

## SC7 – Secure societies

### Protecting freedom and security of Europe and its citizens

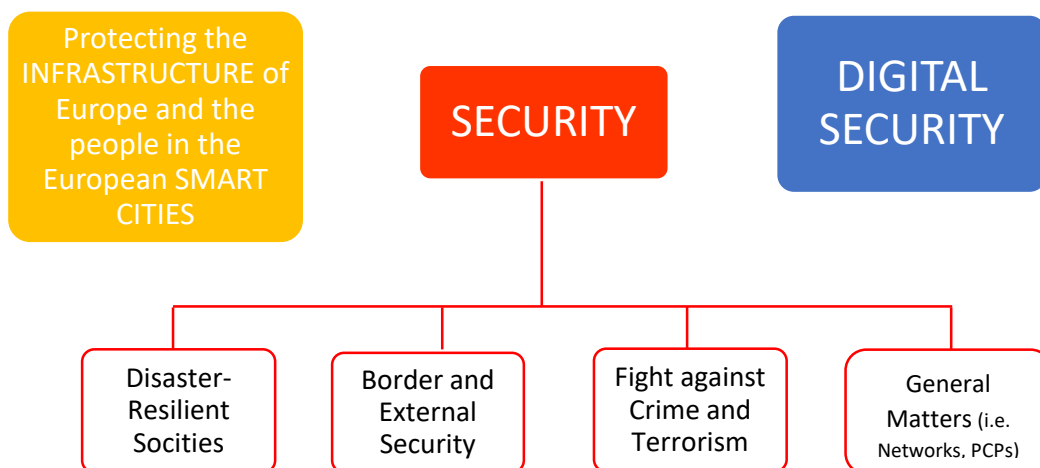


All actions under the 2018-2020 Work Programme (WP) of the Societal Challenge 7 contribute to the Focus Area<sup>1</sup> “[Boosting the effectiveness of the Security Union](#)”, which will support implementation of the Security Union priorities and help tackling the challenges that Europe is facing in:

- **protecting infrastructure** against **natural and man-made threats**, including **cyber-attacks**;
- improving **resilience to natural and man-made disasters**;
- fighting **crime and terrorism**;
- improving **border security**;
- **digital security** and privacy; and
- better **understanding of societal contexts and dynamics**.



At the core of research is the **development of new technologies** or applying emerging technologies to meet the needs of security practitioners, but it also requires **understanding phenomena**. Thus social sciences and humanities will be fully involved. The approach taken in 2016-17 WP requiring a minimum number of practitioners<sup>2</sup> in a consortium is continued. The topics of SC7 are grouped within the following **3 CALLS**:



Please note that several sub-calls include an **open topic**. It requires the involvement of a large number of practitioners (i.e. 5 instead of 3, as in pre-defined topics).

<sup>1</sup> Focus Areas are implemented as ‘virtual calls’, which constitute the linking of specific calls/topics from the different parts of Horizon 2020.

<sup>2</sup> When a reference is made to “practitioners”, the text refers to someone who is qualified or registered to practice a particular occupation, profession in the field of security or civil protection.

# PROTECTING THE INFRASTRUCTURE OF EUROPE AND THE PEOPLE IN THE EUROPEAN SMART CITIES

Threats against crowded areas and disruptions in the operation of EU infrastructure may limit the liberties of citizens and put at risk the functioning of societies and their economies. The security and resilience of Europe critical infrastructure needs to be ensured because disruptions in their operations may entail the collapse of large sectors of our activities. Threats to soft targets such as crowded areas may have less long-term physical impact, but may be highly damaging due to potentially large numbers of victims and subsequent psychological and sociological impacts.

| Action | Topic with link to EC Participant Portal                                                                                                   | Opening date | Deadline(s) |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------|
| IA     | <a href="#">Prevention, detection, response and mitigation of combined physical and cyber threats to critical infrastructure in Europe</a> | 15/03/2018   | 23/08/2018  |
|        |                                                                                                                                            | 14/03/2019   | 22/08/2019  |
| IA     | <a href="#">Security for smart and safe cities, including for public spaces</a>                                                            | 14/03/2019   | 22/08/2019  |

## SECURITY

All the three sub-calls have a first topic on **human factors and the societal aspects** related to the issue at stake (disasters and resilience; crime and terrorism; border security). The social and societal dimension of new technologies and policies should be taken into account and understood, whilst respecting fundamental rights, including privacy, protection of personal data and the free movement of persons. In particular, the sub-calls aim at:

1. advancing innovation in the society at large, and among first responders<sup>3</sup> to **reduce the loss of human life and to reduce environmental, economic and material damage from natural and man-made disasters**, including from **climate-related weather events**, earthquakes and volcanic events, **space weather events**, **industrial disasters**, **crime** and **terrorism threats**.
2. mitigating potential consequences of crime- and/or terrorism-related incidents or to avoid them. New technologies and capabilities should address the fight against and the **prevention of crime (including cyber-crime)**, illegal trafficking and terrorism (including cyber-terrorism and CBRN-E attacks), along with understanding and tackling terrorist ideas and beliefs.
3. strengthening security through **border management**, on **land** and in the **maritime** domain, enhancing the use of new technology for border checks, also in relation to the [Smart Borders](#) initiative, whilst respecting fundamental rights including free movement of persons, protection of personal data, and privacy.

An additional call is dedicated to **practitioners** interested in the uptake of **security research and innovation**. They are invited to associate in **networks and PCPs** in the field security in order to allocate

<sup>3</sup> Please note that the EC is participating in the [International Forum to Advance First Responder Innovation](#).

time and resources to monitor innovation and research that could be useful to them, and to involve their respective procurement bodies in preparing for future acquisitions.

| Disaster-Resilient Societies      |                                                                                                                                                                                                                                                                        |              |             |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------|
| Action                            | Topic with link to EC Participant Portal                                                                                                                                                                                                                               | Opening date | Deadline(s) |
| RIA                               | Human factors, and social, societal, and organisational aspects for disaster-resilient societies                                                                                                                                                                       | 15/03/2018   | 23/08/2018  |
|                                   |                                                                                                                                                                                                                                                                        | 14/03/2019   | 22/08/2019  |
| RIA                               | Technologies for first responders: Victim-detection technologies                                                                                                                                                                                                       | 15/03/2018   | 23/08/2018  |
| RIA                               | Technologies for first responders: Innovation for rapid and accurate pathogens detection                                                                                                                                                                               | 14/03/2019   | 22/08/2019  |
| RIA                               | Technologies for first responders: OPEN TOPIC                                                                                                                                                                                                                          | 15/03/2018   | 23/08/2018  |
|                                   |                                                                                                                                                                                                                                                                        | 14/03/2019   | 22/08/2019  |
| IA                                | Pre-normative research and demonstration for disaster-resilient societies: Pre-standardisation for the security of water supply                                                                                                                                        | 15/03/2018   | 23/08/2018  |
| IA                                | Pre-normative research and demonstration for disaster-resilient societies: Pre-standardisation in crisis management (including natural hazard and CBRN-E emergencies)                                                                                                  | 14/03/2019   | 22/08/2019  |
| RIA                               | Chemical, biological, radiological and nuclear (CBRN) cluster                                                                                                                                                                                                          | 14/03/2019   | 22/08/2019  |
| IA                                | Demonstration of novel concepts for the management of pandemic crises                                                                                                                                                                                                  | 14/03/2019   | 22/08/2019  |
| Fight against Crime and Terrorism |                                                                                                                                                                                                                                                                        |              |             |
| Action                            | Topic with link to EC Participant Portal                                                                                                                                                                                                                               | Opening date | Deadline(s) |
| RIA                               | Human factors, and social, societal, and organisational aspects to solve issues in fighting against crime and terrorism: New methods to prevent, investigate and mitigate trafficking of human beings and child sexual exploitation – and on the protection of victims | 15/03/2018   | 23/08/2018  |
| RIA                               | Human factors, and social, societal, and organisational aspects to solve issues in fighting against crime and terrorism: Understanding the drivers of cybercriminality, and new methods to prevent, investigate and mitigate cybercriminal behaviour                   | 14/03/2019   | 22/08/2019  |
| RIA                               | Human factors, and social, societal, and organisational aspects to solve issues in fighting against crime and terrorism: OPEN TOPIC                                                                                                                                    | 15/03/2018   | 23/08/2018  |
|                                   |                                                                                                                                                                                                                                                                        | 14/03/2019   | 22/08/2019  |
| RIA                               | Technologies to enhance the fight against crime and terrorism: Trace qualification                                                                                                                                                                                     | 14/03/2019   | 22/08/2019  |
| RIA                               | Technologies to enhance the fight against crime and terrorism: Digital forensics in the context of criminal investigations                                                                                                                                             | 15/03/2018   | 23/08/2018  |
| RIA                               | Technologies to enhance the fight against crime and terrorism: OPEN TOPIC                                                                                                                                                                                              | 15/03/2018   | 23/08/2018  |
|                                   |                                                                                                                                                                                                                                                                        | 14/03/2019   | 22/08/2019  |
| Border and External Security      |                                                                                                                                                                                                                                                                        |              |             |
| Action                            | Topic with link to EC Participant Portal                                                                                                                                                                                                                               | Opening date | Deadline(s) |
| RIA                               | Human factors, and social, societal, and organisational aspects of border and external security                                                                                                                                                                        | 15/03/2018   | 23/08/2018  |
|                                   |                                                                                                                                                                                                                                                                        | 14/03/2019   | 22/08/2019  |
| RIA                               | Technologies to enhance border and external security: Providing integrated situational awareness and applying augmented reality to border security                                                                                                                     | 15/03/2018   | 23/08/2018  |
| RIA                               | Technologies to enhance border and external security: Detecting fraud, verifying document validity, and alternative technologies to identifying people                                                                                                                 | 15/03/2018   | 23/08/2018  |
| RIA                               | Technologies to enhance border and external security: Security on-board passenger ships                                                                                                                                                                                | 14/03/2019   | 22/08/2019  |
| IA                                | Technologies to enhance border and external security: Detecting threats in the stream of commerce without disrupting business                                                                                                                                          | 14/03/2019   | 22/08/2019  |
| RIA                               | Technologies to enhance border and external security: OPEN TOPIC                                                                                                                                                                                                       | 15/03/2018   | 23/08/2018  |
|                                   |                                                                                                                                                                                                                                                                        | 14/03/2019   | 22/08/2019  |

RIA: Research and Innovation Action

IA: Innovation Action

CSA: Coordination and Support Action

COFUND: Co-funding of regional, national and international programmes

PCP: Pre-Commercial Procurement

|    |                                                                                                                                                                                             |            |            |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|
| IA | Demonstration of applied solutions to enhance border and external security: Remotely piloted aircrafts and underwater autonomous platforms to be used from on-board offshore patrol vessels | 15/03/2018 | 23/08/2018 |
| IA | Demonstration of applied solutions to enhance border and external security: New concepts for decision support and information systems                                                       | 14/03/2019 | 22/08/2019 |
| IA | Demonstration of applied solutions to enhance border and external security: OPEN TOPIC                                                                                                      | 15/03/2018 | 23/08/2018 |
|    |                                                                                                                                                                                             | 14/03/2019 | 22/08/2019 |

| General Matters |                                                                                                                                                                                                                                                                          |              |             |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------|
| Action          | Topic with link to EC Participant Portal                                                                                                                                                                                                                                 | Opening date | Deadline(s) |
| CSA             | Pan-European networks of practitioners and other actors in the field of security: Practitioners (end-users) in the same discipline and from across Europe                                                                                                                | 14/03/2019   | 22/08/2019  |
| CSA             | Pan-European networks of practitioners and other actors in the field of security: Innovation clusters from around Europe (established at national, regional or local level), especially those managing demonstration sites, testing workbenches, and training facilities | 15/03/2018   | 23/08/2018  |
| CSA             | Pan-European networks of practitioners and other actors in the field of security: Procurement agencies                                                                                                                                                                   | 15/03/2018   | 23/08/2018  |
| CSA             | Pan-European networks of practitioners and other actors in the field of security: Border and coast guard organisations                                                                                                                                                   | 14/03/2019   | 22/08/2019  |
| CSA             | Strategic pre-commercial procurements of innovative, advanced systems to support security: Common requirements specifications for innovative, advanced systems to support security                                                                                       | 15/03/2018   | 23/08/2018  |
| PCP             | Pre-commercial procurements of innovative solutions to enhance security                                                                                                                                                                                                  | 15/03/2018   | 23/08/2018  |
|                 |                                                                                                                                                                                                                                                                          | 14/03/2019   | 22/08/2019  |

## DIGITAL SECURITY

The digital infrastructure, upon which other sectors, businesses and society at large critically depend, must be resilient and trustworthy, and must remain secure despite the escalating **cyber-threats**. The aim of this call is to ensure society as a whole benefit from **user-friendly systems on cybersecurity, digital privacy and personal data protection**, enabling an active participation of citizens and organisations to their own security, privacy and personal data protection. Innovative solutions and services will open new market opportunities for the EU companies and will ensure a **secure and trusted networked environment** for the **governments, businesses, individuals and smart things**.

| Cybersecurity, Digital Privacy and data protection |                                                                                                                                                                                                                                    |              |             |
|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------|
| Action                                             | Topic with link to EC Participant Portal                                                                                                                                                                                           | Opening date | Deadline(s) |
| IA                                                 | Cybersecurity preparedness - cyber range, simulation and economics                                                                                                                                                                 | 15/03/2018   | 23/08/2018  |
| IA                                                 | Digital Security and privacy for citizens and Small and Medium Enterprises and Micro Enterprises: Protecting citizens' security, privacy and personal data                                                                         | 14/03/2019   | 22/08/2019  |
| IA                                                 | Digital Security and privacy for citizens and Small and Medium Enterprises and Micro Enterprises: Small and Medium-sized Enterprises and Micro Enterprises (SMEs&MEs): defenders of security, privacy and personal data protection | 14/03/2019   | 22/08/2019  |
| IA                                                 | Cybersecurity in the Electrical Power and Energy System (EPES): an armour against cyber and privacy attacks and data breaches                                                                                                      | 15/03/2018   | 23/08/2018  |
| IA                                                 | Digital security, privacy, data protection and accountability in critical sectors: Digital security, privacy and personal data protection in multimodal transport                                                                  | 14/03/2019   | 22/08/2019  |
| RIA                                                | Digital security, privacy, data protection and accountability in critical sectors: Digital security, privacy and personal data protection in healthcare ecosystem                                                                  | 14/03/2019   | 22/08/2019  |

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|    |                                                                                                                                                      |            |            |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|
| IA | Digital security, privacy, data protection and accountability in critical sectors: Digital security, privacy and personal data protection in finance | 15/03/2018 | 23/08/2018 |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|



SEARCH FOR NETWORKING OPPORTUNITIES ON THE [SEREN3-Security Research Network](#)  
AND [SERIT-Security Research in Italy](#)

## Other opportunities for SECURITY research and innovation across Horizon 2020

### Societal Challenges 1

Topics on reducing cyber risks in hospitals:

- Call [Trusted digital solutions and cybersecurity in health and care](#)
- Call [Digital transformation in health and care](#)

### Societal Challenges 3

- Call [Smart cities and communities](#)
- Other topics on cyber-resilience of electricity systems

### Societal Challenges 6

Topics relating to security across the 3 calls of SC6:

- [Migration](#);
- [Socioeconomic and cultural transformation in the context of the fourth industrial revolution](#); and
- [Governance for the future](#).

### Bottom-up activities

- [European Research Council](#)
- [European Innovation Council](#) (SME Instrument, Fast-Track-to-Innovation, FET, Prizes)
- [Marie Skłodowska-Curie Actions](#)

### LEIT & Joint Undertaking

- LEIT [Information and Communication Technologies](#): Cybersecurity call
- LEIT [Space](#): topics on space weather, space surveillance, EGNSS application for societal resilience
- [SESAR](#) Joint Undertaking on single European sky

### Related calls in other funding programmes 2014-2020

- Call [Asylum, Migration and Integration Fund](#)
- Call [Internal Security Fund - Police](#)
- Call [Justice Programme](#)

### H2020 Inducement Prize

- Horizon Prize for [Online security - Seamless personal authentication](#)

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# The policy context

## GLOBAL COMMITMENTS



<http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

In particular SDG 16 'Promote just, peaceful and inclusive societies' and SDG 11 'Make cities and human settlements inclusive, safe, resilient and sustainable'



<http://www.unisdr.org/we/inform/publications/43291>

Themes: Climate Change, Community-based DRR, Environment & Ecosystems, Health & Health Facilities, Private Sector, Recovery, Risk Identification & Assessment, Urban Risk & Planning, Governance, Economics of DRR, Disaster Risk Management, Social Impacts & Social Resilience, Vulnerable Populations, Cultural Heritage.

## EUROPEAN POLICIES

- ❖ Charter of **Fundamental Rights** of the European Union  
[http://www.europarl.europa.eu/charter/pdf/text\\_en.pdf](http://www.europarl.europa.eu/charter/pdf/text_en.pdf)
- ❖ EU Agenda on **Security**  
[https://ec.europa.eu/home-affairs/sites/homeaffairs/files/e-library/documents/basic-documents/docs/eu\\_agenda\\_on\\_security\\_en.pdf](https://ec.europa.eu/home-affairs/sites/homeaffairs/files/e-library/documents/basic-documents/docs/eu_agenda_on_security_en.pdf)
- ❖ European **Defence** Action Plan  
[http://europa.eu/rapid/press-release\\_IP-16-4088\\_en.htm](http://europa.eu/rapid/press-release_IP-16-4088_en.htm)
- ❖ **Smart Borders** legislative initiative  
[https://ec.europa.eu/home-affairs/what-we-do/policies/borders-and-visas/smart-borders\\_en](https://ec.europa.eu/home-affairs/what-we-do/policies/borders-and-visas/smart-borders_en)
- ❖ The European Innovation Partnership on **Smart Cities and Communities**  
<http://ec.europa.eu/eip/smartcities/>
- ❖ Communication on "**Strengthening Europe's Cyber Resilience System and Fostering a Competitive and Innovative Cybersecurity Industry**": [COM \(2016\) 410](#)
- ❖ **Digital Single Market** Strategy: [COM \(2015\) 192](#)
- ❖ Joint Communication on "**Resilience, Deterrence and Defence: Building strong cybersecurity for the EU**": [JOIN COM \(2017\) 450](#)
- ❖ Strategy for **international cooperation** in research and innovation  
<http://ec.europa.eu/research/iscp/index.cfm?pg=strategy>