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Department of  
Economic and  
Social Affairs

Division For Public Institutions And Digital Government  
National Data Governance Framework for Sierra Leone



# Sierra Leone Data Governance Framework

## Baseline Study Findings

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# Country Development Overview



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- Analysis Framework
  - Introduction
  - Pillars and Elements
- Research Findings
- SWOT Analysis





# Sierra Leone Development Overview

## Open Government: Progress

- Sierra Leone has sustained Middle OGD status
- Establishing the structural and legal foundations for a comprehensive Open Data Initiative;
- Strengthening mechanisms for enhanced institutional engagement with local authorities
- Setting up regulatory sandboxes in digital technologies

## Recent Trends

Open Government Development Index		
Year	OGDI Group	OGD Index
2022	Middle OGDI	0.3718
2020	Middle OGDI	0.6271

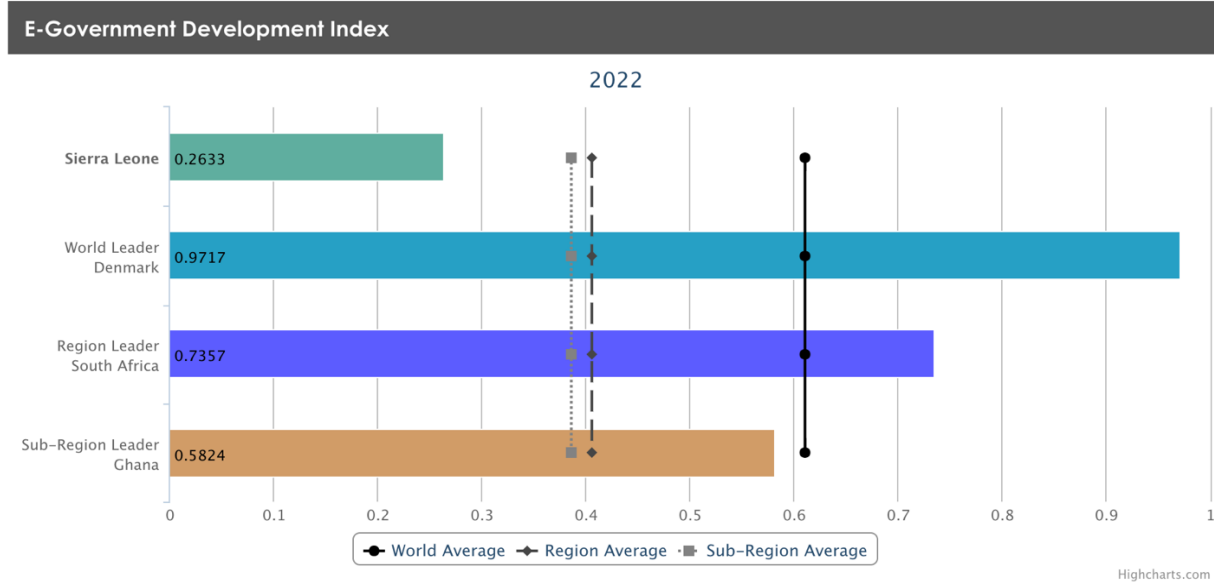
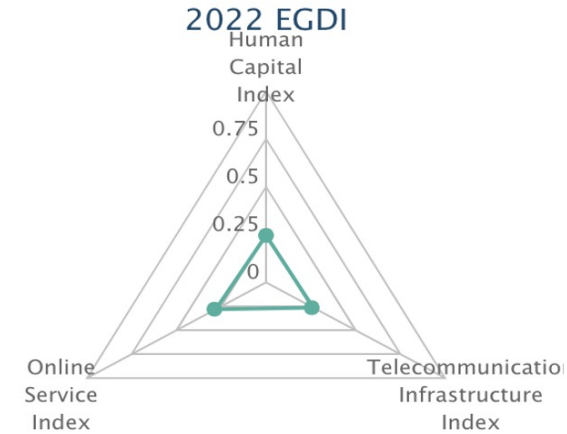
Open Data Inventory Rankings		
Year	ODIN Score	Global Rank
2022	49	102/195
2020	41	128/195



# Sierra Leone Development Overview

## E: Government: Progress

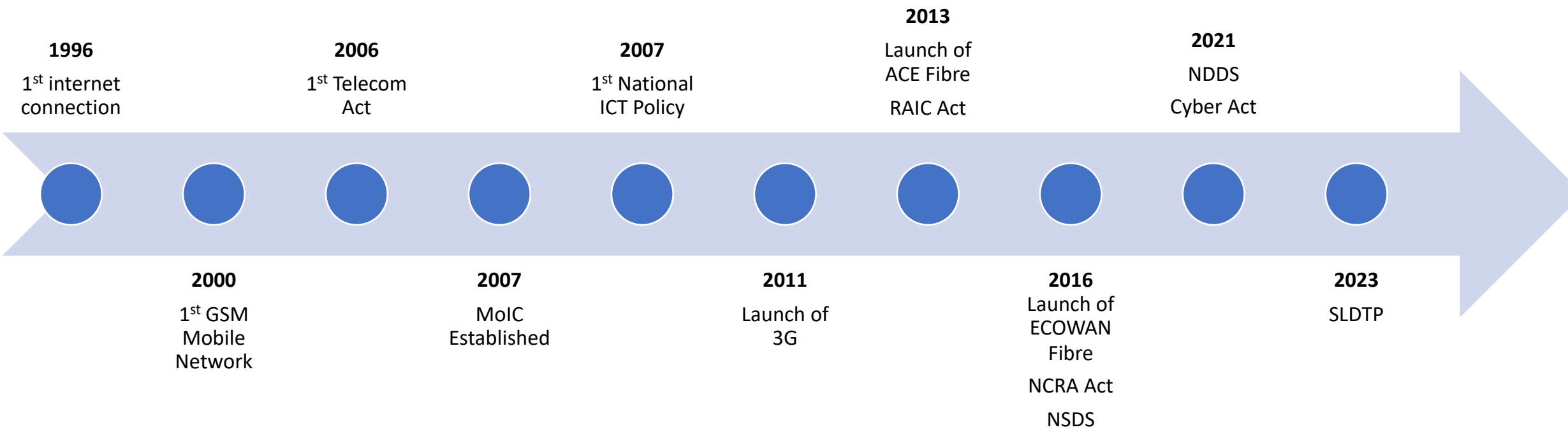
- Sierra Leone has a clear agenda for improving the e-Government landscape
- Strengthening institutional frameworks for e-Government development
- Sierra Leone has remained below sub-region average of the UN's EDGI
- Global ranking 185/193



E-Government Development Index	2022	2020	2018	2016	2014	2012	2010	2008	2005	2004	2003
Sierra Leone (Rank)	185	174	174	186	186	186	177	178	167	161	167
Sierra Leone (Value)	0.26330	0.29310	0.27170	0.15942	0.13286	0.15568	0.16973	0.14630	0.16390	0.17202	0.12626



# Sierra Leone Digital and Open Data Journey





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# Data Governance Analysis Framework

# Pillar-Mapping of Data Governance Elements



<b>Elements</b> → <b>Pillars</b> ↓	<b>Data Standards and Classification</b>	<b>Data Sharing, Exchange and Interoperability</b>	<b>Data Security</b>	<b>Data Privacy</b>	<b>Link with Personal ID</b>
<b>Policy</b>					
<b>Institutions</b>					
<b>People</b>					
<b>Processes</b>					





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# Desk Review Results



**Mapping of National Data Governance Related Documents with Pillars and Elements**

Policy Document	Type	Pol	Inst	Peo	Pro	DS&C	DSE&I	DS	DP	DI	DLPI
Statistics Act 2002	Legislation	Y	Y	P	P	●	●	●	●	●	●
Rights to Access Information Act 2013	Legislation	Y	Y	P	P	●	●	●	●	●	●
National Strategy for Development of Statistics	Policy/Strategy	Y	Y	P	N	●	●	●	●	●	●
National Civil Registrations Act 2016	Legislation	Y	Y	P	N	●	●	●	●	●	●
National Records and Archives Act 2017	Legislation	Y	P	P	N	●	●	●	●	●	●
Sierra Leone Open Data Policy 2017	Policy/Strategy	Y	P	N	N	●	●	●	●	●	●
National ICT Policy 2017	Policy/Strategy	P	P	N	N	●	●	●	●	●	●
National Digital Health Strategy (2018-23)	Policy/Strategy	Y	Y	P	N	●	●	●	●	●	●
Electronic Transactions Act 2019	Legislation	Y	P	P	N	●	●	●	●	●	●
National Innovation and Digital Strategy 2019	Policy/Strategy	P	N	N	N	●	●	●	●	●	●
National Digital Development Policy 2020	Policy/Strategy	P	P	N	N	●	●	●	●	●	●
Cybersecurity and Crime Bill 2021	Legislation	Y	P	P	N	●	●	●	●	●	●
National Communications Act 2022	Legislation	Y	Y	P	N	●	●	●	●	●	●
Sierra Leone Digital Health Roadmap 2024	Policy/Strategy	Y	Y	P	N	●	●	●	●	●	●
Open Government Partnership Action Plan	Policy/Strategy	Y	P	N	N	●	●	●	●	●	●



### **Pillar-Element Mapping: Institutions**

<b>Name of Institution</b>	<b>Type</b>
Min. of Comm, Tech & Innovation	Policy/Strategy
Min. of Info. & Civic Education	Policy/Strategy
Statistics Sierra Leone	Implementation
National Communications Authority	Regulation
National Civil Registration Authority	Delivery
National Social Security & Insurance Trust	Implementation
Right to Access Information Commission	Implementation
Universal Access Development Fund	Implementation
National Council for Civic Education & Dev.	Implementation
Department of Science, Technology & Innov.	Policy/Strategy

The listed institutions are national level institutions

Other sector level institutions and local Government also involved in data management

The private sector also involved in data Management



**Pillar-Element Mapping: People**

Position or Title	Type
Min. of Comm, Tech & Innovation	Political Leadership
Minister of Info. & Civic Education	Political Leadership
Statistician General	Administrative Leadership
Director General NATCA	Administrative Leadership
Director General, NCRA	Administrative Leadership
Director General, NASSIT	Administrative Leadership
Chairman, RAIC	Administrative Leadership
CEO, UADF	Techical/Professional Leadership
Chairmain, NACCED	Techical/Professional Leadership
Director, DSTI	Techical/Professional Leadership
National Cybersecurity Coordinator	Techical/Professional Leadership

The listed persons are national level leaders

Other sector level leadership and local Government also involved in data governance

The private sector leaders also involved in data governance



## Ongoing Digital Development Processes

**World Bank**

Sierra Leone Digital Transformation Programme (SLDTP)

**GPSDD**

Global Partnership for Sustainable Development Data

**OGP**

Open Government Partnerships

**Multi-Partner**

UNCT, Digital Impact Alliance, Smart Africa, ECOWAS, African Union



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# Survey and Interview Findings



**56**

**Questionnaires issued**

**39**

**Responses Received**

	75% or more Responded Yes or Partially
	Up to 50% Responded Yes or Partially
	Up to 25% Responded Yes or Partially
	Less than 25% Responded Yes or Partially



## Pillar-Element Mapping: Data Standards and Classification

Pillars/Processes	DS&C	DSE&I	DS	DP	DI	DLPI
Policy						
Institutions						
People						
Processes						





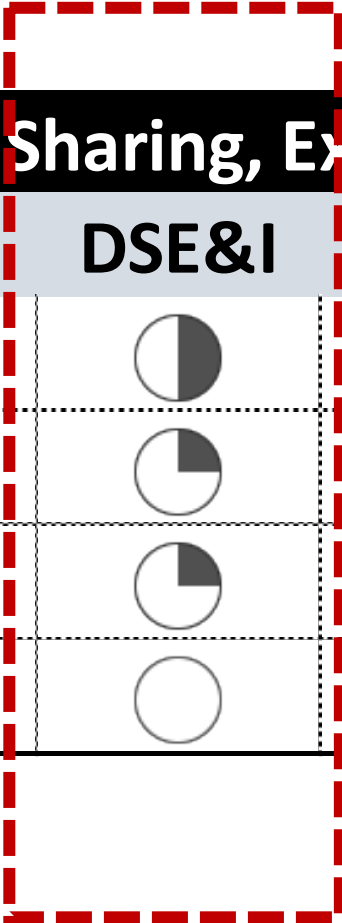
# Data Standardisation and Classification

Policies	Institutions
<ul style="list-style-type: none"> <li>Existing but largely outdated and relatively incomplete legal, regulatory and policy frameworks for data standardisation and classification</li> <li>Lack of clear internal policies on data classification and standardisation</li> <li>No evidence of documented data formats and structures</li> </ul>	<ul style="list-style-type: none"> <li>Statistics SL is the principal institution for national data management</li> <li>SSL’s mandate has not evolved into clearly handling universal data standardisation governance and is primarily in data management</li> <li>Most institutions do not have internal units with data standardisation and classification responsibilities</li> </ul>
People	Processes
<ul style="list-style-type: none"> <li>Limited Government MDAs have specialised internal data management personnel, with focus on statistical data</li> <li>No evidence of designated persons with responsibility for data classification or standardisation</li> </ul>	<ul style="list-style-type: none"> <li>With the exception of SSL, almost all MDAs do not have clearly defined processes for data classification and standardisation</li> </ul>



## Pillar-Element Mapping: Data Sharing, Exchange and Interoperability

Pillars/Processes	DS&C	DSE&I	DS	DP	DI	DLPI
Policy						
Institutions						
People						
Processes						





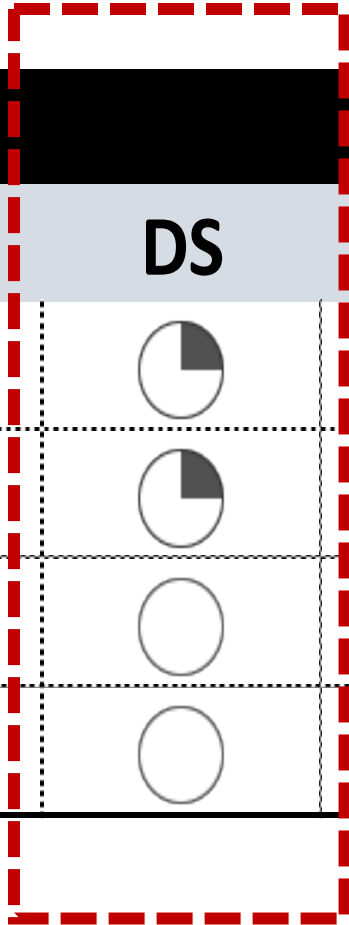
# Data Sharing and Interoperability

Policies	Institutions
<ul style="list-style-type: none"> <li>• Most MDAs have some form of policy to share data, especially with other Government MDAs</li> <li>• Most MDAs are familiar with provisions of RAI requirements to disclosure and data sharing</li> <li>• Because many MDAs do not have digital data storage systems, the question of interoperability hardly occurs</li> </ul>	<ul style="list-style-type: none"> <li>• There are no internal organs or units in almost all MDAs that handling data sharing functions</li> <li>• NCRA and RAIC are the leading Government institution that established organs that handle data sharing functions</li> <li>• NCRA and the MOH have established digital systems that support electronic data sharing</li> </ul>
People	Processes
<ul style="list-style-type: none"> <li>• Limited Government MDAs have personnel, with the mandate and capacity to effectively handle data sharing</li> <li>• No evidence of designated persons with responsibility for data sharing</li> </ul>	<ul style="list-style-type: none"> <li>• NCRA has signed MoUs with many MDAs for sharing and exchange of data. The processes are still in development stages</li> <li>• Across most MDAs there are no clearly defined processes for requesting, sharing or exchanging data between Government bodies</li> <li>• The processes for RAI are also not very clear</li> </ul>



### Pillar-Element Mapping: Data Security

Pillars/Processes	DS&C	DSE&I	DS	DP	DI	DLPI
Policy						
Institutions						
People						
Processes						





# Data Security and Protection

## Policies

- Existing national laws on cybersecurity, with provisions aimed at preventing and combating cybercrime
- Lack of clear internal policies on how to achieve and ensure data security/protection for Government institutions
- No evidence of documented data security policies and measures

## Institutions

- NCCC is the principal institution for national cybersecurity measures
- NCCC’s mandate in governing data security at individual organisational levels is not clearly defined in the Act
- The NCCC’s current mandate focuses on cybercrime more than data security and protection
- Most institutions do not have internal units with data security and protection responsibilities

## People

- Limited Government MDAs have specialised internal personnel with capacity to manage digital data security and protection measures
- No evidence of designated persons with responsibility for data security and protection

## Processes

- The ICT cadre within most MDAs apply some measures aimed at wider IT systems security
- There are not clearly defined processes superficially focused on data security and protection



## Pillar-Element Mapping: Data Privacy

Pillars/Processes	DS&C	DSE&I	DS	DP	DI	DLPI
Policy						
Institutions						
People						
Processes						



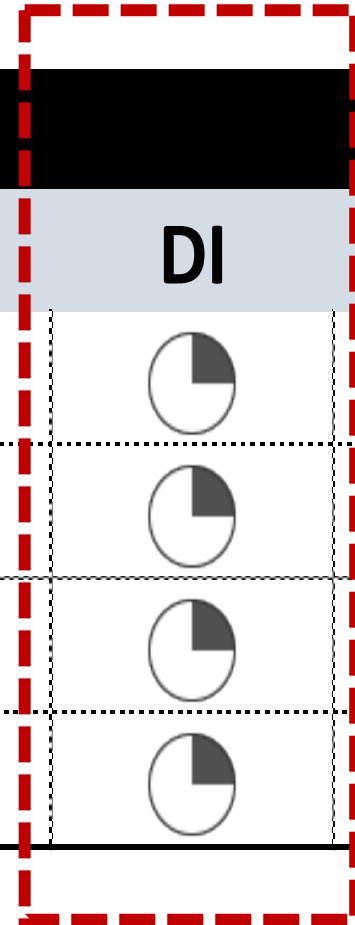
# Data Privacy

Policies	Institutions
<ul style="list-style-type: none"> <li>• There are no laws or national policies focused on data privacy; data privacy practices are arbitrary and selective</li> <li>• Lack of clear internal policies among MDAs on how to achieve and ensure data privacy for PII</li> <li>• No evidence of documented data privacy policies and measures</li> </ul>	<ul style="list-style-type: none"> <li>• There is not nationally recognised institution that is legally responsible for defining governance frameworks for data privacy</li> <li>• Most institutions do not have internal units with data privacy responsibilities</li> </ul>
People	Processes
<ul style="list-style-type: none"> <li>• Limited Government MDAs have specialised internal personnel with capacity to manage data privacy measures</li> <li>• No evidence of designated persons with responsibility for data privacy compliance monitoring</li> </ul>	<ul style="list-style-type: none"> <li>• Most organisations implement data privacy measures by refusal to grant access to or share PII data, rather than implement measures that allow consensual access</li> <li>• There are not clearly defined processes superficially focused on data privacy compliance and monitoring</li> </ul>



## Pillar-Element Mapping: Data Infrastructure

Pillars/Processes	DS&C	DSE&I	DS	DP	DI	DLPI
Policy						
Institutions						
People						
Processes						







# Data Infrastructure

## Policies

- The National Digital Development Policy of 2021 provides a framework for whole-of-government data infrastructure development
- The ***Sierra Leone Digital Transformation Project*** includes activities aimed at improving the policy framework for digital data infrastructure
- Other ongoing interventions seek to improve data infrastructure in Government

## Institutions

- The MoCTI is the principal institution for national Government data infrastructure governance
- Most Government MDAs have designated ICT Units that handle digital and data infrastructure
- There are ongoing discussions about the establishment of a National Digital Development Agency to improve effectiveness in national data infrastructure management

## People

- The Communications Director within the MoCTI takes technical and professional leadership on digital infrastructure across Government
- There is an ICT cadre across Government, which embeds designated ICT Officers within Government institutions at national and local government levels

## Processes

- There are processes in place for data infrastructure policy implementation at individual level
- However, there is little evidence of how national level policies cascade to sector institution levels and how the infrastructure management at these levels are nitored



## Pillar-Element Mapping: Linking Data with National ID

Pillars/Processes	DS&C	DSE&I	DS	DP	DI	DLPI
Policy						
Institutions						
People						
Processes						



# Linking Data to Personal ID

Policies	Institutions
<ul style="list-style-type: none"> <li>The National Civil Registration Act of 2016 provides a framework for registration of citizens and residents, establishment of an integrated national civil registration system and sharing of data sharing and interactions with other digital information systems</li> <li>Recent policy announcements that require mandatory linking of national ID numbers to Government services</li> </ul>	<ul style="list-style-type: none"> <li>The NCRA is the principal institution for national civil registration and management of personal ID and serve as the single source of ‘root-identity’</li> <li>Very few Government agencies have recently adopted internal policies that require linking national ID to services and institutional data</li> </ul>
People	Processes
<ul style="list-style-type: none"> <li>The Director General NCRA is mandated by law to lead day-to-day administration of the institution</li> <li>Some Government Agencies have designated personnel to ensure compliance with these policies, while many still do not have</li> </ul>	<ul style="list-style-type: none"> <li>While some Government agencies are now making it a requirement to present National ID before receiving services, there are no clear processes of and logical framework for linking institutional data with national ID</li> </ul>



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# Country SWOT Analysis



## Strengths

- An understanding of data governance, with a clear vision and objectives for improving e-Government
- Recognition of need for a whole-of-government approach and coordination in digital governance.
- Visible political leadership and institutional framework in digital development.
- Government invested in substantial fibre optic cable network – a key driver of national digital data
- Ambition to take global leadership in the design and implementation of these data infrastructure systems using state-of-the-art technologies in collaboration with both established global companies and regional start-ups.

## Challenges

- Lack of functional coordinated actions at sectoral and national levels for data governance.
- Absence of dedicated data governance practice leaders or stewardship at institutional as well as sector or national level
- Lack of legislation for data privacy and data protection legal frameworks
- Lack of awareness among the populace on the principles of data privacy, security
- Limited capacity to operational open data laws and policies
- Cybersecurity pays greater focus on criminal enforcement than security measures



Opportunities	Threats
<ul style="list-style-type: none"> <li>• Strong commitments from World-Bank-IDA to support data infrastructure within Government</li> <li>• International capacity-building support such as from Global Cybersecurity Capacity Centre (GSCCC) , ITU, and Foreign and Commonwealth Office.</li> <li>• Various African countries and regional institutions, including the AU, ECOWAS MRU have policies on ICT, e-governance, and digitization, which can be domesticated Sierra Leone</li> <li>• Collaboration with both established global companies and regional start-ups.</li> </ul>	<ul style="list-style-type: none"> <li>• Gaps in funding levels to match investment requirements</li> <li>• Lack of other underpinning and ancillary technologies such as electricity, broadband and data storage</li> <li>• Low purchasing power of the population, constraining access to reliable, uninterrupted internet services</li> <li>• Vulnerabilities for cyber-attacks – DDOS, Phishing, Identity Theft etc</li> </ul>



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