The European Commission's science and knowledge service

Joint Research Centre

Introduction to the European IACS components Cybersecurity Certification Framework (ICCF)

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European Commission

Generic activities of the ERNCIP Thematic Groups (TG)

Within the overall context of security solutions for CIP, ERNCIP Thematic Groups have a wide scope of possible activities for their Work Programmes, such as:

- *Harmonise test protocols;*
- *Promote standardisation of test methods;*
- *Recommend EU-wide evaluation / certification / labelling procedures;*
- *Promote sharing of information, good practice and experimental results across all CIP stakeholders;*
- *Recommend new areas for EU-level research and investment.*

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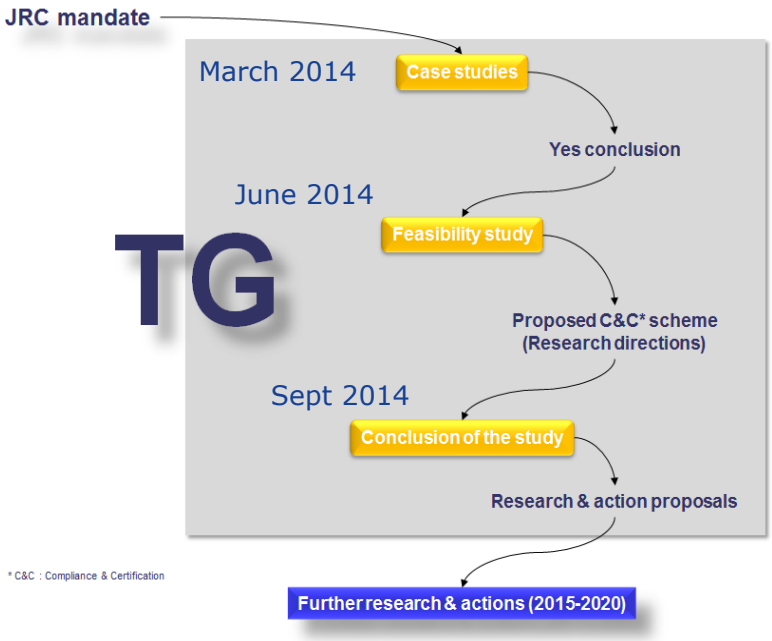
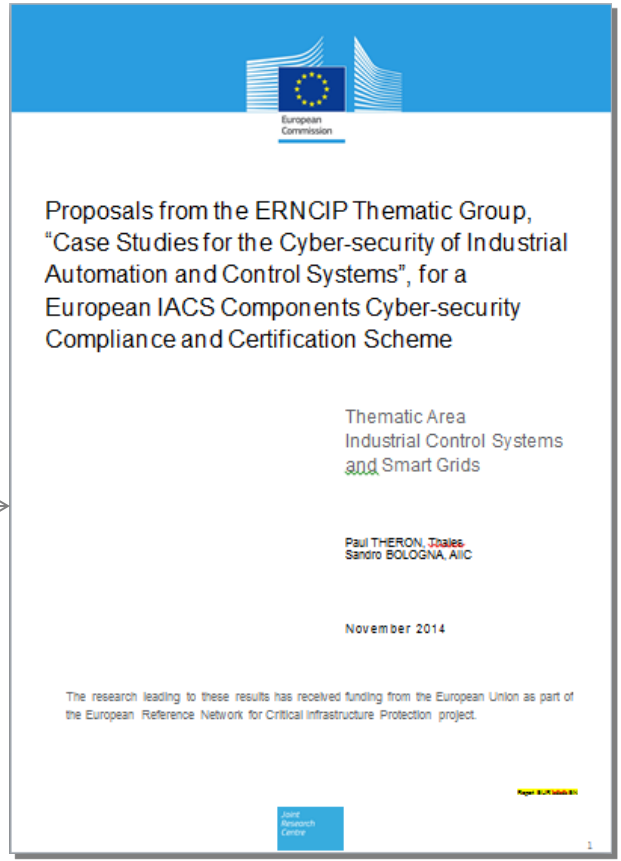
ERNCIP TG on IACS

Two questions

1. Need for European certification of cybersecurity of IACS
2. If yes, conditions of feasibility for making it happen



Nov 2014



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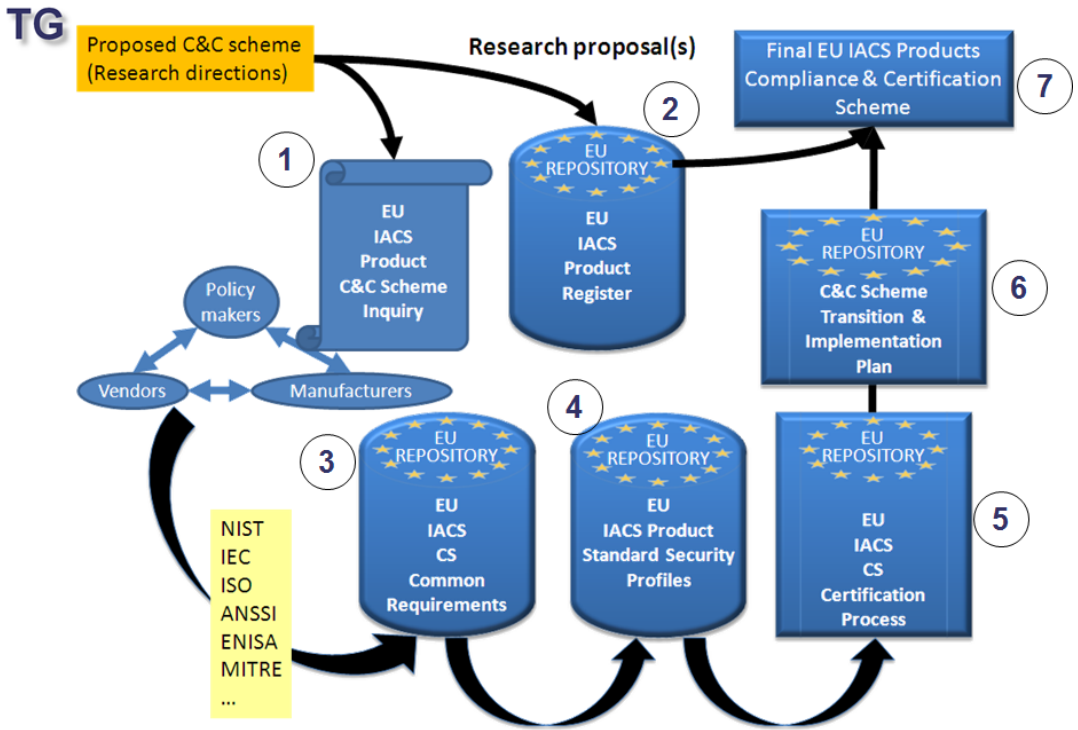
The 2015-2020 roadmap and projects



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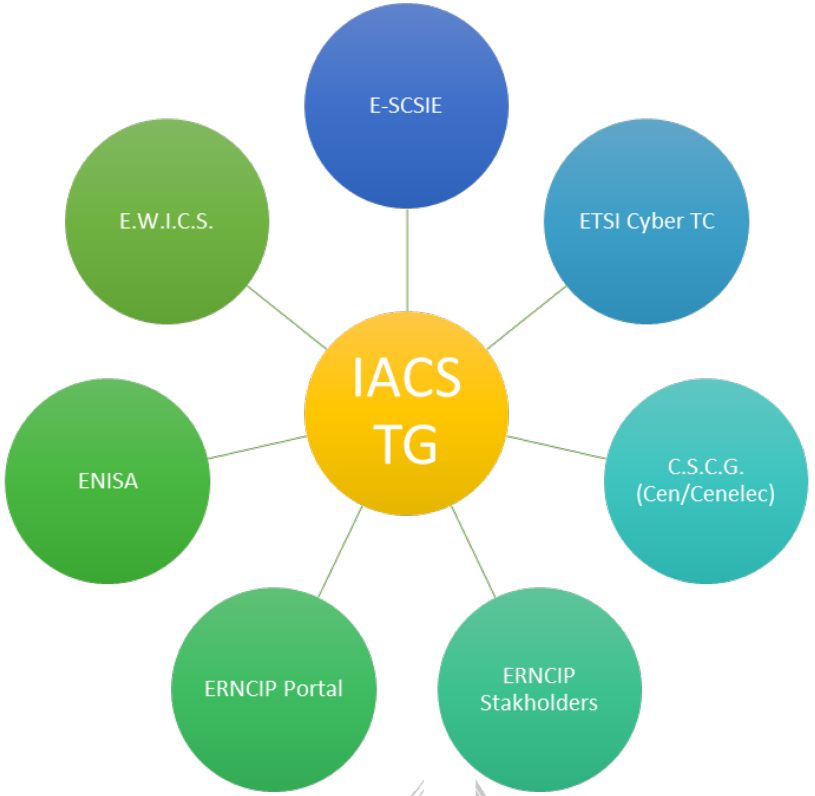
Gaining support from the stakeholders

Stakeholders' consultation 2015-2016:

- ERNCIP Conference 2015;
- ENISA – EICS Group and E-SCSIE (2015);
- ENISA ICT Workshop, 16th of March 2016;
- ETSI Cyber TC meetings;
- The European Workshop on Industrial Computer Systems Reliability Safety and Security (EWICS);
- CEN/Cenelec's Cyber Security Coordination Group (CSCG);
- ERNCIP-Improver Workshop April 2016;
- ISA Security Compliance Institute;
- US NIST.



Released in February 2017

Introduction to the European IACS components Cybersecurity Certification Framework (ICCF)

Feasibility study and initial recommendations for the European Commission and professional users

Paul THERON, Thales

2016

The principal goal of this report is to propose an initial set of common European requirements and broad guidelines. It describes the IACS component Cybersecurity Certification Framework (ICCF) and its components and makes suggestions for its governance, adoption and implementation.
This report is not intended to be a standard, nor aims at the establishment of new ones, as this effort's focus is to perform and publish a feasibility study that could **foster the certification of IACS components in Europe**.

The research leading to these results has received funding from the European Union as part of the European Reference Network for Critical Infrastructure

The philosophy of the ICCF

A generic model for IACS products / components certification:

- **Helping vendors and buyers to approach the issue of certification**

A way to engage stakeholders

- **Schemes from the least to the most demanding**

Guidelines for the European Commission and Professionals

- **How to start? And what to do?**

The IACS Compliance & Certification Framework

Proposes 4 IACS Compliance & Certification Schemes (ICCS)

- *ICCS-A1 (Self-declaration of compliance)*
- *ICCS-A2 (Third-party compliance assessment)*
- *ICCS-B (Cyber resilience certification)*
- *ICCS-C (Full cyber resilience certification)*

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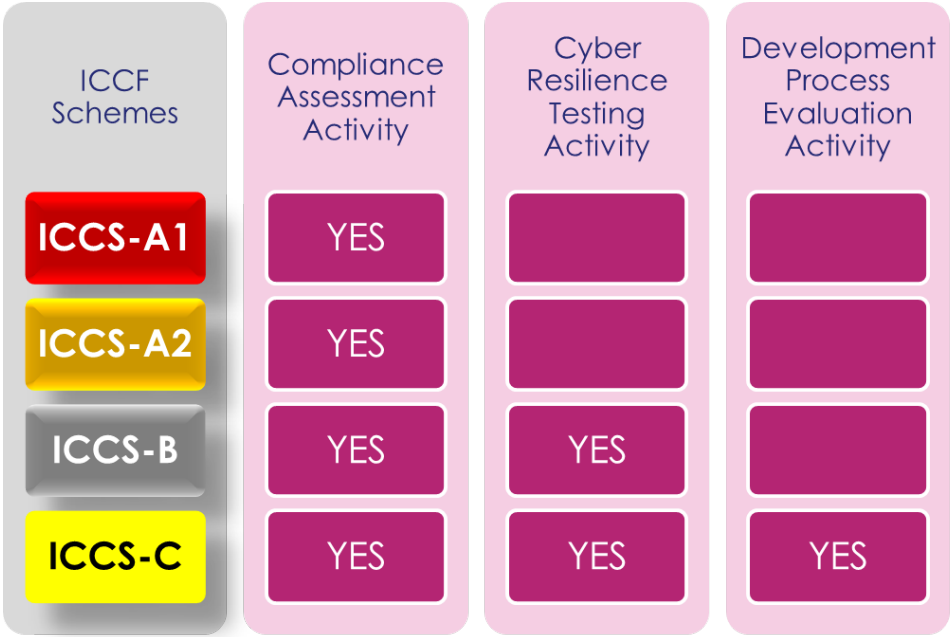
The IACS Compliance & Certification Framework

Involves up to 3 Evaluation Activities

- **Compliance Assessment (in all four ICCS)**
- **Cyber Resilience Testing (ICCS-B & C)**
- **Development Process Evaluation (ICCS-C)**



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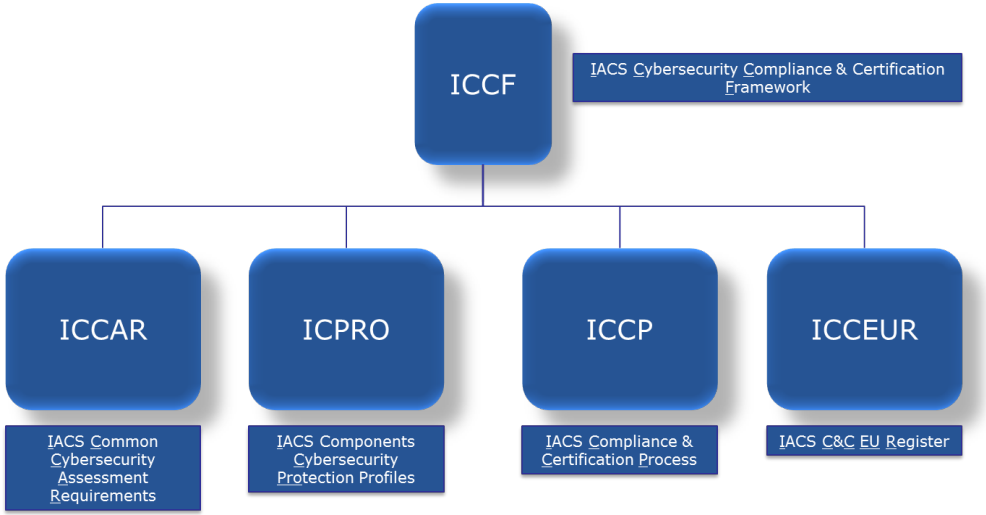
The IACS Compliance & Certification Framework

Requires the guidelines and resources of 3 Pillars

- **IACS Common Cybersecurity Assessment Requirements (ICCAR)**
- **IACS Components Cybersecurity Protection Profiles (ICCPRO)**
- **IACS Compliance & Certification Process (ICCP)**

... And involves a 4th pillar for fostering and disseminating the ICCF

- **IACS C&C EU Register (ICCEUR)**



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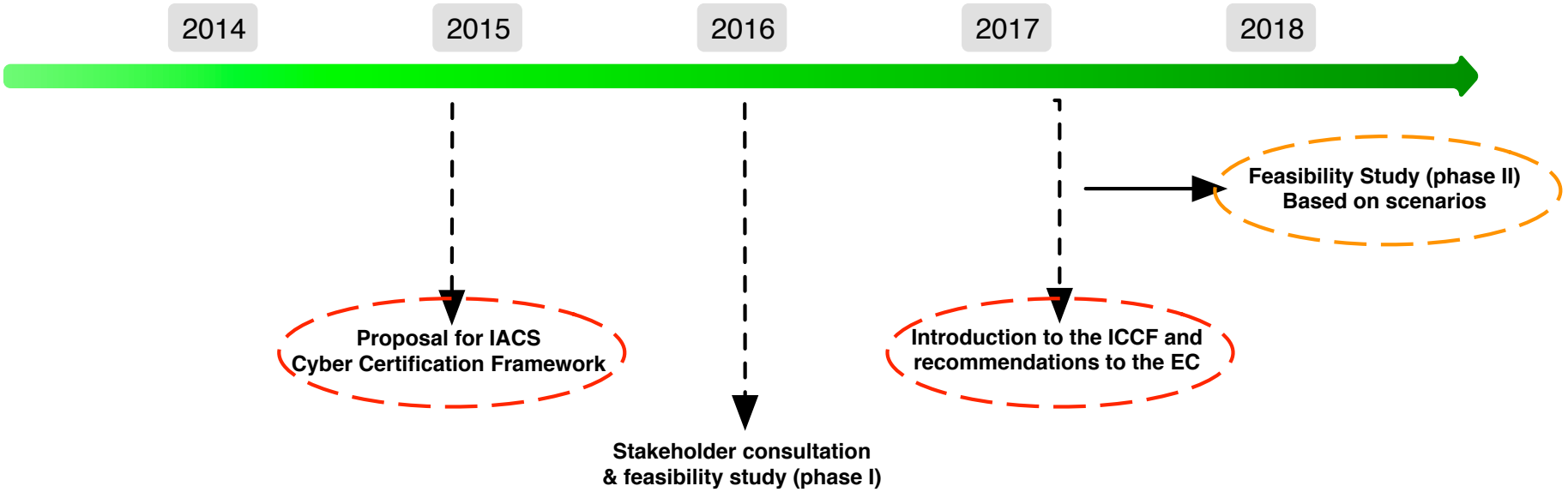
What's next for the ERNCIP IACS TG?

The IACS Project's Timeline:



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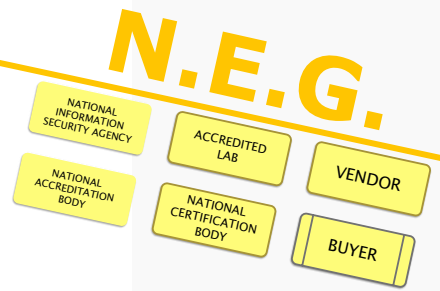
Challenging the ICCF…



The main goal for 2017 is to "**challenge**" the current stage of development of the ICCF and to organise exercises that will **simulate** "the behaviouristic and governance model" of the Framework, in cooperation with "National Exercise Groups".

Map by Freevectormaps: https://freevectormaps.com/world-maps/europe/WRLD-EU-01-0004

To be released tentatively around February 2018…

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2nd phase of the feasibility study.

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Stay in touch

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