

## CONCORDIA

### CYBER SECURITY COMPETENCE NETWORK FOR RESEARCH AND INNOVATION



#### CONCEPT AND OBJECTIVES

- CONCORDIA is developing cyber security solutions and assisting the European Union in building **strong cyber security through EU-wide cooperation** and sharing of information
- The project **provides excellence** and leadership in technology, processes and services to establish a **user-centric EU-integrated cyber security ecosystem**

CONCORDIA, the **Cyber Security Competence Network**, has been set up as a consortium of **more than 60 partners** to promote Europe's digital sovereignty. It aims to:



Connect stakeholder groups



Educate cyber security professionals and students



Explore research and develops industry applications



Promote women in cyber security



Assist start-ups, policy makers, etc.



Organise talks, interviews, panels and conferences

## OUR ROLE IN THE PROJECT

- Coordination of mobile communication tasks
- Industrial use-cases on unoccupied aerial vehicle security applications
- Research activity support with a focus on the following three use-cases:



- Hardware-based, wireless post-quantum secure authentication
- Safe interaction supported by trust mechanisms, including with malicious/uncooperative UAS in urban air mobility
- Secure mobile ad-hoc networking

## RESEARCH QUESTIONS

- 1 How can security challenges for aircraft be analysed ?**  
Attack graphs, attack vector analysis to operations and supporting infrastructure, penetration tests on selected systems to define countermeasures
- 2 How to react to an unauthorised vehicle or failed authentication?**  
Autonomous trust-based decisions, security-by-design
- 3 What are the operational limits of the authentication/authorisation mechanism?**  
Transport level security over wireless channel
- 4 How to establish secure networks in a highly dynamic environment?**  
Ad-hoc networking, hardware-based encryption, resilience to side-channel attacks
- 5 How to safely collaborate with untrusted/partly trusted vehicles?**  
Context aware trust estimation, controlled information sharing, data trustworthiness, zero trust

**HORIZON 2020:** [ec.europa.eu/programmes/horizon2020](https://ec.europa.eu/programmes/horizon2020)

**CONCORDIA:** [concordia-h2020.eu](https://concordia-h2020.eu)

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