

# KNOWLEDGE-SHARING EVENT

8 NOVEMBER 2023 HYBRID FROM BRUSSELS

CYBERSECURITY AWARENESS



## **Agenda**



#### Moderators:

- Ellen Stassart, Head of the NCC-BE;
- Nina Olesen, Head of Sector for Skills and Human Factors, ECCO

#### 13.30 – 13.45 Introductory remarks

- Miguel de Bruycker, Managing Director General, Centre for Cybersecurity Belgium;
- Miguel Gonzales-Sancho, Head of Unit "Cybersecurity Technology and Capacity Building" at the European Commission, and Interim Executive Director at the European Cybersecurity Competence Centre (ECCC)

#### 13.45 – 15.00 The Belgian Perspective

- Katrien Eggers, Communications Manager and Spokesperson, Centre for Cyber security Belgium | Awareness campaigns of the CCB
- Thierry Henrard, Team Leader Project Management, Centre for Cyber security Belgium | Belgian Anti-Phishing Shield (BAPS)
- · Guillaume Nanin, Project Manager, Centre for Cyber security Belgium | SafeOnWeb @ work
- Guy Hofmans, Team Leader Project Management, Centre for Cyber security Belgium | Belgian Anti-Phishing Shield (BAPS)
- · Joke Bosschaert, Staff Officer Q&S AZ Rivierenland and Arnout Van de Meulebroucke CEO Phished | CYZO Cybersecurity in de zorg / Cybersecurity in healthcare

#### 15.00 – 15.15 Break

#### 15.15 – 16.30 NCC perspectives

- NCC-IT: Mara Sorella, NCC-IT, Agenzia per la Cybersicurezza Nazionale, Italy | Cybersecurity Awareness Raising in cooperation with the Public and Private Sector in Italy
- NCC-NL: Kevin Hanemaaijer and Fokko Dijksterhuis, NCC-NL / NEXIS | The HackShield initiative
- NCC-DE: Silke Hoffman, Cyber security for the economy, Federal Office for Information Security (BSI) | Federal Office for Information Security and the Alliance for Cybersecurity (PPP): "Promoting Cybersecurity Awareness in Germany"
- NCC- LU: Dominique Kogue, Coordinator of the "Capacity Building" Center of Expertise within the Luxembourg National Cybersecurity Competence Center (NC3)
- NCC-EE: Kaisa Vooremäe, National Cyber Security Center, Estonian Information System Authority | Estonian Case Study: IT companies and cybersecurity agency collaborate to raise awareness together

#### 16.30-17.00 Q&A and conclusions





# 13.30 – 13.45 **Introductory remarks**





## Miguel Gonzales-Sancho

Head of Unit "Cybersecurity Technology and Capacity Building" at European Commission, Interim Executive Director European Cybersecurity Competence Centre (ECCC)





# Miguel de Bruycker

Managing Director General, Centre for Cybersecurity Belgium





# 13.45 – 15.00 **Belgian perspective**





## **NCC-BE**





## Katrien Eggers

Communications Manager and Spokesperson, Centre for Cyber security Belgium | Awareness campaigns of the CCB





# **Belgian Awareness Campaigns**

Key take aways for a successful campaign

ECCC Knowledge-Sharing Event on Cybersecurity Awareness

Wednesday, November 8, 2023

Katrien Eggers

Communication Officer and Spokesperson, Centre for Cybersecurity Belgium (CCB)

#### What is Safeonweb?



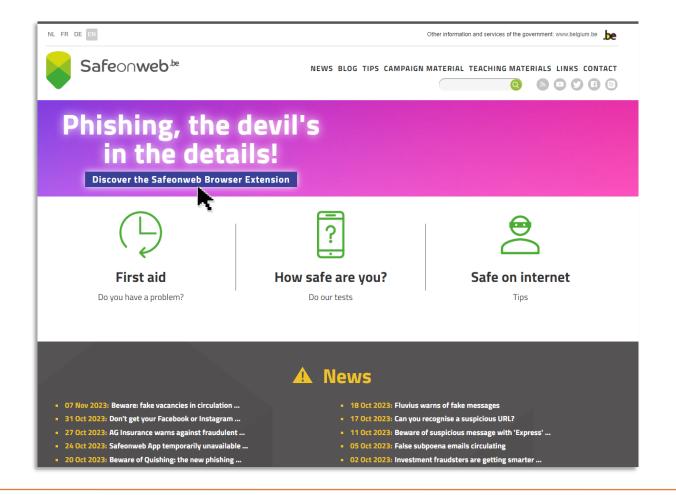
One of the missions of the Centre for Cybersecurity Belgium (CCB) is to inform and raise awareness among all internet users.

The CCB wants to ensure that all internet users have continuous access to sufficient, up-to-date and correct information about the safe use of the internet.





#### www.safeonweb.be





#### www.safeonweb.be

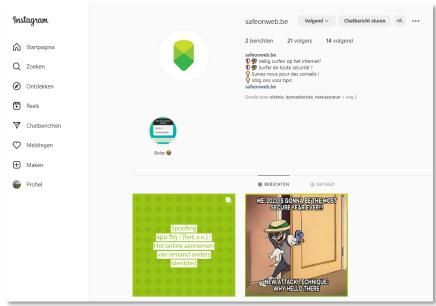
- Tips and tricks to stay safe online
- First aid: Do you have a problem?
- How safe are you? Do the test.
- Teaching materials
- Campaign material
- Interesting links
- News/alerts



#### Social media: Facebook, X, YouTube and Instagram









#### **European Cyber Security Month**





#### 2017: Can you recognize suspicious messages on time?







#### 2018: Back-ups and Updates







#### 2019: Think twice before clicking on a link





#### 2020: Passwords are a thing of the past





#### 2021: Outsmart a phisher: download the Safeonweb App



Download the Safeonweb app >









.be



#### 2021: Outsmart a phisher: download the Safeonweb App









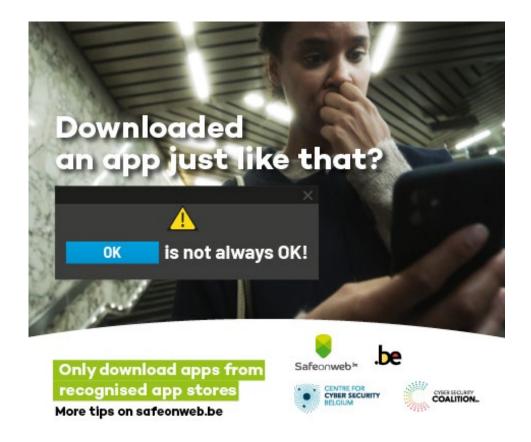




.be



### 2022: OK is not always OK





#### 2023: Phishing, the devil's in the details





# Key take aways for a successful campaign



#### **Grab the attention**







The ECSM Awards is State campaign materi for the

#### Best video

Belgium



Passwords are a thing of the past. Protect your online accounts with two-factor-authentication.

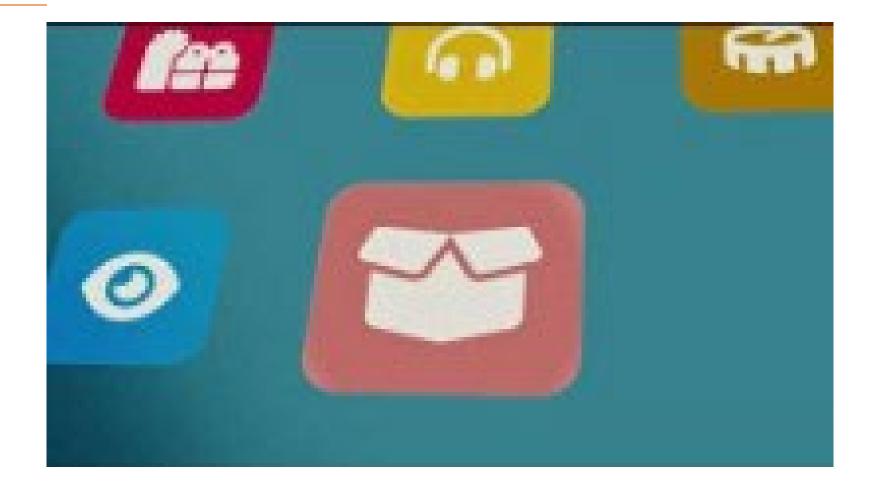
Disclaimer: Translations not available due to copyright.

promote Member ember States voted gns.

# 2022 Winners

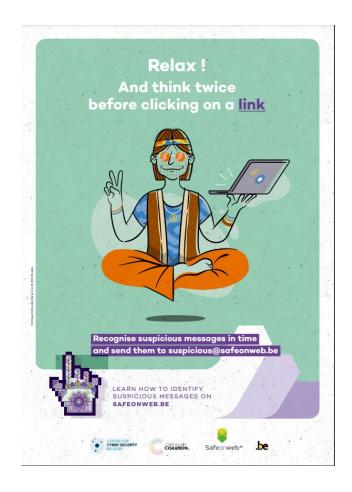
Congratulations to the winning Member States for their successful work!

### **Use emotions**





### Provide a success experience: 'Yes, I can'





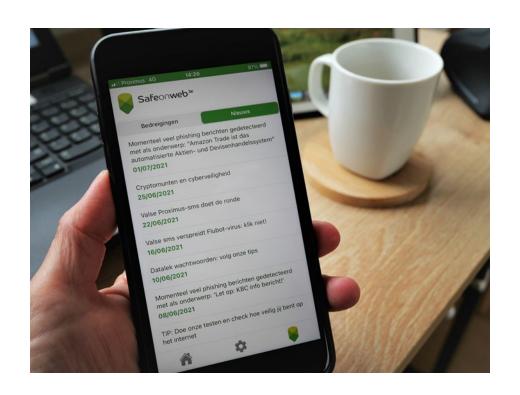


## Stay one step ahead of the fraudsters

The new Safeonweb app sends you updates and alerts about phishing messages and new forms of online fraud.







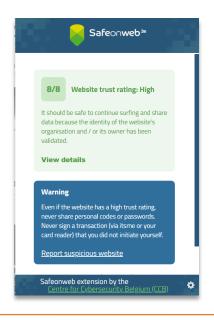
#### **Provide awareness tools:**

- E-mailadress <u>suspicious@safeonweb.be</u>
- Safeonweb App
- E-learning: Surf without worries
- Safeonweb browser extension











## Find partners! A lot of partners...



















































VBO FEB
Verbond van
Belgische
Ondernemingen









































































































































#### **Key take aways**

- Shout it out loud!
- Use emotions
- Provide a success experience and tools: Yes, I can
- Embrace your partners: sharing is caring
- Take a look at safeonweb.be for inspiration



# **Questions?**

Katrien Eggers
Center for Cybersecurity Belgium (CCB)
katrien.eggers@ccb.belgium.be

0485 765 336





# **Thierry Henrard**

Team Leader – Project Management, Centre for Cyber security Belgium | Belgian Anti-Phishing Shield (BAPS)





#### Guillaume Nanin

Project Manager, Centre for Cyber security Belgium | SafeOnWeb @ work





# **Belgian Cybersecurity Coalition**





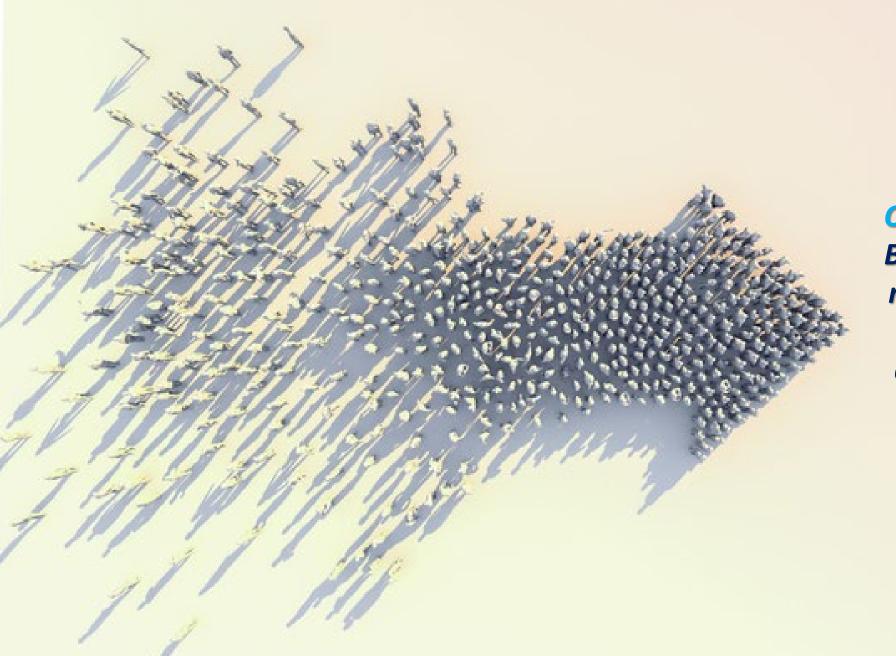
# **Guy Hofmans**

Team Leader – Project Management, Centre for Cyber security Belgium | Belgian Anti-Phishing Shield (BAPS)









Our mission is to bolster Belgium's cyber security resilience by building a strong cyber security ecosystem at national level.

# Why the Cyber Security Coalition?

CYBER SECURITY COALITION...



- Urgent need to increase cyber security awareness in Belgium
- Triple helix partnership as essential component of national cyber security strategy
- Dynamic access to scarce resources cross sectors





167

- Steady growth of community
- In Private, Public, Academic sectors
- Introduction of associate membership
- Community self-governance



•	Balancing service providers	&	user
	organizations		

126

 Commonly recognized reference in Belgium for cybersecurity

Private Sector	Federations	Public Authorities	Academic Institutions
108	11	32	16



# 4 Strategic Pillars



**Experience Sharing** 



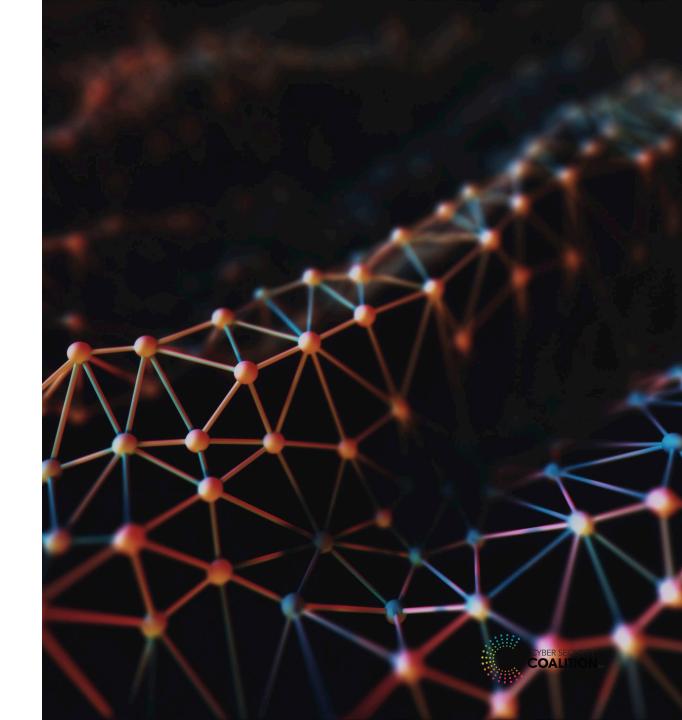
**Operational Collaboration** 



**Policy Recommendations** 



**Awareness Raising** 



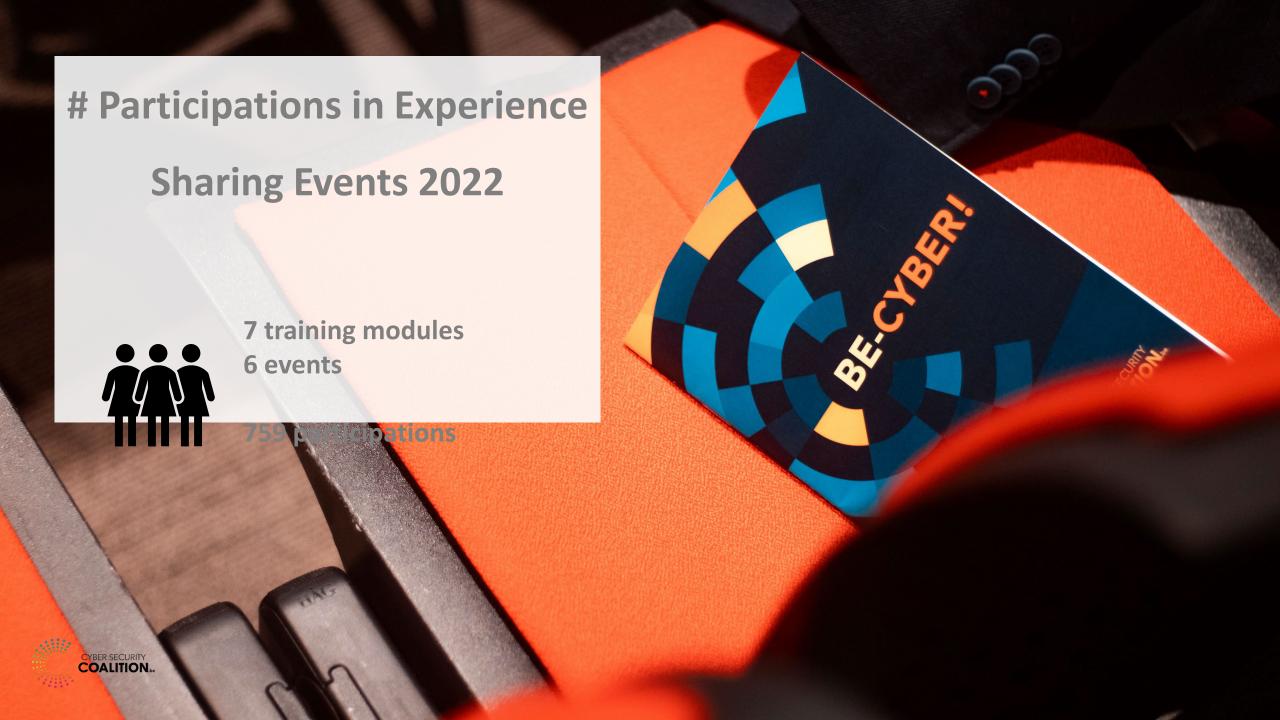
# **Experience Sharing**

# Independent forum for exchange of experiences & best practices

- Connect & build the trust network through in-person & hybrid events
- Shared capability building & mutual aid
- Website enriched with tools, webcasts & podcasts
- Blog & 'Cyber Pulse' newsletter
- 4 editions of Certified Cyber Security
   Awareness & Culture Manager training
   (91 alumni)

















# **Operational Collaboration**

# **12 Focus Groups**

- Tap into a 'virtual team'
- Access to best-of-breed experts
- Reliable references
- Threat intelligence shared by allies
- Sharing of 'common' assets
- Self-regulatory code of conduct

- Application Security
- Awareness
- Cloud Security
- Crypto
- CSIRT-SOC
- Enterprise Security Architecture
- EU Regulations & Standardizations
- GRC
- Healthcare (vertical)
- IAM
- OT/ICS Security
- Privacy & Data Protection





# **Policy Recommendations**





- Coalition as a sounding board for public authorities
- Exchange of implementation practices
- Actions to lift cyber security higher on the list of priorities at all governmental levels.

# I S O 0 1 2 7 0 0 1

# Policy-oriented focus groups

- Privacy & DataProtection
- EU Regulations &Standardizations



# Awareness Raising



National Awareness Campaign



Gamification



Metrics



Tools





Marketing Strategy



**Online Security Awareness** 



Cyber Security @Schools

8 working groups 150 members



#### www.doubleholiday\_\_\_pay.org

Phishing, the devil's in the details. Always check the URL of the website before clicking it.

Install the Safeonweb browser extension via safeonweb.be













# Cyber Security Awards







Cyber Security
Personality of the Year



BELGIUM'S CYBER SECURITY

**CISO** of the Year

CISO - Chief Information Security Officer of the Year



BELGIUM'S CYBER SECURITY

**Researcher/Educator** of the Year

Cyber Security Educator / Researcher of the Year



BELGIUM'S
CYBER SECURITY

**Young Professional** of the Year

Young Cyber Security
Professional of the Year







students & children

Belgium announces the end of phishing

I participate









Contact us: info@cybersecuritycoalition.be

Follow us on LinkedIn: Belgian Cyber Security Coalition: Overview | LinkedIn



# **Case-Study: CYZO Hospital**





#### Joke Bosschaert

Staff Officer Q&S AZ Rivierenland and Arnout Van de Meulebroucke CEO Phished | CYZO - Cybersecurity in de zorg / Cybersecurity in healthcare





# Cybersecurity in de Zorg

Cybersecurity in Care

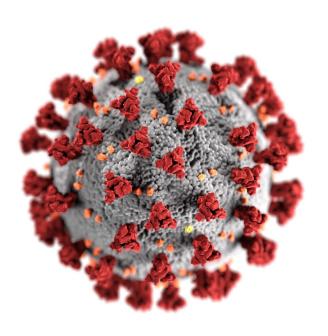












# Early 2020 to 2021: Covid was everywhere

- → Unprecedented Focus on COVID
- Rising Cyber Threats
  - Hospitals became victims
  - Understaffing
- How to improve resilience in a pragmatic manner?









# ESF Project: Call for project

Bringing together the best of the public and the private sector

How to improve cyber resilience in a pragmatic manner?







- O Pragmatic approach: Ready to use
- Focussing on the weakest link
- Obligatory but flexible
- Diversity of healthcare workers and healthcare organisation

Time table– 6 weeks program

Module 1: preliminary stage: build a team, put a timeline, baseline measurement of the phishing mail

Module 2
Overarching
communication
(go through)

FAQ/info page Screensavers Posters



Module 10: follow-up process with care of repeat and communication



# Output





Videos



3 screensavers

**Teaching aids for health care** 





Phishing mails

#### **Short E-learnings**

- 1. How to recognise phishing?
- 2. Person and patient data
- 3. Safe telework + shared working space



**USB-sticks** dropping



Intranetpage and internal communication

Teaching aids for health care







... umbrella organisation of the Flemish hospitals, initiatives from the mental health care and social profit facilities.

775 healthcareorganisations140.000 healthcareworkers



3 industries from the Flemish social work..

- Youth care and family support
- Support of people with disabilities
- Childcare

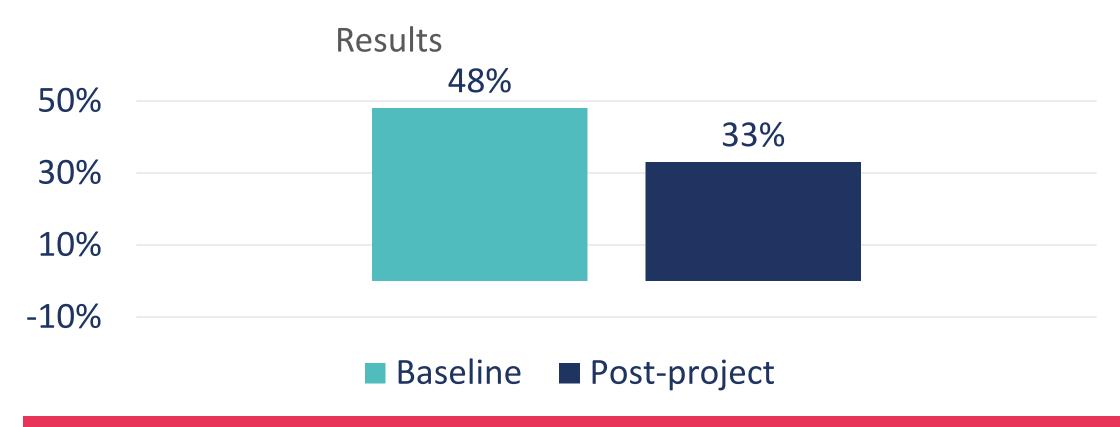
750 healthcare organisations with 31.000 healthcare workers

> 1500 healthcare organisations are informed via newsletters



#### Results



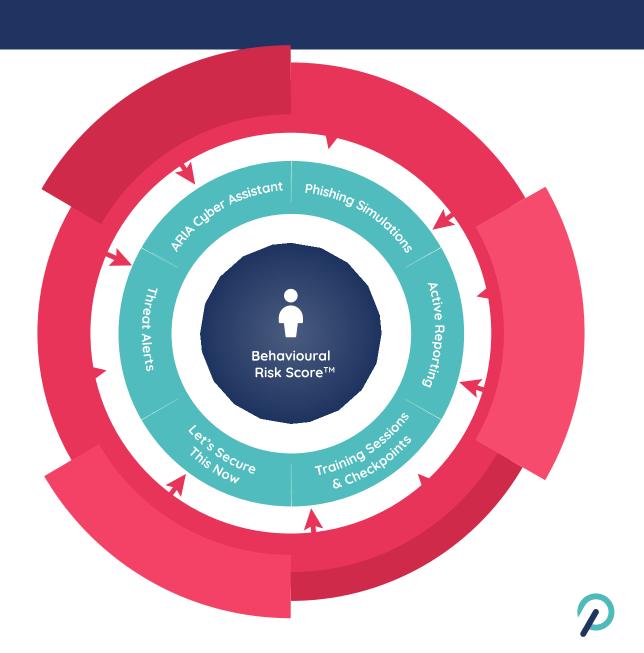


"This case is life-changing! Without this project we wouldn't give so much attention to this case. We are satisfied with the result.



## First step

- This was the first step...... but we need to evolve:
  - Ownership & follow-up in the healthcare environment
  - Recurrent training with a long-term approach





# Break! See you at 15:40!





# **NCC Perspectives**





# **NCC-LU**

**Dominique Kogue** 

Coordinator of the "Capacity Building" Center of Expertise within the Luxembourg National Cybersecurity Competence Center (NC3)





# **NCC-NL**

Kevin Hanemaaijer and Fokko Dijksterhuis NCC-NL / NEXIS | The HackShield initiative



# NCC-NL / NEXIS



A bright example of public-private partnerships regarding cyber security awareness in the Netherlands:









# **NCC-DE**

Silke Hoffmann

Cyber security for the economy, Federal Office for Information Security (BSI) | Federal Office for Information Security and the Alliance for Cybersecurity (PPP): "Promoting Cybersecurity Awareness in Germany"





# **NCC-IT**

Mara Sorella

NCC-IT, Agenzia per la Cybersicurezza Nazionale, Italy | Cybersecurity Awareness Raising in cooperation with the Public and Private Sector in Italy









# Cybersecurity Awareness Raising in Cooperation with the Public and Private Sector in Italy

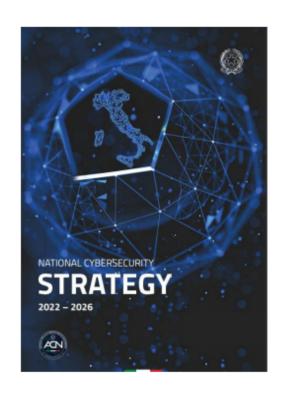
Mara Sorella, Research and Awareness Programmes Division - Italian National Cybersecurity Agency (ACN)

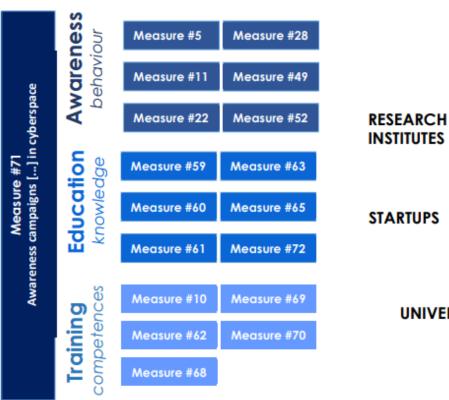
# Cybersecurity Awareness Raising in the Italian National Cybersecurity Strategy

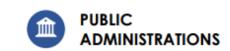


As part of its mission, the National Cybersecurity Agency (ACN) is committed to promoting a cybersecurity culture in Italy. The process is grounded on three main pillars, namely Awareness, Education and Training.

The Italian National Cybersecurity Strategy mandates specific measures to be implemented by ACN exploiting synergies with public and private actors as external stakeholders













SME & PRIVATE **COMPANIES** 





**SCHOOLS** 







OTHER INSTITUTIONS



## Cybersecurity Awareness Program 2023-2026



To implement these directions, ACN has developed a **Cybersecurity Awareness Program** to plan structural interventions for the promotion of awareness **initiatives** and **campaigns** in the **short**, **mid**, and **long term** 



The initiatives aim to cover multiple measures of the National Strategy and their targets using diversified channels conveying key messages to promote responsible behavior in cyberspace and good cyber-hygiene habits.







#### WHAT IS IT?

The program provides a governance tool for planning national awareness initiatives and campaigns

The various activities are organized in a set of **strategic projects** that are implemented by **annual operational plans** 

#### WHAT IS INCLUDED

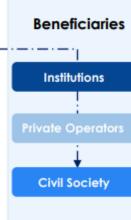
This program includes a **framework** entailing:

- A taxonomy of contents to be spread
- Systematization of intended audiences
- 3. Tools and channels

#### STAKEHOLDERS ROLE

The external stakeholders play different roles in these activities:

- Partners for the implementation of an activity;
- Ambassadors, to boost activities' reach or effectiveness.





## Joint AR Campaign with the Bank of Italy (1)



A first example of initiative from the **2023 Operational Plan**, where the external stakeholder is a **Partner** of ACN's activities is **a joint cybersecurity awareness campaign** between **ACN** and **the Bank of Italy**.



- The Bank of Italy is the central bank of the Republic of Italy, a publiclaw institution regulated by national and European legislation
- The Bank pursues aims in the general interest in the sector of money and finance.
- Personnel: about 6,800 people with multidisciplinary skills.
- Within the bank, the Computer Emergency Response Team of the Bank (CERT-BI) is in charge of carrying out cyber-intelligence activities in collaboration with external parties in order to proactively contrast cyber-threats affecting the institution

# Joint AR Campaign with the Bank of Italy (2)



As part of the collaboration between the Bank of Italy and the ACN, the two institutions have organised a **joint** awareness raising course on cyber-threats for the audience of the **top management** of the Bank



#### **INITIATIVE OVERVIEW**

Topic of the course include:

- (opportunistic and targeted)
   cyber-threats during work
   travels:
- Identity theft on online platforms;
- The impact of emerging technologies
- A final exhibition called 'Data
   Detox' to raise awareness
   towards the minimization of
   the digital footprint as a means
   to protect themselves from the
   targeted threats.

#### **EXTERNAL STAKEHOLDER**

 The Computer Emergency Response Team of the Bank of Italy (CERT-BI)

#### **INVOLVEMENT PROCESS**

- Bank of Italy and ACN have in place a specific info sharing agreement that explicitly encompasses awareness raising activities for mutual interest
- Given ACN's specific mandate on cybersecurity, the Bank of Italy asked the Agency to play an advisory role in the preparation of the contents of the course that will be distributed to the audience



# Awareness raising for SMEs (1)



An example where the external stakeholder is an **institutional partner** of ACN's activities is the **awareness raising** campaign for Small-Medium enterprises (SMEs)







- The campaign is in collaboration with The Department for Information and Publishing of the Presidency of the Council of Ministers which operates, among others, in the functional area relating to the coordination of institutional communication activities of the Presidency and of the Government.
- Italy represents the second manufacturing economy in the European Union. Most of these manufacturing companies are SMEs that are part of international supply chains
- SMEs represent a particularly relevant target for the Agency: in 2022, in fact, over a sixth of them declared they have been victims of a cyber attack.
- Furthermore, over 40% report to have not carried out any action to secure processes or that they act exclusively in response to a regulatory obligation.

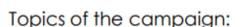


# Awareness raising for SMEs (2)



In order to improve the cybersecurity posture of Italian SMEs, the ACN has planned a **national campaign targeting enterprise owners and management**, regular **employees**, and **ICT professionals** 





- the importance of allocating an adequate budget for cybersecurity;
- the increase of adoption of security measures by employees;
- 3. the strengthening of the company's ICT infrastructure by internal professionals and external suppliers in order to prevent or reduce the impact of IT security incidents

#### **EXTERNAL STAKEHOLDER**

- Department for Information and Publishing of the Presidency of the Council of Ministers
- Some industry associations will also act as ambassadors to further increase the campaign outreach.

#### **INVOLVEMENT PROCESS**

In order to maximize the outreach of the campaign, ACN joined forces with the Presidency of the Council of Ministers, involved in the creation of the creativity of the campaign, of the institutional commercial and other social content, of dissemination of the campaign on national TV, on social media and other channels.





# More on SME: Cyber Index PMI



Tailored to SMEs as well, is the joint initiative between ACN, Generali and Confindustria, to measure their level of culture and awareness of cyber risk, as well as their level of technical preparation



LATUA IMPRESA

#### INITIATIVE OVERVIEW

Through the development of a questionnaire, aims at measuring the level of awareness and cyber-risk management capacity of Italian SME.

- workforce < 250 units)
- 20 areas of analysis
  Detail of questions varies with
  size and exposure to risk
- Target: IT security managers, IT managers, owners, or other managers

The national index will feed the European Cyber Index.

#### **EXTERNAL STAKEHOLDER**

- Generali (Private Insurance company)
- Confindustria (General Confederation of Italian Industry)
- Scientific support of the Digital Innovation Observatories – Polytechnic of Milan

#### **INVOLVEMENT PROCESS**

- Collaboration based on a Memorandum of Understanding.
- ACN was involved as Institutional Partner and actively worked on the preparation of the questionnaire



# Safer Internet Centre Italia – Generazioni Connesse (1)



An example where the external stakeholder is both Partner and Ambassador of ACN's activities is the **Safer Internet Centre (SIC) Italia – Generazioni Connesse** 



- The SIC Italia is a project co-funded by the European Commission, as part of a European network of national projects called 'Better Internet for Kids,' and coordinated by the Italian Ministry of Education within a Consortium of public and private bodies.
- The target of SIC Italia are mainly kids (but also parents and teachers), with the objective of fostering a positive and conscious of the Internet as well as to contrast online criminal activities against kids like child pornography
- Besides the pool of core public institutions (including the Police, Universities, etc.) managing the project, an advisory board comprising private associations and companies supports and promotes the activities planned by the SIC



## Safer Internet Centre Italia – Generazioni Connesse (2)



As part of the activities of the SIC Italia, for the proposal 2024-2025, ACN will contribute to the **WP3 – 'Education**, **awareness raising and dissemination'** 



#### **INITIATIVE OVERVIEW**

Design awareness raising initiatives and campaigns for kids and parents focused on:

- recognising online threats;
- fostering the adoption of good practises while surfing the Internet and the social media.

#### **EXTERNAL STAKEHOLDER**

- Ministry of Education
- SIC Italia Consortium (40+ public institutions and private associations and companies).

#### **INVOLVEMENT PROCESS**

- Given the complexity of the topic, a call to action was necessary to involve actors distributed at national level, each one with a specific role in relation to its mandate.
- in particular, ACN will act as Associated Partner for its Authority role cybersecurity aspects.



https://www.acn.gov.it
awareness@acn.gov.it





# **NCC-EE**

Kaisa Vooremäe

National Cyber Security Center, Estonian Information System Authority | Estonian Case Study: IT companies and cybersecurity agency collaborate to raise awareness together







# Estonian Case Study: IT companies and cybersecurity agency collaborate to raise awareness together

# **SME** hack



- Estonian Association of Information Technology and Telecommunications (officially abbreviated as ITL) together with Information System Authority (NCSC-EE)
- The idea was to find voluntary SME-s, whose systems to ethically attack, fix the holes, and describe the damage that could have occurred in terms of business risks
- The process was filmed and videos were made public
- Videos were also used in NCSC-EE's nationwide campaign in October 2023



# Who were needed for a successful project ECCC EUROPEAN CYBERSECURITY COMPETENCE CENTRE









# Project preparation



- Campaign to find voluntary SME-s
  - 11 companies applied
  - 3 SME-s were chosen
    - Mobire Group OÜ
    - EstHus UÜ
    - Finants ja Marketing OÜ
- Communication activities (3 videos and PR activities)
- Creating landing pages for the campaign
  - https://www.itvaatlik.ee/en/businesses/
  - https://itl.ee/kybertugi/



# Legal side



Consent to participate in the campaign

ITL <> volunteering SME

**Service contract** 

volunteering SME <> cyber security company

**Cooperation agreement** 

ITL <>

Cyber security companies



# Task given to the red teams



**Preparation** based on initial information

2. Meeting with **customer** for setting goals and limits + agreement signing

3. **Recon** – information search, external and internal scans

4. Attack preparation vulnerabilities were identified, finding and configuring their exploits

5. Practical attacks exploitation of vulnerabilities Conducting a fishing campaign

6. Reporting comprehensiv e report on the results been and firm eliminated instructions on how to fix

weaknesses

7. Re-scan to check if all identified errors/weakn esses have



# Expense of red-teaming



- Small enterprise (steps 1-7)
  - Min 68h
  - Max 120h
- Medium enterprise (steps 1-7)
  - 156h (30% more)
- More cost effective (steps 1,2,3 and 6)
  - Ca 40h
- More cost effective (steps 1,2,3 and 6)
  - Ca 60h



# Timeline of the project



April-May

Preparations and a campaign to find voluntary SMEs

July – August

Period of corrections, compilation of videos and other materials









May – July
Selection and testing
of volunteers

September – October PR and media activities



# Project results



- Although SME-s were aware that they were being "attacked", all the attacks succeeded
- Ethical attackers could have deleted, changed, shared the information with competitors or demanded a ransom
- If the attackers had not been ethical, the companies would have suffered real damage, which could have paralyzed their business for a shorter or longer period of time
- All vulnerabilities were fixed during the project!











# Videos (also in ENG)



- Mobire Eesti AS
  - https://www.youtube.com/watch?v=pxibQ28\_KME
- Finants and Marketing OÜ
  - https://www.youtube.com/watch?v=RFAupQ6FfJs
- OÜ EstHus
  - https://www.youtube.com/watch?v=9nBuw7LbJbw&t=211s





# SME

- The risks are clearer
- Weaknesses eliminated
- Company better protected
- Richer in experience

# Wider public

- Awareness raising
- Practical advice
- Better protection
- A more stable business environment































































# **Q&A** and Conclusions

