EU Cybersecurity European policy overview

e-IRG
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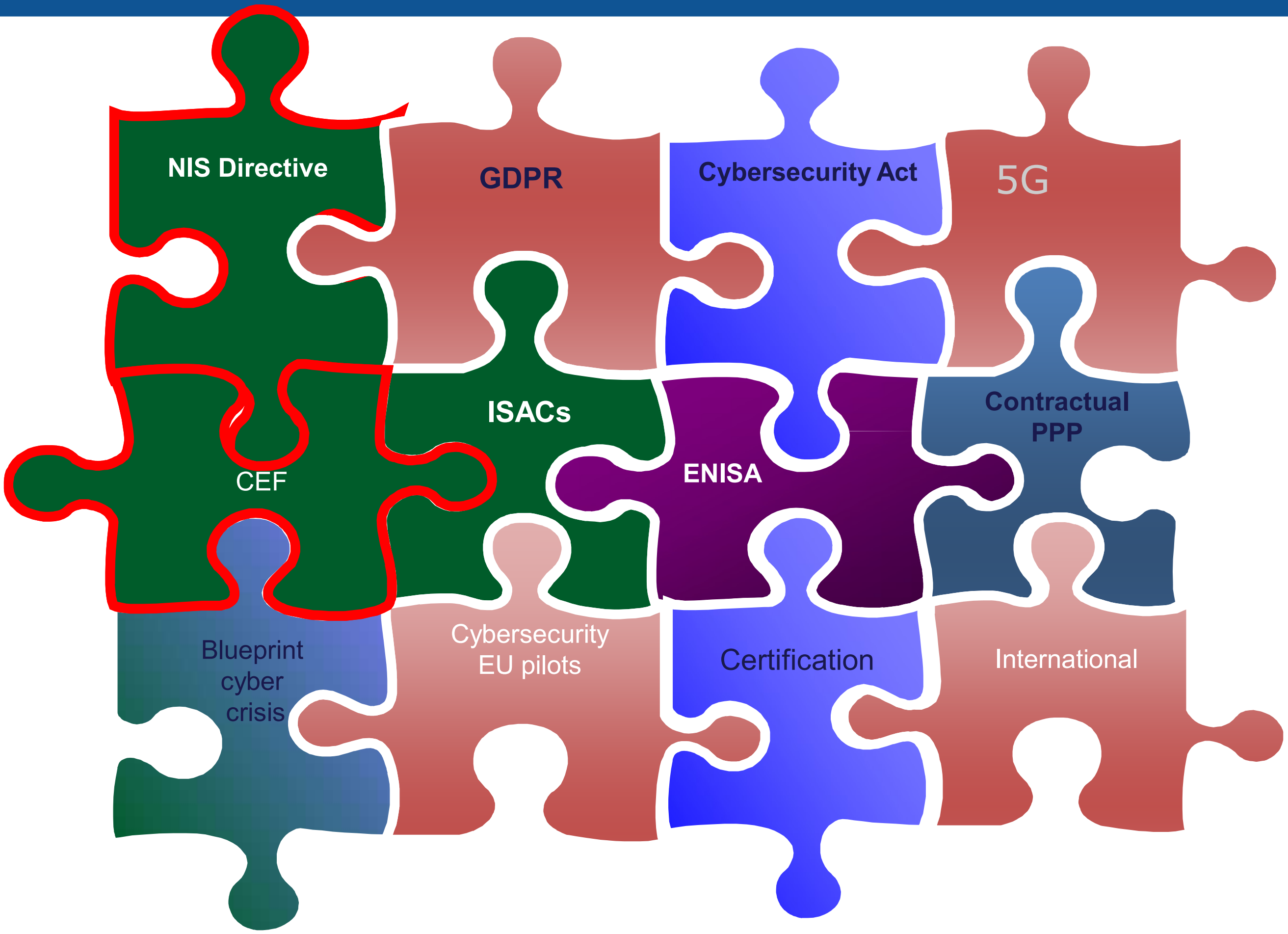
EU in action about cybersecurity

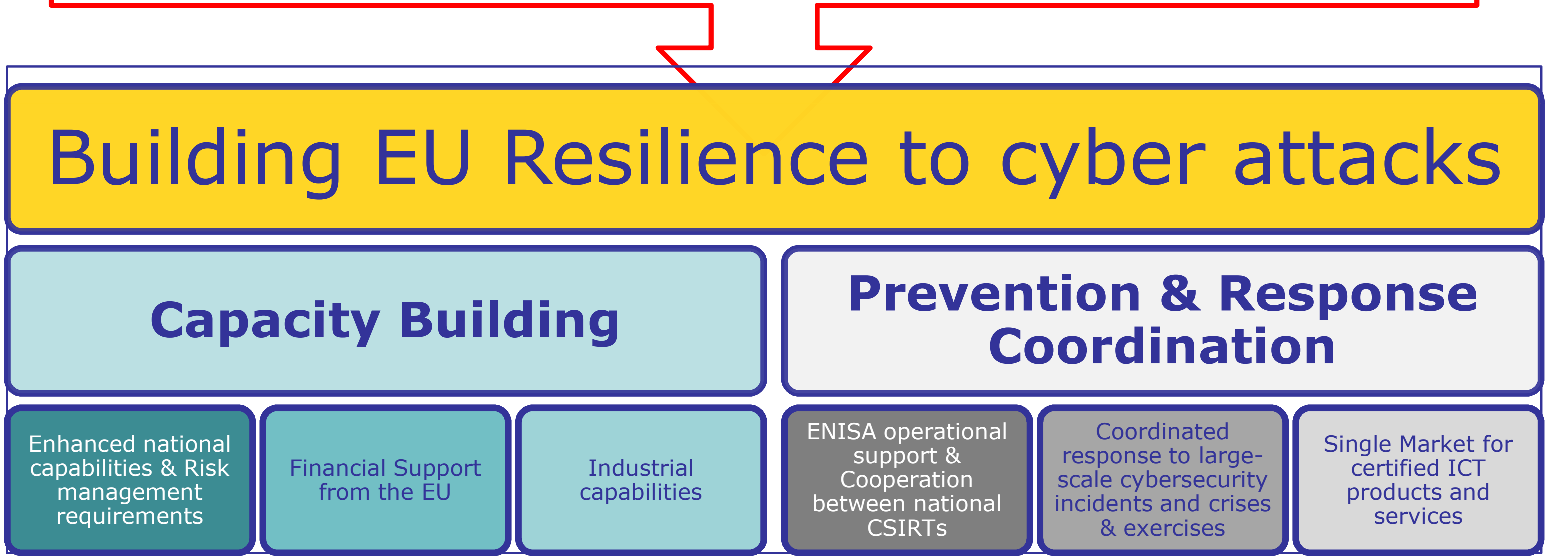


Cybersecurity — A strategic priority for the EU

European Commission

Continuous policy response to the evolving threat landscape:

→ **2013** EU Cybersecurity Strategy: 'An Open, Safe and Secure Cyberspace'
→ **2016** Communication on Strengthening Europe's Cyber Resilience System and Fostering a Competitive and Innovative Cybersecurity Industry
→ **2017** Cybersecurity package
→ **2018** Proposal for the European competence centre and network
→ **2019** Cybersecurity Act entered into force



Building EU Resilience to cyber attacks

Capacity Building

- Enhanced national capabilities & Risk management requirements
- Financial Support from the EU
- Industrial capabilities

Prevention & Response Coordination

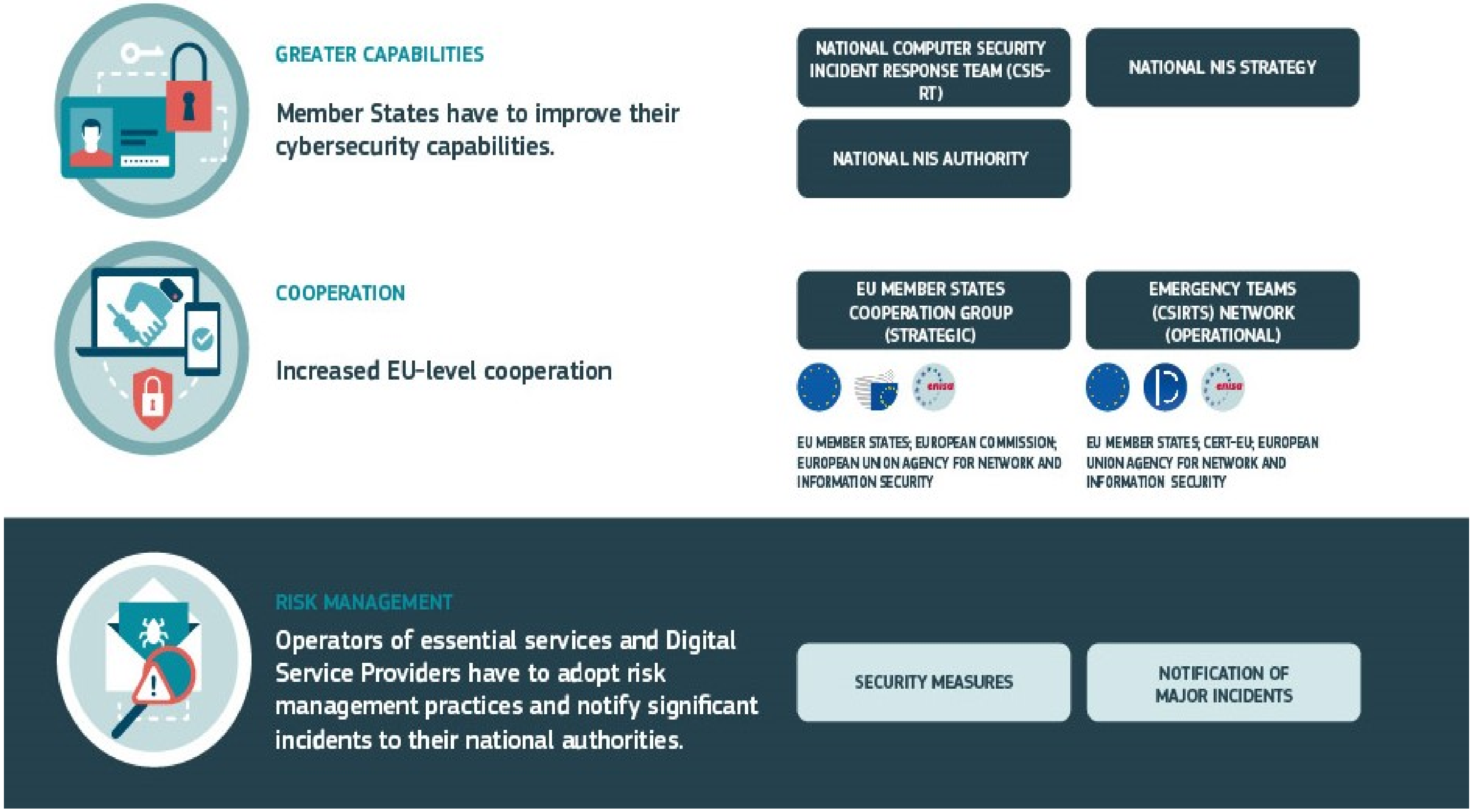
- ENISA operational support & Cooperation between national CSIRTs
- Coordinated response to large-scale cybersecurity incidents and crises & exercises
- Single Market for certified ICT products and services

Cybersecurity Act:
https://ec.europa.eu/digital-single-market/en/eu-cybersecurity-act

European
Commission

NIS Directive

NIS Directive: Main Features



GREATER CAPABILITIES

Member States have to improve their cybersecurity capabilities.

NATIONAL COMPUTER SECURITY INCIDENT RESPONSE TEAM (CSIS-RT)

NATIONAL NIS STRATEGY

NATIONAL NIS AUTHORITY

COOPERATION

Increased EU-level cooperation

EU MEMBER STATES COOPERATION GROUP (STRATEGIC)

EU MEMBER STATES; EUROPEAN COMMISSION; EUROPEAN UNION AGENCY FOR NETWORK AND INFORMATION SECURITY

EMERGENCY TEAMS (CSIRTS) NETWORK (OPERATIONAL)

EU MEMBER STATES, CERT-EU; EUROPEAN UNION AGENCY FOR NETWORK AND INFORMATION SECURITY

RISK MANAGEMENT

Operators of essential services and Digital Service Providers have to adopt risk management practices and notify significant incidents to their national authorities.

SECURITY MEASURES

NOTIFICATION OF MAJOR INCIDENTS

NIS implementation one year later

Full transposition

- 5 Member States did not submit information about Operators of Essential Service identified

Cooperation Group

- 11 Work Streams (15 Work Programme tasks)
- 12 Plenary meetings
- 10 Reference documents delivered (on the implementation of the Directive as well as wider cybersecurity issues)
- 2 table-top exercise. One already performed (on EU elections) and one which took take place in July (blueprint operational layer).

CSIRTs Network

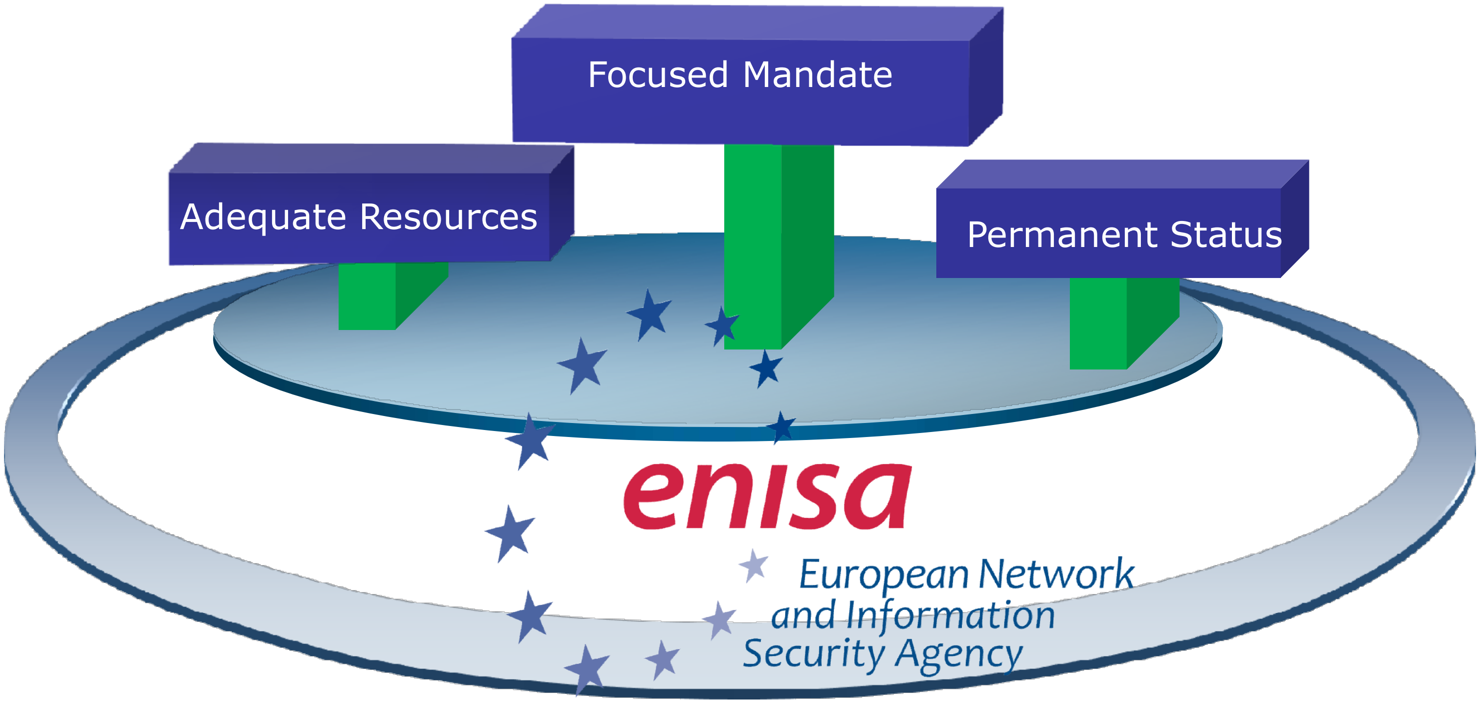
- 8 meetings (continuous exchange through common facilities)
- 2 exercises testing Standard Operating Procedures.

EU Cybersecurity Act

Towards a reformed EU Cybersecurity Agency

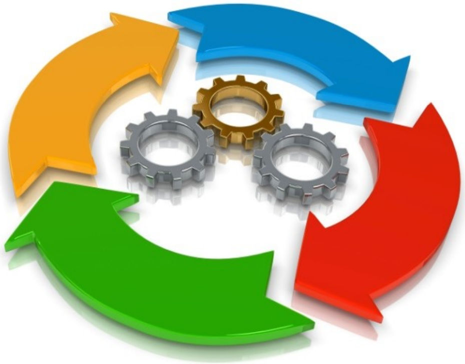
and reinforcing the cybersecurity single market in the EU

What's new with the new proposal?



Cybersecurity Certification

A **voluntary European** cybersecurity certification **framework….**



*…to enable the creation of **tailored** EU cybersecurity certification **schemes** for ICT products and services…*

*…that are **valid across the EU***

The EU Cybersecurity Certification Framework

Cybersecurity Certification Schemes

- Security Objectives

- Assurance levels: Basic, Substantial, High

- Elements of a cybersecurity certification scheme include:

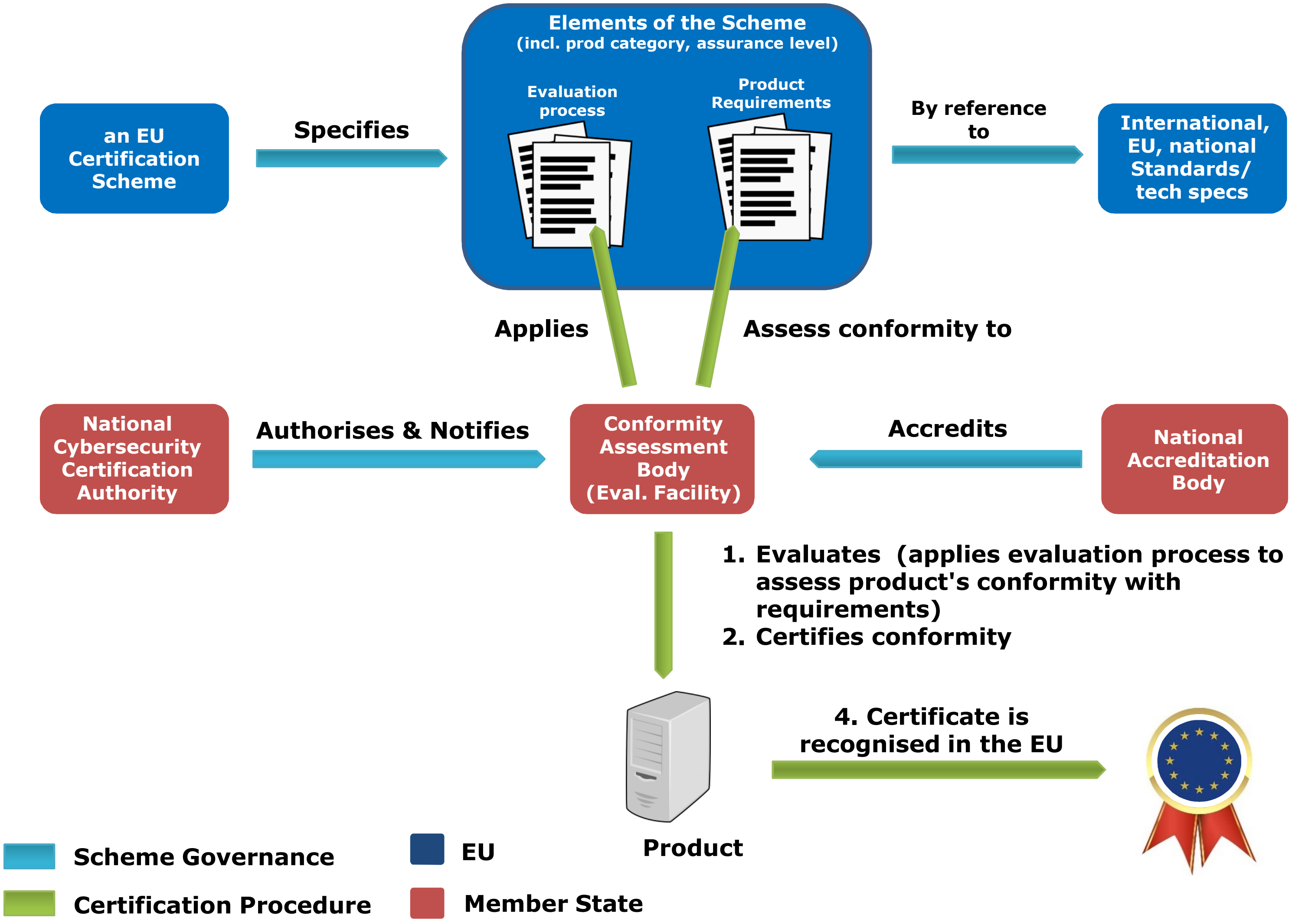
  - Scope - product/service or category(ies) thereof

  - references to the international, European or national standards and to technical specifications

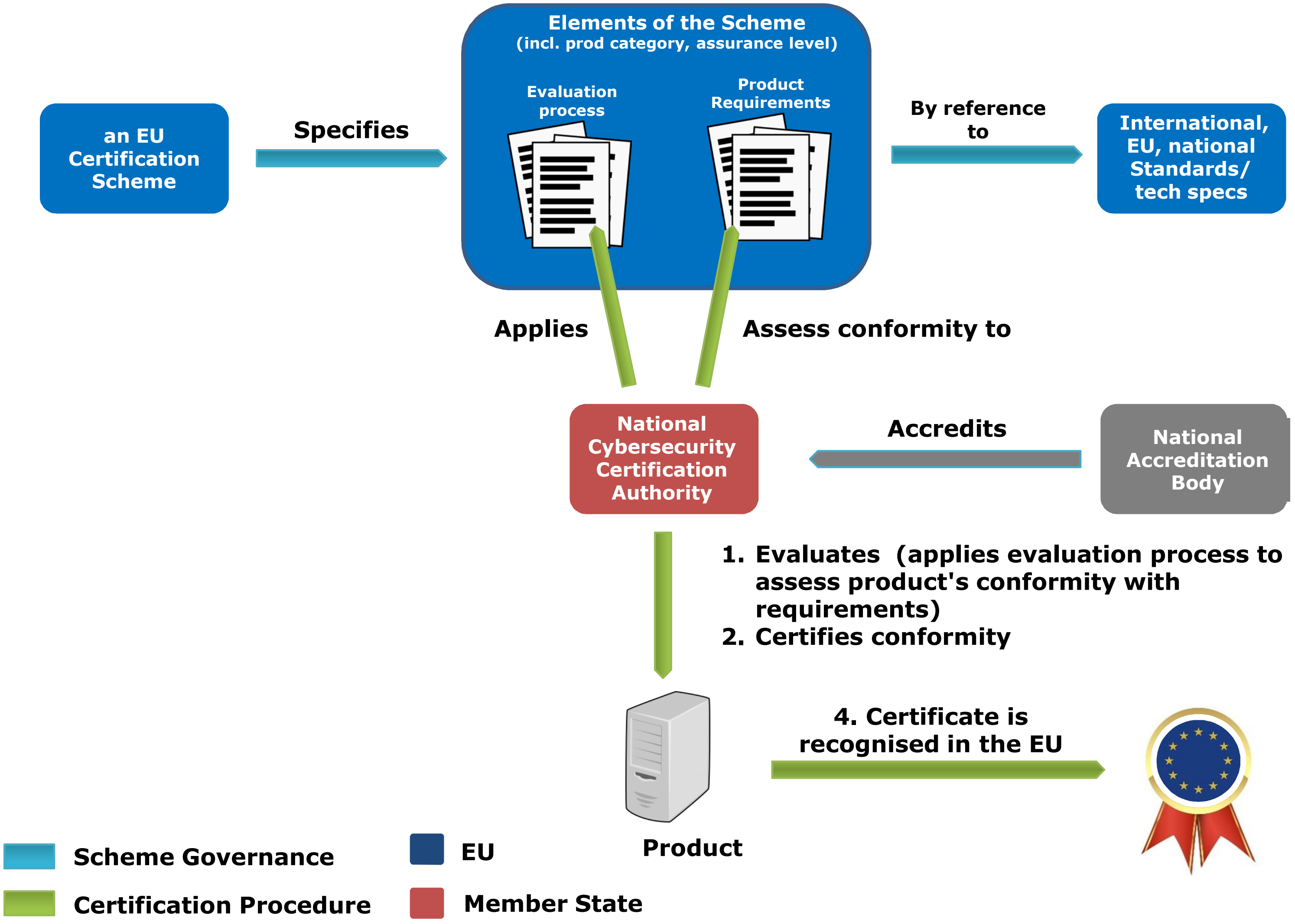
  - one or more assurance levels

- conditions for the mutual recognition of certification schemes with third countries;

European Cybersecurity Certification Scheme (Basic, Substantial)


an EU Certification Scheme
Specifies
Elements of the Scheme
(incl. prod category, assurance level)
Evaluation process
Product Requirements
By reference to
International, EU, national Standards/ tech specs
Applies
Assess conformity to
National Cybersecurity Certification Authority
Authorises & Notifies
Conformity Assessment Body (Eval. Facility)
Accredits
National Accreditation Body
1. Evaluates (applies evaluation process to assess product's conformity with requirements)
2. Certifies conformity
4. Certificate is recognised in the EU
Product
Scheme Governance
Certification Procedure
EU
Member State

European Cybersecurity Certification Scheme (High)



Elements of the Scheme
(incl. prod category, assurance level)

Evaluation process

Product Requirements

an EU Certification Scheme

Specifies

By reference to

International, EU, national Standards/ tech specs

Applies

Assess conformity to

National Cybersecurity Certification Authority

Accredits

National Accreditation Body

1. Evaluates (applies evaluation process to assess product's conformity with requirements)
2. Certifies conformity

4. Certificate is recognised in the EU

Product

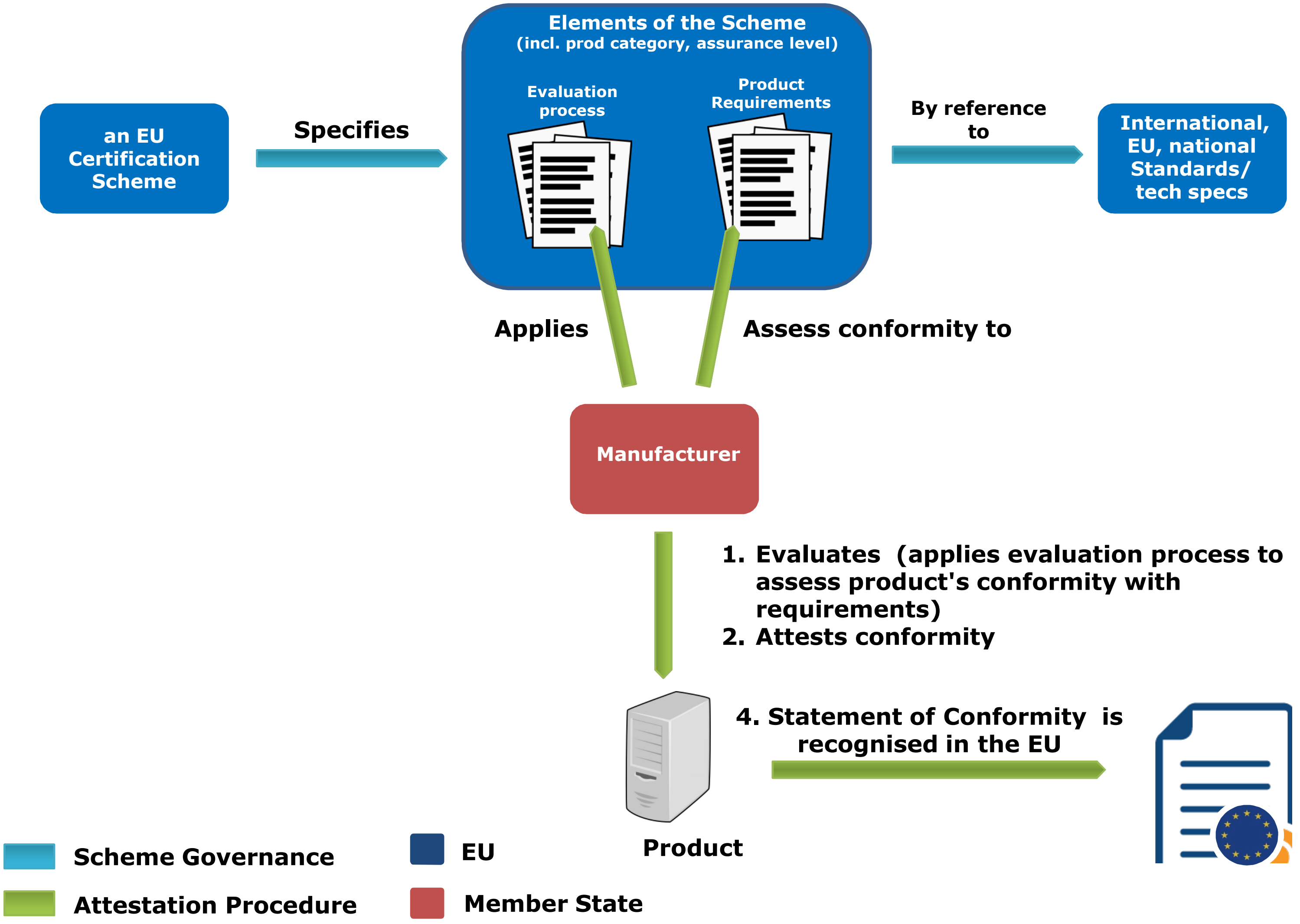
🟦 Scheme Governance

🟩 Certification Procedure

🟦 EU

🟥 Member State

Conformity self-assessment (AL Basic only)



an EU Certification Scheme

Specifies

Elements of the Scheme
(incl. prod category, assurance level)

Evaluation process

Product Requirements

By reference to

International, EU, national Standards/ tech specs

Applies

Assess conformity to

Manufacturer

1. Evaluates (applies evaluation process to assess product's conformity with requirements)
2. Attests conformity

Product

4. Statement of Conformity is recognised in the EU

🟦 Scheme Governance

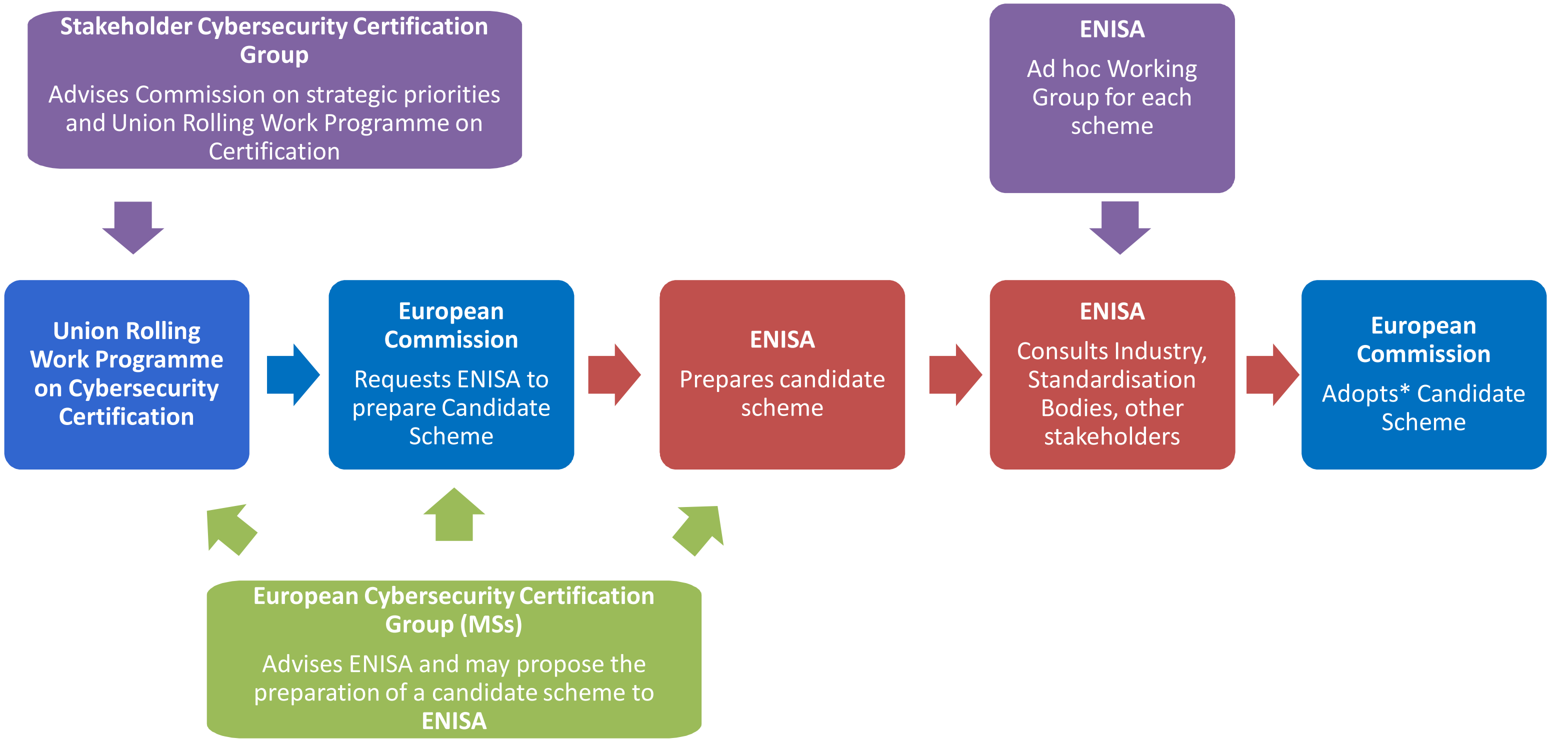
🟩 Attestation Procedure

🟦 EU

🟥 Member State

The EU Cybersecurity Certification Framework

The lifecycle of a European Cybersecurity Certification Scheme



Stakeholder Cybersecurity Certification Group

Advises Commission on strategic priorities and Union Rolling Work Programme on Certification

ENISA

Ad hoc Working Group for each scheme

Union Rolling Work Programme on Cybersecurity Certification

European Commission

Requests ENISA to prepare Candidate Scheme

ENISA

Prepares candidate scheme

ENISA

Consults Industry, Standardisation Bodies, other stakeholders

European Commission

Adopts* Candidate Scheme

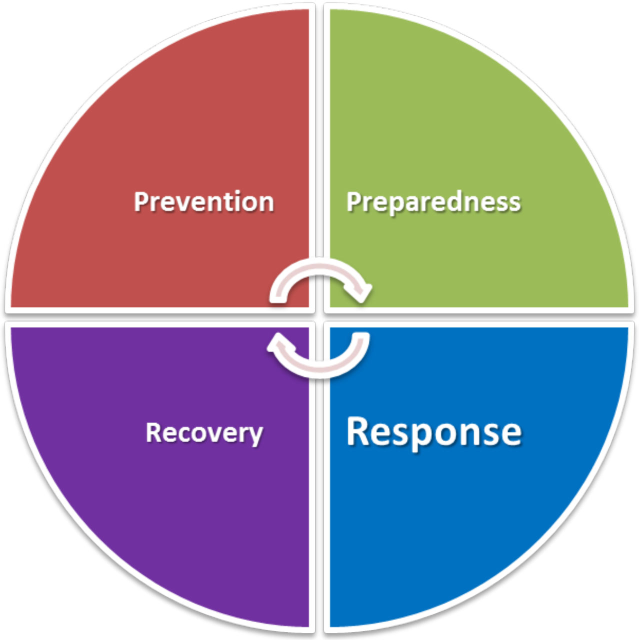
European Cybersecurity Certification Group (MSs)

Advises ENISA and may propose the preparation of a candidate scheme to **ENISA**

Blueprint - coordinated response to large-scale cybersecurity incidents and crises

Resilience through crisis management and rapid emergency response

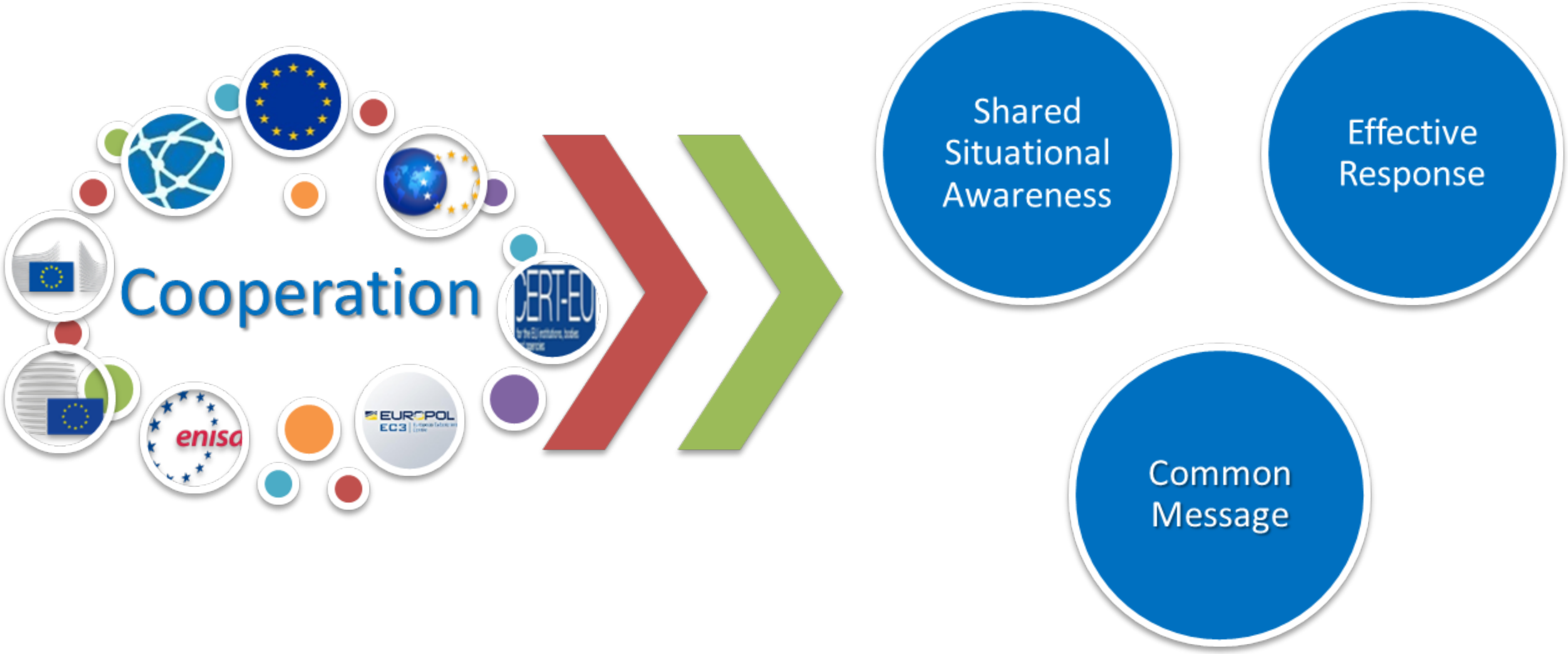
Blueprint - Response



Definition: large-scale cybersecurity incidents and crises

- incidents which cause disruption too extensive for a concerned Member State to handle on its own or which affect two or more Member States or EU institutions with such a wide-ranging and significant impact of technical or political significance that they require timely policy coordination and response at Union political level

Blueprint – Core objectives



Cooperation

Shared Situational Awareness

Effective Response

Common Message

Blueprint – Cooperation at all levels

Technical

- Incident handling during a cybersecurity crisis.
- Monitoring and surveillance of incident including continuous analysis of threats and risk.

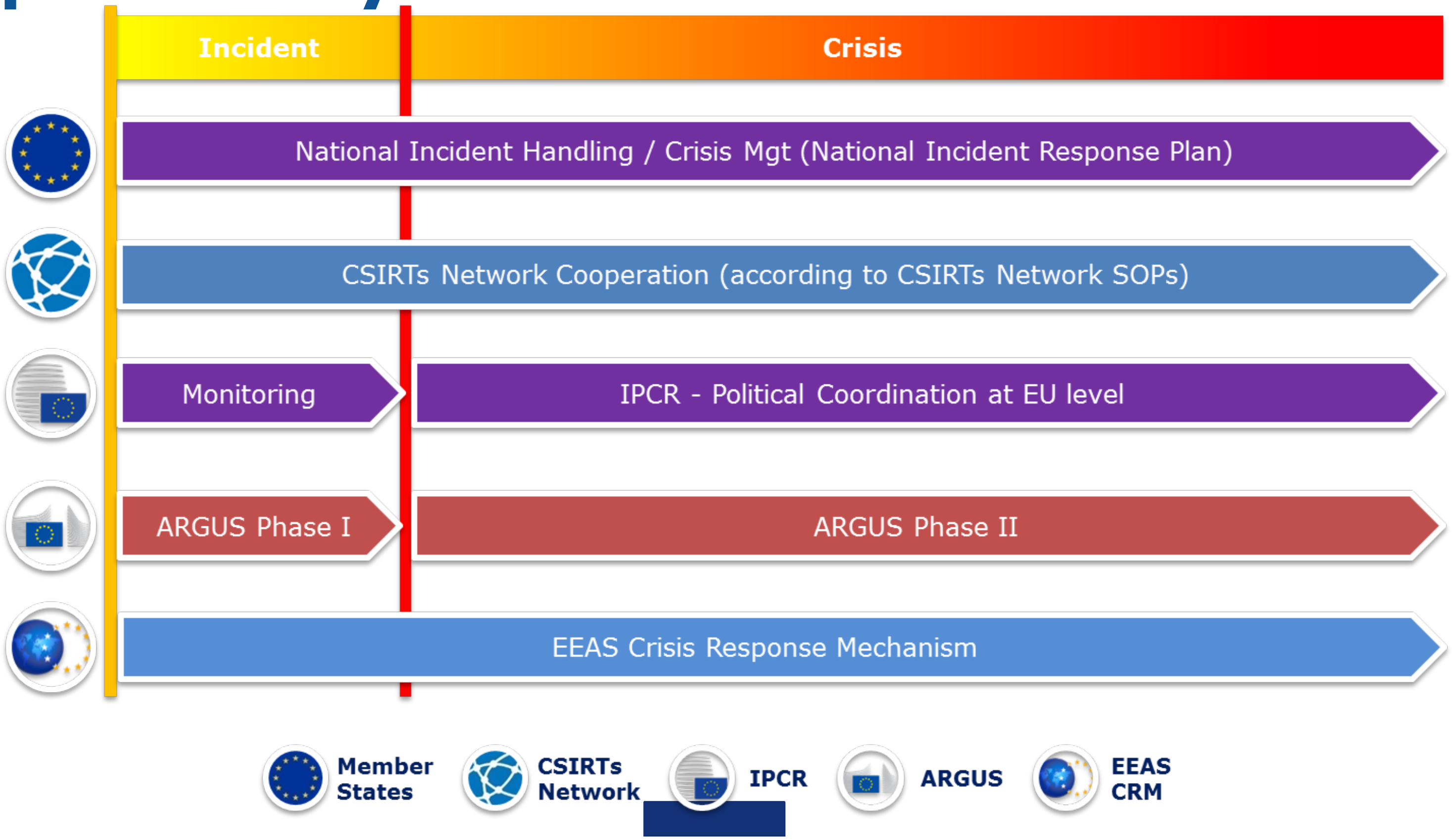
Operational

- Preparing decision-making at the political level.
- Coordinate the management of the cybersecurity crisis (as appropriate).
- Assess the consequences and impact at EU level and propose possible mitigating actions.

Political / Strategic

- Strategic and political management of both cyber and non-cyber aspects of the crisis including measures under the Framework for a Joint EU Diplomatic Response to Malicious Cyber Activities

Blueprint – key mechanisms



Incident

Crisis

National Incident Handling / Crisis Mgt (National Incident Response Plan)

CSIRTs Network Cooperation (according to CSIRTs Network SOPs)

Monitoring

IPCR - Political Coordination at EU level

ARGUS Phase I

ARGUS Phase II

EEAS Crisis Response Mechanism

Member States

CSIRTs Network

IPCR

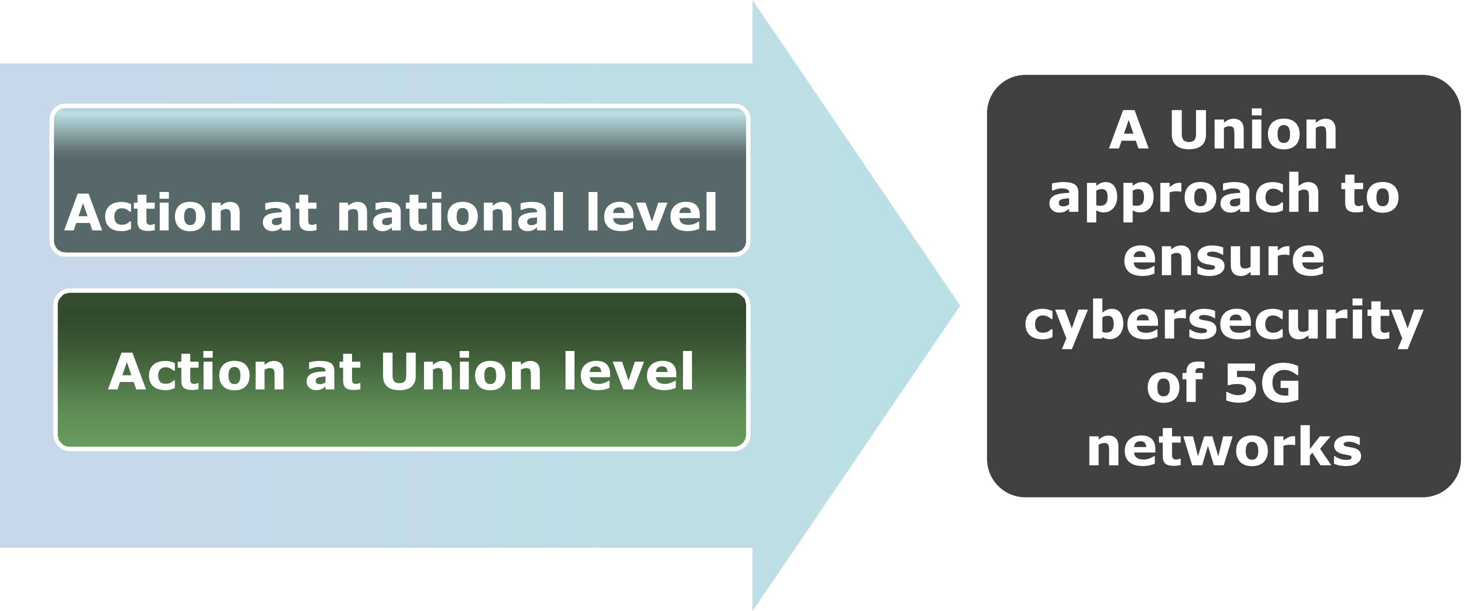
ARGUS

EEAS CRM

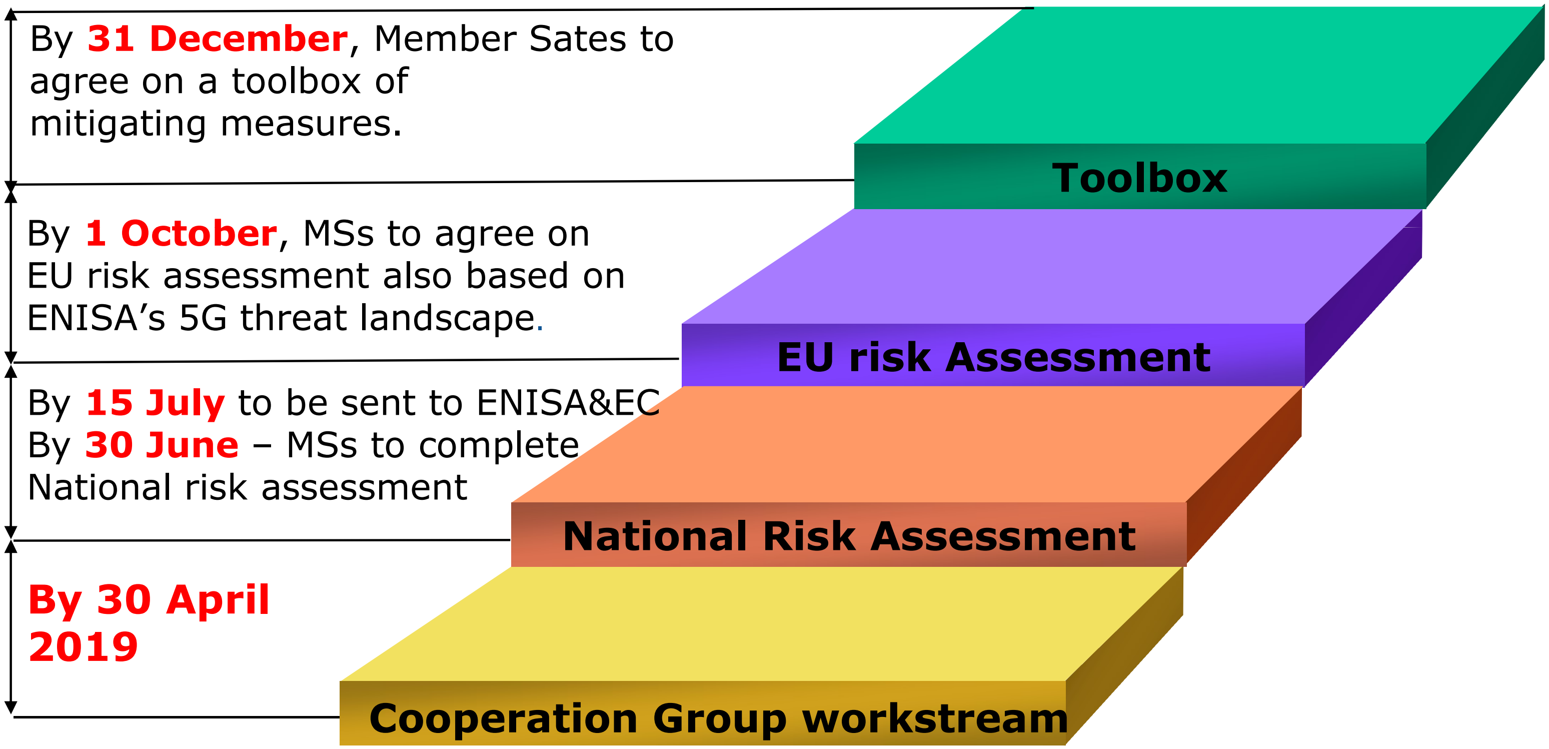
European Commission

Commission Recommendation on Cybersecurity of 5G networks

Commission Recommendation on Cybersecurity of 5G networks – 26.03.2019



Actions – short term



By **31 December**, Member Sates to agree on a toolbox of mitigating measures.

Toolbox

By **1 October**, MSs to agree on EU risk assessment also based on ENISA's 5G threat landscape.

EU risk Assessment

By **15 July** to be sent to ENISA&EC

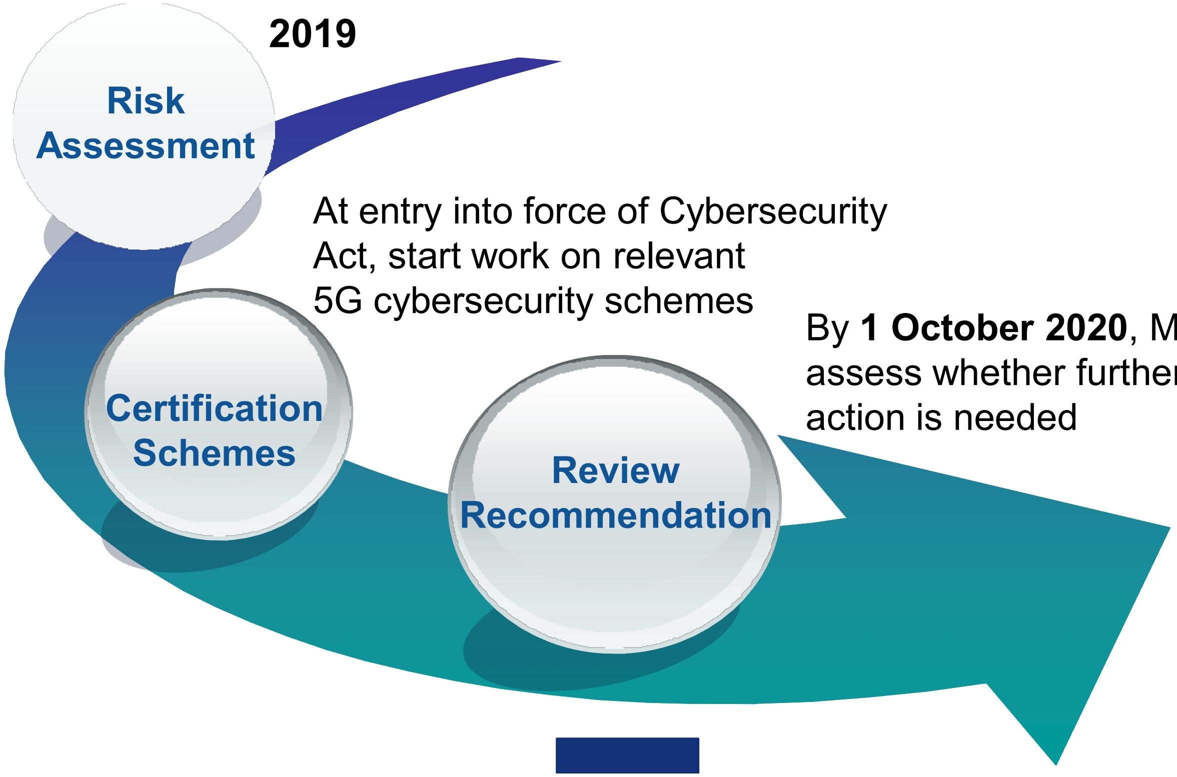
By **30 June** – MSs to complete National risk assessment

National Risk Assessment

By 30 April 2019

Cooperation Group workstream

Next steps – medium/longer term



2019

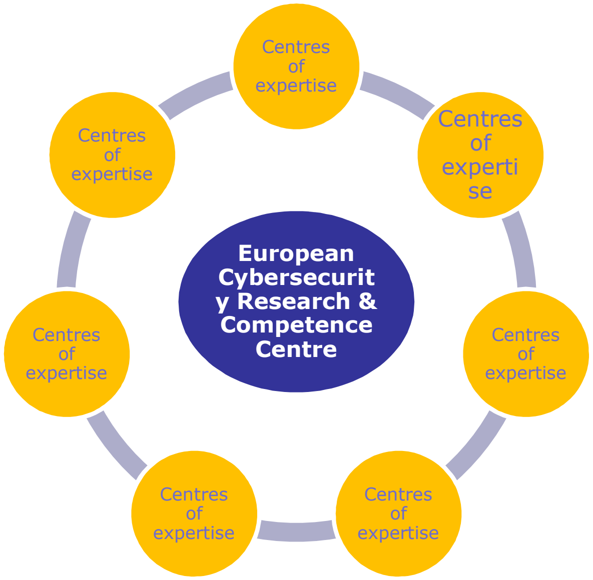
At entry into force of Cybersecurity Act, start work on relevant 5G cybersecurity schemes

By **1 October 2020**, MS to assess whether further action is needed

A cybersecurity competence network with a European Cybersecurity Research and Competence Centre

Reinforcing EU's cybersecurity technologic capabilities and skills

European Cybersecurity Industrial Technology and Research Competence Centre



European Cybersecurity Research & Competence Centre

Centres of expertise

Centres of expertise

Centres of expertise

Centres of expertise

Centres of expertise

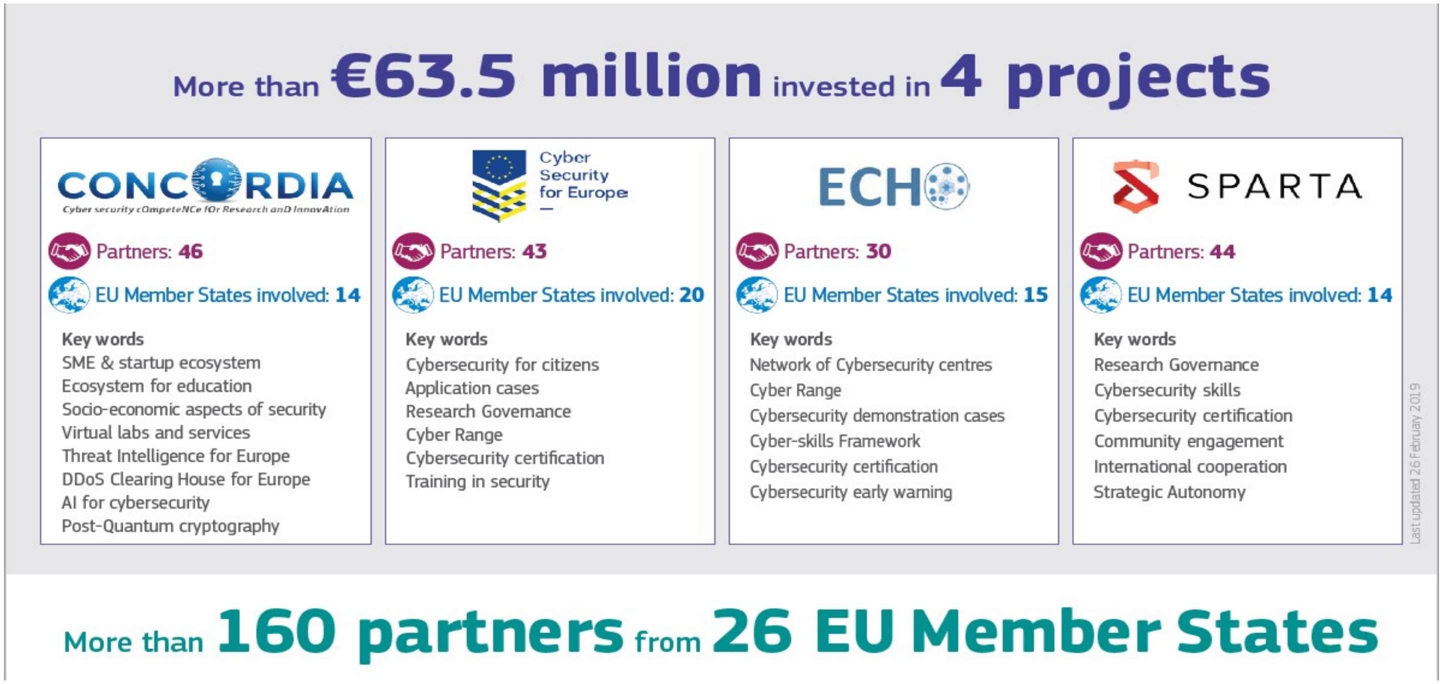
Centres of expertise

Centres of expertise

Centre's Role:

- Network coordination and support
- Research programming and implementation
- Procurement
- Ensuring synergies between civilian and defence spheres

EU pilots to prepare the European Cybersecurity Competence Network



More than **€63.5 million** invested in **4 projects**

CONCORDIA
Cyber security cOmpeteNCe fOr Research anD InnovAtion

Partners: **46**

EU Member States involved: **14**

Key words
- SME & startup ecosystem
- Ecosystem for education
- Socio-economic aspects of security
- Virtual labs and services
- Threat Intelligence for Europe
- DDoS Clearing House for Europe
- AI for cybersecurity
- Post-Quantum cryptography

Cyber Security for Europe

Partners: **43**

EU Member States involved: **20**

Key words
- Cybersecurity for citizens
- Application cases
- Research Governance
- Cyber Range
- Cybersecurity certification
- Training in security

ECHO

Partners: **30**

EU Member States involved: **15**

Key words
- Network of Cybersecurity centres
- Cyber Range
- Cybersecurity demonstration cases
- Cyber-skills Framework
- Cybersecurity certification
- Cybersecurity early warning

SPARTA

Partners: **44**

EU Member States involved: **14**

Key words
- Research Governance
- Cybersecurity skills
- Cybersecurity certification
- Community engagement
- International cooperation
- Strategic Autonomy

Last updated 26 February 2019

More than **160 partners** from **26 EU Member States**

More info at:
https://ec.europa.eu/digital-single-market/en/news/four-eu-pilot-projects-launched-prepare-european-cybersecurity-competence-network

Thank you for your attention!