#### The Sri Lanka Government Enterprise Architecture and GovTechStack



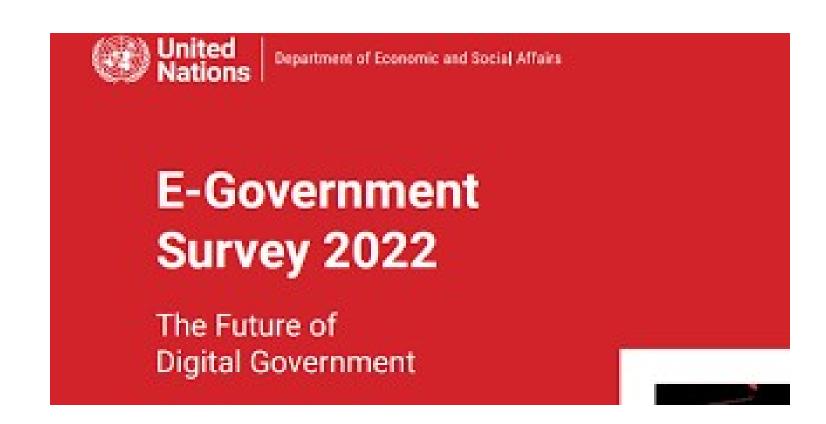


Crishantha Nanayakkara CTO - ICTA



#### DIGITAL GOVERNMENT IN SRI LANKA

- Started its program in 2003-4 period under the e-Sri Lanka initiative, which was managed by ICTA
- Ranked 1<sup>st</sup> in South Asia and 95<sup>th</sup> World Wide under the 2022 UN e-Government Rankings
- Ranked in Category B in GTMI in 2021 and 2022







#### DIGITAL GOVERNMENT IN SRI LANKA

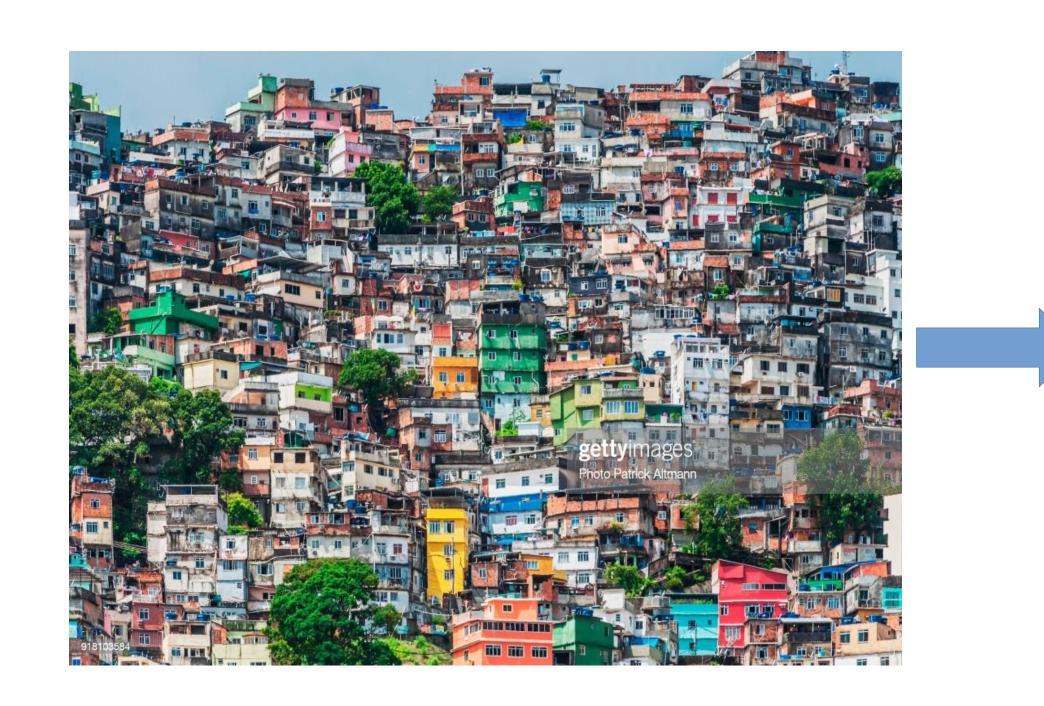
Country	EA	EA [E-Government Readiness Rank]											
	Matur	2003	2004	2005	2008	2010	2012	2014	2016	2018	2020	2022	
	ity												
Denmark	High	4	2	2	2	7	4	16	9	1	1	1	
Finland	High	10	9	9	15	19	9	10	5	6	4	2	
Republic of Korea	High	13	5	5	6	1	1	1	3	3	2	3	
New Zealand	High	14	13	13	18	14	13	9	8	8	8	4	
Iceland	High	15	14	15	21	22	22	19	27	19	12	5	
Sweden	High	2	4	3	1	12	7	14	6	5	6	5	
Australia	High	3	6	6	8	8	12	2	2	2	5	7	
Estonia	High	16	20	19	13	20	20	15	13	16	3	8	
Netherlands	High	11	11	12	5	5	2	5	7	13	10	9	
USA	High	1	1	1	4	2	5	7	12	11	9	10	
United Kingdom	High	5	3	4	10	4	3	8	1	4	7	11	
Singapore	High	12	8	7	23	11	10	3	4	7	11	12	
UAE	High	38	60	42	32	49	28	32	29	21	21	13	
Japan	High	18	18	14	11	17	18	6	11	10	14	14	
Sri Lanka	Low	84	96	94	101	111	115	74	<b>79</b>	94	<b>85</b>	95	

UN e-government rankings 2003 to 2022



#### ENTERPRISE ARCHITECTURE (EA)

- An Enterprise Architecture (EA) is a complete expression of an enterprise.
- It is the primary framework / strategy for the digital transformation for any enterprise.







#### SRI LANKA GOVERNMENT ENTERPRISE ARCHITECTURE (SL-GEA)

"Sri Lanka Government Enterprise Architecture (SL-GEA) is the Sri Lanka Government Digital Transformation strategic plan to achieve the Whole-Of-Government (W-O-G) approach" with a layered architecture framework.

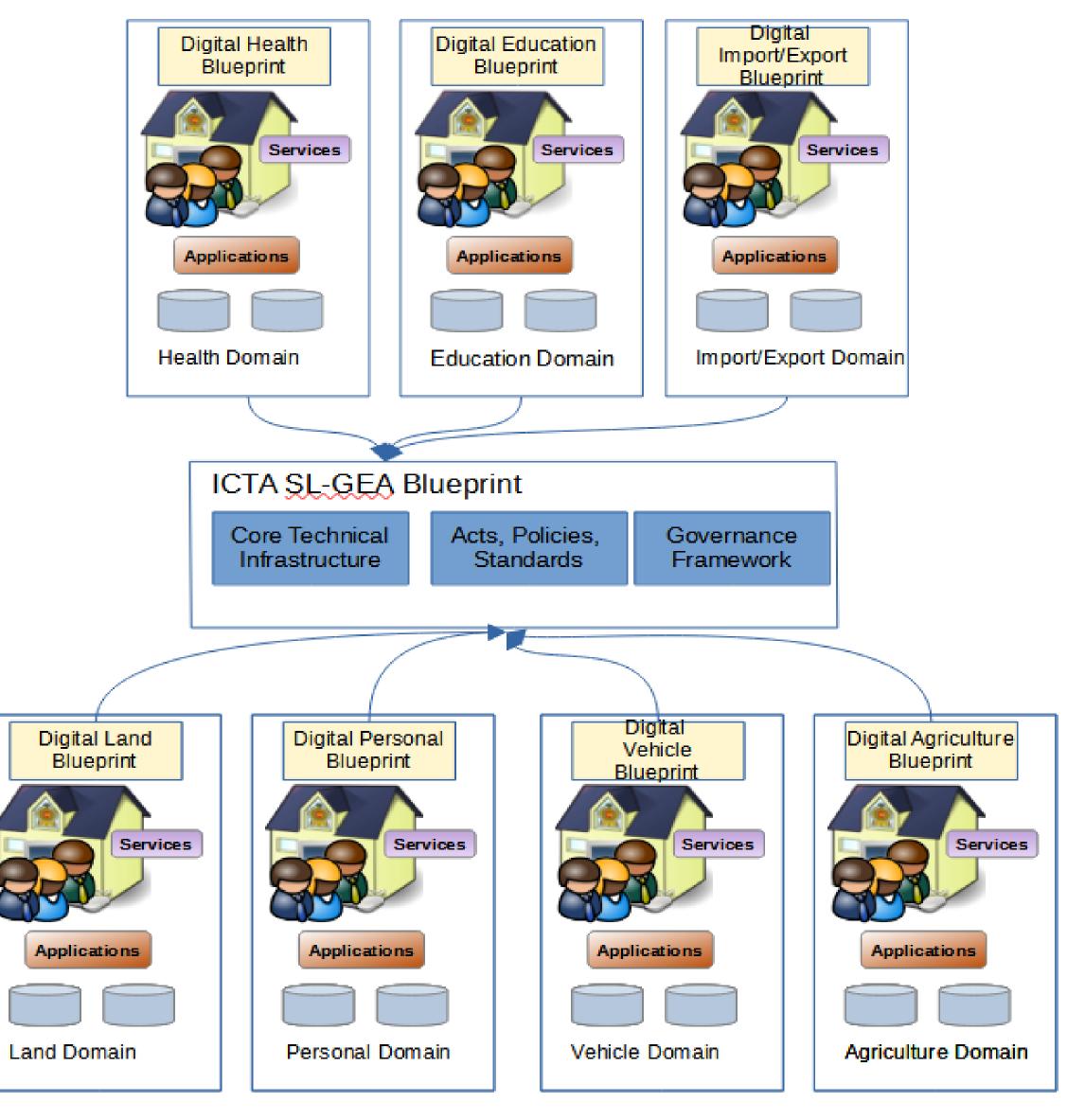


#### SRI LANKA GOVERNMENT ENTERPRICE ARCHITECTURE

The Whole of Government Approach



# THE DOMAIN DRIVEN SECTOR BASED DEVELOPMENT

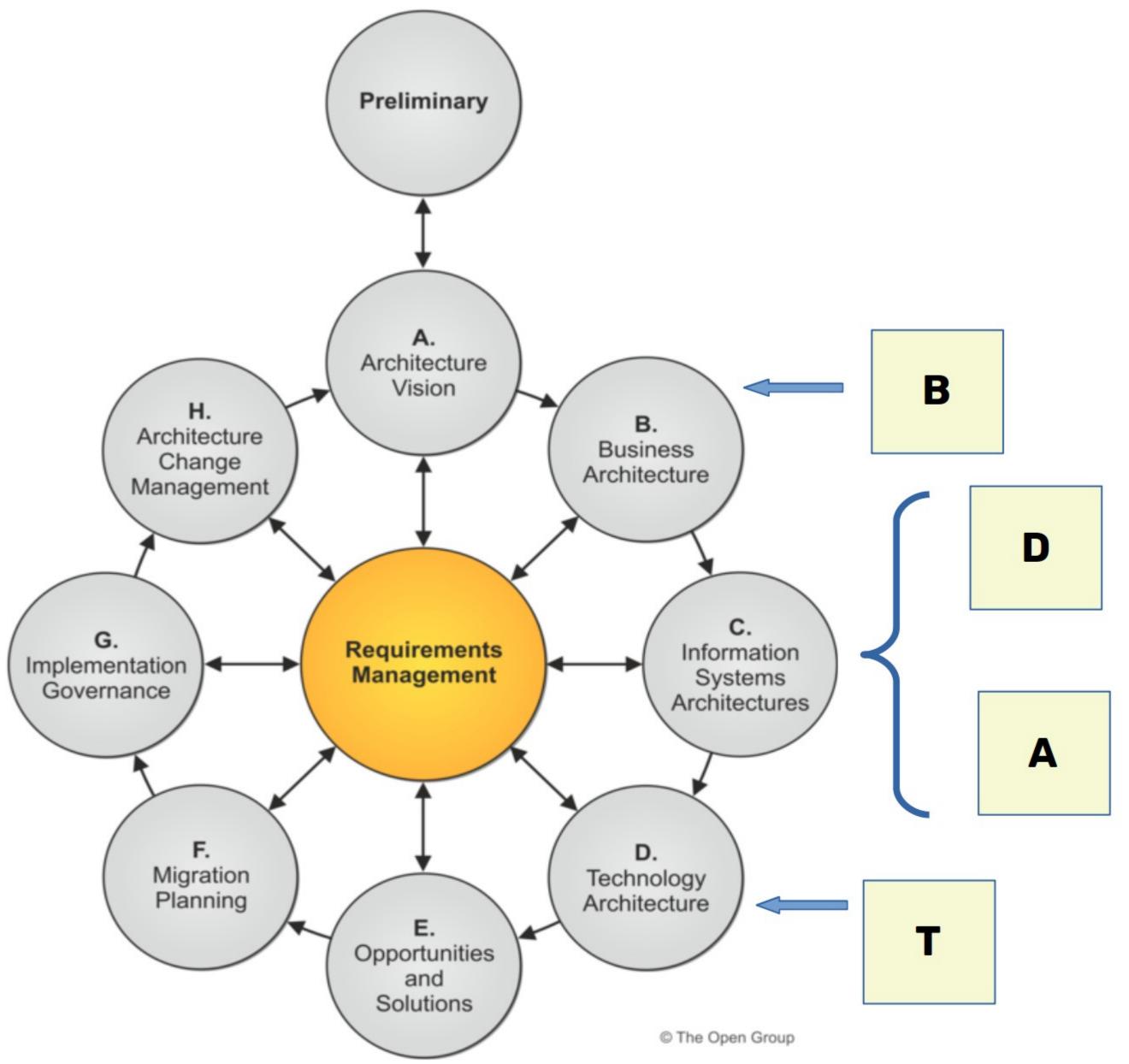




#### THE BDAT

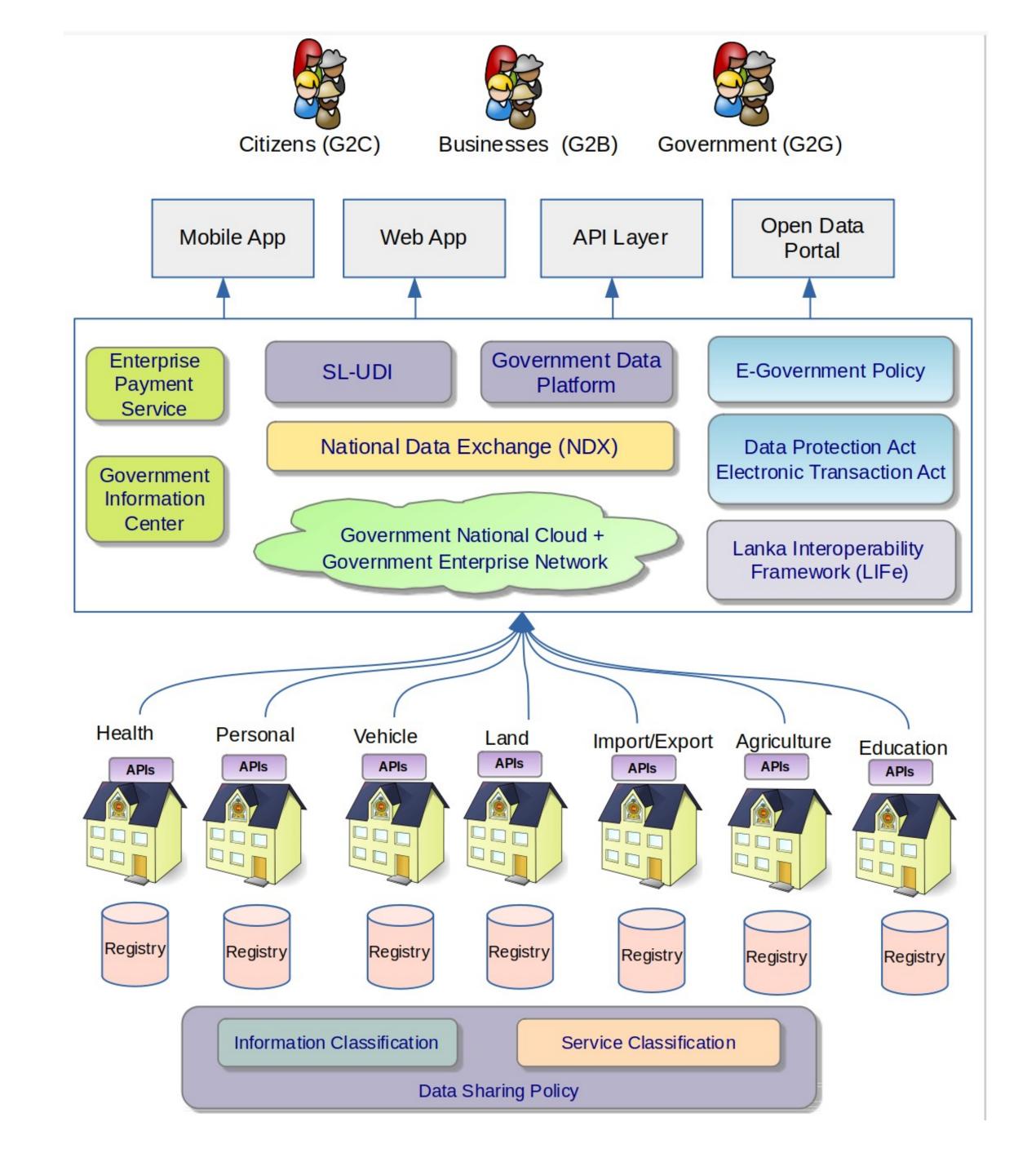
- Out of 8 phases in the TOGAF ADM cycle, B, C and D Phases are mapped to TOGAF BDAT Framework.
  - B -> Phase B
  - D and A → Phase C
  - T → Phase D





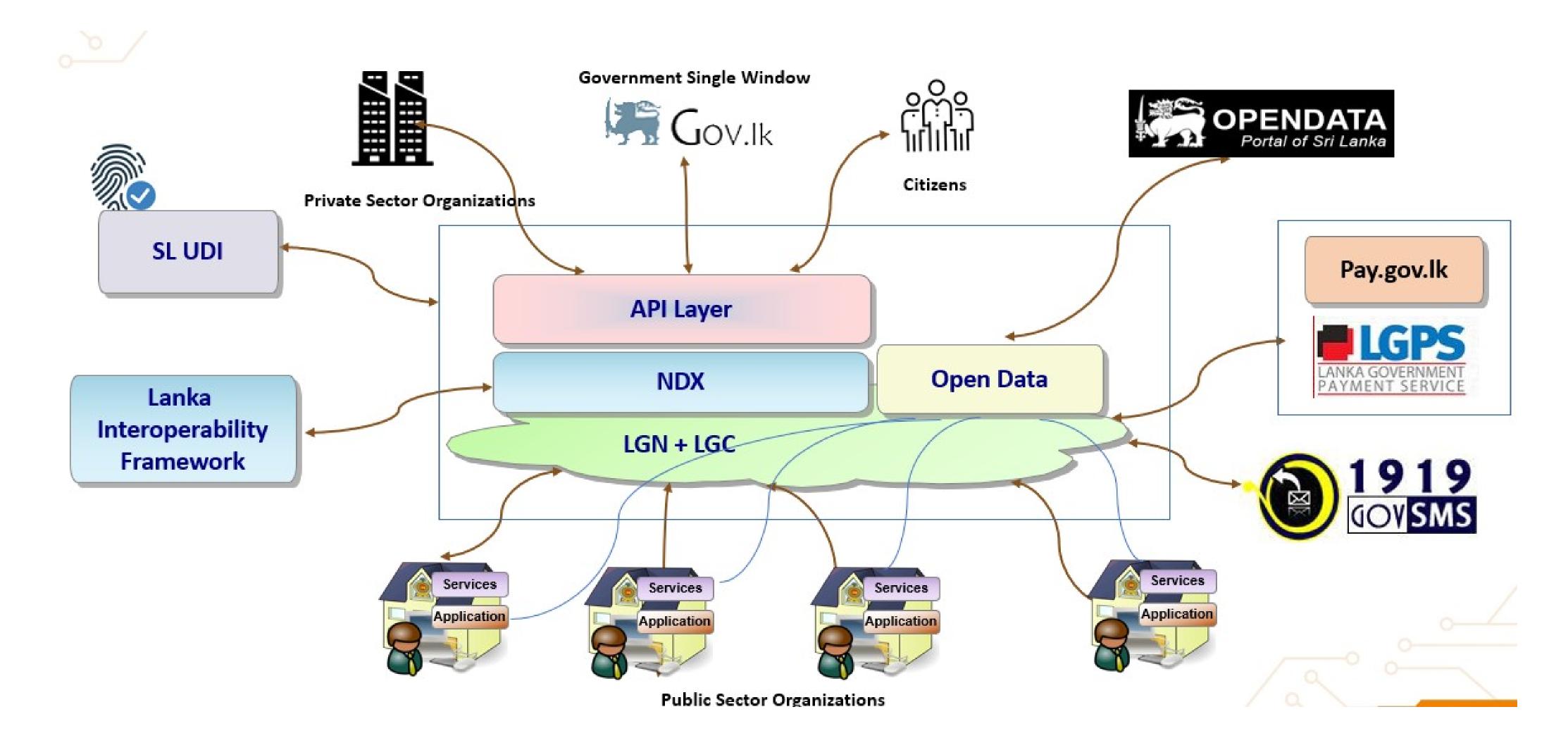


# THE CONNECTED GOVERNMENT

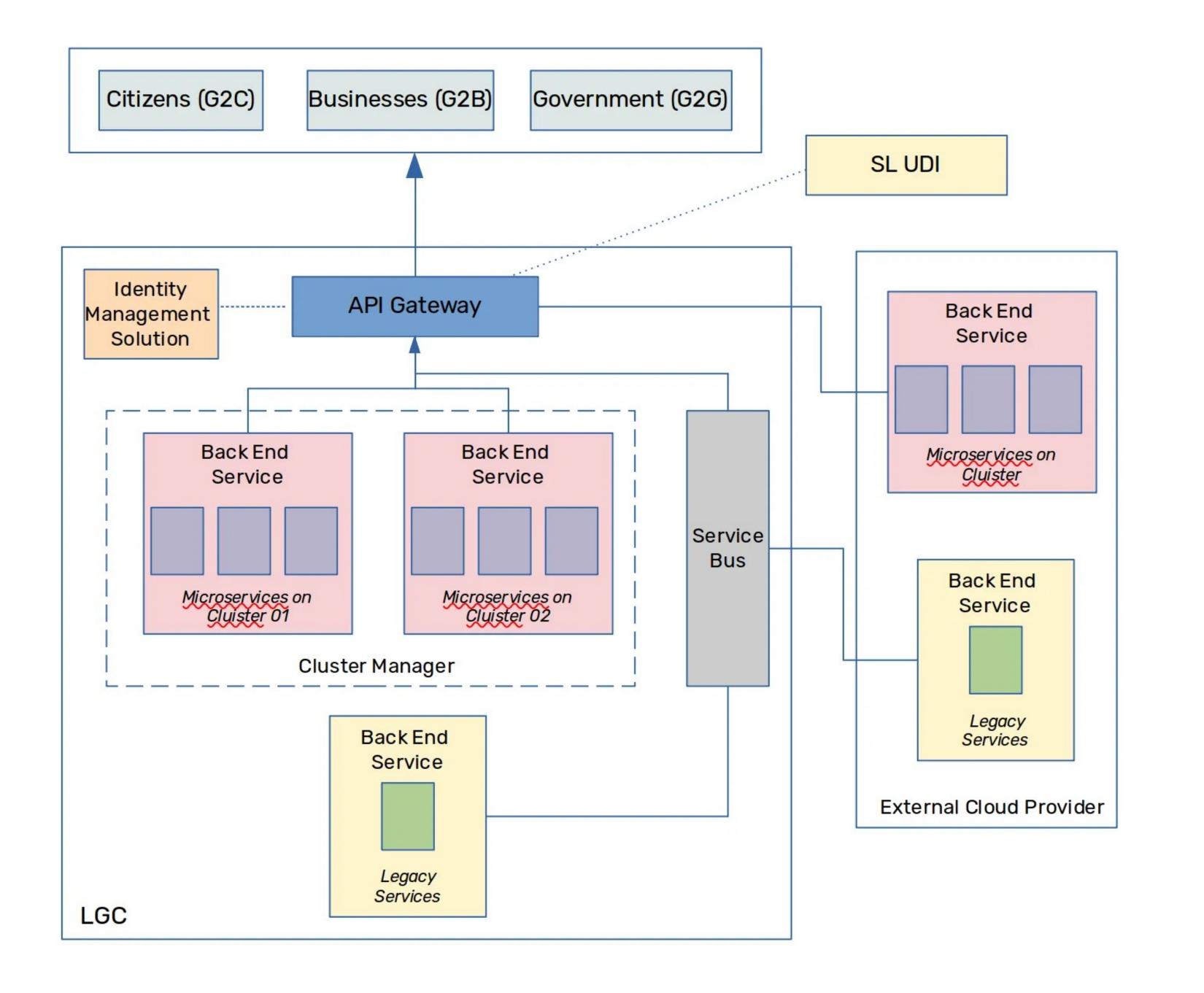




#### THE CONNECTED GOVERNMENT

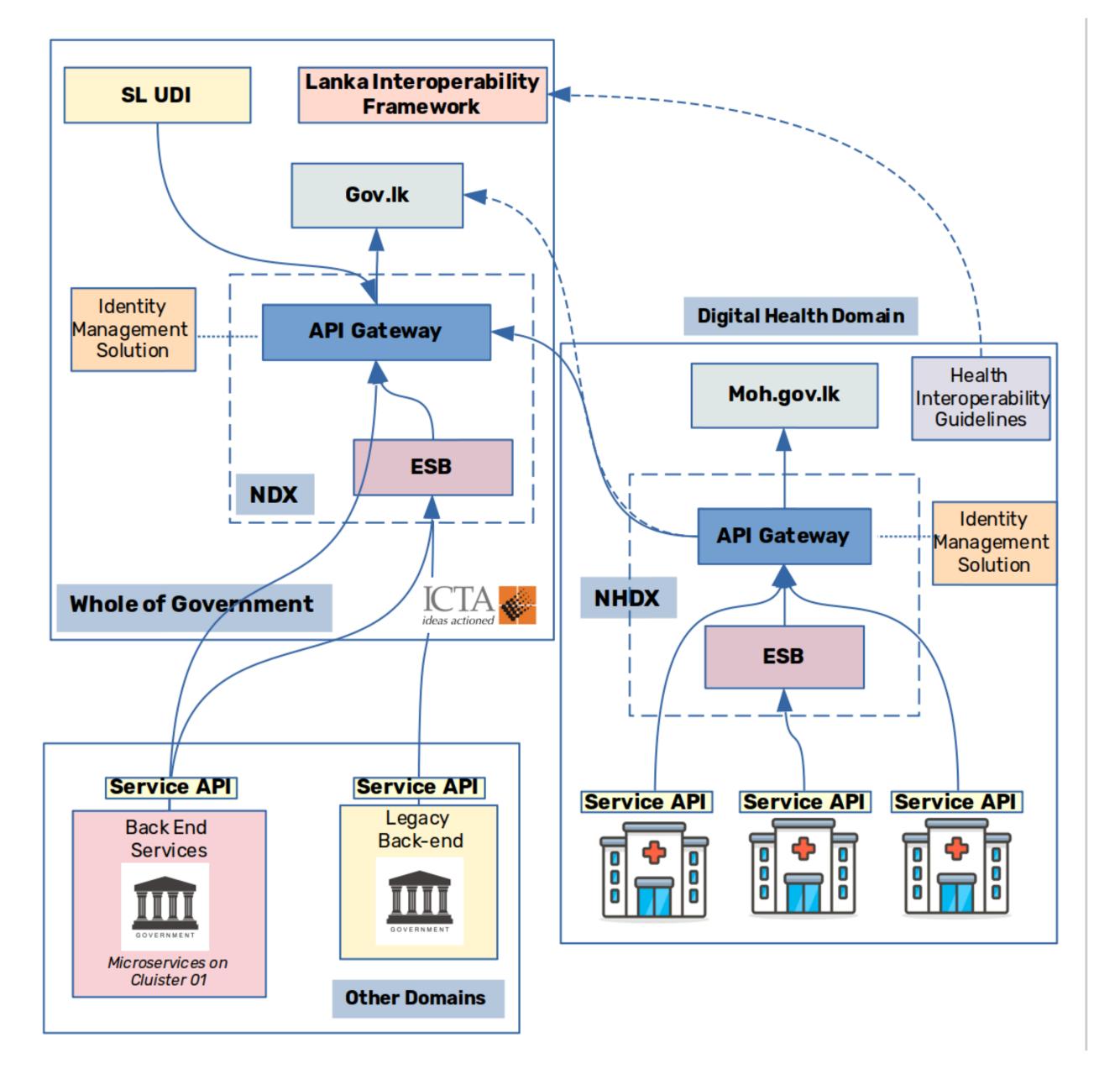






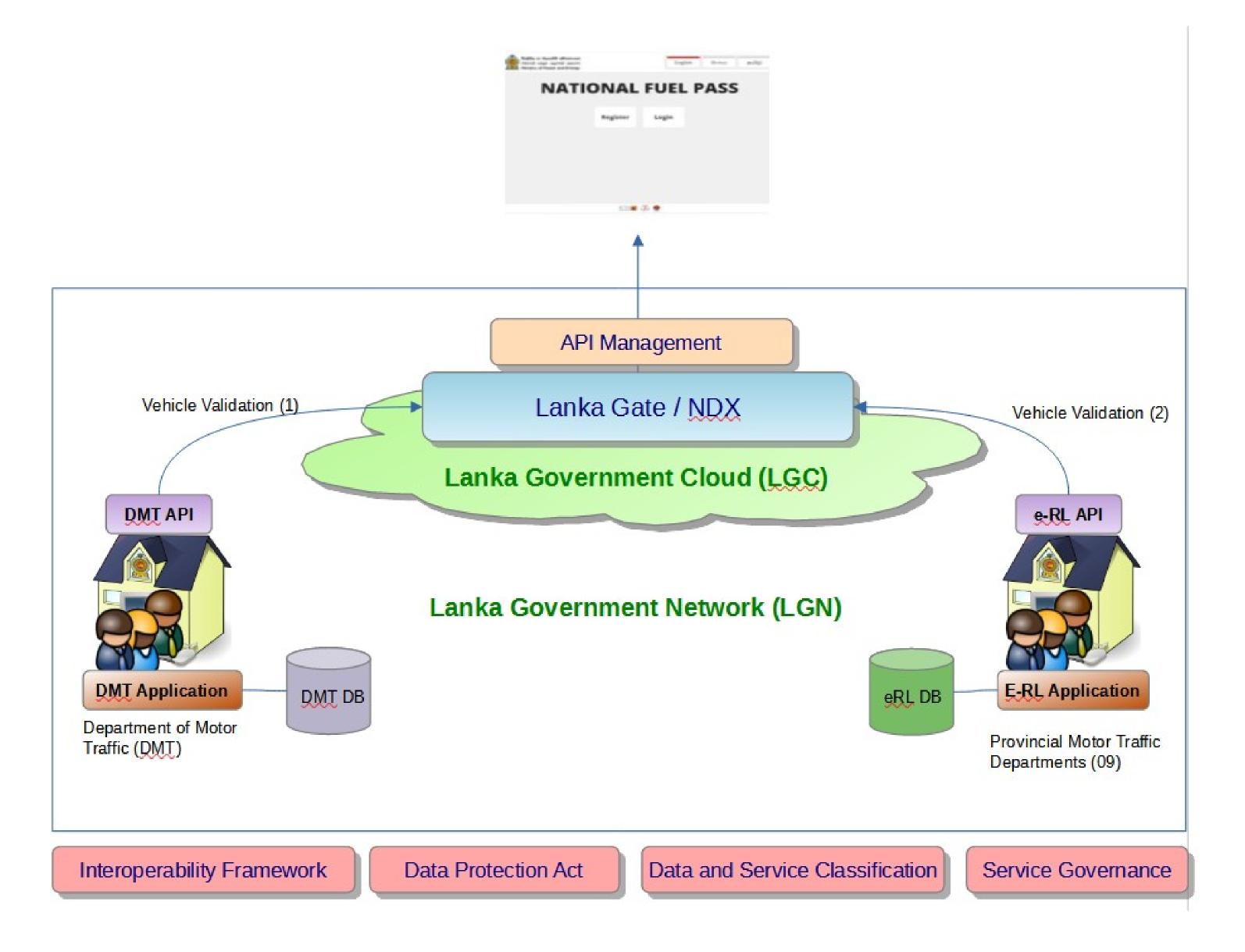


#### CASE STUDY - DIGITAL HEALTH





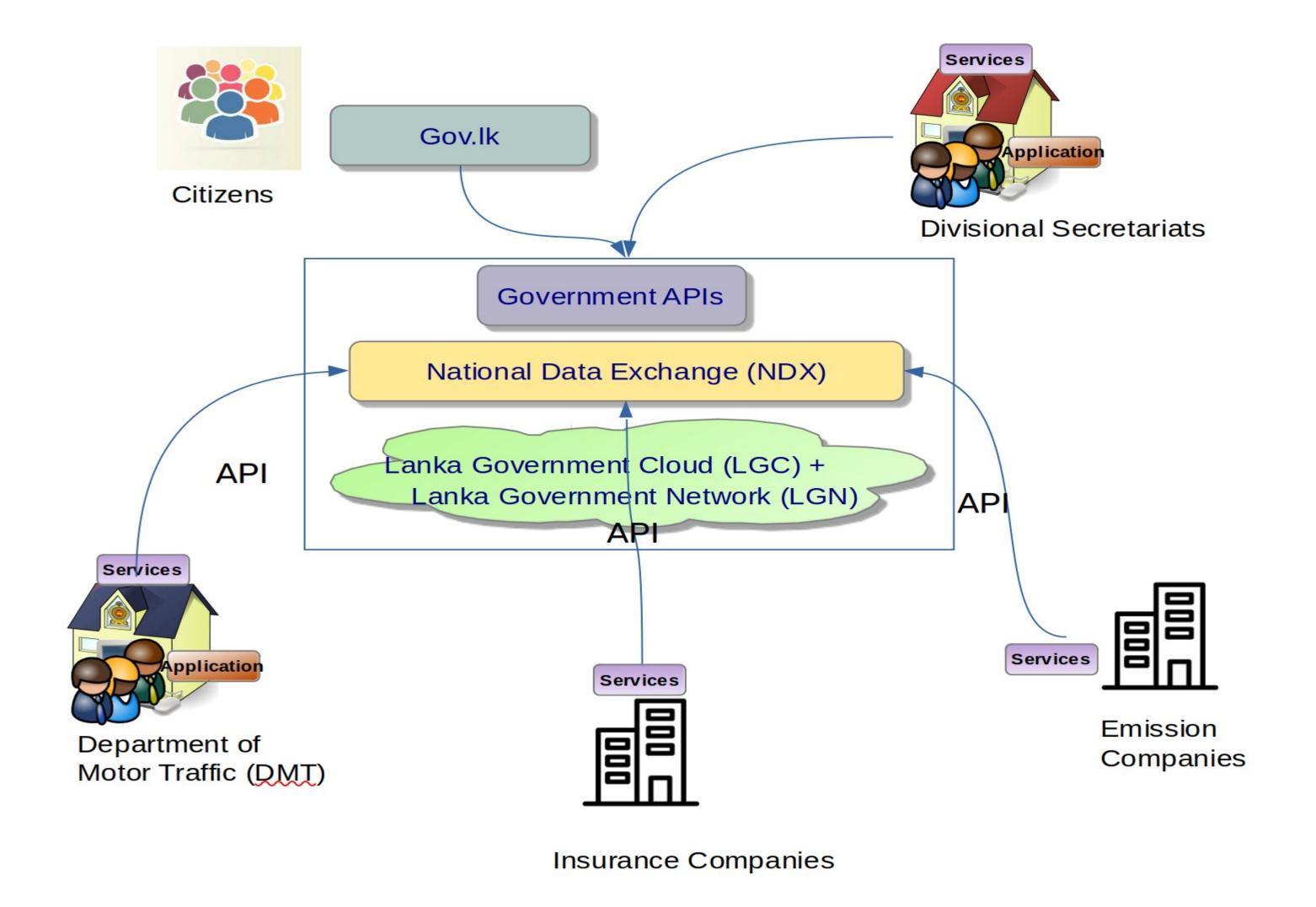
#### CASE STUDY - NATIONAL FUEL PASS







#### CASE STUDY - REVENUE LICENSE





#### API ECONOMY IS DIGITAL ECONOMY





#### **GOVERNMENT INTEROPERABILITY**

### 1. Technical Interoperability

Definitions of Interfaces, Data Formats, Protocols, Standards

### 3. Organizational Interoperability

Is concerned with modeling business processes, aligning information architectures with organizational goals, and helping business processes to cooperate

# 2. Semantic Interoperability

Ensures the precise meaning of Exchanged information is understandable By any other application not initially Developed for this purpose.

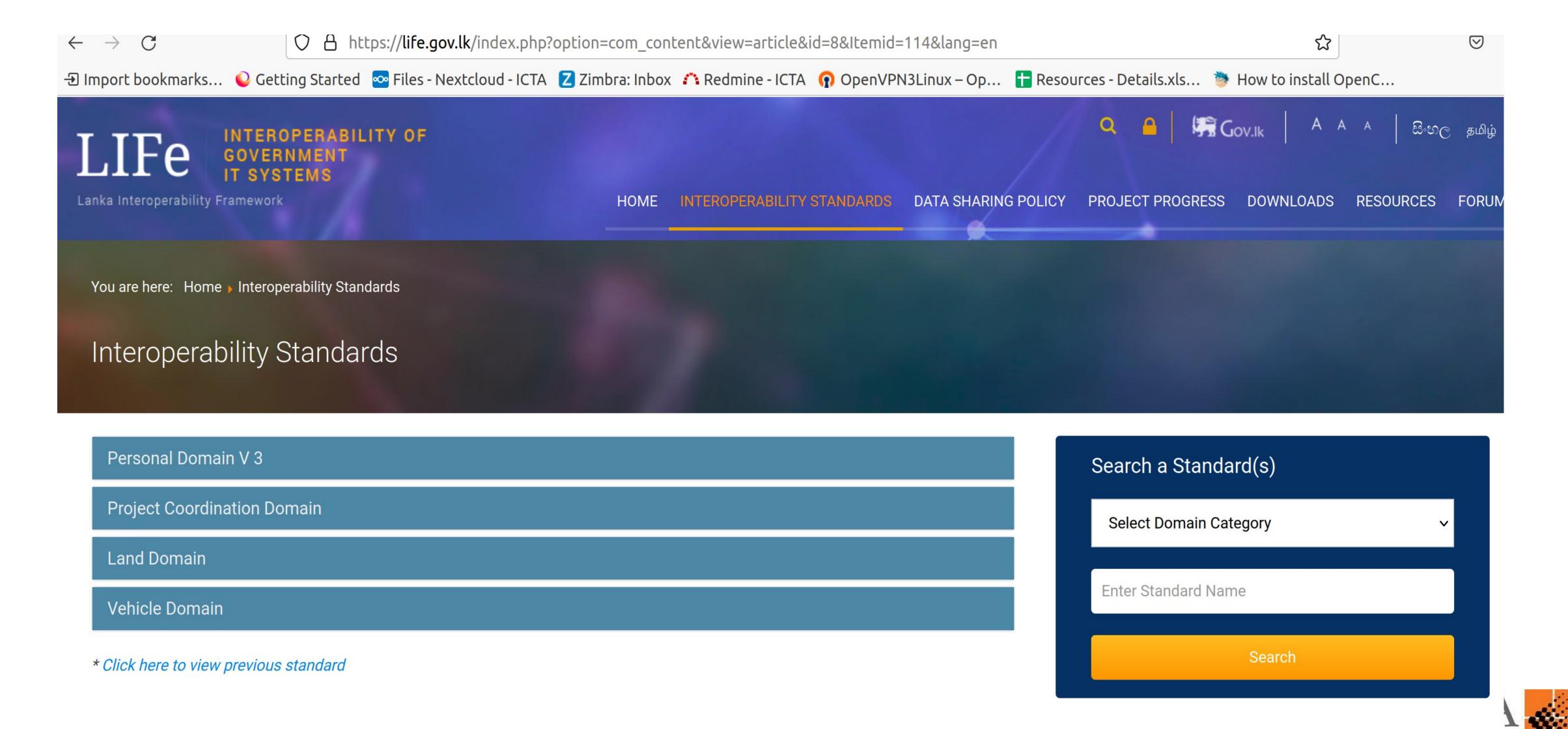
## 4. Legal Interoperability

is about ensuring that organizations operating under different legal frameworks, policies and strategies can work together

Source: European Interoperability Framework



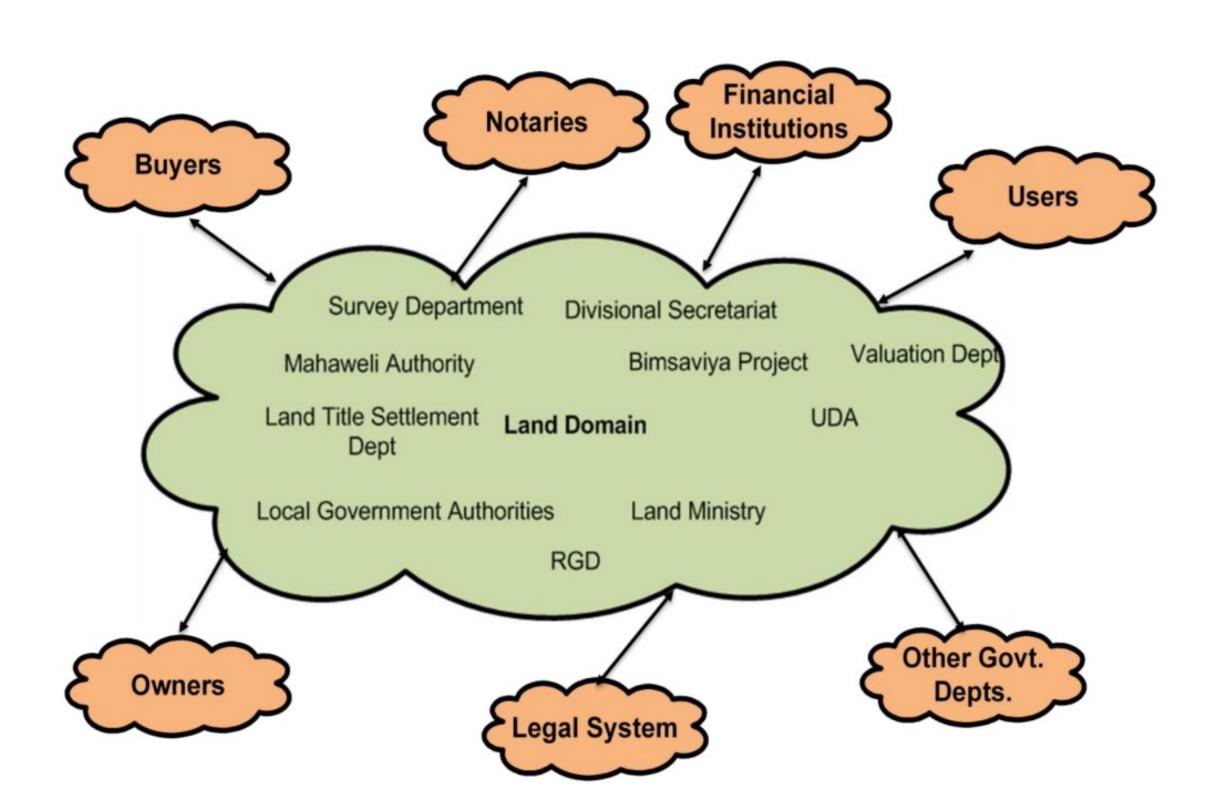
#### LANKA INTEROPERABILITY FRAMEWORK (LIFE)



ideas actioned

#### LIFE STANDARDS - THE IMPORTANCE

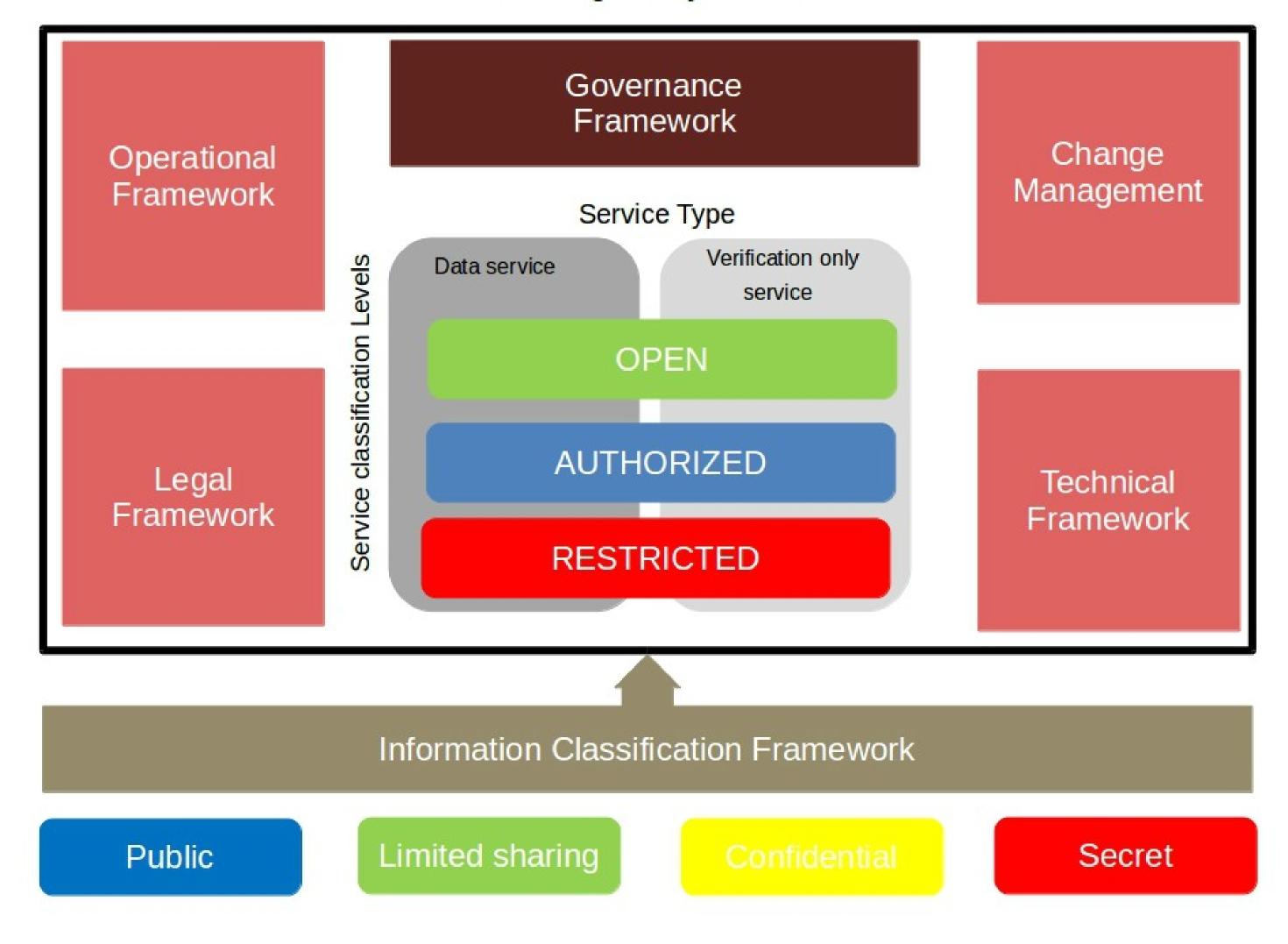
- To ensure data is not captured in multiple locations
- To ensure data captured has a single owner
- To ensure data is always current and accurate
- To ensure the data is shared only with other authorized systems
- To ensure the shared data could be easily understood and used.





#### DATA GOVERNANCE - DATA SHARING POLICY FRAMEWORK

Data Sharing Policy Framework





#### DATA GOVERNANCE - PERSONAL DATA PROTECTION ACT



# PARLIAMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

PERSONAL DATA PROTECTION ACT, No. 9 OF 2022

[Certified on 19th of March, 2022]

Printed on the Order of Government



#### REFERENCES

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- TOGAF 9.2 Documentation : https://pubs.opengroup.org/architecture/togaf92-doc/arch/index.html
- Sri Lanka Government Foundation Architecture: https://www.icta.lk/digital-infrastructure/
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#### Thank You

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