PREVENT

PROCUREMENTS OF INNOVATIVE, ADVANCED SYSTEMS TO SUPPORT SECURITY IN PUBLIC TRANSPORT

EUROPEAN UNION
European Structural and Investment Fund

THE PREVENT PRE-COMMERCIAL PROCUREMENT STAGES

This supporting document provides Public Buyers with key facts concerning this EU-funded pre-commercial procurement (PCP) opportunity. This includes: the common challenge being explored in terms of security threats, the steps in a PCP and last, but not least, the opportunity to undertake R&D without incurring any investments.

ABOUT PREVENT PROJECT:

PREVENT - PRocurEments of innoVativE, advaNced systems to support security in public Transport - focuses on pre-empting attacks in public transport by enabling earlier detection of terrorists and potentially dangerous objects, tracking of detected individuals or situations and coordinating the response of security forces. This focus is shared, from the start, by 25 organisations from 10 countries () of which 12 are consortium partners and 13 are members of the PREVENT User Observatory Group (UOG).

PREVENT implements a progressive and iterative process to deliver 6 jointly defined Common Security Scenarios that capture identified common threats and vulnerabilities. It also delivers a vulnerabilities and threats taxonomy directly applicable to the public transport world. For these scenarios, PREVENT undertakes a gap analysis between available solutions, existing standards, on-going research and identified needs, from which it elaborates a multi-dimensional roadmap of innovations and solutions. The highest priority innovations in the roadmap are selected by practitioners and public buyers to define a Common Challenge. **This Common Challenge serves as the basis for a Pre-Commercial Procurement (PCP), for which the buyers' group is created, the lead buyer is selected, then the tender documents are generated. PREVENT includes a governance mechanism that ensures that the different phases are open to additional practitioners and public buyers.**

> **PREVENT is a project financed by the European Commission under the topic: "SU-GM02-2018 - Strategic pre-commercial procurements of innovative, advanced systems to support security ".**

> **Duration:** 15 months

> **Start date:** 01/05/2019

> **End date:** 31/07/2020

> **Website:** https://prevent.eng.it

> **Coordinator:** Engineering Ingegneria Informatica SpA

◼ OBJECTIVES:

PREVENT is a pioneering and ground-breaking European project focusing on preventing terrorist attacks in public transport by acquiring security solutions through demand-driven R&D procurement.

PREVENT focuses on pre-empting attacks in public transport by:

> **enabling earlier detection** of terrorists' activities and potentially dangerous objects;

> **tracking of detected** individuals or potentially dangerous situations;

> **coordinating the response** of security forces.

◼ OUTCOMES OF PREVENT1:

✅ A common security diagnostics and vulnerability taxonomy

✅ A scenarios elaboration methodology

✅ A set of 6 use cases consolidating the key security challenges in public transport, and integrating the GDPR and economic capabilities dimensions

✅ A roadmap of innovation needs to address these key challenges, integrating the gaps with respect to available solutions

✅ A fully detailed and agreed Common Challenge focused on the highest prioritised need from the roadmap

✅ To initiate a PCP, speeding up its implementation through a follow-up activity beyond the end of PREVENT

IMPORTANT TO KNOW:

PREVENT Practitioners and Public Buyers have identified and agreed on the following Common Challenge for Public Transport Operators in Europe:

Enhancing security situational awareness through i) timely automatic detection of unattended items in Public Transport Infrastructure and, in public areas in the vicinity ii) identification and tracking of perpetrators, and iii) advanced crisis management system.
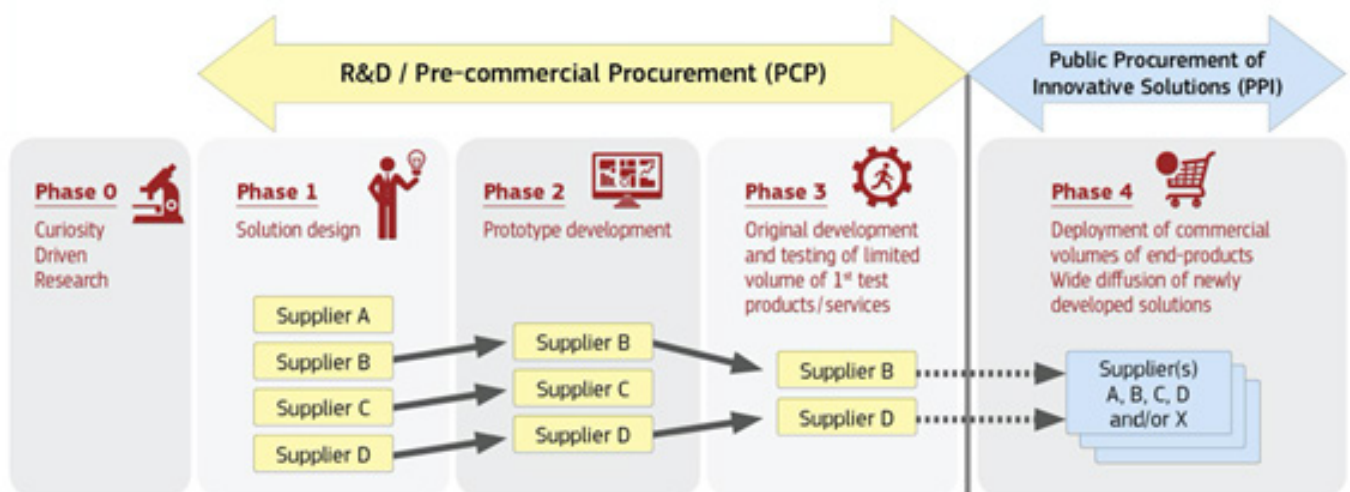
■ BEYOND PREVENT:

The last objective of PREVENT project clearly states:

To initiate a PCP, speeding up its implementation through a follow-up activity beyond the end of PREVENT

Therefore, the consortium is committed to follow the implementation of activities through the **Pre-Commercial Procurement (PCP) instrument**. The European Commission has made available a **€ 12 Million budget** for this activity.

PREVENT relies on the Pre-Commercial Procurement (PCP) instrument. Promoted, supported and co-financed by the European Commission, this procurement process ensures the development of cutting-edge technologies that are tailored to user needs.

■ PCP: HOW IT WORKS?

Source: European Commission

PCP Stage **1**

Solution design

At least four suppliers will be selected (after evaluating their bids) to develop the best solution.

- ⊗ *Company A*
- ⊘ *Company B*
- ⊘ *Company C*
- ⊘ *Company D*
- ⊘ *Company E*

PCP Stage **2**

Prototype

Those participants who have succesfully completed phase 1 will be invited to submit an offer for phase 2. At least three companies will be awarded a phase 2 contract to develop a prototype.

- ⊗ *Company B*
- ⊘ *Company C*
- ⊘ *Company D*
- ⊘ *Company E*

PCP Stage **3**

Operational testing

At least two participants will be selected and their prototypes tested in real-life situations.

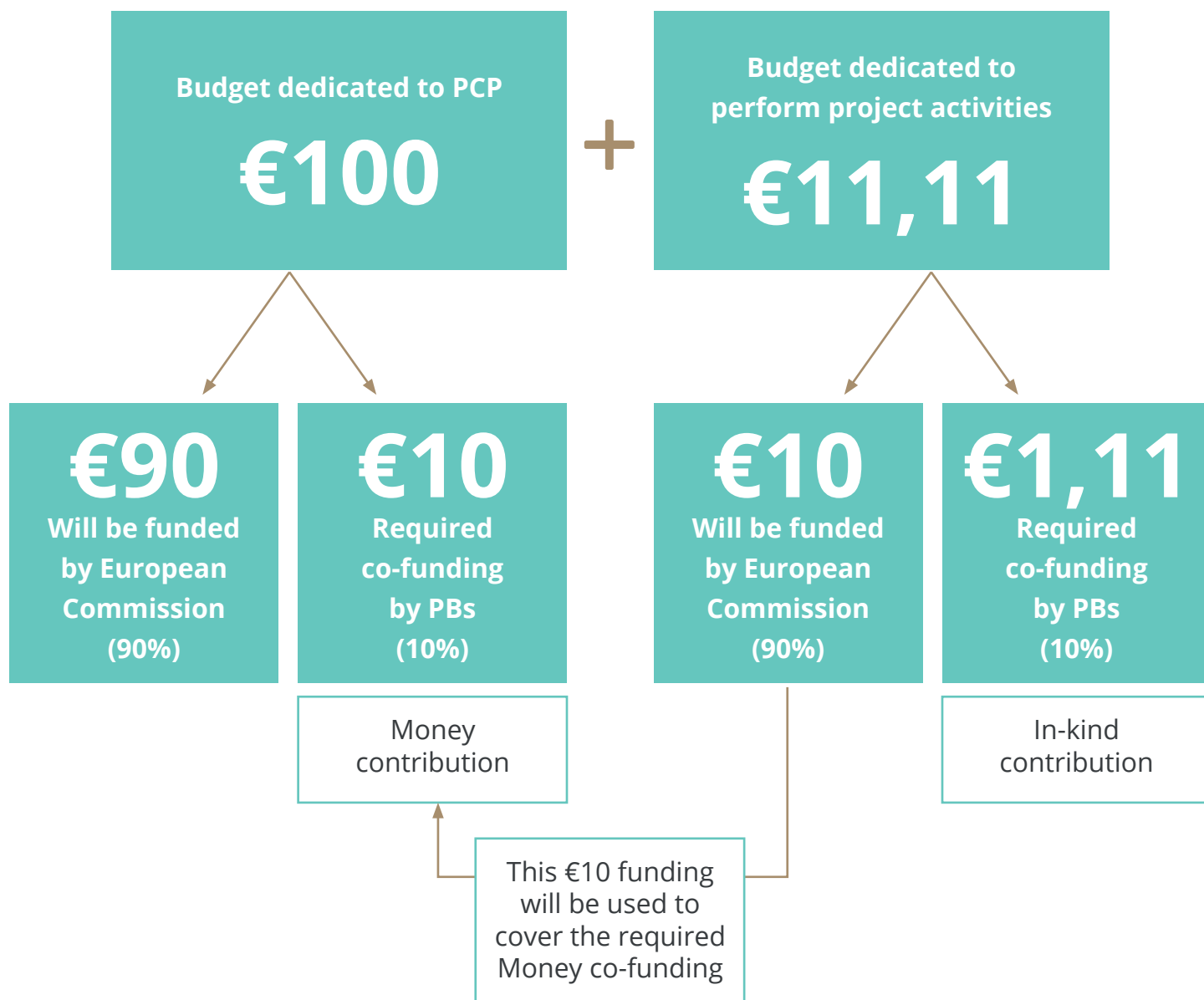- ⊘ *Company C*
- ⊘ *Company D*

The purpose of the PCP is to buy R&D services, but not the commercial deployment of the solution. To purchase this solution a new procurement process must be started after the PCP is concluded.

■ PCP → PREVENT 2

❯ PREVENT 2 represents a joint PCP opportunity supported by the EU Commission through the H2020 programme. This 2nd H2020 project of this program implements the PCP; should this stage be confirmed, 90% of the cost of the whole PCP is funded by the Commission.

❯ With PREVENT 2, Public Buyers' expected co-funding is limited to 10%.

❯ Once the novel product will be developed, tested and approved, suppliers will make the product available for purchase. Royalty-free and IPR conditions defined during the PCP development stage, will allow Public Buyers to reap the financial benefits.

❯ As public buyers, your role is to ensure that investments translate into efficient and sustainable solution through high-level quality and healthy inter-supplier competition via evaluation processes involving the public buyers themselves.

FINANCIAL INVESTMENT: HOW DOES IT WORK?

Example of financial breakdown funding and co-funding for Public Buyers

Budget dedicated to PCP

€100

+

Budget dedicated to perform project activities

€11,11

€90
Will be funded by European Commission (90%)

€10
Required co-funding by PBs (10%)

€10
Will be funded by European Commission (90%)

€1,11
Required co-funding by PBs (10%)

Money contribution

In-kind contribution

This €10 funding will be used to cover the required Money co-funding

IMPORTANT TO KNOW:

PREVENT2 objective is to provide Public Buyers with EU funding in order to avoid Cash Investment

Public Buyers' investment will be limited to providing in-kind contributions (mostly personnel involved in project activities)

Initial scenario:

According to the example above, the prototype costs 100 Euros. The EU invests 90 Euros, and each public buyer would have to invest another 10 Euros in the prototype. In addition to that, 11,11 € are dedicated to cover the costs of additional activities (salaries for the members of the consortiums, travel expenses, other costs, etc). The EU covers 90% of 11,11 €, that is 10 € of the "additional costs", while 1,11€ have to be incurred by each public buyer.

Our proposition:

Our aim is to avoid having public buyers pay the suppliers from their accounts; the suppliers will be payed directly by the consortium, with EU funding.

To achieve this goal, we propose to transfer the 10€ the EU reimburses for additional costs towards the prototype, thus ensuring that the 100 € of the prototype costs are completely supported by the EU. Hence, the public buyers will have nothing to pay.

In this case, the public buyers will be asked to invest ONLY in-kind contributions of 11,11€ to cover project additional activities.

Timeframe:

■ BETWEEN PREVENT 1 AND PREVENT 2.

To maintain the projects momentum in a rapidly changing technological landscape, specific activities shall be planned in the context of Public Transport domain.

Our consortium partner, The International Association of Public Transport (UITP, from the French: L'Union Internationale des Transports Publics) shall initiate meetings and workshops during specific events. UITP is a non-profit advocacy organization for public transport authorities and operators, policy decision-makers, scientific institutes and the public transport supply and service industry. The organization hence provides an ideal networking platform for the PREVENT project.