

**ERCIM/DECOS-Interest Group (DIG)/COOPERS Workshop 2008 on Dependable
Embedded Systems
at SAFECOMP 2008, Newcastle, UK, Sept. 25, 2008**

*“Dependable Embedded Systems – Challenges, Impact, Solutions, Project Reports, Industrial Experience,
Professional and Academic Education and Training”*

Chairs Erwin Schoitsch (Austrian Research Centers – ARC), Amund Skavhaug (NTNU Trondheim)

Workshop Program

Introduction (9:00 – 9:30):

A. Skavhaug, E. Schoitsch: Welcome – EWICS/SAFECOMP, COOPERS, DIG and ERCIM

Validation and Verification (9:30 – 11:00)

Rupert Schlick, Wolfgang Herzner

“Model-Based Test Case Generation: the Project MOGENTES”

Angelo Brillout (ETHZ)

“Test Case Generation from IEEE Floating-Point Decision Procedures: An example for efficient automatic test case generation”

Coffee break 11:00 – 11:30

Networked Embedded Systems: Safety and Security (11:30 – 12:30)

Egbert Althammer, Erwin Schoitsch (ARC, Austria), Gerald Sonneck (Tribun, Austria), Henrik Eriksson, Jonny Vinter (SP, Sweden)

“Modular Certification Support – the DECOS Concept of Generic Safety Cases”

Erwin Schoitsch (ARC, Austria)

“SENSE – Smart Embedded Network of Sensing Entities”

Lunch Break 12:30 – 13:30

Dependable Embedded Real-Time Systems (13:30-15:30)

Amund Skavhaug and Bjørn Forsman (NTNU Trondheim, Norway)

“A Time Management Unit (TMU) for Real-Time Systems”

Kristoffer Gregersen and Amund Skavhaug (NTNU Trondheim, Norway)

“An efficient and deterministic multitasking run-time environment for Ada and the Ravenscar profile on the Atmel AVR32”

Christoph Herrmann and Kevin Hammond (University of St Andrews, UK)

“Compositional Worst-Case Execution Time Analysis of Hume Programs”

Tea Break (15:30 – 15:45)

Co-operative Systems for Road Safety – a European Challenge (1) (15:45 – 17:00)

Jinan Piao, Mike McDonald (University of Southampton, UK),

“COOPERS – Co-operative Systems for Intelligent Road Safety”

Co-operative Systems for Road Safety – COOPERS Supplier Panel

Erwin Schoitsch (ARC, Vienna): Introduction “Automotive Visions – Road Safety of the Future”

Short Overview over “eSafety on the Road” projects Watch-over, Prevent, Safespot and ADOSE
(with short COOPERS video)

Chairpersons: Erwin Schoitsch, Amund Skavhaug