

CALL FOR PAPERS

VDA Automotive SYS Conference 2012

Quality and Functional Safety Management for Automotive software-based Systems

May, 14 – 16, 2012 in Berlin, Germany

From Industry to Industry

In May 2012 the second international Conference on Quality and Functional Safety Management for Automotive software-based Systems hosted by the Association of the German Automotive Industry (VDA) takes place in Berlin. Top-class keynote speakers, experts and managers from E/E Management and Development and the leading service providers are going to share their experience and knowledge.

The conference focuses on Quality and Functional Safety Management of modern vehicle electronics with respect to a new standard on Functional Safety (ISO 26262) and established standards like Automotive SPICE® or ISO/TS 16949.

The conference is accepted by the international assessor certification scheme (intacs™) as active or passive experience evidence for certification as Competent or Principal Assessor.

Call for Papers

The VDA Automotive SYS Program Committee appreciates your contribution (experience reports, best practices, new approaches or strategies) on the following topics:

1. Quality and Functional Safety Management

Focus on general processes and "confirmations measures" like audits, reviews and assessments e.g.:

- User stories on Functional Safety and Quality Assurance, How to solve key Automotive SPICE and ISO 26262 topics?
- Integrated Automotive SPICE & ISO 26262, Process overlap, Tailoring
- Safety Case (Managing evidence and arguments)
- Legal Aspects
 - Product Liability
 - Field Observation
 - Comparison (Nafta, Asia, Europe)
- Contracting regarding safety management between customer and supplier (Development Interface Agreement)
- Managing scope of ISO 26262 with respect to variants of existing systems
- Quality and Functional Safety management for architecture-based and/or model-based development
- Open Source Software in automotive embedded and/or safety relevant systems

2. Quality and Functional Safety Methodology

Focus on methodology, new trends, new standards, more scientific/academic e.g.:

- Model based development, architecture and requirement management
- Methods like FMEA, FTA and FMEDA and calculation of hardware architectural metrics
- Comparison between IEC 61508 and ISO 26262, verification of safety architecture, different view on safety architecture (functional technical, logical, virtual etc.)
- Quantitative and qualitative versus inductive and deductive Analysis
- ISO 330xx, TestSPICE
- Testing Agile development, Lean development processes
- ASIL determination including human factor modeling and use of data
- Verification and validation of safety requirements
- Code Quality Analysis
- Process Assessments and Safety Audits of Open Source development projects

3. System- and Function Development

Focus on System Engineering (Vehicle Networks, E-Mobility, highly available E/E architecture etc.), more engineering/practical/industry e.g.:

- Architecture based development (hierarchical structure, requirement allocation etc.)
- Model based development (model for requirement analysis, as behavior model, as product model, as test reference)
- Functional Safety for E-Mobility
- Safety in AUTOSAR environments
- Safety and Quality in Functional System Design (OEM site)
- Customer/Supplier interface: From Functional Safety concept to technical safety requirements
- Safety and Quality in Technical System Design (Tier 1 site)
- Safety Architectures (EGAS, for micro controller etc.)
- SPFM, LPFM, and random hardware failure metric
- Testing strategies (e.g. how to develop an integration test strategy?, components-, elements-, unit- test strategy etc.)
- Embedding into Quality Management Systems: How to combine DV/PV with Automotive SPICE & ISO 26262
- E/E Systems Quality Assurance and Functional Safety management after SOP

4. Cross border development and other domain experience

Focus on how other industries apply Functional Safety, SPICE, Quality- Management and -assurance, methodology. Focus on developing in a global environment e.g.:

- Aviation, Aerospace, Railway
- Medical Devices
- Automotive IT Security, Automotive IT Service Management
- Non-embedded software development
- Quality and Functional Safety management in a global development

Benefits of submission acceptance

- The main speaker and tutorial speakers will get a full ticket for the conference free of charge
- You will get a speaker certificate as active or passive experience evidence for certification as intacs™ competent or principal assessor
- The best presentation will be selected by the conference participants and will be honoured with the “Best Presentation Award”.

Submission Details

Contributions must be original work which means that they must report previously unpublished work and not be submitted concurrently to another conference with refereed proceedings.

Please provide any submission including a title, the name(s) of the author(s) and a contact address of the author(s) to our conference program website:

<https://www.openconf.org/AutomotiveSYS/>

Abstract of the presentation

The abstract must be in English language and uploaded through the conference program website It shall be at least **one page long** and should **not exceed 3 pages**.

Please notice that the abstract is the major base for the programme committee to take its acceptance decision. It shall describe all relevant topics and experiences addressed as well as conclusions provided in your presentation to enable the programme committee to judge which presentation will best meet the aims of the conference.

Presentation

The presentation must be in english language and submitted in MS Powerpoint (ppt) and pdf format. It should be appropriate in length to fill a 35 minutes talk. You will receive a presentation template for the conference with the acceptance notification of your contribution.

Tutorials

On Monday, the 14th of May there will be an additional tutorial day prior to the conference. There will be several slots for 3 to 6 hour tutorials. Please mark your abstract whether it should be a normal session presentation or a tutorial when submitting. Tutorials are reviewed by the programme committee.

Final paper

Optionally, you can add a full paper, which will be added to the conference proceedings. You will find detailed submission guidelines on <http://www.automotivesys.org> soon.

Important Deadlines

Submission of abstracts:	February, 25 2012
Notification of acceptance:	March, 16 2012
Submission of tutorial and paper slides:	April, 29 2012

Programme Committee

- Kai-Helge Dieken, Volkswagen AG
Head of VDA working group 13
- Alec Dorling, Volvo Group
Global Embedded SW Process Owner, Convener ISO/IEC JTC1/SC7 WG10
- Jürgen Knoblach, BMW Group
- Stefan Kriso, Robert Bosch GmbH
Center of Competence „Functional Safety“, Member of German National Body on ISO 26262
- Pierre Metz, Brose Fahrzeugteile GmbH
Member of intacs™ advisory board, Member of German National Body on ISO 26262
- Joseph Miller, TRW Automotive
Chief Engineer of Systems Safety, Chairman US Technical Advisory Group to ISO TC22/SG3/WG16
- Markus Müller, Kugler Maag CIE
Director Operations, Member of intacs™ advisory board
- Hans-Leo Ross, Continental AG
Principal Technical Expert “FS-Management”, Head of German National Body on ISO 26262
- David Ward, MIRA Ltd
Head of Functional Safety, Head of UK National Body on ISO 26262
- Jörg Zimmer, Daimler AG

Organizing Chair

- Jan Morenzin, VDA QMC

Registration

If you want to attend the conference as a participant, sponsor or exhibitor you can pre-register by mail or phone:

Semih Köşger

Tel.: +49 (0) 30 / 89 78 42 - 232

Email: events@vda-qmc.de

Please watch for actual information on <http://www.automotivesys.org>