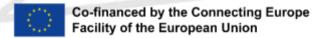
Cyber Resilience and the Future EU Cybersecurity Certification Framework

Stewart Hickey, Khalimatou Samirah

Date; 25th Oct 2022







Agenda

- 1. Introduction
- 2. Cybersecurity Act EU and National Cybersecurity Certification Framework
- 3. EU Cyber Project "A4CEF"
- 4. Summary



1. INTRODUCTION



National Standards Authority of Ireland

Government Agency

- Develop, publish and promote standards that facilitate trade and provide a basis for technical regulation.
- Participate in ISO/IEC JTC 1/SC 27 "Information security, Cybersecurity and Privacy protection"







NSAI Certification

Product Certification

 Notified body for Construction, Automotive and Medical Device Products

Management System Certification

- ISO 9001 Quality
- ISO 14001 Environment
- ISO 45001 Occupational H&S
- ISO 27001 Information Security







2. CYBERSECURITY ACT



Cybersecurity

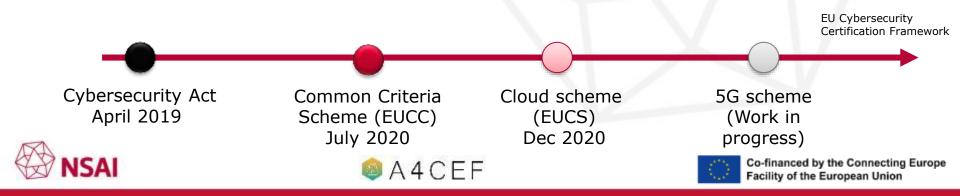


- Framework of Cybersecurity Certifications
 - Initially voluntary in nature
 - 3rd Party + Self Assessment

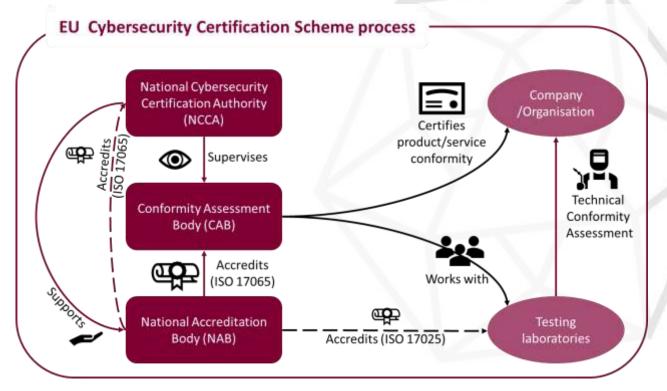


Cybersecurity Act – Regulation (EU) 2019/881

The Cybersecurity Act has been adopted by the EC to strengthen
the role of ENISA in establishing a base of requirements for
cybersecurity certifications that will be recognised through the EU
region, to increase trust in ICT products, services and processes
in EU markets.

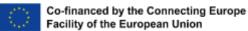


National Certification Framework









3. EU CYBER PROJECT "A4CEF"

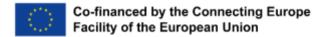


Advancing Cybersecurity Certification and Enhancing (business) Flows (A4CEF)

Project start date **July 2021**Project end date **June 2023**









Under

Connecting Europe Facility 2014-2020

CEF-TC-2020-2 - Cybersecurity

Budget: €280,008







Project Partners

- National Standards Authority of Ireland (NSAI)
- Kypriaki Eteria Pistopoiisis Ltd (KEP Cyprus)
- Digital Security Authority (DSA Cyprus)
- Red Alert Labs (RAL France)













Objectives

Building

 Building internal capabilities of NSAI as a Conformity Assessment Body(CAB) for cybersecurity certification; and a reference model to support cybersecurity certification activities as defined in the European Cybersecurity Certification Framework

Enhancing

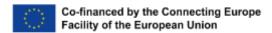
 Enhancing the internal capabilities of the consortium partners, through existing and newly developed training material on cloud computing certification

Exchanging

 Exchanging best practices and relevant information related to conformity assessment between Cyprus and Ireland.







Overview



Activity 1

Project Management



Jul 2021 - Jun 2023



Activity 2

Internal Capability Development



Aug - Dec 2021



Activity 3

Cross Border Exchange



Jan - Dec 2022





Activity 4

Cloud Computing Pilot Certifications



Jul 2022 - Jun 2023

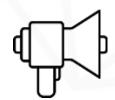


Activity 5

Process & Flow Modelling



Jan 2022 - May 2023



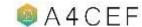
Activity 6

Dissemination



Jul 2021 - Jun 2023







Activity 2 - Internal Capability Development

Activity leader

RAL

Timeline

01 Aug 2021 –
 31 Jan 2022

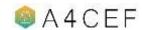
Tasks

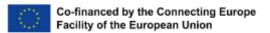
- Reception of pre-existing training program from the <u>Building up the Cybersecurity Certification Capabilities of</u> <u>Cyprus</u> (B4C project)
- Introduction to the Cybersecurity Act, ISO 17065, ISO 17025, <u>EU Common Criteria</u> (EUCC) scheme, <u>EU Cloud</u> <u>Services</u> (EUCS) Scheme and <u>Eurosmart IoT device</u> certification
- Development and delivery of additional training materials for EUCS scheme to all partners

Deliverables

- Training materials (30 Jun 30 Oct 2021),
- Training Evaluation Report (01 Oct 31 Dec 2021)







Activity 2 - Internal Capability Development

Work completed

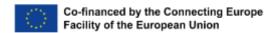
- Delivery of training materials
 - 1000+ training hours provided to Irish SME Cloud Service Providers and stakeholders at national and EU levels
 - Training materials available upon request
 - Evaluation Certificates issued for Consortium Members

Work in progress

Training Evaluation Report







Activity 3 - Cross Border Exchange

Activity leader

DSA

Timeline

01 Jan 2022 –
 31 Dec 2022

Tasks

- Specification of requirements for NSAI CAB accreditation based on ISO 17065
- Preparation and authorization of accreditation processes and audits
- Exchange of information on best practices with regards to cybersecurity audits for CABs and vendors (Workshops TBC)

Deliverables

- Gap analysis report (03 Jan 30 Apr 2022)
- IT Systems demonstration (02 May 31 Aug 2022)
- Workshops reports and checklist for CAB audits (01 Sep 31 Dec 2022)







Activity 3 - Cross Border Exchange

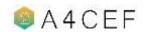
Work completed

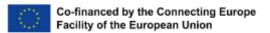
✓ Gap Analysis - Specification of requirements for NSAI CAB accreditation based on ISO 17065

Work in progress

- Developing the EUCS Cybersecurity Scheme processes and procedures based on ISO 17065
- Preparation and authorization of accreditation processes and audits
- Demonstration of IT systems designed to support certification processes Workshops to exchange information on best practices with regards to cybersecurity audits for CABs and vendors







Activity 4 – Pilot certifications

Activity leader

NSAI

Timeline

01 Jul 2022 –
 30 Jun 2023

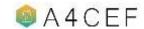
Tasks

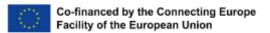
- Perform 3 pilot certifications based on the following steps:
 - Develop a cloud security maturity questionnaire to identify gaps experienced by vendors in meeting the requirements of the EUCS.
 - Collect vendor feedback along with evidence of appropriate implementation of EUCS requirements
 - Issue observation reports before the final Evaluation report that provides the verdict PASS or FAIL of vendors' readiness.
 - Review of the results and decision on certificate issuance.

Deliverables

- Cloud Security Maturity Questionnaire and Report (01 Jul 30 Nov 2022)
- Observation and Evaluation Reports (30 May 2023)







Activity 4 – Pilot certifications

Work completed

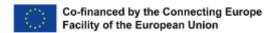
- Preparatory research assessing the readiness of CSPs in Ireland concerning EU Cloud Security scheme requirements
- Selection of 4 CSPs for the pilot certifications (Services)
 - **SaaS** High assurance level
 - IaaS Substantial assurance level
 - **SaaS** Substantial assurance level
 - **SaaS** Basic assurance level
- Development and validation of *Cloud Security Maturity Questionnaire* (CSMQ) for the vendor readiness assessment
- Plan for conducting EUCS pilot certification audits

Work in progress

EUCS pilot certification audits







Activity 5 - Process & Flow Modelling

Activity leader

KEP

Timeline

01 Jan 2022 –
 30 May 2023

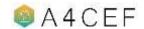
Tasks

- Evaluation of existing modelling methods for stakeholders' module model design
- Define the internal module certification subprocesses for CAB, NCCA, NAB and vendors
- Input/Output Mapping of peer modules and end to end flow design for the certification process to increase efficiency and reduce the cost of certification

Deliverables

 Process description, tools and I/O mapping documents (03 Jan 2022 -31 May 2023)







Activity 5 - Process & Flow Modelling

Work completed

- Modelling end to end process with Bizagi modeler
- Evaluation of existing modelling methods for stakeholders' module model design

Work in progress

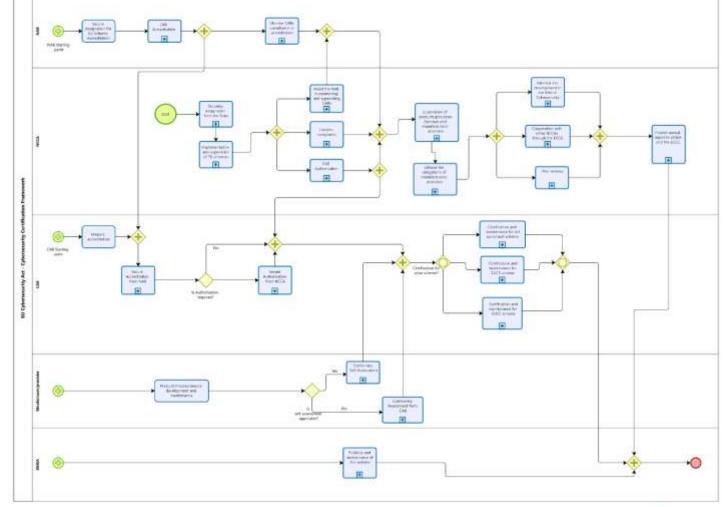
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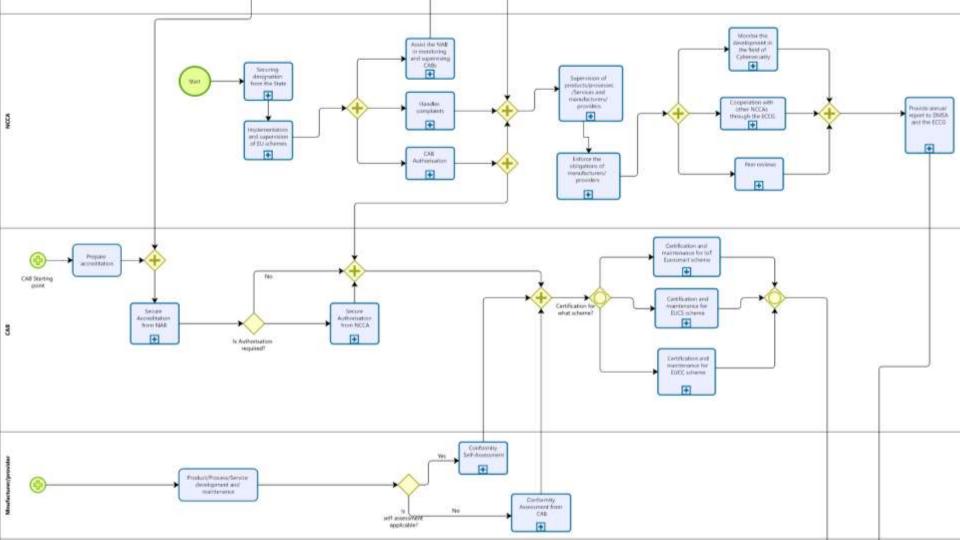


EU Cybersecurity Act – Certification framework









www.a4cef.eu

Advancing Cybersecurity Certification Capabilities with Cross-border exchange and Enhancing (business) Flows

Learn More

A4CEF

As we are living in an increasingly digital world, it is vital that Cybersecurity Standards are applied through certification.

With this in mind, the EU commission has adopted the Cybersecurity Act for cybersecurity certifications. Supported by the European Union and working with partners in Ireland, Cyprus and France, will Build capabilities, contributing to the European Cybersecurity Certification Framework (ECCF) and the EU Cloud



Stakeholder engagement

- CIO Irish Government (DPER)
- NCSC The National Cyber Security Centre
- Cyber Ireland
- IDA Ireland
- Technology Ireland ICT Skillnet
- Enterprise Ireland



















- Certification to play a key role in promoting cyber resilience of products and services into the future
- EU and National Framework is evolving with designation ongoing of stakeholders at member state level
- Many EU Cybersecurity Schemes remain at candidate level and research/projects ongoing with respect to what certification will involve in practice
- Education vital for the industry
- Business opportunity for other stakeholders!





Thank you.

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