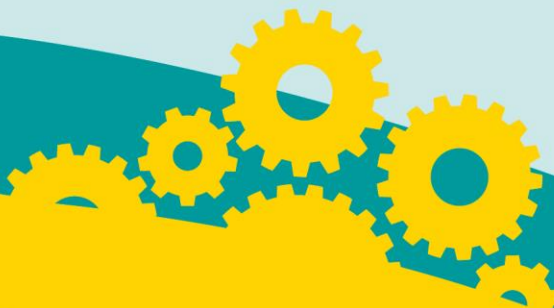




POSIDON
POLLUTED SITE DECONTAMINATION PCP



POSIDON PCP to boost innovation in soil remediation

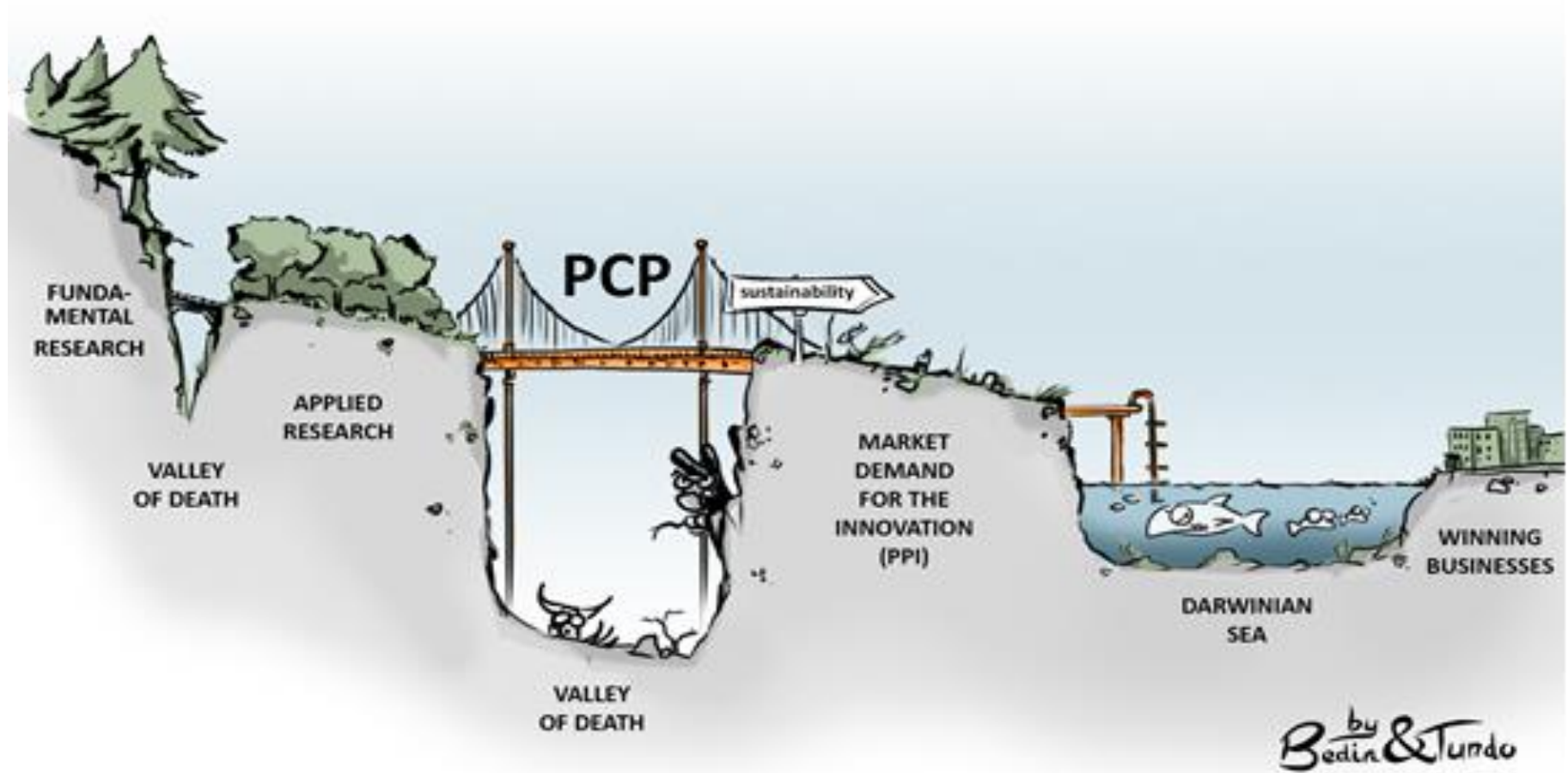
Sara Bedin (Innovation Public Procurement Expert)

Bilbao, 9th October 2023



POSIDON has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N.776838

Innovation uptake failures and dynamics



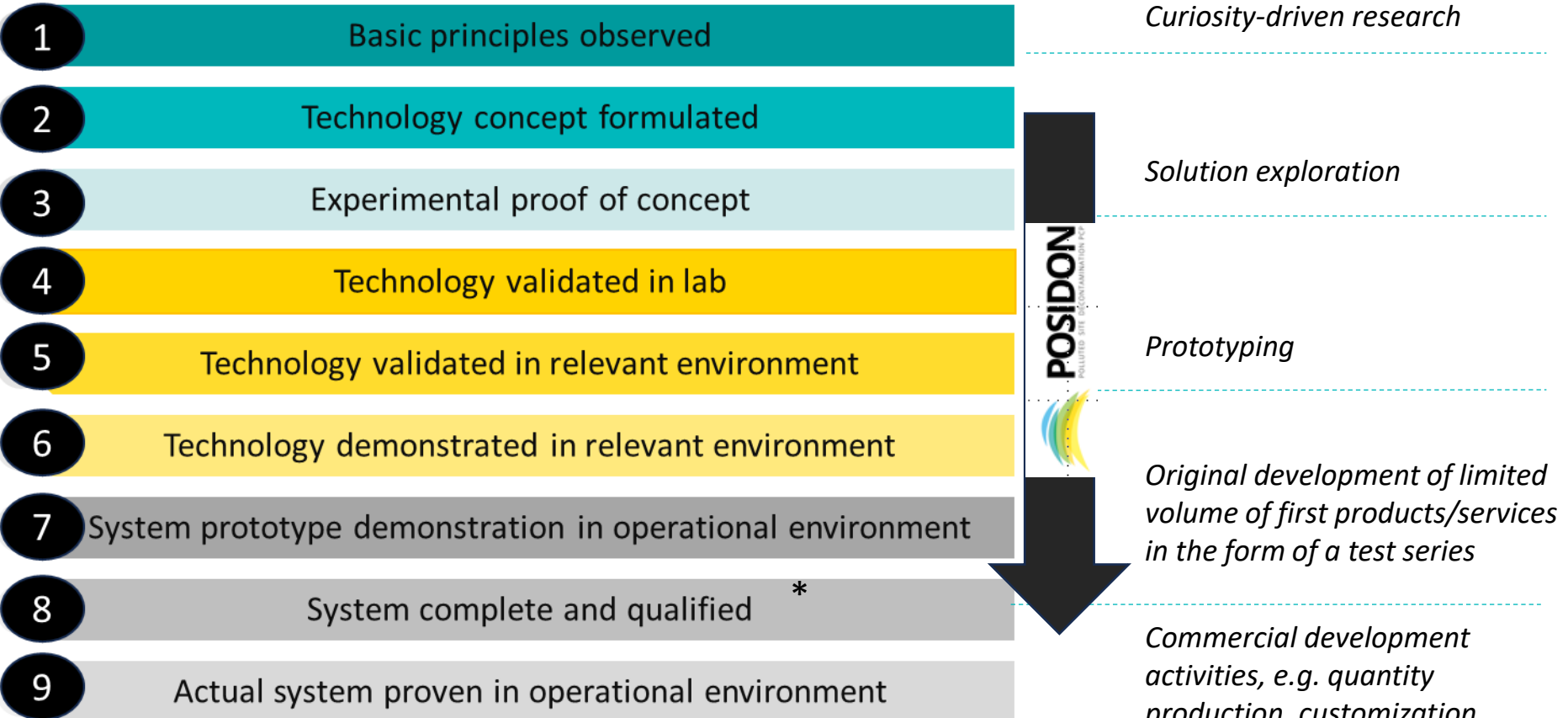
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Technology Readiness Levels defined in the State aid framework that may be covered by PCP

TRLs



* In cases where the final end-technology do not need to be produced in large quantities, then TRL 9 does not exist and TRL 8 covered by the PCP equals the final commercial deployment



Moving from traditional «technology driven» to «demand-driven» innovation strategies to bring promising R&D concepts that are relevant to the public sector faster and closer to the market

SUPPLY SIDE
«PUSHING»
INNOVATION STRATEGY



DEMAND SIDE
«PULLING»
INNOVATION STRATEGY



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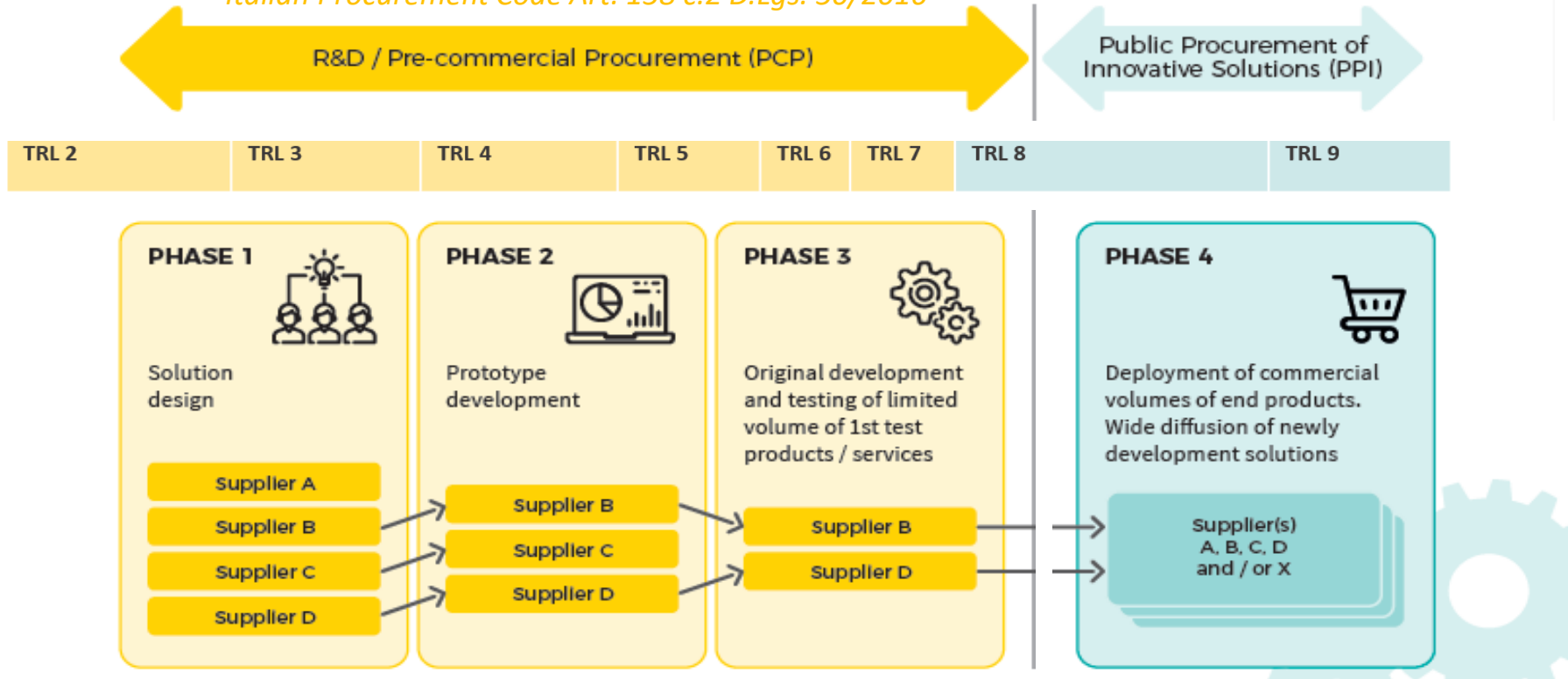


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PRE-COMMERCIAL PUBLIC PROCUREMENT

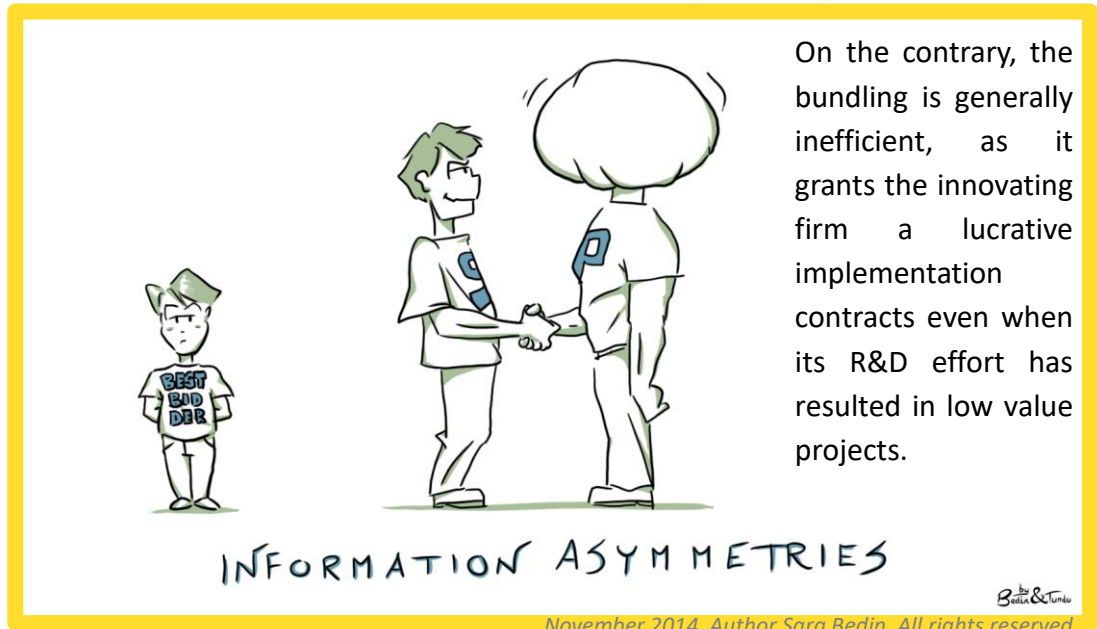
R&D service contract aimed at the purchase of applied research and experimental development services (it is not an R&D supply or works contract)

Italian Procurement Code Art. 158 c.2 D.Lgs. 50/2016



Filtering out technology risks (follow-up commercial tendering)

- 
- Undertaking a PCP before launching a PPI deployment tender can reduce this risk of procurement failure, by gaining a deeper understanding of pros and cons of alternative solution approaches, before committing to procuring a large scale commercial roll-out
 - Defining a forward-looking planning of the procurement process for the testing of a new remediation technology, which takes time (to obtain scientific evidence and laboratory validation outcomes)
- 



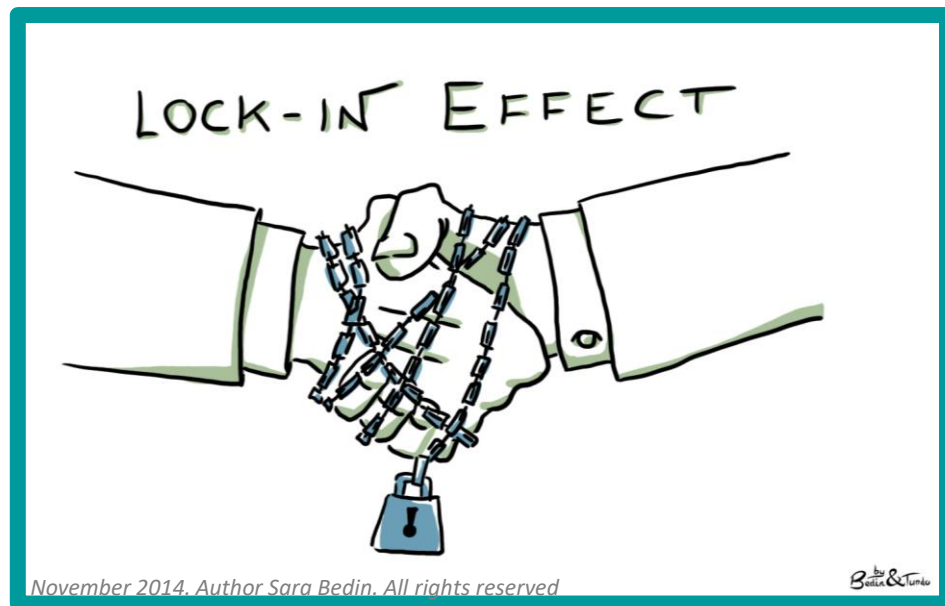
- Increase effort by the technological providers which results in higher value projects being implemented
- Better informed decision-making on future procurement of/ investment in innovative decontamination technologies based on a better understanding of the technological alternatives

Policy making - RECOMMENDATION

Enabling the large-scale application of in-situ sustainable innovative solutions, synchronizing three-stage financing measures: - **1- soil characterizations** (e.g. underground interferences /the site-specific geological and hydrogeological framework, groundwater fluctuations, presence of saturated or unsaturated soils and their local stratigraphy, moisture content, grain size distribution...) -**2- conformance testing and** -**3- PPI (public procurement of innovative solutions)**



- Streamlining desired performance and functional requirements at the stage when solutions are yet to be developed or under development
 - After each phase managing an evaluation/selection of the best suppliers that keep meeting the performance criteria for the desired end-solution, to bid to the next phase.
- Decreasing the number of companies remaining in the project (the cost of R&D gradually increases from phase 1) and retaining at least two participating companies until the last phase
- Maintaining a positive competitive pressure on suppliers.

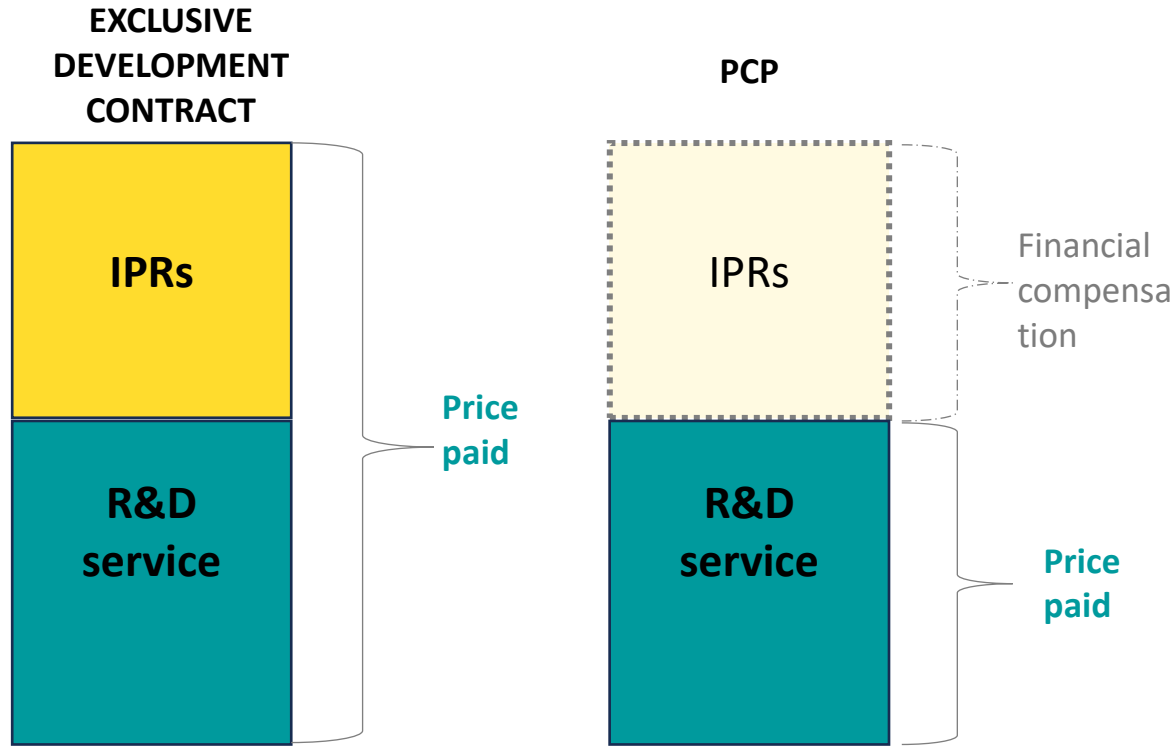


- “First time right” solutions
- More competitive market, avoiding single supplier lock-in
- More competitive and resilient EU industrial base



Leaving IPRs to the firm under unbundling


- In PCP public procurers do not keep exclusive ownership of IPRs but rather **leave IPR ownership to the participating economic operators** in return for:
 - a financial compensation in the form of a lower price that suppliers charge to the procurer for performing the R&D, as compared to when the procurer would exclusively keep all IPR rights for himself or royalties on sales of R&D results to other customers made by PCP suppliers;
 - license free right for the procurer to use the R&D results for internal use;
 - the right for the procurer to request PCP suppliers to license out R&D results to other public administrations and vendors at Fair, Reasonable and Non Discriminating Conditions (FRAND).

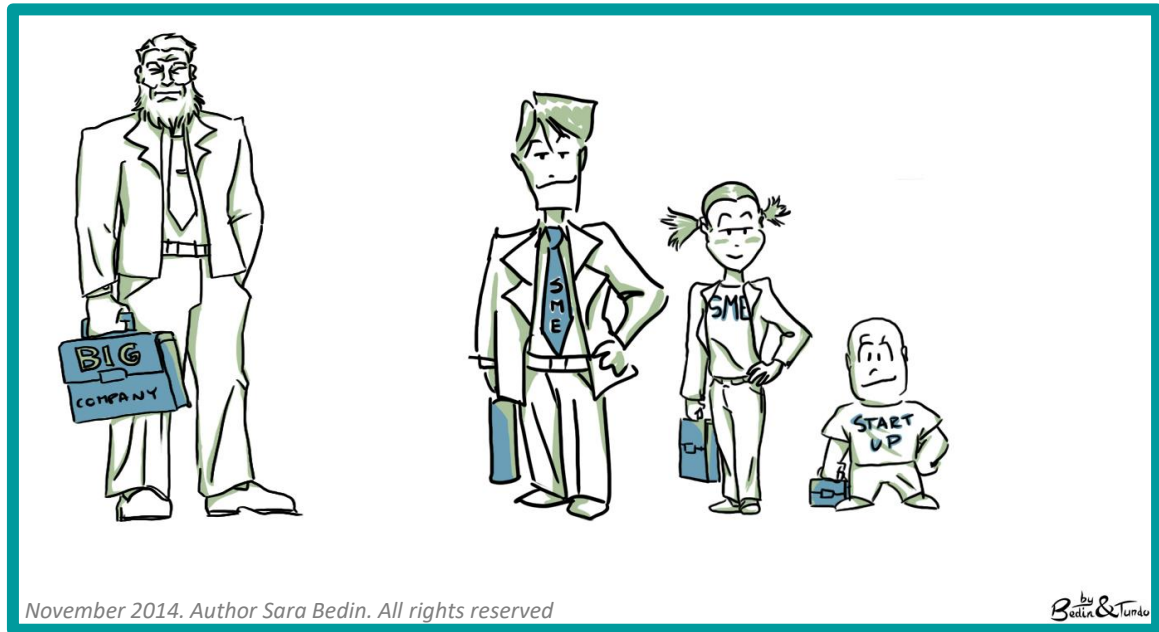


- Natural incentive to public procurers to cooperate (to divide/lower the cost of the R&D for each individual procurer.
- More competitive market, enhanced incentive to strive to improve performance.



Facilitating the access of innovative SMEs to the (procurement) market and firm growth

- 
- Phased PCP approach with gradually growing contract sizes
 - Proportionate qualification/financial guarantee procurement requirements.
 - Setting up procurement process, planning, contractual rights and obligations, including IPRs arrangements beforehand (not discriminating against any potential suppliers)



weight in public procurement (29% of GvA)

vs.

overall weight in the economy (58% of GvA)



- Winning public contracts change firms' behaviour and culture.
- Winners are more likely to participate in tendering procedure where the buyer is located outside of their country, to penetrate more markets and increase the number of solutions they compete for.



Attracting innovation and innovators through commonly validated evidence-based authorization processes.



Art. 49-55 and 56-62 TFEU

Fundamental principle of the European Union that allows businesses and professionals to provide services in any EU member state without being subject to unjustified restrictions.

- freedom of establishment that allows economic operators to operate legally in one Member State and to carry out an economic activity in another Member State, freedom to provide services that allow economic operators to offer and provide their services in other Member States while remaining in their country of origin

Therefore, companies are forced either 1) to carry out works in joint venture with registered local partners or 2) to open operational offices under foreign law in the country where the works are carried out.

Accreditation system in national registers to operate

Legal provisions obliges companies to register in national registers. Typically, registration in national registers is only permitted for companies registered in national trade registers.

The Italian accreditation system for companies in the sector is the "Albo gestori ambientali".

Connection of (local) utilities

The provision of utilities requires having current accounts opened in the country where the activities are executed + recognized electronic signature.

Financial guarantees

Environmental remediation is subject to the issue of guarantees and insurances which guarantee the authorization entity for any environmental damage caused from the activity.

Policy making - RECOMMENDATION

Ensure the implementation of the rules of the single market for decontamination R&D services/works through:

- set-up of the European register of operators in the environmental sector
- mutual recognition of the accreditation for soil remediation



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Autorità di Sistema Portuale
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Porti di Trieste e Monfalcone



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