



Innovating Smart Cities Resilience through Research and Best Practices

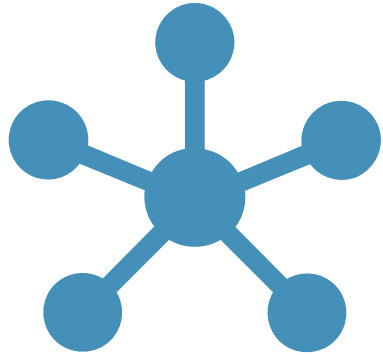
CERIS BRUSSELS EVENT

2024 APRIL 11

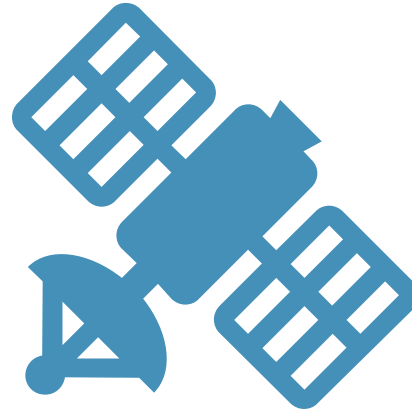
FRÉDÉRIC GUYOMARD – EDF CYBERSECURITY PROJECT MANAGER

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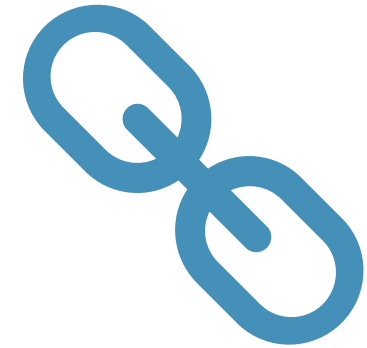
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NETWORKS



CRITICAL ASSETS



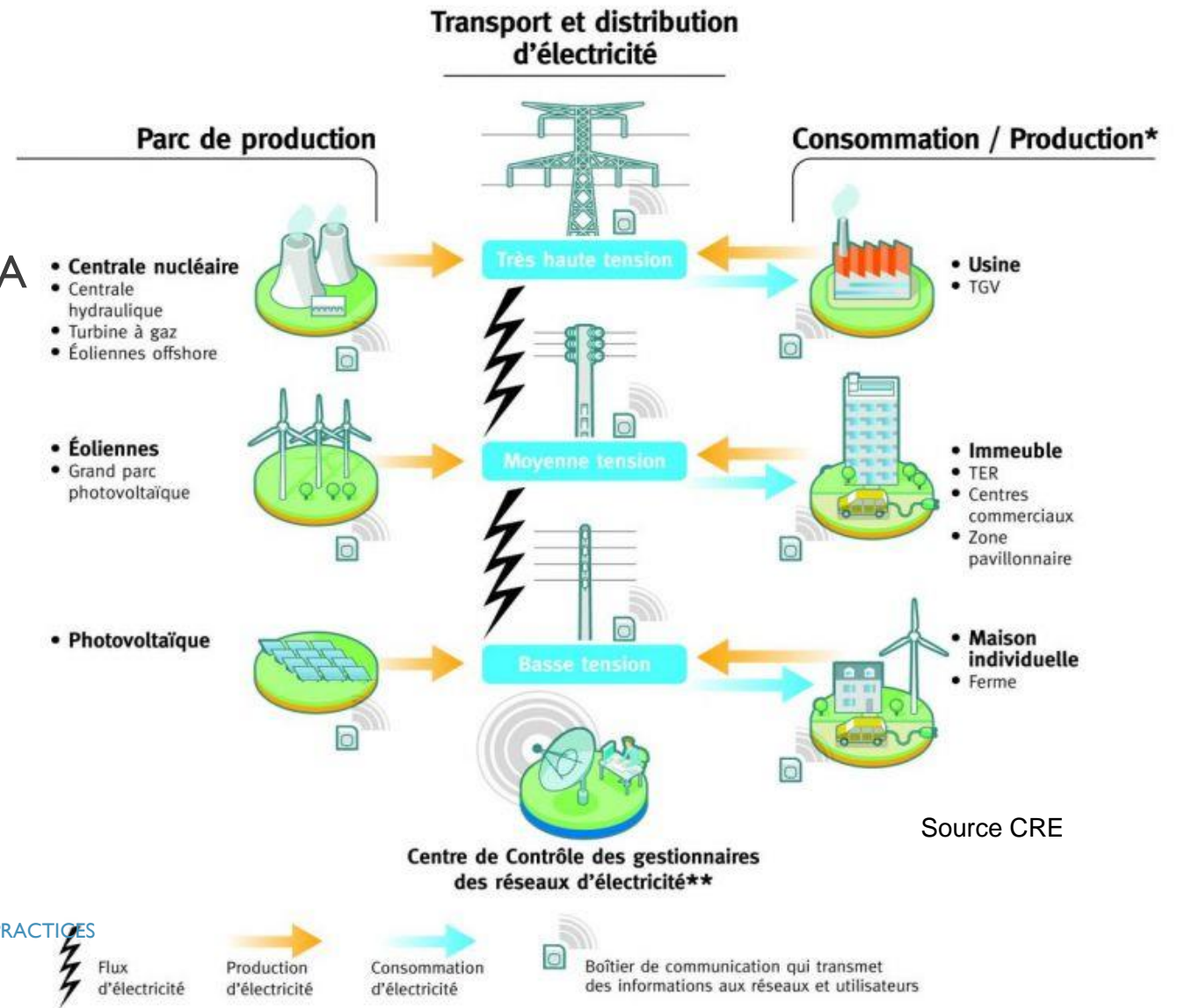
CONNECTION

SMART-CITIES RESILIENCE ... AND PROTECTION

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ELECTRICAL SYSTEM AREA

- Protection of assets means protection of DATA
- During Storage, Transport, Process
- Cybersecurity has become a pillar
- Physical security and Site Protection as a basic
- The Threat is growing (i.e. Ukraine conflict)
- The Threat could be everywhere
- Risk Assessment always
- Human Factors



MONITORING SYSTEMS

- Management Systems

- IACS

- SCADA

- ICS

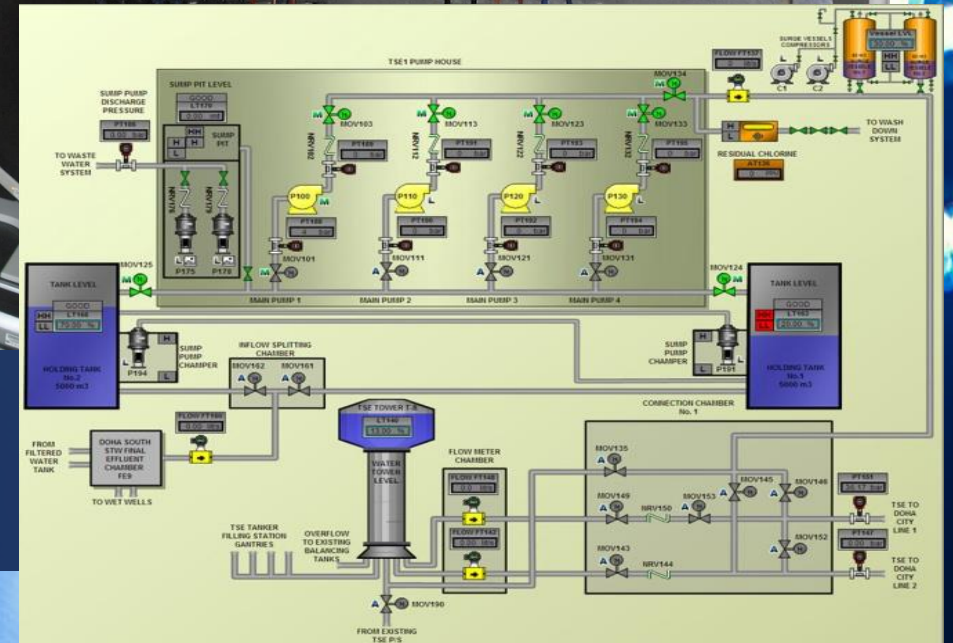
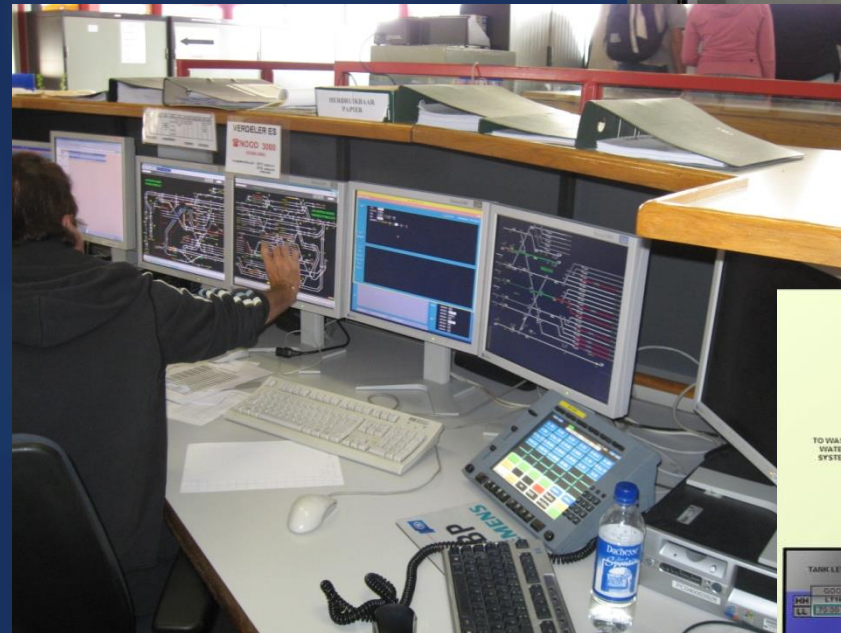
- DCS

- BPCS

- Cyber Monitoring

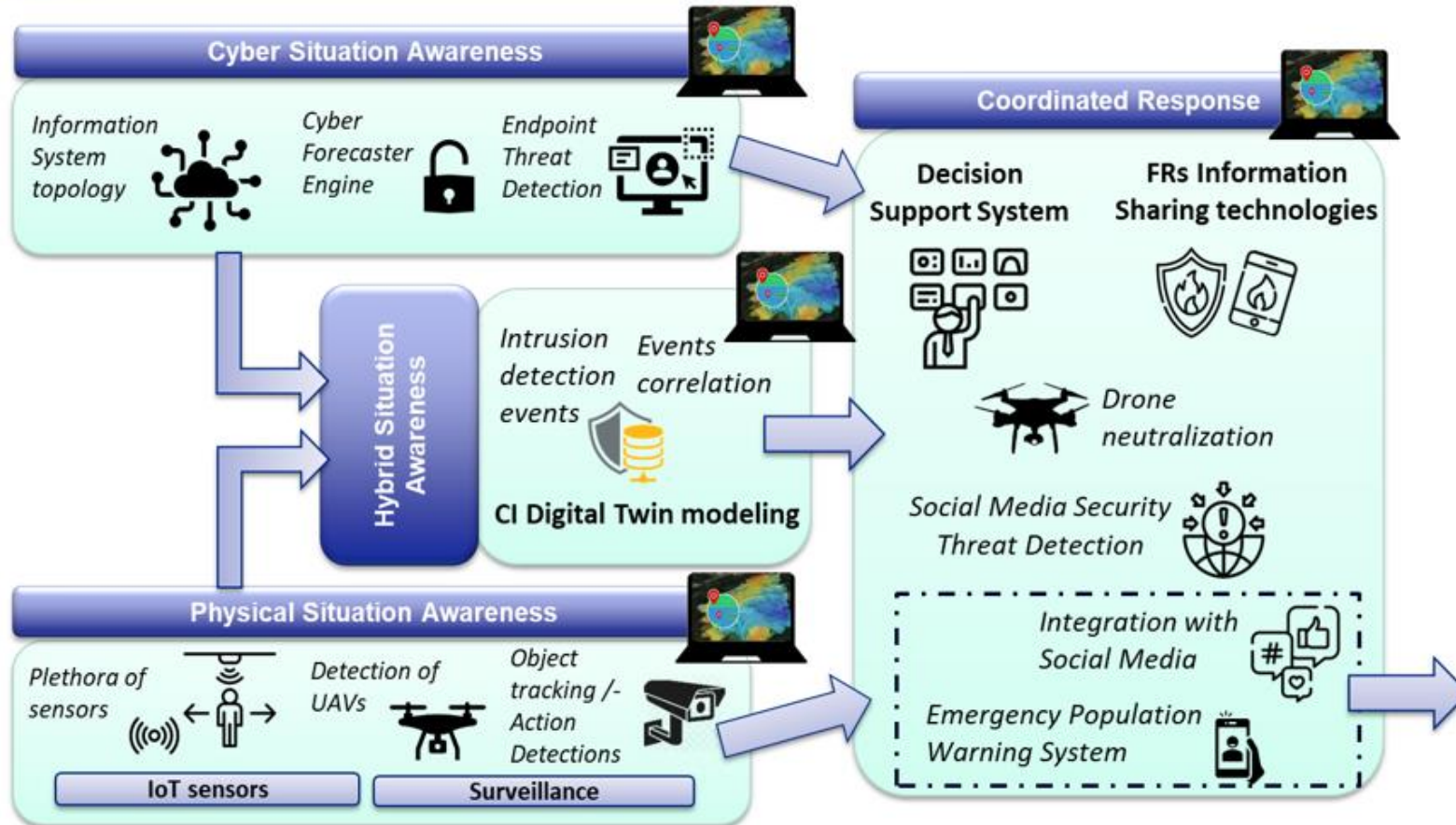
- SOC

- C-SIRT



PRAETORIAN A EUROPEAN FUNDED PROJECT

Project Coordination – Tools



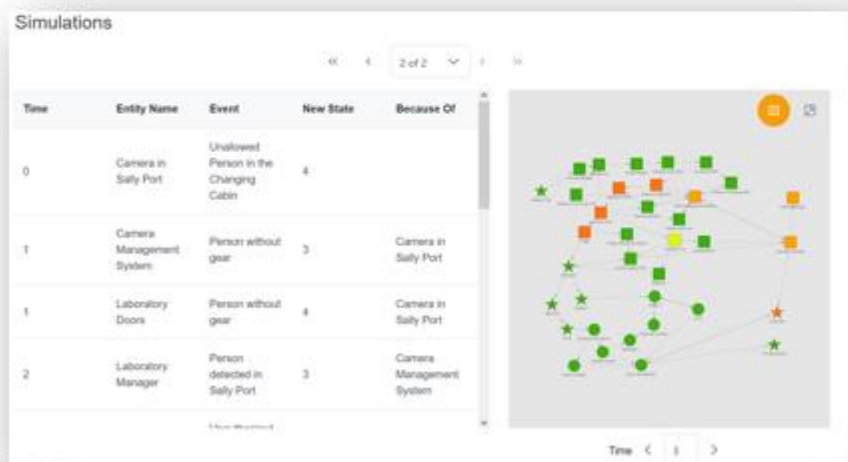
PRAETORIAN strategic goal is to increase the **security and resilience** of European CIs, facilitating the **coordinated protection** of **interrelated CI** against **combined physical and cyber threats**.

<https://praetorian-h2020.eu/>



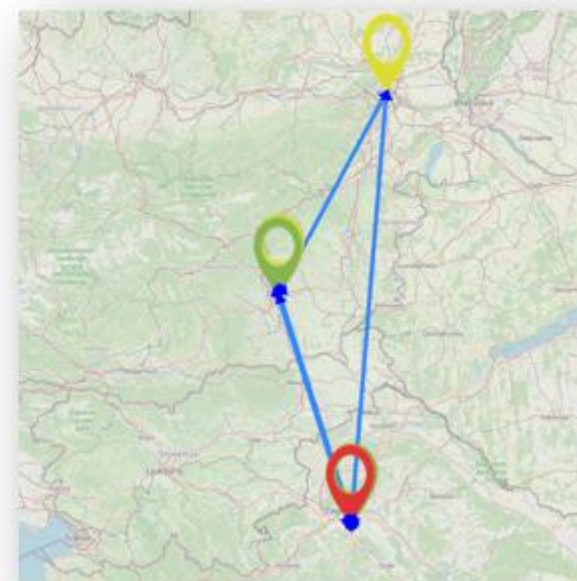
Cascading Effects - TPE Simulation

Threat Propagation Engine (TPE) describes direct and indirect consequences over time



One simulation run

Possible cascading effects on the airport due to the attack on the **laboratory**



After attack simulation

EUROPEAN DIRECTIVES



<https://www.consilium.europa.eu/fr/press/press-releases/2022/12/08/eu-resilience-council-adopts-a-directive-to-strengthen-the-resilience-of-critical-entities/>

<https://digital-strategy.ec.europa.eu/en/policies/nis2-directive>



RESILIENCE

- ✓ Better preparing
- ✓ Better responding
- ✓ Enhancing international cooperation



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THANK YOU

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