# Develop & Define the LIFe 3.0 Interoperability Data Standards for the VEHICLE 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 for those authorized to use the information within and outside the given domain.

### 2. PROJECT OWNER:

National Administration Reform Council (NARC)

### 3. STRUCTURE OF THE PROJECT

# Policy Team Operational Team

### Responsibilities

### **Project Owner:**

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

### **Policy Team**

- 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 Vehicle related information (excluding spare parts) that would be required to identify the Vehicle together with the attributes of the vehicle (including ownership) 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: **Vehicle Information Domain**.

### 7. BOUNDARIES OF THE DOMAIN

All relevant vehicle related information from the point of;

- importing or manufacture,
- to capturing the changes to attributes or ownership,
- to the point the vehicle is no longer in use.

### Note1:

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

### 8. PURPOSE STATEMENT FOR THE ASSIGNMENT

The information within *Vehicle Information Domain* is regularly used among many stakeholders for multiple purposes. The purpose of defining standards for this domain was identified as:

- To identify the vehicle in a unique manner together with the attributes related to the vehicle
- To identify the owner (including absolute owner) of the vehicle at any given time.

### 9. THE POLICY INTEROPERABILITY TEAM COMPOSITION: (THUSHARA PLEASE ASSIST)

Position	Institution
Secretary	Ministry of Public Administration & Home Affairs
Secretary	Ministry of Transport
Director General	Department of Trade Tariff and Investment Policy
Director General	Department of Import and Export Control
Director General	Sri Lanka Customs
Commissioner General	Department of Motor Traffic
Inspector General of Police	Sri Lanka Police
Commissioner	Provincial Commissioner of Motor Traffic (Western Province)
Representative	Insurance Association of Sri Lanka
Representative	Sri Lanka Motor Traders Association
Representative	People's Leasing Co. Ltd. (Representing Leasing Companies)
Representative	Laughs Eco Sri (Pvt) Ltd. (Representing Vehicle Emission Testers)
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: (THUSHARA PLEASE ASSIST)

Institution	Position	Name
Department of Motor Traffic	Assistant Commissioner -IT	Ms. Samanthi Senanayake
Department of Motor Traffic	Data Controller	Mr. R Easwaralingam
Provincial Commissioner of Motor Traffic (Western Province)	Commissioner	Mr. AKR Alawatta
Sri Lanka Customs	Deputy Director of Customs	Mr. K. Premanath
Sri Lanka Customs	Asst. Superintendent of Customs	Mr. WMP Amaranayake
Sri Lanka Police	Director – IT, Superintendent of Police	Mr. AK Samaranayke
Sri Lanka Police	Asst. Superintendent of Police, Colombo City Traffic	Mr. AKD Udaya Hemantha
Department of Import and Export Control	Assistant Controller	Ms. HMPC Kumarihamy
Department of Import and Export Control		Mr. MP Nalin
MBSL Insurance Co. Ltd.		Mr. WDP Fernando
MBSL Insurance Co. Ltd.		Mr. MP Anuradha
Laughs Eco Sri (Pvt) Ltd.		Mr. GHRG Hewage
ICTA	Technologist	Mr. Malith de Alwis
ICTA	Programme Specilist	Mr. Thushara Suraweera

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 form 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 defined 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.
  - Asst. Commissioner of the Department of Motor Traffic
  - Commissioner Provincial Department of Motor Traffic
  - Examiners Department of Motor Traffic
  - Divisional Secretariat Kotte
  - Insurers
  - Financial Institutions
  - Department of Import and Export
  - Sri Lanka Police

### Stage 4: Defining of the Data Elements by the Operational Team

- a. Initial briefing of the Operational Team on the concepts and need for an Interoperability Framework within the vehicle domain.
- b. Together with the Operational Team 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. Standard Vehicle, Manufacture and Importer Related Information
    - Approved Prototypes
    - Registered Importers and Manufacturers

### ii. Initial & Current Vehicle Information

- Initial Vehicle Identification Information with Importer/Manufacturer
- Current Vehicle Identification Information

### iii. Vehicle Ownership Information

Details of Primary and Secondary owners of the vehicle.

### iv. Other Vehicle Related Information

- Licensing/Insurance/Taxes Related Information
- Restrictions Related Information

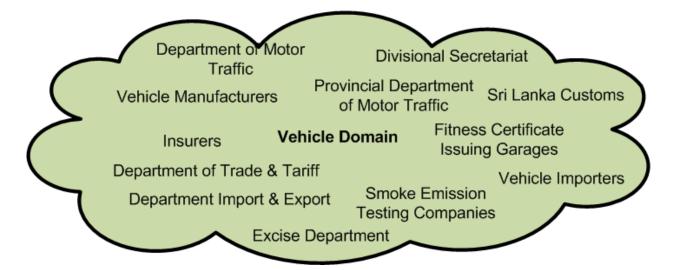
### v. Vehicle Export or Condemned Information

- d. Developed the 'Data Category Life Cycle Matrix'. (**Note:** This step will identify the Life Cycle of the information and different stakeholders associated with the Data Category).
- e. The 'Data Elements' required to be interoperated with other stakeholders were identified and defined. (**Note:** This step will identify data elements that need to interoperate with those within or external to the domain).
- f. The Data Standards for the identified data elements were defined.

Stage 5: Define the Pseudo Technical Standards & Interoperability Standards for each Data Element to be defined (ICTA).

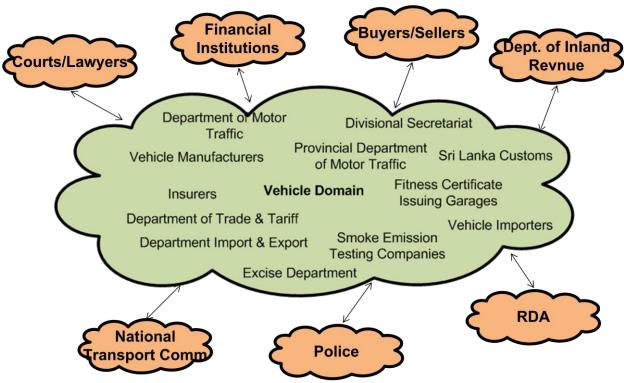
Stage 6: To receive the acceptance of the Policy Team and publish information on the Web (ICTA).

### 12. Major Players within the Land Domain



### **13. DOMAIN INTERACTIONS**

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



### 14. CONCLUSION

The actions with regards to stages 1-4 have been completed and this report is being submitted as an Draft Final Report.

### 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**

Stake	Data Category holders		1	2	3	4	5
•	Department of Motor Traffic	I	✓	✓	✓	✓	✓
•	Provincial Department of Motor Traffic	I		<b>√</b>	<b>✓</b>	<b>√</b>	<b>√</b>
•	Sri Lanka Customs	I	<b>√</b>	<b>√</b>	<b>✓</b>		<b>√</b>
•	Sri Lanka Police	E	<b>✓</b>	✓	<b>✓</b>	✓	<b>√</b>
•	Vehicle Importers	I	<b>✓</b>	✓			
•	Vehicle Manufacturers	I	✓	✓			
•	Banks/Vehicle Leasing Companies	Е	✓	✓	<b>✓</b>	✓	✓
•	Insurers	I	✓	✓	✓	✓	✓
•	RDA	Е				✓	✓
•	Smoke Emission Testing Companies	I		✓		✓	<b>√</b>
•	Courts and Lawyers	Е		✓	✓	✓	<b>√</b>
•	Department of Import and Export	I	<b>✓</b>	✓	✓	✓	<b>√</b>
•	Department of Trade and Tariff	I	✓	✓	✓	✓	
•	Excise Department	I	✓	✓			
•	Inland Revenue	Е	✓	✓	✓	✓	<b>√</b>
•	Divisional Secretariat	I		✓	✓	✓	<b>√</b>
•	Fitness Issuing garages	I		✓		✓	<b>√</b>
•	National Transport Commission	Е		✓		✓	✓
•	General Public	E	✓	✓	✓	✓	<b>√</b>

# **Annexure 2 - Data Categories and their Boundaries**

Standard Vehicle, Manufacture and Importer Related Information:
<ul> <li>All information and data related to a vehicle, registered importer or manufacturer (in the event the vehicles are locally manufactured) including approval of vehicle prototype.</li> </ul>
Initial & Current Vehicle Information:
<ul> <li>All current information in relation to the vehicle including selected identified elements of the original information. The data elements should include data related to the vehicle to enable unique identification of the vehicle.</li> </ul>
Vehicle Ownership Information:
<ul> <li>All information relating to the current primary and secondary ownership.</li> </ul>
Other Vehicle Related Information:
<ul> <li>All information relating to the vehicle which needs to interoperate but is not an attribute of the vehicle. (E.g., Licensing/Insurance/Taxes Related Information, Restrictions Related Information, etc.)</li> </ul>
Vehicle Export or Condemned Related Information:
<ul> <li>All information relating to the vehicle being removed from use within Sri Lanka.</li> </ul>

### **Annexure 3 - Data Elements**

### ☐ Standard Vehicle, Manufacture and Importer Related Information:

- Vehicle Importer Reference Number
- Vehicle Importer Contact Details (Company Name, VAT Number, Company Registration Number, Contact No., Office Address, Office Contact Number, email, web address)
- Vehicle Local Manufacturer Reference Number
- Vehicle Local Manufacturer Contact Details (Company Name, VAT Number, Company Registration Number, Contact No., Office Address, Office Contact Number, email, web address)
- Approved Vehicle Prototype Information
  - Approved Vehicle Prototype Reference Number
  - Approved Vehicle Prototype Manufacturer Name
  - Approved Vehicle Prototype Model Type
  - Approved Vehicle Prototype Model Number
  - Approved Vehicle Prototype Description
  - Approved Vehicle Prototype Tare Weight
  - Approved Vehicle Prototype Seat Numbers
  - Approved Vehicle Prototype Restrictions

### ☐ Initial & Current Vehicle Information:

- Vehicle Chassis Number (DMT)
- Vehicle DMT Chassis Number (DMT)
- Vehicle Importer Reference Number (DMT)
- Vehicle Manufacturer Reference Number (DMT)
- Vehicle Individual Importer SLIN No. (RGD)
- Vehicle Engine Number (DMT)
- Customs Vehicle HS & Description (Customs)
- Vehicle Import Permit Number (DMT)
  - Permit Issuing Authority
  - Permit Reference Number
- Vehicle Permit Conditions (DMT)
  - Vehicle Permit Conditions Type
  - Vehicle Permit Conditions Details

- Vehicle Colour (DMT)
- Approved Vehicle Prototype Number (DMT)
- Vehicle Manufacture Year (DMT)
- Country of Origin (DMT)
- Initial DMT Registration Status (DMT)
- Vehicle Import Date (DMT)
- Custom Entry Number (Customs)
- VIC Number (DMT)
- Vehicle Fuel Type (DMT)
- DMT Vehicle Class (DMT)
- Vehicle Seat Number (DMT)

### ☐ Vehicle Ownership Information:

- Current Vehicle Registration Number (DMT)
- Name, Identity and Contact Details of Registered Owner (DMT)
- Name, Identity and Contact Details of Absolute Owner (DMT)
- Current Vehicle Registration Certificate Number (DMT)
- Last Transfer Date (DMT).

### ☐ Other Vehicle Related Information:

- Provincial DMT Vehicle Class (PDMT)
- Vehicle Revenue License Number (PDMT)
- Fitness Certificate Reference Number (PDMT)
- Expiry Date of Current Revenue License (PDMT)
- Current Vehicle Insurance Certificate Number (Insurance)
- Current Insurance Company (Insurance)
- Vehicle Insurance Expiry Date (Insurance)
- Previous Insurance Issue Company (Insurance)
- Current Vehicle Smoke Test Certificate Number (Smoke Testing Companies)
- Vehicle Taxes (DMT)
  - Vehicle Tax Type
  - Vehicle Tax Amount
  - Next Vehicle Tax Payment Date

- Restrictions on Vehicle (DMT)
  - Restriction Authority
  - Restriction Type
  - Restriction Details

### ☐ Vehicle Export or Condemned Related Information:

- Status of Vehicle (DMT)
  - Current Vehicle Operational Status
  - Cancellation of Registration Date
  - Reason (Accident, Exported, Temp Exported, etc.).

## **Annexure 4 - Data Category Life Cycle Matrix**

### ☐ 1: Standard Vehicle, Manufacture and Importer Related Information:

Creator	Owner
• DMT	• DMT
User	Keepers & sharers
SL Customs	•
Buyers/Sellers	
Modifiers	Authorized to Delete
• DMT	• DMT

### ☐ 2a: Initial & Current Vehicle Information (Customs Information):

Creator	Owner
SL Customs	SL Customs
User	Keepers & sharers
• DMT	• DMT
Buyers/Sellers	
Modifiers	Authorized to Delete
• None	• None

### ☐ 2b: Initial & Current Vehicle Information (Vehicle Permit Information):

Creator	Owner
Permit Issuing Authority	Permit Issuing Authority
User	Keepers & sharers
• DMT	• DMT
SL Customs	
Buyers/Sellers	
Modifiers	Authorized to Delete
Permit Issuing Authority	• None

### ☐ 2c: Initial & Current Vehicle Information (Vehicle Attribute Information):

Creator	Owner
SL Customs	• DMT
• DMT	
User	Keepers & sharers
All Stakeholder	Provincial DMT
Modifiers	Authorized to Delete
• DMT	• None

### ☐ 3: Ownership Information:

Creator	Owner
• DMT	• DMT
User	Keepers & sharers
All Stakeholder	Provincial DMT
Modifiers	Authorized to Delete
• DMT	• None

### ☐ 4a: Other Vehicle Related Information (Revenue Licence/Fitness Related Information):

Creator	Owner
Provincial DMT	Provincial DMT
User	Keepers & sharers
All Stakeholder	•
Modifiers	Authorized to Delete
Provincial DMT	• None

### ☐ 4b: Other Vehicle Related Information (Insurance Related Information):

Creator	Owner		
Relevant Insurance Company	Relevant Insurance Company		
User	Keepers & sharers		
• PDMT	None		
SL Police			
Buyers/Sellers			
Modifiers	Authorized to Delete		
Relevant Insurance Company	Relevant Insurance Company		

### ☐ 4c: Other Vehicle Related Information (Smoke Test Related Information):

Creator	Owner			
Relevant Smoke Testing Company	• DMT			
User	Keepers & sharers			
• PDMT	Relevant Smoke Testing Company			
Modifiers	Authorized to Delete			
• None	• None			

### ☐ 4d: Other Vehicle Related Information (Vehicle Tax Related Information):

Creator		Owner
•	Relevant Vehicle Tax Collection Entity	• DMT
User		Keepers & sharers
•	Department of Inland Revenue	Relevant Vehicle Tax Collection Entity
•	PDMT	
•	SL Police	
•	Buyers/Sellers	
Modifiers		Authorized to Delete
•	None	• None

### ☐ 5: Vehicle Export or Condemned Information:

Creator	Owner
• DMT	• DMT
User	Keepers & sharers
• PDMT	None
SL Police	
Buyers/Sellers	
Modifiers	Authorized to Delete
• None	• None