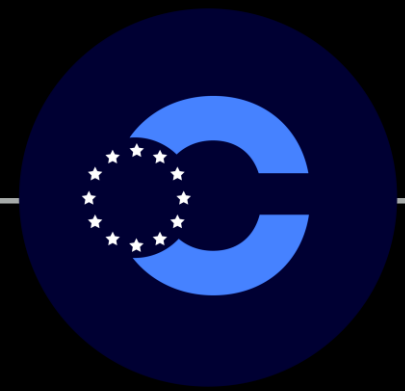


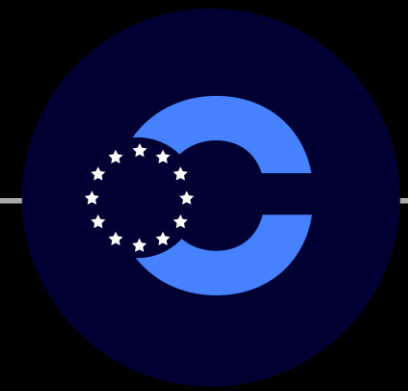
ARTIFICIAL INTELLIGENCE CONFERENCE / 2019-06-03

TLP:GREEN

CERT-EU IN THE BLUEPRINT



- ▶ CERT-EU
- ▶ Blueprint
- ▶ Our Challenges
- ▶ A Good Plan
- ▶ Let's Organise



- ▶ **Cyber Defence Entity** of all the EU Institutions, Bodies & Agencies;
- ▶ Started as a pilot scheme in 2011;
- ▶ Established in Dec 2017 as an **independent, inter-institutional legal entity**;
- ▶ **Core mission**: act as the cybersecurity information exchange and incident response coordination hub for its **65 constituents**;
- ▶ **31 experts** delivering various services to a **heterogeneous** constituency across **diverse** sectors;
- ▶ One of the key actors taking part in the **Blueprint**.

OUR SERVICES



CYBER THREAT
INTELLIGENCE

THREAT MONITORING
& DETECTION

DIGITAL FORENSICS &
INCIDENT RESPONSE

VULNERABILITY
ASSESSMENT &
ADVISORIES

RED TEAM EXERCISES

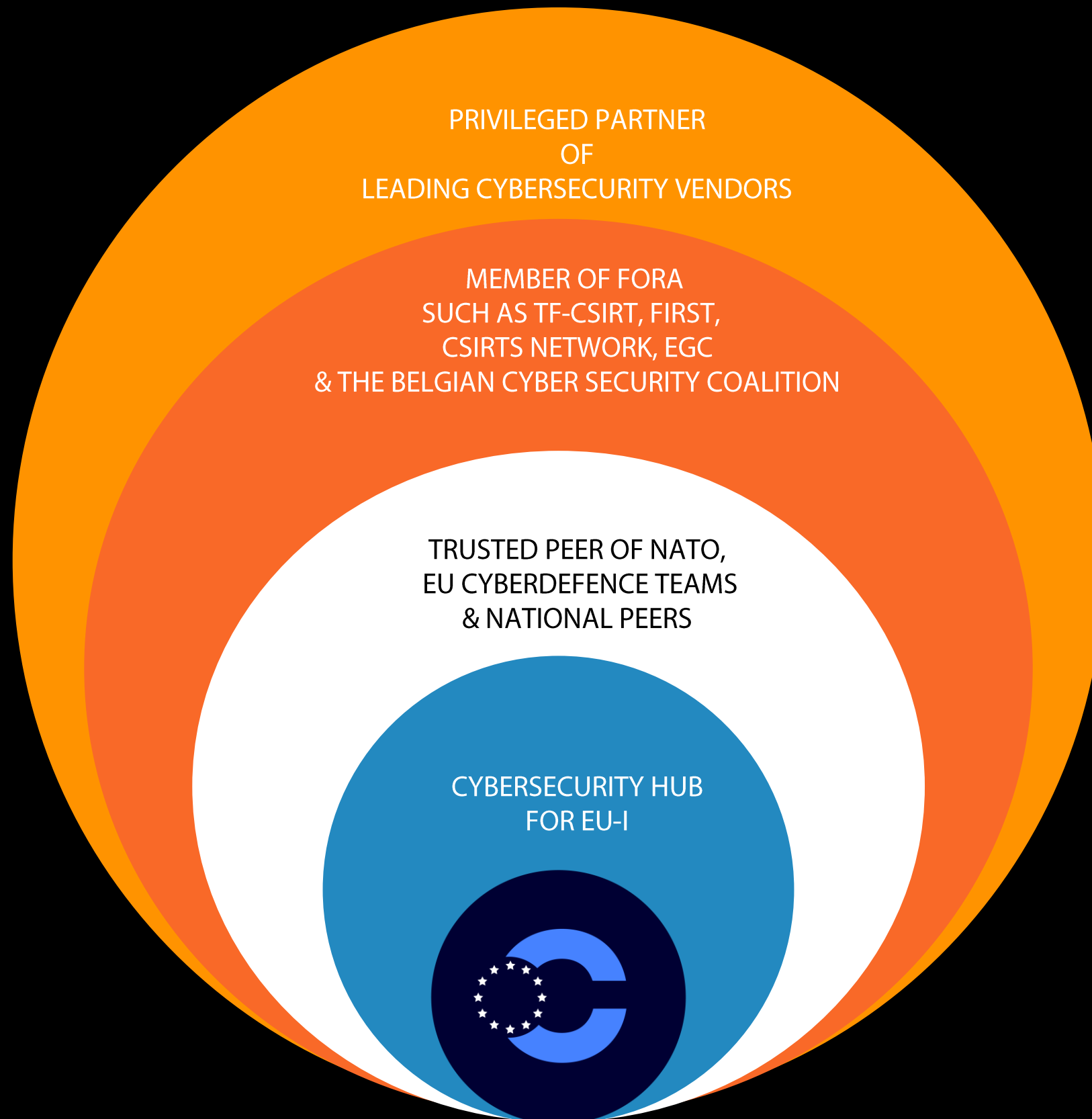
PENETRATION
TESTING

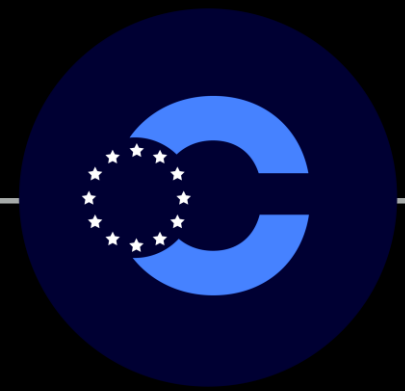
PHISHING EXERCISES

THREAT HUNTING

ENHANCED MEDIA
MONITOR

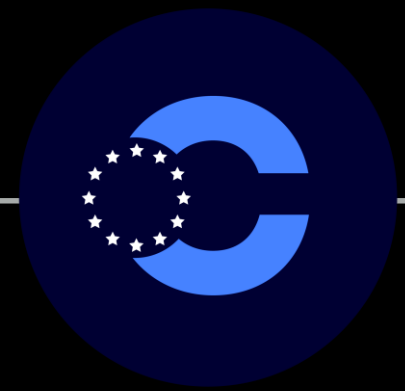
A WIDELY RESPECTED CERT





- ▶ **State or state-affiliated** groups: they tend to possess advanced capabilities and significant resources as well as objectives aligned with the agenda of their sponsor;
- ▶ **Organized crime**: often engage in targeted attacks, driven by profits;
- ▶ **Hacktivists**: attackers with ideological motivations, seeking to raise awareness or benefit their cause through their cyber militancy;
- ▶ **Opportunistic**: largely amateur criminals or, sometimes, legitimate security researchers, looking to expose flaws and exploits.

ARE WE READY?



BACKGROUND & CHALLENGES



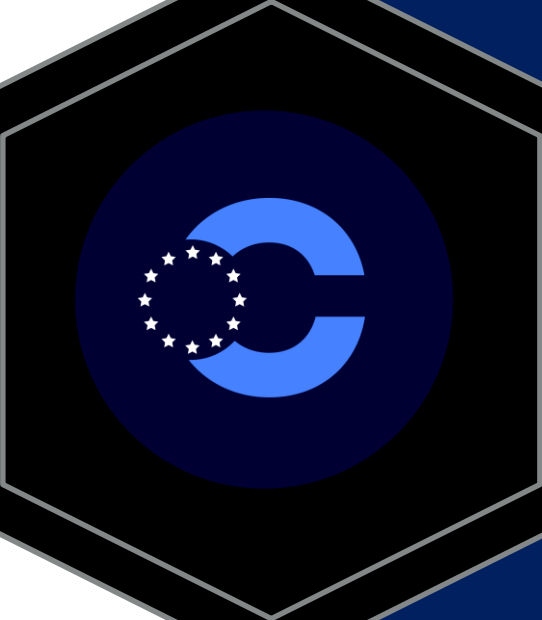
BLUEPRINT

Exchange of Information
Education & Training
Strategic & Technical Cooperation



EU Intelligence Analysis Center
EU Military Staff Intelligence Directorate
Rapid Alert System

Technical Information
Incident Coordination

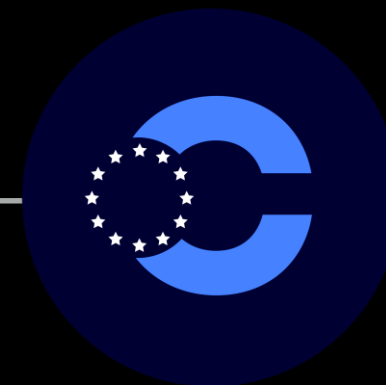


ARGUS I&II

Exchange of Information
Training



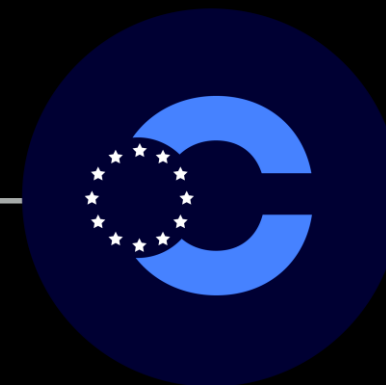
Cyber Diplomacy Toolbox
Integrated Political Crisis Response
Cyber Defence Policy Framework



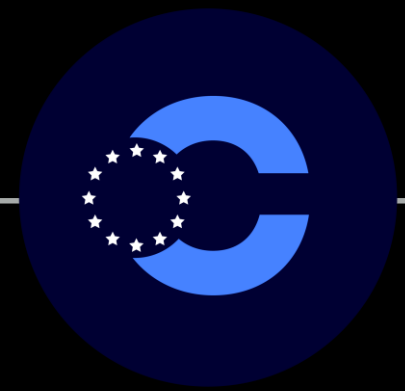
- ▶ **Culture:** vast majority of existing EU-Institutions departments focus on policy; only a “handful” with experience on cyber operations;
- ▶ **Entropy:** policy complexity increases exponentially; the threat landscape adapts quickly; Information & Communication Technology evolves rapidly introducing new challenges;
- ▶ **Diversity:** in the missions of our constituency; variety of ICT infrastructures.



"IN THE MIDST OF CHAOS, THERE IS ALSO
OPPORTUNITY" – SUN TZU



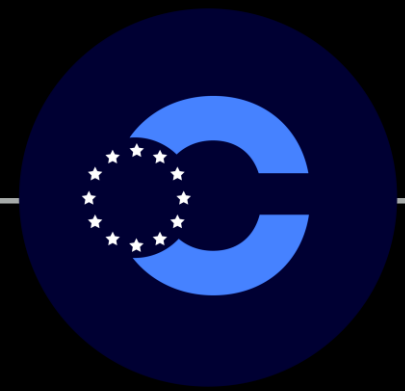
- ▶ **Policy:** define clear objectives; include precise procedures; be simple; unify processes; keep it steady;
- ▶ **People:** most important asset; emphasize on cyber security mentality; expand technical knowledge; engage senior management;
- ▶ **Tools:** team – develop capability; community – foster cooperation; automate and invest in R&D;
- ▶ **Alliance:** information sharing; learn from others; maintain awareness; multiply available resources;
- ▶ **Plan:** continuous improvement; “winter is coming”.



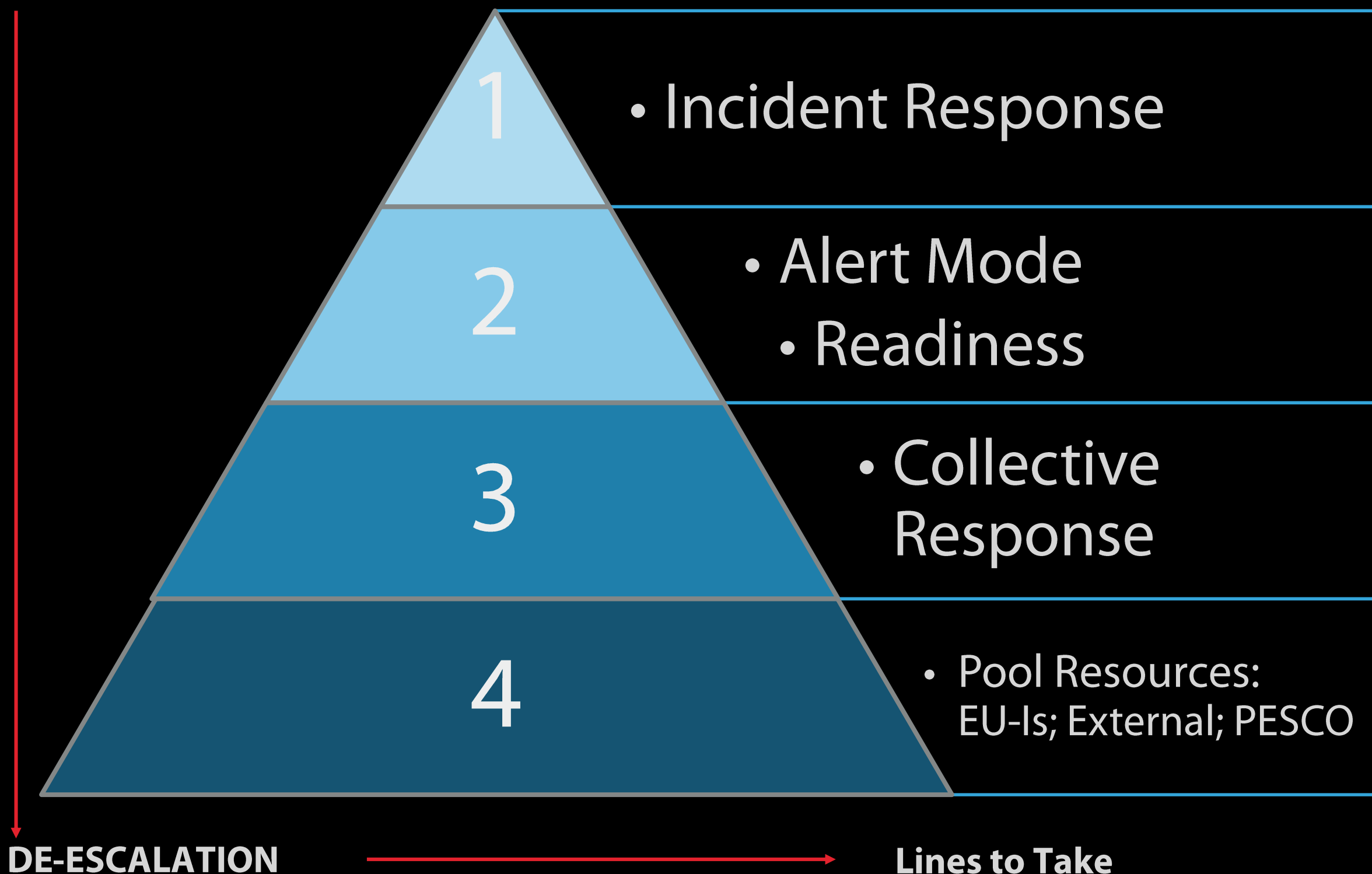
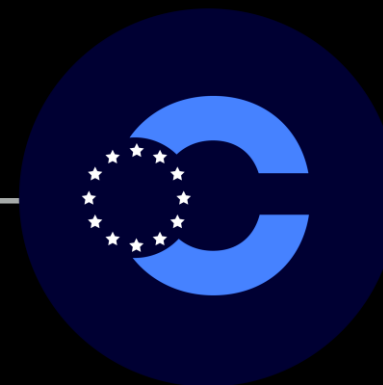
- ▶ **EU-pace/NATO locked shields:** greatest so far operational challenge; shaped an inter-institutional incident response team; engaged all teams; introduced senior management of CERT-EU as training audience;
- ▶ **EU elections:** launched tailored services for the European Parliament; went on operational Readiness status;
- ▶ **Major attacks paper:** an ongoing effort for EU-Institutions on collective response against significant attacks.

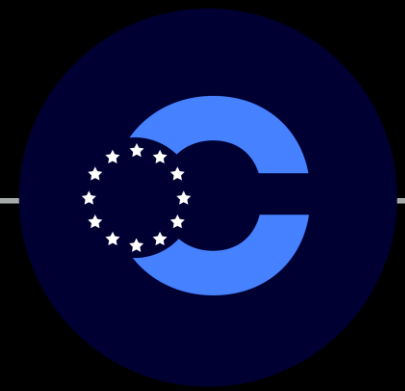


MAJOR ATTACKS PAPER



- ▶ **Standard Operating Procedures:** derived from CERT-EU's experience; best practices; tailored tools;
- ▶ **Situational Awareness:** by a sensor network; by threat feeds; by using advanced threat detection;
- ▶ **Operational Alert System** to complement EEAS RAS;
- ▶ **Contribution:** capacity and willingness to engage.





- ▶ **Streamlines** with existing structures' mandate; does not introduce new bodies;
- ▶ **Cost effective**; utilises constituents' existing capabilities and available resources for the benefit of all;
- ▶ **Simple SOPs** that have been tested and ensure response in timely manner;
- ▶ **Full Crisis Management lifecycle**: prevention, preparedness, response, recovery.

THINK CONSTITUENT



FOR THE EU INSTITUTIONS, BODIES AND AGENCIES

CREATE VALUE