

DTU



Autonomous infrastructure

- a vision for the future

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Threats

- **Non-malicious use:**
 - Operator errors
 - Technical issues
- **Malicious use:**
 - Violation of privacy
 - Spying and tracking (including targeting)
 - Smuggling
 - Platform for cyber attack
 - Physical attacks (harassment, chemical or biological agents, explosives, PSYOPS)



Challenges

- **Detection**

- Size
- Speed
- Deployment

- **Identification**

- Course and speed
- Intent

- **Neutralization**

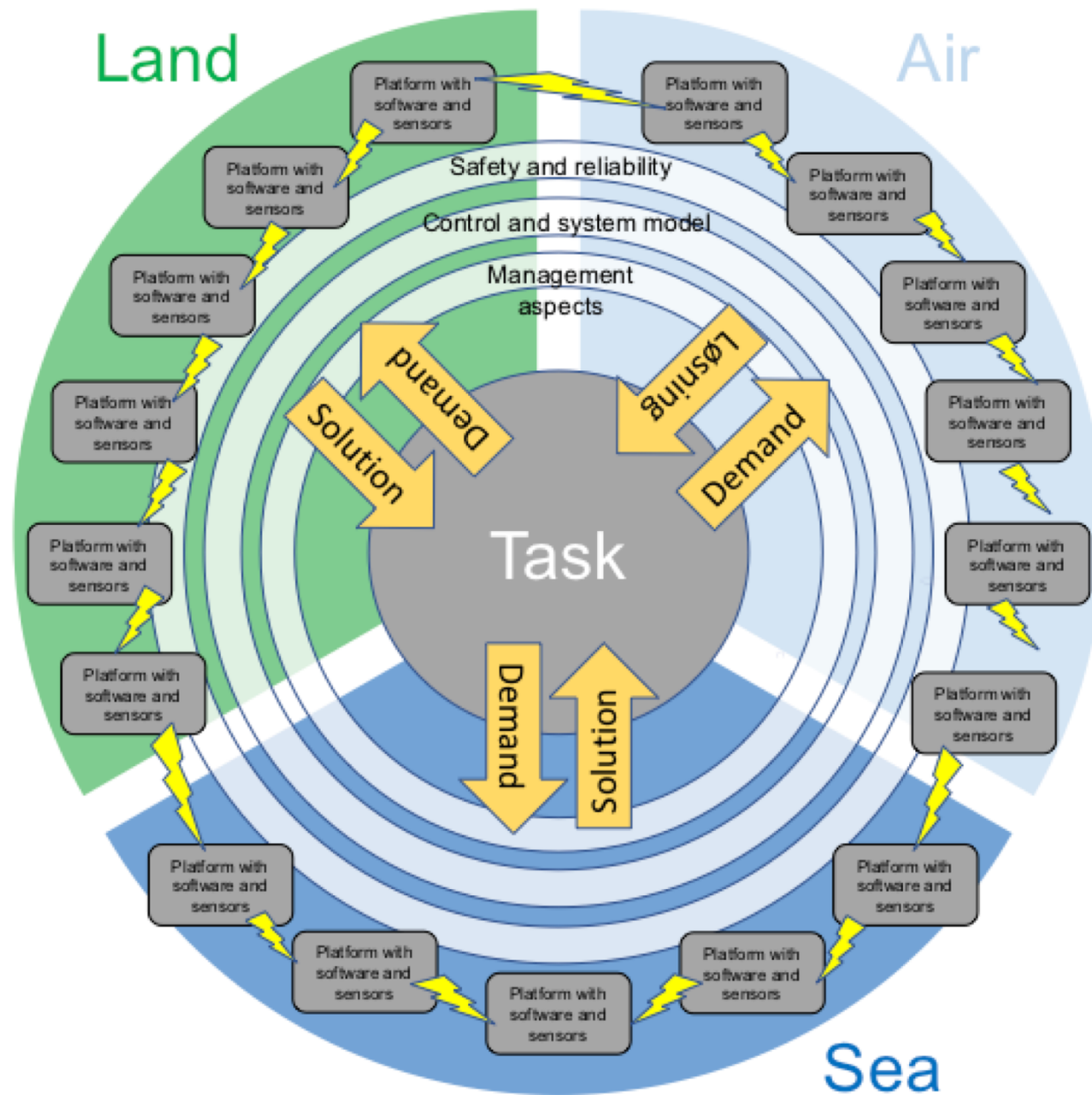
- Jamming
- Take-over
- Directed energy
- Kinetic (guns, nets, drone-on-drone)



Another solution?

Autonomous infrastructure

- **Multiple autonomous systems**
- **Multi-domain**
- **Collaborative**
- **Self-organizing**
- **Modular**
- **Flexible**
- **Open and secure**

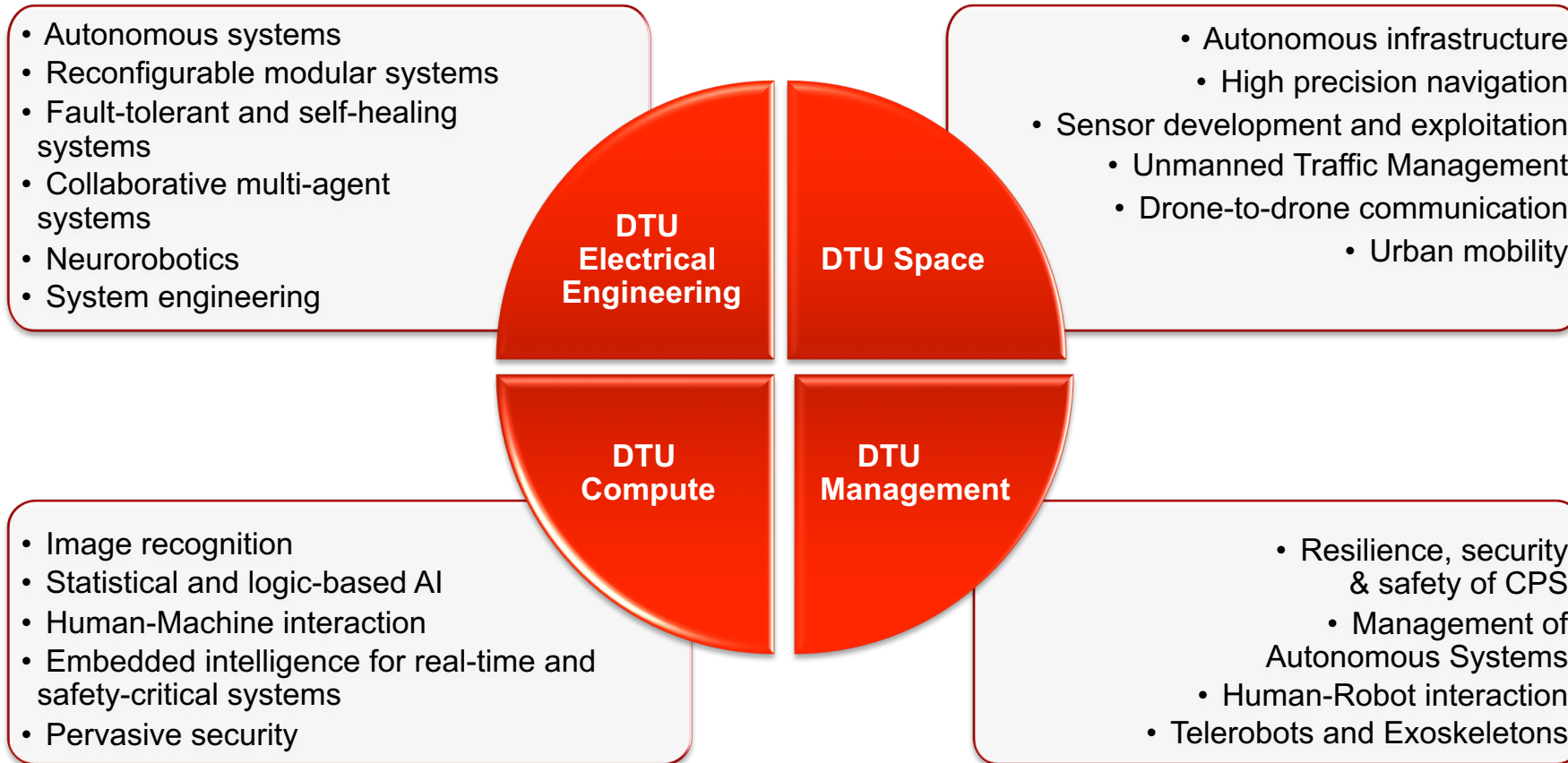


Enabling technologies

- Autonomous systems
- Payloads

- **Navigation**
- **Communication**
- **Traffic management**
- **Data management**
- **Counter-measures**

DTU Center for Collaborative Autonomous Systems





TAPAS - Testbed in Aarhus for Precision positioning and Autonomous Systems

