



p.S.H.I.E.L.D.

pilot embedded Systems archItecturE for multi-Layer Dependable solutions

EXECUTIVE *summary*

To help safeguard society, pSHIELD will guarantee the privacy and security of embedded systems by making these 'built-in' features of future designs.

RELEVANCE CALL *2008 objectives*

The SHIELD consortium proposes a compact R&D, or pilot, project (pSHIELD) to address the core concepts of SHIELD. The pilot is intended to be a pioneer investigation enhanced with R&D activities that will be proposed in the future ARTEMIS Calls.

MARKET *innovation*

The project will have a great impact on the SPD market of the ES. By addressing the reusability of previous designed solutions, the interoperability of advanced SPD technologies and the standardised SPD certifiability, it is possible to estimate an overall 30% cost reduction for a full SHIELD oriented design methodology. The composability of the SHIELD architectural framework will have great impact on the system design costs and time to market of new SPD solutions in ES. The integrated use of SPD metrics will have impact on the development because the qualification, (re-)certification and (re-)validation process of a SHIELD framework instance will be faster, easier and widely accepted.

TECHNICAL *innovation*

pSHIELD will approach SPD at 4 different levels: node, network, middleware and overlay. For each level, the state of the art in SPD of single technologies and solutions will be improved and integrated (hardware and communication technologies, cryptography, middleware, smart SPD applications, etc.). The SPD technologies will be enhanced with composable functionality to incorporate the pSHIELD architectural framework.

The pSHIELD project will be focused on:

- > Demonstrate composability
- > New technologies
- > Modularity and expandability
- > Innovative, modular, composable, expandable and highly dependable architectural framework
- > Metrics
- > Validation of the SHIELD integrated system in one application scenario.



PROJECT COORDINATOR

Antonio Di Marzo

START

June 2010

INSTITUTION

SESM - FINMECCANICA

DURATION

12 months

EMAIL

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TOTAL INVESTMENT

5,4 M€

WEBSITE

www.pshield.eu

PARTICIPATING ORGANISATIONS

18

NUMBER OF COUNTRIES

6

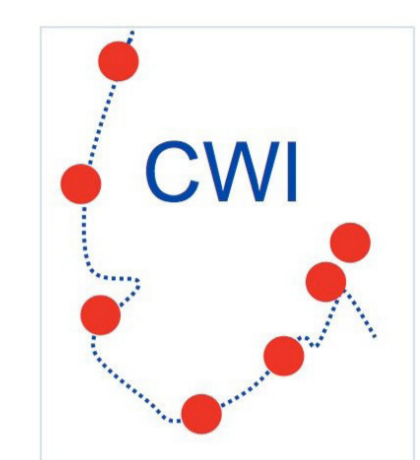


p.S.H.I.E.L.D.

project partners



NORWAY



SLOVENIA



ITALY



PORTUGAL



SPAIN



GREECE

