

Cybersecurity for Control Communication Protection C3P

A Swedish collaboration project
co-financed by



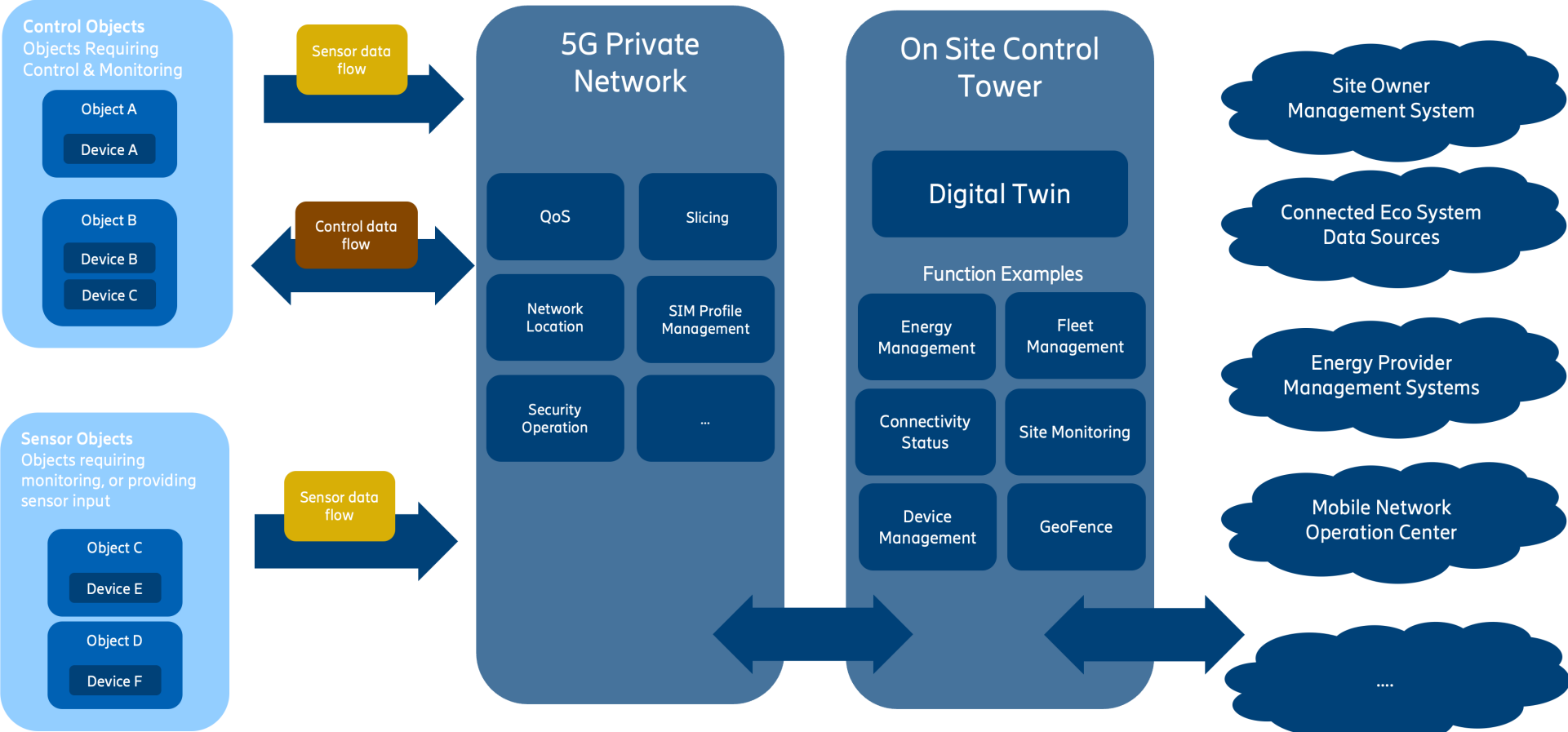
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Basic Facts

- Partners: Ericsson, Telia, Volvo Autonomous Solutions, RISE, AstaZero (coordinator)
- Budget total MSEK 13.8 of which MSEK 6.88 from Vinnova
- 20 Sep 2021 – 31 Mar 2023
- Vinnova Dnr 2021-02487
- Vinnova call "Avancerad och innovativ digitalisering - våren 2021"

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System Overview



Graphics from Vinnova project Aspect, Dnr 2021-04347

Roleplay Exercises

Exercise lead (white team)

RISE – Role play lead
Telia – Facilitator

Enterprise



AstaZero –
Security officer at enterprise, responsible for security and safety

Collaboration, communication

Vehicle automation system provider



Volvo Autonomous Systems –
IT and Security operations of vehicle automation service provider

Collaboration, communication

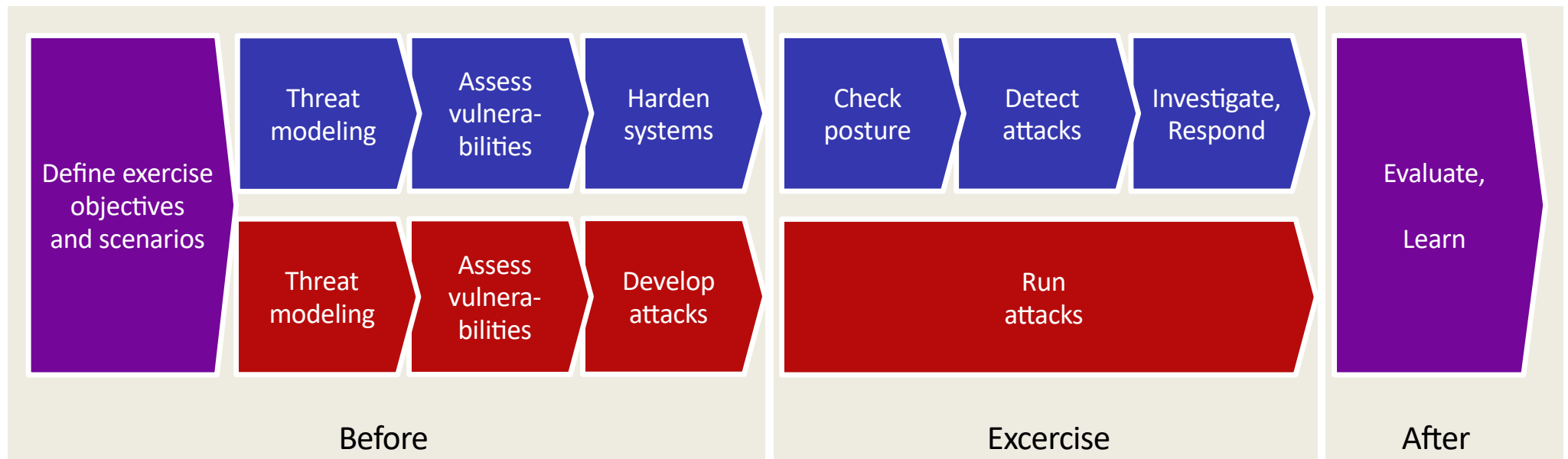
Mobile network operator



Ericsson –
Network operations, NOC
Network security operations, SOC

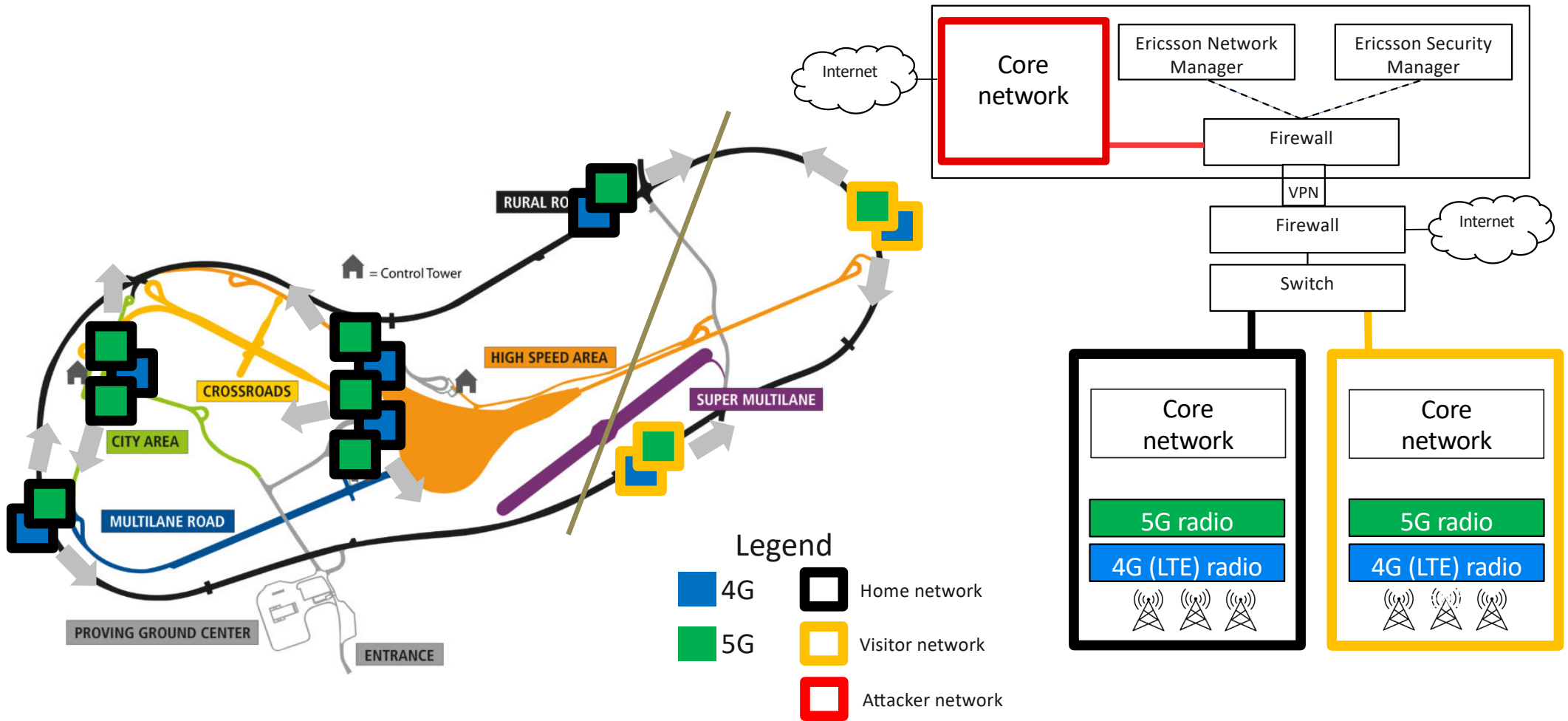
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Cybersecurity Exercise Process



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Mobile network configuration



AstaZero Proving Ground and Networks



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Security Automation in 5G Networks

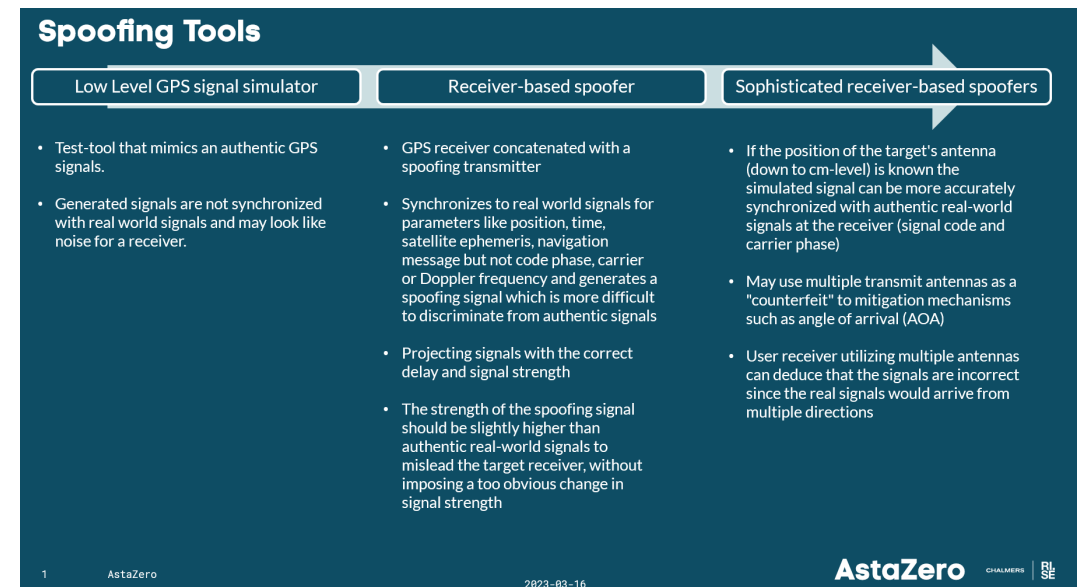


- 5G is very secure, rel 15 comes with security enhancements
- Automation of security baseline configuration and policy compliance checks
- Monitoring and detection of 4G/5G network threats
 - Radio Access Network
 - Core Network

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GNSS Spoofing and Jamming

- Spoofing – falsifying and transmitting GNSS signals to create false position, speed and time in a user receiver
- Jamming – interfering with equipment by transmitting on the same frequencies as the equipment to be interfered with to prevent accurate position, time or speed



Information Sharing using MISP



- MISP – Malware Information Sharing Platform
- Open-source threat intelligence and sharing platform
- Sharing Indicators of Compromise (IoCs) in a structured way
- C3P learnt that sharing IoCs across organizations (in roleplays) is very important and instructive

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Thank you!

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 **Telia Company**

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VINNOVA
Sweden's Innovation Agency

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