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The European watch
on cybersecurity & privacy

The European NIS Directive and Critical Infrastructure Protection Services Home-grown in Europe

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Coordinator, cyberwatching.eu

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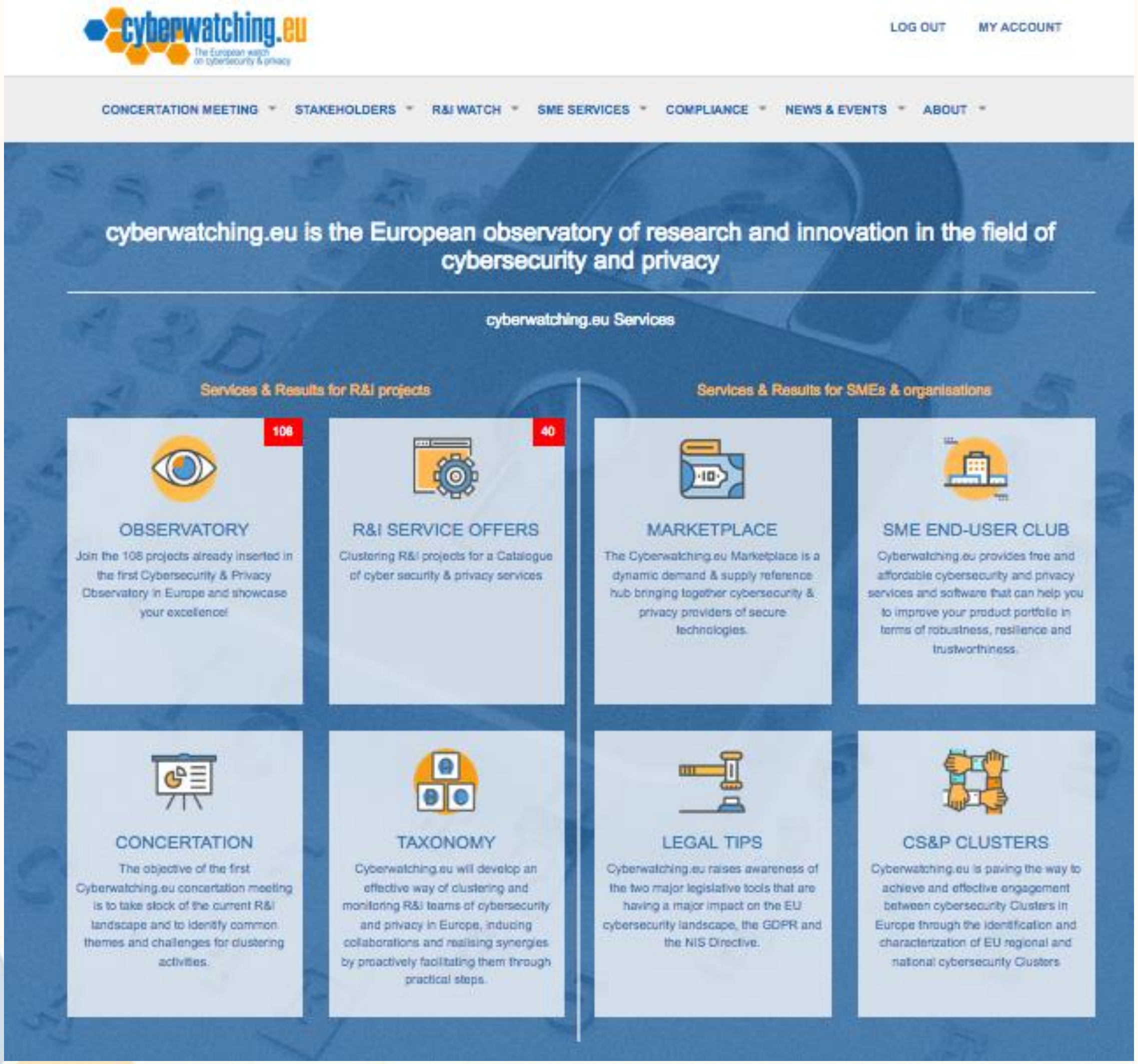

cyberwatching.eu is the European observatory of research and innovation in the field of cybersecurity and privacy

cyberwatching.eu Services

Services & Results for R&I projects

OBSERVATORY (108)
Join the 108 projects already inserted in the first Cybersecurity & Privacy Observatory in Europe and showcase your excellence!

R&I SERVICE OFFERS (40)
Clustering R&I projects for a Catalogue of cyber security & privacy services

CONCERTATION
The objective of the first Cyberwatching.eu concertation meeting is to take stock of the current R&I landscape and to identify common themes and challenges for clustering activities.

TAXONOMY
Cyberwatching.eu will develop an effective way of clustering and monitoring R&I teams of cybersecurity and privacy in Europe, inducing collaborations and realising synergies by proactively facilitating them through practical steps.

Services & Results for SMEs & organisations

MARKETPLACE
The Cyberwatching.eu Marketplace is a dynamic demand & supply reference hub bringing together cybersecurity & privacy providers of secure technologies.

SME END-USER CLUB
Cyberwatching.eu provides free and affordable cybersecurity and privacy services and software that can help you to improve your product portfolio in terms of robustness, resilience and trustworthiness.

LEGAL TIPS
Cyberwatching.eu raises awareness of the two major legislative tools that are having a major impact on the EU cybersecurity landscape, the GDPR and the NIS Directive.

CS&P CLUSTERS
Cyberwatching.eu is paving the way to achieve and effective engagement between cybersecurity Clusters in Europe through the identification and characterization of EU regional and national cybersecurity Clusters

May 2017 - April 2021
and beyond

European Commission

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www.linkedin.com/in/cyber-watching/

Consortium

Trust-IT Services – Communicating ICT to markets

UNIVERSITY OF OXFORD

CONCEPTIVITY 360° SECURITY

aeiciberseguridad – Agrupación Empresarial Innovadora CIBERSEGURIDAD y Tecnologías Avanzadas

ICT LEGAL CONSULTING – Balboni Bolognini & Partners

European Digital SME Alliance

AON

CITIC

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Why we need to be cyber resilient

A critical time for cybersecurity

- Increased reliance on digital infrastructure
- Significant and increased cyber attacks
- Affect critical infrastructure / essential services
- Cross-border in nature
- Impact on government, business, citizens
- Fragmentation across Europe
- 28 countries, 24 languages, 40 borders

Cyber resilience

"The ability to anticipate, withstand, recover from, and adapt to adverse conditions, stresses, attacks or compromises on systems that use or are enabled by cyber resources" - NIST

The Network Information Security (NIS) Directive

The first EU-wide Cybersecurity law - Build resilience through improved national CS capabilities

- Increase cross-border collaboration & EU cooperation
- Improve national cybersecurity capabilities
- National supervision of critical sectors – Health, Transport, Finance, Utilities, Energy, Food, Marine etc

EU is moving from REACTIVE to PROACTICE Cybersecurity

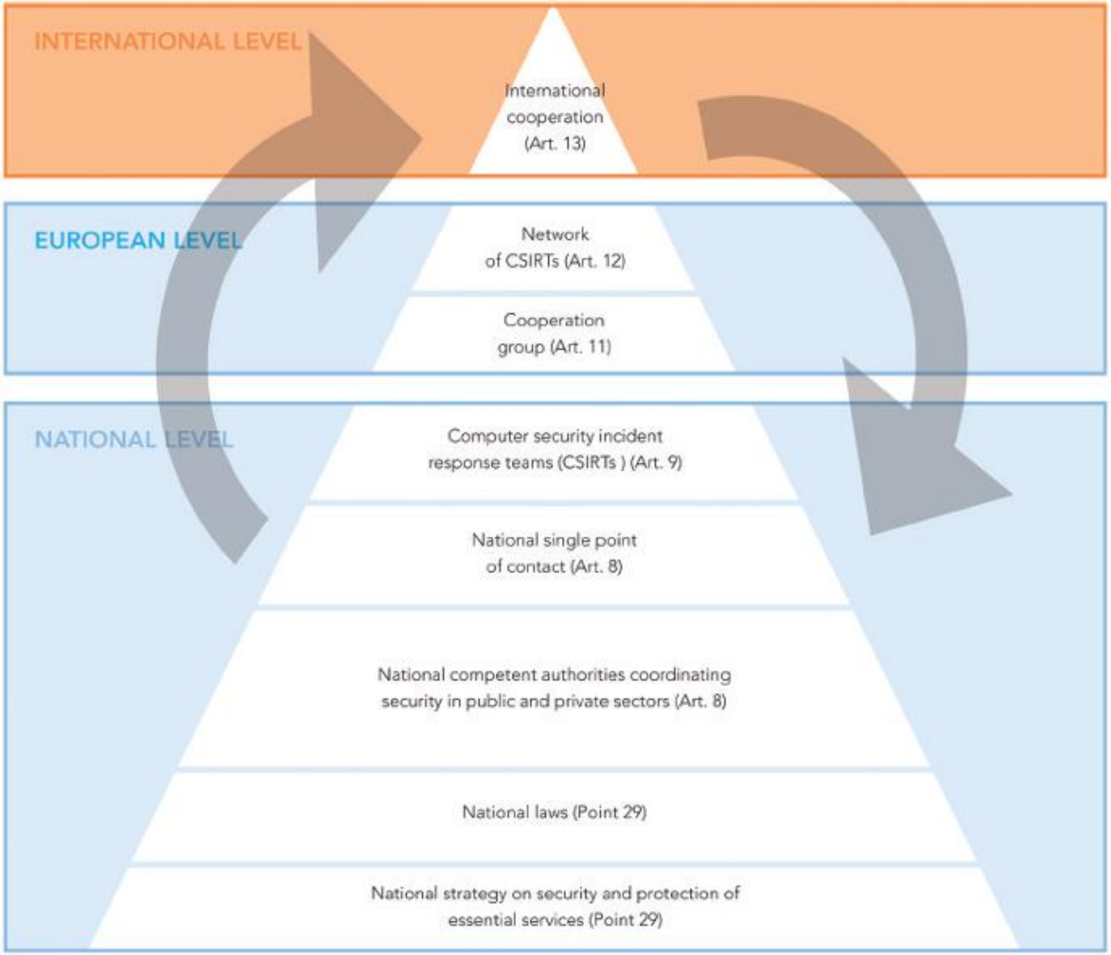
NIS Directive

Increase EU cooperation

- Cross border communication & action
- EU Network CSRIT & Cooperation group
- Shared planning & best practices
- Build trust between Member states

Improve national Cybersecurity capabilities

- Identify OES Services and DSPs
- Understand cross-border responsibility
- National strategy & network (CSRIT, contact points)
- Improve Public- Private cooperation



INTERNATIONAL LEVEL

International cooperation (Art. 13)

EUROPEAN LEVEL

Network of CSIRTs (Art. 12)

Cooperation group (Art. 11)

NATIONAL LEVEL

Computer security incident response teams (CSIRTs) (Art. 9)

National single point of contact (Art. 8)

National competent authorities coordinating security in public and private sectors (Art. 8)

National laws (Point 29)

National strategy on security and protection of essential services (Point 29)

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NIS Directive

National Cybersecurity risk management in key economic sectors

- Operators of Essential Services
- Digital Service Providers
  - ➢ Security of information, systems and facilities
  - ➢ Incident handling processes
  - ➢ Business continuity management in place
  - ➢ Monitoring or auditing security effectively
  - ➢ Use of international standards to demonstrate compliance
  - ➢ Reporting incidents "without due delay"

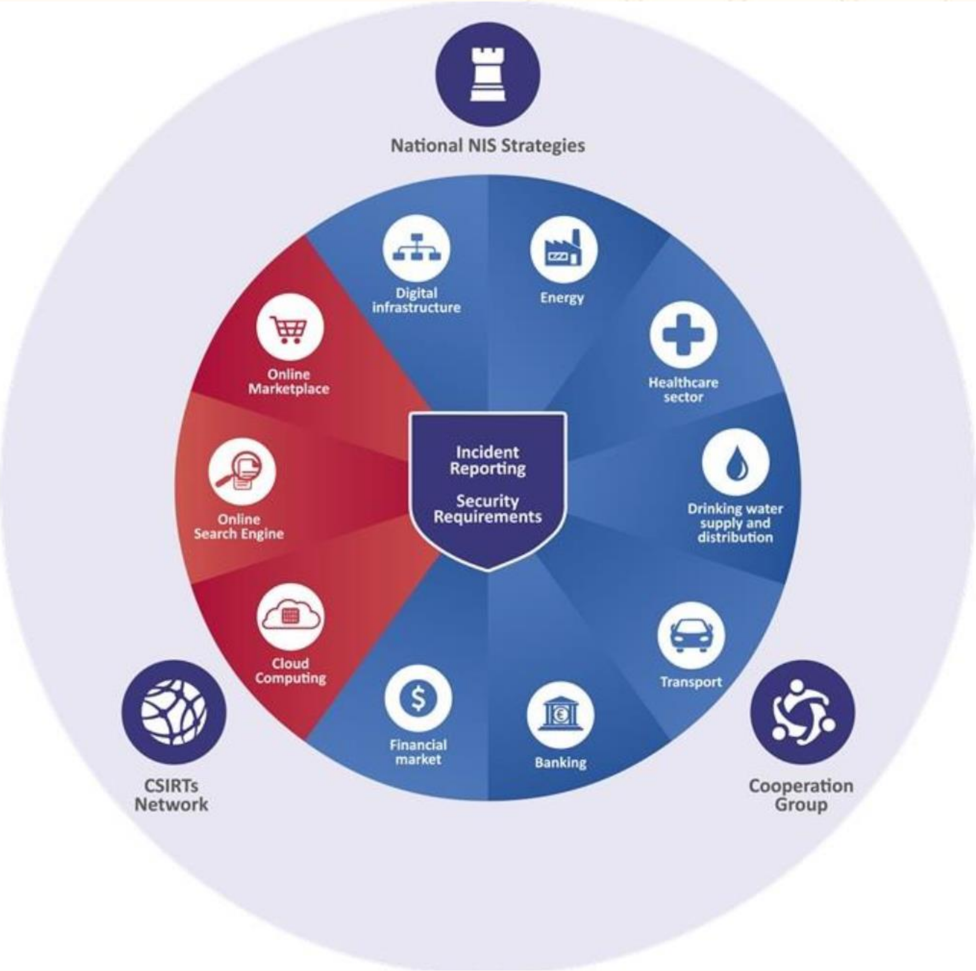

Image courtesy of ENISA

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NIS directive timeline and the broader picture

NIS timeline

- 08/2016 – Entry into force
- 09/05/2018 – Transposition into national law
  - Law enacted on national basis
  - Effective, proportionate and dissuasive
  - Fines high: UK $22 million
- 11/2018 Identify Operators of Essential Services
- 05/2019 EC report on OES identification consistency
- 05/2021 EC review

The broader European picture

- Privacy – General Data Protection Regulation (GDPR) 25/05/2018
  - Data subjects & processing
  - Compliance, accountability, transparency
  - Harmonisation of risk management best practices across Europe
- EU Cybersecurity Act
  - EU Cybersecurity Agency (ENISA)
  - EU Cybersecurity certification framework

Creating a trusted and secure Digital Single Market

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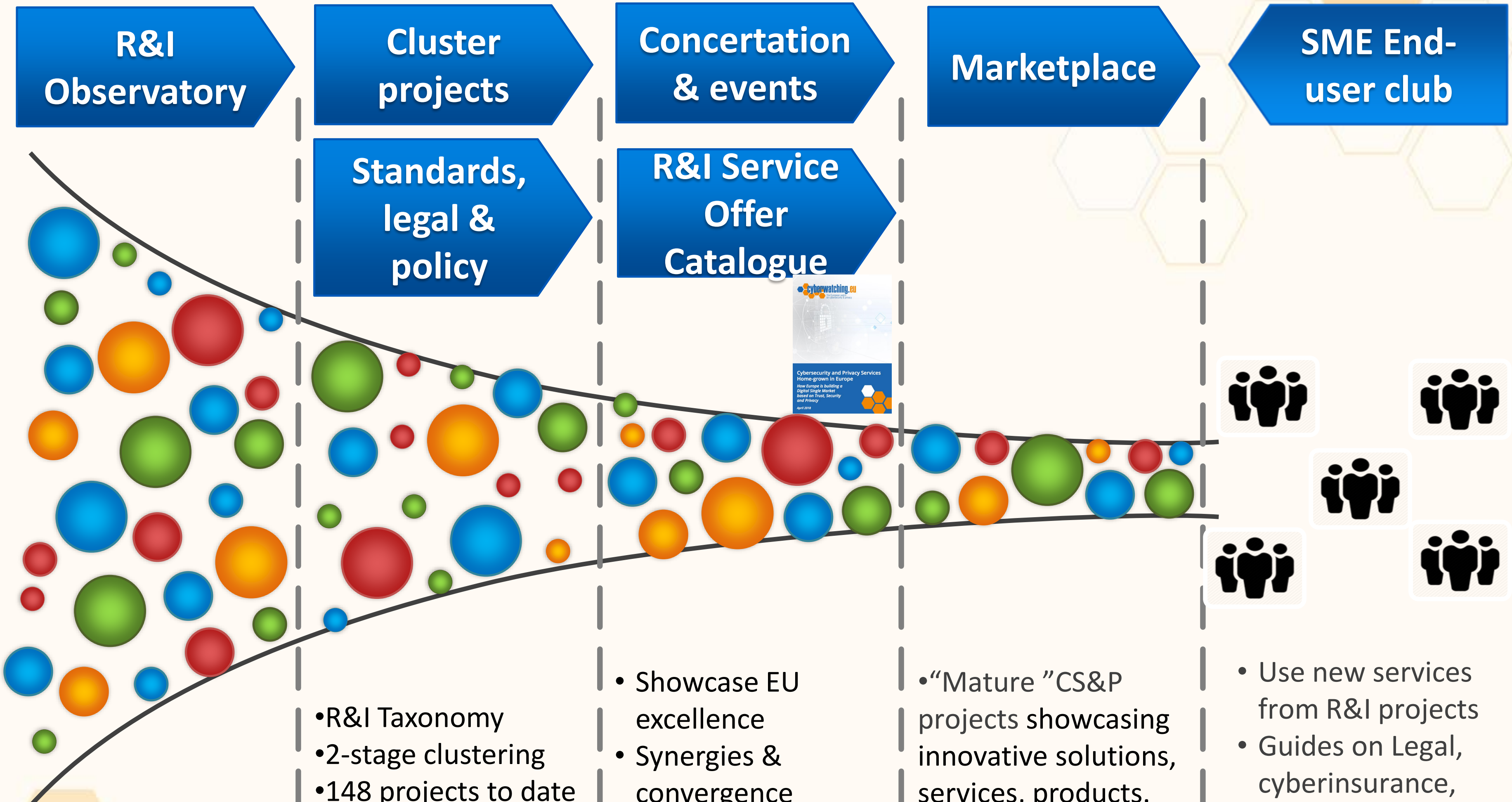
Coordination of CS&P R&I in Europe



R&I Observatory

Cluster projects

Standards, legal & policy

Concertation & events

R&I Service Offer Catalogue

Marketplace

SME End-user club

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Cybersecurity and Privacy Services Home-grown in Europe

How Europe is building a Digital Single Market based on Trust, Security and Privacy

April 2018

- Identify EC, National & Regional CS&P projects.

- R&I Taxonomy
- 2-stage clustering
- 148 projects to date
- Mapping standards & certification usage & roadmap
- Legal best practices

- Showcase EU excellence
- Synergies & convergence
- TRL & market readiness
- EU cluster synergies

- "Mature "CS&P projects showcasing innovative solutions, services, products.
- Validate, test, sell services to end-users

- Use new services from R&I projects
- Guides on Legal, cyberinsurance, certification.
- Workshops & events

Cybersecurity and Privacy Services Home-grown in Europe

Hermeneut

Enterprises intangible risk management via economic models based on simulation of modern cyber attacks

- Holistic risk assessment model to support investment descisions
- Healthcare, Financial services – SME & industry CIOs, Insurers & analysts

ATENA

Advanced Tools to assess and mitigate the criticality of ICT components and their dependencies over Critical Infrastructures

- Software defined security paradigm for real-time and reactive systems
- Energy & water & extension to other OES

CIPSEC

Enhancing Critical Infrastructure Protection with Innovative Security Framework

- Orchestrate security products and services
- Health, Railway Transport, Environment & Multi-domain

CITADEL

Critical Infrastructure Protection using Adaptive MILS

- Automated preparedness, reduced response time and coordinated response
- Airspace control, manufacturing, subway transportation

Ready for testing/validation/adoption 2019-2020

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Thank-you

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Cybersecurity and Privacy Services
Home-grown in Europe

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April 2018

48 EU Cybersecurity & Privacy Services from EU R&I

- Ready for validation/testing/product 2018-2022
- GDPR & NIS compliant
- CIP-related services & use cases
- www.cyberwatching.eu/services/catalogue-of-services

Complete our survey on certification and standards

- https://www.cyberwatching.eu/gaps-survey

Contact

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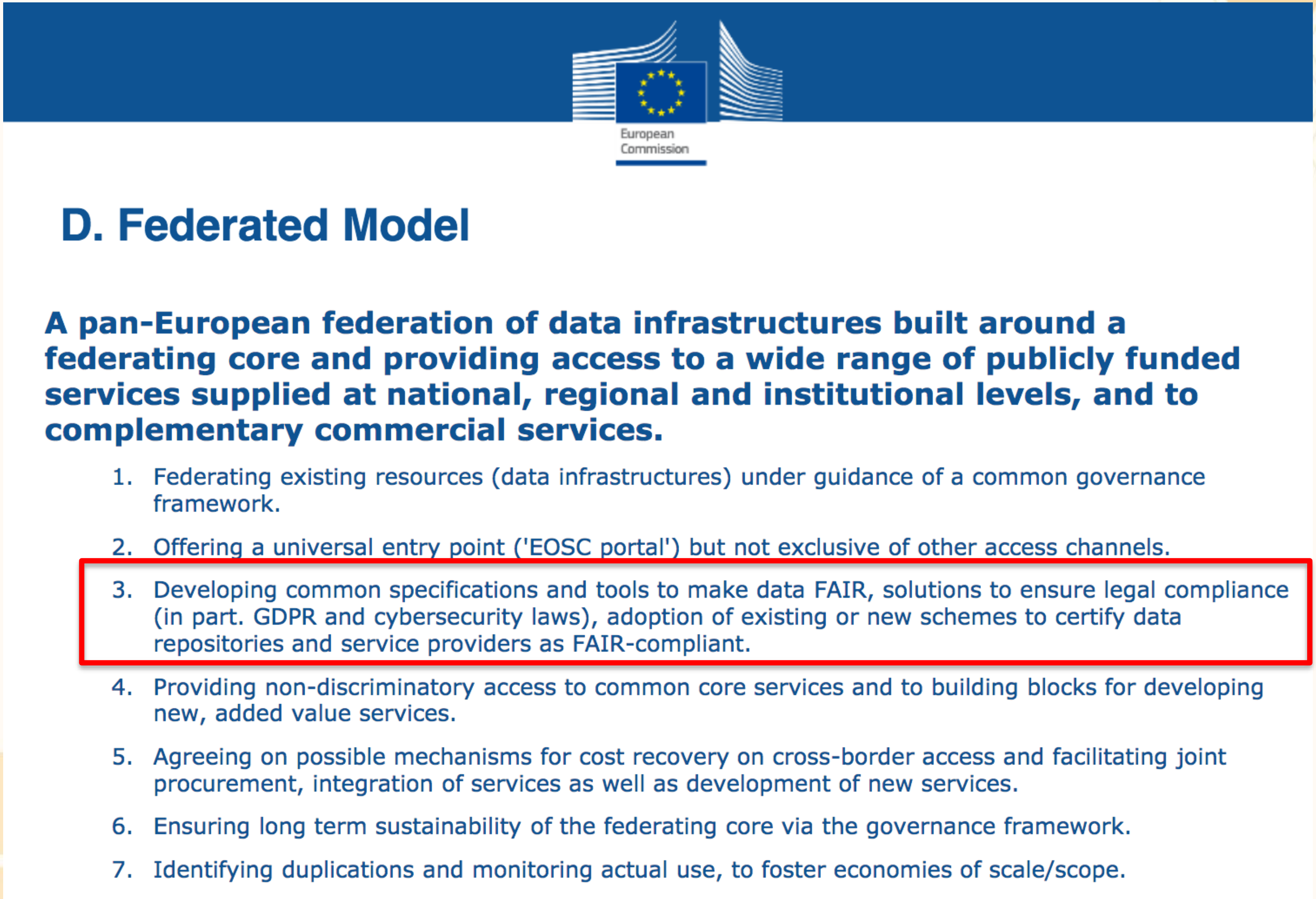
The European Open Science Cloud



European
Commission

D. Federated Model

A pan-European federation of data infrastructures built around a federating core and providing access to a wide range of publicly funded services supplied at national, regional and institutional levels, and to complementary commercial services.

1. Federating existing resources (data infrastructures) under guidance of a common governance framework.
2. Offering a universal entry point ('EOSC portal') but not exclusive of other access channels.
3. Developing common specifications and tools to make data FAIR, solutions to ensure legal compliance (in part. GDPR and cybersecurity laws), adoption of existing or new schemes to certify data repositories and service providers as FAIR-compliant.
4. Providing non-discriminatory access to common core services and to building blocks for developing new, added value services.
5. Agreeing on possible mechanisms for cost recovery on cross-border access and facilitating joint procurement, integration of services as well as development of new services.
6. Ensuring long term sustainability of the federating core via the governance framework.
7. Identifying duplications and monitoring actual use, to foster economies of scale/scope.