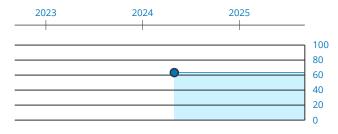


# 49. Ghana 63.33

Population 33.8 million Area (km²) **238.5** thousand GDP per capita (\$) 7.5 thousand

49<sup>th</sup> National Cyber Security Index N/A Global Cybersecurity Index 108<sup>th</sup> E-Government Development Index |||||||||||| 63 % 87th Network Readiness Index |||||||| 44 %

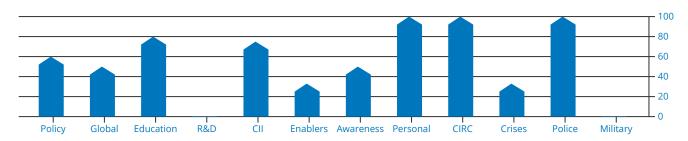
## NCSI DEVELOPMENT TIMELINE







#### NCSI FULFILMENT PERCENTAGE



## STRATEGIC CYBERSECURITY INDICATORS

# 1. CYBERSECURITY POLICY

- 1.1. High-level cybersecurity leadership
- 1.2. Cybersecurity policy development
- 1.3. Cybersecurity policy coordination
- 1.4. National cybersecurity strategy

# (60%) 3 0 3 3

3

3

2

1.5. National cybersecurity strategy action plan 0

# 2. GLOBAL CYBERSECURITY CONTRIBUTION

- 2.1. Cyber diplomacy engagements
- 2.2. Commitment to international law in cyberspace
- 2.3. Contribution to international capacity building in cybersecurity

# (50%) 0 (3) 1

# 3. EDUCATION AND PROFESSIONAL DEVELOPMENT

- 3.1. Cyber safety competencies in primary education
- 3.2. Cyber safety competencies in secondary education
- 3.3. Undergraduate cybersecurity education
- 3.4. Graduate cybersecurity education
- 3.5. Association of cybersecurity professionals



#### 4. CYBERSECURITY RESEARCH AND DEVELOPMENT

- 4.1. Cybersecurity research and development programmes
- 4.2. Cybersecurity doctoral studies



# PREVENTIVE CYBERSECURITY INDICATORS

5. CYBERSECURITY OF CRITICAL INFORMATION INFRASTRUCTURE	•		9 — (12)	(75%)
5.1. Identification of critical information infrastructure	•	3		
5.2. Cybersecurity requirements for operators of critical information	•	3		
infrastructure				
5.3. Cybersecurity requirements for public sector organisations	0	3		
5.4. Competent supervisory authority		3		
6. CYBERSECURITY OF DIGITAL ENABLERS	•	4		(33%)
6.1. Secure electronic identification	•	2		
6.2. Electronic signature	•	2		
6.3. Trust services	0			
6.4. Supervisory authority for trust services	0			
6.5. Cybersecurity requirements for cloud services	0			
6.6. Supply chain cybersecurity	0	2		
7. CYBER THREAT ANALYSIS AND AWARENESS RAISING		6	(12)	(50%)
7.1. Cyber threat analysis		3		(5070)
7.2. Public cyber threat reports	0	3		
7.3. Public cybersecurity awareness resources	· ·	3		
7.4. Cybersecurity awareness raising coordination	0	3		
		3)		
8. PROTECTION OF PERSONAL DATA	•		4	(100%)
8.1. Personal data protection legislation	•	2		
8.2. Personal data protection authority	•	2		
RESPONSIVE CYBERSECURITY INDICATORS				
9. CYBER INCIDENT RESPONSE	•		14	(100%)
9.1. National incident response capacity	•	3		
9.2. Incident reporting obligations	•	3		
9.3. Cyber incident reporting tool	•	2		
9.4. Single point of contact for international cooperation	•	3		
9.5. Participation in international incident response cooperation	•	3		
10. CYBER CRISIS MANAGEMENT	•	3		(33%)
10.1. Cyber crisis management plan	0			
10.2. National cyber crisis management exercises		3		
10.3. Participation in international cyber crisis exercises	0	2		
10.4. Operational crisis reserve	0			
11. FIGHT AGAINST CYBERCRIME			16	(100%)
11.1. Cybercrime offences in national law		3		(10070)
11.2. Procedural law provisions		3		
11.3. Ratification of or accession to the Convention on Cybercrime		2		
11.4. Cybercrime investigation capacity		3		
11.5. Digital forensics capacity		2		
11.6. 24/7 contact point for international cybercrime		3		
		3		
12. MILITARY CYBER DEFENCE	0		6	(0%)
12.1. Military cyber defence capacity	0	2		
12.2. Military cyber doctrine	0	2		
12.3. Military cyber defence exercises	0	2		



NCSI is held and developed by e-Governance Academy Foundation Company code: 90007000

Rotermanni 8 10111 Tallinn Estonia P: +372 663 1500 E: ncsi@ega.ee W: www.ega.ee