

CYBER SECURITY

dark web
servers
remote administration tools
backdoor
internet
wikileaks
corporations
trojan
bitcoin
porn
adwares
root
data
spoofing
government
ssl
data dump
keylogger
antivirus
blackhat
database
whitehat
firewall
worms
script kids
defacement
stuxnet
surveillance
distributed denial of service
malwares
access
world wide web
activism
warez
hackers
encryption
information technology
cross site scripting
social engineering
privacy
denial of service
financial institutions
cyberspace
anonymous

RISE Cybersecurity

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RISE SICS Cybersecurity

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2019-05-16

RISE-wide collaborations

Cybersecurity

ICT: SICS, ACREO, Viktoria, Interactive

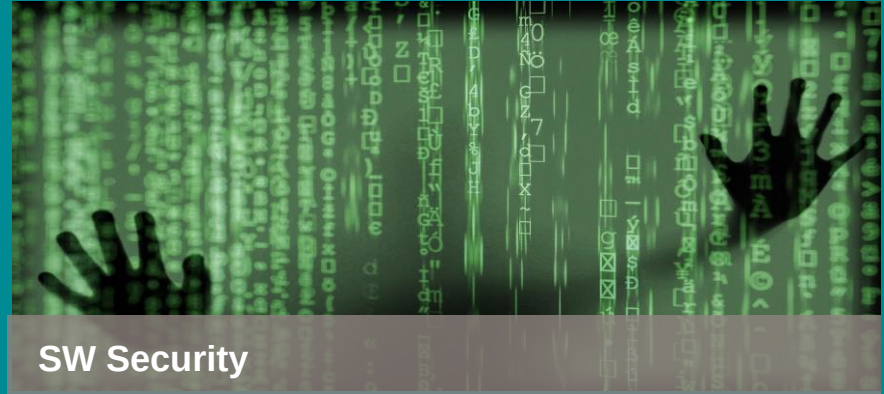
Certification

Electronics

Mobility & Transport

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WORLD CLASS Cybersecurity EXPERTISE



RISE Cybersecurity

Application Areas

- Communication
- Mobility & Transport
- Health Care
- Critical Infrastructure
- Smart Cities / Buildings
- Industry

Activities

Direct Industry-funded Research/Development

Strategic Research

Applied Research – International/Swedish

Standardization

Strategic Research

- SSF **SEC4Factory**: Cyber Security for Next Generation Factory
 - Lund University (2018-2023)
- SSF **aSSIsT**: Secure Software for the Internet of Things
 - Uppsala University (2018-2023)
- SSF Institute PhD **DIET**: Defense-in-depth for IoT
 - Uppsala University (2017-2022)
- VR **HackingThings**: Human Centred Internet of Things Security
 - Stockholm University (2018-2023)



Vetenskapsrådet



Applied Research – International

- H2020 **CONCORDIA**: Cyber Security Competence for Research and Innovation (2019-2023)
- H2020 **nIoVe**: A novel Adaptive Cybersecurity Framework for the Internet-of- Vehicles (2019-2022)
- H2020 **ACLEPIOS**: Security in cloud-connected eHealth (2018-2021)
- H2020 ECSEL **SECREDAS**: Platform security in autonomous vehicles (2018-2021)
- Celtic-Plus **CritiSec**: Critical Infrastructure Security (2019-2022)
- Eurostars **SecureIoT**: Asymmetric cryptography for IoT (2016-2019)
- H2020 **COLA**: Cloud-orchestration at the level of application (2017-2019)
- Celtic-Plus **CyberWi**: Cyber-security in the wireless industrial use cases (2016-2018)
- EIT **ACTIVE**: Implementation/evaluation/standardization of secure group communication (2016-2018)
- H2020 **5G-ENSURE**: A Secure, Trustworthy And Viable 5G Network (2015-2017)

Applied Research – Swedish

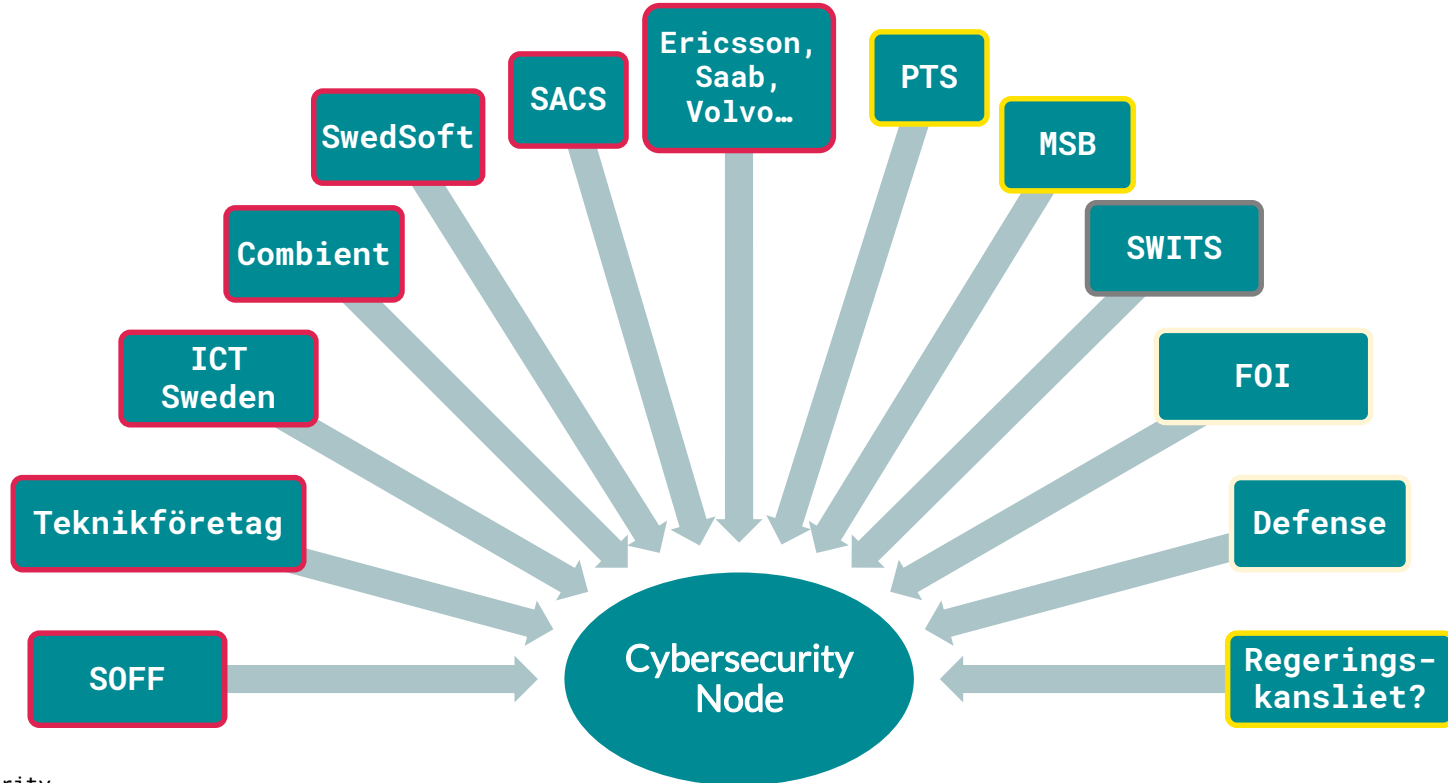
- SIP-IoT **SecureCare**: The SIP IoT Security Hub with a use case in elderly care at home
- Vinnova UDI **SECONDS**, Secure Connected Devices
- Vinnova Digital säkerhet och infrastruktur **GroupSec**: Secure Group Communication
- Vinnova Digital säkerhet och infrastruktur **IoTSec-Offentlig**: IoT security in public sector environment
- SIP-IoT **CEBOT**: Certificate Enrollment in Billions of Things
- Vinnova Digital säkerhet och infrastruktur **National Cybersecurity Node**



Future Position

Swedish National Cybersecurity Node (II)

AVinnova-funded activity



European Cyber Security Organisation (ECSO)

- A partnership for cybersecurity in Europe
 - European Commission and the ECSO signs cybersecurity Public Private Partnership (cPPP)
- RISE participates in WG6: SRIA and Cyber technologies
 - SWG 6.1 Ecosystem
 - SWG 6.2 Digital Transformation in Verticals
 - SWG 6.4 Basic and Disruptive Technologies
 - SWG 6.5 Cyberdefence
- RISE is the only RTO from Sweden



H2020 CONCORDIA

EU Cybersecurity Excellence Network

- A prestigious network shaping the future of cybersecurity in Europe
- 46 cybersecurity centres participating [Europe, Norway, Israel]
- RISE Cybersecurity and Ericsson join from Sweden
 - RISE has Nordic lead
 - RISE is a member of management board
- Coordinated by the University of Federal Armed Forces, Munich



Cybersecurity

Horizon 2020 pilot projects

to prepare a European Cybersecurity Competence Network
& contribute to the European cybersecurity industrial strategy

More than **€63.5 million** invested in **4 projects**

 CONCORDIA Cyber security competence & R&D Research and Innovation Partners: 46 EU Member States involved: 14 Key words SME & startup ecosystem Ecosystem for education Socio-economic aspects of security Virtual labs and services Threat Intelligence for Europe DDoS Clearing House for Europe AI for cybersecurity Post-Quantum cryptography	 Cyber Security for Europe Partners: 43 EU Member States involved: 20 Key words Cybersecurity for citizens Application cases Research Governance Cyber Range Cybersecurity certification Training in security	 ECHO Partners: 30 EU Member States involved: 15 Key words Network of Cybersecurity centres Cyber Range Cybersecurity demonstration cases Cyber-skills Framework Cybersecurity certification Cybersecurity early warning	 SPARTA Partners: 44 EU Member States involved: 14 Key words Research Governance Cybersecurity skills Cybersecurity certification Community engagement International cooperation Strategic Autonomy
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More than **160 partners** from **26 EU Member States**

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