Blueprint

European coordinated response to large-scale cybersecurity incidents and crises

Artificial Intelligence – An opportunity for the EU cyber-crisis management

Athens, 3 June 2019

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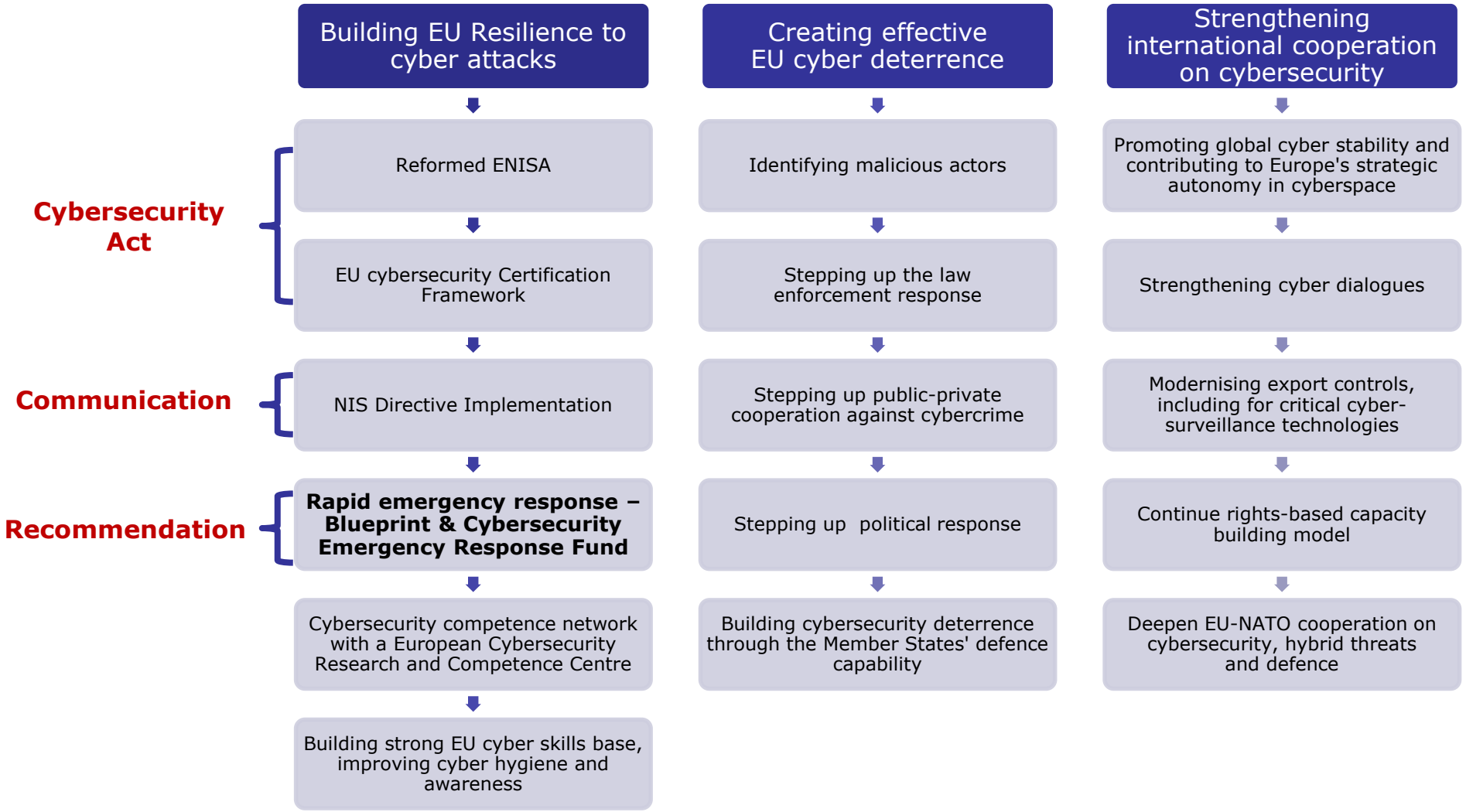
STATE OF THE UNION 2018

Building strong cybersecurity in Europe

#SOTEU

'Cyber-attacks know no borders, but our response capacity differs very much from one country to the other, creating loopholes where vulnerabilities attract even more the attacks. The EU needs more robust and effective structures to ensure strong cyber resilience and respond to cyber-attacks. We do not want to be the weakest links in this global threat.'

Jean-Claude Juncker, Tallinn Digital Summit, 29 September 2017


Building EU Resilience to cyber attacks
Creating effective EU cyber deterrence
Strengthening international cooperation on cybersecurity
Cybersecurity Act
Reformed ENISA
EU cybersecurity Certification Framework
Identifying malicious actors
Stepping up the law enforcement response
Promoting global cyber stability and contributing to Europe's strategic autonomy in cyberspace
Strengthening cyber dialogues
Communication
NIS Directive Implementation
Stepping up public-private cooperation against cybercrime
Modernising export controls, including for critical cyber-surveillance technologies
Recommendation
Rapid emergency response – Blueprint & Cybersecurity Emergency Response Fund
Stepping up political response
Continue rights-based capacity building model
Cybersecurity competence network with a European Cybersecurity Research and Competence Centre
Building cybersecurity deterrence through the Member States' defence capability
Deepen EU-NATO cooperation on cybersecurity, hybrid threats and defence
Building strong EU cyber skills base, improving cyber hygiene and awareness

Blueprint

EN

Official Journal of the European Union

RECOMMENDATIONS

COMMISSION RECOMMENDATION (EU) 2017/1584

of 13 September 2017

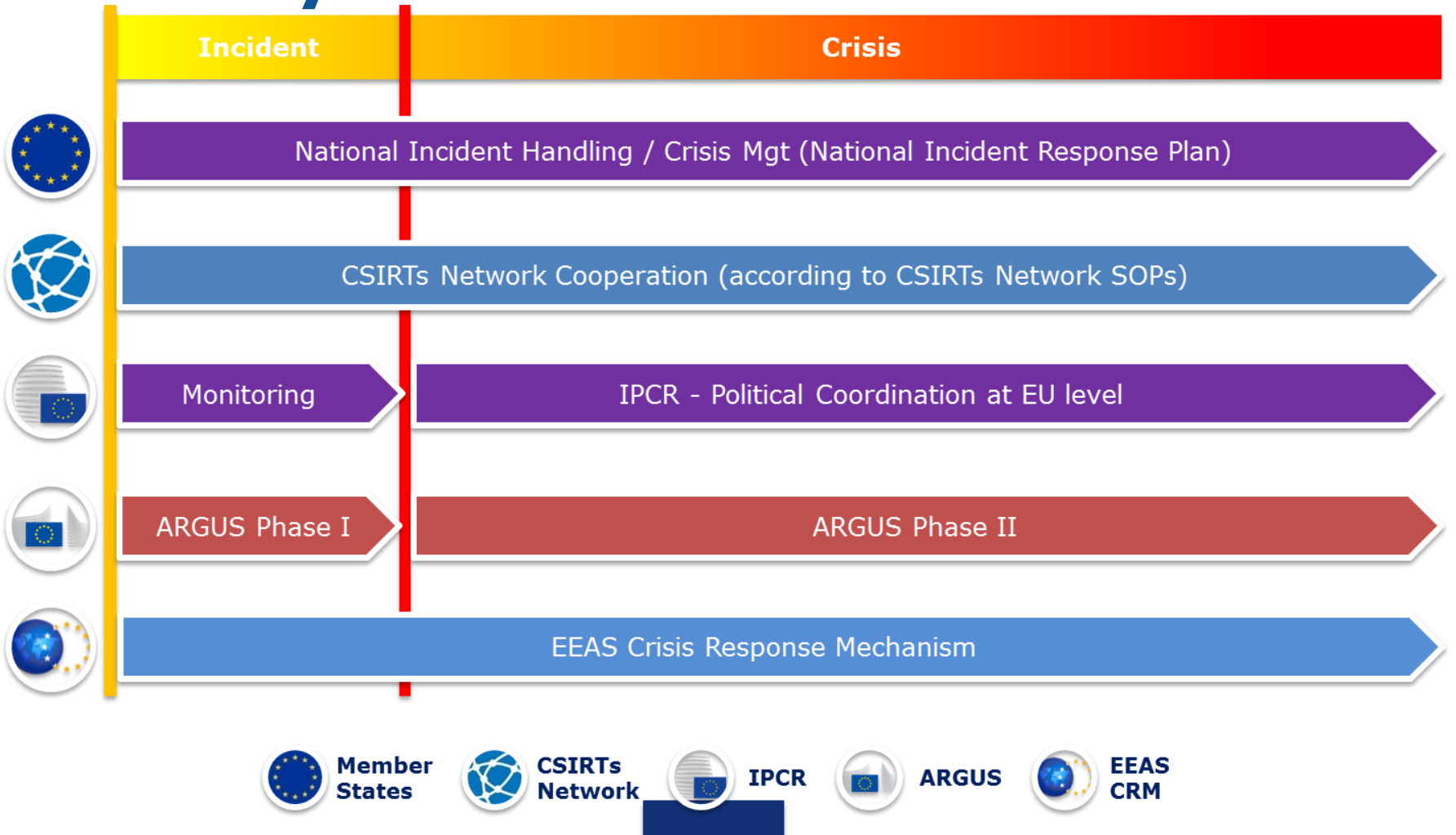
on coordinated response to large-scale cybersecurity incidents and crises

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 – key mechanisms



Blueprint – key mechanisms

- Integrated Political Crisis Response (IPCR)
- ARGUS rapid alert system
- EEAS Crisis Response Mechanism for CSDP

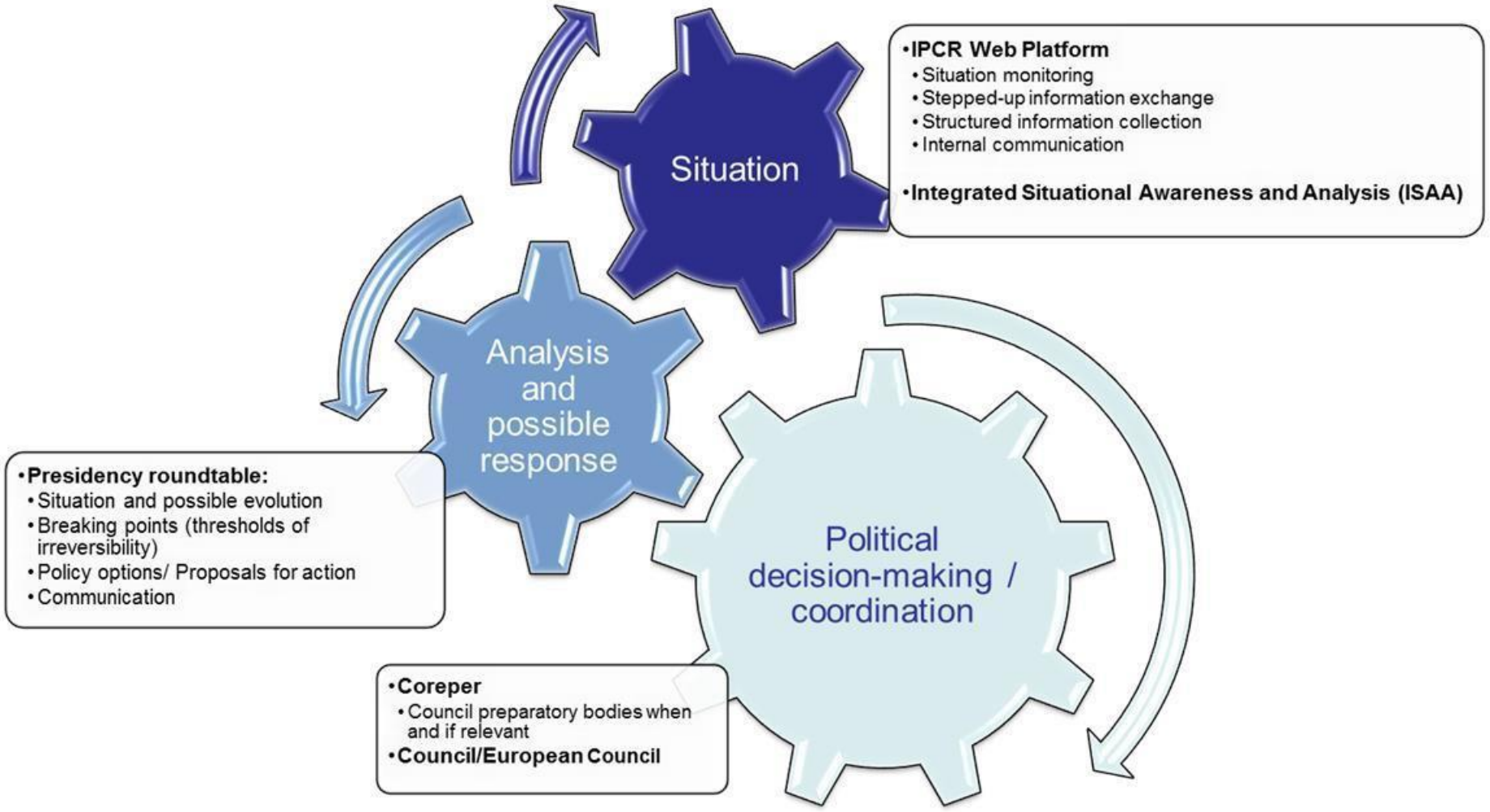
What is IPCR?

- The Integrated Political Crisis Response
- the EU crisis mechanism
- … for cross sectorial / complex crises requiring coordination …
- … @ strategic / political level in the Council / European Council

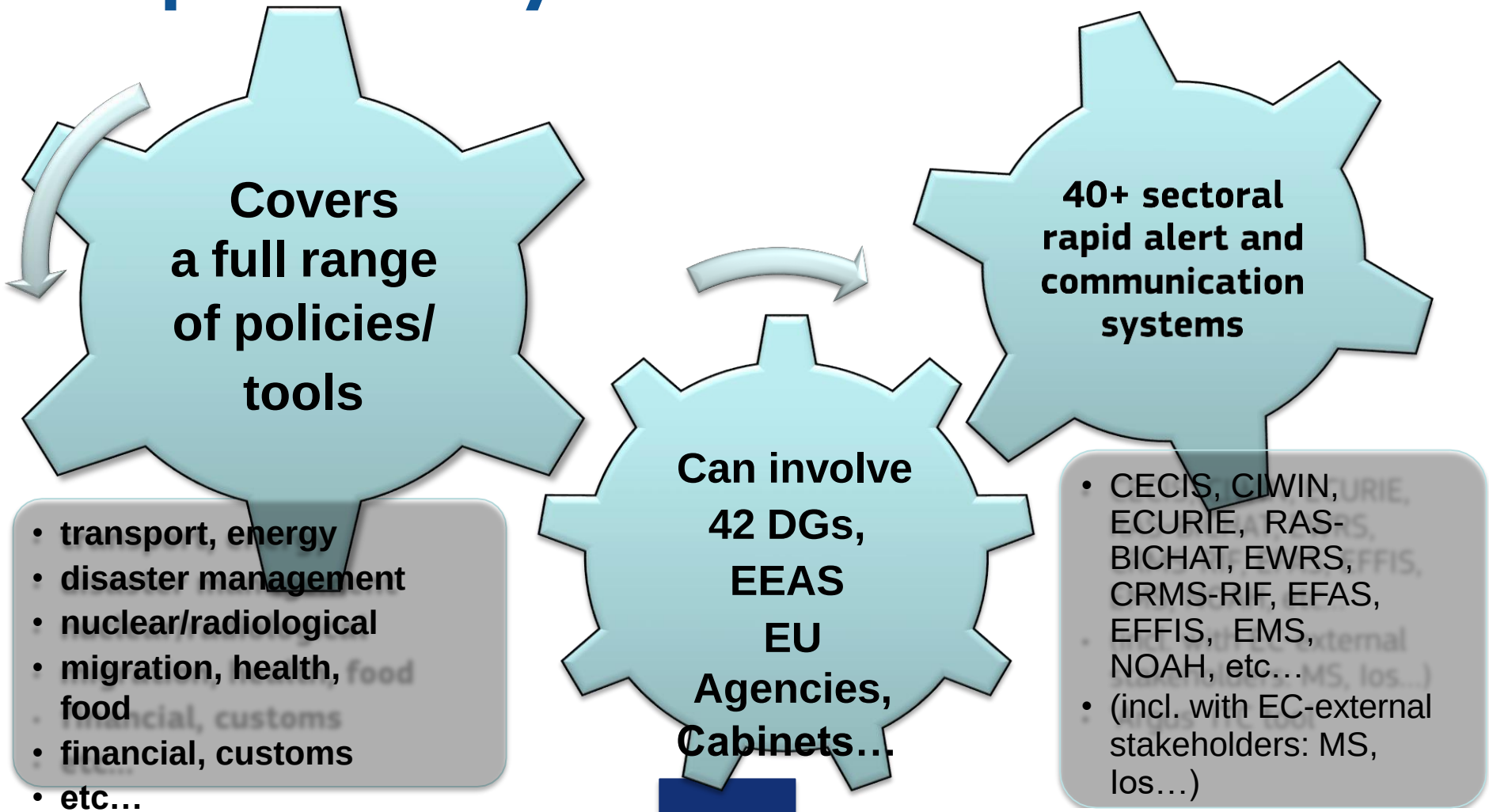
IPCR Tools

- An informal roundtable
- The Integrated Situational Awareness and Analysis (ISAA) report
- The IPCR web platform
- The central IPCR 24/7 contact point

The IPCR architecture



ARGUS rapid alert system



ARGUS Phase II

- Activated by Commission President
  - in a major multisectoral crisis or imminent threat
- Crisis Coordination Committee:
  - Convened on a short notice
  - Chaired by (Deputy) Secretary General
  - Brings all relevant CABs, DGs, Agencies + EEAS (Core: SG, COMM, DIGIT, ECHO, ENV, HOME, HR, JUST, SANTE, TAXUD, TRADE, JRC, SJ)
  - Purpose: Information exchange & Decision-making

ARGUS Phase II so far

- A/H1N1 influenza pandemic threat (2009)
- Volcanic ash cloud (Eyjafjallajökull, 2010)
- Japan triple disaster (Fukushima, 2011)
- Migration and refugee crisis (2015- (ongoing))

Blueprint – core objectives

Shared Situational Awareness

Effective Response

Common Message

Recap: Blueprint – Cooperation at all levels

Technical

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

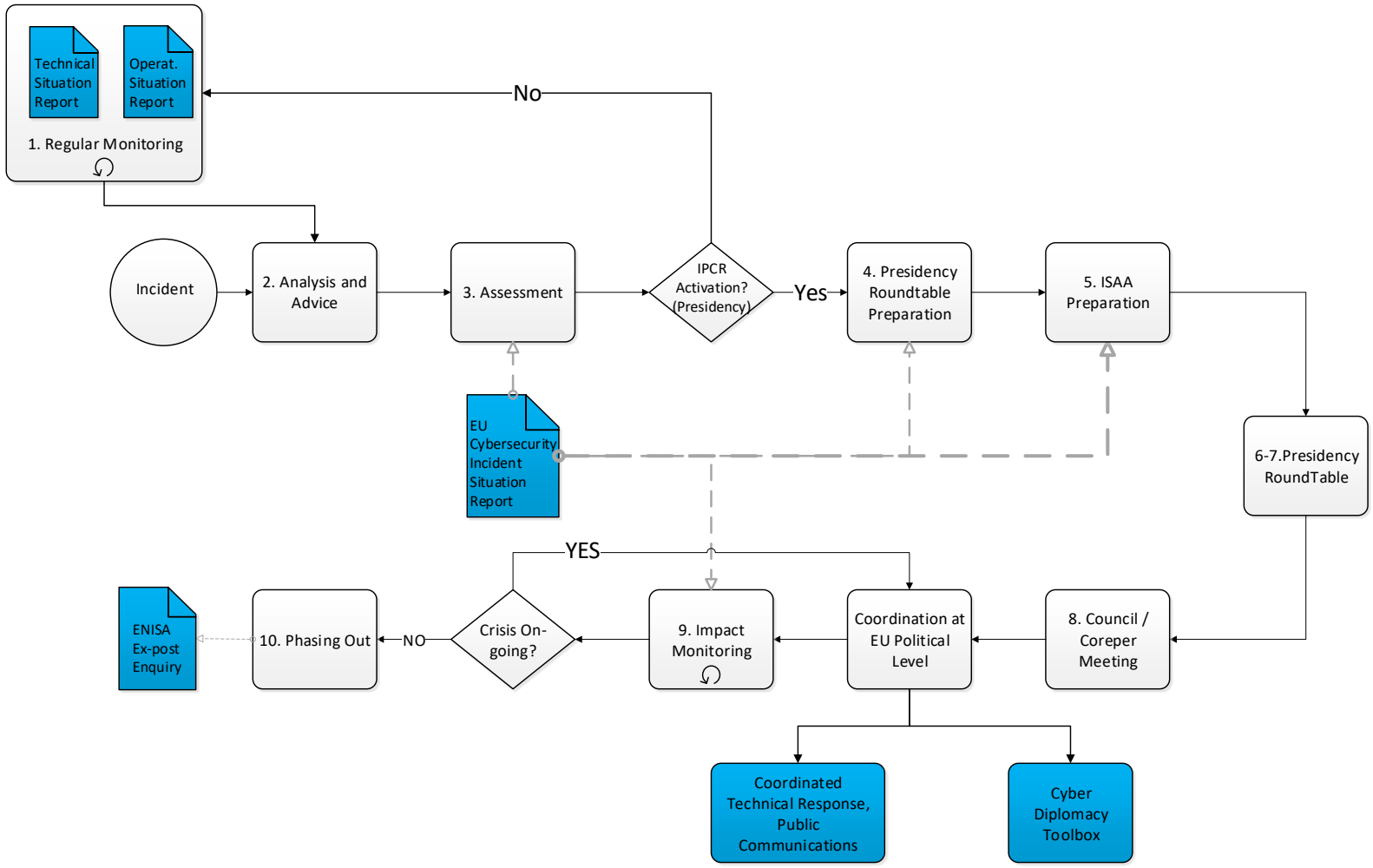
Operational

- 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**

Recap: Blueprint –integration in IPCR arrangements



Blueprint Taxonomy – as a Political Decision support mechanism

- **Nature of the Incident**
  - Root cause category: (1 of 5)
    - System failures, natural phenomena, human errors, malicious actions, 3rd party failures
  - Severity of threat: (1 of 3)
    - High, medium, low
- **Impact**
  - Sectors impacted: (1 or more of 11)
    - Energy, transport, banking, finance, health, drinking water, digital infrastructure (7 NISD sectors with OES)
    - Communications (EU ecomms framework directive)
    - Trust and identification (EIDAS)
    - Digital services (NISD DSP)
    - Government services
  - Scale of impact: (1 of 4)
    - Red – very large, Yellow – large, Green - minor, White – no
  - Outlook: (1 of 3)
    - Improving, stable, worsening

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EXTERNAL ACTION

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Parallel and Coordinated Exercise 2018

EU HEX-ML18 (PACE)

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Parallel and Coordinated Exercise 2018 (EU HEX-ML PACE 2018)

- Double exercise containing a CSDP planning (ML) and an event driven (HEX) crisis management exercise, coordinated with and conducted in parallel with NATO.
- It took place between 5-23 November, with the conduct phase held between 19-23 November

PACE 2018 – Overarching objective

- The **objective** was twofold:
  - **to improve and enhance the EU's ability to respond to a complex crisis of a hybrid nature with an internal and an external dimension**
  - **to improve cooperation with NATO in response to a hybrid crisis**

PACE 2018 – Policy areas

- The **policy areas** where the crisis responses mechanisms were triggered during the exercise were:
  - **Cybersecurity, terrorism, CBRN, maritime, energy, health/food security, poly-criminal exchange of information and communication**

PACE 2018 – Cybersecurity objectives

- Test **cyber threat assessment capacity and threat information exchange** with other EU stakeholders.
- Test the capacity of the EU institutions and relevant EU Agencies (including ENISA, EU-LISA, Europol and CERT-EU) to c**oordinate and to respond to large-scale cybersecurity incidents** and crises at the operational and political/strategic level.

PACE 2018: Main observations 1/2

- Positive involvement of various actors allowing for testing Blueprint to a broad extent – **overall successful use of Blueprint** during the exercise
- **Good cooperation** among the actors within the cyber community as well as with NATO
- **Reinforced knowledge about Blueprint** among the communities less accustomed with cyber issues but still using the cyber tools; **still lacking of proper awareness** about the Blueprint among some ("less usual") services

PACE 2018: Main observations 2/2

- There is a **certain lack of operational clarity in the design of Blueprint** favouring different interpretation of the Blueprint by the various the actors;
- There are challenges due to the use of **different taxonomies** by the different communities (in particular cyber vs law enforcement) for the same phenomena
- The **information exchange** among different communities (e.g. cyber vs law enforcement) is very difficult or sometimes impossible due to: technical, legal and practical obstacles;

Next steps

- [Blue Olex 2019]
- SOPs
- Cyber Europe 2020

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Thank you for your attention!