

Industrial Day 2014

November 19, 2014

Karlovo náměstí 13 Prague, Czech Republic



http://sesamo-project.eu/content/sesamo-industrial-day-2

The question of how to best combine **functional safety** with **cybersecurity** needs to be addressed by almost every industrial domain in these days. SESAMO project works on this topic for about two years and has significantly advanced the state of the art in several respects. In order to disseminate the project results to broader audience, we organize SESAMO industrial days, which are good opportunity for interested people from industry to efficiently learn about project results and get in touch with SESAMO experts. The second edition of SESAMO Industrial Day will be held on November 19 in Prague, Czech republic. Attendees shall register (free of charge) at the <u>event web site</u>.

Program

- 9:00 Welcome Z. Hanzálek, M. Sojka, CTU
- 9:05 SESAMO introduction Alessandra Martelli, Intecs
- 9:20 Security informed safety cases Robert Stroud, Adelard

9:50 Automotive eMotor use case

Infineon's eMotor is a reusable software module (AUTOSAR complex device driver) with demanding safety (ASIL D) and security requirements.

- Introduction to the use case Frank Badstuebner, Infineon
- Adapted process for Automotive Mario Winkler, ikv
- System design with medini analyze Mario Winkler, ikv
- Stochastic modeling Marc Bouissou, EDF
- AUTOSAR integration Marc Born, ikv
- Secure CAN bus, Testing and validation with Simulink Michal Sojka, CTU
- 10:50 Coffee break

11:10 Railway use case

The Embedded Safety and Security Interface (ESSI) is a device providing safe and secure communication in a distributed control system via open transmission environment such as the Internet or Wi-Fi. The development process must be compliant with EN 50129, EN 50128 and EN 50159 railway standards for the highest Safety Integrity Level (SIL 4).

- Introduction to the use case Petr Novobílský, UniControls
- The use of SESAMO tool chain in ESSI development Tomáš Kertiš, UniControls
- ESSI security layer verification Martin Vítek, UniControls
- UPPAL model for the communication protocol Jan Sálus, UniControls
- Hardware platform and PikeOS integration Pavel Bartůšek, SYSGO

12:10 Excursion to Operation Control Centre of Prague metro

13:40 Lunch

15:00 Avionics use case

The avionic use case deals mainly with safety and security of Integrated Modular Avionics (IMA). The focus is on assurance and control of information flows between security domains on-board of an aircraft within a communication gateway. The use case relies on a DO-178 certified operating system (PikeOS) as base component.

- Introduction to use case Kevin Mueller, Airbus Group
- Modelling information flow using security labels Kevin Mueller, Airbus Group
- IMACT: Integrated configuration of aircraft systems Henrik Theiling, SYSGO