Societal Challenge 7 2018 - 2020

Protecting freedom and security of Europe and its citizens

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Security in Horizon 2020

▸ Security= 1 of the 4 Focus areas in Work Programme 18-20: Boosting the effectiveness of the Security Union (cfr. Strategic programme overarching Document - page 20)

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Focus Area 4: Boosting the effectiveness of the Security Union

Budget: €1,000m +

Aims	Component	Source
✓ New technologies and processes to meet needs of security practitioners, including for fighting and preventing crime	✓ Better match R&D objectives with Security Union policy needs.	✓ LEIT-ICT
✓ Reduced loss of life and damage from natural and man-made disasters	✓ Strengthen impact of security-related research: involving practitioners and stimulating new markets.	✓ LEIT-Space
✓ Key infrastructure better protected	✓ Identify security-related research in other H2020 societal challenges, and contribute to other policies (Digital, Space, Health, etc.)	✓ SC1
✓ EU borders better secured		✓ SC3
✓ Secure and trusted digital environment		✓ SC6
		✓ SC7

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Security in Horizon 2020 – background (2)

▸ Security= 1 of the 4 Focus areas in 18-20: Boosting the effectiveness of the Security Union (cfr. Strategic programme overarching Document - page 20)

▸ DG Home – leading DG for Disease Resilient Societies, Fight Against Terrorism, Border and external security

  ▸ policy papers! (interesting background information)

  ▸ Check regularly Progress reports of the Security Union

▸ DG Connect – leading DG for Digital Security

  ▸ Policy papers! (interesting background information)

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Security in Horizon 2020 - Workprogramme, Calls & topics

▶ SC 7 - Secure societies – Protecting freedom and security of Europe and its citizens

▶ Emphasis/ideas behind? -> **Work Programme 18-20** (WP)

    ▸ 3 main points of interest - in EU commission language =**calls**

    ▸ Each call has several **topics**= projects with specific challenge, type of action, deadline of application, …

SC 7 - Work Programme

- Content:
  - The research and innovation activities to protect the European citizens, society and economy as well as the infrastructures services, the prosperity, political stability and wellbeing
- Specific emphasis in 2018-2020:
  - Min. number of practicioners
  - SME involvement! (1 call: coordinator=SME)
  - To bring newly developed technologies closer to the market
  - Challenge-driven – new technologies and methods that help practicioners respond to emergency security threats

SC 7 – WP - Calls

3 calls in WP SC7:

▸ Protecting the **infrastructure** of Europe and the people in the European smart cities (p9-p17)

▸ **Security** - establishing **disaster-resilient societies** (p18-27), **fighting against crime and terrorism** (p28-p35), and improving **border and external security** (p35-p54)

▸ **Digital security** (p55-p79)

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SC7 -WP- common points in the 3 calls

▶ Practicioners may be compulsory!

Definition: Practicioner= to practice a particular occupation, profession in the field of security or civil protection

▶ Coordination with European Defence Agency (EDA) may be considered (explicit and firm committment required!)

  ▸ Cfr. EDA Conference on 23/11/2017

▶ Several open topics- can be anything creative, inclusion of high number of practicioners!

  ▸ projects will nurture ideas for calls 2020 which are not defined yet

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SC 7 – Call Infrastructure and people in smart cities

▸ Critical infrastructure protection
▸ Soft target protection eg. Crowded areas

SC7- Call Security

- 3 sub-categories
    - 1. Disaster resilient societies (p18-p27)
    - 2. Fight against crime and terrorism (p28-p35)
    - 3. Border and external security (p35-p54)
    - 4. General Matters
        - Networks!
        - Pre-commercial Procurements= NEW in 18-20

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SC7 – Security – Disaster resilient societies

▸ Aim:
  ▸ reduce loss of human life
  ▸ Reduce environmental, economic and material damage from disasters –
    ▸ man-made: industrial disasters, crime and terrorism threats
    ▸ Natural: climate-related weather event, erathquakes, volcanic events, space weather events
▸ Co-funding projects with Japan and South-Korea

SC7 – Security – Fight against crime and terrorism

▶ Aim:

  ▸ Fight againt and prvention of crime (including cyber-crime)

  ▸ Illegal trafficking and terrorism (incl. cyber-terrorism)

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SC7 – Security – Border and external security

▶ Further development of European border Surveillance System (EUROSUR)

▶ Aim:

  ▶ Technologies for border security (equipment, tools, processes)

  ▶ Technologies for civilian tasks (border mgmt, peace-keeping, conflict prevention)

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SC 7 – Call Digital security

▶ Aim: Innovation towards enhancing digital security

▶ Cybersecurity, digital privacy and data protection

▶ Interesting documents:

  ▶ Pillar of the European Agenda on Security (2015)

  ▶ Cfr. Joint Communication on cybersecurity (13/09/2017)

  ▶ Challenges in Communication on the Strengthening Europe's Cyber Resilience System and fostering a Competitive and Innovative Cybsersecurity Industry (5/07/2016) – Contractual Public Private Partnership on Cybersecurity

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Security in Horizon 2020

▶ Not only topics about security in SC 7 but also in other fields - cfr. participant portal- search on key word "security"

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ALL TOPICS

SC 7 –Infrastructure and people in smart cities – topics (1)

▶ Physical and cyber threats to critical infrastructure (SU-INFRA01):

  ▶ IA

  ▶ Open 15/036/2018 – 24 mio€ - deadline 23/08/2018

  ▶ Open 14/03/2019 – 22 mio€ - deadline 22/08/2019

  ▶ Participants:

    ▶ 2 operators of critical infrastructure in 2 MS/AC

    ▶ Industry!

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SC 7 –Infrastructure and people in smart cities – topics (2)

▶ Security for smart cities/public places (SU-INFRA02)
  ▸ IA
  ▸ Open 14/03/20**19** – 16mio€ - deadline 22/08/2019
  ▸ Participants:
    ▸ Min. 2 cities or metropolitan areas in 2 MS/AC
    ▸ Industry!

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SC7 – Security – Disaster resilient societies – topics (1)

▶ Human/social/societal/organisational factors and aspects (SU-DRS01):
  ▶ RIA
  ▶ Min. 3 responder organisations or agencies from 3 MS/AC
  ▶ Open on 15/03/2018 – 5 mio€ - deadline 23/08/18
  ▶ Open on 14/03/2019 - 5 mio€ - deadline 22/08/19

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SC7 – Security – Disaster resilient societies – topics (2)

▶ Technologies for first reponders (SU-DRS02)
- ▶ Subtopics:
  - ▶ Victim detection technology
  - ▶ Pathogen detection
  - ▶ Pre-hospital life support
  - ▶ Open
- ▶ Min. 3 responder organisations or agencies from 3 MS/AC (for open topics: at least 5)
- ▶ Cooperation (not compulsory) with Japan and Korean research centers (cofunding)

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SC7 – Security – Disaster resilient societies – topics (3)

- Pre-normative research and demonstration (SU-DRS03)
  - Subtopics:
    - Pre-standardisation for security of watersupply
    - Pre-standardisation in crisis management
    - First aids vehicles
  - IA
  - Min. 3 responder organisations or agencies from 3 MS/AC (for open topics: at least 5)
  - Open on 15/03/2018 – 6 mio€ - deadline 23/08/2018
  - Open on 14/03/2019 - 6 mio€ - deadline 22/08/2019

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SC7 – Security – Disaster resilient societies – topics (4)

▸ Chemical, biological radiological and nuclear clusters (SU-DRS04)

  ▸ RIA

  ▸ Collaboration with ENCIRCLE consortium

  ▸ Coordinated by SME

  ▸ Open on 14/03/2019 – 10,5 mio€ - deadline 22/08/2019

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SC7 – Security – Disaster resilient societies – topics (5)

- Demonstration novel concepts for mgmt of pandemic crises (SU-DRS05)
  - Cfr/ outcome of call DRS4 – 2014)
  - IA
  - Participation of
    - Organisation of national planning with pandemic preparedness of min. 5 diff. MS/AC
    - Min 3 responder organisaiton of min. 3 diff. MS/AC
    - Open on 14/03/2019 – 10 mio€ - deadline 22/08/2019

SC7 – Security – fight against crime and terrorism – topics (1)

▸ Human/social/societal/organisational factors and aspects (SU-FCT01)

- ▸ Subtopics:
  - ▸ Trafficking of human beings and child exploitation
  - ▸ Drivers of cyber-criminality
  - ▸ Prevent violent radicalisation and terrorism in EU
  - ▸ Open
- ▸ RIA
- ▸ Open on 15/03/2018 – 10 mio€ - deadline 23/08/2018
- ▸ Open on 14/03/2019 – 9,6 mio€ - deadline 22/08/2019
- ▸ Participants:
  - ▸ 3 Law enforcement agencies from 3 diff. MS/AC (open: min. 5)

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SC7 – Security – Fight against crime and terrorism – topics (2)

▶ Technologies (SU-FCT02)
  ▶ Subtopics:
    ▶ Trace qualification
    ▶ Digital forensis
    ▶ Money flows tracking
    ▶ Open
  ▶ RIA
  ▶ Open on 15/03/2018 – 21mio€ - deadline 23/08/2018
  ▶ Open on 14/03/2019 – 28,16mio€ - deadline 22/08/2019
  ▶ Participants:
    ▶ 3 Law enforcement agencies from 3 diff. MS/AC (open: min. 5)

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SC7 – Security – fight against crime and terrorism – topics (3)

▸ Information and data stream management (SU-FCT03)
▸ IA
▸ Open on 15/03/2018 – 8 mio€ - deadline 23/08/2018
▸ Open on 14/03/2019 – 8 mio€ - deadline 22/08/2019
▸ Participants:
  ▸ Min 3 law enforcement agencies of 3 MS/AC

▸ In 2020: FCT04: explosves: detrection, intelligence, forensis

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SC7 – Security – Border and external security – topics (1)

- Human/social/societal/organisational factors and aspects (SU-BES01)
    - Subtopics:
        - Security threats
        - Migration flows
        - Indicators of threats
        - Open
    - RIA
    - Participants:
        - Min 3 coast guard authorities from 3 MS/AC (open: min. 5)
    - Open on 15/03/2018 – 10mio€ - deadline 23/08/2018
    - Open on 14/03/2019 – 9,6mio€ - deadline 22/08/2019

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SC7 – Security – Border and external security – topics (2)

▶ Technologies border and external security (SU-BES02)

  ▶ Subtopics:

    ▶ Situational awareness and augmented reality
    ▶ Fraud, daicument validity, people identification
    ▶ On-board passenger
    ▶ Threats in stream of commerce
    ▶ Sensor
    ▶ Open

  ▶ RIA

  ▶ Open on 15/03/2018 – 21mio€-deadline 23/08/2018

  ▶ Open on 14/03/2019 – 21mio€ - deadline 22/08/2019

  ▶ Participants:

    ▶ Min 3 coast guard authorities from 3 MS/AC (open: min. 5)

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SC7 – Security – Border and external security – topics (3)

▶ Demonstration of solutions (SU-BES03)
  ▶ Subtopics:
    ▶ Remoted piloted aircrafts
    ▶ Decision support and information systems
    ▶ Detection/tracking small boats
    ▶ Open
  ▶ !complement (no overlap) with Defence Research: PADR-US-01-2017
  ▶ IA
  ▶ Open on 15/003/2018 – 10mio€ - deadloine 23/08/2018
  ▶ Open on 14/03/2019 – 10mio€ - deadline 22/08/2019
  ▶ Participants:
    ▶ Min 3 coast guard authorities from 3 MS/AC (open: min. 5)
    ▶ Coordination by practicioners organization under civilian authority

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SC7 – Security - General matters – topics (1)

▶ Pan-european networks of practicioners (SU-GM01)

- ▶ CSA
- ▶ 4 categories and per category specific guidelines – 1 general: Min. 8 MS/AC
- ▶ Open on 15/03/2018 – 5 mio€- deadline 23/08/2018
- ▶ Open on 14/03/2019 – 10,5 mio€ - deadline 22/08/2019

▶ Pre-commercial Procurements – systems to support security (SU-GM02)

- ▶ Open on 15/03/2018 – 6mio€- deadline 23/08/2018

▶ Pre -commercial Procurements – solutions to enhance security (SU-GM03)

- ▶ Open on 15/03/2018 – 8,2 mio€- deadline 23/08/2018
- ▶ Open on 14/03/2019 – 7mio€ - deadline 22/08/2019

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SC 7 –Digital security – topics (1)

▸ Cybersecurity preparedness (SU-DS01)
  ‣ Continuation of DS-07-2017
  ‣ Encouraged participation of public security end-users, private end-users, SME's
  ‣ Create link with Computer Emergency Response Teams (CERTs)/Computer Security Incident Response Teams (CSIRTs)
  ‣ IA
  ‣ Open on 15/03/2018 – 16mio€ - deadline 23/08/2018

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SC 7 –Digital security – topics (2)

- Management of cyber-attacks and other risks (SU-DS02)
  - Open in 2020
- Digital security and privacy for citizens and enterprises (SU-DS03)
  - Proposals – one of the subtopics:
    - Protecting citizens' security, privacy and personal data
    - SMEs and Mes: defenders of security, privacy and presonal data protection
  - IA
  - Open on 14/03/2019 – 18mio€ - deadline 22/08/2019

SC 7 –Digital security – topics (3)

▶ Cybersecurity in Electric Power and Energy System (EPES): an armour against cyber and privacy attacks and data breaches (SU-DS04)
  ▸ Including pilot/demonstrator
  ▸ Encouraged participation of Transmission System Operator (TSO), Distribution System Operators (DSO), equipement manufacturers, technology provides, …
  ▸ IA
  ▸ Open on 15/03/2018 – 20mio€- deadline 23/08/2018

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SC 7 –Digital security – topics (4)

▶ Digital security, privacy, data protection and accountability in critical sectors (SU-DS05)

   ▸ Critical sectors: energy, transport, banking, financial amrket infrastructures, health sector, water supply, digital infrastructure (cfr. the NIS directive)

   ▸ Engagement of end-users, participation of SME

   ▸ Subtopics – sector related:

      ▸ 2018: **finance** – IA - Open on 15/03/2018 – 8,5 mio- deadline 23/08/2018

      ▸ 2019: **transport** – IA - Open on 14/03/2019 – 10mio – deadline 22/08/2019

      ▸ 2019: **healthcare** – RIA - Open on 14/03/2019 – 10mio – deadline 22/08/2019