

# ATESST

## ATESST Open Workshop

3<sup>rd</sup> March 2008

Volvo Office Brussels



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### Model based development of embedded systems: The EAST-ADL approach for automotive applications

#### Agenda

9:00: Welcome coffee and poster session

10:00: Morning session

- EAST-ADL2 Overview
- Application of EAST-ADL2: UML2 Profile, AUTOSAR/DSL
- Behavior and Environment modelling
- Safety and error modelling
- Variability and feature modelling

12:30: Lunch with demonstrations

14:30: Afternoon Session

- Requirements
- Timing
- Adoption of the EAST-ADL2 and the future
- Concluding discussions

16:00: End of day

Poster presentations and tool demonstrations will be provided during breaks

#### Time and Venue:

Date: March 3<sup>rd</sup> 2008

Location: Volvo Office Brussels

Address: Hunderenveldlaan 10, B-1082 Brussels

Transport : Taxi from airport ~30 min

#### Contact:

Email: [atesst-coordinator@vtec.volvo.se](mailto:atesst-coordinator@vtec.volvo.se)

On site: Henrik Lönn, Volvo Technology, +46709026217 or  
Lars-Olof Berntsson, Volvo Technology, +46709026849

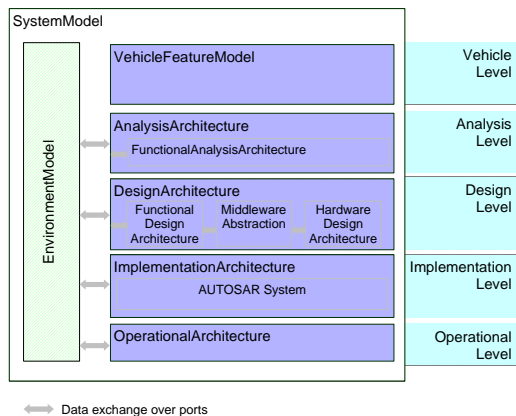
#### Registration:

Register participation by email before Feb 25<sup>th</sup> to  
[atesst-coordinator@vtec.volvo.se](mailto:atesst-coordinator@vtec.volvo.se)

# ATESST Open Workshop

The purpose of this workshop is to disseminate results developed in the ATESST project.

The EAST-ADL2 is an Architecture Description Language (ADL) initially defined in the EAST-EEA project (<http://www.east-eea.net/>) which has been further evolved in the ATESST project. EAST-ADL2 is an approach for describing automotive electronic systems through an information model that captures engineering information in a standardized way. By this, traceability, consistency, completeness, system-wide analyses, etc. are improved. Aspects covered include vehicle features, functions, requirements, variability, software components, hardware components, and communication. The EAST-ADL2 contains several abstraction levels, see figure below. The software- and electronics-based features of the vehicle are described at different levels of abstraction, where EAST-ADL2-specific constructs are found on Design Level and up, while Implementation level is based on AUTOSAR.



The EAST-ADL is specifically targeted to support the modeling of automotive embedded control systems, and consequently provides modeling constructs for describing, maintaining and analyzing such systems.

The results of the ATESST project include a domain model, defining the EAST-ADL language, a UML-profile design and implementation, a tool chain, and an example application.

Existing approaches are integrated in the language based on needs and applicability. For example, requirements concepts and functional architecture modeling is based on SysML. Error propagation is inspired by the AADL. Software and Hardware architecture on implementation level is modeled using the AUTOSAR metamodel.

## More information:

[www.atesst.org](http://www.atesst.org)

## Intended audience:

Industrialist and researchers with an interest in embedded systems, systems modeling and analysis techniques.