BRIDGING THE CYBERSECURITY TALENT GAP IN THE EU

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CYBERSECURITY SKILLS TALENT IN THE EU

- A gap of 300K cyber professionals exists in the EU

- Skills professionals are essential to safeguard Europe's digital infrastructure, ensure business continuity, and maintain trust in public and private services.

Capacity building in ENISA

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The 12 Cybersecurity Profiles

Chief Information Security Officer (CISO)

Cyber Incident Responder

Cyber Legal, Policy and Compliance Officer

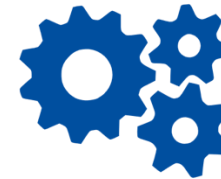**Cyber Threat Intelligence Specialist**

Cybersecurity Architect

Cybersecurity Auditor

Cybersecurity Educator

Cybersecurity Implementer

Cybersecurity Researcher

Cybersecurity Risk Manager

Digital Forensics Investigator

Penetration Tester

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16 Member States are using the ECSF

How have MSs been using:

- National standard (few MSs)

- Cybersecurity training paths

- Public sector recruitment

- Workforce assessment taxonomy

- Mapped to NIS2 requirements: use cases to support strategic workforce planning to meet NIS2 obligations

- Mapped to ESCO taxonomy, the classification covering occupations and skills across the entire EU labor market

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Public Survey
414 replies – 26 MS

ECSF is an excellent and **much-needed resource and baseline** for the European **market**.

80% of the respondents are **aware of the ECSF**

ECSF is a good **baseline for building** and **validating** a **cybersecurity structure** in an organisation.

Among the respondents who are familiar, 33% are **currently using the ECSF 66% plans to use**

ECSF should be **considered and referenced more** in the EU **cybersecurity legislative framework**.

ECSF **roles and skills** are mapped against the **regulatory framework**

The common EU language on cybersecurity roles and skills

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needs **good practices from MS & Industry** to:
- Develop relevant proposal based on the ECSF
- Build on existing national and private mechanisms and experience
- Ensure consistency with the regulatory landscape (CSA, CSoA, NIS2)

MEMBER STATES & PLEDGERS

- Participate in pilots with the industry (Pledgers),
- Influence direction
- Validate proposition and use cases
- Individually decide on how to proceed afterwards

ECCC/EDIC

- Support the process and ensure its scalability

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Cyber Europe in a few words

Cyber Europe is a series of large-scale, cross-border cyber crisis management exercises

- Simulations of large-scale cybersecurity incidents inspired by real-life events, that escalate to become cyber crisis
- For both the public and private sectors from the EU and EFTA Member States
- Opportunity to test preparedness, readiness and reaction capacity at technical and operational levels.

Last edition **in numbers**:
- ~ 5k estimated participants
- 27,8k injects sent
- 62MB of RAW data collected for analysis

CYBER EUROPE **2024**

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The history of Cyber Europe

Target:
General Critical Information Infrastructure

Target:
Energy

Target:
Aviation

Target:
Energy

Target:
Public electronic services

Target:
ICT industry

Target:
Healthcare

- Piloted in 2 MS as a service
- More than 15 MS (NCCs) are engaging to test it
- 5 MS are interested to get it though support action
- More than 3 EUIBAs expressed interest to use it
- Self-paced online course (EU academy)

AR-IN-A-BOX
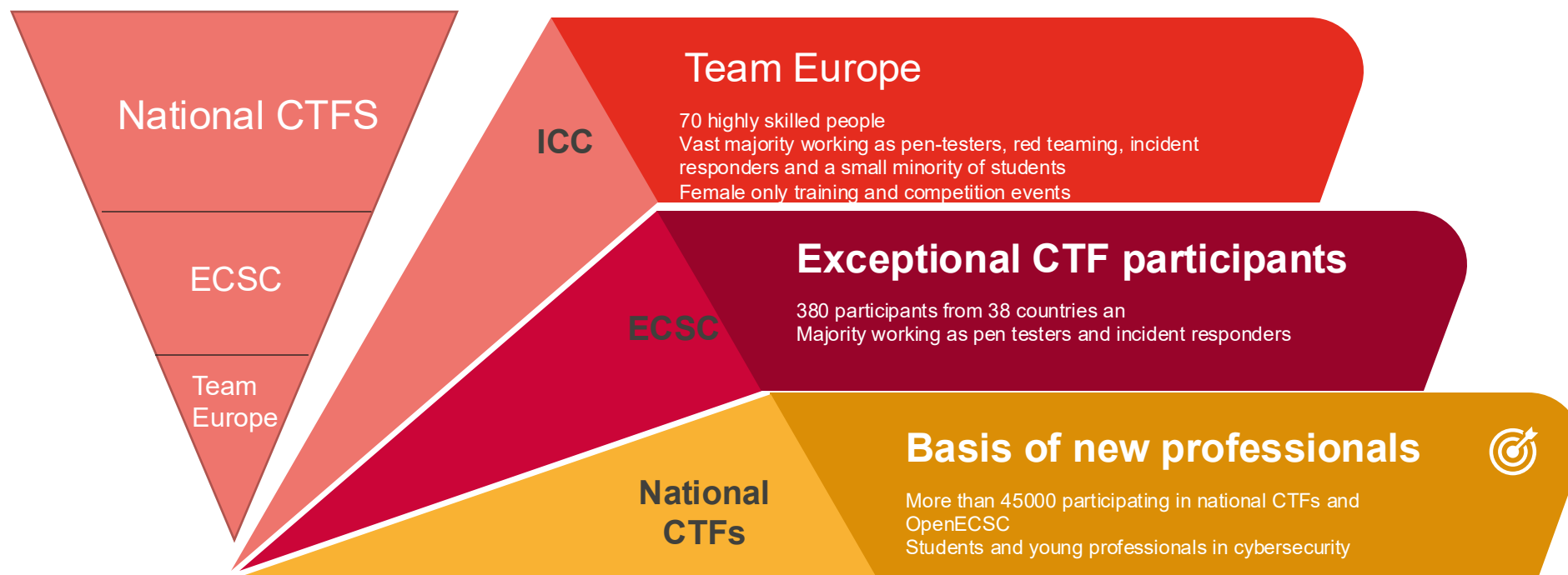### A GUIDE TO CREATING YOUR OWN AWARENESS RAISING PROGRAMMES

AR-IN-A-BOX — YOUR GUIDE TO DESIGNING A CYBER-AWARENESS PROGRAMME

AR-IN-A-BOX — YOUR GUIDE TO DESIGNING A CYBER-AWARENESS CAMPAIGN

AR-IN-A-BOX — COMMUNICATION STRATEGIES FOR CYBER AWARENESS

AR-IN-A-BOX — PROMOTION TOOLS AND CHANNELS

AR-IN-A-BOX — CYBER AWARENESS – MEASURING IMPACT

AR-IN-A-BOX — CYBER CRISIS COMMUNICATION GUIDE

AR-IN-A-BOX — HOW TO RUN THE CYBER-AWARENESS GAME

AR-IN-A-BOX — CYBER AWARENESS GAME — EnergyCorp hacked — BE THE STRONGEST LINK BREAK THE KILLCHAIN

AR-IN-A-BOX — HOW TO PROMOTE CYBER SECURITY AWARENESS TO C-LEVEL: A GUIDE

The ENISA-Do-It-Yourself Toolbox
*how to **design** and **implement** your own effective cybersecurity awareness program*

Target audience
public bodies,
operators of essential services,
large and small private companies,
*and organizations seeking to enhance cybersecurity awareness among internal and external stakeholders.*

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CREATING NEW YOUNG PROFESSIONALS

National CTFS

ECSC

Team Europe

ICC

ECSC

National CTFs

Team Europe

70 highly skilled people
Vast majority working as pen-testers, red teaming, incident responders and a small minority of students
Female only training and competition events

Exceptional CTF participants

380 participants from 38 countries an
Majority working as pen testers and incident responders

Basis of new professionals

More than 45000 participating in national CTFs and OpenECSC
Students and young professionals in cybersecurity

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ECSC AND ICC: TWO VIBRANT CTF COMMUNITIES FOR YOUNG PROFESSIONALS

- 32 countries + 6 guest countries
- 380 Contestants
- 1000 Participants – Contestants, PA, Coaches, VIP, Partners, etc
- **>27,000** people (students and young professionals) in national events
- > 5000 people (no age restriction) on OpenECSC from more than 150 countries
- Female only dedicated training events to address the gender gap
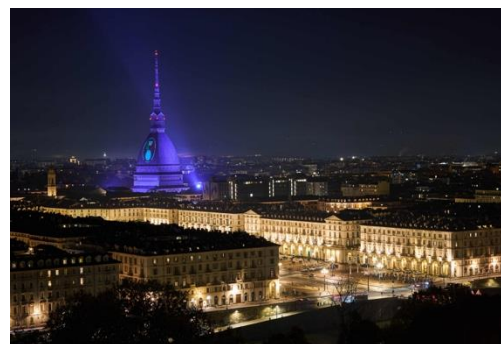
- **>8.000** participants in regional CTFS / 70 countries / 7 teams
- Europe is perceived as pioneers in challenges
- Only European platforms are trusted for certain challenges
- Female only competition events

The learning outcomes of the challenges are mapped with ECSF

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- build on ECSF - the EU language on cyber

- Work with MSs and with all EU actors involved in skills (in particular NCCs, EDIC, ECCC)

- pilots of attestation schemes - ensure that the work is aligned with Member States existing practices
- All capacity building activity in ENISA are mapped to the ECSF

- Identify skills needed -> train individuals -> test the skills

THANK YOU FOR YOUR ATTENTION

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