



# International Workshop on MILS: Architecture and Assurance for Secure Systems

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### Welcome to the MILS world

- Security is keeping making headlines in news
- Growing systems complexity and interconnections make addressing security issues harder
- MILS can help solving these problems by
  - addressing security issues modularly
  - allowing mixing applications/components with different security criticalities
  - allowing achieving high-, medium-, basic assurances
  - providing standardised open APIs
  - providing scaling from local systems to networked applications
  - supporting system designers with templates, guidelines and good-practices at all stages of system development
  - integrating with certification schemes

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### **Active MILS Working Groups**

- There are some active working groups on MILS topics
- > EURO-MILS
  - FP7/H2020 project
  - The Open Group "MILS WG"
  - working group under umbrella of The Open Group
- > D-MILS
  - > FP7/H2020 project



## Schedule

10:00	Welcome
	EURO-MILS Results: MILS Architecture, Certification, and Formal methods.
10:15	Sergey Tverdyshev
11:00	Coffe break
	Asset-Centric Security Risk Assessment of Software Components.
11:30	Tobias Rauter, Andrea Höller, Johannes Iber and Christian Kreiner.
	MILS Compliant Software Architecture for Satellites.
12:00	Herpel, Montano, Kerep, Krutak, Schoen, Eckstein.
	An Architecture-Centric Process for MILS Development.
12:30	Julien Delange, Min-Yong Nam, Will Klieber and Peter Feiler.
13:00	Lunch
	Employing Distributed MILS in a Smart Grid setting challenges for analysis and verification
14:00	Holger Pfeifer
	Content-Dependent Security Policies in Avionics.
	Tomasz Maciazek, Hanne Riis Nielson and Flemming Nielson.
	Security for Safety Problem in the Cyberphysical Systems.
15:15	Semen Kort and Ekaterina Rudina. (short paper)
15:30	Coffe break
	Applying MILS to multicore avionics systems.
16:00	Paul Parkinson.
	Modelling Information Routing with Noninterference.
16:30	Ruud Koolen and Julien Schmaltz.
	Non-Interfering Composed Evaluation.
	Igor Furgel, Viola Saftig, Tobias Wagner, Kevin Müller, Reinhard Schwarz and Axel Söding-Freiherr von
	Blomberg.
17:00	bioiniacig.



#### Final countdown

- > This a workshop, feel free to ask questions
- For presenters, please keep timing and also for questions
  - We will help you by giving a signal:
    - Yellow card 5 minutes left
    - Red card 1 minute left
- Let's start ...