



#InvestEUresearch

Horizon 2020 Work Programme for Research & Innovation 2018-2020

Secure Societies Work Programme 2018-2020

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Outline of Presentation

- The policy context
- 'Secure Societies' in figures
- Work Programme 2018-2020
- Focus Area 'Boosting the effectiveness of the Security Union'

State of the Union of President Jean-Claude Juncker

- *[...] Following the recent terrorist attacks on European soil, the Commission has proposed a number of key actions and initiatives, such as a counter-terrorism Directive, measures to address terrorist financing, and tighter controls on firearms, in order to move towards an operational and effective Security Union. These proposals now need to be adopted, with their ambition maintained. [...]*

Why action at EU level is required

- The EU and Member States face common security threats, which are complex and of cross-border nature
- Addressing these threats is a common responsibility and requires a common European approach
- EU action justified where it can bring added value
- The Agenda is the basis for joint action, and provides strategic focus for the EU and Member States

Policy context

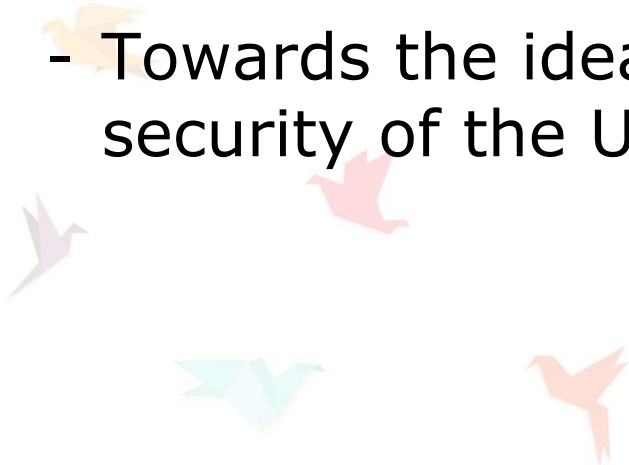
- 04/2015: European Agenda on Security defines the priority actions at EU level to ensure an effective EU response to security threats over the period 2015-2020
- Terrorist attacks since January 2015: the fight against terrorism has been the first priority for the Commission in the period 2015-2017
- 10/2016: new Commissioner for the Security Union, supported by a horizontal Task Force involving 30 different services in the Commission and the EEAS

Task Force

- *A Task Force composed by experts from the Commission services and supervised by the Director-General for Home Affairs will support you. This Task Force will in particular include experts from Units B4 (Innovation and Industry for Security) and D1 (Terrorism and Crisis Management) of the Directorate-General for Home Affairs (DG HOME), from Units A2 (Aviation Security) and A4 (Land and Maritime Security) of the Directorate-General for Mobility and Transport (DG MOVE) and from Unit H1 (Cybersecurity) of the Directorate-General for Communications Networks, Content and Technology (DG CONNECT) as well as the relevant experts from Directorate-General for Energy (DG ENER).*

Towards an effective and genuine Security Union

- A step change for the EU internal security
 - Moving from the concept of cooperating to protect MS internal security
 - Towards the idea of protecting the collective security of the Union as a whole



The 9th Security Union progress report

- Based on a comprehensive assessment of EU security policy since 2001, the report highlights the remaining gaps and challenges to be addressed. Incomplete implementation of existing policies remains a challenge, as do evolving threats such as radicalisation and cybercrime — which may require changes to existing instruments.

The 11th Security Union progress report

- Support Member States in protecting public spaces;
- Close the space in which terrorists can operate by further restricting access to explosive precursors and improving cross border access to financial information;
- Enhance preparedness, resilience and coordination at EU level in case of an incident involving chemical, biological, radiological or nuclear (CBRN) substances;
- Support law enforcement and judicial authorities that encounter encryption by criminals in criminal investigations;
- Set out the next steps on countering radicalisation;
- Reinforcing the EU's external action on counter-terrorism.

TARGETED FUNDING

- €18.5 million for projects launched today to support transnational projects improving the protection of public spaces
- Up to €100 million in 2018 to support cities investing in security solutions
- €195 million in funding for 48 security research projects related to public space protection

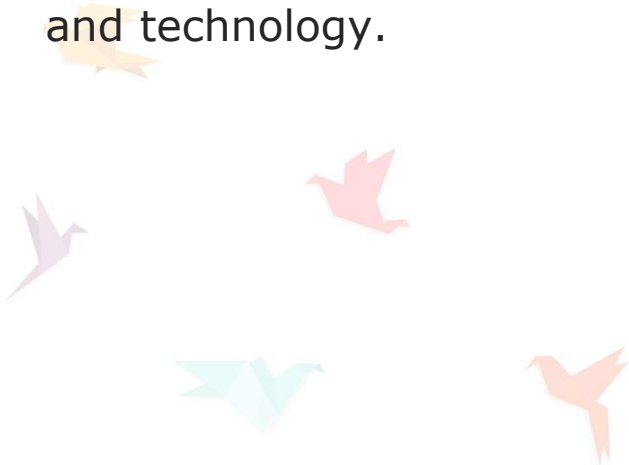


The 12th Security Union progress report

- This reports sets out a number of actions taken at EU level to step up the exchange of information to enhance internal security and better manage the external borders. The proposed Regulation on interoperability provides for a targeted and intelligent way of using existing data to best effect and integrating the principle of data protection by design. It constitutes a step-change in the way the EU manages data for security and external border, helping national authorities to better address transnational threats and detect terrorists who act across borders.

The European Agenda on Security COM(2015) 185 final (28 April 2015)

"Research and innovation is essential if the EU is to keep up-to-date with evolving security needs. Research can identify new security threats and their impacts on European societies. It also contributes to creating social trust in research-based new security policies and tools. Innovative solutions will help to mitigate security risks more effectively by drawing on knowledge, research and technology.

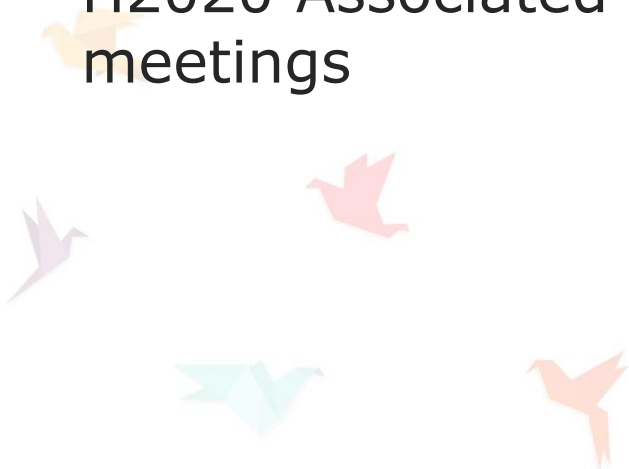


Policy context

- **Mission letter** of Julian King as Commissioner for Security Union:
- "During our mandate, I would like you to support the Commissioner for Migration, Home Affairs and Citizenship in the following tasks:
- [...] "Ensuring that EU-financed **security research** targets the needs of **security practitioners** and develops solutions to forthcoming security challenges [...]."

General Policy context for the WP

- Security research unit moved from GROW to HOME
- Input from other DGs (e.g. TAXUD): Horizon Directors Group Security and bilateral contacts
- Secure Societies Programme Committee (MS and H2020 Associated Countries): workshops and formal meetings



General Policy context for the WP

Practitioner involvement in projects (since 2016/17):

- Enhance **policy support**
- Improve **market uptake**
- Increase **innovation dimension**
- **Reduce oversubscription**
- **Reduce duplications**

'Secure Societies' in figures

- 2014-2020 budget: EUR 1.7 billion:
 - of which EUR 1.2 bn under DG HOME, and EUR 500 m under DG CNECT
- H2020 is 50% of public funding for security research in Europe
- Secure Societies is 2.2 % of the H2020 budget
- 2018-2020 budget: EUR 716 million

Work Programme 2018-2020 - Structure

3 Calls (same structure as WP 2016-2017):

- **INFRA**: Protecting Infrastructure Call
- **SEC**: Security Call
 - **DRS**: Disaster-Resilient Societies
 - **FCT**: Fight against Crime and Terrorism
 - **BES**: Borders and External Security
 - **GM**: General Matters (i.e. Networks, PCPs)
- **DS**: Digital Security Call

WP 2018-2020 – General principles

- **Obligatory participation of practitioners** (INFRA, SEC Calls)
- **Challenge-driven:**
 - Needs of practitioners and relevant polices
 - Reflected in 'Expected Impacts'
- **Flexibility for 2020**

WP 2018-2020: Protecting Infrastructure

- Topic 1: **Combined physical & cyber threats to infrastructure**
 - (similar to CIP-01 in 2016-2017)
 - Types of infrastructure identified in the text
 - Aim is to cover the largest range of infrastructures
 - "Practitioner" = operator of infrastructure; at least 2 required
- Topic 2: **Security for smart cities, including for public spaces (2019)**
 - "Practitioner" = city government; at least 2 required

WP 2018-2020: SEC Call – DRS

- Topic 1: **Human factors**
- Topic 2: **Technologies** for first responders
 - A specific sub-topic each year (2018: victim-detection technologies; 2019: rapid pathogens detection; 2020: pre-hospital life support and triage)
 - Plus 'open' sub-topic each year
 - Co-funding opportunities from Japan and Korea

WP 2018-2020: SEC Call – DRS

- Topic 3: **Pre-normative research and demonstration**
 - A specific sub-topic each year (2018: security of water supply; 2019: interoperable equipment and procedures for crisis management and civil protection, incl. CBRN-E; 2020: effective deployment of resources to respond to major crises)
- Topic 4: **CBRN cluster**
 - Actions to be coordinated by an SME
- Topic 5: **Demonstration of concepts for managing pandemics**

WP 2018-2020: SEC Call – FCT

- Topic 1: **Human factors**

- A specific sub-topic each year (2018: new methods to tackle trafficking of human beings and child sexual exploitation; 2019 cybercriminality; 2020 violent radicalisation)
- Plus 'open' sub-topic (2018, 2019)

- Topic 2: **Technologies**

- A specific sub-topic each year (2018: digital forensics; 2019: trace qualification; 2020: tracking money flows)
- Plus 'open' sub-topic each year

WP 2018-2020: SEC Call – FCT

- Topic 3: **Information and data management**
 - Big Data, AI, etc., in fight against (cyber)crime and terrorism
 - Open in 2018, 2019 and 2020
- Topic 4: **Explosives**
 - Open in 2020

WP 2018-2020: SEC Call – BES

- Topic 1: **Human factors**

- A specific sub-topic each year (2018: security threats possibly arising from certain perceptions of EU in other countries; 2019: predicting migration flows to avoid tensions; 2020: indicators of threats at EU external borders)
- Plus 'open' sub-topic (2018, 2019)

- Topic 2: **Technologies**

- Specific sub-topic(s) each year (2018: integrated situational awareness; travel document fraud and identifying people; 2019: detecting threats in the stream of commerce; 2020: sensors)
- Plus 'open' sub-topic each year

WP 2018-2020: SEC Call – BES

- Topic 3: **Demonstration of applied solutions**
 - A specific sub-topic each year (2018: remotely piloted autonomous platforms; 2019: decision support and information systems; 2020: detection and tracking of small boats)
 - Plus 'open' sub-topic each year



WP 2018-2020: SEC Call –GM – Networks

- Builds on the networks being funded under WP 2016-2017
- Networks 2018-2020:
 - Practitioners in the same discipline (2019: protection of public figures; hybrid threats; 2020: to be decided)
 - 2018: Innovation clusters, esp. those managing demonstration sites, training facilities
 - 2018: Procurement agencies or departments
 - 2019: Border and coast guard organisations

WP 2018-2020: SEC Call – GM – PCPs

- Topic 1: Strategic PCPs
 - *Targeted scope*: requirements must relate to needs in the specified areas
 - 2018: sub-topic 1: Common requirements
 - 2020: sub-topic 2: Procurement of prototypes from among those specified as a result of sub-topic 1
 - 90% funding
- Topic 2: PCPs
 - *Wide scope*: solutions that support the development of the EU's Security Union
 - Opened each year
 - 70% funding

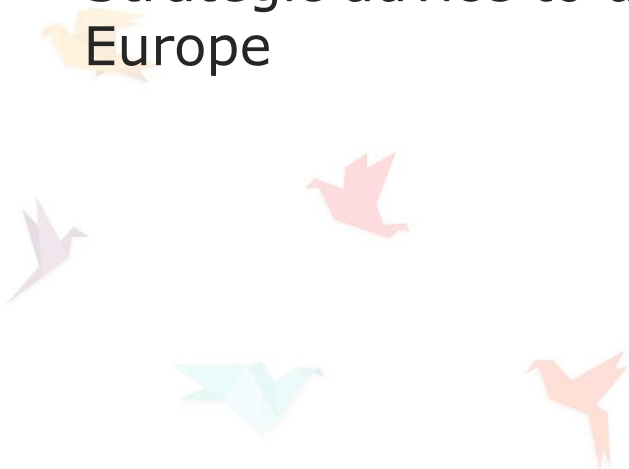
WP 2018-2020: DS Call – Digital Security

- Topics on:
 - Cybersecurity preparedness
 - Management of cyber-attacks
 - Digital security and privacy for citizens and SMEs
 - Cybersecurity in Electrical Power and Energy System
 - Digital security etc. in critical sectors
- Under responsibility of DG CNECT

WP 2018-2020: EIC pilot

EIC pilot:

- The "new label" for the SME instrument - Fully bottom-up
- It offers in a single place:
- €2.7 billion in funding for the period 2018-2020
- Opportunities for networking, mentoring and coaching
- Strategic advice to upgrade the innovation ecosystem in Europe



WP 2018-2020: FTI

The FTI's aim is to:

- reduce time from idea to market,
- stimulate the participation of first-time applicants to EU research and innovation funding, and
- increase private sector investment in research and innovation.
- Budget of €100 million per year – 300 million total

WP 2018-2020: Adoption and publication

- **Adoption on 27 October 2017**

- **Available on:**

– Participant Portal (Calls)

– H2020 policy page (texts)

Focus Area – 'Boosting the effectiveness of the Security Union'

- Brings together the main actions across the WP that contribute to **developing the EU as a Security Union**:
 - SC7 (**Secure Societies**): all topics
 - LEIT-**ICT**: Cybersecurity Call
 - LEIT-**Space**: topics on space weather, space surveillance; EGNSS applications for societal resilience
 - SC1 (**Health**): topics on reducing cyber risks in hospitals
 - SC3 (**Energy**): contribution to DS topic on cyber-resilience of electricity systems
 - SC6 (**Inclusive Societies**): topics on preventing radicalisation through social inclusion, impact of extreme ideologies; trafficking of cultural goods; etc.

Focus Area – 'Boosting the effectiveness of the Security Union'

- Virtual call: topics are linked through the Participant Portal
- First topics (from SC1 and SC6) opened in Nov 2017
- Budget 2018-2020: EUR 1 billion
- Publicity: Booklet, etc.



Focus Area 'Boosting the effectiveness of the Security Union' (SU)



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Assisting to implement the **Security Union**:

- Provide **innovative security solutions** with involvement of security practitioners
- Build a **secure digital economy and infrastructures**
- **Understand phenomena** such as violent radicalisation and **develop effective policies**
- React to and recover from **natural and man-made disasters**

€ 1 bn

Contributions from work programme parts ICT; Space; Health; Energy; Societies; Security

Thank you!

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www.ec.europa.eu/research

Participant Portal www.ec.europa.eu/research/participants/portal.htm

<http://ec.europa.eu/programmes/horizon2020/en/h2020-section/cross-cutting-activities-focus-areas>