



European
Commission

The 2020 Security Research Calls for Proposals (and their policy context)

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Key challenges in security innovation

- *Fast-changing tech landscape vs. reactivity of EU Innovation*
- *Urgent need to respond to crises vs. longer term planning*
- *Alignment of MS and EU capability development strategies*
- *Dialogue between all stakeholders*
- *Fragmented (institutional) market*



EU
Agenda
on
Security

"Research and innovation is essential if the EU is to keep up-to-date with evolving security needs"

17th
Security
Union
Progress
Report

"EU Security Research is one of the building blocks of the Security Union"

2015

2016

2017



2018

2019

Mission
Letter of
Csr.
J. King

"Ensuring that EU-financed security research targets the needs of security practitioners and develops solutions to forthcoming security challenges [...]."



	Number of projects	Number of participants	Total EU funding (EUR)
	320	1918	1.334.274.292
	335	1838	1.040.616.632
Total	655	3756	2.374.890.924

- *Knowledge and Value creation is inherent to Research and Innovation*
- *What is the impact on our ultimate objective?*

*pour
memoire...*

The protection of citizens, society and economy as well as Europe's assets, infrastructures and services, its prosperity, political stability and well-being

- *Our biggest challenge: MARKET UPTAKE*
 - *Do technologies and knowledge get to the market?*
 - *Do products get to the market?*
- *Hard evidence required!!*

Research is not a stand-alone process

Research is part of a wider process

- Research is only part of the journey
- Research is one piece of the bigger security puzzle
- We need to articulate connections among pieces
- This is not only in our hands
- ... but we can do our part!

CBA (Capability Based Approach) as:

- *a **systematic** and **structured** long term planning*
- *a technology development framework based on the **anticipation** of long-term needs, while **adapting** to the evolving threats*
- *a process that sustains on*
 - identification of (future) **opportunities** and **risks**,
 - assessment of the existing **resources**,
 - identification of **gaps** and of possible **options**,
 - planning of different actions that lead to the envisaged solution

Role of Foresight

- *Foresight needed to reveal future challenges, **technological trends**, R&I **needs**, potential **applications & benefits**;*
- ***Anticipation** of the future (threats and opportunities) in order to **drive innovation** to maximise its **impact**:*

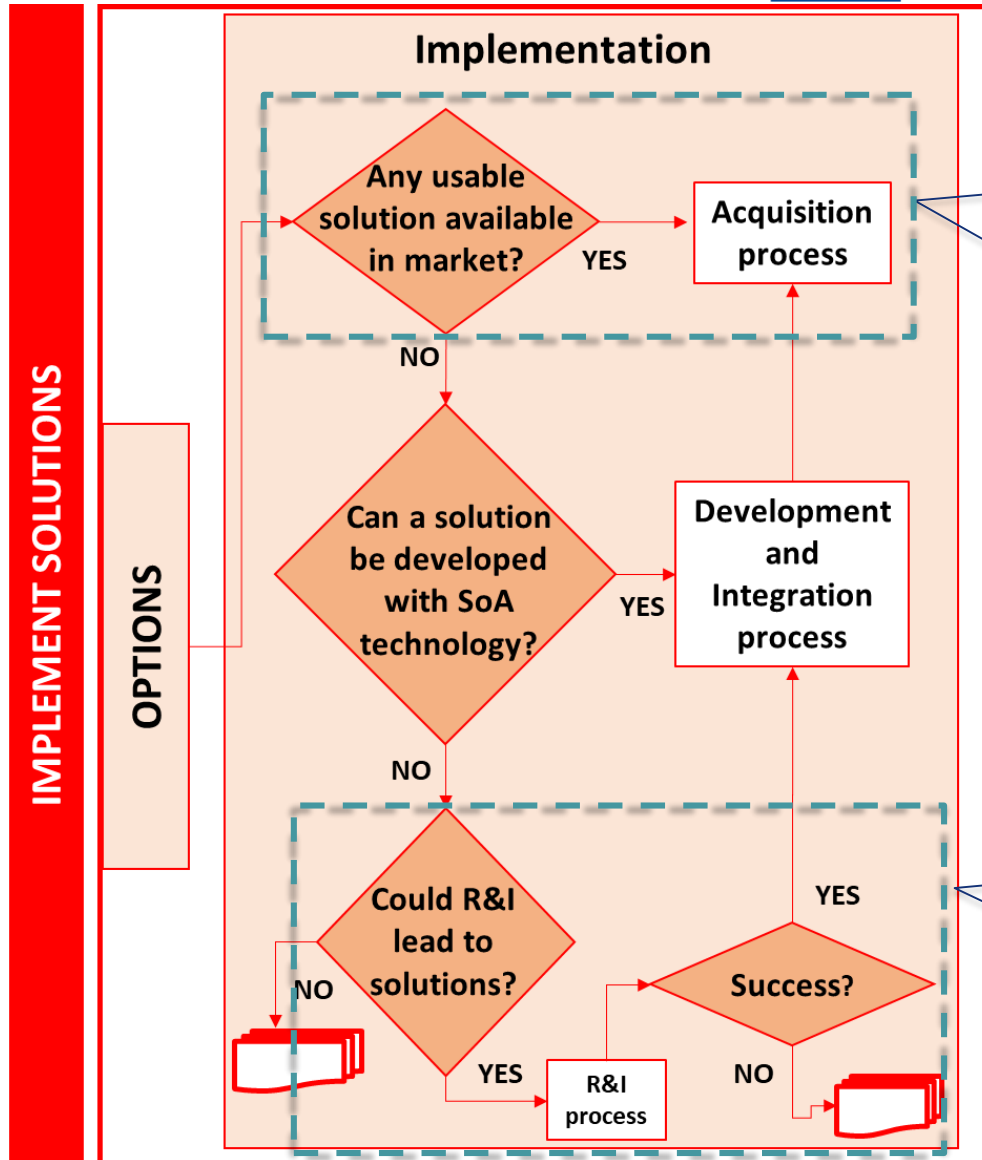
Improving synergies between funds

- *Funding instruments available by EC, in coordination with the investments made at MS level, are the **main capacity building tools** for LE.*
- *synergies between funds as a **catalyst** for the development of innovative solutions that address current and future capability gaps*
- *Goal: to enable a **seamless transition** of innovative technologies from the **laboratory** to the field **deployment**.*
- ***Role of MS** in final acquisition*

A more competitive EU security technology and industrial base

Without the committed involvement of EU industry, innovative solutions would never go operational

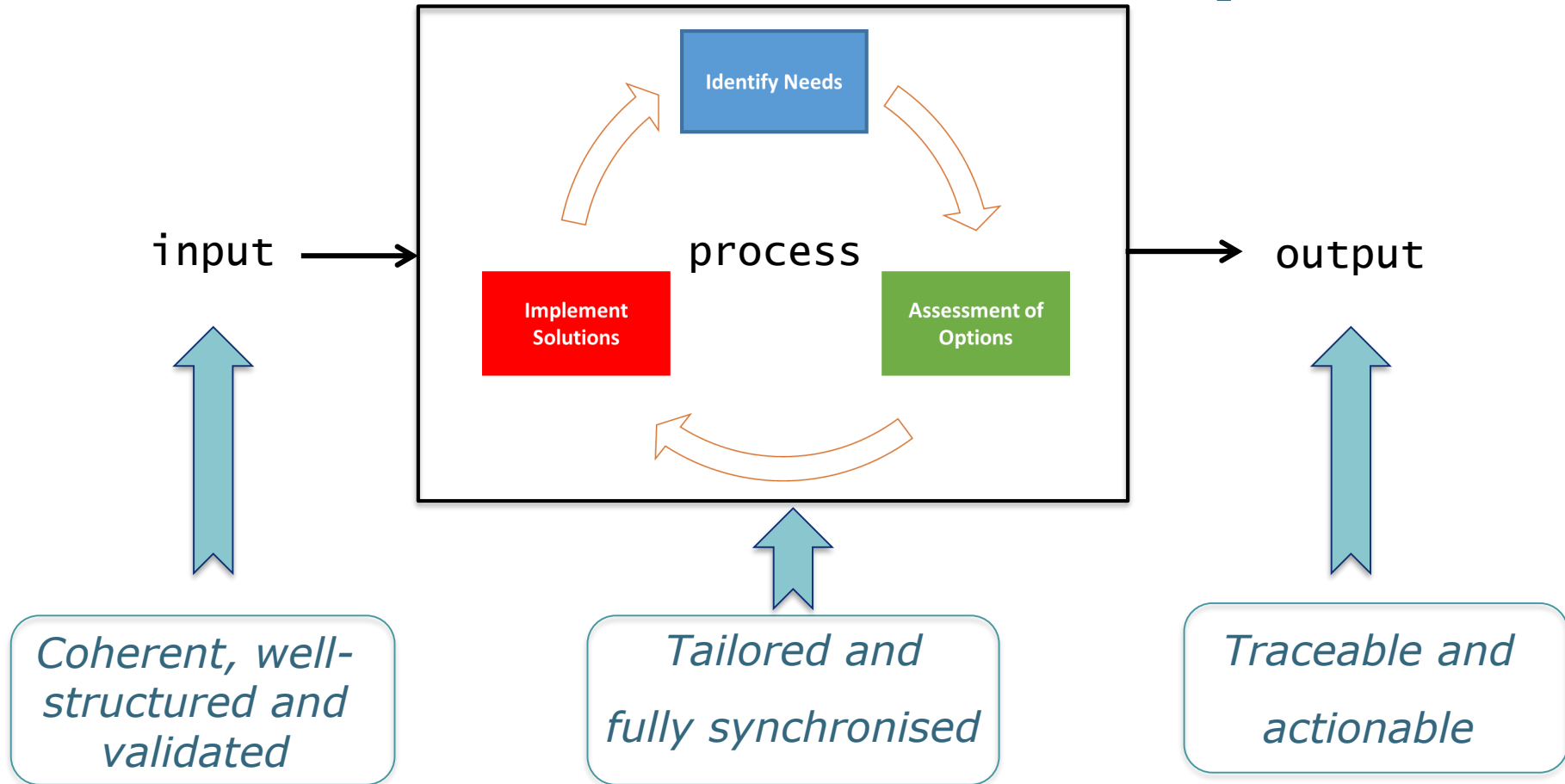
- the dialogue between the **supply** and the **demand** side of the security market is key to drive innovation
- A more competitive EU Industrial base can better guarantee security of supply and affordability of state of the art solutions.
- Technological sovereignty



Our goal:
Bring innovative technologies to the field of operations

Our tool:
Research and Innovation

A « well-oiled » research system





- *How to ensure identification of relevant capability gaps?*
- *How to target R&I towards identified needs?*
- *How to ensure a streamlined cooperation between the various stakeholders?*
- *How to ensure seamless transition between funding instruments along the capability development path?*
- *How to attract private investment*
- *Role of National authorities?*

Main facts and Figures

Total number of topics 21

Total Budget 275 MEUR

Call Opening

12 March 2020



Info Day

12-13 March 2020



Call Closure

27 August 2020



Grant Agreement Signature

End of April 2021





European
Commission

CALL – INFRA

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

1 Topic
20.7 MEUR

Call – AI

Artificial Intelligence and security:
providing a balanced assessment of
opportunities and challenges for Law
Enforcement in Europe

3 Topics
20 MEUR

Call- SEC

Security

Disaster-Resilient Societies
Fight against Crime and Terrorism
Border and External Security
General Matters

13 Topics
165.5 MEUR

Call -DS

Digital Security

4 Topics
68.8 MEUR

Call - INFRA

The reasoning behind the INFRA call

- **Threats against** infrastructure and disruptions in their operation
- Reducing the **vulnerabilities** of 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
- **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**

Call - INFRA

Policy context

- Directive 2008/114/EC – Identification and designation of EU CI
- The 2017 Comprehensive Assessment of EU Security Policy (SWD(2017) 278)
- European Programme for CI Protection (COM (2006) 786, COM(2013) 318)
- EU Cybersecurity Act COM/2017/0477
- NIS Directive (EU) 2016/1148 concerning measures for a high common level of security of network and information systems across the Union

Call - INFRA

Policy context

Security Union 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...)

The 18th Security Union progress report COM(2019) 14

- Vulnerabilities of Digital Infrastructures

The 19th Security Union progress report COM(2019) 353

SU-INFRA01-2018-2019-2020 (IA)

REMINDER

When selecting for funding the proposals submitted, **the Commission will take due account of similar projects financed in the previous years since 2016**, with a view to cover the largest possible spectrum of installations

Each year, **a list of infrastructures already covered** by the Call will be published on the Funding and Tenders Portal



CALL – AI

Artificial Intelligence and security: providing a balanced assessment of opportunities and challenges for Law Enforcement in Europe

Topic	Funding scheme	Budget (MEUR)	Indicative budget per proposal (MEUR)	TRL	Gender	Intl Coop	SSH
SU-AI01-2020	CSA	1.50	1.5	-	Y	N	Y
SU-AI02-2020	IA	17.00	17	7-8	Y	N	Y
SU-AI03-2020	CSA	1.50	1.5	-	Y	N	Y

CALL – AI

Policy context

In order to **improve the competitiveness of Europe in AI**, it is necessary to map the existing research excellence and to boost and facilitate technology uptake. It remains indispensable to **safeguard the strategic autonomy of the EU** when developing security systems using AI technology by finding ways of embracing the opportunities offered by AI.

Commission Communications:

- Artificial Intelligence for Europe COM(2018) 237 final
- Coordinated Plan on Artificial Intelligence COM(2018) 795 final
- Cybersecurity Joint Communication JOIN(2017) 450

SU-AI01-2020 (CSA)

Title: Developing a research roadmap regarding Artificial Intelligence in support of Law Enforcement

Scope:

- Proposals under this topic should provide an **EU AI roadmap for LEAs**, meeting their specific operational and cooperation needs

Expected impact:

- Longer term perspective, identification of key areas in which AI would be beneficial for LEAs, meeting their operational and collaborative needs, and of key areas in which it could pose a threat to security;
- Roadmap for Law Enforcement to benefit as much as possible from the AI based technologies, systems, solutions, including their protection;
- Increased awareness regarding the state of the art and trends in AI-based criminal activities (short-, mid- and long-term)

SU-AI02-2020 (IA)

Proposals should:

- **Develop AI tools** and solutions in support of LEAs daily work.
- Include combined hardware and software solutions such as robotics or **Natural Language Processing**, in support of LEAs.
- **Develop cybersecurity tools** and solutions for the protection of AI based technologies in use or to be used by LEAs.
- **Exploit AI technologies** for cybersecurity operation purposes of Law Enforcement infrastructures
- **Tackle** the fundamental **dual nature of AI tools**, techniques and systems, i.e.: resilience against adversarial AI, and prevention and protection against malicious use of AI for criminal activities or terrorism
- From a multidisciplinary point of view, **identify, assess and articulate the whole set of actions** that should be carried out in a coherent (legal) framework

SU-AI03-2020 (CSA)

Title: Human Factors, And Ethical, Societal, Legal And Organisational Aspects Of Using Artificial Intelligence In Support Of Law Enforcement

Scope:

- Provide an exhaustive analysis of human, social and organisational aspects related to the use of AI tools
- lead to solutions developed in compliance with European societal values, fundamental rights and applicable legislation

Expected impact:

- Raised awareness of civil society about benefits of AI technologies in the security domain
- European common approach for assessing risks/threats involved by using AI in the security domain
- Advances towards the implementation of the AI tools and technologies in support of Law Enforcement

Call- Sec/BES

The reasoning behind the BES call

Development of technologies, capabilities and solutions to:

- Improve EU border security in terms of:

Flow of people: Research will support the exploitation of the potential given by the **European Border Surveillance System** (EUROSUR - Regulation No 1052/2013) and promote an enhanced use of new technology for border checks in relation to the recent legislative initiatives (DG HOME)

Flow of goods: Customs play an important role in the fight against crime and terrorism by checking for illegal trafficking and trade. Research will address, in the context of the EU's customs policy, supply chain security trying to strike the right balance with trade facilitation (DG TAXUD)

- Contribute to capability development of the European Border and Coast Guard
- Support the EU External Security Policies in civilian tasks (EEAS)

.. But also understanding the phenomena with impact on border and external security. Social sciences and humanities involved.

The Policy landscape

EU Agenda on Security

Organised Crime & Human Trafficking

We help EU States in taking consistent action to effectively prevent and counter the many facets of modern organised crime.



[THB Directive](#)

[Expl. of Children Directive](#)

[Serious and Organised Crime](#)

EU Agenda on Migration

Schengen, Borders & Visas

The EU's common external border calls for EU States' cooperation on border control and visa policy to ensure freedom and security within Europe.



[Smart Borders](#)

[Interoperability of EU Information systems](#)

[European Border And Coast Guard](#)

[Document fraud](#)

Irregular Migration & Return

In 2014, 276 113 migrants entered the EU irregularly via land, air and sea routes. Most migrants have recourse to criminal networks of smugglers.



[EUROSUR](#)

[Migrant Smugg.](#)

Taxation and Customs Union

[EU Customs Strategy](#)

[Union Customs Code](#)

Union External Security Policies in Civilian Tasks

[CSDP](#)

[EU Maritime Security Action Plan](#)

Call- Sec/DRS

Advancing innovation in the society to reduce the loss of human life and to reduce environmental, economic and material damage from natural and man-made disasters by

- ✓ Funding the most **promising tools, methods, guidelines**
- ✓ Ensuring that research programming takes into account **practitioners' needs**
- ✓ Supporting the **competitiveness of EU industry and SMEs** by enhancing the market for research results
- ✓ Ensuring that the research results are available to policy makers, thereby **facilitating the policy-making process**
- ✓ Studying **Human Factor and societal aspects** to raise citizen awareness

DG HOME Secure Societies

EU Research - Horizon 2020 Security

Joint Investment Programme / EFC

EDA Defence

Crisis and disaster Management

DG HOME Internal Security CBRN Action Plan, CBRN-E risks + European Agenda on Security

DG ECHO Civil Protection EU Civil Protection Mechanism

DG ENER Energy Tran-European Energy Infrastructure Safety of nuclear installations

DG MOVE Transport Tran-European Transport Network

Environmental threats

DG ENV Environment Environment Action Programme (Seveso III Directive)

DG TAXUD Customs EU Custom policy for supply chain security and CBRN-E

DG TRADE Trade Transit of dual use items

Climate threats

DG CLIMA Climate Action EU Climate Adaptation Strategy

DG SANCO Health Serious cross-border threats to health

International aspects

DG DEVCO International Coop

Intergovernmental Cooperation

EEAS Ext Security Nuclear non-proliferation treaty
Chemical Weapons Convention
Biological Weapons Convention

NATO UN Bodies

Call- Sec/FCT

Policy Context

The 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:

(...) "**Terrorism, organised crime and cybercrime** are the three core priorities which are highlighted in this Agenda for immediate action. They are clearly interlinked and cross-border threats, and their multi-faceted and international dimension shows the need for an effective and coordinated response at EU level". (...)

(...) "The response to cybercrime (e.g. phishing) must involve the entire chain: from Europol's European Cybercrime Centre, Computer Emergency Response Teams in the Member States concerned by the attack, to internet service providers that can warn end-users and provide technical protection. In short, cybercrime demands a new approach to law enforcement in the digital age." (...)

CALL- SECURITY

Sub-Call Title: General Matters - GM

Topic	Funding scheme	Budget (MEUR)	Indicative budget per proposal (MEUR)	TRL	Gender	Intl Coop	SSH
SU-GM01-2018-2019-2020 <i>2 Sub-Topics</i>	CSA	7.00	3.5	-	N	N	N
SU-GM02-2018-2020	PCP	24.00	12	8	N	N	N

SU-GM01-2018-2019-2020

Pan-European networks of practitioners and other actors in the field of security

a. [2019-2020] Practitioners (end-users) in the same discipline and from across Europe are invited to get together: **1)** to monitor research and innovation projects with a view to recommending the uptake or the industrialisation of results, **2)** to express common requirements as regards innovations that could fill capability and other gaps and improve their future performance, and **3)** to indicate priorities as regards areas requiring more standardisation.

- Areas of specialisation (discipline):
- Type of action: Coordination and Support Action
- Estimated EU contribution: EUR 3,5M
- Recommended duration: 5 years

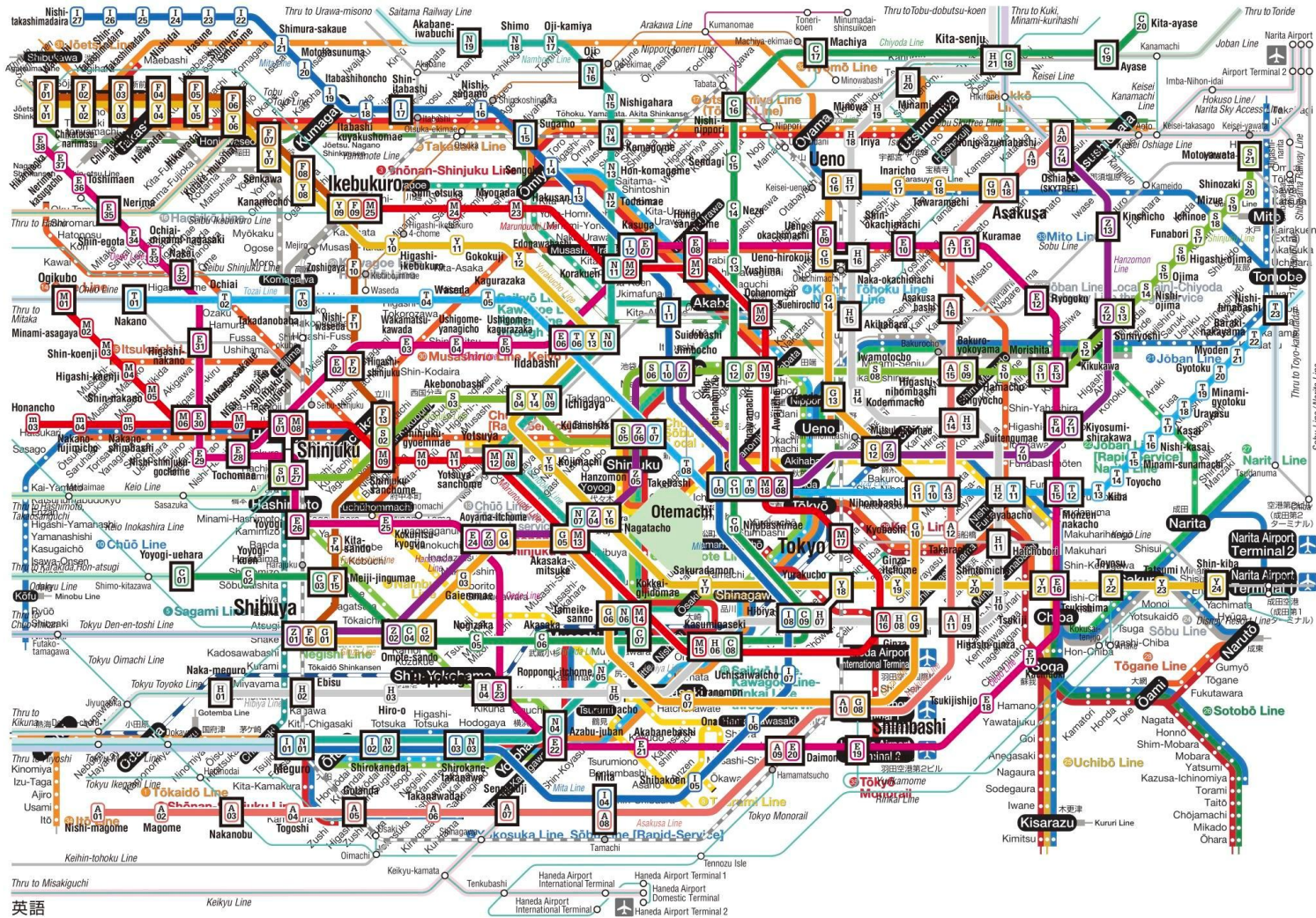
Ongoing Networks of Practitioners

Acronym	Name	CORDIS	Project website
eNotice	European Network of CBRNE Training Centres	Link	https://www.h2020-enotice.eu/
Fire-IN	Fire and rescue Innovation Network	Link	https://fire-in.eu/
DARENET	DAnube river region Resillience Exchange network	Link	www.darenetproject.eu/
ILEANET	Innovation by Law Enforcement Agencies networking	Link	https://www.ileanet.eu/
I-LEAD	Innovation - Law Enforcement Agencies Dialogue	Link	https://i-lead.eu/
ARCSAR	Arctic and North Atlantic Security and Emergency Preparedness Network	Link	https://arcsar.eu/
EXERTER	Security of Explosives pan-European Specialists Network	Link	www.exerter-h2020.eu
MEDEA	Mediterranean practitioners' network capacity building for effective response to emerging security challenges	Link	https://www.medeaproject.eu/
NO-FEAR	Network Of practitioners For Emergency medical systems and cRitical care	Link	http://no-fearproject.eu/
PEN-CP	Pan-European Network of Customs Practitioners	Link	https://www.pen-cp.net/
INCLUDING	Innovative Cluster for Radiological and Nuclear Emergencies	-	-
iProcureNet	European Procurer Networking for security research services	Link	https://www.iprocurenet.eu/



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Anything unclear?



英語

Keikyū Line

Haneda Airport International Terminal
Haneda Airport
Domestic Terminal
Haneda Airport Terminal 2