



HORIZON *2020*

LE PROGRAMME DE RECHERCHE ET
D'INNOVATION DE L'UNION EUROPÉENNE

GTN Horizon 2020 « Défi sécurité »
MENESR – 05/10/18

Ordre du jour

☐ Point Europe

- Horizon 2020 :
 - Programme de travail 2020 (RCP)
- Horizon Europe Planification stratégique
 - Rappel du processus européen et national (MESRI)
 - Analyse par le CFS (JY Guédon)

☐ Actualité du PCN

☐ AOB

- ...

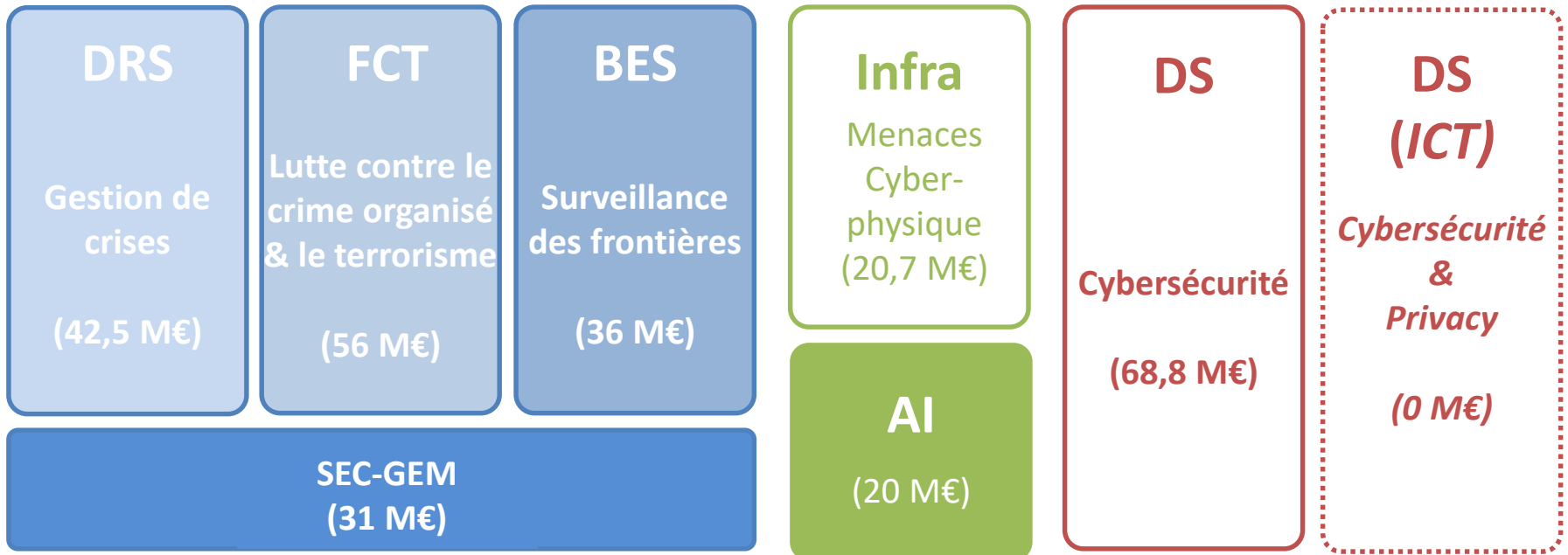


POINT EUROPE






Budget 2020



Les sujets 2020 (en bref)

(1/6)

- ❑ SU-INFRA01-2018-2019-2020: *Prevention, detection, response and mitigation of combined physical and cyber threats to critical infrastructure in Europe*
- ❑ SU-AI01-2020: *Developing a research roadmap regarding Artificial Intelligence in support of Law Enforcement*
- ❑ 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*
- ❑ SU-AI03-2020: *Human factors, and ethical, societal, legal and organisational aspects of using Artificial Intelligence in support of Law Enforcement*



Les sujets 2020 (en bref)


(2/6)

- ❑ SU-DRS01-2018-2019-2020: Human factors, and social, societal, and organisational aspects for disaster-resilient societies

- ❑ SU-DRS02-2018-2019-2020: Technologies for first responders
 - **Sub-topic 3: [2020] Methods and guidelines for pre-hospital life support and triage**
 - Sub-topic: [2018-2019-2020] Open

- ❑ SU-DRS03-2018-2019-2020: Pre-normative research and demonstration for disaster-resilient societies
 - **Sub-topic 3: [2020] First aids vehicles deployment, training, maintenance, logistic and remote centralized coordination means**

- ❑ SU-DRS04-2019-2020: Chemical, biological, radiological and nuclear (CBRN) cluster



Les sujets 2020 (en bref)


(3/6)

- ❑ SU-FCT01-2018-2019-2020: *Human factors for FCT*
 - *Sub-topic 1: [2018, 2020] New methods to prevent, investigate and mitigate trafficking of human beings and child sexual exploitation – and on the protection of victims*
 - ***Sub-topic 3: [2020] Developing evidence-based approaches to evaluate and to further develop initiatives to prevent and counter violent radicalisation***

- ❑ SU-FCT02-2018-2019-2020: *Technologies to FCT*
 - ***Sub-topic 3: [2020] Money flows tracking***
 - ***Sub-topic 4: [2020] Development and deployment of technologies, tools and relevant infrastructure to identify speedily terrorist content online, and prevent its re-upload***
 - ***Sub-topic: [2018-2019-2020] Open***

- ❑ SU-FCT03-2018-2019-2020: *Information and data stream Mgt*

- ❑ **SU-FCT04-2020: *Chemicals: intelligence, detection, forensics***



Les sujets 2020 (en bref) (5/6)

- SU-BES01-2018-2019-2020: *Human factors for BES*
 - **Sub-topic 3: [2020] Developing indicators of threats at the EU external borders on the basis of sound risk and vulnerability assessment methodologies**

- SU-BES02-2018-2019-2020: *Technologies for BES*
 - **Sub-topic 5: [2020] Disruptive technologies for non-intrusive identification of hidden goods**
 - *Sub-topic: [2018-2019-2020] Open*

- SU-BES03-EBCGA-2018-2019-2020: *BES demo of applied solutions*
 - **Sub-topic 3: [2020] Improved systems for the vessel tracking, behaviour analysis and automatic anomaly detection Open**
 - *Sub-topic: [2018-2019-2020] Open*

Les sujets 2020 (en bref)

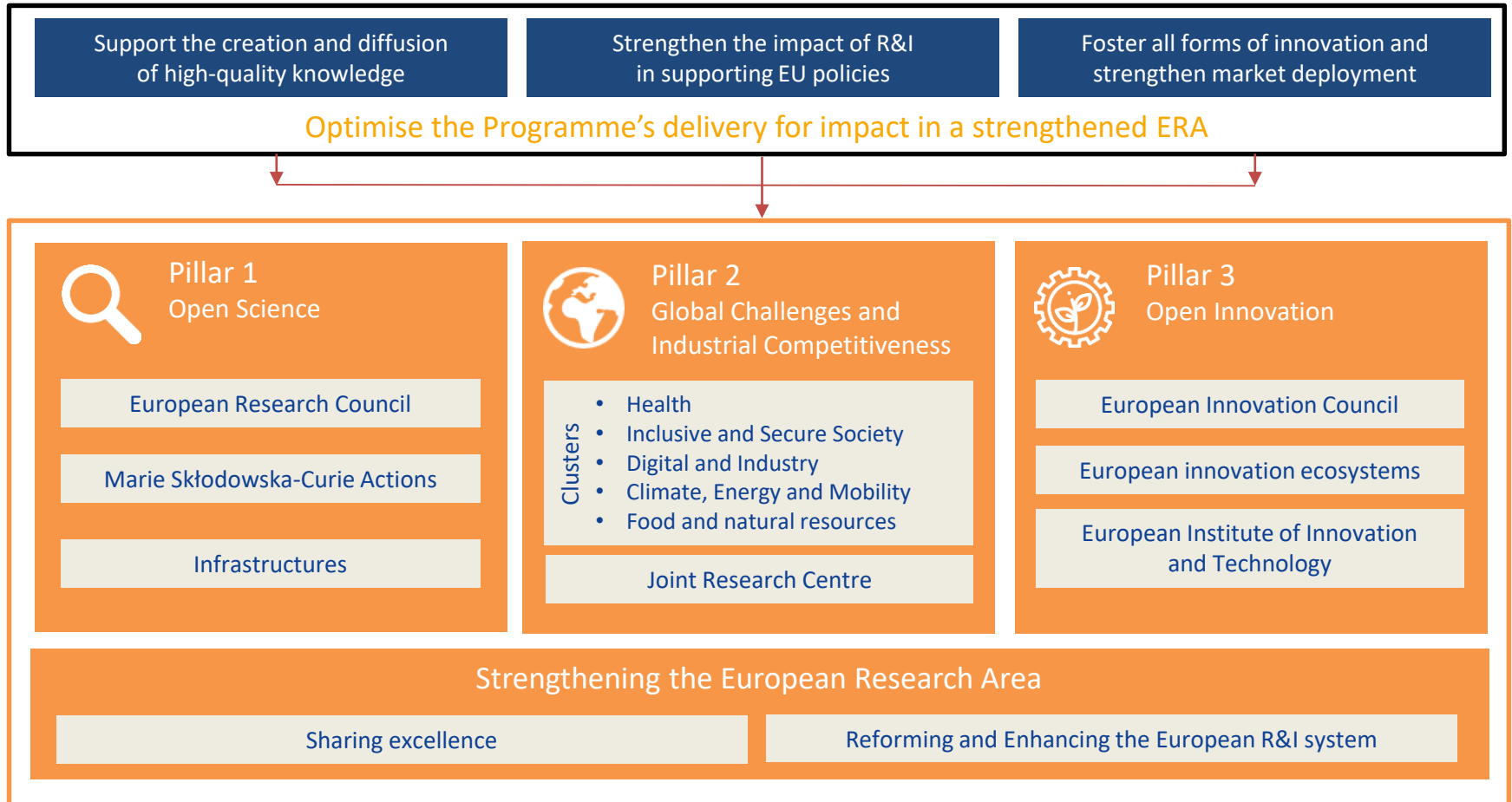
(6/6)

- ❑ SU-GM01-2018-2019-2020: *Pan-European networks of practitioners and other actors in the field of security*
 - *[2019-2020] Practitioners (end-users) in the same discipline and from across Europe*
- ❑ SU-GM02-2018-2020: *Strategic pre-commercial procurements of innovative, advanced systems to support security*
 - *Sub-topic 2: [2020] Procurement of prototype systems among those specified as a result of Sub-topic 1 (PCP)*

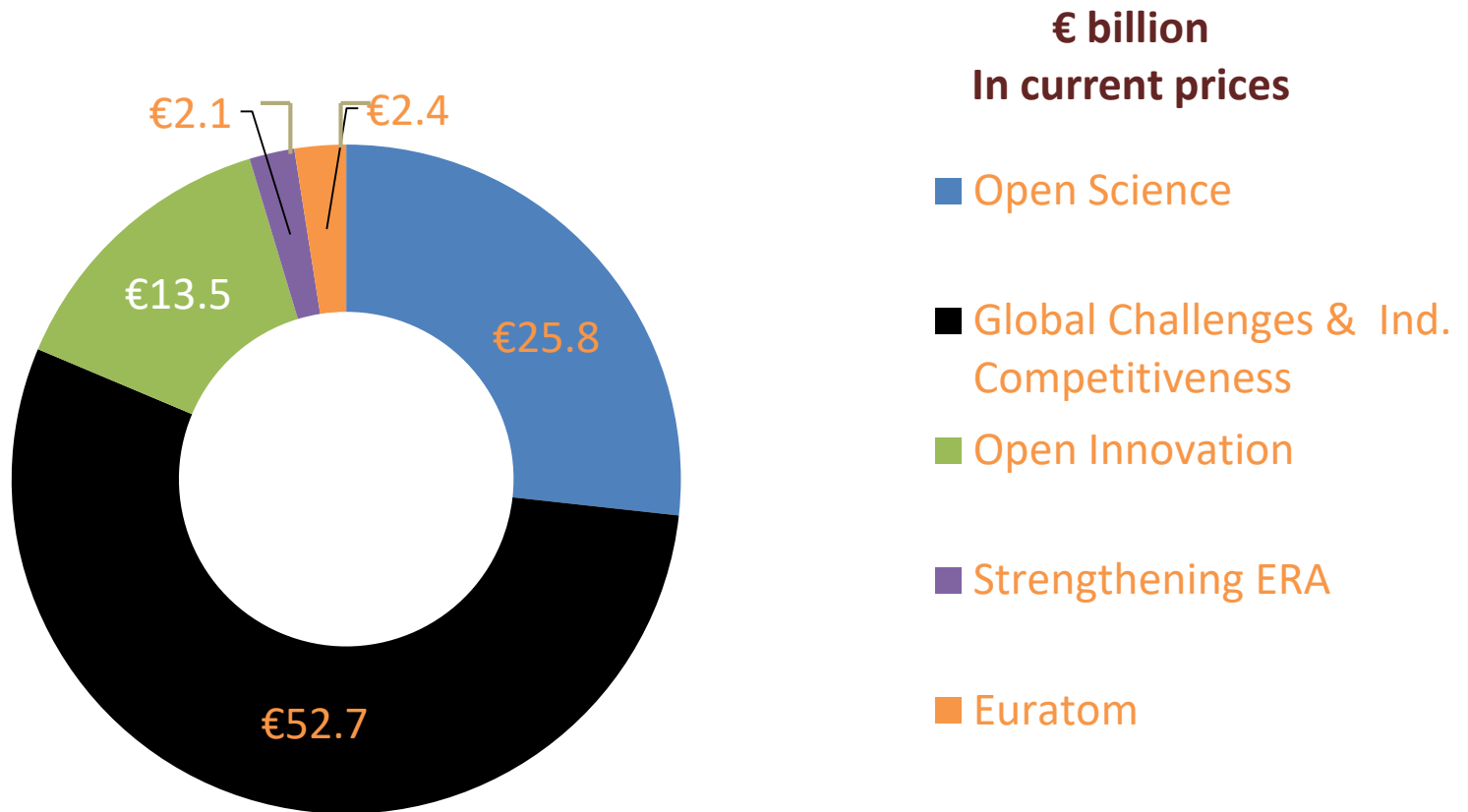
- ❑ SU-DS03-2019-2020: *Digital Security and privacy for citizens and Small and Medium Enterprises and Micro Enterprises*
- ❑ SU-DS04-2018-2020: *Cybersecurity in the Electrical Power and Energy System (EPES): an armour against cyber and privacy attacks and data breaches*

Horizon Europe: evolution not revolution

Specific objectives of the Programme



Budget: €100 billion*



* This envelope includes EUR 3.5 billion allocated under the InvestEU Fund.

Strategic Planning

Triangle
institutionnel

Règlement HE



Décision Programme Spécifique



Comitologie

Planification Stratégique 21-24

Planification Str. 24-27



WP 21-22

WP 23-24

WP 25-27

The road towards the Strategic Plan

- **May 2019** : early dialogue with Member States on a *draft consultation document* to prepare the web based public consultation by igniting a collective discussion
- **Summer 2019** : assessment of the feedbacks received through the web based public consultation
- **24 – 26 September 2019** : R&I days co-design sessions based on a *discussion document* integrating the outcome of the web based public consultation
- **October 2019** : web based feedback on the outcome of the co-design sessions
- **November 2019** : installation of the new European Commission, adoption of the *implementing act establishing the First Strategic Plan* and opinion of the Shadow Programme Committee (strategic configuration)

HORIZON EUROPE OBJECTIVES (based on PGA)

OPERATIONAL OBJECTIVES

Creating high-quality new knowledge

- Strengthen excellent basic and frontier research; reinforcing and spreading excellence, including by fostering wider participation throughout the Union
- Connect and develop research infrastructures and provide transnational access across the ERA

Strengthening human capital in R&I

- Attract talents, train & retain researchers & innovators in the ERA, incl. through mobility

Fostering diffusion of knowledge and Open Science

- Foster open science and ensure visibility to the public & open access to scientific publications and research data, including appropriate exceptions

Addressing EU policy priorities & global challenges through R&I

- Support the implementation of Union policy priorities incl. in particular the Sustainable Development Goals and the Paris Agreement
- Reinforce the link between research, innovation, and where appropriate, education & other policies, including complementarities with national and regional and EU research and innovation policies and activities

Delivering benefits and impact through R&I missions

- Deliver through R&I missions on ambitious goals within a set timeframe

Strengthening the uptake of research and innovation in society

- Improve the relationship and interaction between science and society, incl. the visibility of science in society and science communication, and promote the involvement of citizens & end-users in co-design & co-creation processes
- Promote responsible research and innovation taking into account the precautionary principle

Generating innovation-based growth

- Stimulate R&I activities in SMEs and the creation & scale-up of innovative companies, in particular SMEs, and in exceptional cases small mid-caps

Creating more and better jobs

- Accelerate industrial transformation, including through improved skills for innovation

Leveraging investments in R&I

- Improve access to risk finance, including through synergies with InvestEU, in particular where the market does not provide viable financing

- Increase collaboration links in European R&I and across sectors and disciplines, including SSH
- Strengthen international cooperation
- Strengthen the gender dimension across the programme
- Encourage exploitation of R&I results and actively disseminate & exploit projects results, in particular for leveraging private investments & policy development

SPECIFIC OBJECTIVES

Scientific impact

Develop, promote and advance scientific excellence, support the creation and diffusion of high-quality new fundamental and applied knowledge, skills, technologies and solutions, training and mobility of researchers, attract talent at all levels and contribute to full engagement of Union's talent pool in actions supported under this Programme

Societal impact

Generate knowledge, strengthen the impact of research and innovation in developing, supporting and implementing Union policies and support the access to and uptake of innovative solutions in European industry, notably in SMEs, and society to address global challenges, including climate change and the Sustainable Development Goals

Economic/Technological impact

Foster all forms of innovation, facilitate technological development, demonstration and knowledge and technology transfer, strengthen deployment and exploitation of innovative solutions

Optimise the Programme's delivery for strengthening and increasing the impact and attractiveness of the European Research Area, to foster the excellence-based participations from all Member States, including low R&I performing Member States, in Horizon Europe and to facilitate collaborative links in European research and innovation

Maximise Union added value by focusing on objectives & activities that cannot be effectively realised by Member States acting alone, but in cooperation

HORIZON EUROPE GENERAL OBJECTIVE

Deliver **scientific, technological, economic** and **societal** impact from the Union's investments in research and innovation so as to:

- strengthen the scientific and technological bases of the Union and foster its competitiveness in all Member States, including in its industry, deliver on the Union strategic priorities and contribute to tackling global challenges, including the Sustainable Development Goals by following the principles of the Agenda 2030 and the Paris Agreement, and to strengthen the European Research Area

CO-CREATING AN IMPACT-BASED NARRATIVE

CHALLENGES IDENTIFIED

Different understanding of terminology

Different granularity of orientations

Unclear link between challenges, objectives and R&I orientations

Lack of clarity of intervention logic

Identification of R&I relevant drivers / other drivers

Technical and abstract language

Evidence base not put forward

SUGGESTED ACTION

Common glossary / framework

Cluster based Impact logic

SUGGESTED FRAMEWORK TOWARDS AN IMPACT-BASED NARRATIVE ACROSS CLUSTERS

- 1. Global challenges & their drivers:** What is the rationale/problem driver/evidence we want/need to address? What is the scale of the global challenge we are targeting and the urgency and extent of the problem today and tomorrow for Europe?
- 2. EU policy objective:** In line with the challenges identified, what is the overarching EU policy objective that the Programme aims ultimately to contribute to taking the view of 2030-2050 (related to Sustainable Development Goals and the Paris Agreement)? What is the difference we want to make collectively?
- 3. Expected R&I impacts:** How is EU funded research and innovation expected to contribute to deliver on the EU objectives in the long term, what difference will it make over time through the diffusion of the results towards these objectives – with a specific focus on the targeted societal impact, but also the related scientific and economic/technological impact?
- 4. Identification of key R&I strategic orientations:** How will Horizon Europe make a difference through its investments in its first four years across the clusters? What will come out of the projects we will fund in the 4 first years (classified as 'medium term impact' in the intervention logic)?
- 5. Synergies and framework conditions:** What else is needed beyond Horizon Europe to achieve the desired impacts at national, regional level or EU level, including through other MFF programmes?
- 6. European Partnerships:** What will be the role of Horizon Europe partnerships to contribute to deliver the desired impacts?



La planification stratégique (en résumé)

❑ Objectifs officiels (CE)

- Aligner Horizon Europe avec les priorités de la nouvelle Commission
- Augmenter l'impact d'Horizon Europe
- Présenter l'argumentaire permettant de préserver le budget HE
- Faire travailler les DG ensemble (et arrêter le fonctionnement en silo)
- Affiner le programme spécifique

❑ Objectif officieux (DG RTD)

- Renforcer le contrôle exercé sur la « famille recherche », en particulier via le contrôle du budget des différentes DG

Cluster 3

Targeted impacts

- Improved **disaster risk management** and societal resilience
- Improved management of **EU external borders**
- Better **protection of public spaces**
- Improved security and resilience of **infrastructure and vital societal functions**
- Improved **maritime security**
- **Fighting crime and terrorism** more effectively
- **Cybersecurity** and a secure online environment

Cluster 4 – Digital, Industry and Space

Targeted impacts

- ***Competitive edge and Autonomy of EU Industry***
 - Leadership in Digital, Key Enabling and Space Technologies
 - Autonomy in technologies and raw materials in Strategic Value Chains
 - Enabling and fostering Digital and Technological transformation
 - New services from Space for the EU society and economy
- ***Climate-Neutral, Circular and Clean Industry***
 - By 2030, industrial plants with zero net emissions of greenhouse gases, zero waste and zero polluting emissions
 - By 2050, factories that are climate-neutral, resource-efficient and fully integrated in the circular economy
- ***Major Contribution to Inclusiveness***
 - Skills development – Attractive jobs in industry
 - Societal engagement & values informing developments, e.g. in AI



Evénement avec date fixée pour les appels 2020

- ❑ 4 septembre : Infoday régional TIC et sécurité à Rennes
- ❑ 10 septembre après-midi : Infoday national Intelligence Artificielle pour les forces de l'ordre à Paris (amphi Lumière)
- ❑ 18 octobre après-midi : événement national de réseautage sur les appels de cyber sécurité à Paris (amphi Stourdzé)

- ❑ 5 novembre après-midi : 2 tables rondes de « practitioners » sur les appels FCT 2020 à Helsinki (avant SRE)
- ❑ 18 novembre : infoday régional à Lyon
- ❑ 20 novembre : 4 tables rondes de « practitioners » sur les appels Intelligence Artificielle pour les forces de sécurité (Paris Nord)
- ❑ 8 janvier : Infoday national de sécurité à *Paris (amphi Poincaré)*



★ Événement avec date à fixer pour les appels 2020

- Demi-journée nationale de réseautage sur les appels sécurité avec SHS prépondérantes à Paris
- Demi-journée nationale de réseautage sur les appels protection des infrastructures critiques à Paris

- Infoday régional à Toulouse ?
- Infodays BES et DRS ?

- SMI2G 2020 à Bruxelles (fin janvier / début février)
- Infoday & brokerage event de la Commission et SEREN4 à Bruxelles (mars / avril)