

# Sensor informatics and Decision-making for the Digital Transformation (SEDDIT)

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A Vinnova Competence Center

Thematic Workshop 2025

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Situation readiness and resilience

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Sensor informatics and Decision-making  
for the Digital Transformation



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# Why this workshop?

- An initial idea - situation awareness
- Discussions resulted in an extension of the scope – situation readiness
- Connections to resilience
- Remember the Mission of SEDDIT:

To contribute to a **resilient and sustainable society** and the competitiveness of Swedish industrial ecosystems by developing cutting-edge knowledge and competitive solutions within sensor informatics and decision-making

- Our intention with this workshop is to offer an occasion and an arena to learn, share ideas, experiences, and challenges around these topics and discuss SEDDIT's role





# Center partners

Linköping University

Uppsala University

Saab Aeronautics

Saab Dynamics

Scania

Volvo Cars

Atlas Copco Industrial Technique

Väderstad

Actia Nordic

SafeLine

UMS Skeldar

Sensorbee



# What is meant by situation readiness and resilience? – Some answers from ChatGPT

What is the definition of resilience?

Resilience is the capacity to withstand adversity, maintain or regain mental, emotional, and physical well-being, and continue functioning effectively in the face of stress or change.

Examples:

- Community resilience: How a community recovers from disasters or crises.
- Engineering resilience: How systems or structures withstand and recover from failure or disruption.



# What is meant by situation readiness and resilience? – Some answers from ChatGPT

What is the definition of situation readiness?

Situation readiness is the degree to which a person, team, or organization possesses the necessary awareness, resources, skills, and plans to act appropriately and effectively in response to a given situation.

Example:

- **Military or emergency management:** The ability to respond immediately and appropriately to crises.



# What is meant by situation readiness and resilience? – Some answers from ChatGPT

Which are the connections between resilience and situation readiness?

Readiness builds the foundation for resilience; resilience sustains performance when readiness is tested.

- Situation readiness is about being prepared before a challenge occurs.
- Resilience is about how you respond and recover after the challenge happens.



# Additional perspectives

- Societal perspectives – Thomas Ekström, Kristina Börjevik Kovaniemi
- Core competence perspectives
- Management perspectives – Nicolette Lakemond



# Core competences

- Sensor fusion and sensor systems
- Data-driven modeling and diagnostics
- Learning methods for control
- Control-oriented physics-based modeling
- Optimization and planning for control and autonomy



# Program

09.30 – 10.00: Coffee

10.00 – 10.10: Welcome and introduction

10.10 – 11.00: *From information to decision – A resilience perspective.* Thomas Ekström, Rote Consulting

11.00 – 12.00: *Lessons from Almirante Storni and Marco Polo – Society's Preparedness for Major Maritime Incidents.* Kristina Börjevik Kovaniemi, The Swedish Accident Investigation Authority

12.00 – 13.30: Lunch

13.30 – 15.00: *Situation Readiness and Resilience from Core Competences Perspective*

15.00 – 15.30: Coffee

15.30 – 16.30: *Organizational perspectives on situation readiness and resilience.* Nicolette Lakemond, Linköping University

16.30: Discussion and closing

19.00: Dinner at Restaurant Citat, Nygatan 38



# Dinner tonight – Restaurant Citat, Nygatan 38

Google Maps

Citat Vin & Mat Linköping





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