



# **INTERCEPT** Open Market Consultation Webinar in English

12 May 2025



# Agenda

Hours	Topic	Presenter
10:00 – 10:15	<b>Introduction to the INTERCEPT project</b>	Nina Czyżewska, PPHS
10:15 – 10:30	<b>Introduction to Pre-Commercial Procurement</b>	Azra Atalan, CORVERS
10:30 – 10:45	<b>INTERCEPT Procurement Strategy</b>	Panagiota Benekou, KEMEA
10:45 – 11:00	<b>Presentation of the use cases and associated needs</b>	Youssef Bouali, DIGINNOV
11:00 – 11:15	<b>Presentation of the state of the art</b>	Youssef Bouali, DIGINNOV
11:15 – 11:30	<b>OMC objectives and organisation of the activities</b>	Nina Czyżewska, PPHS
11:30 – 11:45	<b>Open discussion</b>	All participants
11:45 – 11:50	<b>Conclusions</b>	Nina Czyżewska, PPHS





# Introduction to the INTERCEPT project

Nina Czyżewska, PPHS



# Scope of INTERCEPT

The main aim of INTERCEPT is **to enhance the capabilities of European law enforcement authorities** and provide them with effective means to **safely stop vehicles remotely**.

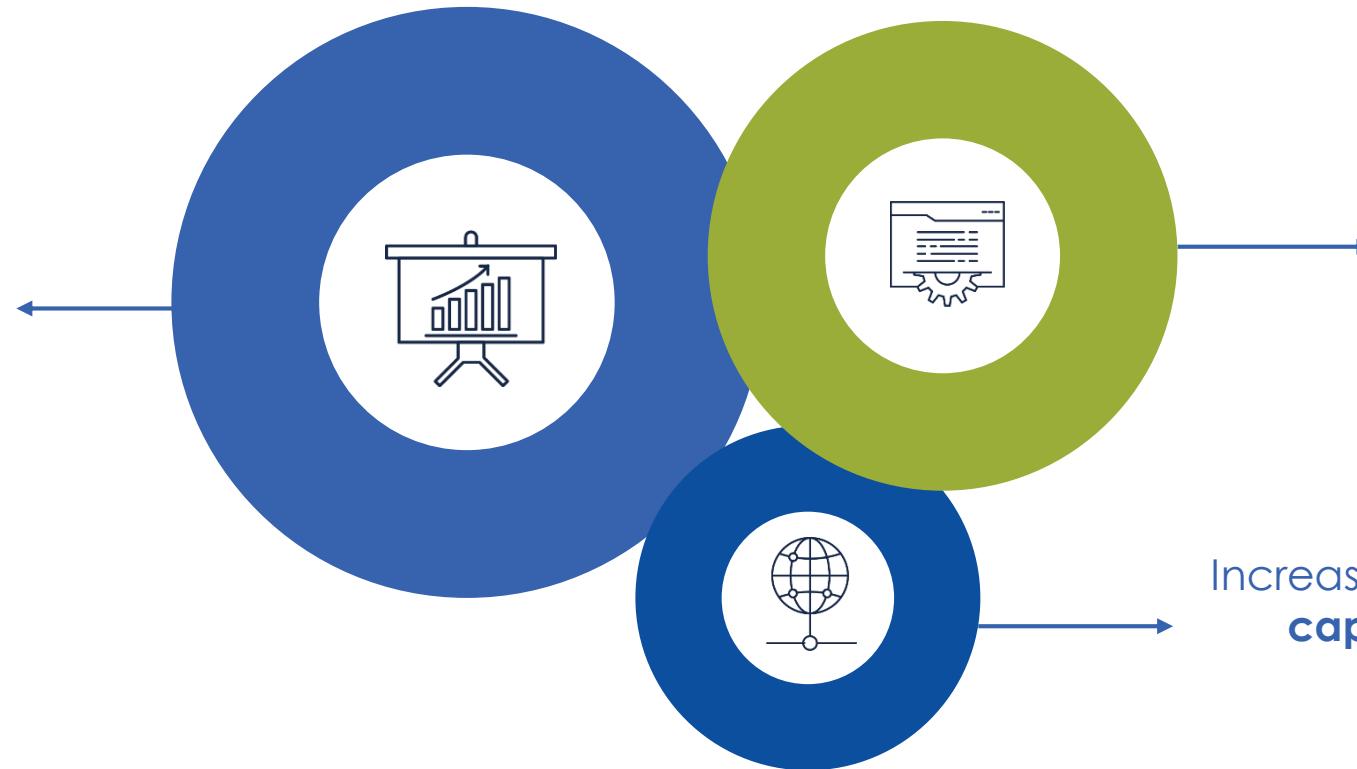
INTERCEPT will identify technology gaps to be addressed to reduce existing vulnerabilities and improve security efficiency. Based on this, a security use case and related challenges will be defined. These will form the foundation for conducting a Pre-Commercial Procurement (PCP).



# Our Goals



Consolidating demand for innovative security technologies



**Better informed decision-making** related to investment in innovative security technologies

Increasing the **innovation capacity** of EU public procurers



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# Who Can Benefit



Law  
Enforcement  
Agencies



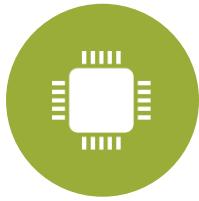
Local  
Authorities



Public  
Procurers &  
Contracting  
Authorities



Policy  
Makers &  
Legislative  
Authorities



Industry and  
Technology  
Providers



Car  
Companies



Research  
Organisations



Citizens and  
Society





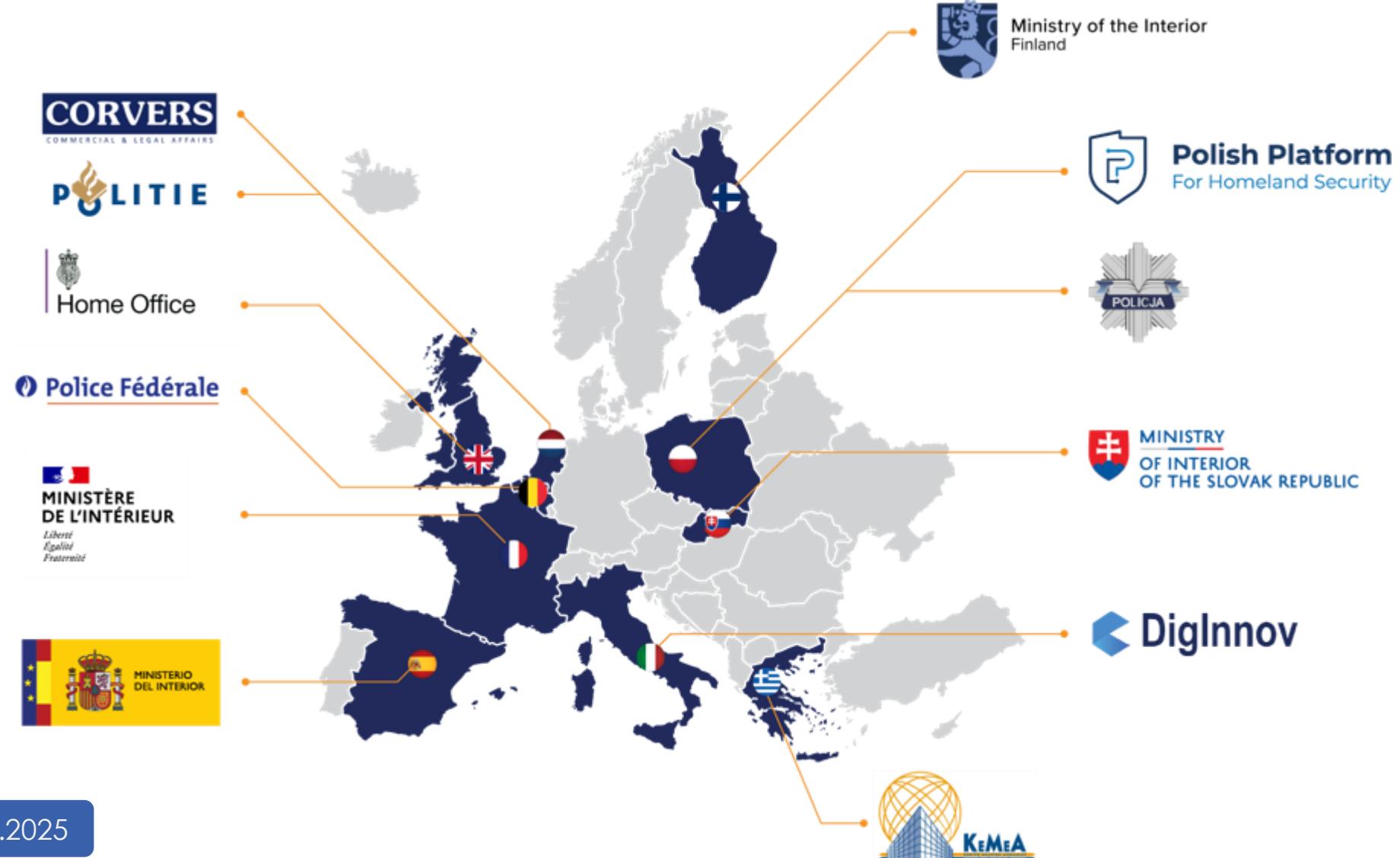
# Our Team

11 Partners  
1 Associated Partner  
10 Countries



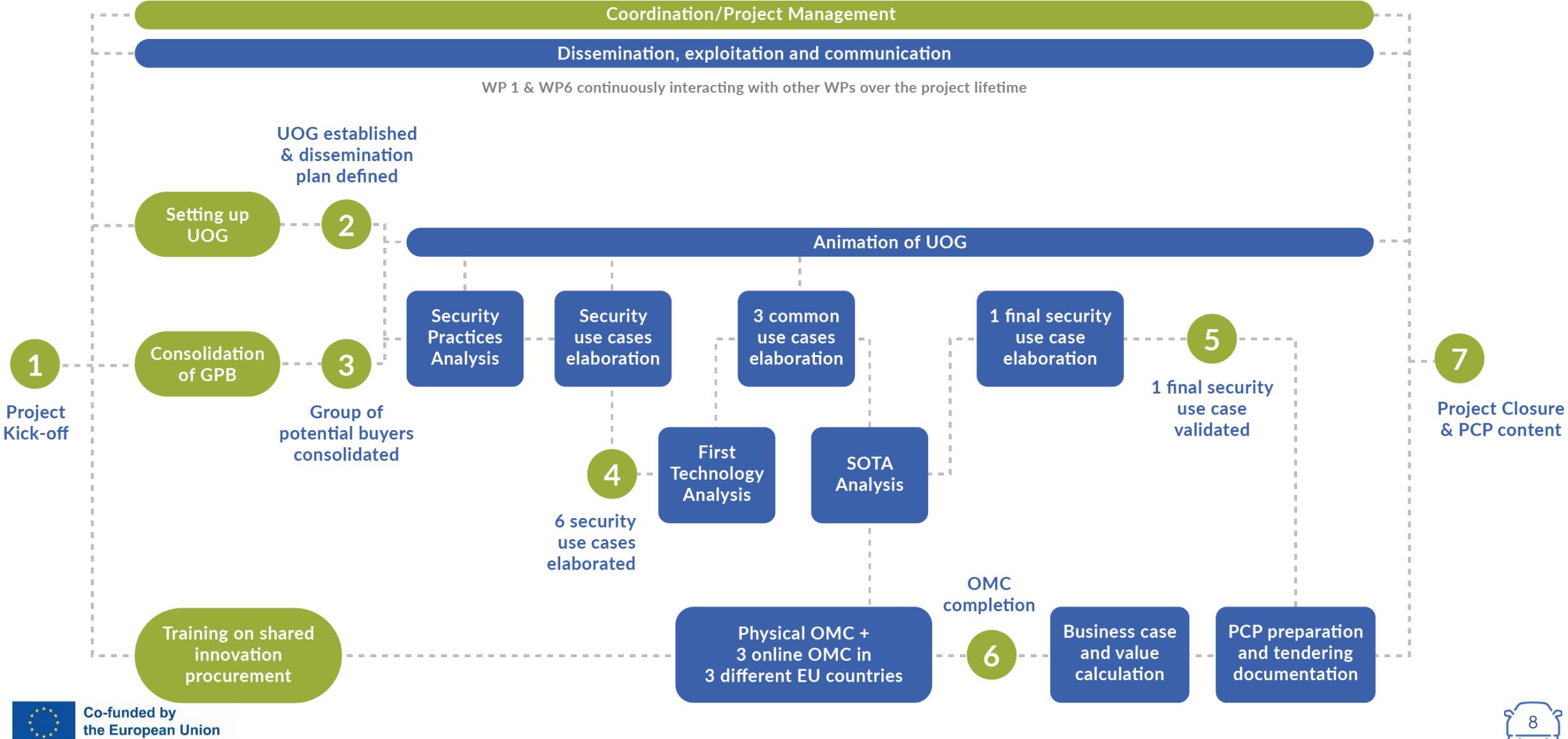
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Time Frame: 1.09.2024 – 31.08.2025





# How It Works



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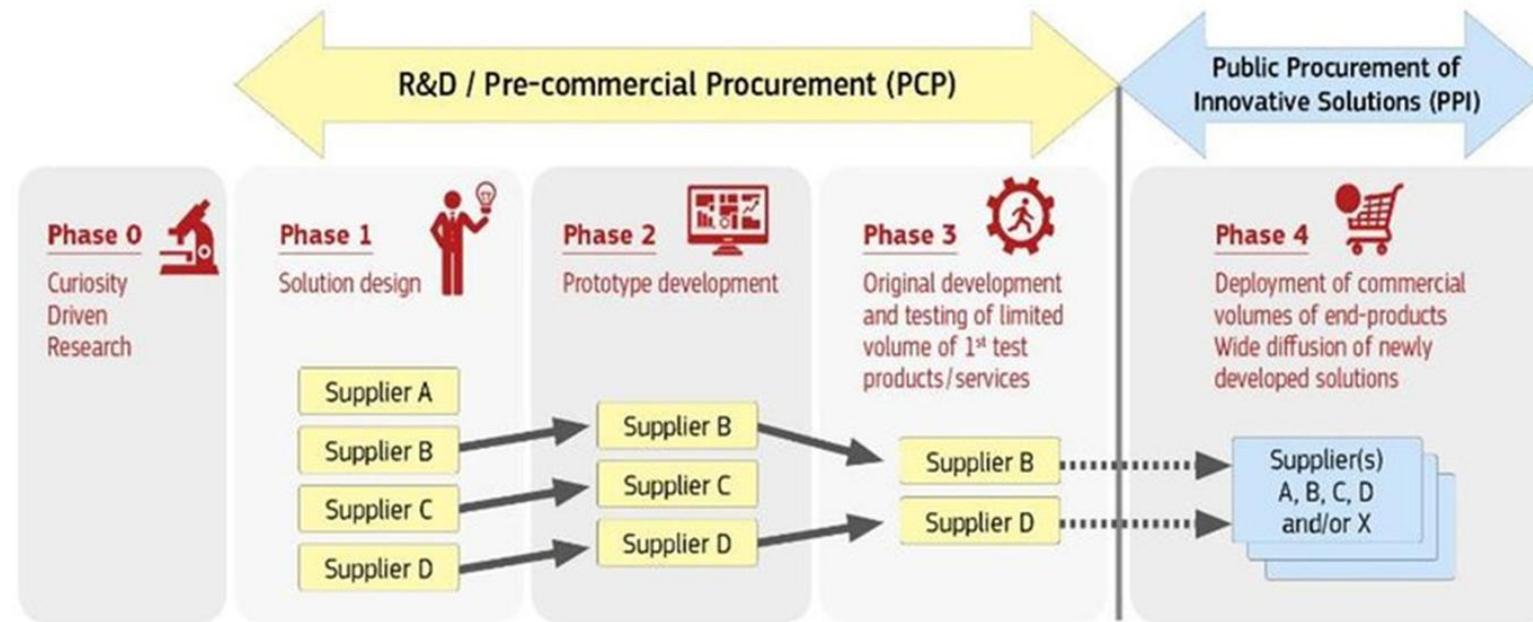
# Introduction to Pre-Commercial Procurement

Azra Atalan, CORVERS



# Innovation Procurement

Innovation Procurement happens when **public buyers** acquire the **development or deployment of pioneering innovative solutions** to address specific **mid-to-long-term public sector needs**.



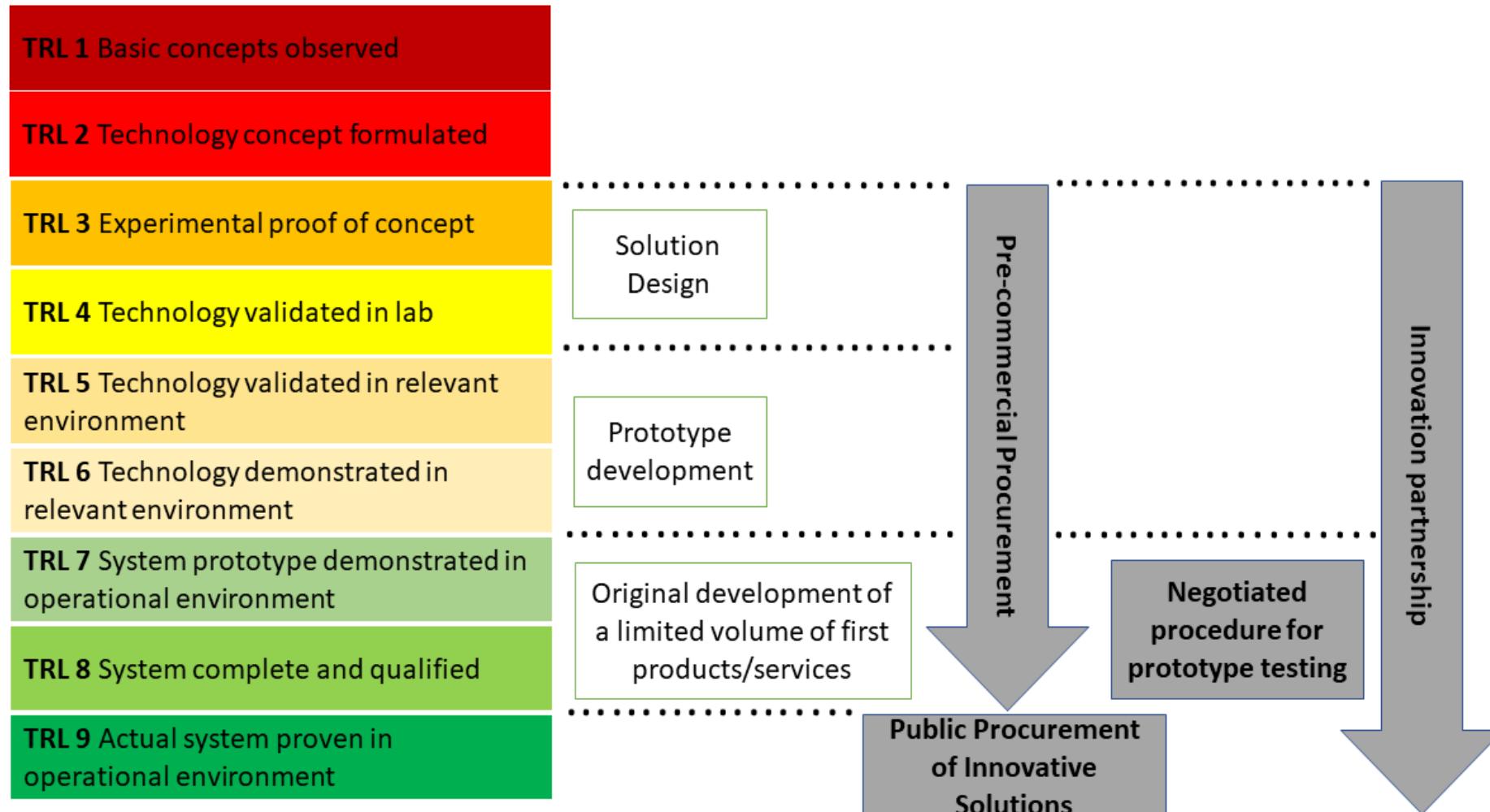
Source: European Commission, 2016

- Innovation procurement is a tool for addressing pressing societal challenges across various sectors: Health care, climate change, energy efficiency, transport, security etc.





# Technology Readiness Level (TRL)





# What is PCP?

The **Pre-Commercial Procurement (PCP)** is an approach that allows public procurers to buy **research and development services** from several competing technology providers in parallel, to compare alternative solution approaches, and to identify solutions that offer the best value-for-money and address their specific needs.

## Good to Know

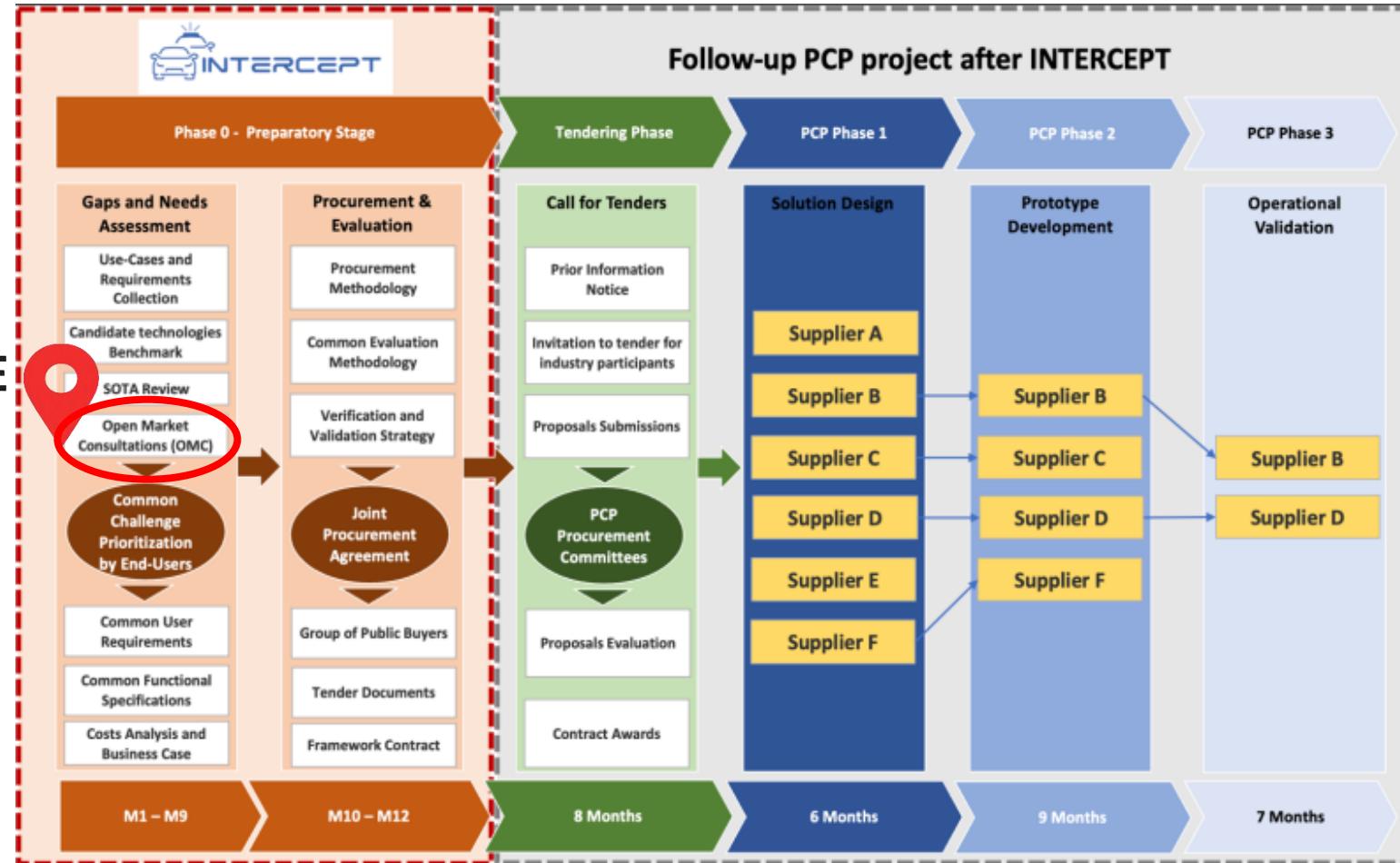
PCP challenges innovative players on the market, via an open, transparent and competitive process. The goal is to **develop new technological solutions** that meet specific needs.



# INTERCEPT Innovation Procurement Phases



WE ARE  
HERE



For more information regarding INTERCEPT methodology, please visit the following insight: [INTERCEPT Insight #1 - Innovating Through Public Procurement: Scope, Rationale, and Methodology](#)



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# PCP Phases



## Phase 0 Preparatory Stage

Gaps & Needs  
Assessment

Procurement &  
Evaluation

## Tendering Phase

Call for  
Tenders

## PCP Phase 1

Solution  
Design  
6 Competing Suppliers

## PCP Phase 2

Prototype  
Development  
4 Competing Suppliers

## PCP Phase 3

Operational  
Validation  
2 Competing Suppliers



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# Supporting Your Work

	End Users	Industry Players
 BENEFITS	High quality products at a low price	Development of innovations and your company
 INVOLVEMENT	User Observatory and Public Buyers Groups	Open Market Consultation, call for Interest & matchmaking
 CONTRIBUTION	Support of the project and a future procurement	Responding to the INTERCEPT security challenges
 EXPERTISE	Related to safely stopping vehicles remotely	Developing innovative security solutions
 SUPPORT	UOG - participation in meetings covered PBG - possibility of joining a PCP project	Industry partners - a possibility of becoming a contractor in a PCP project





# Steps tendering phase in PCP

## **1. Publication and transparency**

- Publish a Contract Notice
  - ✓ Start of the tendering process
  - ✓ Create awareness about the PCP
  - ✓ Provide enough time to the tenderers to prepare and submit their tender
  - ✓ Use standard template of eNotices
- Publish a Call for Tenders and related tender documents
- Provide clarifications to potential tenderers

## **2. Submission of tenders, evaluation and contract award**

- Open tenders received within the deadline
- Evaluate the tenderer (exclusion/selection criteria)
- Evaluate the proposal (award criteria)
- Award of the Framework Agreement + Contract for Phase 1
- Notify the tenderers and publish a Contract Award Notice

## **3. Execution of the contract**

- Manage and monitor the execution
- Evaluation of the performance at the end of each phase (satisfactory vs successful)
- Issue payments
- Call off to select the contractors for next phase
- Deal with contract modification, penalties and/or termination of the contract
- Closure of the contract





# INTERCEPT Procurement Strategy

Panagiota Benekou, KEMEA

# Procurement Strategy

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the detailed definition of the major aspects of the R&D procurement based on the results of the OMC



the tendering process (including IPRs' issues)



the evaluation strategy for the solutions developed during the PCP phases of the PCP procurement



the PCP requirements



the legal framework



the PCP phased approach, along with the procurement process and approach, as well as the evaluation and contracting approach.



# PCP Joint Procurement Procedure



The Joint Procurement Procedure shall not include any state aid. The Joint Procurement Procedure shall be set up in accordance with the provisions of the 2014 state aid framework for R&D&I (C (2014) 3282).



The Joint Procurement Procedure shall be designed in accordance with the provisions of the EC governing PCP, such as the Communication (COM (2007)799): Specific requirements for innovation procurement (PCP/ PPI) supported by Horizon Europe grants.



The Joint Procurement Procedure will be governed, by the LP legal framework [Greek Law n. 4412/2016 and n. 4782/2021]



Detailed contract and PCP conditions shall be made known to all potential interested PCP tenderers upfront to ensure equal opportunities to participate in the Joint Procurement Procedure via usual communication channels for public procurement.



The Joint Procurement Procedure shall be designed, and the tenders shall be evaluated according to the rules as set out in the Joint Procurement Agreement, in such a way that it complies with EU treaty principles and principles derived thereof, for example the principles of non-discriminatory, transparency and equal treatment.





# PCP Phased approach

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- The INTERCEPT PCP shall follow the phased PCP model described by the European Commission in the Communication 'Pre-commercial Procurement: Driving innovation to ensure sustainable high-quality public services in Europe' (COM (2007)799), aiming at conducting R&D services up to the development of a limited volume of first products.
- The INTERCEPT PCP will be divided into three Phases. Each Phase will result in competition between the Tenderers in such a way that the number of Tenderers shall decrease from one Phase to the next one to ensure the selection of those that best address the technical challenge on which this PCP is based.
  - PCP PHASE 1 – Solution Design
  - PCP PHASE 2 – Prototype Implementation
  - PCP PHASE 3 – Validation and demonstration of the solutions





# Procurement procedure

Open procedure: In an open procedure anyone may submit a full tender. This procedure is used most frequently.

Restricted procedure: Anyone may ask to participate in a restricted procedure, but only those who are pre-selected may submit tenders.

Competitive negotiated procedure: In competitive negotiated procedures anyone may ask to participate, but only those who are pre-selected will be invited to submit initial tenders and to negotiate.

Competitive dialogue: This procedure can be used by a contracting authority with the aim of proposing a method of addressing a need defined by the contracting authority.



# The procurement process- The preparation stage



PCP public procurers, for the preparation stage (i) will agree in writing on their internal procedures for carrying out the joint PCP procurement;



(ii) make an 'open market consultation', which was, *inter alia*, published — two months in advance — in the Official Journal of the European Union (via a 'prior information notice (PIN)', drawn up in English (Annex II);



and (iii) prepare 'common tender specifications' .

# The procurement process- The procurement/tendering stage



A contract notice which will:

-  **Be published by the lead procurer in the Official Journal of the European Union (in English).**
-  **Specify that the procurement concerns a pre-commercial procurement that is exempted from Directives 2004/18/EC (or 2014/24/EU) and 2004/17/EC (or 2014/25/EU).**
-  **Specify a time-limit for receipt of tenders of at least two months.**
-  **Allow for the submission of tenders in English.**
-  **Be promoted and advertised widely.**
-  **Indicate how potential tenderers can obtain the 'call for tenders'.**





# Procurement Methodology

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- The Call for Tenders takes into consideration **the findings of the open market consultation** and describes the **common challenge, using functional and performance based specifications**, being in line with the requirements defined in project.
- The Call for Tender describes also the **process for the evaluation and selection of the tenderers for the first PCP Phase, the intermediate evaluations for each following PCP Phase, the minimum requirements** that subcontractors must comply with during the PCP and the arrangements for **intellectual property rights, confidentiality, publicity, rules on applicable law and dispute settlement**.
- Before the deadline to deliver the tenders, Public Buyers will be engaged in supporting the potential contractors, namely by **organising info webinars** and **answering questions related to the call for tender**.





# Procurement Methodology

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Evaluation  
approach

Contracting  
approach





Presentation of the use  
cases and associated  
needs

Youssef Bouali, DIGINNOV

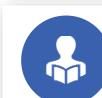
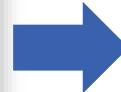


# INTERCEPT Common Security Use Cases



## Workshop

- Common identification of threats and vulnerabilities
- Identification of the Gaps to address
- Definition of the basis to use for security use cases elaboration



## Homework

- Each LEAs and member of UoG were invited to build 3 security use cases
- Specific template were prepared to build uses cases following a standardized format



## Prioritization

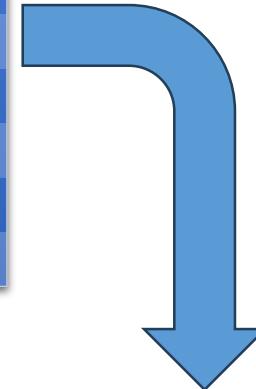
- Each LEA provided a detailed presentation on proposed use cases
- Discussion and prioritization workshop to build most voted common security use cases





# Consolidated Use Cases

Use Case #1	High-Speed Pursuit Following ANPR Alert
Use Case #2	Vehicle Ramming Attack in a Public Market
Use Case #3	Large Coach with Distressed Driver
Use Case #4	High-Speed Pursuit After Vehicle Theft
Use Case #5	Refusal to Comply at DUI Checkpoint
Use Case #6	Protest Security Breach
Use Case #7	Hostage-Taking and Vehicle Ramming
Use Case #8	Smuggling Operation in Coastal City
Use Case #9	High-Speed Pursuit in Urban Surroundings
Use Case #10	Organized Criminal Use of High-Powered Motorcycles and Electric Bikes



Prioritization of end-users by:

- The most **relevant threats**,
- Identified **operational gaps**, and
- **Shared priorities** of end users.

Use Case #1	Vehicle Ramming Attack in a Public Market
Use Case #2	High-Speed Pursuit in Urban Surroundings
Use Case #3	Large Coach with Distressed Driver
Use Case #4	High-Speed Pursuit Following ANPR Alert
Use Case #5	Organized Criminal Use of High-Powered Motorcycles and Electric Bikes
Use Case #6	Hostage-Taking and Vehicle Ramming





# 3 Common Security Use Cases

- Based on the six consolidated use cases, the work coordinated the extraction of relevant functional and non-functional requirements.
- List of requirements related to detection, decision-making, remote stopping, communication, situational awareness, safety, legal compliance, and technical constraints.
- LEAs provided their prioritisation reflecting the collective assessment of operational relevance, urgency, and feasibility as expressed by the LEAs.



Further refinement to 3 most representative Use Cases





### Use Case 1: Complex threat and pursuit scenario by car vehicle

This comprehensive use case presents a realistic and escalating threat scenario in which a vehicle initially flagged by an ANPR system engages in a series of criminal activities, including an intentional vehicle ramming attack in a crowded urban area, a high-speed pursuit through city streets, and an eventual cross-border chase. The incident reflects the multi-dimensional nature of modern security threats and highlights the range of response challenges and capability gaps faced by LEAs.

### Use Case 2 – Urban agile threat involving high-powered motorcycles and e-Bikes

A series of luxury store robberies in central Paris is linked to a criminal gang using high-powered motorcycles and electric bikes to execute smash-and-grab thefts and evade police through narrow streets and pedestrian zones. The operation demonstrates the growing use of agile vehicles by organized crime networks and the complex urban environment challenges faced by law enforcement.

### Use Case 3 – Distressed driver operating a large passenger coach

A large 81-seater intercity coach traveling through central London during evening rush hour begins to behave erratically. Passengers onboard observe the driver exhibiting signs of severe emotional distress, prompting widespread panic. The coach becomes a mobile hazard, weaving unpredictably through traffic, and presenting a severe safety risk on the city's arterial routes.





# Requirements

<b>Threat Detection and Identification</b>	The system should enable real-time identification of high-risk vehicles and hazardous substances, detect dangerous driving behaviors, and assess environmental conditions that may affect threat recognition and response.
<b>Before Incident</b>	Ensure reliable threat verification, resource readiness, inter-agency communication, risk assessment protocols, and public alert systems are in place prior to initiating a pursuit.
<b>During Incident</b>	The system must enable real-time tracking, adaptive strategy updates, reliable multi-agency communication, and situational awareness while ensuring safe and controlled neutralization of the target vehicle through measures like deceleration mechanisms, engine control influence, and road-based stopping tools, all with minimal risk to bystanders and infrastructure.
<b>After Incident</b>	Implement secure and efficient tools for evidence collection, event documentation, damage assessment, and post-operation evaluation to support investigations, legal processes, and continuous improvement.
<b>Environmental Adaptation</b>	Solutions must adapt to diverse environmental and geographic conditions, including adverse weather, challenging terrains, and varying pursuit environments, while mitigating associated risks.
<b>External Coordination</b>	Establish robust protocols, interoperable systems, and clear communication tools to enable effective inter-agency and cross-border collaboration, ensuring compliance with international protocols and operational consistency across diverse agencies.
<b>Legal and Regulatory</b>	Ensure all pursuit-related systems and actions comply with relevant laws and regulations on vehicle interventions, data protection, transparency, and proportionality at local, national, and EU levels.
<b>Other Reqs</b>	<ul style="list-style-type: none"><li>• User-Centered Requirements</li><li>• Public and Community Interaction</li><li>• Evaluation and Feedback</li></ul>



Presentation of the  
state of the art

Youssef Bouali, DIGINNOV



# Results & Technologies (Use Case 1)

Analyzing the shortlisted patents provided the following:

## Results

- **RFID tags** to track vehicles.
- **Cloud-based communication platforms** to ensure cross-border tracking and coordination.
- Emergency vehicle prioritization and **real-time location sharing**.
- **Real-time vehicle identification** and coordination with law enforcement.
- **Video & audio analytics** for detecting suspicious or criminal behavior.
- **Behavioral pattern recognition** to identify criminal activity or dangerous driving behavior.
- A first sensing system (e.g., **ANPR, RFID, facial recognition**) **identifies the object at a known location**, and a second sensing system (e.g., basic cameras, radar) **tracks the object over a wider area**.
- **A traffic model to convert raw sensor data into vehicle trajectory information** (e.g., speed, idling time, acceleration patterns).
- **A device designed to stop an approaching vehicle by deflating its tires**, using upward-facing spikes to puncture the tires, making it an effective immobilization tool for target vehicles.

## Technologies

- Automatic Number Plate Recognition (**ANPR**): Detects and reads vehicle license plates from captured images.
- Autonomous Driving Control Systems
- Emergency Stop Systems
- Vehicle-to-Device Communication
- Sensing and Tracking Infrastructure
- Character Recognition (**OCR**): Extracts the alphanumeric number from the plate image.
- Artificial Intelligence (**AI**): Core engine for automation and decision-making.
- On-Demand Roadway Stewardship Systems: Dynamically deploys monitoring and enforcement functions in urban areas.





# Results & Technologies (Use Case 2)

Analyzing the shortlisted patents provided the following:

## Results

- **Multi-camera drone surveillance** with **thermal imaging for real-time vehicle detection**.
- **Real-time tracking of high-risk or unauthorized vehicles in border zones**, highways, and restricted areas. Utilizes AI, camera sensors, and inertial sensors to detect unusual traffic events.
- **Identifying reckless driving**, vehicle malfunctions, and external factors affecting traffic incidents.
- **Analyzing high-risk vehicle behaviors** and **alerting law enforcement in real time**.
- Identifying violations such as **excessive speeding, illegal lane changes**, and **reckless driving, key indicators of criminal intent**.
- Helping track vehicles involved in violations and intervene before incidents escalate
- A system that includes a **graphical user interface (GUI) for triggering alerts based on real-time drone observations**. (patent number).
- Enabling the centralized coordination of numerous drones, making it suitable for large-scale or complex monitoring operations.
- An **analytical recognition system** that **works with multiple camera types**, including fixed traffic cameras and aerial drone-mounted cameras.

## Technologies

- Monitoring Control Units
- Emergency Event Detection
- Drone Base Station Communication
- Data Analytics and Decision-Making Algorithms
- Real-Time Communication
- Ultra-Wideband (UWB): Used for precise distance measurement and spatial awareness.
- Network Communication: Facilitates data exchange between the UAV, user device, and remote systems.
- Automated Drone Deployment: A drone is instructed to image the incident area based on computed coordinates.
- Real-Time Video Streaming: Live footage from both fixed cameras and drones is displayed for operator assessment.





# Results & Technologies (Use Case 3)

Analyzing the shortlisted patents provided the following:

## Results

- An **AI-Assisted vehicle deceleration** & emergency stop system.
- **Real-time monitoring of driver state** and vehicle speed.
- Automatic emergency stop and deceleration options for hazardous situations, that works for autonomous and manually driven vehicles.
- **Enables non-lethal vehicle stopping**, ideal for hazardous or high-risk vehicle intervention.
- **Remote monitoring of vehicle and speed control.**
- Secure stopping methods for high-risk vehicles in critical zones.
- **Sensors are used to detect the driver's presence and continuously monitor their phycological state.** Safe mode stop.(Upon detecting driver incapacity, the system initiates a safe stopping maneuver).
- An emergency stop system that can receive stop signals from non-driving users in the vehicle. If the required number of signals is received in time, the vehicle is immediately stopped or slowed down.
- Safe mode stop.(Upon detecting driver incapacity, the system initiates a safe stopping maneuver). **AN: FR2212069A (EU)**

## Technologies

- Autonomous Emergency Stop Execution.
- Target Vehicle Identification.
- Remote monitoring of vehicle operations.
- Behavioral pattern recognition.
- Driver Monitoring System (DMS): Detects abnormal driver states (e.g., drowsiness, incapacitation).
- Remote Control Enablement: Authorizes remote vehicle operation after the autonomous stop.



# OMC objectives and organisation of the activities

Nina Czyżewska, PPHS

# What is an Open Market Consultation (OMC)?



Before launching a procurement procedure, **contracting authorities may conduct market consultations with a view to preparing the procurement** and informing economic operators of their procurement plans and requirements.

In essence, an open market consultation is **an open dialogue between procurer(s) and the market**, in which the procurers ask for the view of the market to identify the ability thereof to meet the needs of the procurer(s).

Source: Directorate-General for Research and Innovation, European Commission ([link](#))





# Why Conduct an Open Market Consultation (OMC)?



**Market consultations** bridge the gap between the supply side and the demand side.

**Suppliers** are informed about the needs and expectations of the procurers.

**Procurers** are informed about what the market has to offer, including how is the supply chain, which gives a view on European resilience and autonomy.

## **PROCURERS** can cross-check:

- Prior-art-analysis and IPR Search
- Analysis of the Standards' landscape
- Key contractual set-up and conditions for the procurement
- Project feasibility (e.g. business case)

## **SUPPLIERS** are informed about the public procurers' needs





# Objectives of the OMC



Validate the findings of the State-Of-The-Art (SOTA) analysis and discuss the viability of possible technical and financial provisions/ functionalities.



Raise awareness of the industry and relevant stakeholders (including other users) regarding the upcoming PCP.



Collect insights from the industry and relevant stakeholders (including users) to finetune the tender specifications.





# What are the e-pitching sessions?



**E-pitching sessions** are part of the preparatory activities for a future procurement procedure. E-pitching sessions are virtual meetings where suppliers showcase their solutions to public buyers, aiming to address predefined procurement challenges.

## **Purpose:**

- Facilitate early engagement between public procurers and the market.
- Identify innovative solutions that meet specific public sector needs.
- Encourage competition and transparency in the procurement process.





# How does it work?

- **Preparation:** Public procurers define specific challenges and communicate them to potential suppliers. Suppliers prepare presentations demonstrating how their solutions address these challenges.
- **Presentation:** Each supplier is allocated a time slot to present their solution. Presentations start with an overview of the economic operator and then focus on existing solutions that can address the respective challenge(s), R&D efforts and capabilities, benefits, and overall alignment with procurer needs.
- **Q&A session:** Public procurers and other stakeholders pose questions to the supplier. Clarifications are sought to assess solution suitability.
- **Follow-up actions:** Procurers may inform the suppliers on the procurement plans. Discussions may lead to further engagement or bilateral meetings.





# OMC activities

Date	Event
3 March 2025	Publication of the Prior Information Notice (PIN) on TED.
7 April 2025	Publication of the OMC documents on the project's website: <a href="https://intercept-horizon.eu/">https://intercept-horizon.eu/</a> Publication of the RFI questionnaire: Technology providers: <a href="https://ec.europa.eu/eusurvey/runner/Intercept-OMC_RFI_for_TechnologyProviders">https://ec.europa.eu/eusurvey/runner/Intercept-OMC_RFI_for_TechnologyProviders</a> End users: <a href="https://ec.europa.eu/eusurvey/runner/Intercept-OMC_RFI_for_End-Users">https://ec.europa.eu/eusurvey/runner/Intercept-OMC_RFI_for_End-Users</a>
9 May 2025 10:00 – 12:00 CET	OMC webinar in Spanish
12 May 2025 10:00 – 12:00 CET	OMC webinar in English
12 May 2025 12:30 – 14:30 EET	OMC webinar in Greek
13 May 2025 10:00 – 12:00 CET	OMC webinar in French
13 May 2025 12:30 – 14:30 EET	OMC webinar in Finnish
14 May 2025 12:30 – 14:30 CET	OMC webinar in Italian
15 May 2025 10:00 – 12:00 CET	OMC webinar in Polish
15 May 2025 12:30 – 14:30 CET	OMC webinar in Slovak
23 May 2025	Deadline for the submission of questions via the RFI questionnaire
30 May 2025	Publication of preliminary OMC report based on the findings from the OMC webinars
3 June 2025	E-pitching session 1
4 June 2025	E-pitching session 2
5 June 2025	E-pitching session 3
25 June 2025	OMC event in Warsaw
4 July 2025	Publication of the OMC findings, including all questions and answers to the OMC questionnaire.
4 July 2025	Closure of the OMC.





# OMC activities (milestones)



Prior Information Notice (PIN) on TED.



[\*\*139942-2025 - Planning - TED\*\*](https://ec.europa.eu/ted/teedweb/pin/139942-2025-Planning)



The OMC document has been published on the project website.



[\*\*INTERCEPT OMC Document\*\*](#)



RFI questionnaires have been published on the EU survey platform.



**1. Technology providers:**

[https://ec.europa.eu/eusurvey/runner/  
InterceptOMC\\_RFI\\_for\\_TechnologyProviders](https://ec.europa.eu/eusurvey/runner/InterceptOMC_RFI_for_TechnologyProviders)

**2. End users:**

[https://ec.europa.eu/eusurvey/runner/  
InterceptOMC\\_RFI\\_for\\_End-Users](https://ec.europa.eu/eusurvey/runner/InterceptOMC_RFI_for_End-Users)



The OMC webinars are ongoing in different languages.



The findings (anonymised) will be published through an OMC report.





# RFI Questionnaire for **technology providers**



RFI for Technology Providers

- Please scan the QR code to access to the RFI questionnaire for the technology providers.
- You can save your draft answers and complete it by the 23 May 2025.



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# RFI Questionnaire for technology providers



The link: [https://ec.europa.eu/eusurvey/runner/InterceptOMC\\_RFI\\_for\\_TechnologyProviders](https://ec.europa.eu/eusurvey/runner/InterceptOMC_RFI_for_TechnologyProviders)

Intercept OMC | Request for Information Questionnaire for Technology Providers

Fields marked with \* are mandatory. ×

**Disclaimer**  
The European Commission is not responsible for creator and manager. The use of EUS expressed within them.

**Request for** (1)

**INTERCEPT: Innovation Project**  
This survey is part of the Open Market Competition about the challenge concerning effective means to safely stop vehicles (<https://intercept-horizon.eu>).  
Technology providers are invited to answer tender documents for the future PCP. The announced on the INTERCEPT project will be anonymised, summarised and public.

Please note that taking part in this survey provider. INTERCEPT will ensure transparency will be anonymised, summarised and public.

Your personal data will be collected, processed within the framework of the INTER Regulation (Regulation 2016/679 of the European Union) the right to rectify such data by contacting:

**PCP challenge and requirements**

1- Are you aware of any existing or emerging technologies that could enable the remote stopping of vehicles in high-risk situations (as described in INTERCEPT)?  
 Yes  
 No

2- Are you currently developing or have you developed any solution relevant to any of the following use cases? (Tick all that apply and describe briefly)  
 Use Case 1: Vehicle ramming attack in a public market.  
 Use Case 2: High-speed pursuit in urban surroundings.  
 Use Case 3: Large coach with distressed driver.  
 Use Case 4: Pursuit following ANPR alert.  
 Use Case 5: Criminal use of motorcycles/bikes.  
 Use Case 6: Hostage-taking and vehicle ramming.  
 No solution was developed for any of the use cases above.

3- What are the most critical technical functionalities or performance parameters your solution would focus on (e.g., real-time tracking, safe neutralization, communication systems)?

4- What are the safety mechanisms and fail-safe features your solution would include to avoid collateral damage or unintended consequences?

5- Do you foresee any technical or operational barriers in implementing remote vehicle-stopping systems?  
 Yes  
 No

6- Can you identify relevant needs that have not been described in the market consultation document?  
 Yes  
 No

7- If you were to develop the solution for use case 1 Vehicle ramming attack in a public market, please provide your estimated time allocation (in months) for each of the following phases:  
(Total should not exceed 30 months.)

Phase 1: Solution Design (months):

Phase 2: Prototype Development (months):

Phase 3: Validation & Demonstration (months):

## Key Information Requested:

- 1. Company profile:** Please insert the name of the organisation, contact details, and the type of your organisation.
- 2. PCP challenge and requirements:**
  - Information on existing technologies or solutions relevant to remote and safe stopping of vehicles.
  - Indication of whether solutions have been developed or are under development for specific high-risk use cases.
  - Description of key technical functionalities and performance focus areas (e.g. tracking, neutralization, communication systems).
  - Safety mechanisms and fail-safe features to prevent collateral damage.
  - Identification of potential technical or operational barriers to implementation.
  - Estimated development timeline and budget per phase (design, prototype, demonstration) for each of the six use cases.
  - Information on operational limitations in specific environments (e.g. tunnels, cities).
  - Suitability of solutions for different vehicle types (e.g. cars, trucks, e-bikes).



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# RFI Questionnaire for technology providers

The link: [https://ec.europa.eu/eusurvey/runner/InterceptOMC\\_RFI\\_for\\_TechnologyProviders](https://ec.europa.eu/eusurvey/runner/InterceptOMC_RFI_for_TechnologyProviders)

## State-of-the-art analysis

\* 18- Do you think there is room for technological development beyond the state of the art?

- Yes
- No

Please explain:

19- What is the current Technology Readiness Level (TRL) of your solution(s)?

Please indicate the TRL for each relevant use case, if applicable.

Use Case 1 – Vehicle ramming attack in a public market.

TRL:

## Miscellaneous

23- What information do you still need to make a good plan of action for the development and/or implementation of solutions suitable to address the challenge?

24- Do you have specific requirements to achieve the functionalities that INTERCEPT should take into account?

- Yes
- No

25- What are the risks associated with the development and implementation of a solution that tackles the functional needs of INTERCEPT?

26- Do you have any suggestions and/or remarks?

20- What improvements beyond the state-of-the-art would your solution introduce?

## 3. State-of-the-art analysis

- Assessment of whether further technological development is possible beyond current solutions.
- Indication of the Technology Readiness Level (TRL) for each relevant use case.
- Description of the innovative aspects of the proposed solution compared to the current state-of-the-art.
- Information on the use of any patented technologies or technical standards.
- Identification of potential intellectual property barriers that may limit development or deployment.

## 4. Miscellaneous

- Information still needed to plan solution development or implementation.
- Specific technical or operational requirements to consider.
- Risks related to developing and implementing the solution.





# RFI Questionnaire for end users



RFI for End Users

- Please scan the QR code to access to the RFI questionnaire for the end users.
- You can save your draft answers and complete it by the 23 May 2025.



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# RFI Questionnaire for end users



The link: [https://ec.europa.eu/eusurvey/runner/InterceptOMC\\_RFI\\_for\\_End-Users](https://ec.europa.eu/eusurvey/runner/InterceptOMC_RFI_for_End-Users)

**INTERCEPT**  
Request for Information Questionnaire for End Users

**INTERCEPT: Innovation Procurement**  
This survey is part of the Open Market Consultation (OMC) on the market about the challenge concerning enhancing effective means to safely stop vehicles remotely. The survey is part of the INTERCEPT project (https://intercept-horizon.eu).

End users are invited to answer all the questions in this survey. The survey is part of the Open Market Consultation (OMC) on the market about the challenge concerning enhancing effective means to safely stop vehicles remotely. The survey is part of the INTERCEPT project (https://intercept-horizon.eu).

Please note that taking part in this survey is not a commitment to purchase the INTERCEPT system. INTERCEPT will ensure transparency, openness, and anonymised, summarised and published online in English.

Your personal data will be collected, processed, stored and used within the framework of the INTERCEPT project. Regulation (Regulation 2016/679) of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation) (GDPR) applies. You have the right to rectify such data by contacting: contact@intercept-horizon.eu

**GENERAL INFORMATION**

\* Name of your organisation:

\* Website:

\* Contact person name & email address:

\* Country:

\* Type of organisation:  
 Public Organisation  
 Private Organisation  
 Other (Please indicate below.)

**Operational Needs & Gaps**

\* 1- In your day-to-day operations, how often do you encounter high-risk situations involving vehicles (e.g., pursuits, threats, incapacitated drivers)?

Rarely (e.g., less than once per month)  
 Occasionally (e.g., 1-2 times per month)  
 Regularly (e.g., once per week)  
 Frequently (e.g., multiple times per week)  
 Very Frequently (daily or almost daily)

\* 2- Which of the six INTERCEPT use cases is most relevant to your context? Please rank them from 1 (most relevant) to 6 (least relevant). If a use case is not applicable, you may leave it blank.

Use drag&drop or the up/down buttons to change the order or accept the initial order.

II   Use Case 1 – Vehicle ramming attack in a public market

II   Use Case 2 – High-speed pursuit in urban surroundings

II   Use Case 3 – Large coach with distressed driver

II   Use Case 4 – High-speed pursuit following ANPR alert

II   Use Case 5 – Organized criminal use of high-powered motorcycles/e-bikes

II   Use Case 6 – Hostage-taking and vehicle ramming

3- What existing tools or strategies do you currently use for remote vehicle intervention (if any)?

## Key Information Requested:

**1. Organisation profile:** Please insert the name of the organisation, contact details, and the type of your organisation.

## 2. Operational Needs & Gaps:

- Frequency of high-risk vehicle situations (e.g. pursuits, incapacitated drivers) in daily operations.
- Ranking of INTERCEPT's six use cases by relevance to the respondent's operational context.
- Information on existing tools or methods currently used for remote intervention (if any), to help identify gaps and overlaps.





# RFI Questionnaire for end users

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## Technical Expectations & Constraints

4- What would be your top 3 requirements for a remote vehicle-stopping solution?  
(e.g., effectiveness, response time, operator control, minimal public disruption)

### Legal, Ethical & Societal Considerations

\* 5- In which environments would it be most important  
(Please tick all that apply)

- Urban streets / dense city centres
- Rural roads
- Highways / motorways
- Tunnels or underpasses
- Public events / open markets
- Transport hubs (airports, train stations)
- Industrial or logistics zones
- Other (Please specify below.)

6- What level of operator involvement would you prefer

- Fully automated (system detects and acts without human intervention)
- Semi-automated with human confirmation (system detects, operator confirms)
- Manual control only (operator initiates and executes)
- Other (Please indicate below.)

\* 7- Are there specific communication or integration standards?  
(Select all that apply, or specify others)

- Integration with national police ICT systems
- Secure and encrypted communications
- Compatibility with ANPR or vehicle databases
- V2X (vehicle-to-everything) communication protocol
- Compliance with EU/National data protection regulations (e.g., GDPR)
- There is none.
- I do not know.
- Other (Please indicate below.)

8- Are there national or regional laws that could restrict or govern the use of remote vehicle-stopping systems in your country?

- Yes
- No

Please explain:

\* 9- What are the main ethical concerns or public perception risks in using such technologies?  
(Please select or describe briefly)

- Risk of misuse or abuse by authorities
- Lack of public trust in automated interventions
- Potential harm to suspects or bystanders
- Concerns about surveillance or tracking
- Disproportionate use in certain communities
- No major concerns were identified.
- Other (Please indicate below.)

Other:

\* 10- How would you ensure accountability and transparency in the use of remote vehicle-stopping tools?  
(Tick all that apply or explain)

- Clear operational procedures or usage protocols etc.
- Independent oversight or auditing
- Mandatory logging of usage events
- Bodycam or in-vehicle video recording during activation
- Public reporting or annual transparency reviews
- Training and certification for authorised users
- Other (Please indicate below.)

## 3. Technical Expectations & Constraints

- Identification of the three most important technical requirements for a remote stopping solution (e.g. effectiveness, response time, operator control).
- Specification of key environments where testing would be most relevant (urban, rural, tunnels, events, etc.).
- Preferred level of automation in vehicle-stopping systems — from fully automated to manual control.
- Communication and integration requirements based on national systems and EU frameworks (e.g. encrypted communication, GDPR compliance, ANPR integration).

## 4. Legal, Ethical & Societal Considerations

- Legal or regulatory limitations that might restrict deployment of such solutions (e.g. national laws, safety standards).
- Ethical concerns such as misuse risks, data privacy, disproportionate application, or lack of public trust.
- Expectations for ensuring transparency and accountability (e.g. independent oversight, logging, reporting, training requirements).





# RFI Questionnaire for end users

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## Feasibility, Procurement & Testing

\* 11- Would your organisation be interested in participating in testing or piloting such a solution?

- Yes
- No

12- Would you require a certification or third-party evaluation before adopting a new system?

- Yes
- No
- I do not know yet.

13- Are there budgetary or procurement constraints that may affect participation in future PCP activities?

- Yes
- No
- I do not know yet.

14- Do you have any feedback or suggestions regarding the tender preparation or functional requirements?

## 5. Feasibility, Procurement & Testing

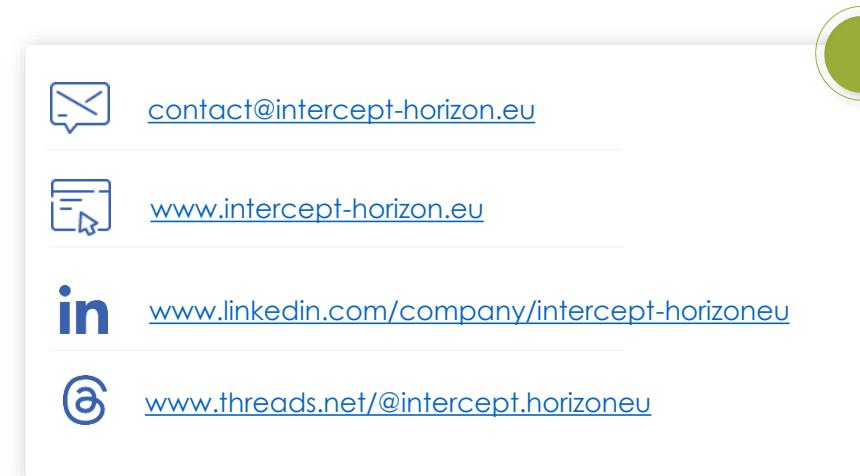
- Willingness to participate in pilots or field testing of a future solution.
- Whether formal certification or third-party validation would be required for adoption.
- Budgetary or procurement constraints that might impact involvement in PCP activities.
- Final input or suggestions related to the preparation of the tender or the technical specifications of the solution.

! The deadline for replying to the questionnaires is 23 May 2025. !





# Thank you for your attention



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