Stakeholders</b>				
Registrar General's Department	✓	✓	✓	✓
Bimsaviya Project and Ministry of Lands	✓	✓	✓	✓
Survey Department	✓	✓	✓	✓
Land Commissioner's Department	✓	✓	✓	✓
Provincial Land Commissioner's Dept & Ministry.	✓	✓	✓	✓
UDA / National Physical Planning Dept.	✓	✓	✓	✓
Valuation Dept	✓	✓	✓	✓
Land Settlement Dept.	✓	✓	✓	✓
Land Reforms Commission	✓	✓	✓	✓
Divisional Secretariat & Grama Niladhari	✓	✓	✓	✓
Local Government Authorities	✓	✓	✓	✓



## Annexure 2 - Data Categories and their Boundaries

**Land Parcel Identification Information:**

- All information and data pertaining to an individual that was initially created at the time of birth.

**Land Ownership Information:**

- All information that was created at the time of birth but changes regularly during the life of an individual.

**Land Usage Information:**

- All information relating to major life events of the individual.

**Land Restriction Identification Information:**

- All information relating to major life events of the individual.

## Annexure 3 - Data Elements

**Land Parcel Identification Information:**

- Land Parcel Reference Number
- Land Parcel Geo-Coordinates
- Cadastre Reference Number
- Land Parcel Address
- Bounds of the land
- Assessment Number
- GN Householder's List Number

**Land Ownership Information:**

- Pending.

**Land Usage Information:**

- Pending.

**Land Restriction Identification Information:**

- Pending.

## Annexure 4 - Data Category Life Cycle Matrix

Land Parcel Identification Information:

Creator	Owner
<ul style="list-style-type: none"> <li>• Survey department</li> <li>• Private Surveyors</li> <li>• Local Government</li> <li>• RGD</li> <li>• Valuation Dept</li> <li>• DS</li> </ul>	<ul style="list-style-type: none"> <li>• RGD</li> </ul>
User	Keepers & sharers
	<ul style="list-style-type: none"> <li>• Survey Dept</li> <li>• Local Authority</li> <li>• Valuation</li> <li>• UDA</li> <li>• Land Ministry</li> </ul>
Modifiers	Authorized to Delete
<ul style="list-style-type: none"> <li>• Survey Dept.</li> <li>• Local Government</li> <li>• Valuation Department</li> </ul>	