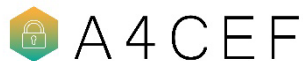# Cyber Resilience and the Future EU Cybersecurity certification framework

Stewart Hickey

Date; 19 March 2022

NSAI

A4CEF

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Agenda

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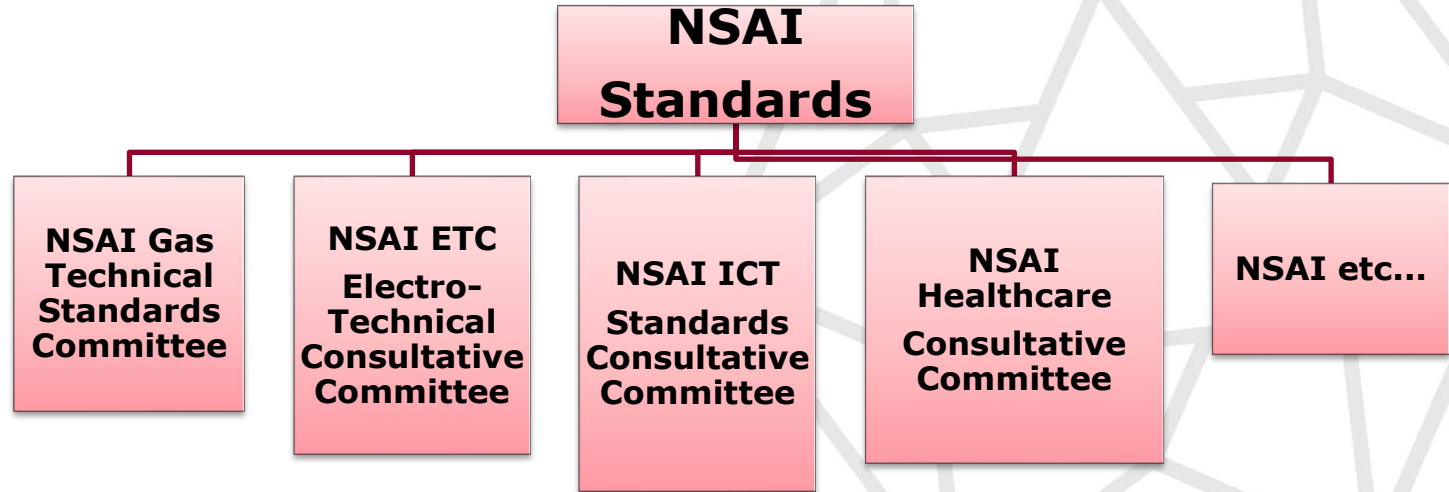4. EU Cyber Project "A4CEF"
5. Summary

NSAI

National Standards Authority of Ireland

Develop, publish and promote standards that facilitate trade and provide a basis for technical regulation.

Dept. for Enterprise Trade and Employment

NSAI Standards Structure is consultative in nature

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                          NSAI
                        Standards
   ┌──────────┬──────────┬──────────┬──────────┐
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| NSAI Gas Technical Standards Committee | NSAI ETC Electro-Technical Consultative Committee | NSAI ICT Standards Consultative Committee | NSAI Healthcare Consultative Committee | NSAI etc... |

NSAI

ISO/IEC JTC 1/SC 27 Information security, Cybersecurity and Privacy protection

- 215 Standards published
- 71 Standards in development
- 51 Participating National Member Bodies

ISO/IEC JTC 1/SC 27/WG 1	Information security management systems
ISO/IEC JTC 1/SC 27/WG 2	Cryptography and security mechanisms
ISO/IEC JTC 1/SC 27/WG 3	Security evaluation, testing and specification
ISO/IEC JTC 1/SC 27/WG 4	Security controls and services
ISO/IEC JTC 1/SC 27/WG 5	Identity management and privacy technologies

NSAI

NSAI Certification Activities

- Conformity assessment activities account for approx. €25M of NSAI Income
- Offering Certification to 2000+ clients across 50 different countries
- Offer accredited certification to ISO/IEC 27001
  - Sectors supported include
    - Construction
    - Transport
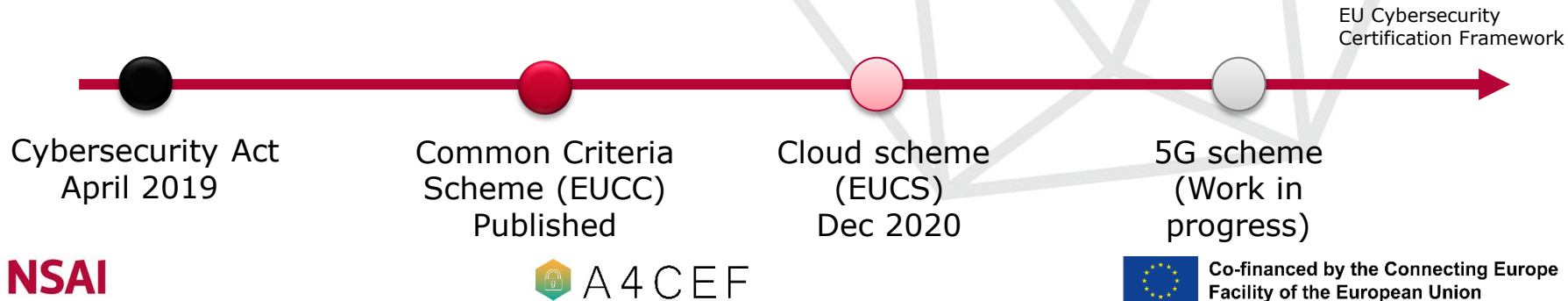   - Information Technology
    - Engineering services

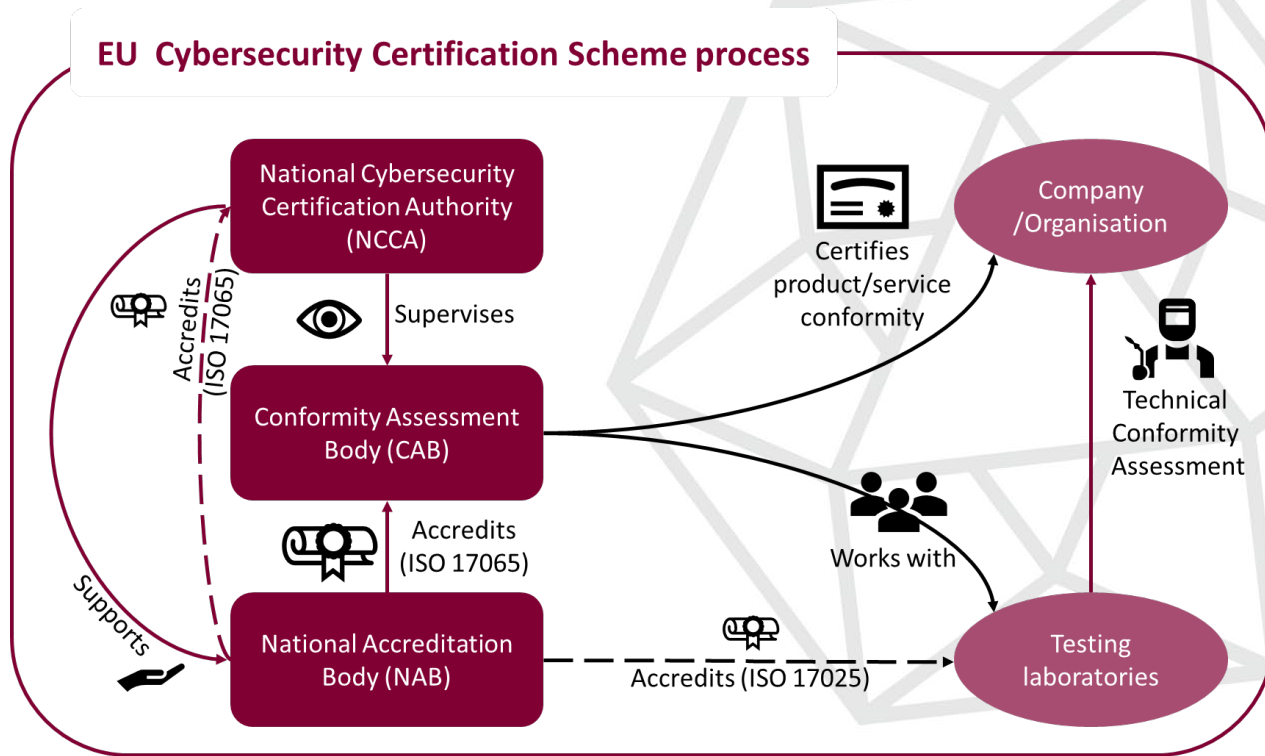**NSAI**

Cybersecurity

- Framework of Cybersecurity Certifications
  - Initially voluntary in nature
  - 3rd Party Certification + Conformity 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.

EU Cybersecurity Certification Framework

Cybersecurity Act
April 2019

Common Criteria
Scheme (EUCC)
Published

Cloud scheme
(EUCS)
Dec 2020

5G scheme
(Work in
progress)

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National Certification Framework

EU Cybersecurity Certification Scheme process

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

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

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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
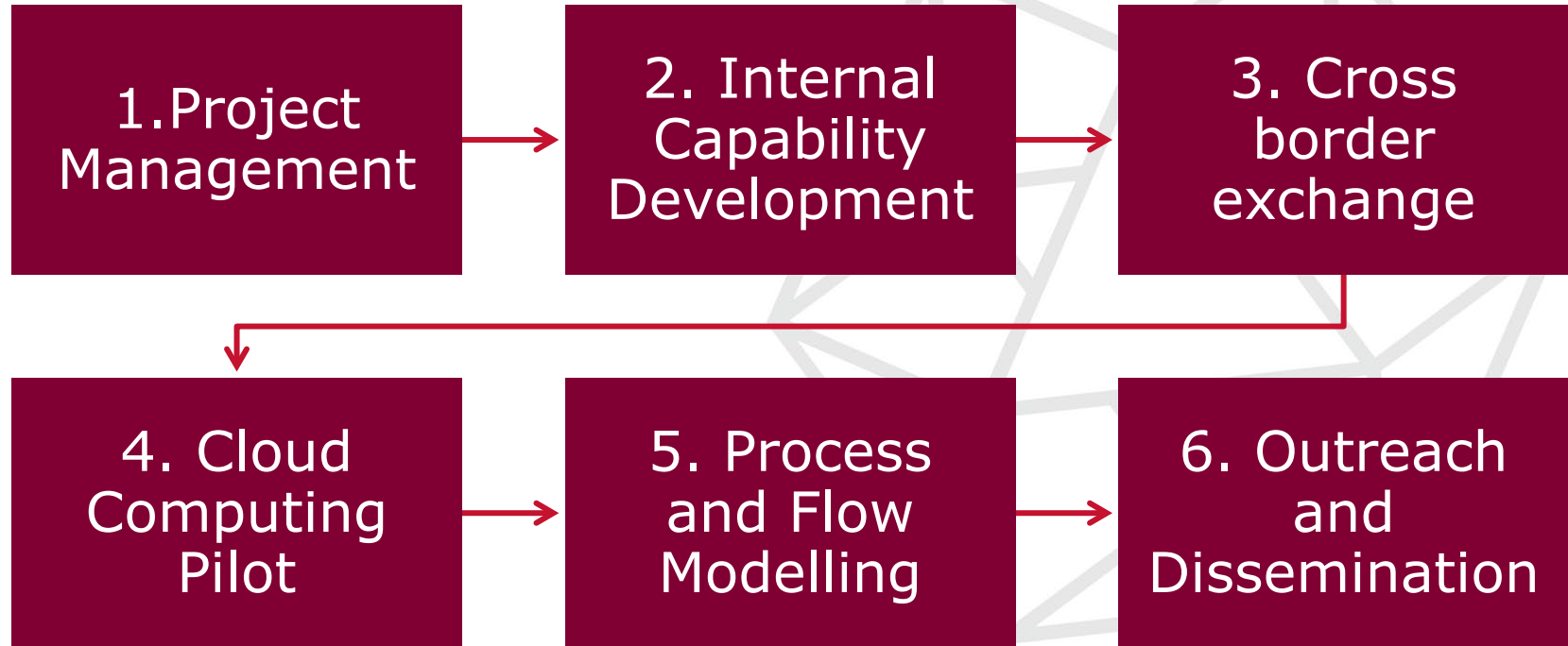
Enhancing

- 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.

Activities (6)

Activity 1 - Project Management

Activity leader

- KEP

Timeline

- 01 Jul 2021 – 30 Jun 2023

Tasks

- Kick off meeting 15th September 2021
- Project plan – progress and coordination meetings – project monitoring
- 3 formal project meetings (Kick off meeting, Interim meetings, Final meeting)

Deliverables

- Progress reports every 6 months (01 Jul 2021 - 30 Jun 2023)
- Meeting minutes (15 Feb 2022 - 14 Feb 2023)

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Activity 2 - Internal Capability Development

Activity leader

- RAL

Timeline

- 01 Aug 2021 – 31 Dec 2023

Tasks

- Reception of pre-existing training program from the _Building up the Cybersecurity Certification Capabilities of Cyprus_ (B4C project)
- Introduction to the Cybersecurity Act, ISO 17065, ISO 17025, _EU Common Criteria_ (EUCC) scheme, _EU Cloud Services_ (EUCS) Scheme and _Eurosmart IoT device_ 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)

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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)

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)

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Activity 4 - Cloud Pilot Certifications

Activity leader

- NSAI

Timeline

- 01 Jul 2022 – 30 Jun 2023

Tasks

- Perform 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)

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Activity 5 - Process and 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)

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Activity 6 - Outreach and Dissemination

Activity leader

- NSAI

Timeline

- 01 Jul 2021 – 30 Jun 2023

Tasks

- Development of a webpage
- Dissemination of project results through government and industry channels at national (Cyber Ireland Technology Ireland ICT Skillnet, NCSC, EI, IDA Ireland…) and EU level (Cyprus and France)

Deliverables

- Website, Advisory committee briefings, Webinars (01 Jul - 30 Jun 2023)
- Article published at a leading cybersecurity conference

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Advisory Committee Members

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

Progress to date

- Preparatory research assessing the readiness of CSPs in Ireland concerning EU Cloud Security scheme requirements.

- Engagement with International Networks (e.g. ECCG, Concordia, International Women4Cyber Network)

- 900 (person) training hours with representatives from NSAI, Irish SME Cloud Service Providers, plus project stakeholders

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

Learn More

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

Summary

- 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.

NSAI

Thank you.

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