

Pre-commercial Procurement The Market Consultation

05/03/2015 Brussels Concertation Meeting



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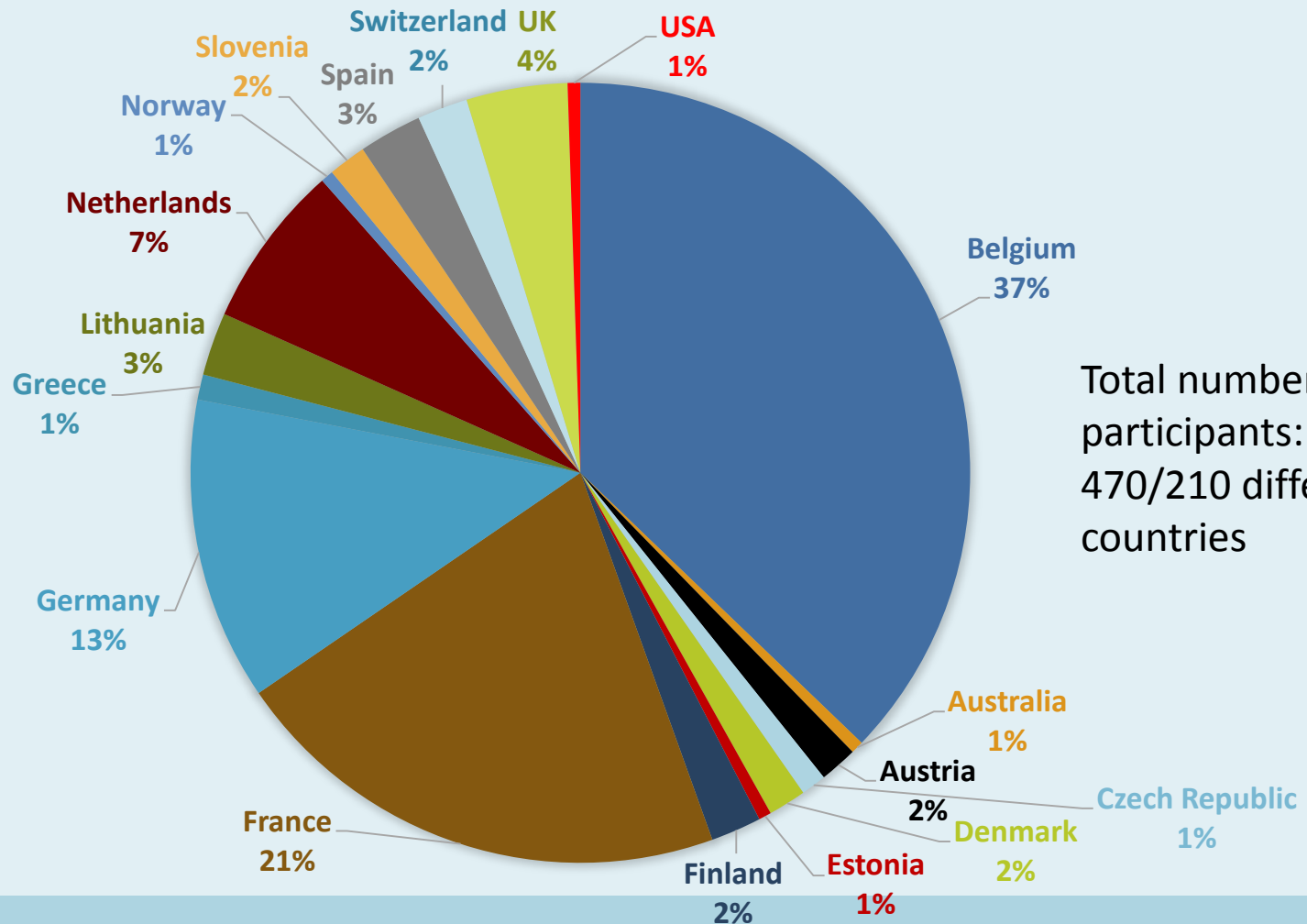
Overview



- 🔥 European FP7 project (2012-2015) to develop smarter firefighting solutions by 2015
- 🔥 11 partners
- 🔥 6 countries (Belgium, the Netherlands, France, Germany, UK, Hungary)
- 🔥 7 Work Packages for a successful completion of the challenging objectives
- 🔥 Goal: Reduce the risks inherent to firefighting by creating a smarter suit through the integration of innovative ICT solutions in Personal Protective Equipment (PPE)



Success factor: market consultation



Total number of participants:
470/210 different/18 countries

Stages of a Market Consultation

Stage 1: Preparation of the Market consultation



Stage 2: Informing the market



Stage 3: The Market consultation sessions



Stage 1: Preparation of the market consultation

Stage 1: Preparation of the Market consultation



LIST OF ACTIVITIES

A. Needs assessment

B. State-of-the-art

C. Standardisation

D. Legal Framework

E. Risk assessment

A. Needs assessment

What is the **innovation potential** from an **end-user perspective**?
Added value for the end-user? Which needs are being answered?

- Innovation is driven by the end-user (use cases). If the procurer is not the end-user make sure to involve them.
- Determine the needs, not only outcome rather user requirements, organise scoping sessions!
- Detect common high priority user needs.

The result of the needs assessment session is a prioritisation grid of innovations expectations of the procurers

Sample Priority Matrix

Schedule Priority → **HIGHER** ← **LOWER**

HIGHER	Required (P1) Work stoppage will occur and no workaround exists OR Regulatory, Program Directive, or contractual requirements will not be met.	Work Stoppage	Regulatory	Audit Finding	Program Directives
	Significant (P2) High impact to resources and/or systems OR Workaround requires excessive time, cost and/or resources.	High impact to production (significant cost to resources)	Significant cost reduction to a currently expensive workaround	Break-fix not stopping production but has high impact	System retirement/ system replacement
	Moderate (P3) Moderate impact to resources and/or systems OR Workaround requires some increase in time, cost and/or resources.	No risk (easy to change, minimum resource effort), moderate benefit	Low risk (minimum resource effort), moderate benefit	Medium risk (reasonable change required), moderate benefit	High risk (extensive change), moderate benefit
	Minor (P4) Minimal impact to resources and/or systems OR Workaround in place with minimal time, cost and/or resources.	No risk (easy to change, minimum resource effort), minor benefit	Low risk (minimum resource effort), minor benefit	Medium risk (reasonable change required), minor benefit	High risk (extensive change), minor benefit
LOWER	Low (P5) Administrative change or system nuisance with no impact OR Watch item	Administrative change	System or process nuisance; cosmetic change	Watch Item: Cost prohibitive	Watch Item: not technologically feasible at the present time

Impact Priority ↑

User Expectation System Architecture

Local Sensing

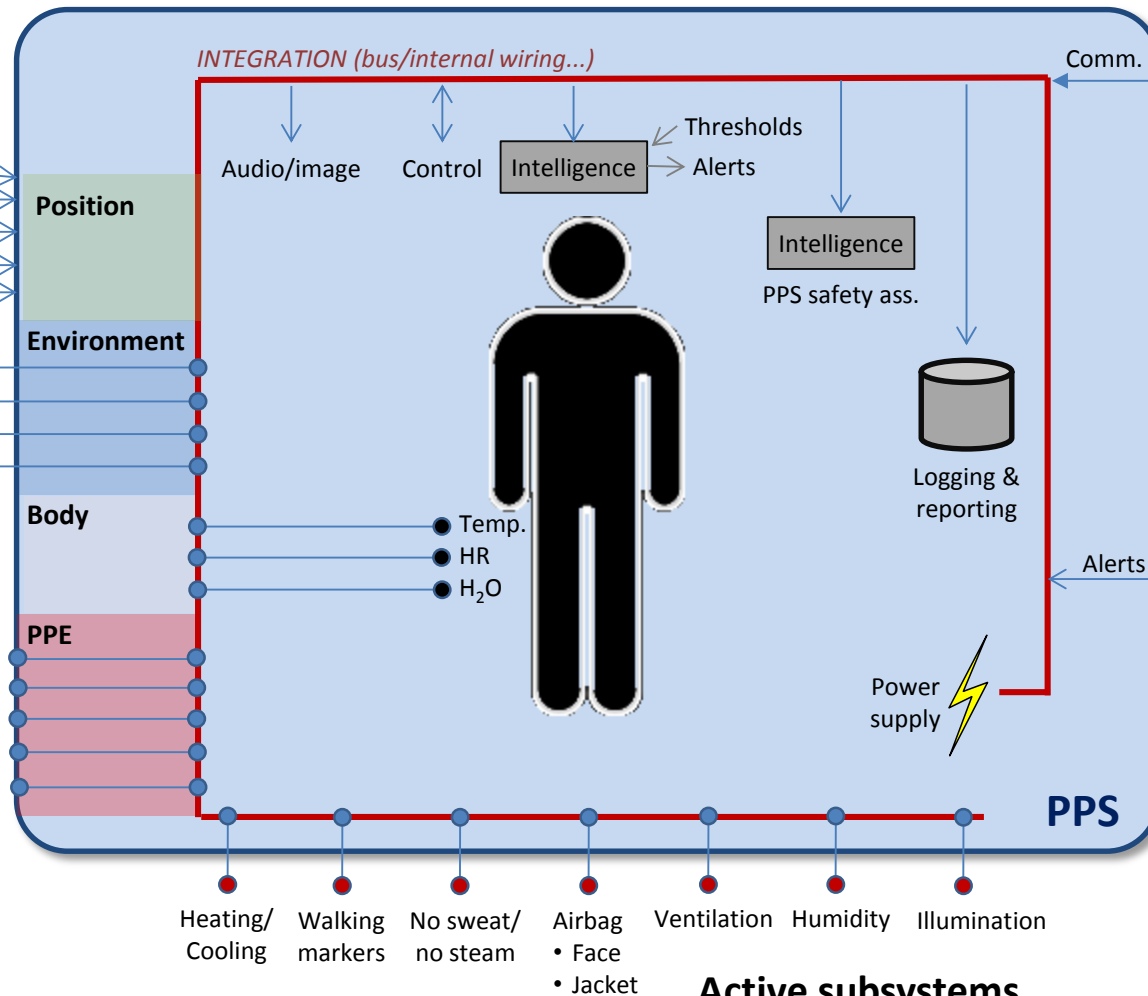


Colleagues
Forrest
Building
Sensors

Gasses: toxic
Gasses: explosive
Temp.
IR: hotspots

Compressed air
Integrity
Lifetime/repairs/cleansings
Sweat absorbed by PPS
Contamination spills

Local Intelligence



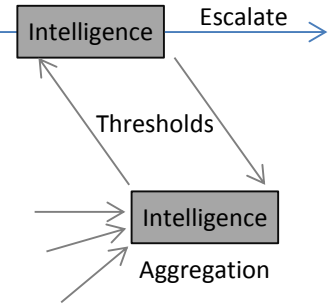
Remote coordination

Officer



Visualisation

Position
Environment
Health status
PPS



Active subsystems

B. State-of-the-art through market sounding

Where does today's state-of-the-art technology stand?



- **IP scan – scientific journals – web search – EU-projects - investigation and interview (70)**
- **Insure the envisaged solution goes beyond the state-of-the-art**

C. Standardisation – Conformity assessment

The central question within a project context is:

can the innovation expectation/potential be realized within the boundaries of known harmonized standards and directives?

Within ICT-related products and systems, 5 levels of directives and harmonized standards can be distinguished:

Environmental standards & directives

- E.g. MIL-STD 810, IP67, etc.
- Extra: explosive environments: ATEX, IEC-Ex

Functional specifications and standards

- Pressure Equipment Directive (PED): 97/23/EC
- EN 50217:2001 (Kat-Ex sensors methane tot nonane)
- Standard location protocols: ETSI LIP, Motorola LRRP
- TETRA Speech codec (ACELP) according to EN 300 395

Radio & communication compatibility

- RTTE: Directive 1999/5/EC
- FCC regulation
- TETRA specs: EN 300 392 V+D Air Interface, ...

Medical standards (contact with body)

- IEC 60601-1 (General Medical Electrical Standard)
- ECG Type: EC38 Type 3

Material –related standards and directives:

- REACH 1907/2006/EC
- RoHS 2002/95/EC

These are known by vendors as products and systems comply with these standards and directives.
Vendors obtain certification through test procedures specified in the harmonized standards,
carried out by known certified bodies.

For ICT sometimes no harmonized standards and directives exist today.

D. Legal Framework

Validation of the legal framework for PCP by partnering countries

- ✓ Check the legal framework of partnering countries
- ✓ Check how the exception 16f was implemented in the partnering legal framework. Any additional national constrain?
- ✓ Identify legal obstacles
- ✓ Determine the legal construction of the PCP (Lead Partner vs buyers group - Preferred partners)
- ✓ “Previous knowledge?”

E. Procurement Risk assessment & Contingency Plan

Phase	Risk	Risk degree	Remedy
I. Planning and preparation phase			
Establishing needs	Procurers are buying a Personal Protective System (PPS) that will not fit 100% their needs	Low	Thorough needs assessment is a pre-requisite. (In smart@Fire needs assessment was done in Belgium, France, UK, ... (961 fire fighters were involved))
	In Belgium, IBZ is the procuring entity for all 17000 fire fighters but not all have the same needs nor the same requirements for their PPE	Moderate	Find a good compromise and prioritize the needs
	Buying a PPS that covers the needs of the contracting authorities in Smart@Fire	low	Elaborate a list of common use-cases between French and Belgian Fire fighters. The use-cases are the starting point from which the market consultation is organised
Market consultation	Procurers don't always know what is (yet) available on the market	Low	A thorough state-of-the-art is needed to identify innovation potential from a user and technological perspective. By engaging with the industry: market research and market consultation
Project definition: what are we buying?	Public procurers are afraid of buying innovation, they like to stay with what they know	Low	Organise training sessions for public procurers and use benchmarking, establishing a database with best practices
	"Adaptation risks": when public procurers are buying innovative PPS there is a risk that it will not be used in the field	High	Consultation rounds with end-users are crucial. In addition the development must be done taking into account the minimum requirements set in the European Standards. For PPE EN 469 to be sure the solutions could be used by fire fighters in perilous situations
	Number of PPS that will be bought after the PCP is unsure: if the amount is estimated to low, the tenderer will not be willing to invest in innovative solutions (economy of scale)	Moderate	Obtain a commitment of the participating procurers for the final tender. One important condition is of course that the proposed solution is in line with expectations. Consultation rounds with all stakeholders to establish a good investment plan

Stage 2: Informing the market

1. Upfront efficient communication:
 - Broad communication channels eg PIN (5%)
 - Clear message and expectations + timeline
 - Detect your potential suppliers
 - Inform about market potential
 - Invite right profile (engineers – universities – standardisation experts - innovators)
2. Create close collaboration with sectorial organisations and business organisations for dissemination
3. Web and media
 - Speak their language (eg IT infrastructure)
 - Smart@Fire 470 participants!

Stage 2: Informing the market



Stage 3: The market consultation sessions

Goals

1. Bridging the demand and supply side
2. Stage 1 Market sounding → State-of-the-art → double check your findings with the market
3. Attract the suitable players
4. Identification of the innovation potential
 - Technological point of view
5. Feasibility-check = capacity&capability to supply the innovation
6. Technological risks assessment
7. Forum for the supply side to meet each other (consortia)
8. Persuade the market of a real commitment and market potential
9. Inform the market on legal issues

Stage 3: The Market consultation sessions



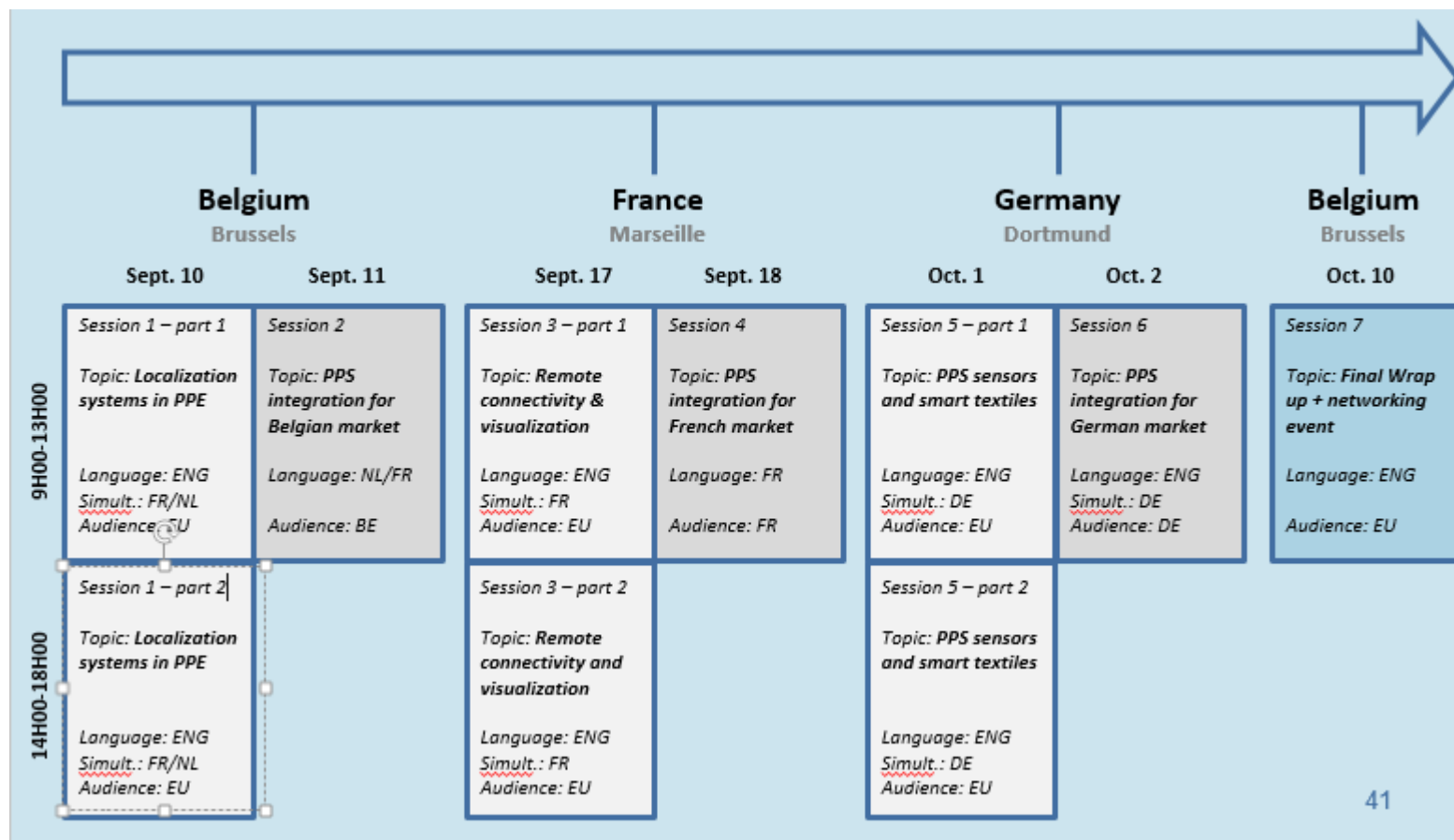
Results

- Final report
- Preparation of the PCP tender documents



How

1. Findings and output stage 1
 - content and amount of sessions
 - geographical spread



How

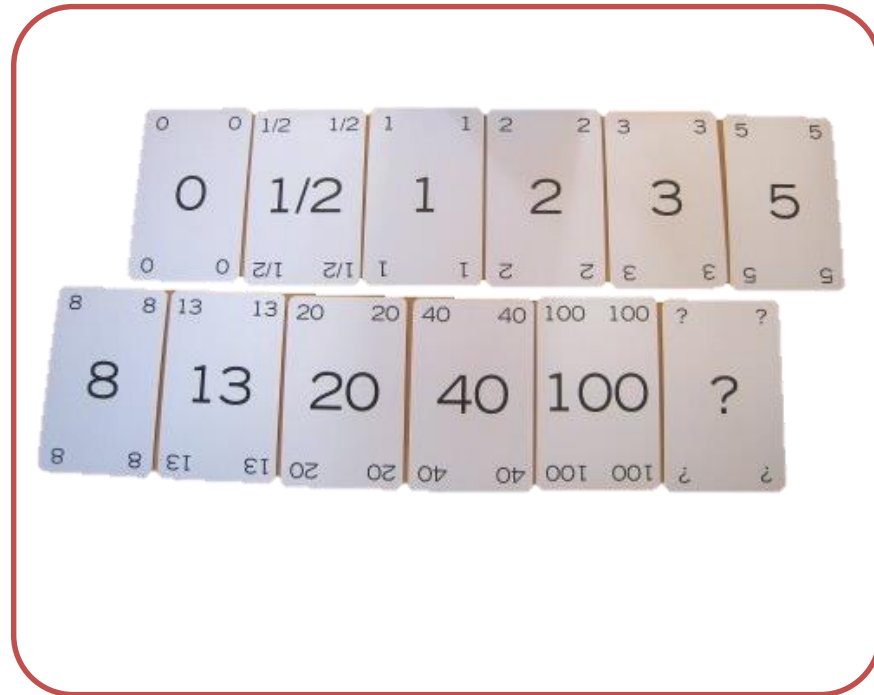
2. Sessions with representative stakeholders

Active participation – Concrete technological questions and challenges – Profile of the participants

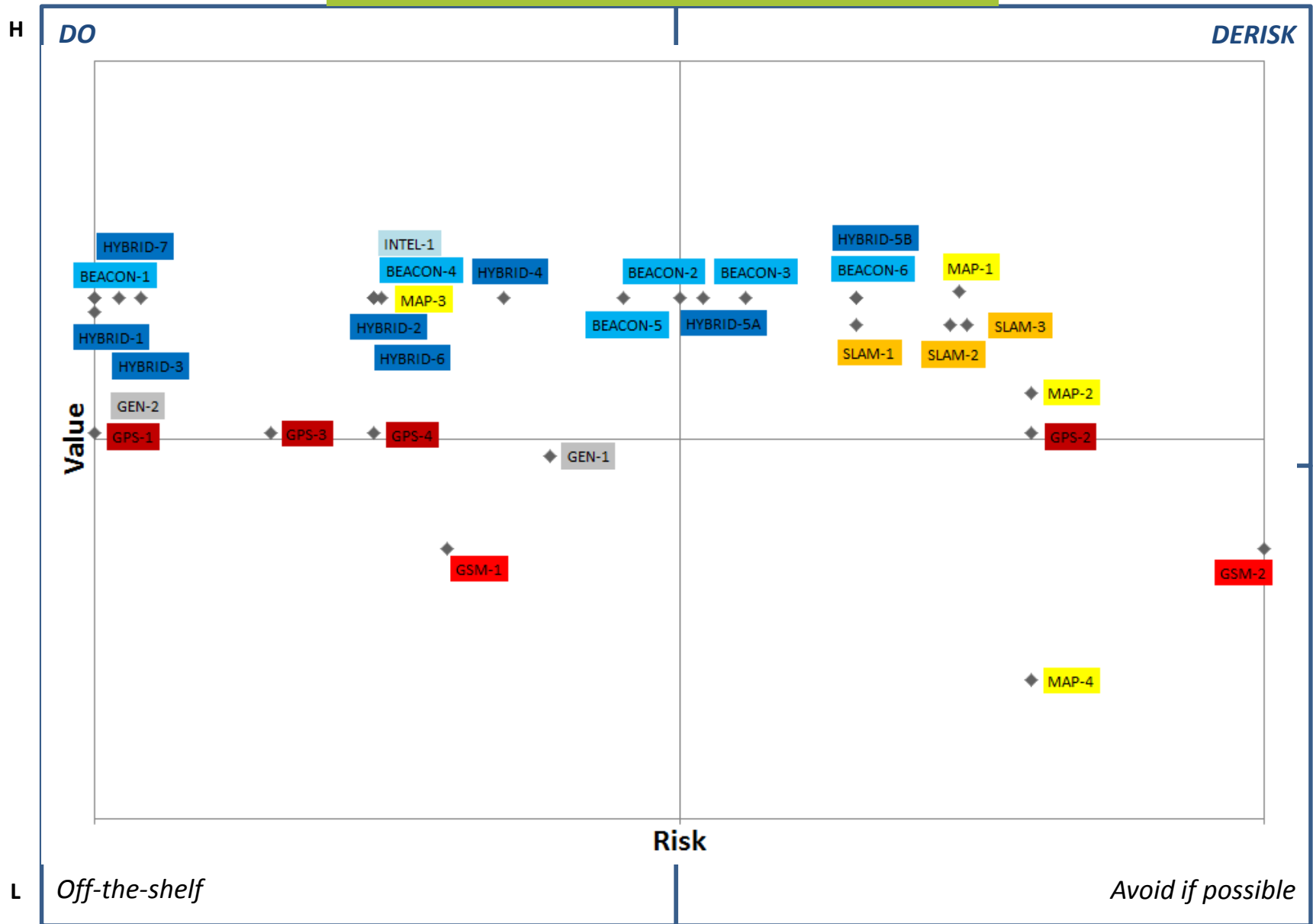


How

3. Proven Methodology



Results



Formulate detailed answer on key questions:

1. What is the **innovation potential** from an **end-user perspective (stage 1)**?
Added value for the end-user? Which needs are being answered?
2. Where does today's state-of-the art technology stand (Phase 1)?
What is achievable today, where are extra breakthroughs required?
What are the (implementation) risks?
What is the **innovation potential** from a **technological point-of-view (stage 3)**?
3. What is the overall innovation potential (end-user & technological perspective)?
What are the **priorities** for a **innovative prototype** solution?
Where is **risk reduction** required before commercialization?
4. Which choices set the **final prototype scope** and **functional specifications (stage 3)**?

Questions?

