ANNOUNCEMENT LETTER

The **SAFURE project** officially started on 1st February 2015 and is scheduled for 36 months. It receives funding from the European Union's Horizon 2020 Programme (H2020/2014-2020) under grant agreement no 644080.

SAFURE: SAFETY AND SECURITY BY DESIGN FOR INTERCONNECTED MIXED-CRITICAL CYBER-PHYSICAL SYSTEMS

The project SAFURE targets the design of cyber-physical systems by implementing a methodology that ensures safety and security "by construction". This methodology is enabled by a framework developed to extend system capabilities so as to control the concurrent effects of security threats on the system behaviour.

The current approach for security on safety-critical embedded systems is generally to keep subsystems separated, but this approach is now being challenged by technological evolution towards openness, increased communications and use of multi-core architectures.

The goals of the SAFURE project are to

- implement a holistic approach to safety and security of embedded dependable systems, preventing and detecting potential attacks, to
- empower designers and developers with analysis methods, development tools and execution capabilities that jointly consider security and safety, and to
- set the ground for the development of SAFURE-compliant mixed-critical embedded products.

The results of SAFURE will be

- a framework with the capability to detect, prevent and protect from security threats on safety, the ability to monitor system integrity from application level down to the hardware level including time, energy, temperature and data integrity;
- a methodology that supports the joint design of safety and security of embedded systems, assisting the designers and developers with tools and modeling language extensions;
- proof of concept through 3 industrial use cases in automotive and telecommunications;
- recommendations for extensions of standards to integrate security on safety-critical systems;
- specifications to design and develop SAFURE-compliant products.

The SAFURE consortium brings together a team of recognized partners in the fields of industry and research in combination with an innovation-oriented SME what makes it suitable to achieve the project's objectives. These 12 SAFURE partners are spread over 6 European countries and comprise basic research and service design with applied research and end-user oriented service. The complementarities of the partners' expertise aim at creating value for individual enterprises and institutions and their value chains. To be more precise, SAFURE will help European suppliers of safety-critical embedded products to develop more cost and energy-aware solutions.

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The SAFURE partners are:

- Technikon Forschungs- und Planungsgesellschaft mbH, Austria
- Escrypt GmbH – Embedded Security, Germany
- Magneti Marelli S.P.A., Italy
- TTTech Computertechnik AG, Austria
- Sysgo AG, Germany
- Symtavision GmbH, Germany
- Thales SA, France
- Technische Universität Braunschweig, Germany
- Barcelona Supercomputing Center – Centro Nacional De Supercomputacion, Spain
- Scuola Superiore di Studi Universitari e di Prefezionamento Sant'Anna, Italy
- Eidgenössische Technische Hochschule Zurich, Switzerland
- Thales Communications & Security, France

For more information visit http://www.safure.eu/ (under construction)

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SAFURE – SAFety and secURity by dEsign for interconnected mixed-critical cyber-physical systems

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