

**BUSINESS
FINLAND**

A view to EU research initiatives

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Horizon 2020 Secure Societies National Contact Point

Horizon 2020 ending, Horizon Europe starts 2021



EN

Horizon 2020

Work Programme 2018-2020

14. *Secure societies - Protecting freedom and security of Europe and its citizens*

SECURITY RESEARCH PRIORITIES

CONCEPT PAPER, version 2.2 – 8.1.2020

For discussion at the Jan 15th workshop with Member States

European Union **Framework Programme #9**

Budget for Security research 2.8 billion euro during 2021-27

More funding in **Digital Europe Programme** (investments) & **Defence Fund**

European Union **Framework Programme #8**

Budget for Security research 1.7 billion euro during 2014-2020

Secure Societies Call 2020 – ends 27 August

Call - Protecting the infrastructure of Europe and the people in the European smart cities

- SU-INFRA01-2018-2019-2020: **Prevention, detection, response and mitigation of combined physical and cyber threats to critical infrastructure in Europe**, 3 projects each 7-8 M€

Call - Artificial Intelligence and security: providing a balanced assessment of opportunities and challenges for Law Enforcement in Europe

- SU-AI01-2020: Developing a **research roadmap** regarding Artificial Intelligence in support of Law Enforcement, 1.5 M€ (one project)
- SU-AI02-2020: Secure and resilient Artificial Intelligence **technologies, tools and solutions** in support of Law Enforcement and citizen protection, cybersecurity operations and prevention and protection against adversarial Artificial Intelligence, 17 M€ (one project)
- SU-AI03-2020: **Human factors, and ethical, societal, legal and organisational aspects** of using Artificial Intelligence in support of Law Enforcement, 1.5 M€ (one project)

Call - Digital Security: Cybersecurity, Digital Privacy and data protection

- SU-DS02-2020: **Intelligent security and privacy management**, 38 M€, 10 projects
- SU-DS03-2019-2020: **Digital Security and privacy for citizens and Small and Medium Enterprises and Micro Enterprises**, 10,8 M€ budget (3 projects),
- SU-DS04-2018-2020: **Cybersecurity in the Electrical Power and Energy System** an armour against cyber and privacy attacks and data breaches, 2-3 projects, budget 20 M€

DISASTER-RESILIENCE

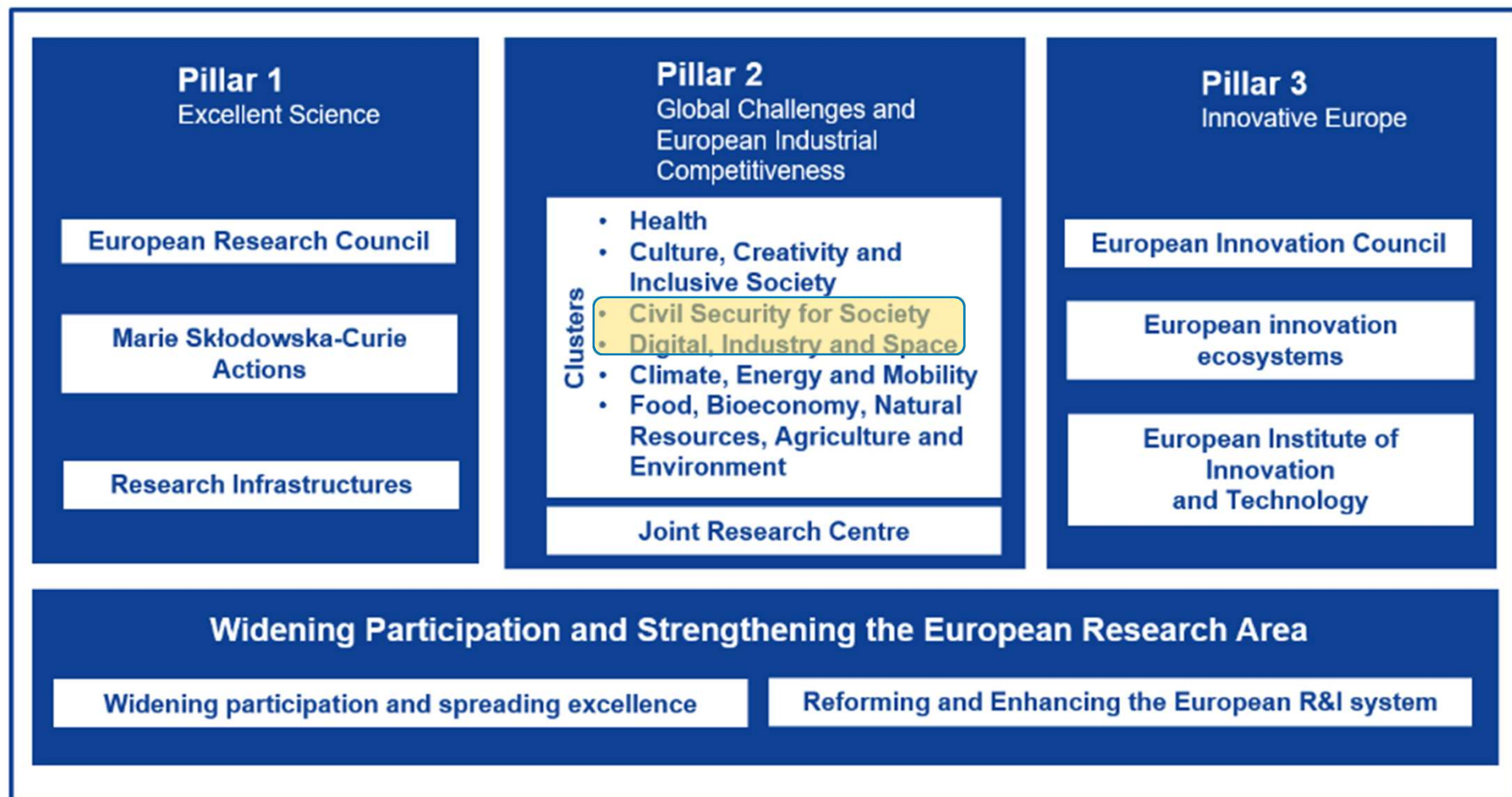
- SU-DRS01-2018-2019-2020: **Human factors, and social, societal, and organisational aspects** for disaster-resilient societies, 5 M€ (one project)
- SU-DRS02-2018-2019-2020: **Technologies for first responders** 28 M€, 4 projects,
- SU-DRS03-2018-2019-2020: **Pre-normative research** and demonstration for disaster-resilient societies, 6 M€ (one project),
- SU-DRS04-2019-2020: **Chemical, biological, radiological and nuclear (CBRN) cluster**, 3,5 M€ per project (3 projects),

FIGHT AGAINST CRIME AND TERRORISM

- SU-FCT01-2018-2019-2020: **Human factors, and social, societal, and organisational aspects** to solve issues in fighting against crime and terrorism, 5 M€ per project, 2 projects
- SU-FCT02-2018-2019-2020: **Technologies** to enhance the fight against crime and terrorism, RIA, 28 M€, 4 projects
- SU-FCT03-2018-2019-2020: **Information and data stream management to fight against (cyber)crime and terrorism**, 8 M€ (one project)
- SU-FCT04-2020: **Chemicals**: intelligence, detection, forensics, 5 M€ (2 projects)

BORDER SECURITY AND EXTERNAL SECURITY

- SU-BES01-2018-2019-2020: **Human factors, and social, societal, and organisational** aspects of border and external security, 5 M€ (2 projects)
- SU-BES02-2018-2019-2020: **Technologies** to enhance border and external security, 7 M€ (3 projects)
- SU-BES03-2018-2019-2020: **Demonstration of applied solutions** to enhance border and external security, 10 M€ (2 projects)



Preliminary structure of Horizon Europe

Coming themes during 2021-2027

Disaster Risk Reduction

- Societal Resilience
- Support to Disaster Risk Management and Governance
- **Technologies for first responders**

Border surveillance

- Maritime security
- Business continuity for border protection and checks
- Better document security for border checks
- Data and interoperability for border checks
- Customs and supply chain security

Fighting Crime and Terrorism

- Modern information analysis and solutions, data protection, societal aspects
- Digital forensics
- (Traditional) forensics
- Passenger Name Record (PNR) information analysis
- Corruption (may include procurement corruption)
- Terrorism
- Radicalisation
- Trafficking of Human Beings
- **Cybercrime**
- Drugs
- Monitoring of other illegal offline and online trades (incl. dark web)

Infrastructure Protection

- Addressing interdependencies and systemic risks
- **Increasing protection and resilience of Critical Infrastructures**

Cybersecurity

- **Resilient digital infrastructures and interconnected systems**
- **Hardware and supply chain security**
- **Securing disruptive technologies**
- **Smart and quantifiable security assurance and liability**
- **Human-centred security, privacy and ethics**

Cyber security funding will be boosted

Cybersecurity pilot network



JAMK
here

Laurea
here



**EU Cyber
Competence
Center and
National
Centers**

EU funding calls for Digital Trust organisations

| Call/Scope | What | To Do | Decision | Build consortium | Start Writing | DL |
|---|---|--|------------|------------------|------------------------|----------|
| ECSEL JU/ Electronics components and systems | 40-70% funding in very large value chain projects | Use https://ecscollaborationtool.eu/ or email to coordinators of new consortiums | Now | Not your task | Coordinator defines | 5.5.2020 |
| H2020 Cyber security | 70-100% funding 6-12 partners 40 € total budgets | Use ECS collaboration tool to get onboard, OR build your own | 01-02/2020 | 02-03/2020 | 04/2020 | 08/2020 |
| Eureka AI call/ AI for a user case | BF funding rate, min 2 partners from 2 countries | Find a non-Finnish partner! | 01-02/2020 | 02-03/2020 | 04/2020 | 06/2020 |
| Eureka ITEA3/ smart systems | BF funding rate, min 2 partners from 2 countries | Find a non-Finnish partner! | 04-05/2020 | 05-08/2020 | 08/2020 | 10/2020 |
| Eureka Celtic +/ connectivity | BF funding rate, min 2 partners from 2 countries | Find a non-Finnish partner! | 04-05/2020 | 05-08/2020 | 08-09/2020 | 11/2020 |

Quantum

- Also European funding:
 - H2020 ICT
 - H2020 Space
 - **European Space Agency**

Study on system definition of a Quantum Communication Infrastructure for Europe (EuroQCI)

Objective:

- Perform the feasibility and the preliminary system definition (for both the Terrestrial and Space segments) of the QCI

Strategic aspects e.g.

- EU's non-dependence for critical components and technologies
- Sustainability of the supply chains

Indicative budget: € 4 + 4 million EURO

Funding Sources: **H2020*** (DEFIS) + **CEF** (CNECT)

() 4 M€ proposed as an amendment of H2020 Space WP2020*



Thank you

