Economic and Social Commission for Western Asia

The Arab Cybersecurity Strategy (ACSS)

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Workshop on Building Trust in Digital Government Services, Beirut, 11-12 September 2023



Summary









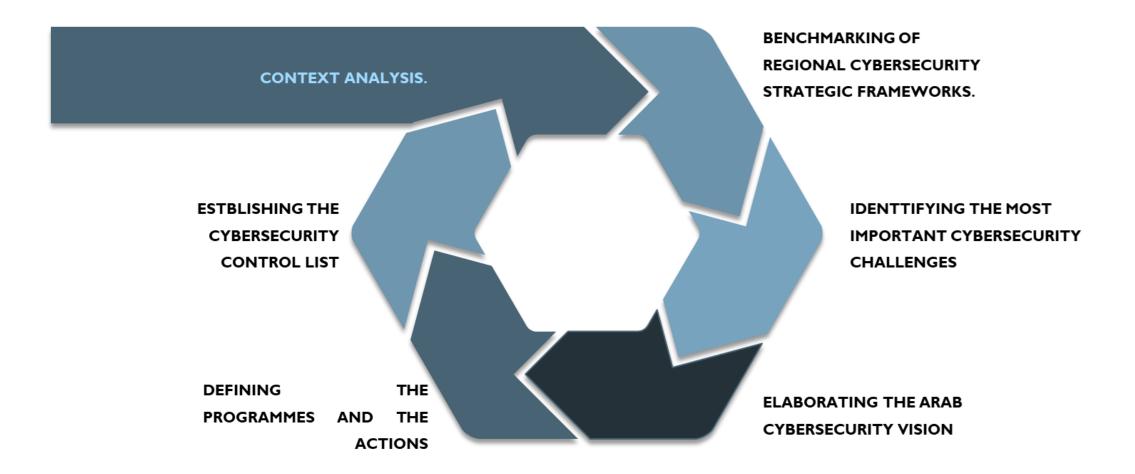




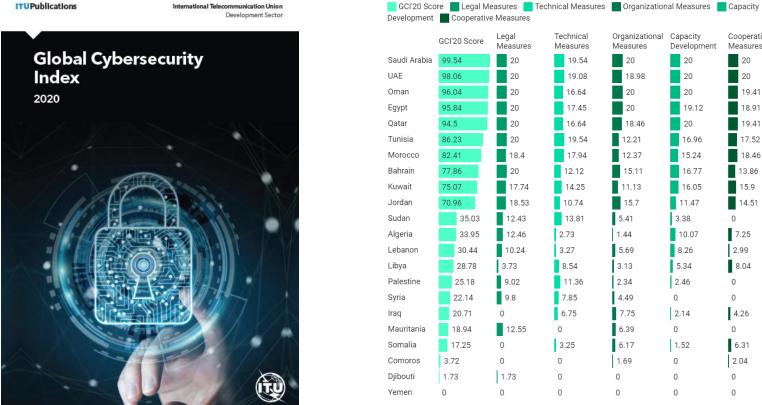




The Methodology



The Context: Cybersecurity in the Arab Region



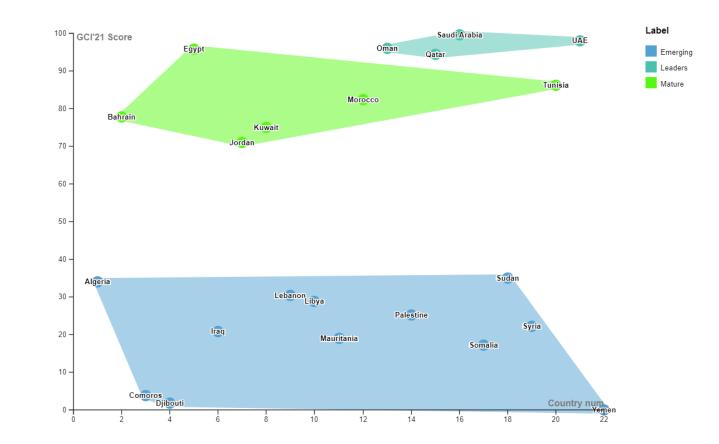
Development	Cooperative Measures										
	GC	l'20 Score			Technical Measures		ganizational asures		pacity velopment		operative easures
Saudi Arabia	99	9.54		20	19.54		20		20		20
UAE	98	3.06		20	19.08		18.98		20		20
Oman	96	5.04		20	16.64		20		20		19.41
Egypt	9	5.84		20	17.45		20		19.12		18.91
Qatar	94	4.5		20	16.64		18.46		20		19.41
Tunisia	8	5.23		20	19.54		12.21		16.96		17.52
Morocco	82	2.41		18.4	17.94		12.37		15.24		18.46
Bahrain	7	7.86		20	12.12		15.11		16.77		13.86
Kuwait	7	5.07		17.74	14.25		11.13		16.05		15.9
Jordan	70	0.96		18.53	10.74		15.7		11.47		14.51
Sudan		35.03		12.43	13.81	5	.41	3	.38	0	
Algeria		33.95		12.46	2.73	1.	44		10.07		7.25
Lebanon		30.44		10.24	3.27	5	.69	8	3.26	2	.99
Libya		28.78	3	.73	8.54	3.	.13	5	5.34		8.04
Palestine		25.18		9.02	11.36	2.	34	2	.46	0	
Syria		22.14		9.8	7.85	4	.49	0		0	
Iraq		20.71	0		6.75	7	.75	2	.14	4	1.26
Mauritania		18.94		12.55	0	6	.39	0		0	
Somalia		17.25	0		3.25	6	.17	1.	.52	6	5.31
Comoros	3	.72	0		0	1.	69	0		2	.04
Djibouti	1	.73	1	.73	0	0		0		0	
Yemen	0		0		0	0		0		0	

The Context: GCI-based classification

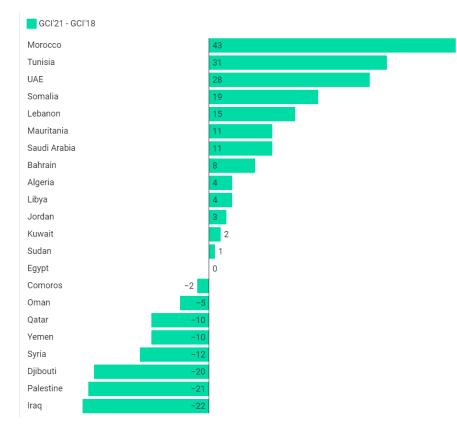
Algeria	33.95	104
Bahrain	77.86	60
Comoros	3.72	175
Djibouti	1.73	179
Egypt	95.84	23
Iraq	20.71	129
Jordan	70.96	71
Kuwait	75.07	65
Lebanon	30.44	109
Libya	28.78	113
Mauritania	18.94	133
Morocco	82.41	50
Oman	96.04	21
Palestine	25.18	122
Qatar	94.5	27
Saudi Arabia	99.54	2
Somalia	17.25	137
Sudan	35.03	102
Syria	22.14	126
Tunisia	86.23	45
UAE	98.06	5
Yemen	0	182

GCI'21 Score

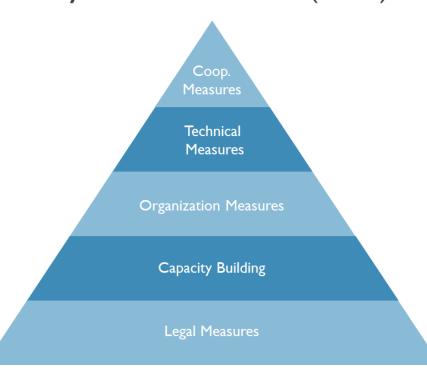
GCI'21 R



The Context: Differential GCI rank (2018-2020)



Key Success Factors (PCA)



Towards an Arab Cybersecurity Strategy

ECOWAS Regional Cybersecurity and Cybercrime Strategy

Motivation

CONS More rights for more people

Strengthening the Cyber Security Capacity of the Americas

The OAS Cyber Security Program

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EUROPEAN UNION AGENCY FOR CYBERSECURITY



NATIONAL CAPABILITIES ASSESSMENT FRAMEWORK

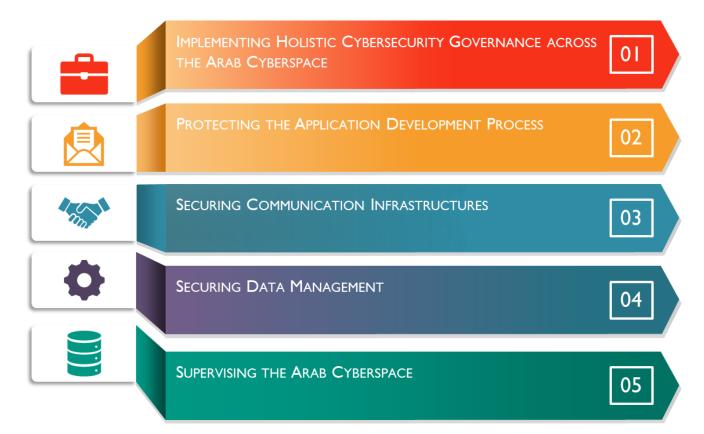
DECEMBER 2020

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Towards an Arab Cybersecurity Strategy

Motivation Sharing Threat 01 Information . Setting Common Cybersecurity Body of **03** Knowledge **02** Creating a Domestic Cybersecurity Marketplace

The Challenges



The Challenges



The Vision

"Towards a secure, safe, inclusive Arab society integrated into the global digital economy empowering self-sufficient solutions and expertise supporting digital confidence and trust within the Arab cyberspace."

The Programmes



WP7

DEVELOPING UNIFYING LEGAL MEASURES

WP6

SUPPORTING RESEARCH AND DEVELOPMENT IN CYBERSECURITY

WP5

ENHANCING THE MATURITY OF INSTITUTIONAL AND ADMINISTRATIVE STRUCTURES

WPI

DEVELOPMENT OF A UNIFYING CYBERSECURITY ASSESSMENT FRAMEWORK

WP2

PROMOTING TRAINING AND AWARENESSIN CYBERSECURITY

WP3

ESTABLISHMENT AND DEVELOPMENT OF A NATIONAL ARAB CSIRT

WP4

PROMOTING COMPLIANCE TO INTERNATIONAL STANDARDS

WP 1: Development of a Unifying Cybersecurity Assessment Framework Define common cybersecurity maturity levels and assessment methodology Elaborate the architecture of the regional cybersecurity framework Define target score assignment policy per function and category Design a cybersecurity scoring methodology

WP 2: Promoting Training and Awareness in Cybersecurity	Create cybersecurity curricula for institutions
	Create cybersecurity curricula for universities
	Develop course materials and deploy online
	courses
	Elaborate a regional cybersecurity awareness
	policy

WP 3: Establishment and Development of a National Arab CSIRT

Elaborate an inventory of the national and sectoral CSIRTs/CERTs/CIRTs Establish a coordination scheme between the stakeholders identified by the previous action

Define regional Incident Response Plans Identify the needs of the regional CSIRT in terms of human resources, HW/SW components, and funding Elaborate a roadmap for the regional Arab CISRT Create the Arab CSIRT

WP 4: Promoting Compliance to International Standards

Elaborate an inventory of the cybersecurity standards adopted in the region Identify synergies and compositions alternatives between the adopted standards Assess the gaps in terms of standard adoption and maturity Elaborate a roadmap for cybersecurity standard adoption Design and implement supervision mechcanisms for the standard adoption roadmap Elaborate an inventory of the cybersecurity 16 standards adopted in the region

WP 5: Enhancing the Maturity if Institutional and Administrative Structures

Define cybersecurity assessment policies for institutions and administrations Compile assessment results and identify gaps

Elaborate a strategy to improve the cybersecurity maturity of institutions and administrations Conduct continuous cybersecurity assessment to implement a sustainable vision

Define cybersecurity assessment policies for institutions and administrations Compile assessment results and identify gaps₁₇

WP 6: Supporting Research and Development in Cybersecurity	Analyse the impact of the advent of quantum computing on the secrecy of sensitive data in the Arab Cyberspace
	Promote the development of zero-trust solutions to address regional problems
	Facilitate research initiatives addressing the protection of data management and data mouvement
	Organize regional cybersecurity conferences
	Analyse the impact of the advent of quantum computing on the secrecy of sensitive data in the Arab Cyberspace

WP 7: Developing Unifying Legal Measures	Conduct a study of the Arab cybersecurity legislations Organise conferences to discuss the impact of cybersecurity innovation on regulatory frameworks Develop cybersecurity regulatory measures to levrage the regional digital economy
	Conduct a study of the Arab cybersecurity legislations

The Controls

04

GUIDELINES FOR SECURE SERVICE DEPLOYMENT

03

02

01

GUIDELINES FOR SECURE COMMUNICATION NETWORKS

Giving evidence-based assurance regarding the security capabilities of communication infrastructures. Elaborating shared controls enabling the implementation of context-aware security policies in dynamic environments.

GUIDELINES FOR SECURE APPLICATION DEVELOPMENT

Providing a common understanding of the requirements that should be followed by the different stakeholders involved in the application development pipelines.

GENERAL CYBERSECURITY GUIDELINES

Improving the ability of the cybersecurity architecture to identify, detect, protect, respond, and recover sensitive digital assets deployed on the Arab Cyberspace.

The Implementation





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