



# Understanding the Cybersecurity research and Innovation landscape

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- ◆ Coordination Support Action (740129)
- ◆ May 2017 - July 2021 (51 months)
- ◆ Keywords: **TECHNOLOGY, POLICY & STANDARDS, ENGAGEMENT, MARKET**

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**WEBINAR**  
●●●●●●●● cyberwatching.eu

21 May 2021 - 11:00-13:00 CEST

# Financial Sector Cybersecurity

Collaboration & Engagement of Stakeholders

**ONLINE EVENT**



CERTFin ∞ Infnitech

**CONCORDIA**  
Cyber security cOmpeteNce for Research and InnovAtion



Cyber  
Security  
for Europe

# Cybersecurity and Privacy R&I

Why are these numbers significant for the period of 2004-2021?

115

€1.1 billion

280+

# R&I Cybersecurity and Privacy Landscape

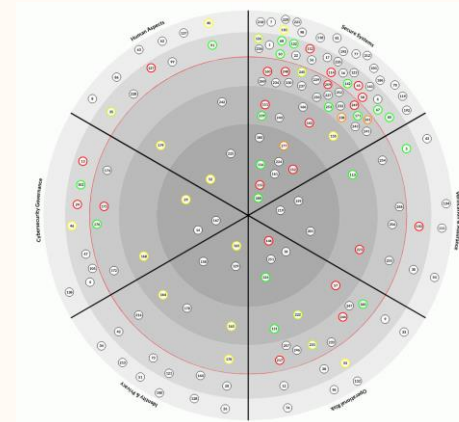
- ◆ Why are these numbers significant for the period of 2004-2021?
  - ◆ 115 EC Open calls
  - ◆ €1.1 billion invested
  - ◆ 280+ projects funded
- ◆ Challenging to understand the landscape
  - ◆ Dispersed information (project websites, individual partners)
  - ◆ Standard static information on projects & calls (CORDIS and reports)
  - ◆ Analysis found in mapping reports (generally dispersed info)

<https://www.cyberwatching.eu/d25-cybersecurity-technology-radar-2nd-report>



# How can you make sense of the landscape?

- Could a radar be the answer? – well a little more than a radar perhaps
  - A single online resource or tool
  - Managed by projects
- Find and contact projects
  - Technology
  - Sector
  - Project Lifecycle
  - Market & Technology Readiness



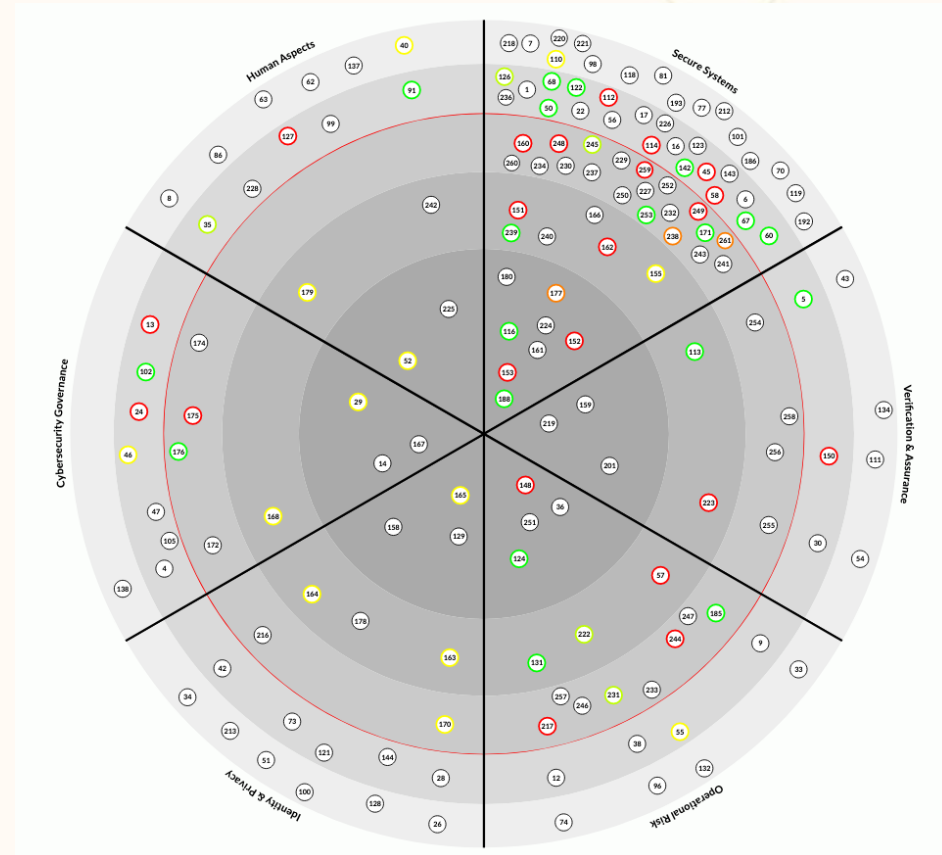
**R&I & Ecosystem domains**  
**Vertical sectors**  
**Lifecycle**  
**Relative progress**  
**Live info**  
**Contact**  
**Automated upload**

A unique interactive window on the European R&I world

# Radar visualization elements: Segments

## Full radar overview – High-level R&I categories\*

- Secure systems
- Verification and assurance
- Operational risk
- Identity & Privacy
- Cybersecurity governance
- Human aspects



# Radar visualization elements: Rings

## ● Rings illustrate project age

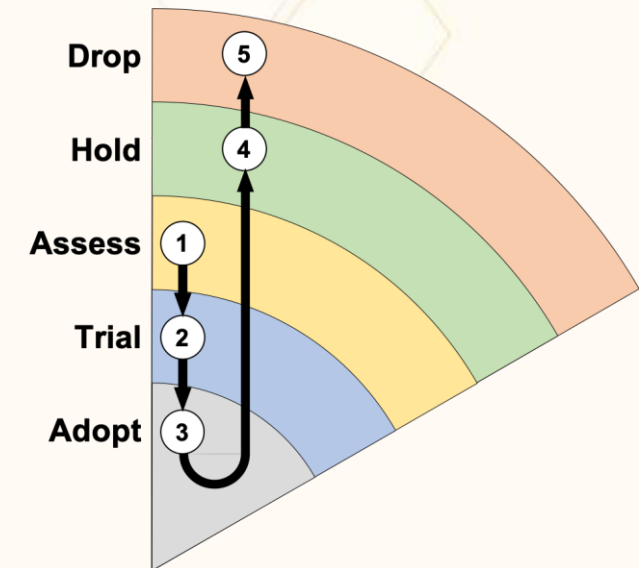
- Relative to radar date

## ● Active projects

- ADOPT – The project finished **less than 1 year ago**.
- TRIAL – Project is running, but has **less than 6 months to go**.
- ASSESS - Project is running, and has **more than 6 months to go**.

## ● Finished projects

- HOLD The project finished **1 – 2 years ago**.
- DROP The project finished **more than 2 years ago**.

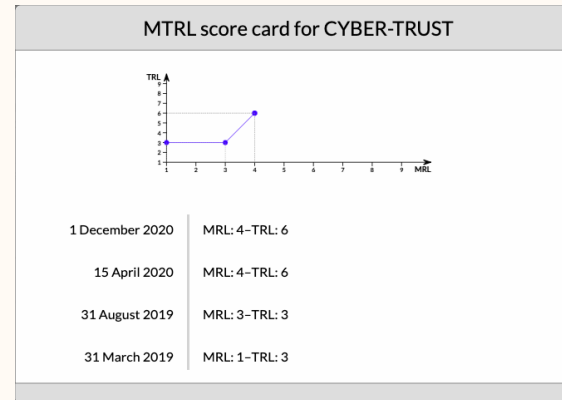
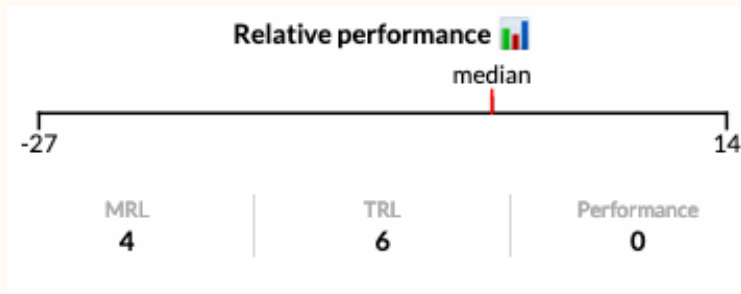


Assess → Trial → Adopt  
→ Hold → Drop

# Radar visualization elements: project's performance

## Market and Technology Readiness Level

- Based on self-assessment carried out by 60+ projects in 2019-2021
- With many projects regularly submitting MTRL scores, we can calculate “relative performance” with other projects
- Traffic-light Coloured dots show the project Market and Technology readiness level relative to the average of their lifecycle stage and radar domain. Green showing fastest relative progress.



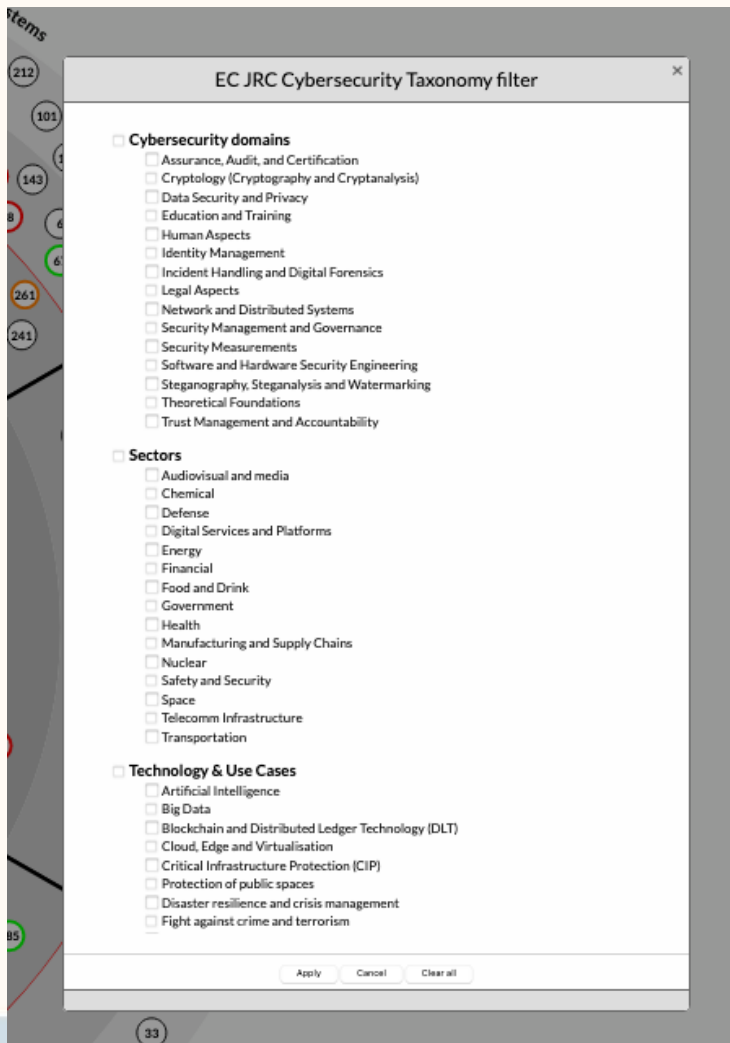
- 2** Greatly prepared
- 2** Very prepared
- 2** Fairly prepared
- 2** Poorly prepared
- 2** Insufficiently prepared
- 2** No information

2 project readiness level clusters formed & sector specific clusters now collaborating  
Visualises projects relative performance and where the project stand with its peers



# Project tagging to JRC taxonomy

- ◆ **Projects can tag themselves based on JRC Taxonomy**
  - ◆ Cybersecurity domains
  - ◆ Vertical Sectors
  - ◆ Technology & use cases
- ◆ Radar entries can be filtered based on JRC taxonomy
- ◆ Live statistical information presented based on filtering



Live statistics	# Projects	Project types	Avg. duration	Total duration	Avg. budget	Total budget
<input checked="" type="checkbox"/> Active	15	IA, RIA	40 m	49 y	6.22 M€	93.26 M€

JRC Taxonomy Filter Any All Data Security and Privacy <sup>x</sup> Health <sup>x</sup>

JRC – Key EC CS&P reference providing more detail to radar capabilities



<https://radar.cyberwatching.eu/radar>



# Who can benefit from the Radar

## ◆ Policy makers: EC Project Officers, JRC, Project Assessment Office

- ◆ Bird's eye view of R&I investment (past and present) – quick and easy for events like these
- ◆ Identification of low and over-developed/funded spaces
- ◆ Track project progress & maturity/readiness
- ◆ Projects mapped to JRC taxonomy
- ◆ Saving the user time and money by processing and analysing detailed landscape data.
- ◆ Make swift yet statistically sound statements on the state of the art of the EU CS&P research landscape.

## ◆ Research community

- ◆ Dissemination channel for projects
- ◆ Synergy ignition levers based on sector, technology, Maturity
  - ◆ Radar used as basis for 4 clusters of CS&P projects and ongoing collaboration
  - ◆ Dissemination opportunities based on sector & maturity levels
- ◆ Very easy UX for projects to update profiles and new projects to join
- ◆ Outreach campaign to encourage projects to update profiles and map to JRC taxonomy: Jan-Feb.

## ◆ Standardisation bodies, activities and projects (StandICT.eu) etc.

- ◆ Identify projects focussing on a technology / sector and contact for engagement
- ◆ Direct liaison with projects for contributions, collaboration, validation, funding (StandICT.eu)

Single resource providing bird's eye & detailed updated information on CS&P landscape

- ◆ What happens to all this investment?
- ◆ What are the tangible results?



# Cyberwatching.eu Marketplace



## Cyberwatching Marketplace

- ◆ EU innovation
- ◆ R&I project results
- ◆ SMEs & Micro-enterprises
- ◆ Interactive & dynamic platform

## ECSSO SME Registry

- ◆ EU solutions for EU companies
- ◆ R&I results & SME products
- ◆ Promotion
- ◆ Search
- ◆ Matchmaking

**2017 - 2021**

**July 2021 - →**

Sustainability of the Marketplace through ECSSO's SME Registry



# The situation

## 99% of enterprises in EU are SMEs

- 25+ million SMEs, employing 100 million people, of which 93% were micro-SMEs.
- As susceptible and more vulnerable than larger enterprises to cyber attacks.
- More regulations, more standards and more complexity
- Requirements for a more robust and trusted market



**A complex path for your average Micro-SME!**

# The problem

## 99% of enterprises in EU are SMEs

- ◆ 25+ million SMEs, employing 100 million people, of which 93% were micro-SMEs.
- ◆ Lack of resources, skills & time
- ◆ Seen as an IT not human problem – *It's the IT guy's problem*
- ◆ We're too small to be hit
- ◆ CS can be an after thought in the race to market
- ◆ CS doesn't make money

Better Cybersecurity can be a differentiator though

# A small part of the solution

## COMPANIES



Products



Processes

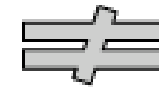


Services



### CERTIFICATION

Provides: Accredited third independent Party



### SELF ASSESSMENT

Internal exercise



### CONSULTING

Implementing standards and/or technical specifications



Courtesy of Lucio González Jiménez, SGS

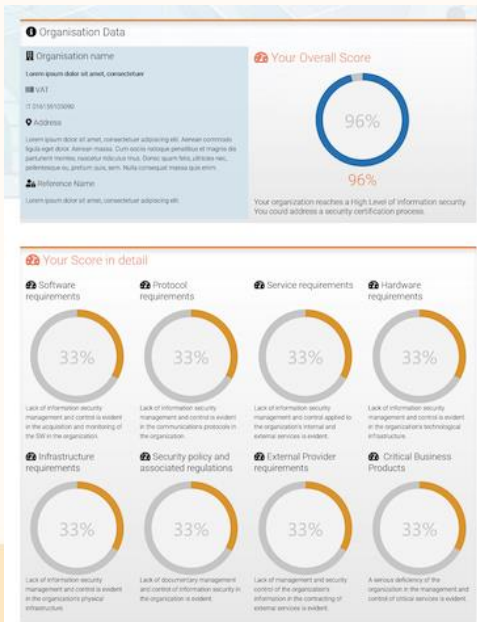
Lightweight and affordable self—assessment can set SMEs on the right path

# Cybersecurity Seal



## Topics

- ◆ Software requirements
- ◆ Protocol requirements
- ◆ Service requirements
- ◆ Hardware requirements
- ◆ Infrastructure requirements
- ◆ Security policy and associated regulations
- ◆ External Provider requirements
- ◆ Requirements for Critical Business Products



Language versions

Affordable, self-assessment to lower barriers to certification - Launch June 2021

# Managing risk



cyberwatching.eu  
**CYBER  
RISK  
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**AON**

Delivered to  
**CYBERSECURITY**  
innovation **HUB**  
El ecosistema de ciberseguridad  
y tecnologías avanzadas  
de Castilla y León

## Topics

- ◆ Capacity building
- ◆ Cybersecurity framework
- ◆ Who has admin rights to company systems
- ◆ Acceptable use and access authorisation policies
- ◆ Log in authentication
- ◆ Regularity of password changes
- ◆ Regularity of vulnerability assessment and remediation plan for systems
- ◆ Intrusion detection system
- ◆ Regularity of back-up



Language versions

Free and lightweight way to understand areas at risk



# GDPR



- ◆ Understand risk exposure to sanctions
  - ◆ Individual consent for data processing
  - ◆ Services to children aged 13 or over
  - ◆ Automated processing of personal data
  - ◆ Data transfer out of EU
  - ◆ Training or written instruction to staff
  - ◆ DPO appointed.....
- ◆ Practical check-list for the components required in an Information Notice under the GDPR



Language versions

Free resource to understand risk of GDPR sanctions

# Upcoming events

## ◆ Concertation Meeting series

◆ **Cybersecurity in the Finance Sector, 11:00 – 13:00, 21 May**

◆ Registration open

◆ **Standards and certification for a more resilient Europe, 10:30 – 13:00  
14 June**

◆ **Critical Infrastructure – the case of Health and Energy in cybersecurity,  
Date TBC**

◆ **Charting a course for cybersecurity in Europe, Late June/Early July**

# *Thank you and keep in touch*

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