



INFORMATION TECHNOLOGY FOR EUROPEAN ADVANCEMENT

The SPICES Project

ITEA 2 Symposium 2006, 5th October 2006
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European leadership in Software-intensive systems and Services. The Future of Embedded and Distributed Software.

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Objectives

- Modelling approach, transformation of models and code generation for mission critical systems
- AADL extension (*Architecture Analysis & Design Language*)
- Software architecture is component-orientation CCM (*Container Component Model*)
- Plate-form based on Eclipse

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Technological Innovation

- Multi-domain extended AADL
 - Code & test generation
 - Static (power, weight, ..)and dynamic (timed aspects) properties
 - Support of ARINC 653 and POSIX OS
- Methods and tools to assist in the verification and validation of architectures expressed using AADL
 - Formal techniques
 - Interoperability with TOPCASED tool suite

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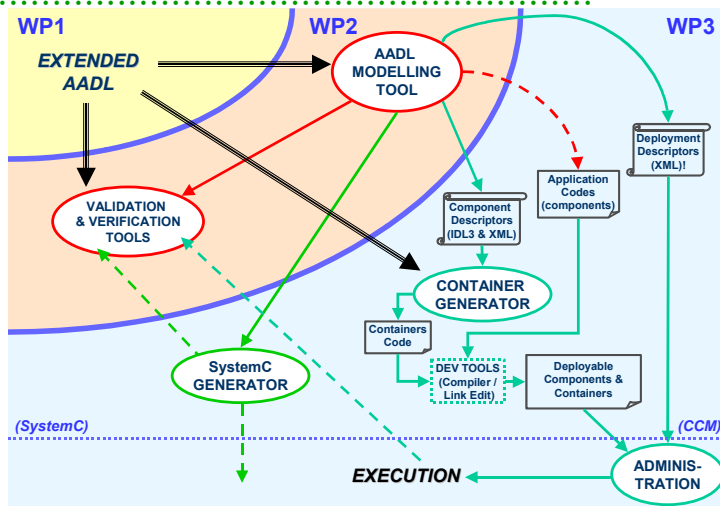
Technological Innovation

- Derivation from the AADL description of the execution support
 - Based on the Component/Container
 - Model Adaptation of the framework (resulting from MERCED)
 - on top of Arinc563/IMA.
 - with support for reconfigurable hardware
 - with instrumentation for verification/validation tools
- Certification impacts
 - DO178
 - DO254
- AADL to SystemC translation
- Integration of the results into OSATE tool suite
- Validation in Avionics and Communications domains

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Thank you *for your attention*



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