



#HorizonEU

HORIZON EUROPE

THE EU
RESEARCH & INNOVATION
PROGRAMME

2021 – 2027

LIEVE BOS

THE RULES OF THE GAME –
FUNDING CONDITIONS



Innovation procurement in Horizon Europe

27 January 2022

WHY INNOVATION PROCUREMENT

Strategic importance and benefits for demand & supply side



Complementing push with pull R&I policies

Innovation procurement uses public procurement to drive innovation from the demand side.



Innovation procurement Key benefits for the supply side

- Open up concrete business opportunities
- Speed up time to market for innovations
- Attract investors / scale up internationally
- Create jobs / technological leadership

Innovation Procurement Key benefits for the demand side

- Steer and speed up the development and/or adoption of innovative solutions to:
- Improve quality & efficiency of public services
 - Address wider societal challenges

Public Procurement of Innovative solutions (PPI)

- **When**

- Solution is **almost** on the market or already on the market in **small quantity** but not meeting requirements for large scale deployment yet
- If **clear requirements** and **critical mass of demand** was expressed, industry would provide solutions with required quality / price
- **No need to procure R&D** (more scaling up of production, adaptation / integration with existing solutions etc.)

- **What**

- Public sector acts as **early adopter** (first 20% buyers on market) for the innovative solutions arriving on the market (not widely used yet)

- **How**

- Public sector expresses **demand** for a critical mass of solutions which triggers industry to bring products on the market with **desired quality / price** within a **specific time** (open market consultation, prior information notice)
- After the specified time, and **testing / certification / labelling (optional)**, the public sector **buys a significant volume of solutions**



Pre-Commercial Procurement (PCP)

- **When**

- R&D procurement needed to get new solutions developed, to **de-risk** tech
- Pros / cons of **# solution approaches** not compared / validated yet
- Still **too risky** to commit to go for **large scale deployment**, not possible yet to define final budget and/or final requirements
- Still **too risky** to tie your hands to **specific solutions / suppliers**
- Need to **attract new players** to tackle supplier lock-in issues



- **What**

- Public sector buys R&D to **steer development** to its needs, to collect info about pros / cons of alternative solutions to make specs for a possible follow-up PPI, to create a future competitive supply base

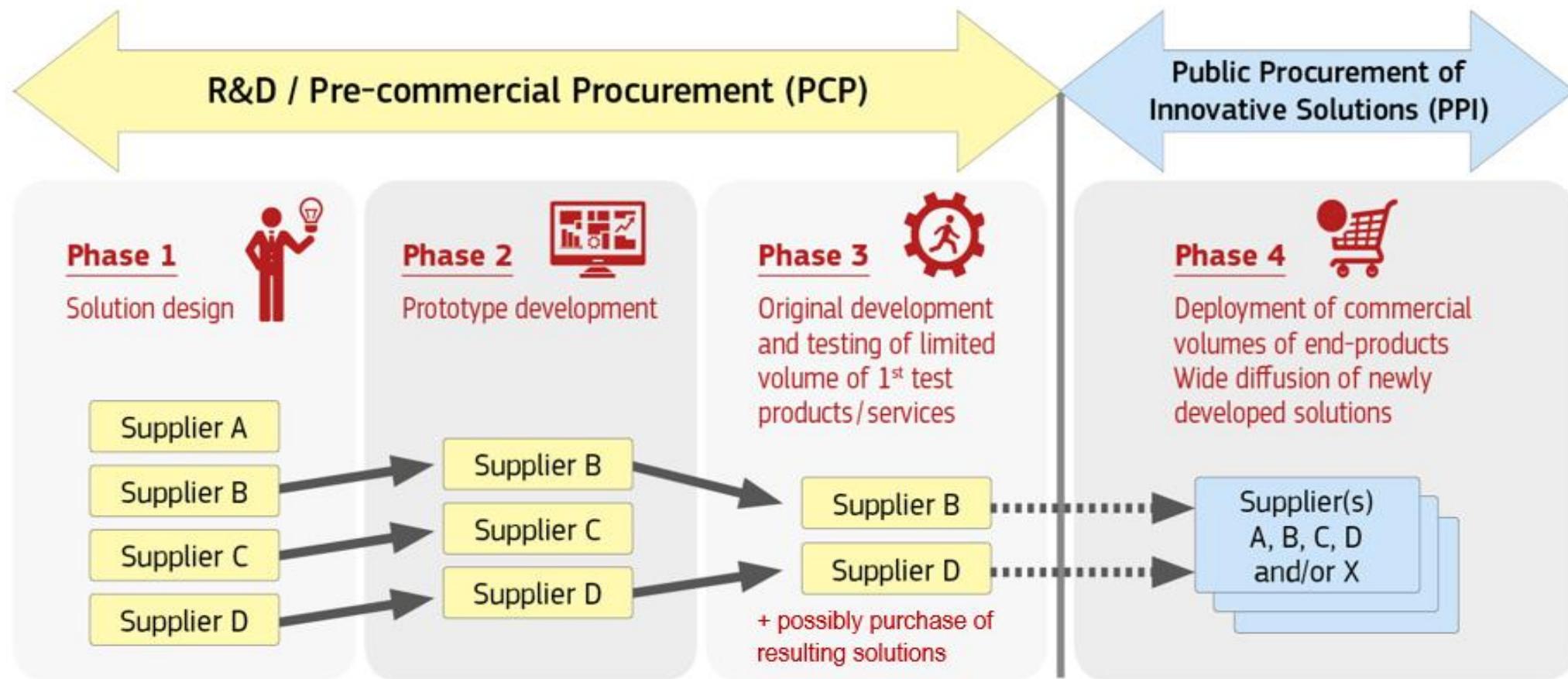


- **How**

- Public sector **buys R&D** from **several suppliers in parallel** (comparing **# solution approaches**) and **possibly also limited volume of solutions**
- and **evaluates progress** after critical milestones (design, prototyping, test)
- and **shares risks & benefits** of R&D (in particular the IPRs) with suppliers to maximise incentives for wide commercialisation



Complementarity



PCP falls outside WTO GPA and EU public procurement directives ([COM\(2007\)799 & SEC\(2007\)1668](#))

[More than 600 public buyers around Europe](#) have already successfully implemented PCPs

PPI uses procurement procedures defined in EU public procurement directives and national law

Split between PCP and PPI enables to



Use PPI also if no R&D needed for procurement need



Get 20% better value for money products (US defense data)



Use a small budget PCP to de-risk a large budget PPI

- PPI spec can be 'completely rephrased', benefiting from PCP lessons learnt



Use conditions to create strategic autonomy & growth/jobs 'in Europe'

- Because PCP falls outside WTO rules



Prevent foreclosing competition & crowding out other R&D investments

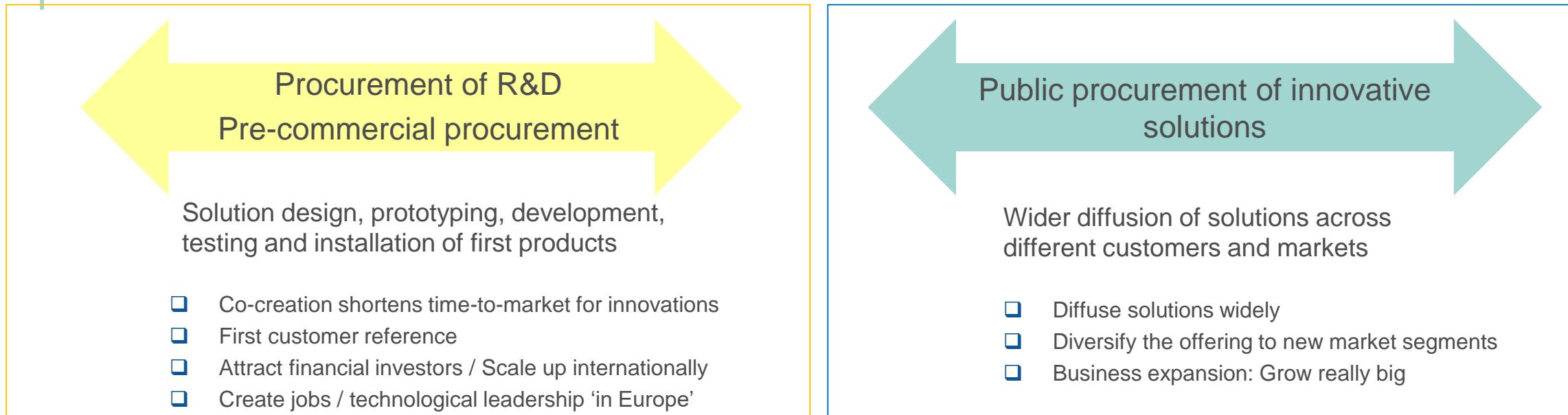
- Companies that are not financing their R&D via the PCP (e.g. via grants, own internal company resources, other investors, other procurements) can still bid for deployment contracts/PPIs

Facilitates access to procurement market for SMEs

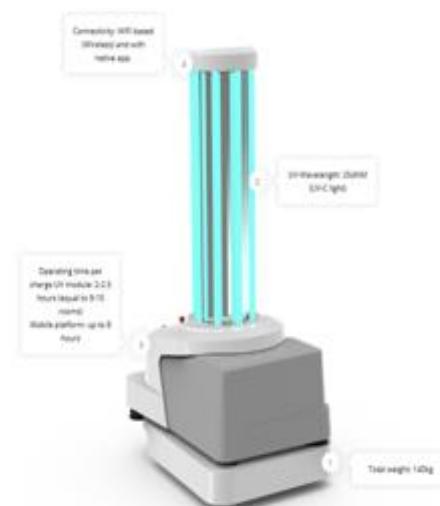
- Gradually increasing contract sizes, tasks, required manpower
- Stringent financial guarantee/qualification requirements:'no' in PCP,'ltd' in PPI

... All the above is not the case if R&D is procured as part of/inside large deployment contract

Example: National PCPs → EU funded PPIs



EXAMPLE
PCP by Norwegian government resulted in deployment (EFTA funding) of the world's first and largest full scale carbon capture, transport and storage facility. This will reduce by 14% the CO2 emissions across the entire EU.



EXAMPLE
PCP by Danish hospitals
Blue Ocean Robotics
(Danish startup grew into unicorn)
Its disinfection robots kill 99% of all viruses, bacteria and are sold worldwide to fight COVID-19.
EC procured 200 robots for hospitals across Europe, speeding up wider diffusion.

[More success case examples](#)

Example: EU funded PCPs -> EU/national PPIs

- Deployment: 2Y after project end 55% of projects/procurers deployed solutions
- Improved interoperability: 60% of PCPs resulted in more interoperable solutions
- Removing supplier lock-in: 20% cost reduction & higher quality products
- Strategic autonomy, security of supply chain: Several examples for EU companies now being lead providers, not only in EU but also for Asian and US procurers



SILVER PCP -> BIOSERVO's Exoskeleton muscle strengthening system
Used worldwide (NASA, GM, Airbus, Eiffel...)
NASDAQ listed, 3rd VC investment round



PRACE 3IP PCP -> PPI4HPC PPI -> EUROHPC. More energy efficient high performance computing PCP paved way for €Bn joint undertaking

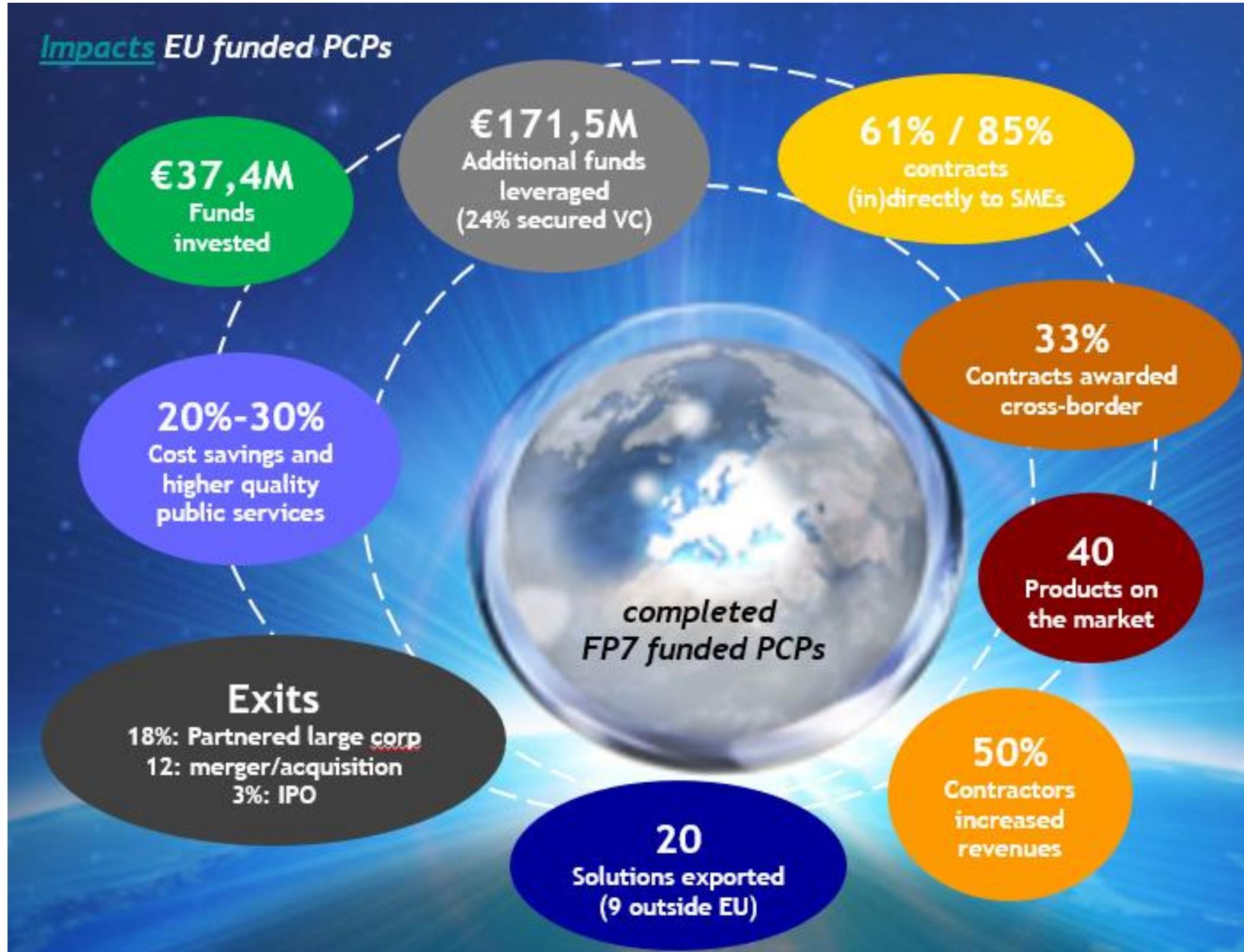
Immediate impacts of EU funded PCPs on supply side (132 procurers, 349 companies, 63 univs involved)

- **Opening a route-to-market for new players/SMEs**
 - 61,5% of the total value of all PCP contracts goes directly to SMEs
 - Compared to 29% average in public procurements across Europe
 - Mostly small young SMEs: 31% below 10 people, 48% below 50 people, 60% less than 10 years old
- **Helping also larger market players bring products to the market**
 - 16% of PCP contracts won by large companies as single bidder
 - 19% of PCP contracts won by consortia of larger companies plus SMEs
 - 73,5% of the PCP contracts won by SMEs (SMEs alone, or as lead bidder)
- **Stimulating cross-border company growth**
 - 33,1% of contracts are won by bidders that are not from a country of any of the procurers in the buyers group (e.g. DE company & ES+NL procurers)
 - Compared to 1,7% average in public procurements across Europe
- **Creating growth and jobs in Europe**
 - 99,5% of contractors do 100% of R&D activities for PCP in Europe
 - (2 have committed to do minimum 68% resp. 85% of R&D in Europe)

Longer term impacts 'so far' of EU funded PCPs on supply side (132 procurers, 349 companies, 63 univs involved)

- **Commercialisation of solutions (product available on the market)**
 - 86% of Ph3 contractors, 75% of Ph2 contractors and 30% of Ph1 contractors have already commercialised (part of) their solutions
 - 11% of contractors (across Ph1/2/3) still expect to commercialise within 2Y
 - 17% of contractors do not plan commercialisation of solutions
- **Business growth**
 - ~ 50% of contractors already increased their revenues thanks to the PCP solution
 - 24,2% of start-ups have secured equity investment since the PCP
 - 18% of start-ups concluded partnerships with large corporates
- **Exit strategy (62,8% of companies in the PCPs are Start-Ups)**
 - 12,1% of start-ups have undergone a merger or acquisition
 - 3% of start-ups have done an IPO since end of the PCP (1 on NASDAQ)

Impacts EU funded PCPs



HORIZONEU SUPPORT FOR INNOVATION PROCUREMENT

Funding conditions



Types of actions



Coordination and Support Actions (max 100% funding rate)

- Can support procurers to prepare a PCP or PPI (e.g. define common needs, perform open market consultation, prepare PCP/PPI procurement)
- Cannot fund R&I activities
- Cannot fund the cost/price of an actual PCP or PPI procurement

Actions with as 'primary aim' the implementation of PCP/PPI procurement by a transnational buyers group (PCP/PPI procurement cost > 50% action budget)

NEW



PCP Actions (max 100% funding rate)

- Fund actual PCP (1 joint PCP procurement/action) + related activities*

PPI Actions (max 50% funding rate)

- Fund actual PPI (1 joint or # coordinated PPI proc/action) + related activities*

* To prepare, manage and follow-up the PCP/PPI procurement + embed the PCP/PPI in a wider demand side context (e.g. to test / label / certify / standardise solutions, prepare follow-up procurement, awareness raising and training)

Types of actions

Other actions may 'involve' the implementation of PCP/PPI procurement, e.g.

RIA and IA actions can fund a PCP or PPI under the **subcontracting costs**



- Needs to fit with the R&I / I scope of the action
 - Not possible if call requires industry / suppliers to be part of consortia
 - PCP or PPI can be implemented by 1 public procurer or by a buyers group
- NEW** • PCP/PPI can be proposed by participants, or called for in the call conditions
- Since main aim of R&I/I action is that beneficiaries do R&D/I themselves, normally subcontracting costs can only be limited part of the action (unless the call conditions call for the PCP/PPI to be a key/large part of the action)



The EC or funding body itself may also implement PCP/PPI procurements

- On its own behalf or jointly with public buyers from Member States or Associated Countries (example in H2020: EU blockchain PCP)

Conditions for participation

ELIGIBILITY

- Min 3 independent legal entities from 3 different Member States or Associated Countries, **min 2 of which are public procurers** from 2 different Member States or Associated Countries. Of these 2 at least 1 is established in a Member State (minimum requirement buyers group)
 - Public procurers are contracting authorities or contracting entities as defined in the EU public procurement directives (see programme guide)



Don't forget the box in the application form that asks you to confirm compliance with this

- Buyers group can contain **additional other type procurers** that are providing services of public interest and share the procurement need
 - E.g. NGOs or private procurers
- Other entities may participate in the action, on condition that they are **not potential suppliers of solutions** sought for by the PCP/PPI and they have no other type of conflict of interest with the PCP/PPI
 - E.g. Assisting buyers in preparing the PCP/PPI, dissemination activities

Role of different actors

- **Buyers group**
 - Buyers group: Procurers (beneficiaries + possibly linked 3rd parties) that provide the financial commitments to implement the PCP/PPI(s)
 - Needs to comply with minimum requirements buyers group! Eligibility!
 - **Lead procurer**
 - Beneficiary appointed by buyers group to lead & coordinate the PCP/PPI(s)
 - **Other beneficiaries and third parties**
 - Other entities helping the procurers in related activities
 - 3rd parties can provide in-kind contributions to the procurers to implement the PCP/PPI(s) (e.g. resources/equipment needed for testing)
- NEW** • Participants can give financial support to 3rd parties (if allowed by the call)
-
- **PCP/PPI providers**
 - Successful tenderers, selected by the buyers group & lead procurer as result of the PCP/PPI call for tenders, to provide the R&D services (PCP) or innovative solutions (PPI). They do 'NOT' enter the grant agreement

Applicable rules and guidance



General annexes of the work programme

In particular *Annex H: Specific conditions for actions with PCP / PPI*. It applies to all actions that support the preparation and or implementation of PCP / PPI procurements (see above)!



Model Grant Agreement (MGA) and Annotated Model Grant Agreement (AGA, coming soon)

Annex 5 - Specific rules for PCP and PPI procurements (recalls main points of Annex H of WP)

Article 6.2.D.5 – PCP/PPI procurement costs (specific cost category for PCP / PPI actions)

Article 6.2.B – Subcontracting costs (cost category for R&I / I actions that involve a PCP/PPI)

AGA: Guidance & examples that clarify the obligations from the articles of the MGA



Guidance PCP tender docs, Guidance PPI tender docs (update for HorizonEU coming soon)

Provides guidance on how to draft the tender documents and notices in line with HE rules



FAQs about PCP actions and FAQs about PPI actions (update for HorizonEU coming soon)

You can ask more Q&A via the topic page on the Funding & Tenders Portal



Application form PCP actions, Application form PPI actions

Reminds you of what to explain at proposal stage, mandatory deliverables etc.



HorizonEU Programme guide (section on cross-cutting priority ‘innovation procurement’)

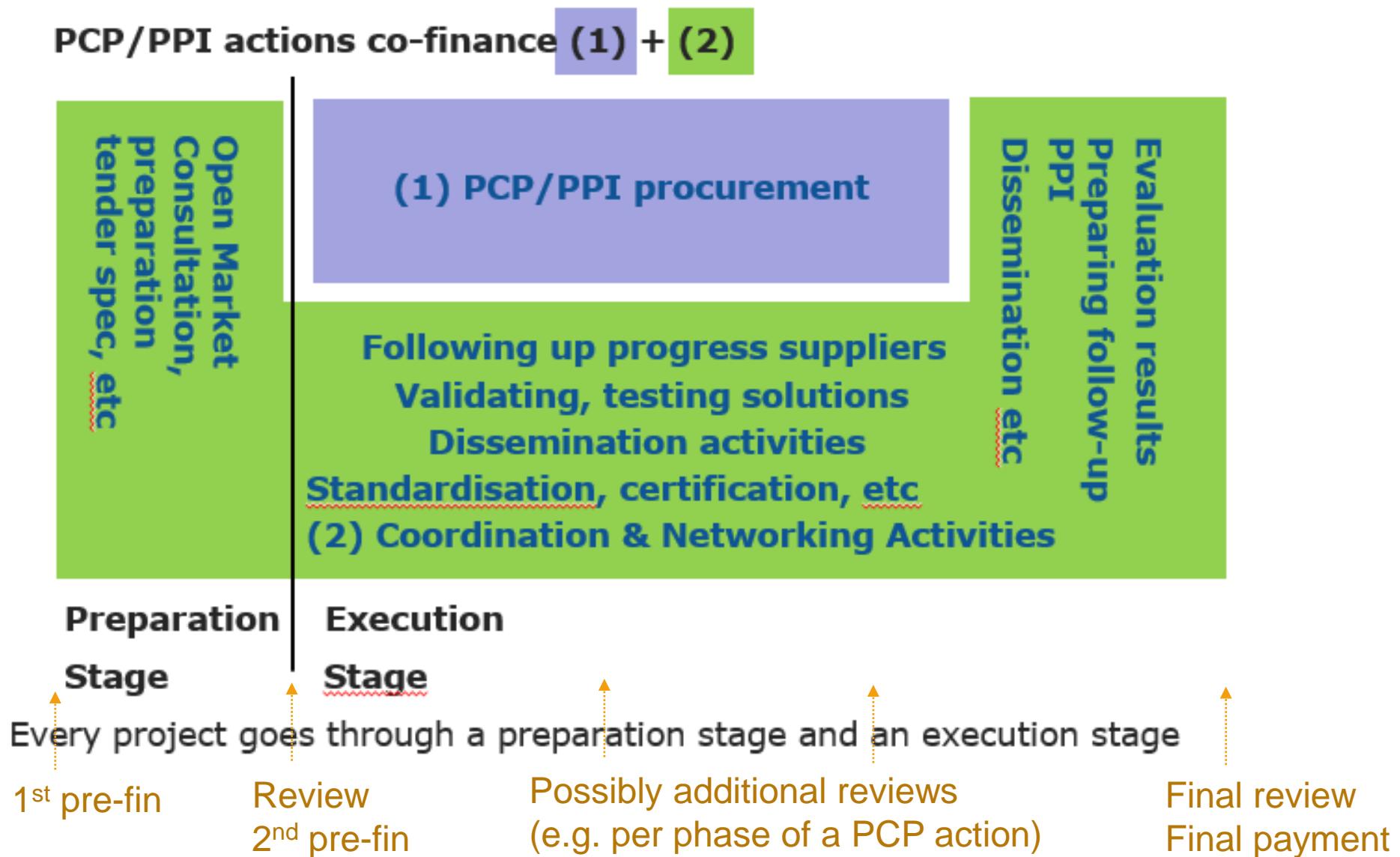
High level strategic guidance to help you find your way in how to apply

Eligible activities

In the proposal, consortium shall already identify a specific challenge in the innovation plans of the procurers that requires innovation + KPIs (targeted quality/efficiency improvements) for the PCP/PPI. Eligible activities:

- **Preparation stage**
 - Preparing **1 joint PCP / 1 joint or several coordinated PPI(s)** per action
 - Open market consultation, verifying market readiness to meet the need
 - Outcome: Tender specifications + Joint procurement agreement
 - **Execution stage**
 - Procurement of the R&D services (PCP) or innovative solutions (PPI)
 - Validating performance of solutions for sufficient duration to evaluate impact
 - Assessment & publication of the outcomes of the procurement
 - Confirmation of strategy for dissemination/exploitation of results
- + If relevant to the action, other activities (e.g. preparation of follow-up PPI, testing, contribution to standardisation / regulation / certification, training)

Eligible activities



EU contribution

- **Reimbursement rate direct costs:** Max 100% of eligible costs (PCP actions) versus Max 50% of eligible costs (PPI actions)
 - Price of the R&D services (PCP) or innovative solutions (PPI) procured
 - Eligible additional activities
 - May include in-kind contributions (and financial support to 3rd parties, if allowed by call)
 - VAT is an eligible cost unless for beneficiaries that can deduct it
- Flexibility: Consortium may choose to use part of the Union contribution to increase the support to additional activities or the budget for the PCP/PPI call for tender as long as the Union contribution does not exceed the max 100% (PCP) / 50% (PPI) of the total costs.
- Requested funding for additional activities can be max 50% (for PCP and PPI actions) of total requested grant. PCP/PPI procurement cost must be min 50% of total eligible costs.
- **Plus 25% for indirect costs:** But, no indirect costs on the PCP/PPI procurement cost, nor on financial support to 3rd parties
- **Pre-financing:** Yes, 1st pre-financing at start project for costs for preparation stage, 2nd pre-financing before execution stage for costs for rest (incl. call for tender)

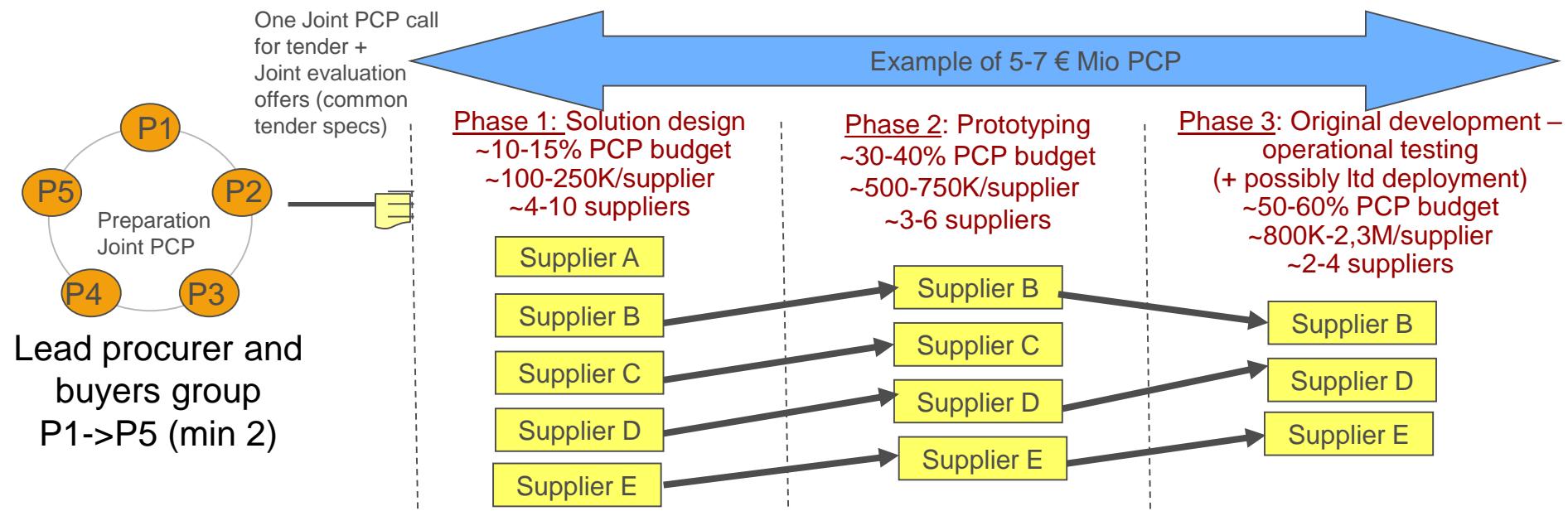
Example PCP action

- **Example: 5 €M PCP action**

- EU contribution: e.g. 4,3 €M for PCP (procurement of min 4,3 €M) + 0,7 €M for other activities
- EU contribution: Min 2,5 €M for PCP (procurement of min 2,5 €M) + Max 2,5 €M for other activities

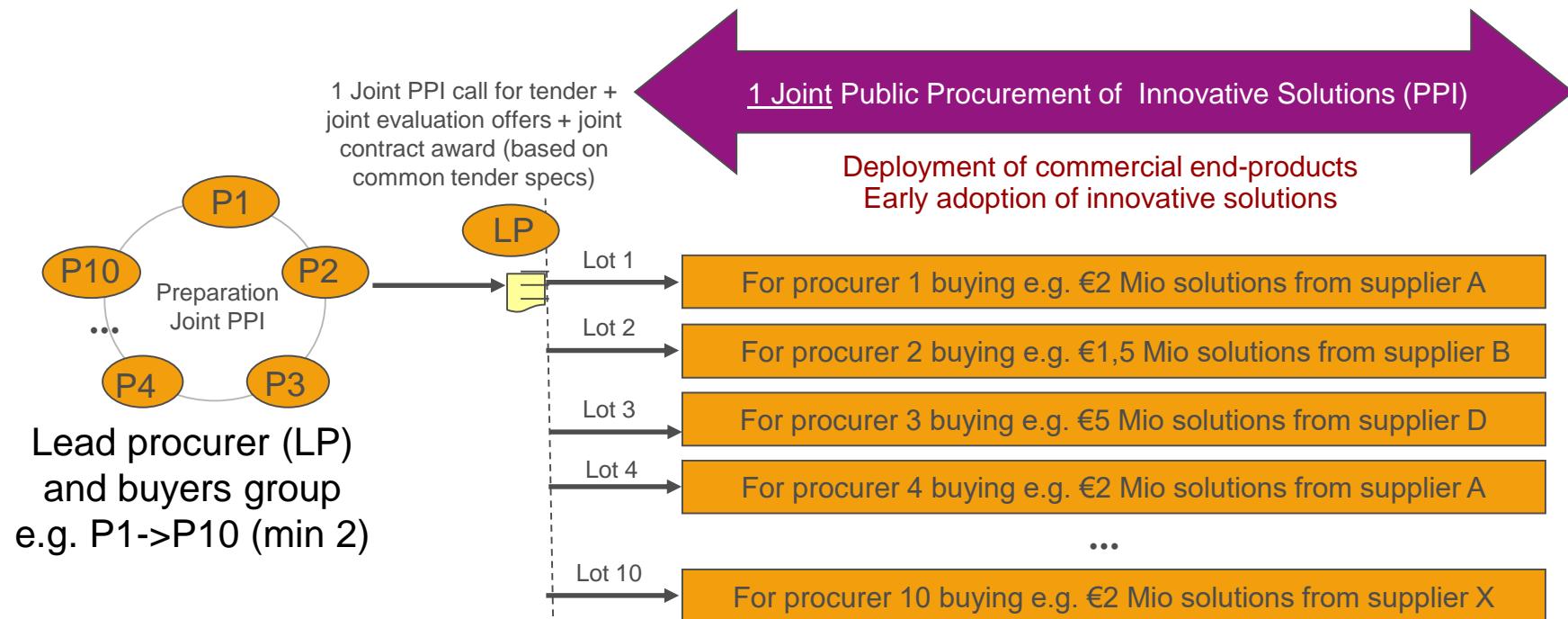
- **Example: 3 €M PCP action**

- EU contribution: e.g. 2,3 €M for PCP (procurement of min 2,3 €M) + 0,7 €M for other activities
- EU contribution: Min 1,5 €M for PCP (procurement of min 1,5 €M) + Max 1,5 €M for other activities



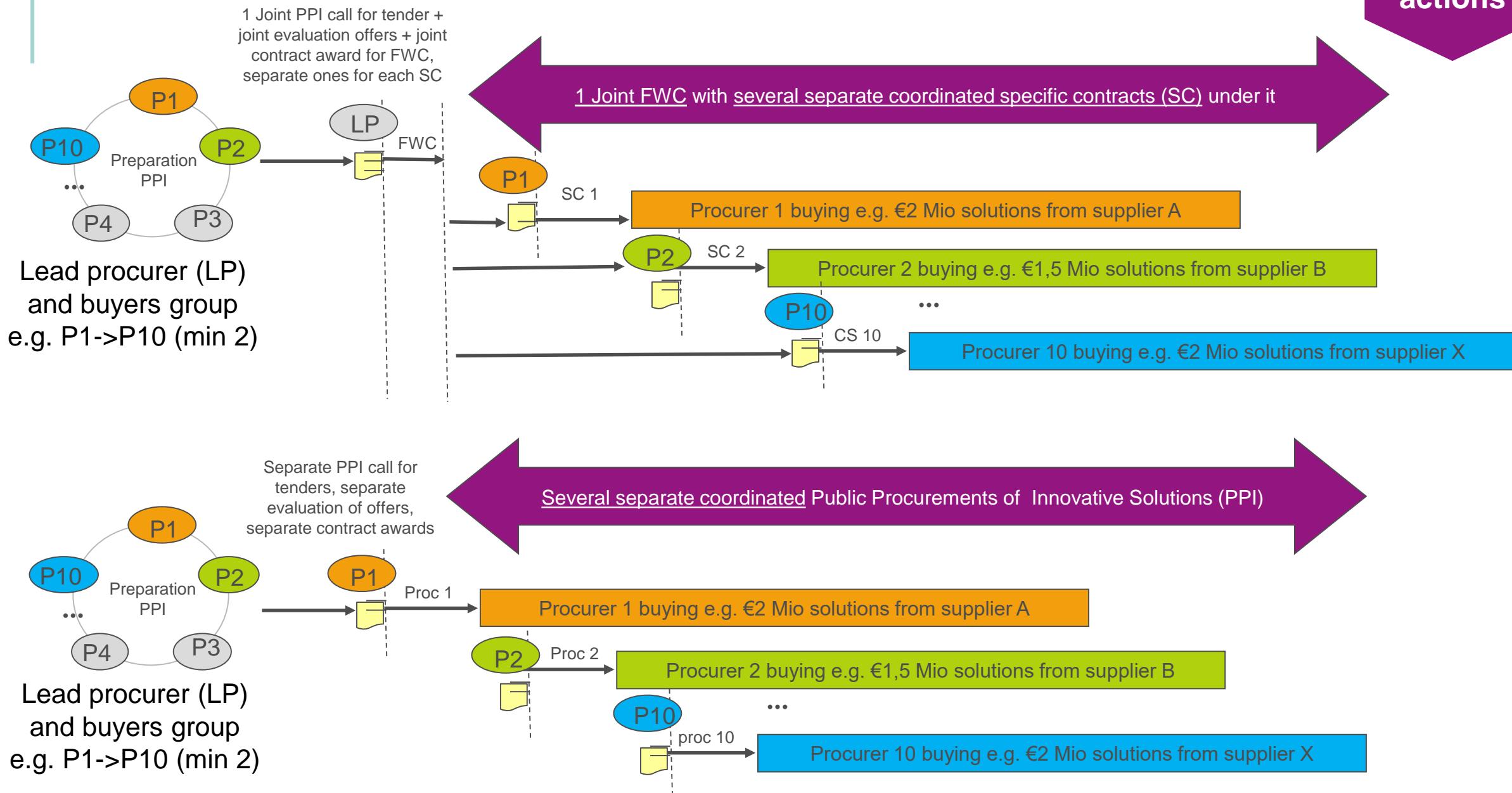
Example PPI action – joint procurement

- **Example: 5 €M PPI action grant**
 - EU contribution: e.g. 0,2 €M for coordination + 4,8 €M for PPI (procurement of 24 €M)
 - EU contribution: Max 2,5 €M for coordination + 2,5 €M for PPI (procurement of 12,5 €M)
- **Example: 2,5 €M PPI action grant**
 - EU contribution: e.g. 0,2 €M for coordination + 2,3 €M for PPI (procurement of 11,5 €M)
 - EU contribution: Max 1,25 €M for coordination+ 1,25 €M for PPI (procurement of 6,25 €M)



Example PPI action – coord procurement

PPI
actions



IPR allocation

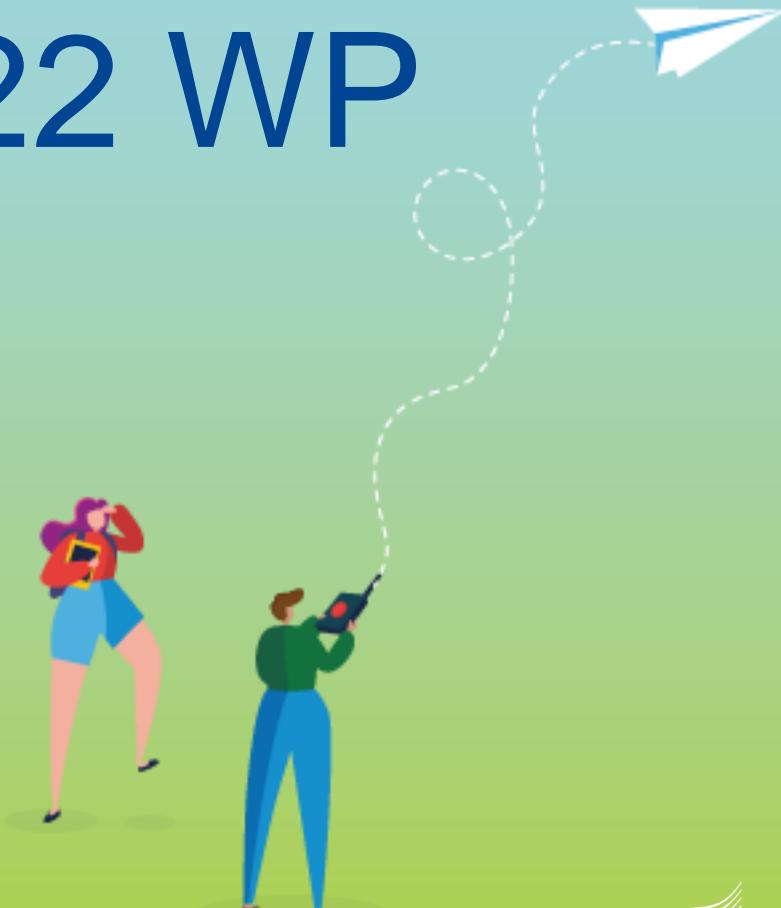
- **PCP procurements:**
 - Beneficiaries retain IPR they generate and give each other and other participants (including PCP/PPI providers) access to their background needed for project
 - PCP providers retain IPR they generate and buyers group obtains:
 - License free rights to use the results *for their own use*
 - Right to require the PCP providers to grant, or to grant themselves, *non-exclusive* licenses to exploit the results *for the procurers under fair and reasonable conditions*, without right to sublicense
 - Call back right: If PCP provider uses results to the detriment of the public interest, including security interests, or fails to commercially exploit the results within a specified period after the contract, then - *after having consulted the PCP providers on why this happened* - the procurers *can require* the PCP provider to transfer the IPR ownership to the procurers
- **PPI procurements:**
 - Similar approach as in PCPs: Ownership of IPR should be allocated to the party generating it, except in duly justified cases (e.g. when party not able to exploit)

Main novelties in Horizon Europe

- **Implementation novelties:**
 - Higher funding rates: 50% (PCP actions), 100% (PPI actions)
 - Easier to propose PCPs/PPIs in other actions (incl. for single procurer)
 - Fast-track PCPs (2 iso 3 phases, deployment in PCP), starting PCP with 2 iso 3 suppliers
 - Third party financing possible in PCP/PPI actions
 - IPR allocation approach from PCPs generalized to all procurements (also PPIs)
- **Fair international level playing field:**
 - Non-discrimination: no preferential treatment for companies from your country / region / city, or for bidders of specific size / types (SMEs/startups)
 - Access for 3rd country bidders based on reciprocity
 - All PINs for market consultations, contract (award) notices published on TED, except possibly for low value PPIs (< national thresholds) and security contracts
 - Restriction to EU-established/EU-controlled bidders possible in security PCP/PPIs
 - Place of performance conditions possible also for security PPIs
 - EU strategic autonomy clauses: e.g. restrict licensing / transfer of IPR outside EU, require sourcing strategic components from EU, min level commercialisation in EU

TOPICS CALLING FOR INNOVATION PROCUREMENT

Calls in 2021-2022 WP



2021-2022 calls in support of PCP and PPI

2021 WP (95,5 M€)

PCP actions

- Situation awareness in civil protection: 6 M€ ([SSRI-01-04](#))

RIA actions involving PCP or PPI

- International connectivity Research & Education: 15 M€ ([NET-01-FPA](#))

CSA actions

- New and existing ESFRI research infrastructure projects: 36 M€ ([DEV-02-01](#)), 7,5 M€ ([DEV-02-02](#))
- Healthcare Innovation Procurement Network: 5 M€ ([CARE-05-04](#))
- Coordination... adoption of trustworthy AI, data and robotics: 13 M€ ([HUMAN-01-02](#))
- Joint procurement of local energy related digital services: 4 M€ ([D3-02-11](#))
- Zero polluted seas and oceans: 3 M€ ([ZEROPOLLUTION-01-04](#))
- Preparing PCP on climate change adaption and mitigation: 2 M€ ([GOVERNANCE-01-15](#))
- Building capabilities in innovation procurement – startups / SMEs: 4 M€ ([CONNECT-01-02](#))

2022 WP (170,7 M€)

PCP actions

- Building resilience of healthcare systems in the context of recovery: 25 M€ ([CARE-08-02](#))
- Boosting green economic recovery and open strategic autonomy in strategic digital technologies: 9 M€ ([RESILIENCE-02-01](#))
- Public sector as Galileo or Copernicus user: 5,2 M€ ([SPACE-02-52](#))

RIA actions involving PCP

- R&D for next generation scientific instrumentation, tools and methods: 110 M€ ([TECH-01-01](#))

PPI actions

- Building resilience of healthcare systems in context of recovery: 15 M€ ([CARE-08-03](#))

CSA actions

- Stronger grounds for PCPs on Innovative security technologies: 2 M€ ([SSRI-01-03](#))

Programme Cofund actions

- Stimulating innovation procurement: 4,5 M€ ([CONNECT-02-02](#))

Open & Forthcoming calls for PCP and PPI actions**

Click on a topic identifier (e.g. CARE-08-02)

for more detailed information

Call deadlines in red

- Civil Security Work program
 - [HORIZON-CL3-2021-SSRI-01-04](#): Demand-led innovation for situation awareness in civil protection (PCP actions; 6 M€; **23 November 2021**)
- Digital, Industry and Space Work program
 - [HORIZON-CL4-2022-RESILIENCE-02-01-PCP](#): Boosting green economic recovery and open strategic autonomy in Strategic Digital Technologies through pre-commercial procurement (PCP actions; € 9M; **30 March 2022**)
 - [HORIZON-EUSPA-2022-SPACE-02-52](#): Public sector as Galileo and/or Copernicus user (PCP actions; € 5,2M; **September 2022, indicative**)
- Health Work Program
 - [HORIZON-HLTH-2022-CARE-08-02](#): Pre-commercial research and innovation procurement (PCP) for building the resilience of health care systems in the context of recovery (PCP actions; € 25M; **21 April 2022**)
 - [HORIZON-HLTH-2022-CARE-08-03](#): Public procurement of innovative solutions (PPI) for building the resilience of health care systems in the context of recovery (PPI actions; € 15M; **21 April 2022**)

Open & Forthcoming calls for PCP/PPIs in RIA/IA actions**

Click on a topic identifier (e.g. CARE-08-02)

for more detailed information

Call deadlines in red

- Research Infrastructure Work Program

- [HORIZON-INFRA-2021-NET-01-FPA](#): Network connectivity in Research and Education - Enabling collaboration without boundaries (€ 15M; Second quarter 2022, indicative)
- [HORIZON-INFRA-2022-TECH-01-01](#): R&D for the next generation of scientific instrumentation, tools and methods (€ 110M; **20 April 2022**)

Open and forthcoming calls for CSA actions

Click on a topic identifier (e.g. CARE-05-04)

for more detailed information

Call deadlines in red

Extended deadlines underlined

- **Health Program**

- [HORIZON-HLTH-2021-CARE-05-04](#): Health care innovation procurement network (€ 5M; **21 September 2021**)

- **Research infrastructure Work Program**

- [HORIZON-INFRA-2021-DEV-02-01](#): Preparatory phase of new ESFRI research infrastructure projects (€ 36M; **20 January 2022**)
 - [HORIZON-INFRA-2021-DEV-02-02](#): Consolidation of the research infrastructure landscape – Individual support for ESFRI projects (€ 7,5M; **20 January 2022**)

- **Digital, Industry and Space Work program**

- [HORIZON-CL4-2021-HUMAN-01-02](#): European coordination, awareness, standardisation & adoption of trustworthy European AI, Data and Robotics (AI, Data and Robotics Partnership) (€ 13M; **21 October 2021**)

- **Civil Security Work program**

- [HORIZON-CL3-2022-SSRI-01-03](#): Stronger grounds for pre-commercial procurement of innovative security technologies (€ 2M; **23 November 2022**)

Open and forthcoming calls for CSA actions

Click on a topic identifier (e.g. CARE-05-04)

for more detailed information

Call deadlines in red

- Energy Program
 - [HORIZON-CL5-2021-D3-02-11](#): Reinforcing digitalisation related know how of local energy ecosystems (€ 4M; **5 January 2022**)
- Food, bioeconomy, natural resources, agriculture and environment Work Program
 - [HORIZON-CL6-2021-ZEROPOLLUTION-01-04](#): Achieving zero polluted seas and ocean (€ 3M; **6 October 2021**)
 - [HORIZON-CL6-2021-GOVERNANCE-01-15](#): Preparing for pre-commercial procurement (PCP) for end-user services based on environmental observation in the area of climate change adaptation and mitigation (€ 2M; **6 October 2021**)

Topic specific workshops / Info days

Specific workshops for topics that are supporting PCP or PPI

- 28 / 06 / 21: [Online workshop / healthcare topics](#) (CARE-05-04, CARE-08-02, CARE-08-03)
- 28 / 06 / 21: [Online Info session / research & education network topic \(@13:00\)](#) (NET-01-FPA)
- 02 / 07 / 21: [Online workshop / security topics](#) (SSRI-01-03, SSRI-01-04)
- 4-7 / 10 / 21: [Big Science Business Forum / scientific instrumentation topic](#) (TECH-01-01)
- 07 / 07 / 21: [Info day / Climate change topic \(@15:45\)](#) (GOVERNANCE-01-15)

For more info about the Horizon Europe programme

- [European Research and Innovation Days 2021](#) - 23 & 24 June 2021
- [Horizon Europe Info Days](#) between 28 June and 9 July 2021
- [Horizon Europe Cluster 4 Info Days](#) (30 November 2021: info session about open PCP call)

Subscribe to the [EU Innovation Procurement notifications](#) to receive regular info on calls, news etc.



Thank you!

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