

### ITU Global Cybersecurity Index Overview

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#### ITU builds technical and human capacity in ICTs

ITU is the United Nations specialized agency for ICTs.

Founded in 1865, it works to facilitate international communications, ensure seamless interconnections, and improve ICT access to underserved communities worldwide. ITU is committed to connecting all the world's people —wherever they live and whatever their means.

193
MEMBER
STATES

+700

INDUSTRY & INTERNATIONAL ORGANIZATIONS

+150
ACADEMIA
MEMBERS

ITU works across three main areas:



ITU Development

Bridging the digital divide



ITU Radiocommunication

Coordinating radio-frequency spectrum and assigning orbital slots for satellites



ITU Standardization

Establishing global standards





## Cybersecurity is the biggest threat to the global economy over the next decade\*

33%

Increase in mobile ransomware 2018-2019\*\*

78%

Increase in supply chain attacks 2018-2019\*\*

0.8%

Of the global economy was lost due cybercrime in 2019, nearly \$600 billion. Cybercrime will result in a loss of \$90 trillion in net economic impact by 2030.

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\*Source: <u>EY</u>

\*\*Source: Symantec

\*\*\* Source: CSIS&McAfee



#### Why does cybersecurity matter for global trade?

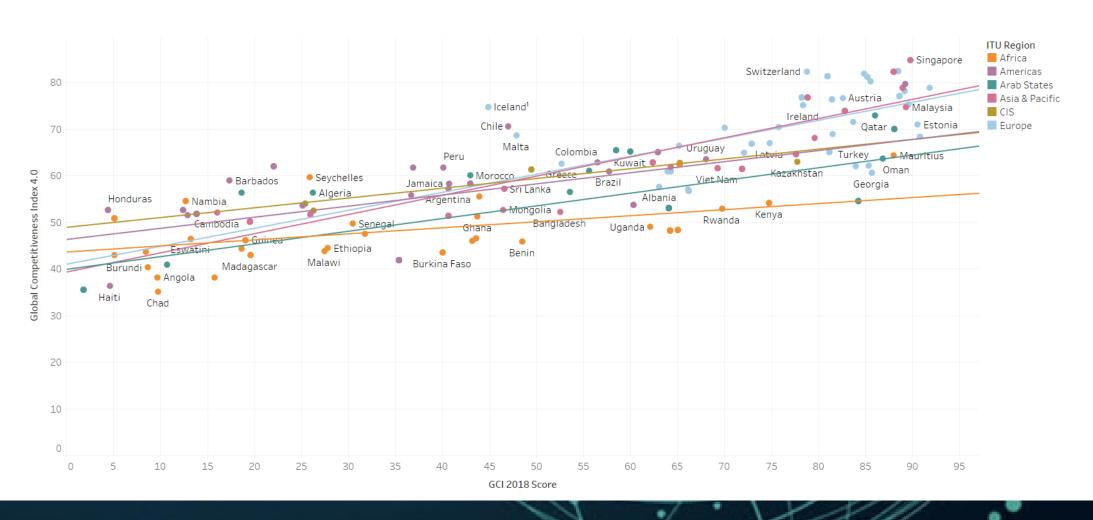
Trade is enabled by interoperability and trust

Examples of cybersecurity in trade:

- Payment security
- Free data flow to enable information sharing
- Cyber espionage/corporate espionage
- Protection against malicious attacks
- Supply chain security

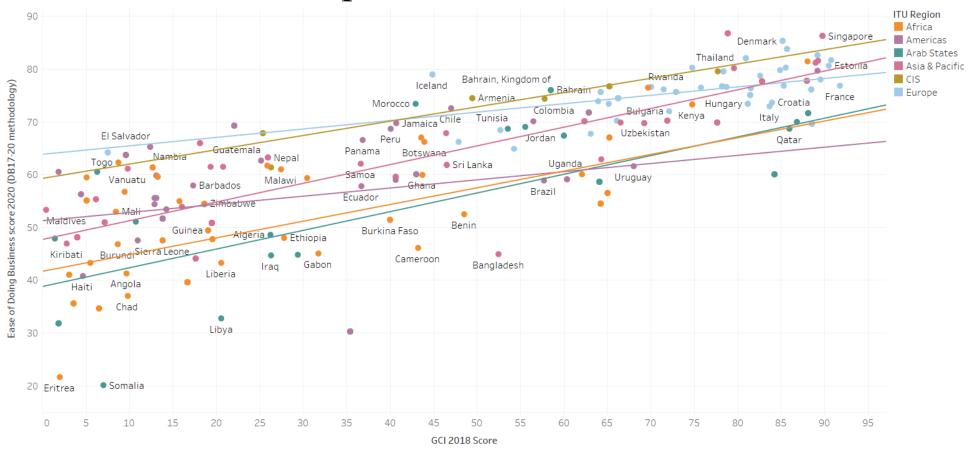


#### GCI 2018 versus WEF Global Competiveness Index 2019





## GCI 2018 generally correlates with World Bank Doing Business scores, except for in the Americas







#### What is the GCI? < GCI Pillars

The Global Cybersecurity Index (GCI) builds on five pillars, which represent key cybersecurity measures relevant to Member States











Legal

Te chnical

Organizational

Capacity Development

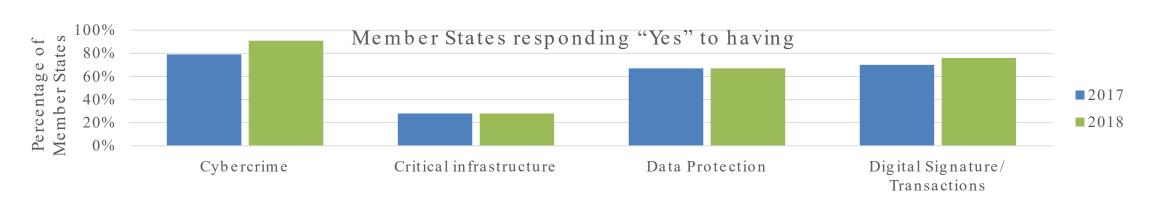
Cooperation



#### Countries are increasingly adopting of cybersecurity laws and regulations



- Most cybersecurity laws are broad, covering multiple sectors
- Cybercrime laws and acts: several models harmonise the content worldwide, such as the Budapest Convention of 2001
- GDPR forced countries to update existing data protection regulations
- Cybersecurity related certifications of products and procurement processes are becoming increasingly important





### National Cybersecurity Strategies (NCS) rarely address trade issues



- An NCS defines the maintenance of resilient and reliable national critical information infrastructures including the security and the safety of citizens
- 104 Member States have national strategies related to cybersecurity
- Common features identified in cybersecurity policies include:
  - The protection of critical information infrastructure
  - A national resiliency plan
  - Some have clear action plan for government implementation on cybersecurity governance
  - Cybersecurity Responsible Agencies responsible for implementing the national cybersecurity strategy/policy



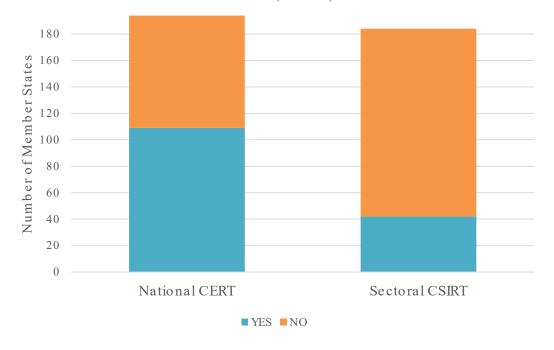
# CERT/CIRT/CSRIT can improve the security and reliability of the digital ecosystem



CIRT/CSIRT/CERT are organizational entities responsible for coordinating and supporting response to computer security events or incidents responses

Most of the Sectoral CERT/CIRT/CSRIT are established within the financial sectors, a few in the academic sector

Does your country have a National and Sectoral CERTS (2018)







### ICT and critical infrastructure are shaped through different international cybersecurity standards

- Standards address security requirements, building a common level of security, providing tools for operators etc.
- Many governments are developing national standards or adopting existing standards (especially ISO 27000 series, NIST)
- Governments often support increasing national and international certifications as it brings several benefits for both trade and security

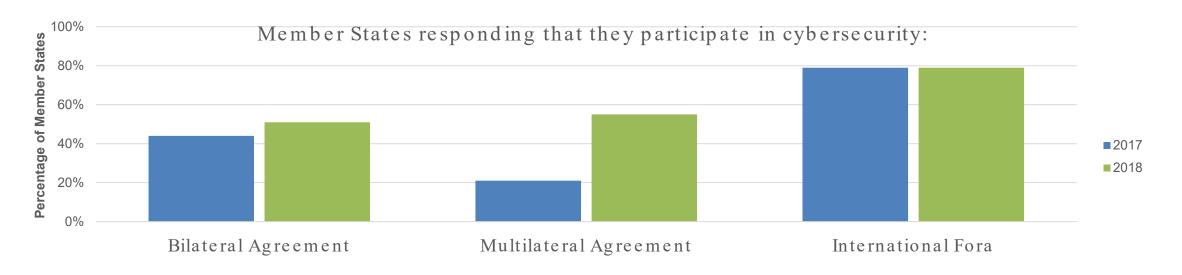




# Cooperation Measures enables the creation of a more comprehensive cybersecurity



- International cooperation needs to be strengthened in order to effectively improve international trade and deal with cybercrime which easily transcends national borders.
- The Global Cybersecurity Agenda is one example of countries coming together to cooperate on cybersecurity.

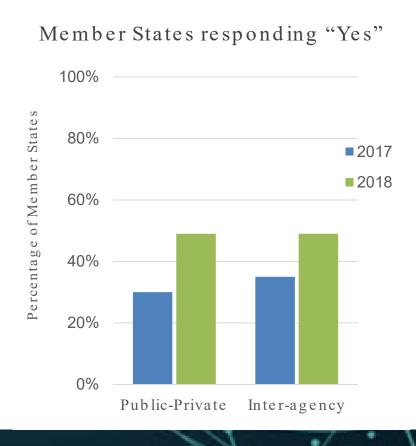




## Public-private partnerships and inter-agency partnerships are crucial



The Public-Private partnerships are important in connecting diverse public and sector stakeholders to exchange information and guiding policymaking on trade issues around the world



Inter-agency Partnerships in cybersecurity in the domestic level are found:

- Police officers and law enforcement agents
- Judicial and other legal actors including Lawyers, Judges, solicitors, Barristers, Attorneys and paralegals
- Communication/ICT
   Ministries and CERT teams



#### Good practices identified by the GCI

High scoring countries in the GCI tend to have:	Potential Impact on trade
Cybersecurity acts and regulations	Standards and requirements for products sold in a country (ex. Standards, GDPR)
National Cybersecurity Strategies (NCS)	Security protocols, import/export control (ex. Encryption sales)
National CERTs	Increased operating costs, sharing trade secrets, freeloaders, improve reliability of services
Public awareness campaign	Shape what products consumers buy, how they use products (ex. Privacy and home security system)





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### The Global Cybersecurity Agenda (GCA) is a framework for international cybersecurity cooperation



Launched 13 years by the ITU in 2007



Designed for cooperation, efficiency, encouraging collaboration, and building on existing initiatives



The framework is regularly reviewed and updated by Member States, with relevant experts and stakeholders



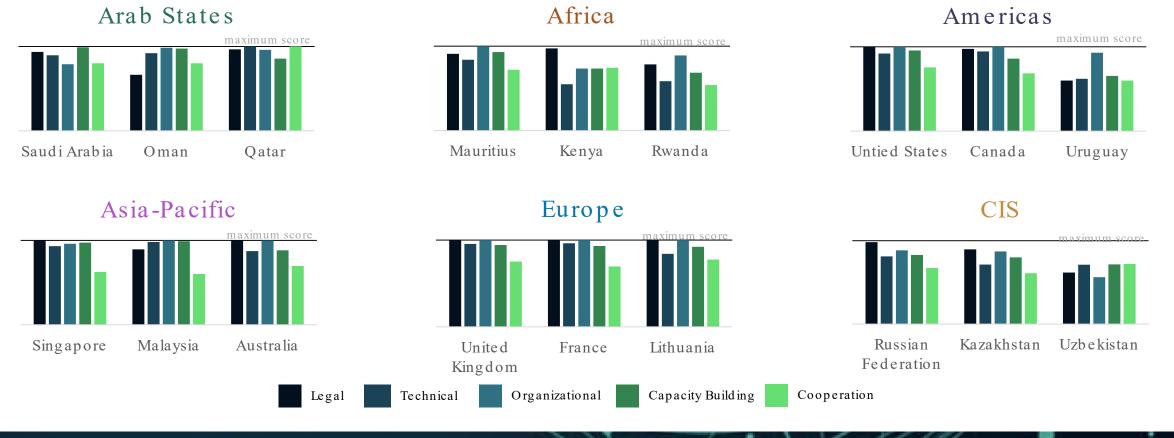
The GCA informs cybersecurity strategy and shapes international cooperative efforts



For more: https://www.itu.int/en/action/cybersecurity/Pages/gca.aspx

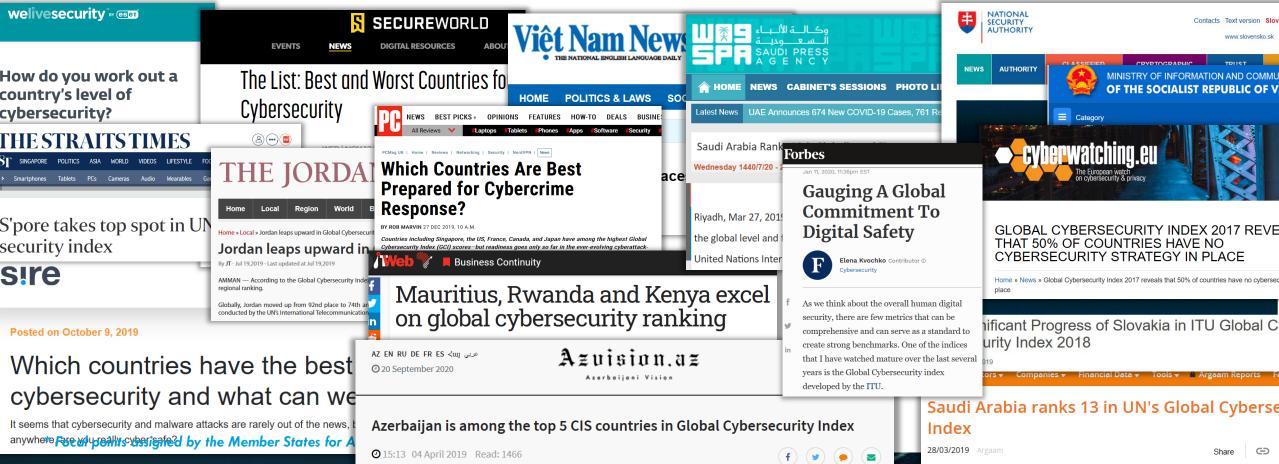


# Top GCI performers have diverse competitive advantages across the GCI pillars





The Global Cybersecurity Index (GCI) is internationally recognized as a measure of cybersecurity commitments by states





### The GCI is a composite index that measures key aspects of state-level cybersecurity practices

Key Statistics

First released: 2015

Past editions: 3

Member States Participating: 164 (of 194)

Mentions in scholarly articles: 821\*

Current questionnaire: 82 questions

The GCI is designed to

- ✓ Drive awareness global cybersecurity
- ✓ Share best practices
- ✓ Drive continuous cybersecurity improvement
- ✓ Build capacity in ITU Members



#### The GCI developed through a multistakeholder process, with Member States, civil society, academia, and private sector

Check

Quality

Survey Preparation &

Complete

Questionnaire review with the consultation group

Approvalof questionnaire through the Study Group meeting

Official invitation sent and Survey conducted

Ongoing

Member States submit completed Questionnaires

Weightage Expert Group meets, members submit weightage recommendations Ongoing

Questionnaire submissions are cross-checked

Member States are invited to validate ITU-GCI team verification

Questionnaires are scored and weighted

End-2020

Report compiled and published



#### Upcoming for ITU Cybersecurity

#### For the GCI

- In the process of submitted questionnaire data validation.
- Weightage Expert Group meeting 15 October 2020
- Publication tentatively scheduled for end 2020
- Working to expand the application of the GCI, including:
  - Creation of a Self-Assessment tool, based on GCI, that cities or regions can use to assess their cybersecurity maturity
  - Targeting ITU operations based on needs identified by the GCI

#### Other ITU Cybersecurity activities

- Global and regional CyberDrill 2020 ongoing until end of the year.
- ITU Cybersecurity webinar 19 October 2020
- Consultation meeting for the second review of the National Cybersecurity Strategies Guide (NCS)-started end of September to mid-year 2021.
- Ongoing National CIRT/CERT/CSIRT
   Assessments, Design and Establishment of Member States requests

