



## **ANNOUNCEMENT LETTER**

certMILS, an European cooperative research project, has officially started on 1<sup>st</sup> January 2017 with a set duration of 48 months. It receives funding from The European Union's Horizon 2020 research and innovation programme under grant agreement n° 731456.

# CERTMILS: COMPOSITIONAL SECURITY CERTIFICATION FOR MEDIUM- TO HIGH-ASSURANCE COTS-BASED SYSTEMS IN ENVIRONMENTS WITH EMERGING THREATS

certMILS develops a security certification methodology for Cyber-physical systems (CPS). CPS are characterised by safety-critical nature, complexity, connectivity, and open technology. certMILS aims to increase the economic efficiency and European competitiveness of CPS development, while demonstrating the effectiveness of safety & security certification of composable systems.

The constant security-related news and security bulletins make evident how insecure currently deployed ICT systems are. To tackle this challenge we need to provide an assurance within the system and its components, i.e. instead of "blind" trust we need evidence-based trustworthiness. Traditional certification schemes conservatively require assessment of the entire integrated system for certification. Due to system complexity, number of functions, and usage of Commercial Off-The Shelf (COTS) components, this approach became infeasible.

certMILS addresses the hard questions in certification: how to reuse security certification results of different components and domains, how to act when flaws in a system are found and fixed, yet keep the certified assurance. This project delivers a certified MILS platform (Multiple Independent Levels of Security), for the first time in Europe and three security certified MILS pilots, using the MILS platform. CERTMILS generates rich interaction between developers, evaluation laboratories and certification resulting in:

- √ validated modular Protection Profile (PP)
- ✓ standardised and validated methodology for evaluating and certifying high assurance products
- ✓ guidelines for compositional security for developers and evaluators.

certMILS addresses the following eight objectives:

Objective 1. Transfer know-how in compositional safety certification to security certification

Objective 2. Make certification of composed systems affordable

Preservation of certified assurance throughout operational deployment

Objective 3.

Objective 4.
Involvement of all stakeholders in different industry domains

Objective 5. Certified European MILS platform

Objective 6. Develop and apply compositional certification methodology on three industrial pilots

Objective 7. MILS
Platform Protection
Profile

Objective 8.
Guidelines and templates for MILS certification

certMILS can achieve major impact because technology-wise the consortium operates at a high TRL level close to security market, uses proven security-by-design (MILS) technology, and uses system design approach which is tightly coupled with security evaluation and security certification. This allows certMILS to develop technology prototypes early enough for later security evaluation and certification

### certMILS:

Compositional security certification for medium- to high-assurance COTS-based systems in environments with emerging threats

The project leading to this application has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 731456.







certMILS **reuses** compositional certification **results across national borders**, strengthening the Single Digital Market. Moreover this project counters US dominance in the operating system security markets by **making available a certified European MILS platform** and demonstrating it on the pilots.

The certMILS consortium consists of 11 partners (including linked third parties) from 5 different EU countries. It is thoroughly selected mix of partners who complement each other with their competencies, experience and ambition at high level.

## **THE PARTNERS ARE:**

- ✓ TECHNIKON Forschungs- und Planungsgesellschaft mbH, Austria
- ✓ ATSEC Information Security GmbH, Germany
- ✓ Schneider Electric España SA, Spain
- ✓ Epoche and Espri SL, Spain
- ✓ Thales Austria GmbH, Austria
- ✓ Unicontrols A.S., Czech Republic
- ✓ SYSGO s.r.o, Czech Republic
- ✓ University of Rostock, Germany
- ✓ Elektrotechnicky zkusebni ustav, s.p., Czech Republic
- ✓ SYSGO AG, Germany
- ✓ NXP Semiconductors N.V., The Netherlands

For more information visit <a href="http://www.certmils.eu">http://www.certmils.eu</a>

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