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

Call 2019

The reasoning behind the INFRA call

- Threats against crowded areas and disruptions in the operation of our countries' infrastructure.
- **Reducing the vulnerabilities** of critical infrastructure and increasing their **resilience** is one of the major objectives of the EU. An adequate level of protection must be ensured and the detrimental effects of **disruptions on the society and citizens** must be limited as far as possible.
- Recent terrorist attacks have shown a focus on so-called soft targets, which may have less long-term physical impact, but which may be highly damaging in terms of victims and subsequent psychological and sociological impacts.

Policy context - CIP

CIP Policy:

- Directive 2008/114/EC Identification and designation of EU CI (Evaluation ongoing)
- European Programme for CI Protection (COM (2006) 786, COM(2013) 318)

Main priorities on CIP:

- Identification of tools, including indicators, to protect CIs from Hybrid Threats;
- Methods and tools for addressing insider threats to CI, such as background checks and awareness raising in cooperation with relevant authorities;
- New challenges to CIP and emerging threats (e.g. drones...)
- Other: CI Risk assessment methods, transnational cooperation, civ-mil cooperation / cooperation with international orgs.

Policy context – Protection Public Spaces

<u>COM(2017) 612</u> – Action Plan protection of public spaces

- Guidance material and Exchange of best practices to support MS.
- Improving cooperation between local actors and the private sector
- Increased financial support: €18.5 million from the ISF. Further €100 million from the Urban Innovative Actions.

COM(2018) 845 final - SU Progress Report, Dec. 2018 – State of play

Main priorities on Protection of Public Spaces

- Focus on known threats but also on emerging threats (e.g. drones, CBRN attacks)
- Enhance cooperation between public actors, private actors and citizens.
- New solutions to protect EU cities while maintaining their openness and not creating new vulnerabilities.
- Consider the human factor.

SRE 2018 Panel on Protection of Public Spaces

• Take a look at the <u>conference proceedings</u>!!

General information on the INFRA call

Call title:

• Protecting the infrastructure of Europe and the people in European smart cities

Topics 2019:

- **SU-INFRA01-2018-2019-2020:** Prevention, detection, response and mitigation of combined and cyber threats to critical infrastructure in Europe (Innovation Action)
- **SU-INFRA02-2019**: Security for smart and safe cities, including for public spaces (Innovation Action)

Budgetary overview

Topics (Type of Action)	Budgets (EUR millio		million)	Deadlines
	2018	2019	2020	
Opening: 15 Mar 2018				
SU-INFRA01-2018-2019-2020 (IA)	24,00			23 Aug 2018
Opening: 19 Mar		2019		
SU-INFRA01-2018-2019-2020 (IA)		22,00		22 Aug 2019
SU-INFRA02-2019 (IA)		16,00		
Opening: TBD			2020	
Focus area topic(s) for 2020			18,00	TBD
Overall indicative budget	24,00	38,00	18,00	

Scope for sub-topics SU-INFRA01-2018-2019-2020

Prevention, detection, response and mitigation of combined physical and cyber threats to CI in Europe

Scope of proposals:

- Forecast, assessment of physical and cyber risks, prevention, detection, response, mitigation of consequences and fast recovery after incidents.
- Objective: Resilience of all functions, and of neighbouring population/environment.

Proposals should:

- Assess in detail all aspects of interdependent physical and cyber threats and incidents;
- Demonstrate the accuracy of <u>risk assessment</u> approaches;
- Develop real-time <u>evidence-based</u> security management of threats
- Provide scenarios and recommendations for policy planning, engagement of <u>civil</u> <u>society</u> and <u>investment</u> measures

Scope for sub-topics SU-INFRA01-2018-2019-2020

Prevention, detection, response and mitigation of combined physical and cyber threats to CI in Europe

In 2018 and 2019 the following IPs shall be addressed:

- Water systems
- Energy infrastructure (Energy value chain, Gas networks, others)
- Transport infrastructure (Ports, Airports, **others**)
- Communication infrastructure
- Ground segments of space systems
- Health services
- E-Commerce and postal infrastructure
- Sensitive industrial sites and plants
- Financial services

*Areas in red, covered in calls 2016 and 2017

Areas in green, to be covered following 2018 evaluation (currently under GAP) ***Areas in black, not yet covered**

- Objective
 - To cover the largest possible spectrum of installations.
 - Minimize overlapping with ongoing actions

Technical aspects SU-INFRA01-2018-2019-2020

Prevention, detection, response and mitigation of combined physical and cyber threats to CI in Europe

Each year a list of infrastructures excluded from the Call:

- The Commission has funded 6 projects addressing different CI areas following the call CIP-2016-2017. Additionally 3 more projects have been selected for funding following the 2018 call of SU-INFRA01-2018-2019-2020 (currently under GAP).
- Applicants willing to address any of the abovementioned infrastructures under UINFRA01-2018-2019-2020 shall duly justify the added value of their proposal and provide evidence that minimal overlapping exists with the dimensions already covered by projects funded since 2016 in these areas. Any different dimension, not already covered by previously funded projects, would be eligible for possible consideration.

Check Funding and Tenders Portal for <u>topic updates!</u>

Technical aspects SU-INFRA01-2018-2019-2020

Prevention, detection, response and mitigation of combined physical and cyber threats to CI in Europe

- TRL 7 system prototype demonstration in operational environment.
- The participation of SMEs is strongly encouraged.
- Indicative budget: of € 7-8 million.
- International cooperation is encouraged, and in particular with international research partners in the context of the International Forum to Advance First Responder Innovation (IFAFRI)

Expected impact – Main points SU-INFRA01-2018-2019-2020

Short term:

- Analysis of vulnerabilities, technologies and risk scenarios
- In-situ demonstrations

Mid term:

- Tools, Innovative approaches, Security risk management plans.
- Test-beds for the measurement of the performance of CI systems when equipped with cyber and physical security measures

Long term:

- Convergence to safety and security standards and secure/interoperable interfaces;
- Contribution to regulatory initiatives.

Eligibility criteria SU-INFRA01-2018-2019-2020

- At least **2 operators** of the chosen type of critical infrastructure operating in **2 Member States or Associated countries** must be beneficiaries (possibly, but not necessarily: coordinator) of the grant agreement and should be directly involved in the carrying out of the tasks foreseen in the grant.
- The participation of **industry** able to provide security solutions is required.
- The duration of the proposed activities must **not exceed 24 months**

Scope SU-INFRA01-2018-2019-2020

Security for smart and safe cities, including for public spaces

Scope of proposals:

- The security and good operation of a smart and safe city relies on **interconnected**, **complex and interdependent networks and systems**.
- Infrastructure for detection and "**big data**" **collection**. The screening of such data can enhance the capabilities and performances of practitioners.

Proposals should:

- Develop and integrate experimentally, in situ, the components of an **open platform for sharing and managing information** between public & private service operators and security practitioners.
- The proposed pilots should consider how to combine, inter alia:
 - Methods to detect weapons, explosives, toxic substances
 - Systems for video surveillance
 - Methods to identify, and neutralize crime perpetrators whilst minimizing intrusion into crowded areas

Scope SU-INFRA01-2018-2019-2020 Security for smart and safe cities, including for public spaces

Priorities brought in from ongoing actions for the Protection of PS:

- Underline the involvement of public and private operators (e.g. mass events and entertainment, hospitality, shopping malls, sports and cultural venues, transport hubs and others).
- Contribute to the implementation of the Action Plan (see status of implementation in <u>SU</u> progress report December 2018):
 - Improved cooperation
 - Addressing priorities
 - Exploiting synergies with other EC funding instruments (<u>UIA ERDF</u>)

Technical aspects SU-INFRA02-2019 Security for smart and safe cities, including for public spaces

- TRL 7 system prototype demonstration in operational environment.
- Indicative budget: of € 8 million.
- Projects should foresee activities and envisage resources for cooperating with other projects.

Expected impact – Main points SU-INFRA02-2019

Security for smart and safe cities, including for public spaces

- Creation of cybersecurity solutions for smart cities adopting common approaches with all involved stakeholders.
- In situ demonstrations of efficient and cost-effective solutions to the largest audience, beyond the project participants.
- An easier level of integration by developing a holistic cyber-security framework that benefits all smart infrastructures.
- IoT ecosystems built adopting common approaches in their cybersecurity management, achieving economies of scale.
- Novel concepts of operations taking account of multiple, heterogeneous data sources and the social media.
- Contribute to the implementation of the measures foreseen in the Action Plan to support the protection of public spaces (COM(2017)172 final)

Eligibility criteria SU-INFRA02-2019

Security for smart and safe cities, including for public spaces

- At least the local governments of **2 cities or metropolitan areas** in 2 Member States or Associated Countries must be beneficiaries (possibly, but not necessarily: coordinator) of the grant agreement and should be directly involved in the carrying out of the tasks foreseen in the grant.
- The participation of **industry** able to provide security solutions is required.
- The duration of the proposed activities must **not exceed 24 months**

Thank you!

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www.ec.europa.eu/research

Participant Portal www

http://ec.europa.eu/programmes/horizon2020/en/h2020section/cross-cutting-activities-focus-areas