

FP7-ICT-2011-12 Pre-Commercial Procurement (PCP) Actions

Open call in Objective 11.1

Calls for PCPs in specific public sector domains
in objectives 5.3, 5.4 and 3.5

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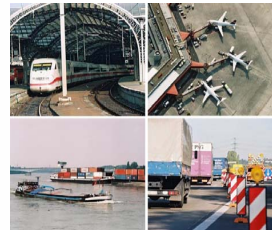
**Strategy for ICT research and innovation unit
DG Information Society and Media
EU Commission**



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- Rational behind PCP

What is the rational behind PCP?

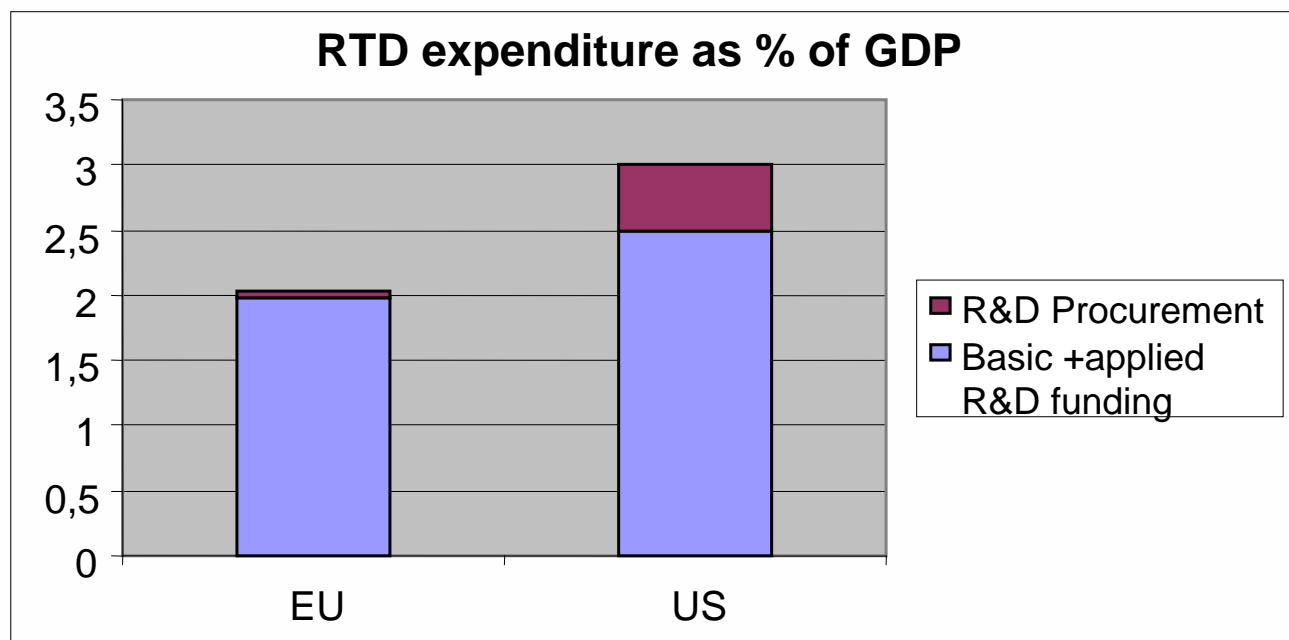
- Health care
- Climate Change
- Energy Efficiency
- Transport
- Security
- ...



- Public sector is faced with important **societal challenges**.
- Addressing these, often requires public sector transformations so technologically demanding, that **no commercially stable** solutions exists on the market yet, and forward looking public procurement strategies (incl. procurement of **R&D**) are needed

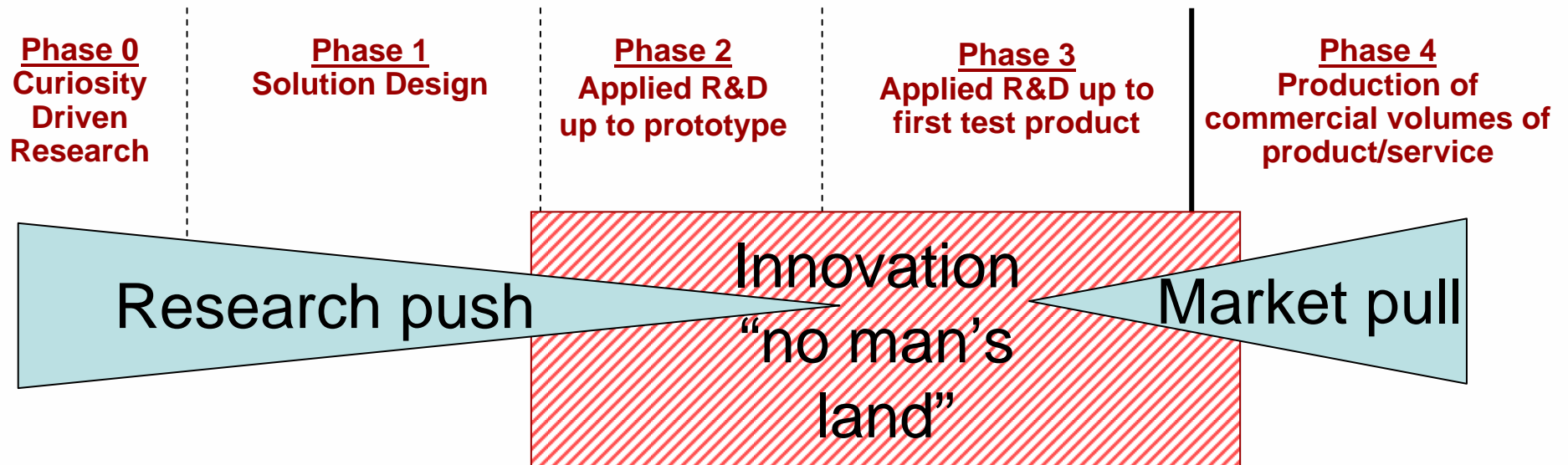
European public sector can do better

Our competitors use public demand for R&D more



- Public expenditure is 47% of EU-25 GDP, but 20 times less is spent on R&D procurement in EU (~2,5 Bn€) versus US (~50Bn€)
- More demand to develop new innovative solutions for public sector challenges for which there are no products on the market yet (R&D procurement) can fill half of the EU-US R&D investment gap

Where is this missing link in the EU innovation cycle?



- A better balance between supply and (public) demand side measures to stimulate innovation could help bridge this gap

Why so little R&D procured in EU? Barriers

- Lack of awareness of how to optimise risk-benefit balance for procurer and supplier
- Unclear how to do it within the legal framework for R&D procurement
- Fragmentation of demand

Commission's PCP Communication
(COM(2007)799 & SEC(2007)1668)
addresses these 3 barriers

Current practice in EU often no risk-benefit sharing, no competition

- Procurer pays high development price in exchange for all R&D benefits
- High R&D procurement cost
 - little incentive for procurers to share info with other procurers (market fragmentation)
- No benefit (IPR) sharing
 - suppliers not allowed to exploit innovations to other customers

Best practice: risk-benefit sharing at market price and under maximum competition

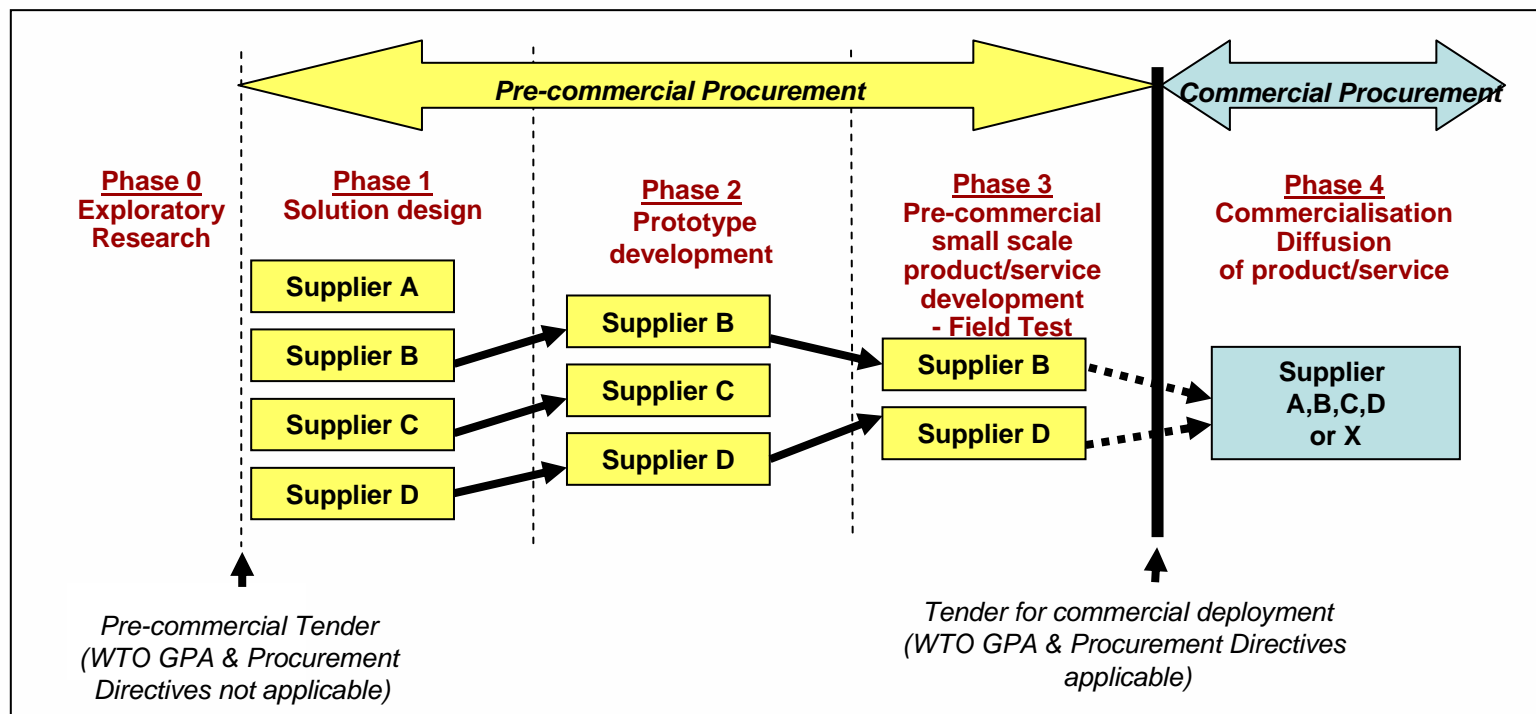
- Risk-benefit sharing, a key success factor
 - Financial compensation for benefits shared with suppliers
 - E.g. Procurers leaving IPR ownership with suppliers in return for discount on R&D price, free usage rights and right to require licensing to 3rd parties
 - Risk-benefit sharing to be done at market price
 - No state aid
- Competition ensuring best value for money
 - Competitive development in phases
 - Separation of R&D phase from contract for large roll-out
 - First resulting products on average 20% cheaper than when sourcing R&D from 1 supplier only

Pre-commercial procurement

Bridging the innovation gap through public demand pull

- Specific approach for public sector to procure R&D services, enabling
 - Price/quality products that better fit public sector needs
 - Earlier customer feedback for companies developing solutions
 - Better take-up/Wider commercialisation of R&D results

(COM/2007/799 &
SEC/2007/1668)



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- Concrete case examples

(1) Famous international cases

Life changing technologies resulting from R&D procurements

- Air crafts
- Semiconductor technology
- Internet protocol
- GPS
- Wireless CDMA protocol technology (Qualcomm)
- High performance computing technology
- First single chip processors (Intel)
- First applications for hydrogen, biotech (Genentech), nanotechnology

Study "Opportunities for technology procurement in ICT-related sectors in Europe,
Ramboll management, June 2008"

(2) Famous international cases Computer development case - US

- Since the 60s US government has set itself the ambition to actively spur continuing technological progress in computing by demanding ever higher levels of technical performance.
 - Regular long term planning of R&D procurements across agencies
- The cost per unit of computing power has reduced a trillion times over 60 years of US R&D computing procurements.
 - Enormous cost savings to computing-intensive gov. departments
 - Large spill-over effects to PC affordability for consumer segment

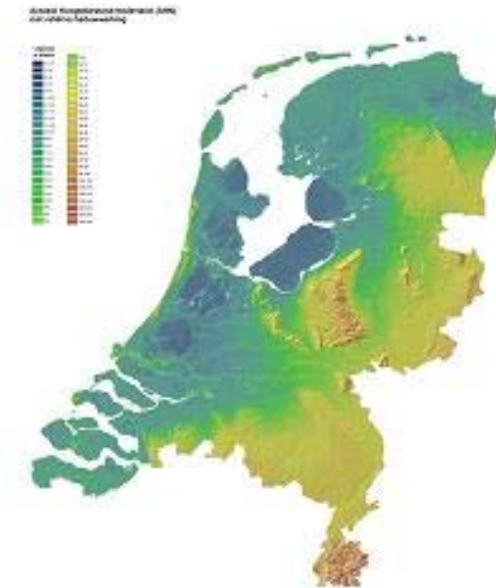
Chapter 8 'policy framework' of the book 'Getting up to speed: the Future of Supercomputing', Committee on the future of supercomputing, National Research Council, 2004

Results: world leading companies life-changing technologies developed

Public Procurer	Competing Companies	Technologies Developed
DOD - DOE - NSA (50s-60s)	IBM, CDC/ETA	Multiprogramming Memory protection General Interrupts
DOE Laboratories (70s)	Cray, IBM	Vector Processing
DARPA, Universities (80s)	DEC, CDC, IBM, UNIVAC	Timesharing
Universities (80s)	SUN, DEC, HP, IBM	Work stations
DOE (90s and beyond)	HP, IBM, SGI, Cray, SUN	Teraflop (petaflop?) machines

Table: Computer systems development supported by government purchases.
SOURCE: ' May 2006 report for the US Center of Research and Development Strategy ',
Gerald Hane, Special Assistant in the Office of Science and Technology Policy of the
Executive Office of the US President on the interaction of trade and security
on international science and technology policy, May 2006

(3) Example PCP-like pilot in Europe



The Netherlands: 40% below sea level

- 17.000 km of dikes
- made of clay, sand, peat
- experience with high water
- visual inspection



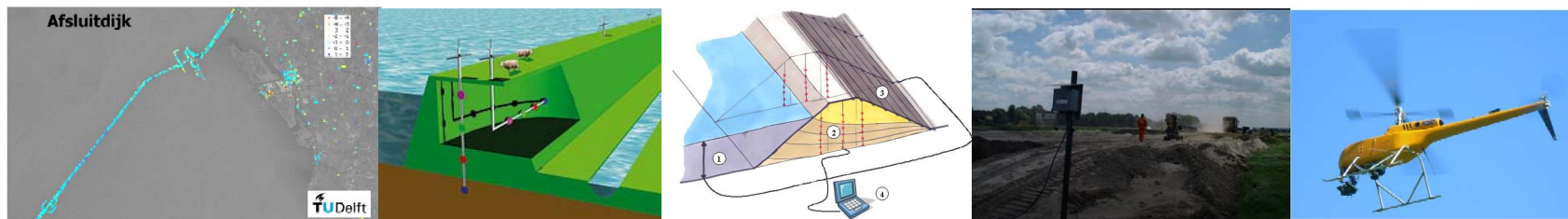
Unexpected dike problems

- Dike burst in Wilnis (August 2003) caused by **dry** period that weakened peat dike
 - Leak in the dike in Spijk (January 2004) caused by broken water pipe **inside** the dike along the Juliana canal.
- Start programme Improvement inspection of dikes and dams:
- Need for new techniques for real time visual dike inspection and early warning systems



Added value pilot

- Totally new approaches: satellite, chip, helicopter based etc
 - Better insight of pro & cons of different solutions
 - less risk to miss-specify tender specs for large roll-out
- New parties: from other sectors and starting companies
 - Budget for phase 1 (5 companies) – 250,000€
 - Budget for phase 2&3 (2 companies) – 850,000 €
- Instead of theoretic market studies, prospect of solving problem:
 - 2 systems entering the market within 5 years
 - Today starting to sell to Dutch and US procurers
- Close participation of problem owners: dike managers
- No obligation to purchase large roll-out from any supplier



(4) PCP-like projects in NHS NIC

Examples of solutions developed



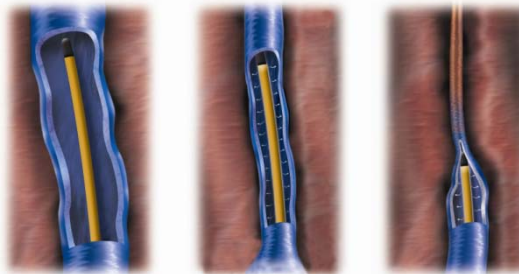
Potential £19m p.a. saving



Potential £160m p.a. saving



£4,000 per HCAI avoided



Disposable catheter inserted into vein

Vein heats and collapses

Catheter withdrawn, closing vein

Potential £17m p.a. saving



Potential £30m p.a. saving

PCP-like projects in NHS NIC

Economic benefits year 2009/2010

Value to the economy:

- The NIC supports SME's to develop innovative solutions to patient and staff needs. With the support of the NIC, a number of innovations have been able to attract significant funding (**£290m**).

Potential Value to NHS:

- The NIC has supported the development of innovations that would improve the quality of the patient experience and generate potentially significant cost savings to the NHS (**£236m**).



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- EU support for PCP

Current EU support for PCP

Networking & awareness raising activities

- 2009 calls for proposals
 - In FP7, CIP and INTERREG IV RFEC
 - support the establishment of networks of public authorities on pre-commercial procurement
 - promote awareness-raising and experience-sharing on PCP, debate mid-to-long term public needs requiring R&D of new technology solutions with potential role for PCP strategies
- 3 CSAs in FP7 ICT
- 2 RFEC fast track networks



PCP in
Intelligent
Transport
Systems



PCP in ICT
for health
and energy
domains

**PROGR
- EAST**

PCP in egov
in eastern
European
countries



PCP at
regional level
in Hungary,
Poland, UK

MKW
Making Knowledge Work

New project,
speed up innovation
time-to-market
from demand side

'New' FP7-ICT-WP2011-2012 support for PCP

Cross-border PCPs on topics of common EU interest

- Support for public authorities planning joint implementation of pre-commercial procurements on topics of common European interest
- EU contribution (CP-CSA): combination of
 - CSA: Reimbursement of eligible costs for **preparation, management and coordination** of the joint PCP call for tender (100% funded)
 - CP: Reimbursement of max 50% of the eligible costs for the **development of the new ICT solutions procured through the joint PCP** (for financing of the R&D to be performed by the bidders/subcontractors selected via the joint PCP)

CSA = Coordination and Support Action

CP = Collaborative Project

ICT for ageing and wellbeing info day, Brussels, 15 october 2010: Slide 21

Eligibility criteria consortia

- Minimum number of participants
 - **3 mutually independent public bodies** from 3 different Member States or FP7 Associated Countries
 - Critical mass of public **purchasers**
- Eligible public bodies
 - **Public purchasers**, planning to integrate PCP into their procurement programs
 - **Public authorities** (e.g. managing R&D&I programs) planning to provide incentives to public purchasers to do PCP
- What is meant by “public purchasers”
 - Public bodies & Utilities **as in public procurement directives**
 - E.g.: public hospitals / transport operators, ministries (e.g. for health, welfare, transport, environment, justice, etc), water or energy utilities, local/regional authorities, police or fire fighters

Eligibility criteria consortia

- Other stakeholders
 - Whose participation well justified -> may participate, but...
- Private bodies
 - **Potential suppliers** of solutions sought for by the public bodies -> not eligible to participate as EC grant beneficiaries (to avoid conflicts of interest)
 - **Not potential suppliers** of solutions sought for by the public bodies -> may participate as EC grant beneficiaries (e.g. private hospitals, health insurance companies etc)
- Universities
 - May participate **on the buyers side** as “public bodies” interested in procuring new development of solution xyz
 - If “for profit”, may participate **on the supply side** as bidders/contractors developing solutions in the PCP

Specific requirements for joint PCP procurement in the CP-CSAs

- **EU wide publication** of PCP tender, at least in English
 - in compliance with Treaty principles
- All offers evaluated based on **same objective criteria**
 - regardless of company size, location of head office
- Use **functional/performance based specifications**
 - not prescribing specific solution approach
- Joint PCP has to cover **phase 1 to 3** and needs to have **multiple companies** developing in competition
 - one framework contract with 3 specific contracts/phase
- Tenders awarded based on **best value for money** (not just lowest price) and **market price** (no State aid)
- **IPRs shared**: ownership rights with companies, free usage rights & right to license with procurers

WP2011-2012 support for PCP

What? How? How Much?

- Calls on **specific areas of public interest (3M€ each)**
 - In ICT for health (obj. 5.3(d), call 7)
 - Topic: services for mobile access to patient health info
 - In ICT for inclusion/ageing well (obj. 5.4(d), call 7)
 - Topic: robotics solutions for ageing well
 - Photonics (obj. 3.5(d), call 8)
 - Topic: innovative photonics solutions improving quality and / or efficiency of public sector challenges
- **Open call** for any domain of public sector needs (**5M€**)
 - Addressing ICT solutions for security, e-gov, transport, energy, environment, health, ageing etc (obj.11.1, call 8)

Call 7: 18 Sept 2010 -> 18 January 2011
Call 8: +/- 1 year later

Where can I network / find partners? for submitting PCP proposals to call 7

- For call 7: PCPs on ICT for ageing & health
 - FP7 Info day (joint ageing / health PCP workshop)
 - Venue: 15 October 2010, Brussels
 - Agenda: http://ec.europa.eu/information_society/activities/einclusion/events/info_day_call7/index_en.htm
- Other opportunities to meet health procurers & discuss PCP
 - E-health procurement workshop
 - Venue: 7 October 2010, Brussels
 - Agenda: <http://epractice.eu/en/workshops/ehealth>

Important docs to check when preparing a proposal

- WP2011-12, Call fiche
 - Read not only obj. 3.5/5.3/5.4, but also obj. 11.1 and Appendix 6
 - Guide for applicants for CP-CSAs on PCP !
 - Guidance on how to prepare your proposal
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- COM/2007/799 and SEC/2007/1668
 - Contains the basics: why and how PCP
 - FAQs on PCP website
 - Answers to more practical questions

Expression of interest form

- Can help to find partners

Pre-proposal check

- Get feedback on your draft pre-proposal

Interesting Links

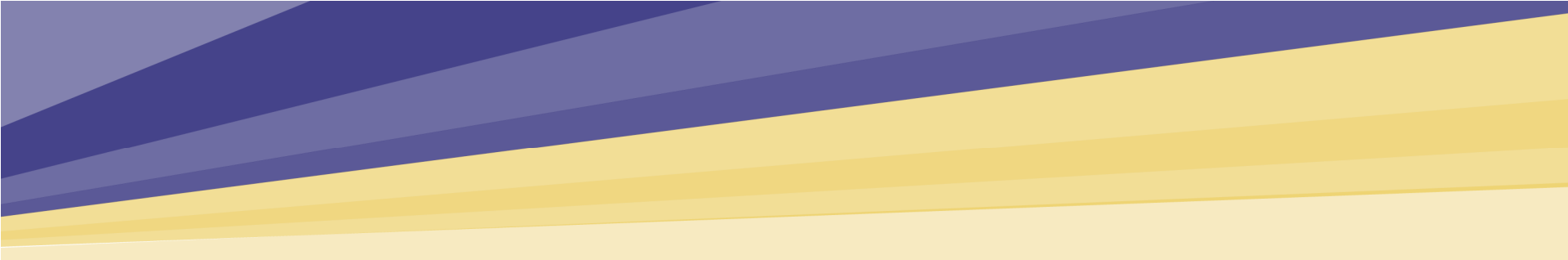
Pre-Commercial Procurement (PCP) website

Info on calls, EU funded projects, background docs, FAQs, etc

http://cordis.europa.eu/fp7/ict/pcp/home_en.html

Link to Work Programme FP7-ICT-2011-7

http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.FP7DetailsCallPage&call_id=376

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- Extra slides: what activities can be covered by CP-CSAs on PCP

Type of activities supported under CSA part

- Defining the mid-to-long term **solution requirements** for the required public service innovation, and resulting **specifications** for a joint PCP call for tender
- Establishing and implementing **good practices for multinational PCP evaluation and monitoring** (common evaluation criteria & implementation methods)
- Developing **personnel exchange and/or joint training activities** on PCP to support a wider cooperation between public purchasers on introducing innovative solutions in public services across Europe
- Establishing **specific cooperation agreements or (legal) arrangements** between participants to prepare for further trans-national PCP projects or programmes
- **Dissemination of results** and contribution to **standardisation** bodies (based on jointly defined requirements for the innovation of public services).

Type of activities supported under CSA part

- Other networking and coordination activities essential to the preparation, management and coordination of a joint PCP call for tender, such as:
 - Building cooperation with other stakeholders essential for the implementation of a PCP strategy (e.g. public purchasers, R&D&I agencies, public procurement policy makers, other stakeholders).
 - Updating of the joint PCP action/implementation plan based on the outcomes of the PCP evaluations after each phase of the joint PCP (e.g. joint regulatory agreements, joint standardisation activities)

Type of activities supported under CP part

- The exploration, through a joint PCP, of possible solutions for the targeted improvements in public sector services, and the testing of these solutions against a set of jointly defined performance criteria.
- Different constellations for joint procurement[1] are allowed, such as for example common procurement entity[2], lead authority[3] and piggy-backing[4] constellations.
- [1] "Joint procurement" means combining the procurement actions of two or more contracting authorities. The key defining characteristic is that there should be only one tender published on behalf of all participating authorities.

Type of activities supported under CP part

- [\[2\]](#) In the "**common procurement entity**" constellation all involved public purchasing authorities commonly establish or designate one external legal entity to conduct the joint procurement with a joint mandate and joint resources of all public purchasing authorities.
- [\[3\]](#) In the "**lead authority**" constellation a group of public purchasing authorities collaborate through their existing purchasing departments in such a way that one public purchasing authority of the group is designated as lead authority to take responsibility for sourcing markets, tendering and arranging contractual documentation for specific procurements, all in consultation with other purchasing authorities involved in the joint procurement.
- [\[4\]](#) In the "**piggy-backing**" constellation one public purchasing authority executes the procurement and provides access to the results of the contract for a wider range of authorities, essentially by stating in the Contract Notice that other named public purchasing authorities may also wish to may also wish to make use of the resulting contract a later date (normally during the timeframe of the original contract).