



Newsletter / March 2019  
Issue 4

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

## Consortium

11 partners (5 countries)

## Project Coordinator

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Project number: 731456

Project website: [www.certmils.eu](http://www.certmils.eu)

Project start: 1<sup>st</sup> January, 2017

Duration: 48 Months

Total cost: EUR 5,616,543.75

EC contribution: EUR 3,999,055.63

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## Message from the Coordinator

The certMILS project has reached the half way point. We can proudly say that the communication between the partners as well as the teamwork carried out has proven to be effective and efficient. certMILS successfully underwent its first review meeting (September 27, 2018 in Brussels) and the work performed to this point has produced noteworthy results. We are thus looking forward to the next few months and are eager to move further towards the final goals in certMILS.

## Upcoming Conferences

As expected, the certMILS project has produced some important outcomes which can be shared with industry, innovators, policy makers and the Member States. Consortium members plan to attend the following events to reach all interested stakeholders.

ICMC 2019 • May 14-17  
Vancouver, Canada

IEEE ISIE 2019 • June 12-15  
Vancouver, Canada

IEEE WFCS • May 27-29  
Sundsvall, Sweden

ESREL 2019 • September 22-26,  
Hannover, Germany

RSSRail 2019 • June 4-6  
Lille, France

IEEE ITSC • October 27-30,  
Auckland, New Zealand

ICCC 2019



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 731456.

## Project Progress/ Highlights

After the successful completion of the project's third milestone, "Protection Profile ready for community feedback, pilots specified," the certMILS partners started working on various tasks towards the next milestone, "Interoperable PP, MILS platform evaluation, pilot security architectures specified."

Have a look at the results after the second project year:

► Partner SYSGO Czech Republic invited the Czech certification authority to the certMILS advisory board which will soon be composed of more than 10 experts in the field.

► SYSGO presented the Protection Profile (PP) and the questionnaire during ICCC in Amsterdam in October 2018 and had the opportunity to present it at the Open Group RTES forum in February 2019 after having announced the questionnaire results to a mailing list of the Open Group.

► Regarding MILS platform enhancement and certification, the Certifiable Partitioned Network Driver was successfully implemented and an evaluation of the employed separation kernel was performed according to the requirements defined by the CC and the Security Target.

Furthermore, there has been progress in the implementation of the Smart Grid pilot for high assurance and in the porting of the Remote Terminal Unit (RTU) software with PikeOS.

► Partner Thales Austria began to specify the Railway pilot together with partner EZU, who provided the first documentation needed for its evaluation and certification. Also, the work on the subway pilot has already started and is going to be carried out in the upcoming months.

► The certMILS consortium has submitted three more technical deliverables since the beginning of project period two in July, as well as a report on the interoperability aspects of the Common Criteria Base Separation Kernel Protection Profile (PP) draft, based on feedback of the MILS community.

The [white paper](#) was published in January 2019 on Zenodo and describes how the PP draft can be applied to the separation kernels of MILS platform providers and how well the PP draft addresses requirements of users such as system integrators.

The activities being discussed resemble the Common Criteria User Forum presentations and its community involvement. Beyond that, certification bodies and a few known consortium contacts were directly contacted and invited to provide feedback. The questions asked, as well as the corresponding answers are presented in the white paper. It closes with a discussion on the continued improvement of the PP for proposed acceptance and adoption.

Public period 1 deliverables are available on the [project website](#)

Since July 2018, the certMILS partners concentrated significantly on disseminating project results. Some activities included:

► **Poster:** the certMILS Pilots presented @IT-SA 2018. See it [here](#)

► **Presentation:** "Security by design for mixed-critical systems" by SYSGO @heise devSec 2018

► **Participation of partners** SYSGO, E&E, ATSEC and UROS in the CCUF Kernel meeting co-located @ICCC 2018

## MILS Community

If you want to

- learn more on the MILS Community
- participate in it
- be informed about its status

then send an e-mail to [community@mils.community](mailto:community@mils.community) or subscribe to the MILS mailing list [mils@lists.technikon.com](mailto:mils@lists.technikon.com)

The MILS mailing list is a public mailing list for discussions of Multiple Independent Levels of Security (MILS) architectural approach for security and safety, MILS components, MILS implementations, MILS research, MILS use-cases, real-time separation kernels, MILS evaluation and certification, MILS testing and vulnerability, and analysis of MILS systems.



## certMILS Review Meeting

The first review of the certMILS project took place on September 27 at the EC offices in Brussels, Belgium. The partners, the coordinator and the technical leader presented the work performed from January 2017 to June 2018 (the first 18 months of the project) to the project officer and the reviewers. It was a successful review meeting.