Pre Commercial Procurement

Austrian Pilot Calls

MLE Innovation Procurement,
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ANCHORING PCP IN THE AUSTRIAN R&I POLICY CONTEXT

- March 2011: concept of "innovation promoting public procurement" (IÖB)
- The move towards implementation was prepared through a combination of measures at the strategic, operational, legal, monitoring and benchmarking level. (~ 2-5% of the procurement volume for IÖB)
- In 2010-2011 the first national Austrian PCP pilot was prepared.

WHEN CHOOSE A PCP?

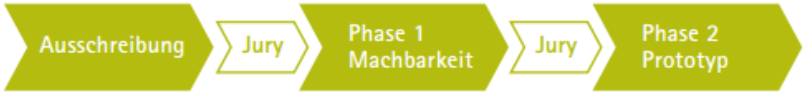
Needs assessment:

- Procurement needs
- Stakeholder opinions

Market consultation:

- What is state of the art?
- What are current developments?
- Do companies understand our challenge?
- Are challenge and scope feasible, given time frame and budget – or what should be changed to make it feasible?
- What do companies need to respond to the challenge?
- Which companies might apply?

PROCEDURE:
BUDGET/ EVALUATION



Budget
- 50% procurer
- 50% funding authority

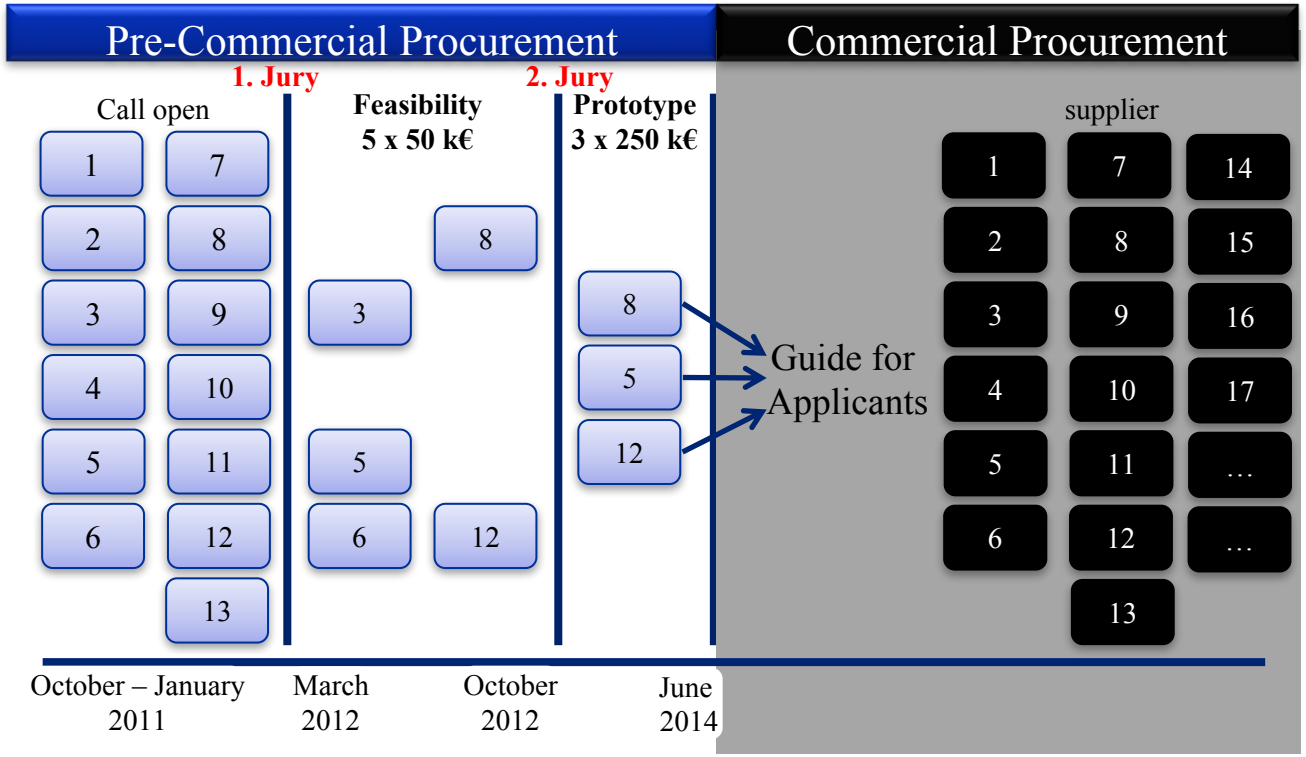
Beneficiaries
- enterprises
- Universities
- research bodies

Evaluation
- Relevance
- Quality
- qualification
- cost-benefit ratio

PCP PILOT

Procedure

innovation needs time vs. problems need quick solutions



Quelle: Blust, bmvit

FFG-PCP PILOT CALLS

FIRST EXPERIENCES:
2 parallel PCP Pilot-Calls (2011-2014)
co-funded by bmvit, ASFINAG & ÖBB

- **ASFINAG: Mobile traffic management system** for road works and major incidents: to enable a temporary, intensive monitoring of traffic flow for construction sites and major events

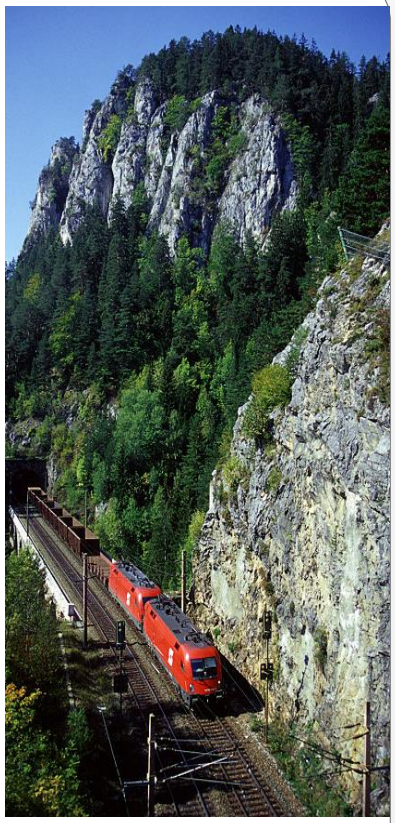
- **ÖBB: Detection of natural hazards**: detection of natural disasters to achieve sufficiently early warning and timely "suppression" of avalanches, debris flows, rock falls, landslides etc

PILOT EXAMPLE:
DETECTION OF NATURAL HAZARDS

- Risk of rock fall , floods , mudflows , landslides
- Timely warning and measures reduction

- Despite different approaches many similarities
  - Safe and durable sensors ,
  - universal data interfaces and protocols
  - stable energy supply and data processing
  - aligned information transfer

- Market: offers innovative approaches and solutions
  >> but are often isolated solutions
  ➔ Pre commercial Procurement



DETECTION OF NATURAL HAZARDS:

Procedure

- 1. Phase
  - 13 Ideas
  - 5 consortia invited for the feasibility study

    ➔ big variety of innovative ideas

    ➔ experimental and pre commercial approaches

- 2. Phase
  - 3 consortia developed a prototype
  - followed by a 6 month test phase

    ➔ difficult to test in a row: rare events

    ➔ test phase should last for a year

    ➔ nevertheless: positive performances of all prototype

DETECTION OF NATURAL HAZARDS:

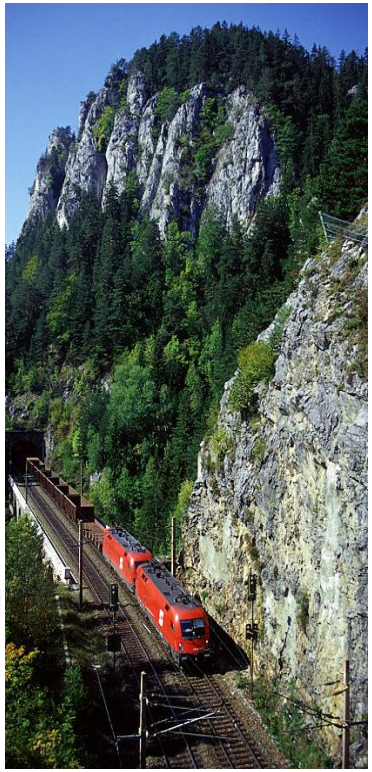
Experiences

- exits in phase 1 because:
  - too much experimental
  - technical difficulties

- all projects reach the overall goals of the PCP

solution assessment needs:
comparative ratings, to elaborate the procurement basis

- comparability through a standardized performance catalogue
- comparison in the field of technological implementation
- standard system architecture, data interface and modularization



MOBILE TRAFFIC MANAGEMENT SYSTEM

- traffic flow monitoring and steering especially in sectors without traffic management systems
- spontaneous events (accidents, unpredictable damages of infrastructure,..)
- Long term or predictable events (roadworks, events, …)
- Information on travel times/delays, alternative routes, availability of parking spaces…

REQUIREMENTS: TRAFFIC MANAGEMENT SYSTEM

- easy handling (quick and easy to install and to use)
- island system, energy self-sufficient
- reliability of data (traffic flow, congestion, transit times)
- reliably data submission to infrastructure operators and e.g. police
- protection against vandalism and theft

CONSORTIA

VKT Verkehrs- und Kommunikations-Technik GmbH

PRISMA solutions

EBE SOLUTIONS

MOVEBAG

Wieser
www.verkehrssicherheit.at

tim traffic information and management GmbH

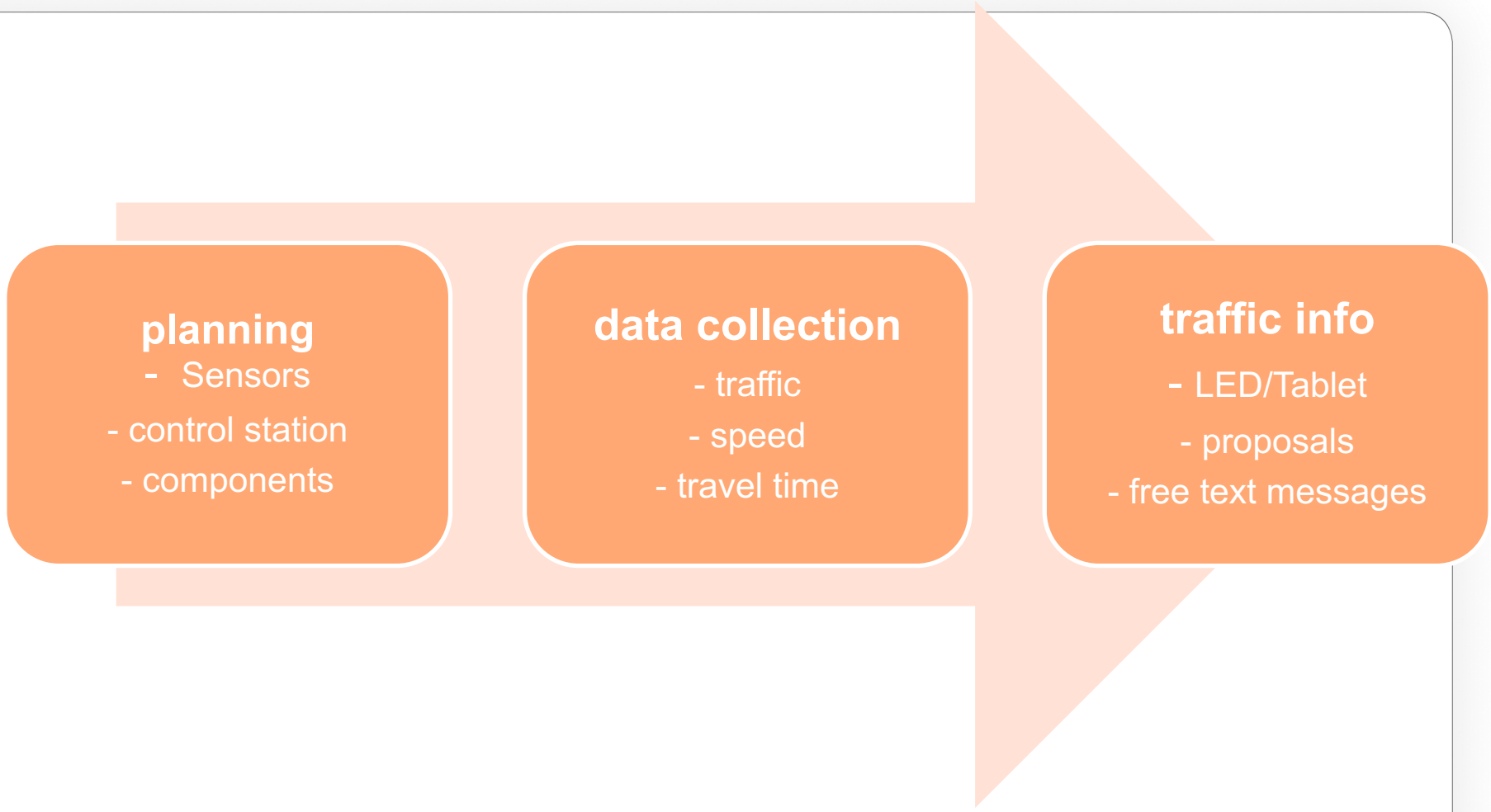
swarco
SWARCO FUTURIT
Verkehrssignalsysteme Ges.m.b.H.

MOVEBEST

AIT AUSTRIAN INSTITUTE OF TECHNOLOGY
TOMORROW TODAY

verkehrspuls
Technisches Büro für Verkehrsplanung

MOBILE TRAFFIC MANAGEMENT SYSTEM



RESULTS: MOVEBAG/MOVEBEST

- modular system, components/overall system
- transport in existing track vehicles
- easy assembly and disassembly thereby quick commissioning
- low energy consumption, autonomous operation until 1 W
- high data quality: total cross-sectional sensors
- visualization through camera systems, travel time-tracing, travel time, speed, traffic volume
- full graphic LED – display, expanding of display symbolism possible
- Input and output unit = outdoor tablet
- connection to traffic control centre
- reliable decision base for control measures

Impressions

SECOND PILOT-PHASE
Pilot-Call 2014-2016 co-funded by bmvit & ÖBB

- **ÖBB:** eHybridlok for electrical shunting (without the need of diesel)

- 6 Submissions
  - >> 4 feasibility studies selected
  - >> summer 2015: 2 selected for prototype-development

PCP PILOT
the learnings so far

- **competition** → to increase quality and innovation
- **R&D service contract** →100% financed, results published
- **shared IPR** → non exclusive rights of use and exploitation for both client AND supplier

- PCP is an instrument for **public procurers!**
- **Most important** to start a PCP:

You need a problem that will be
solved by procuring an innovative solution.

R&D INNOVATION PARTNERSHIPS

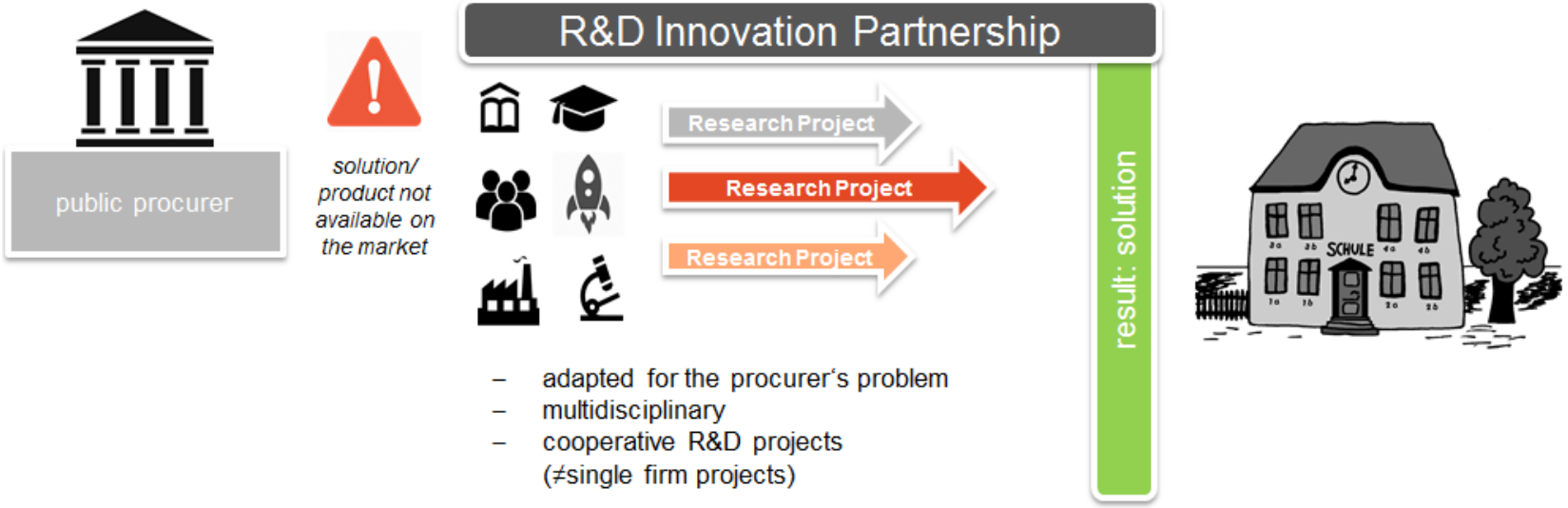
FFG concept

R&D INNOVATION PARTNERSHIPS

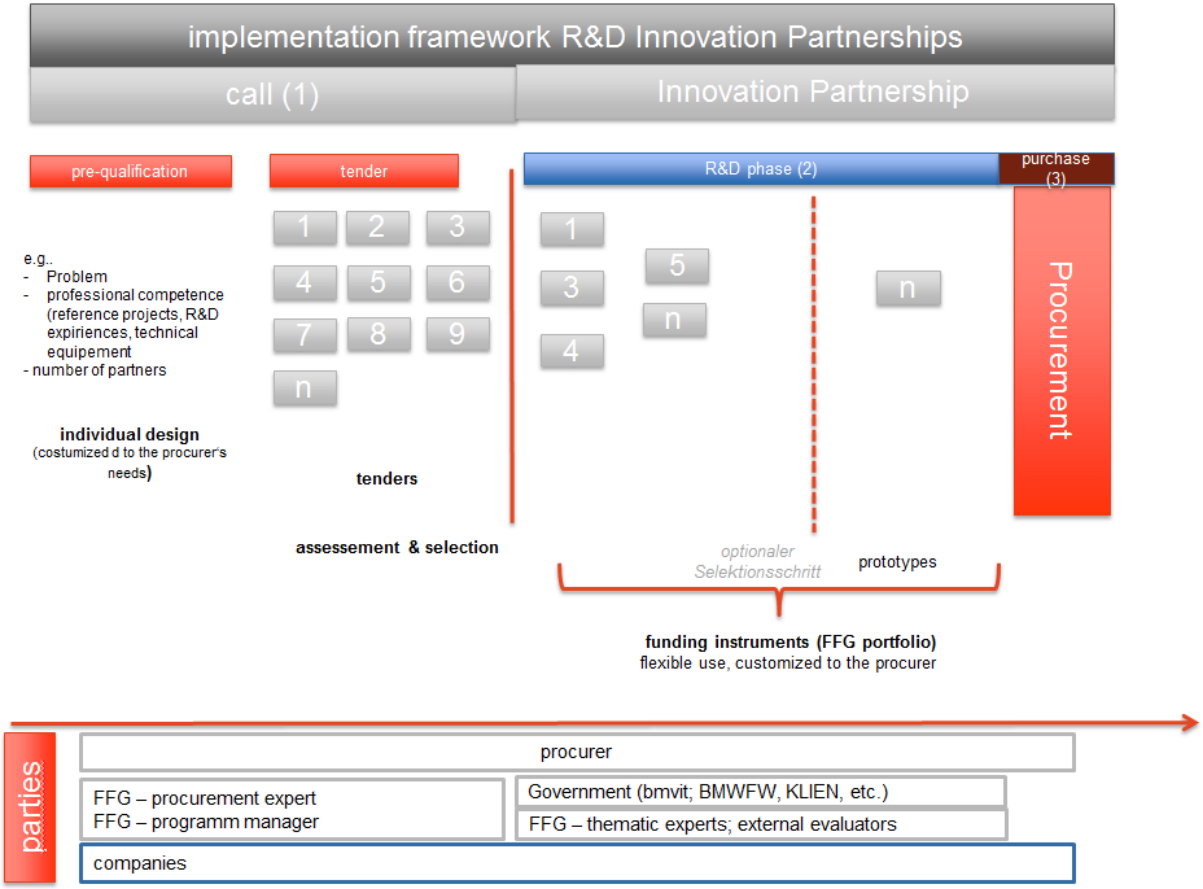
New procedure: Directive 2014/24/EU

- aims at the development of an innovative product, service or works and the subsequent purchase of the resulting supplies, services or works
- combines PCP and commercial procurement
- one partner or several partners conducting separate research and development activities
- conclusion of the IP-contract via competitive procedure with negotiation

THE PROCEDURE



THE FUNDING INSTRUMENT



Further Information:

https://www.ffg.at/Beschaffung

https://www.ffg.at/europa/h2020/pcp-ppi

http://www.ioeb.at/