



EUROPEAN UNION AGENCY
FOR CYBERSECURITY

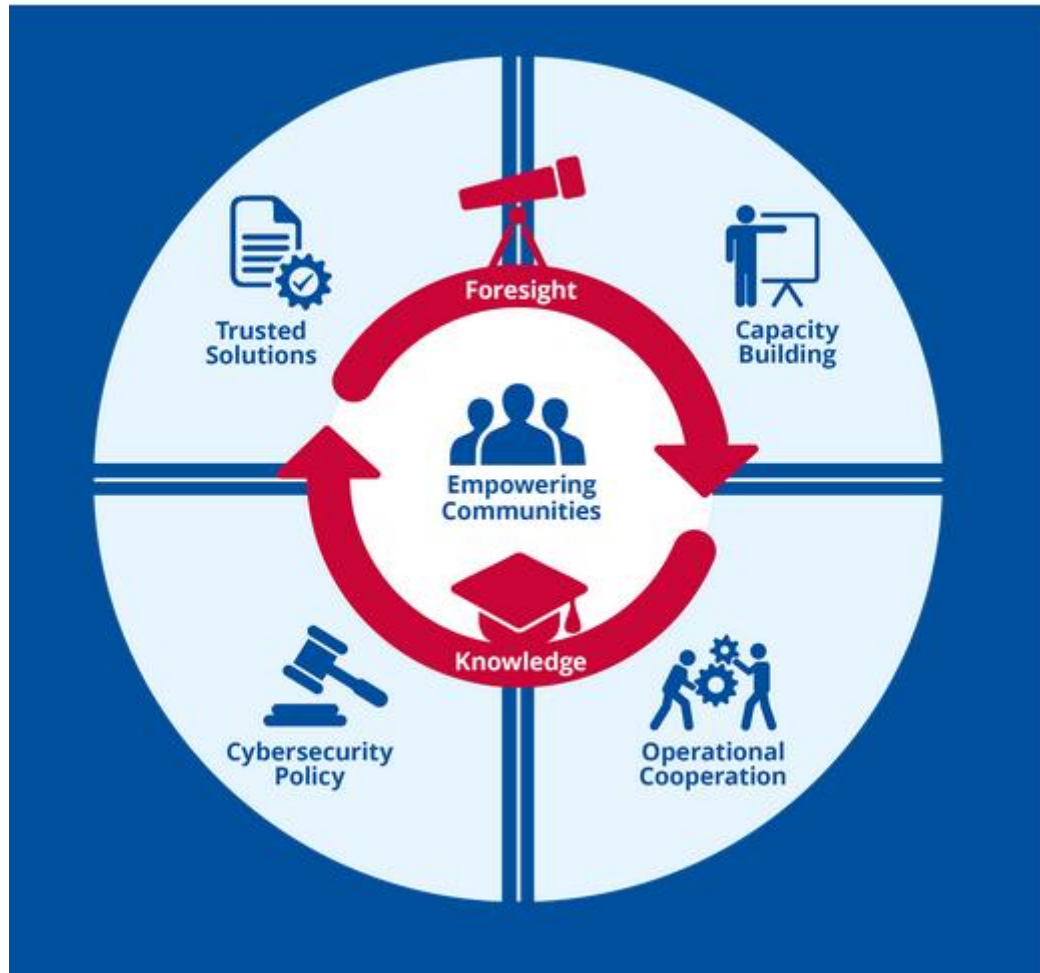
CYBERSECURITY AWARENESS: INSIGHTS FROM ENISA

CYBERSECURITY FOR SMEs



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7 December 2021

ABOUT ENISA

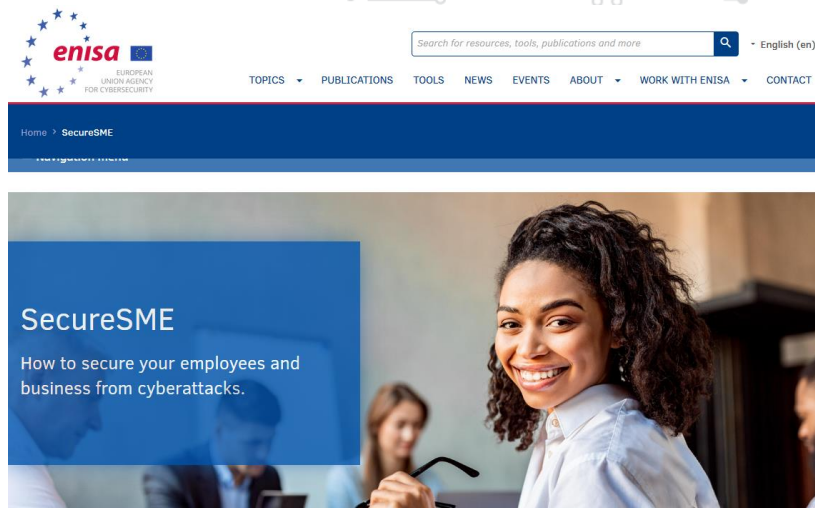


SUPPORTING SMES

1



3



Cybersecurity doesn't necessarily have to be costly for SMEs to implement and maintain. There are several measures that can be implemented, without the company having to invest a large amount.

2



4



Awareness campaign at FIC



OVERALL SCOPE



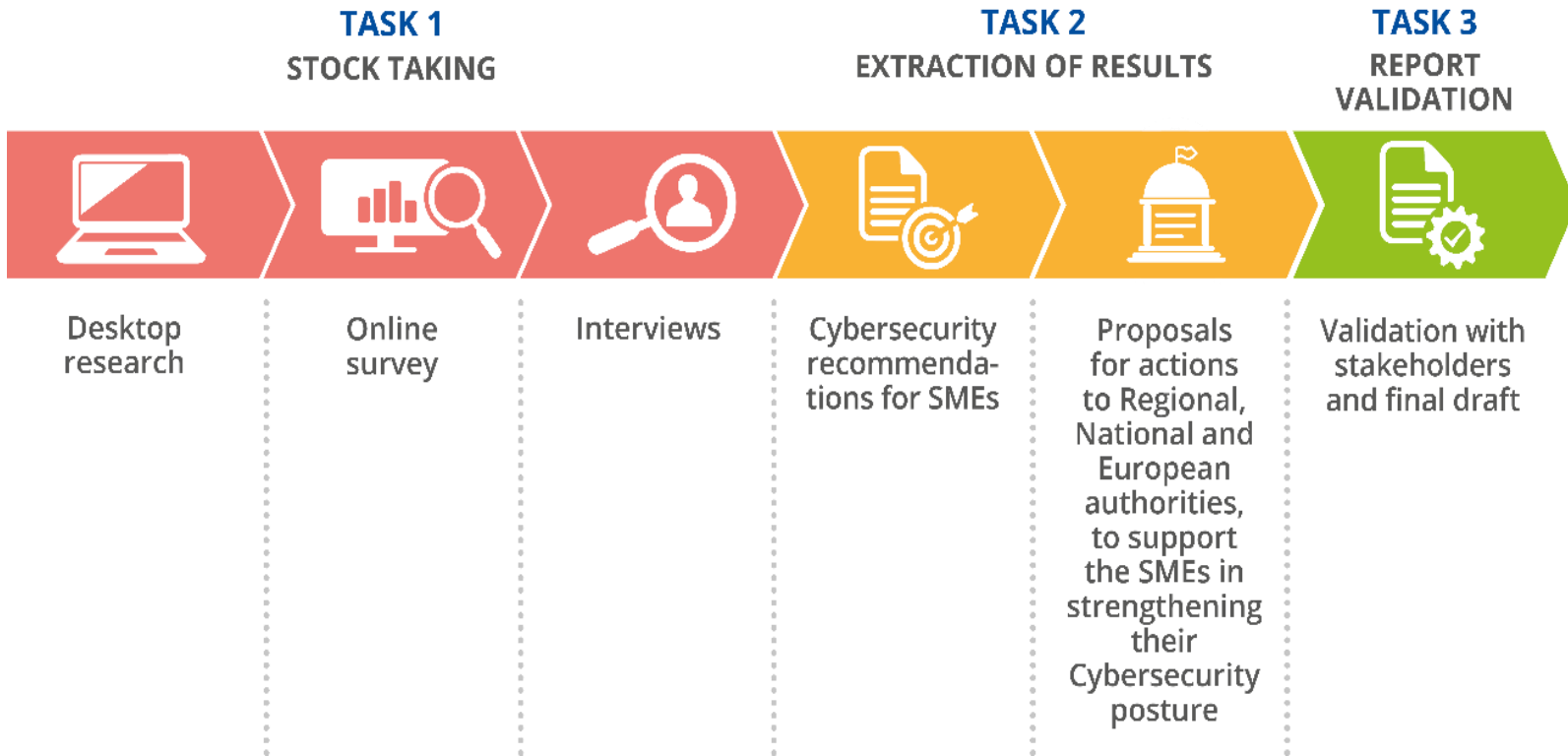
THE EU CYBERSECURITY AGENCY



In the situation of the COVID19 pandemic, ENISA analysed the ability of EU SMEs to cope with cybersecurity issues in a crisis by identifying cybersecurity challenges and determining advice and good practices, as well as proposals for actions towards Member States to support SMEs improve their cybersecurity posture.



METHODOLOGY



BACKGROUND

99%

of all businesses in Europe are SMEs.

93%

of all enterprises in Europe are micro SMEs.



Staff headcount
< 10



Turnover
≤ € 2 m



or Balance sheet total
≤ € 2 m



Staff headcount
< 50



Turnover
≤ € 10 m



or Balance sheet total
≤ € 10 m



Staff headcount
< 250



Turnover
≤ € 50 m



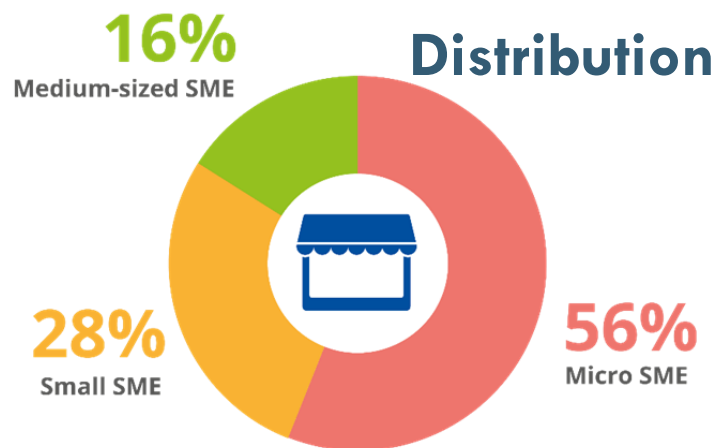
or Balance sheet total
≤ € 43 m

KEY FINDINGS



Study Participants

- ~250 SMEs
- 25 EU MS



Increased dependency on ICT

LESS USED INFORMATION SERVICES



E-learning



e-commerce

MOST USED INFORMATION SERVICES



Teleworking



Banking Transaction

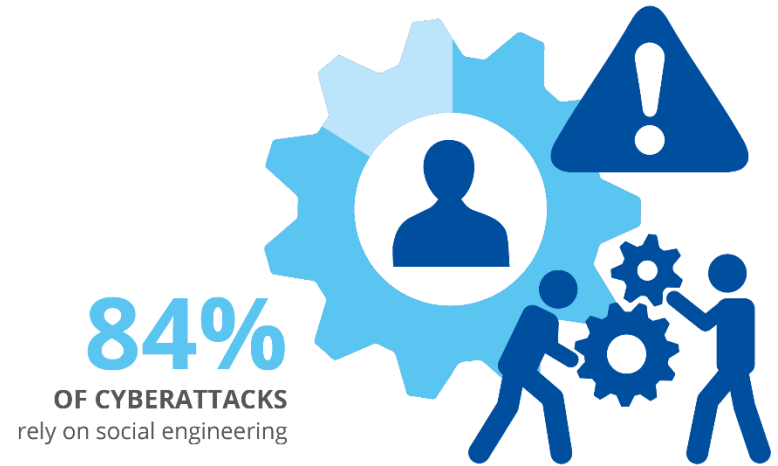
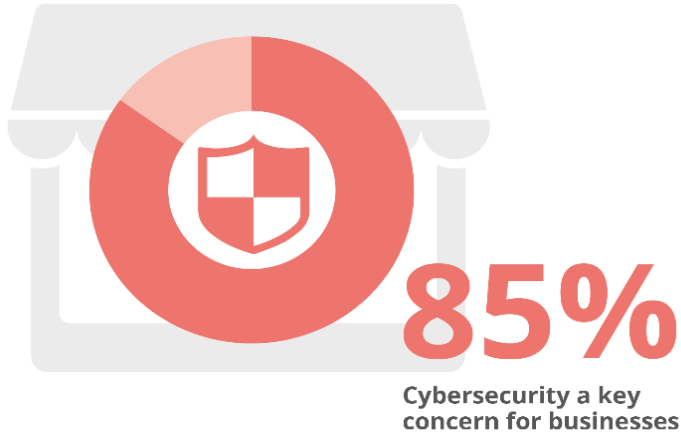


Emails



Information Search

KEY FINDINGS



41%
Phishing



40%
Web based attack



39%
General malware



19%
Malicious insider



12%
Denial of service



11%
Social engineering




7%
Compromised/
stolen device




KEY FINDINGS

LESS THAN
30%
OF THE PARTICIPANTS

-  Removable media management
-  ISMS
-  Security Officer
-  Incident response structure
-  Business continuity and Disaster recovery plan
-  Cyber/Information

MORE THAN
70%
OF THE PARTICIPANTS

-  Backup
-  Antivirus
-  Firewall
-  Systematic updating of software

USE CASE SCENARIOS & LESSONS LEARNT 1/3

RANSOMWARE ATTACK

- Company Type : IT Software Service Provider
- Company Size : < 50 employees
- Breach Type : Ransomware attack



LESSONS LEARNT

- Backups are an effective method to recover from a ransomware attack
- Strong password policy & employee awareness
- If using RDP for remote access ensure it is secured

USE CASE SCENARIOS & LESSONS LEARNT 2/3

STOLEN LAPTOP



- Company Type : Legal Firm
- Company Size : <25 employees
- Breach Type : Laptop stolen containing sensitive client data

LESSONS LEARNT

- **Need to know principle for accessing sensitive data**
- **Ensure all portable devices are encrypted**
- **Provide security awareness to staff on the risks of portable devices and how to protect them**

USE CASE SCENARIOS & LESSONS LEARNT 3/3

CEO FRAUD

- Company Type : Technology Company
- Company Size : <75 employees
- Breach Type : CEO Fraud



LESSONS LEARNT

- **Ensure all staff, especially those in privileged role such as finance, follow written processes and procedures.**
- **Ensure management will not discipline staff for when they do follow proper processes and procedures**
- **Provide company systems for staff to communicate securely**



CHALLENGES

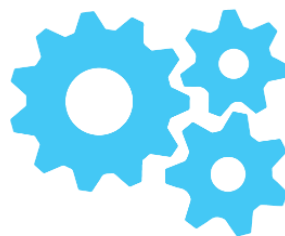
- **low cybersecurity awareness of the personnel,**
- **inadequate protection of critical and sensitive information,**
- **lack of budget,**
- **lack of ICT cybersecurity specialists,**
- **lack of suitable cybersecurity guidelines specific to SMEs,**
- **shadow IT, i.e. shift of work in ICT environment out of SME's control,**
- **low management support.**

RECOMMENDATIONS FOR SMES



People

- Responsibility
- Employee buy-in
- Employee awareness
- Cybersecurity Training
- Cybersecurity Policies
- Third Party Management



Process

- Cybersecurity Audits
- Incident Planning & Response
- Passwords
- Software Patches
- Data Protection



Technology

- Network Security
- Anti-Virus
- Email and Web Protection
- Encryption
- Security Monitoring
- Physical Security
- Secure Backups

CHECKLISTS

Check Item	Description	Answer
Responsibility	Does a director, or equivalent, have responsibility for cybersecurity?	
Employee Buy-in	Have all members of staff given written acknowledgement that they have read, understood and accepted the information security policy?	
Employee awareness	Do all users on your computer systems receive regular training on their security responsibilities on how to identify and deal with various security threats? Ensure that staff are aware of, and can verify, all contact points and communication channels	
Cybersecurity Training	Do staff members with specific security responsibilities receive proper and regular training to support their role?	
Cybersecurity Policies	Have you a documented security policy, with associated operating procedures, signed off and fully supported by senior management?	
Third Party Management	Does senior management authorise third party access to confidential and/or commercially sensitive information pending completion of appropriate confidentiality forms?	

EU AND NATIONAL LEVEL RECOMMENDATIONS



Promote Cybersecurity



Provide Targeted Guidelines



Create SME Focused Standards



Bolster Use of Risk Management Frameworks

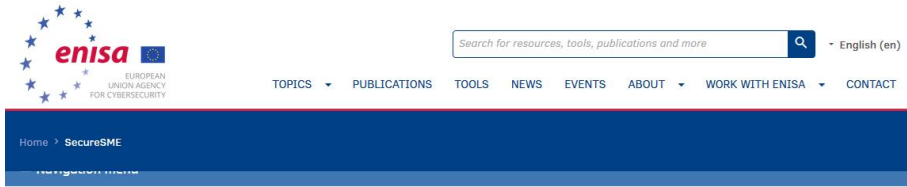


Make Cybersecurity Affordable



Promote the creation of ISACs

TOOLS



Cybersecurity doesn't necessarily have to be costly for SMEs to implement and maintain. There are several measures that can be implemented, without the company having to invest a large amount.

enisa.europa.eu/securesme



enisa.europa.eu/publications/cybersecurity-guide-for-smes



NEXT YEAR'S WORK

Scope: Support SMEs to understand their cybersecurity posture towards risks and threats and help them improve.

Objective: Development of an online self-assessment to measure SMEs maturity and provide instructions for improvement.

+ Awareness campaign

THANK YOU FOR YOUR ATTENTION

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