

SWISSCYBER INITIATIVE

Mapping Switzerland's Cybersecurity R&D Ecosystem



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
**State Secretariat for Education,
Research and Innovation SERI**



Why do we need this project?

Cybersecurity is strategic, but the ecosystem is difficult to observe as a whole.

Strategic importance

Cybersecurity has become a strategic and digital-sovereignty issue.

Fragmented evidence

Relevant information is spread across organizations, investments, R&D, technology, workforce, and geography.

A shared view is missing

Policymakers, researchers, industry and investors need a clearer, consolidated view of the ecosystem.

The project addresses this gap by bringing fragmented sources into one analytical framework.

From initial objectives to delivered capabilities

The project evolved from a set of objectives into an integrated ecosystem evidence base.

Initial objectives

What the project set out to deliver

- 1 **Data collection and analysis**
- 2 **Target-state analysis**
- 3 **Platform development**
- 4 **Delta analysis and recommendations**
- 5 **Dissemination and networking**

What we accomplished

From fragmented sources to integrated insights

Integrated ecosystem database

Multiple sources, entity resolution, classification, and enrichment

Interactive exploration platform

Maps, filters, charts, and indicators

Evidence and stakeholder insights

Ecosystem analysis, survey results and exploratory indicators

Dissemination and engagement

Stakeholder survey, feedback and networking

Outcome: a shared evidence base for exploring Switzerland's cybersecurity ecosystem

Building reliable information

From multiple sources to a platform, report, and exploratory indicators.



TMM 2.0 is the main technology-monitoring input.

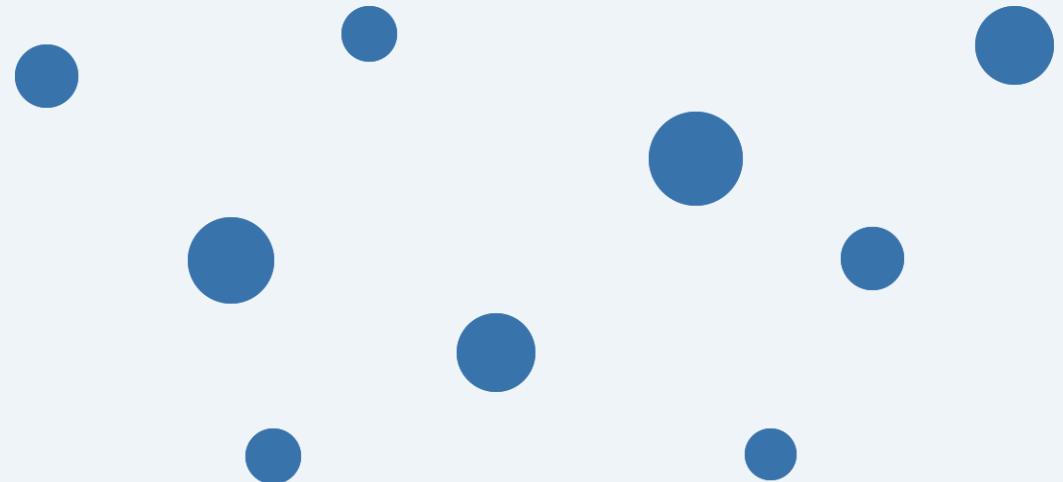
The ecosystem we can now observe

Explore organizations, relationships, and signals through a single interface.

What can be explored?

- Swiss-connected cybersecurity companies
- Investments and acquisitions
- Workforce indicators
- Technological categories
- Survey insights

Interactive map and analytical views



Filters · smart filters · charts · indicators

Map

Charts



Company Count



What does the data and platform tell us?

Four recurring patterns emerge from the available evidence.

Concentration

Cybersecurity activity is concentrated geographically and organizationally.

International connectivity

The ecosystem is strongly connected to international capital and organizations.

Heterogeneity

Broad industry classifications do not adequately describe cybersecurity activity.

Investment structure

Investment is concentrated and requires nuanced interpretation.

What do stakeholders tell us?

The survey complements what ecosystem data can observe with how actors perceive it.

Perceived strengths

- Skilled personnel
- Existing capabilities
- Collaboration across the ecosystem

Perceived challenges

- Investment constraints
- Executive understanding and awareness
- Limited knowledge and use of available frameworks
- Uncertainty about future threats

Combining ecosystem data and stakeholder perceptions

The strongest insights appear where observable signals and reported perceptions meet.

Investment tension

Investment is concentrated, while 70% perceive lack of investment as a barrier.

Geographical convergence

Both data and survey responses point to concentration in a limited number of regions.

Protection complement

Mapped capabilities do not necessarily translate into perceived readiness.

R&D alignment

47% perceive R&D as mainly not aligned with needs.

From mapping to indicators

An exploratory approach to comparing organizations and tracking ecosystem signals.

Cybersecurity exposure score

Who is actually involved in R&D

An interim score based on CommonCrawl classification.

Exploratory Cybersecurity Innovation Index

Who in Switzerland innovate the most?

Combines percentile ranks for total funding, cybersecurity exposure, last funding round, and organization age.

JRC taxonomy and indicators

How do our results compare with other studies?

Integrate the JRC taxonomy and strengthen indicators.

Project dissemination and ecosystem engagement

Engagement supported the data collection and helped shape the platform around stakeholder needs.

Survey participation

Encourage experts and organizations to contribute responses.

Needs gathering

Understand what stakeholders need from an ecosystem map.

Feedback

Collect reactions to the approach, platform and emerging results.

Visibility and networking

Share the work and strengthen connections across the ecosystem.

What are we still working on?

The platform is useful, but the underlying evidence can be improved.

Data completeness

Even all sources used can not capture the entire ecosystem; coverage varies by organization and data type. - CommonCrawl

Classification

Cybersecurity cuts across conventional industry classifications. - JRC integration is key.

Financial interpretation

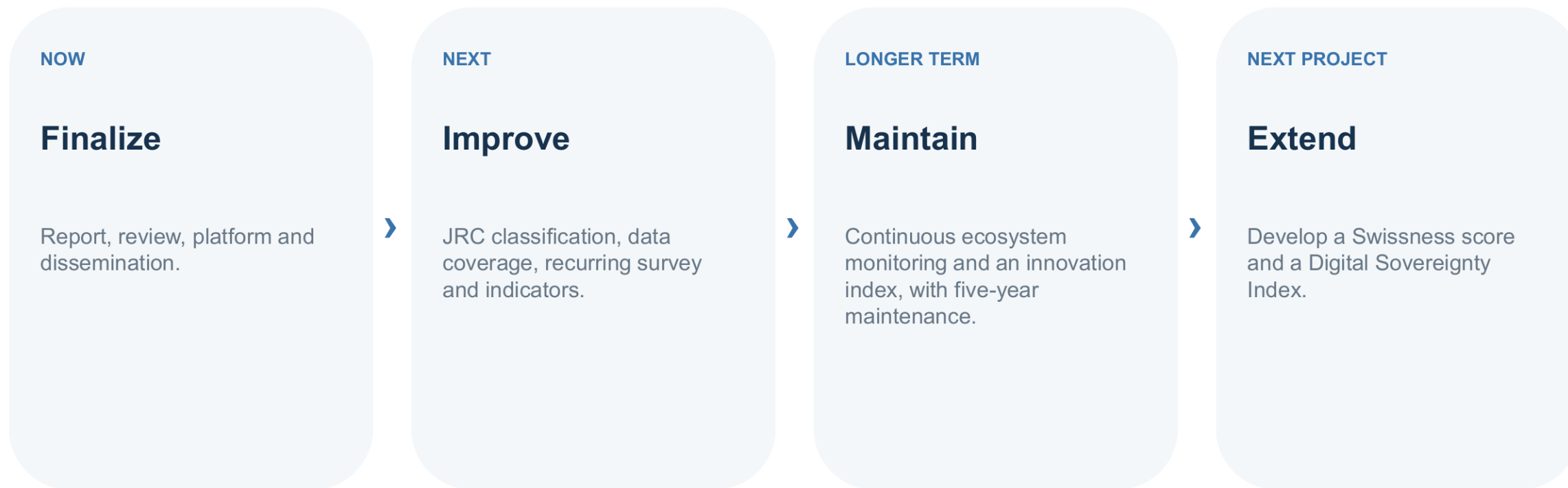
Funding is not the same as cybersecurity R&D expenditure.

Sustainability

Updates, maintenance, and governance are needed to keep the platform useful over time. – Joint CYD Campus and HES-SO Valais Wallis maintenance on our own infrastructure.

Final steps and longer-term direction

Moving from a project deliverable towards a sustainable monitoring capability.



Help us improve the ecosystem picture

A short census survey can help us strengthen the evidence base.

Contribute to the next iteration December 2026 release date

Please complete the short census survey to help us improve coverage and identify gaps.



SwissCyber Initiative

Project team and institutional contact.

Project team

Principal Investigator	Prof. Dr. Dimitri Percia David	HES-SO Valais-Wallis
Technical Lead	Prof. Dr. Andrei Kucharavy	HES-SO Valais-Wallis
Lead Scientist	Dr. Loïc Maréchal	HES-SO Valais-Wallis
Lead Engineer	Dr. Sébastien Rouault	HES-SO Valais-Wallis
Content Coordinator	Vladimir Pfister	HES-SO Valais-Wallis
Platform Coordinator	Valentin Mulder	CYD Campus
Full-stack Engineer	Samuel Gillieron	Softcom
Front-end Engineer	Johnattan Baillod	Softcom
Dissemination	Tobias Schlegel	SATW

Thank you

Questions and discussion

SwissCyber Initiative · HES-SO Valais-Wallis

loic.marechal@hevs.ch
<https://www.linkedin.com/in/loicmarechal/>

