

# Locked Shields 2023

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Netnod AB 2023

### CCDCOE

→ MISSION: support our member nations and NATO with unique interdisciplinary expertise in the field of cyber defence research, training and exercises covering the focus areas of technology, strategy, operations and law.

- → VISION: foster cooperation of like-minded nations. We bring together NATO Allies and partners beyond the Alliance.
- $\rightarrow$  30 sponsoring nations, 9 contributing participants
- $\rightarrow$  Located in Tallinn, Estonia
- → One of the NATO Centres of Excellence



#### Sweden and CCDCOE

 $\rightarrow$  Sweden is a contributing participant since 2017

- Sweden is represented in the Steering Committee
- → A seconded researcher (from the Armed Forces) at the Strategy Branch
- Participates to varying extents in the centre's activities
- $\rightarrow$  Research, exercises, training
- The Swedish participation is coordinated by the Swedish Armed Forces Cyber Defence

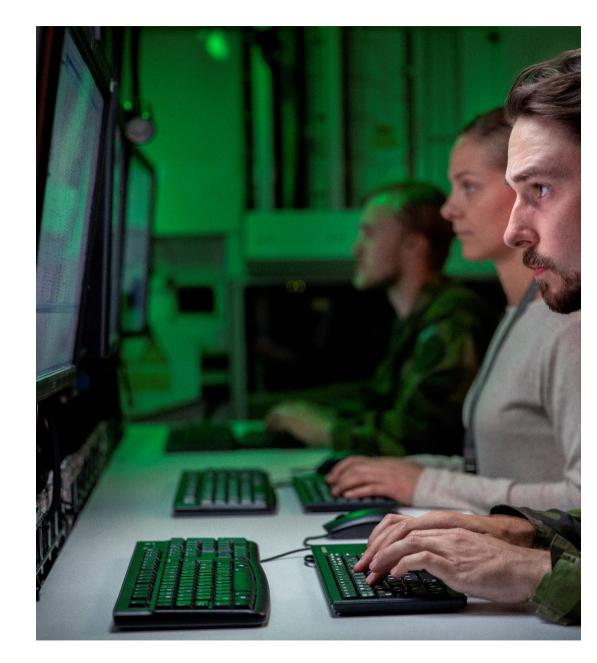


# SWEDISH ARMED FORCES CYBER DEFENCE



# **CYBER DEFENCE**

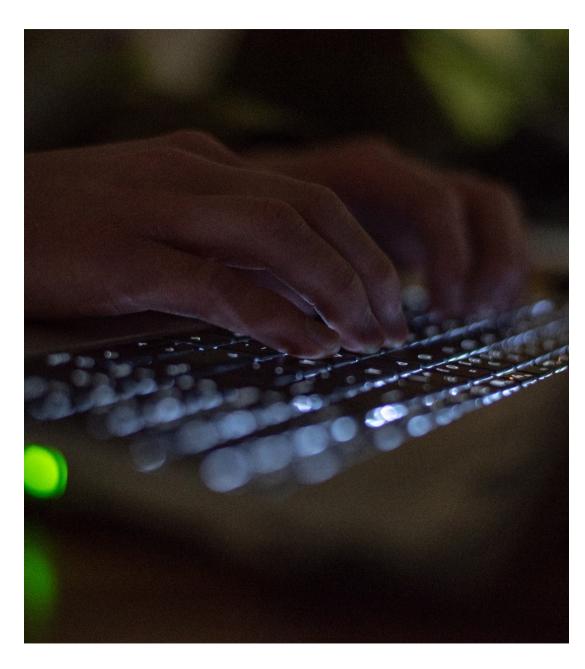
- → The Armed Forces have a leading role in the Swedish Cyber Defence
- $\rightarrow$  Cyber Defence is one of the main priority tasks
- → Able to protect systems both inside and outside of the Armed Forces
- → Necessary to plan defence and total (civil) defence
- ightarrow Cyber Security is an absolute necessity





### **EXERCISES**

- → It is important to practice realistic situations where competent threat actors test the participants
- → Exercises are a natural part of the Armed Forces operations
- $\rightarrow$  Can be carried out at different levels, e.g.:
  - → Discussion exercises (Tabletop exercises)
  - $\rightarrow$  Technical exercises
- → Conducts both own exercises and together with national and international partners



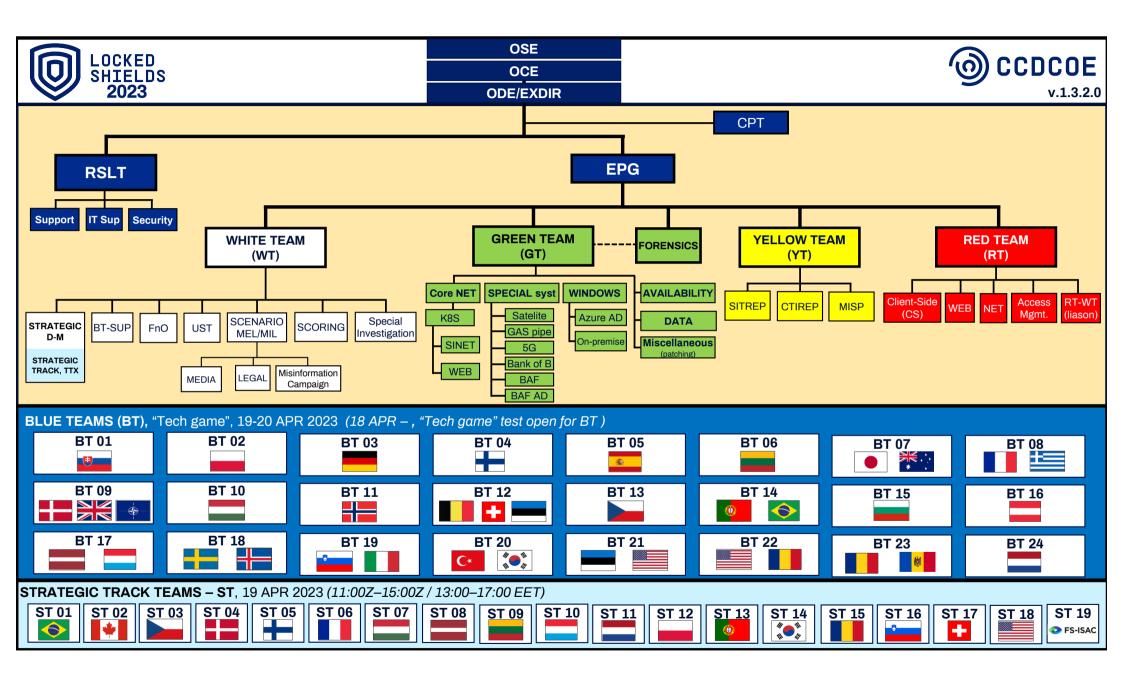
SWEDISH ARMED FORCES

## **LOCKED SHIELDS 23**

- → The Swedish Armed Forces led the Swedish team and participated in the exercise management in Tallinn
- $\rightarrow$  Sweden cooperated with Iceland
- → Participants came from the finance sector and the sector of electronic communication
- $\rightarrow$  Focus was technical



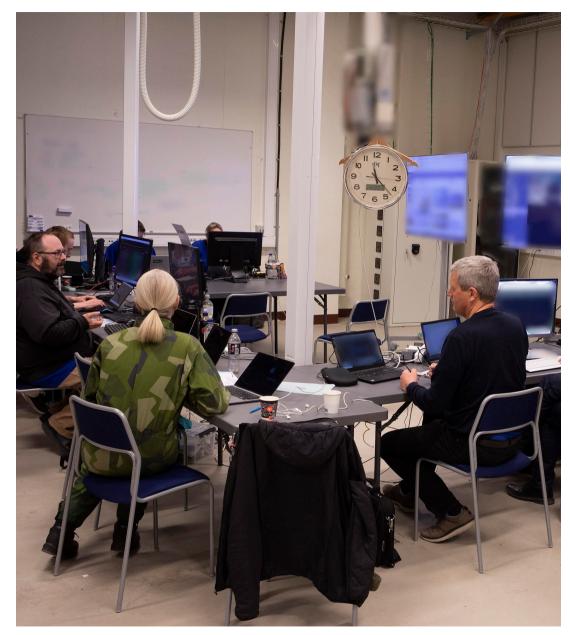




# SETUP

SWEDISH ARMED FORCES

- $\rightarrow$  24 teams from 38 different countries
- $\rightarrow$  Sweden/Iceland was at LedSS in Enköping
- $\rightarrow$  Three days of preparation
- $\rightarrow$  Two days of exercise
- $\rightarrow$  Each day 8-16 local time
- → Points deducted if services are not reachable, additions for good reports and end user support



# **TECHNICAL BACKEND**

- → The exercise was run in a crate at the organisation CR14 in Tallinn
- $\rightarrow$  Technical platform
  - → VMWare vCenter
  - $\rightarrow$  30 TB RAM
  - $\rightarrow$  15700 CPU Cores
  - $\rightarrow$  5500 Virtual servers
  - → 2600 simultaneous VPN-connections





