

# CESAR

Cost-efficient methods and processes for safety relevant embedded systems



**EXECUTIVE summary**

CESAR aims to reduce costs of safety relevant embedded system development by delivering innovative system design processes as well as implementing fundamentals for interoperability including the RTP (Reference Technology Platform) as integrated tool platform in Aerospace, Automotive, Automation and Rail.

**RELEVANCE CALL 2008 objectives**

Answering the ARTEMIS Call 2008, CESAR contributes to safe functional mobility in respect of e.g. environment for which embedded systems are key enabling solutions.

**MARKET innovation**

CESAR will increase the productivity and therefore the competitiveness of European manufacturers through shortening development time and decreasing development costs of safety-relevant embedded systems while ensuring the quality and safety properties. Such innovation will have particular relevance to the automotive, aerospace, automation and railway domains.

**TECHNICAL innovation**

The inherent trade-off between reducing costs for the development of safety relevant systems, increasing complexity and ensuring quality may only be faced by improving the entire System Engineering. CESAR provides solution by:

- > Introducing innovations in RE (Requirements Engineering) tools and methods
- > Introducing innovations in CBD (Component Based Development) tools and methods and extending CBD with multi views and multi criteria
- > Combining improved RE and Design System Engineering since close collaboration between RE and CBD is necessary to achieve the ambitious CESAR goals

The CESAR IOS (Interoperability Specification) is providing the implementation - and technology independent framework for the RTP realization.

Only by integrating these disciplines and providing adequate tool support can a seamless tool chain (CESAR Reference Technology Platform - RTP) emerge that will give free rein to realise the full potential of the CESAR approach.



<b>PROJECT COORDINATOR</b> Dr. Josef Affenzeller	<b>START</b> March 2009
<b>INSTITUTION</b> AVL List GmbH	<b>DURATION</b> 40 months
<b>EMAIL</b> cesar@avl.com	<b>TOTAL INVESTMENT</b> €58.5 M
<b>WEBSITE</b> www.cesarproject.eu	<b>PARTICIPATING ORGANISATIONS</b> 54
	<b>NUMBER OF COUNTRIES</b> 10

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