

# NORWEGIAN EXPERIENCES ON THE APPLICATION OF PROCEDURES AND RULES FOR INNOVATION PROCUREMENT

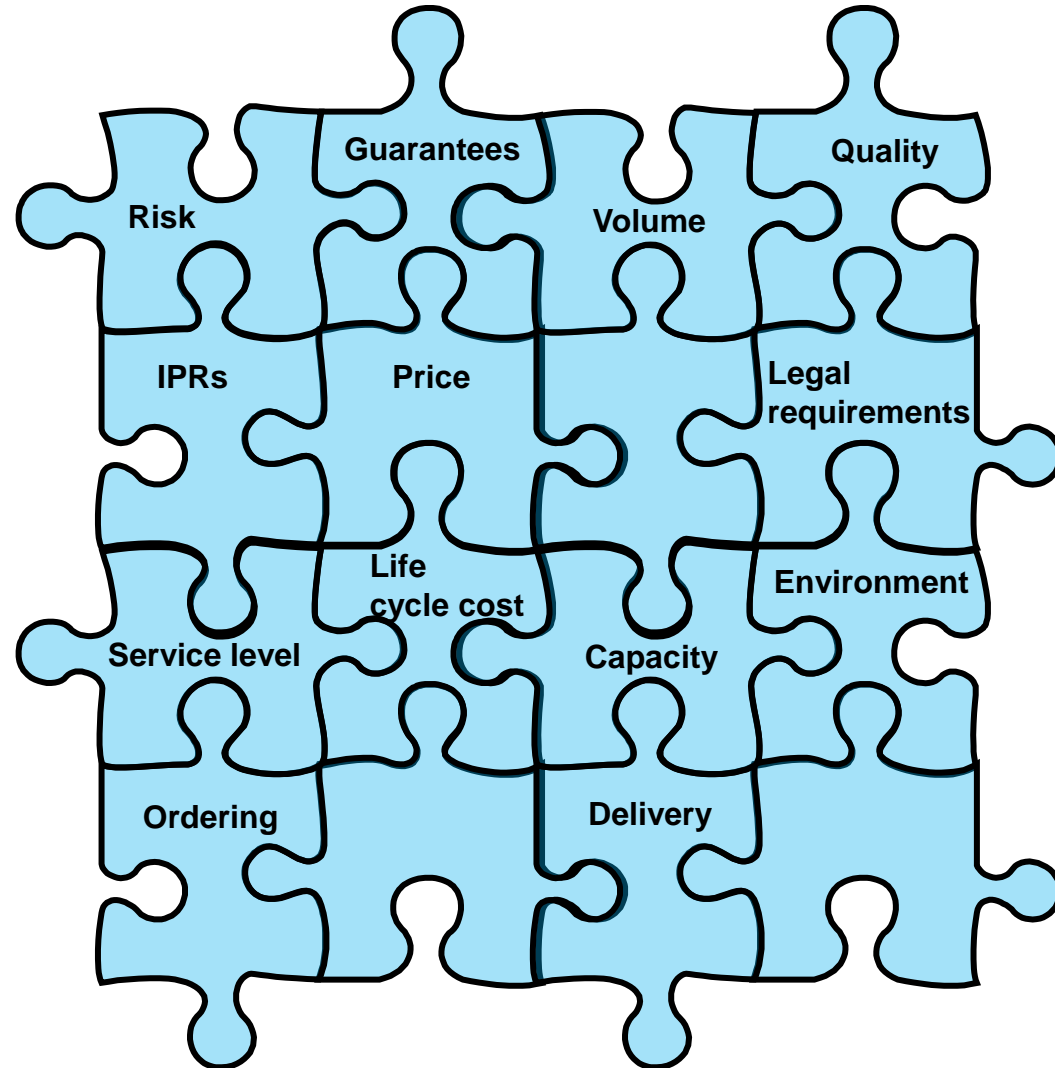
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The Norwegian Agency for Public and Financial Management



# The verified need



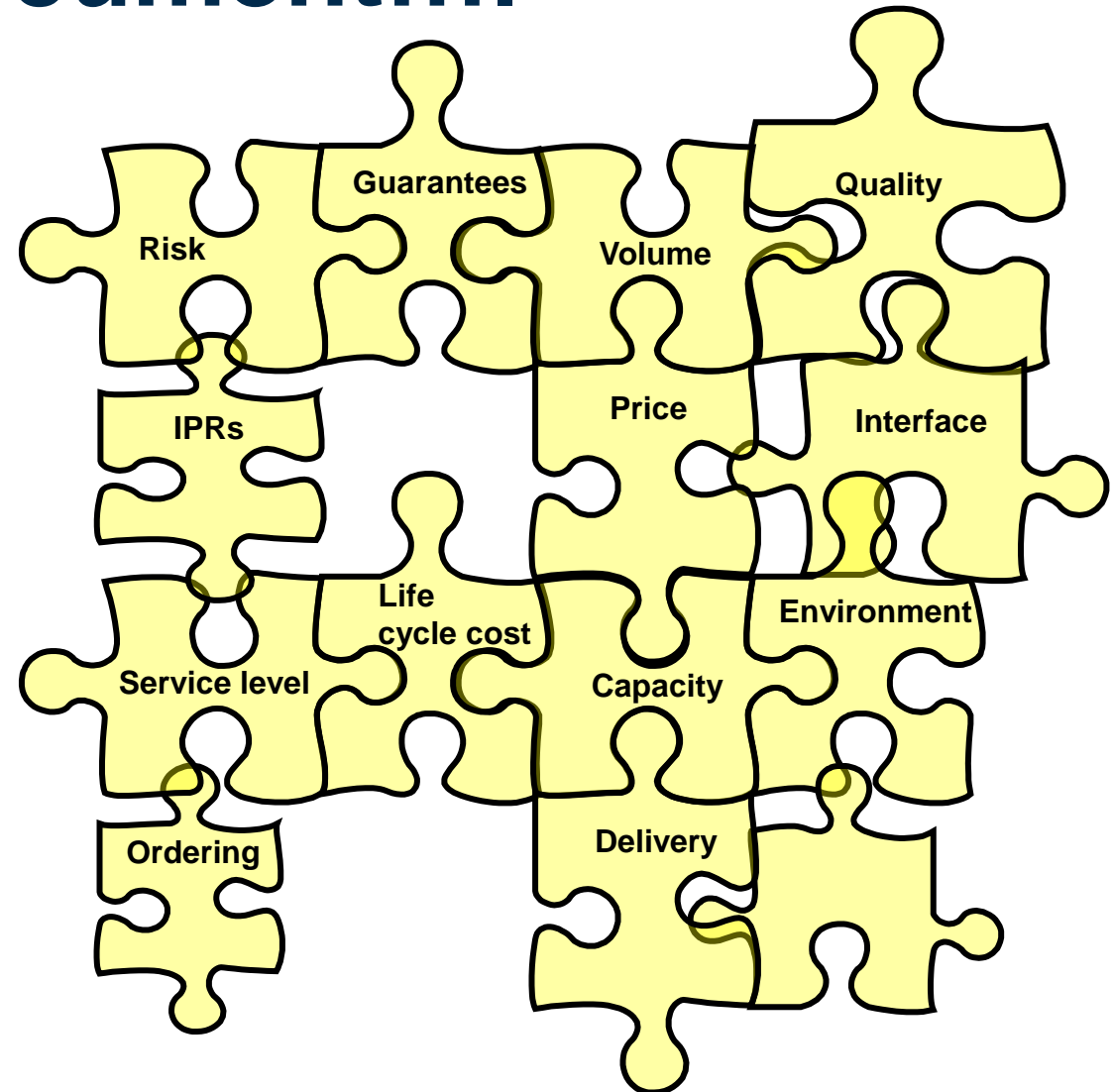
# The tender document....

The need should be described in the tender document

**However**, due to lack of:

- time?
- procurement competence?
- good co-operation between different departments?

:... the verified need is not reflected in the tender document



# The bid from the supplier...

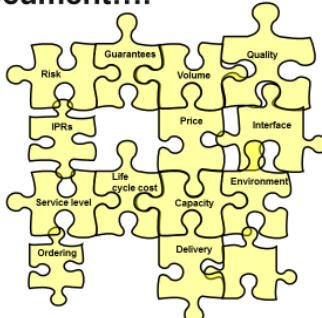
**The tender document....**

The need should be described in the tender document

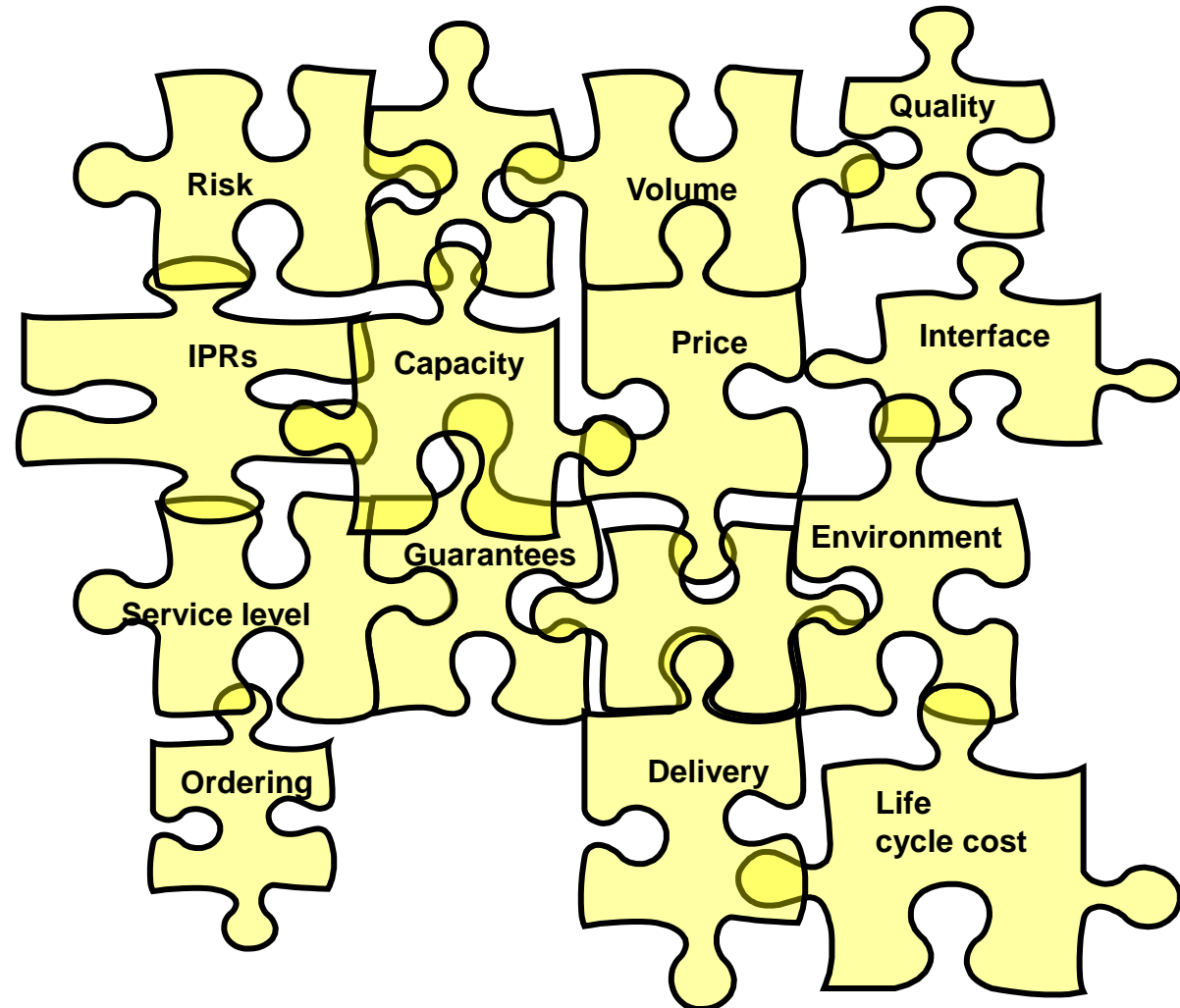
However, due to lack of:

- time?
- procurement competence?
- good co-operation between different departments?

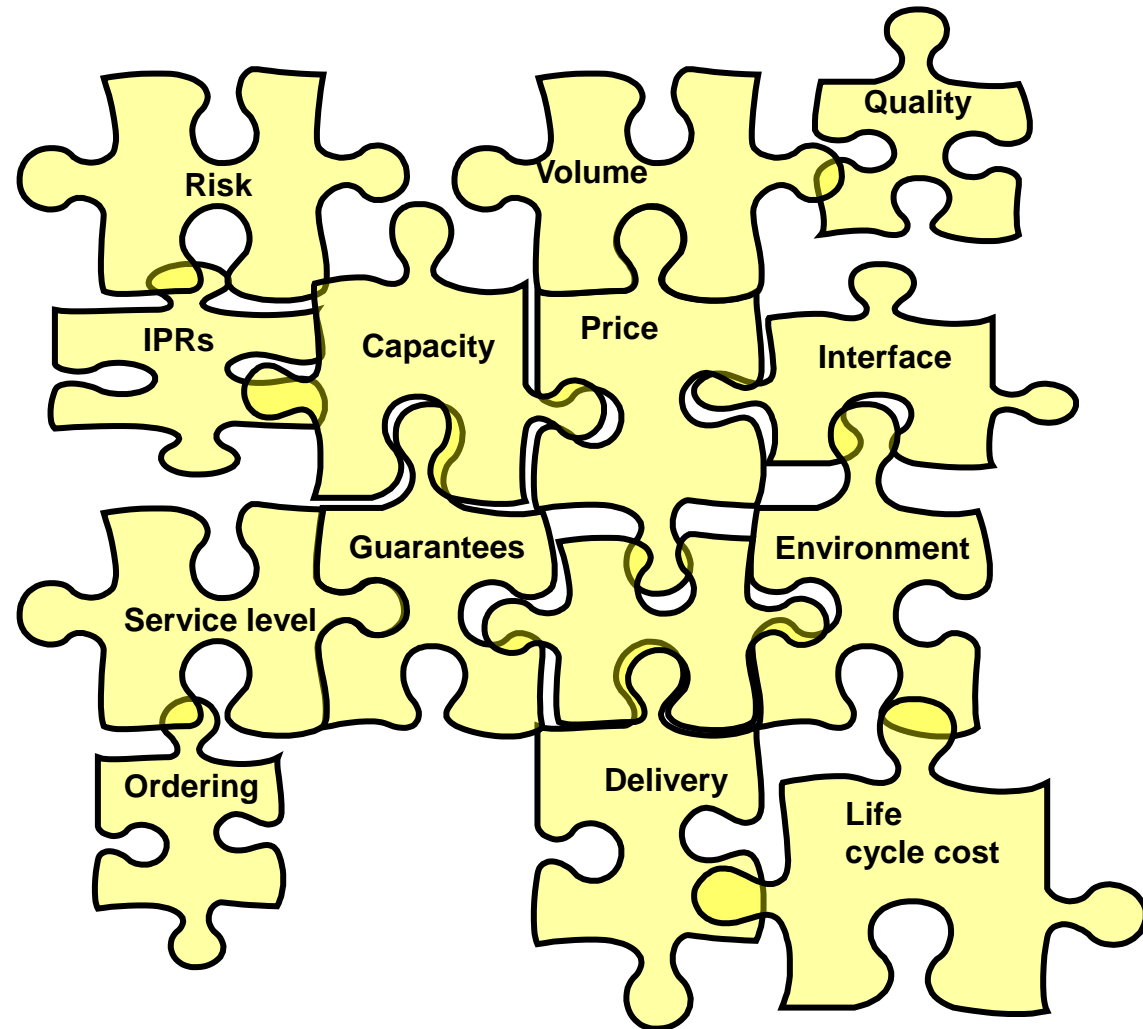
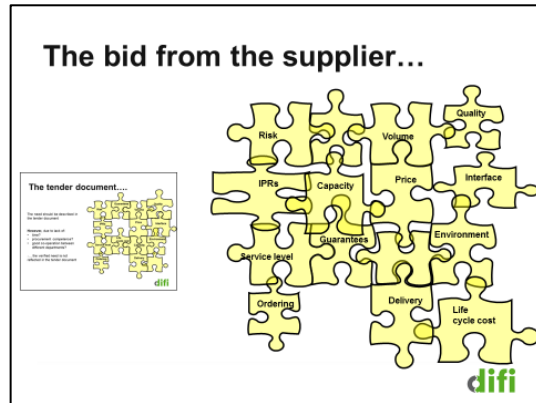
... the verified need is not reflected in the tender document



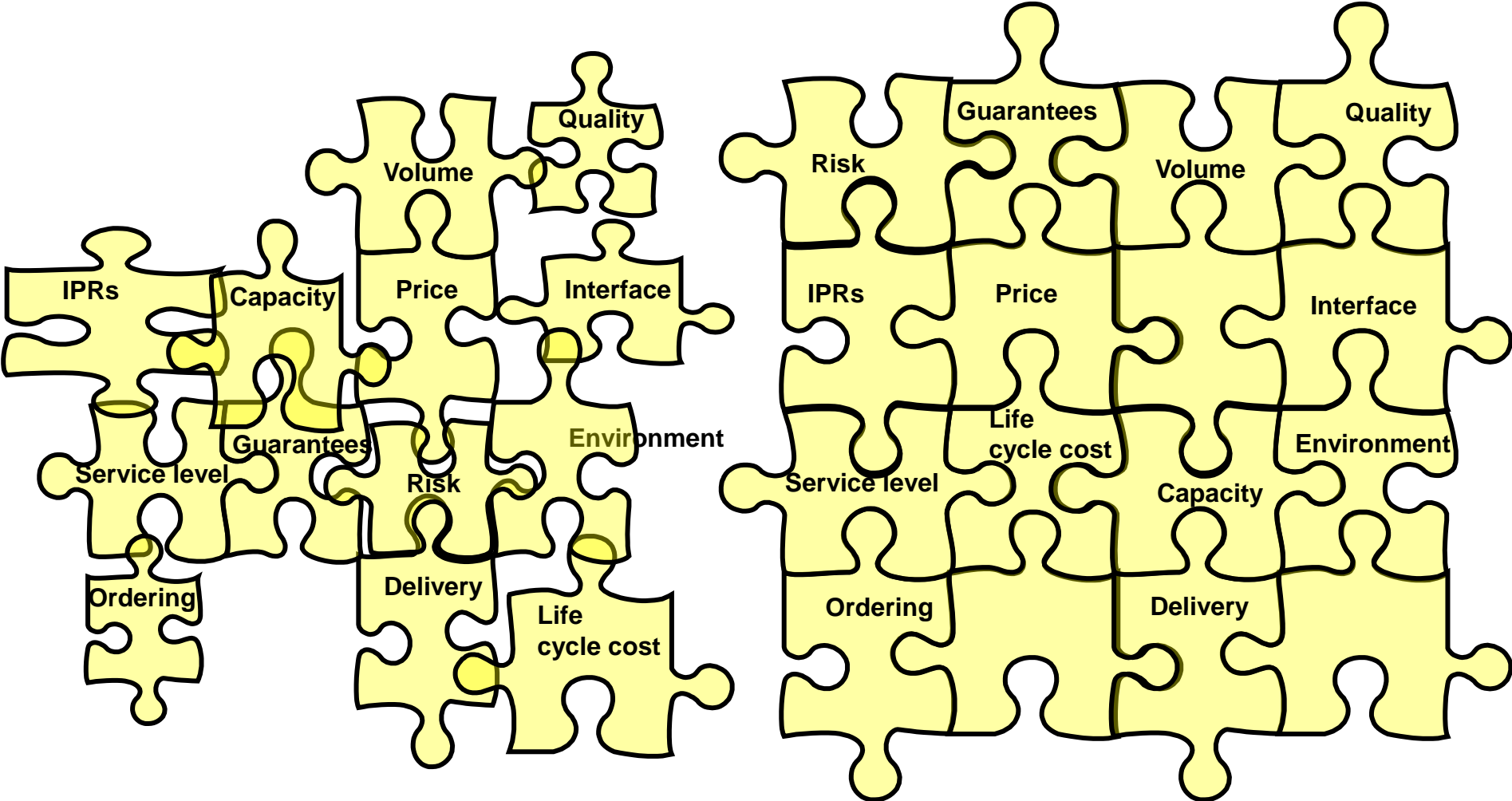
difi




# The final contract



# The final contract $\neq$ Verified need





## General principles – Public procurement

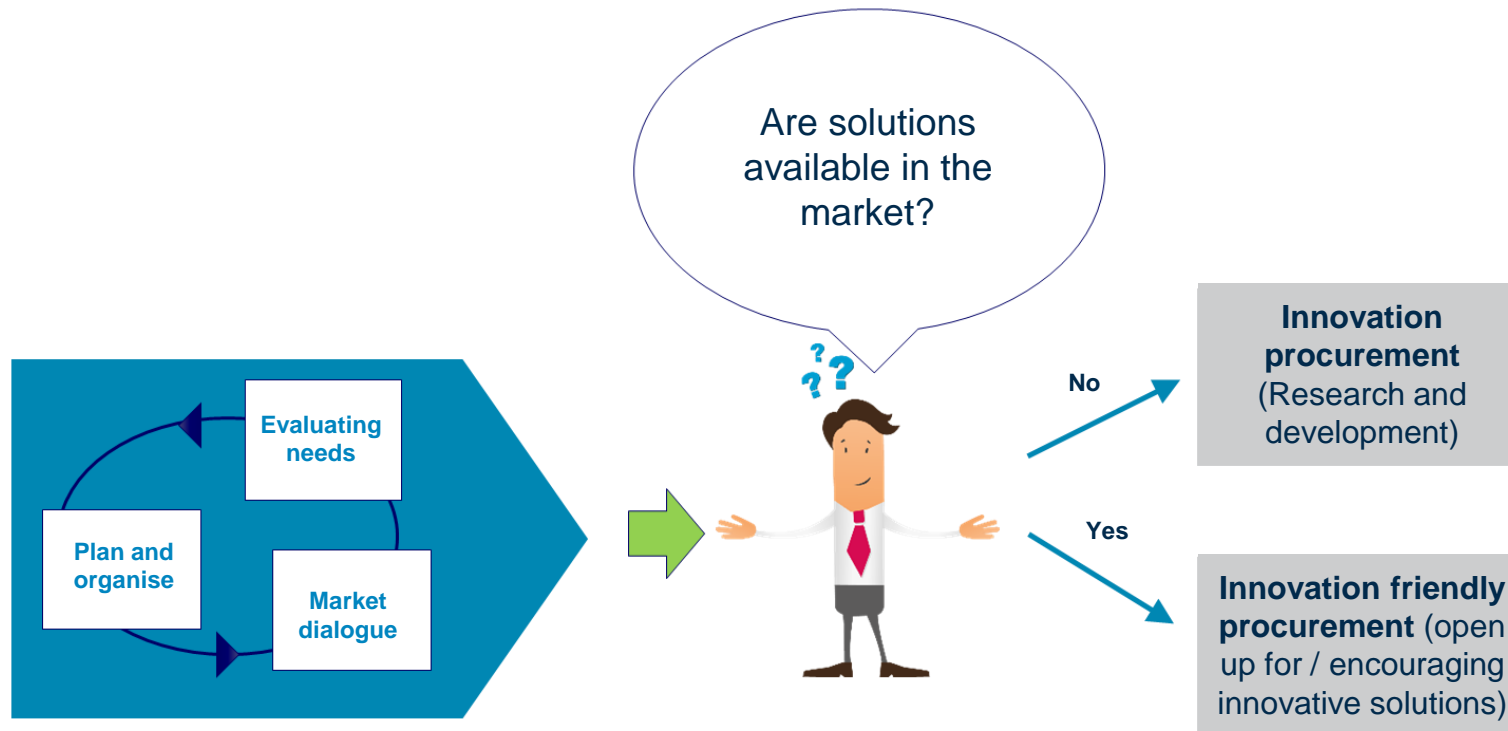
- Competition
- Equal treatment – Non - discrimination
- Transparency
- Predictability
- Verifiability



Innovation?

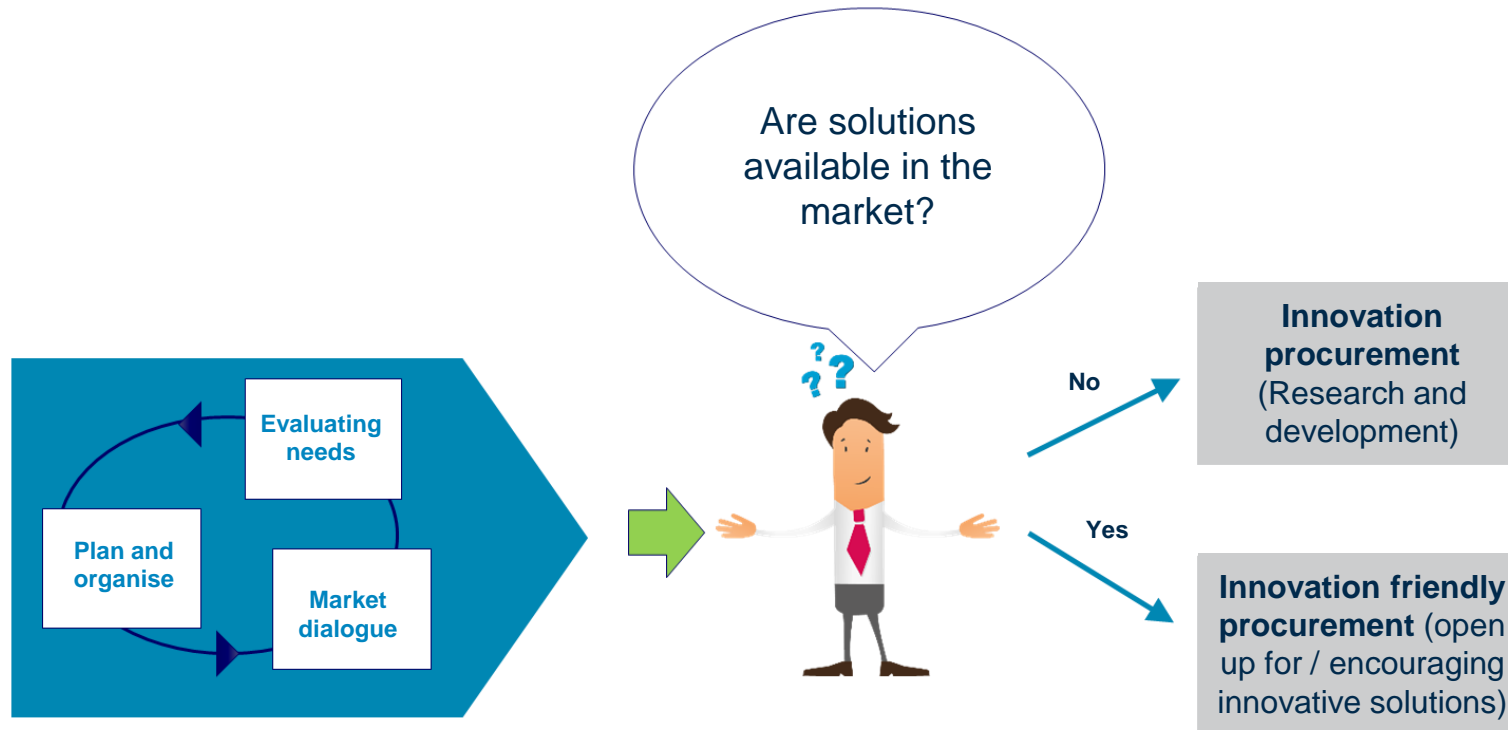


# Innovation Procurement



Describes needs, the effects and results the procurement needs to achieve. Leaves to the market to come up with the right solution

# Innovation Procurement

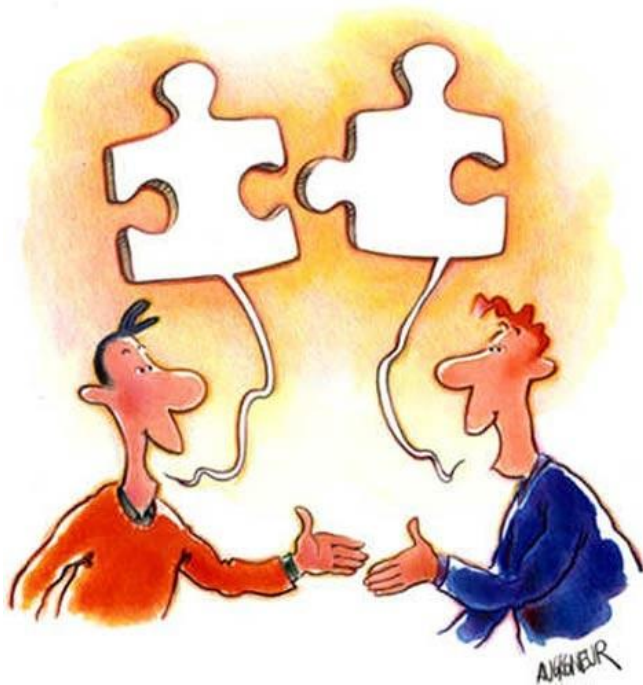


Key components: Focus on the need, open specifications, market dialogue and the contract (IPRs etc.)

# OPPORTUNITIES IN THE REGULATION?

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# Dialogue is possible!



## *Article 40*

### **Preliminary market consultations**

Before launching a procurement procedure, contracting authorities may conduct market consultations with a view to preparing the procurement and informing economic operators of their procurement plans and requirements.

For this purpose, contracting authorities may for example seek or accept advice from independent experts or authorities or from market participants. That advice may be used in the planning and conduct of the procurement procedure, provided that such advice does not have the effect of distorting competition and does not result in a violation of the principles of non-discrimination and transparency.

## *Article 41*

### **Prior involvement of candidates or tenderers**

Where a candidate or tenderer or an undertaking related to a candidate or tenderer has advised the contracting authority, whether in the context of Article 40 or not, or has otherwise been involved in the preparation of the procurement procedure, the contracting authority shall take appropriate measures to ensure that competition is not distorted by the participation of that candidate or tenderer.

Such measures shall include the communication to the other candidates and tenderers of relevant information exchanged in the context of or resulting from the involvement of the candidate or tenderer in the preparation of the procurement procedure and the fixing of adequate time limits for the receipt of tenders. The candidate or tenderer concerned shall only be excluded from the procedure where there are no other means to ensure compliance with the duty to observe the principle of equal treatment.

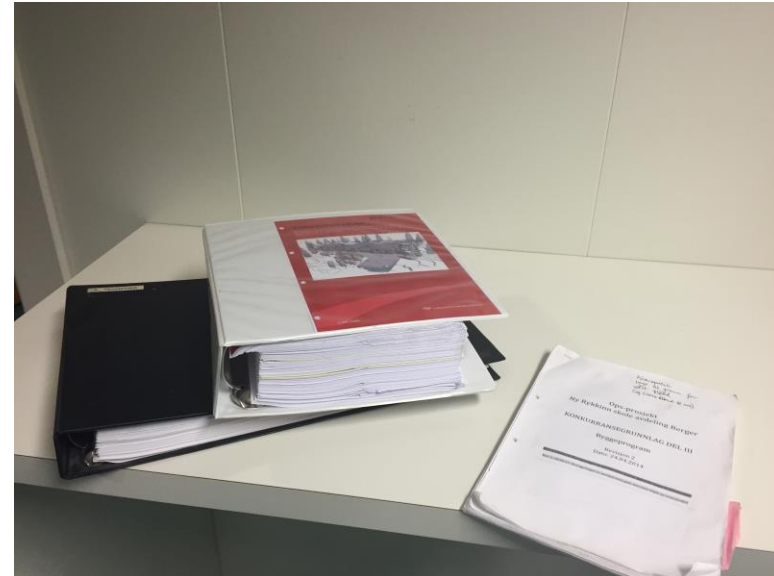
Prior to any such exclusion, candidates or tenderers shall be given the opportunity to prove that their involvement in preparing the procurement procedure is not capable of distorting competition. The measures taken shall be documented in the individual report required by Article 84.



# OPEN SPECIFICATIONS

# The characteristics of an open specification

- Describing WHAT should be achieved
  - ..... Not HOW it should be achieved
- Transfer of risk
- Contract monitoring- follow up on results and effects
  - ..... Not the actual delivery



# Follow up on specifications

## Specification:

- ▶ Installation of 50 panel ovens with a thermostat

## Contractual performance

- ▶ Deliverance of 50 panel ovens with a thermostat

## Contractual monitoring

- ▶ Does the supplier deliver the number of panel ovens?

## Specification

- The energy use should be maximum 15 kWh

## Contractual performance

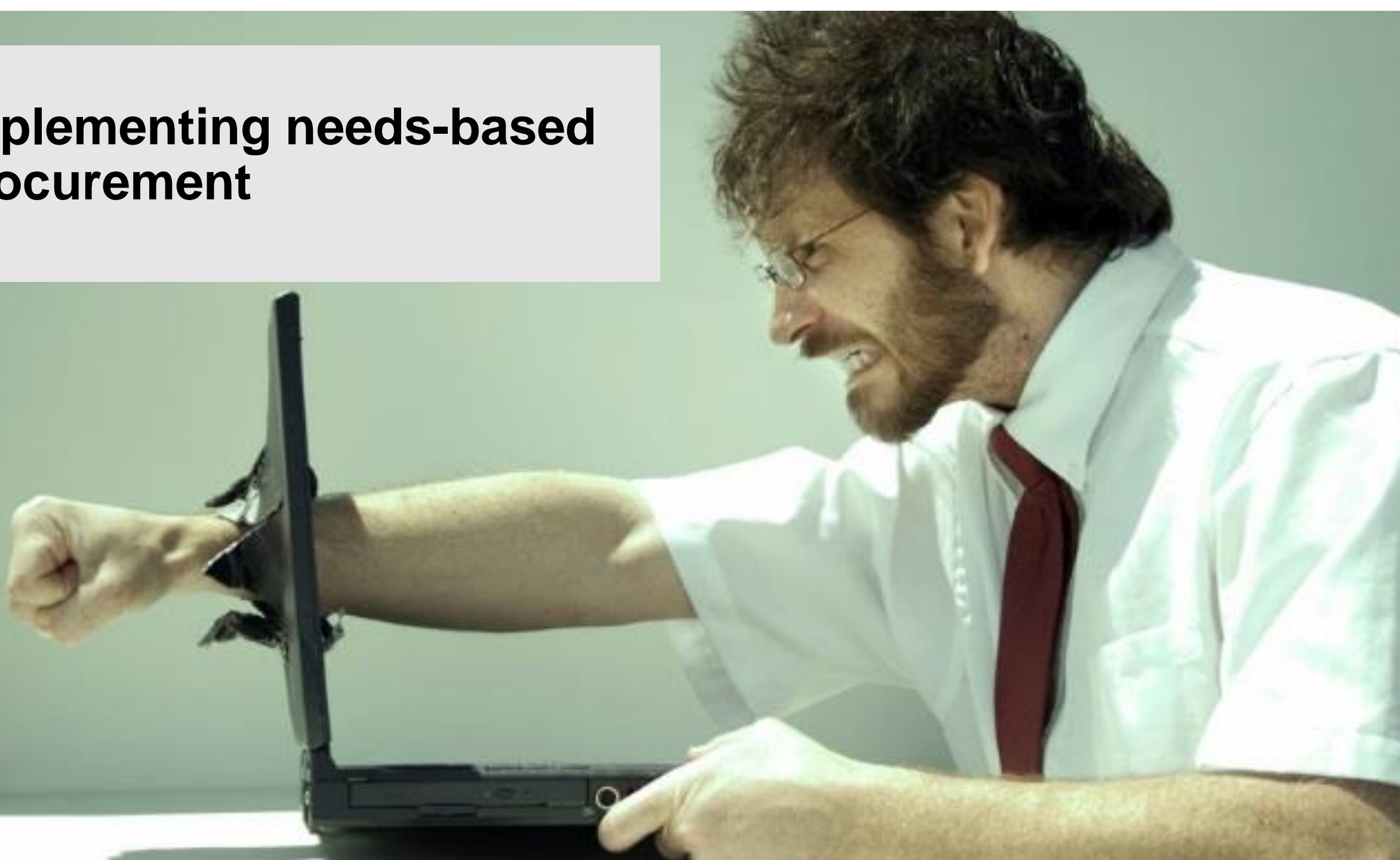
- Deliver an energy use of maximum 15 kWh

## Contractual monitoring

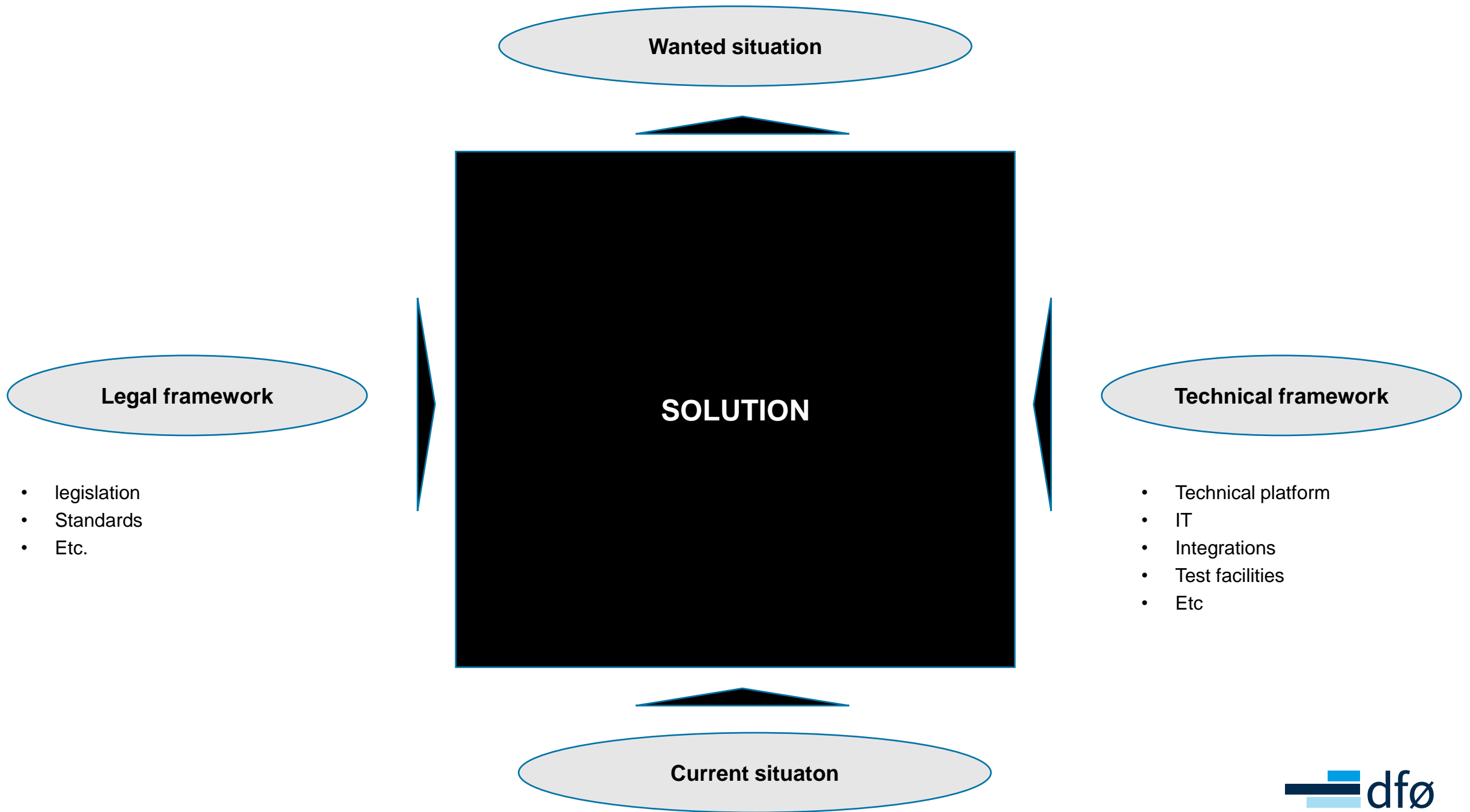
- Does the supplier deliver an energy use?



# Implementing needs-based procurement



**WE START WITH THE PROBLEM**  
**NOT THE SOLUTION**



# The key elements in a needs discription

## Introduction

Why are we challenging the market for new solutions?

## The problem (Current situation)

Describing the problem and how it is solved today (or not solved)

## Effects that we want to achieve (Wanted situation)

Expected result and effects

## The need

Why is it a challenge for us? The need to take technical and legal framework into consideration?

## The needs matrix

Nr.	Needs description	Performance/function
B01	The solution has to be flexible	How much different the solution can be used for
B02	The solution has to be mobile	How easy and fast is it possible to move the solution?
B03	The solution has to be robust	To what extent it can withstand weather, wind and temperature
B04	The solution has to be secure	To what extent solutions resist blasting and gunfire
B05	The solution should be sustainable in material use / reuse and climate emissions	Emissions and material use
B06	The solution should be self-sufficient in power	Degree av autonomy

# The model that we use for innovation partnerships and pre-commercial procurement

## Needs description (incl. the needs matrix)

Nr.	Needs description	Performance/function
B0 1	The solution has to be flexible	How much different the solution can be used for
B0 2	The solution has to be mobile	How easy and fast is it possible to move the solution?
B0 3	The solution has to be robust	To what extent it can withstand weather, wind and temperature
B0 4	The solution has to be secure	To what extent solutions resist blasting and gunfire
B0 5	The solution should be sustainable in material use / reuse and climate emissions	Emissions and material use
B0 6	Løsningen må være selvforsynt med strøm	Degree av autonomy



## Award criterias

**Quality**

**Implementation**

**Price**

# RULES AND REGULATION ON INNOVATION PROCUREMENT



# EU Legislation applicable in Norway through the EEA-agreement

There are currently three directives governing the field of public procurement. All three are dated 26 February 2014 and their numbers are correlative: 23, 24 and 25.1.

- Directive 2014/23/EU of the European Parliament and of the Council of 26 February 2014 on the award of concession contracts.
- Directive 2014/24/EU of the European Parliament and of the Council of 26 February on public procurement.
- Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors

These are implemented into the Norwegian Law through the Act - (general), and regulation (specific) on public procurement, as well as spesfic regulations on concession contracts, water, energy and postal services.

# PROCEDURES AND METHODS FOR INNOVATION PROCUREMENT





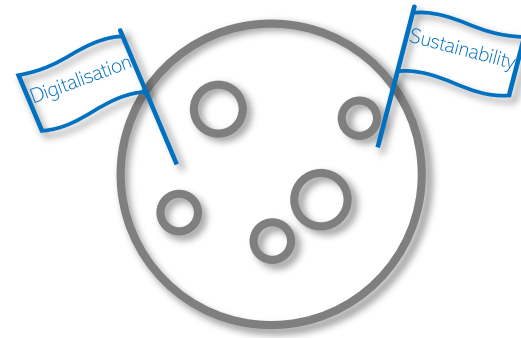
# Innovation Procurement Eco-System



← Assisting



# DFØ – Our Role in Innovation Procurement



**Inform**  
Create awareness on the opportunities of innovation procurement

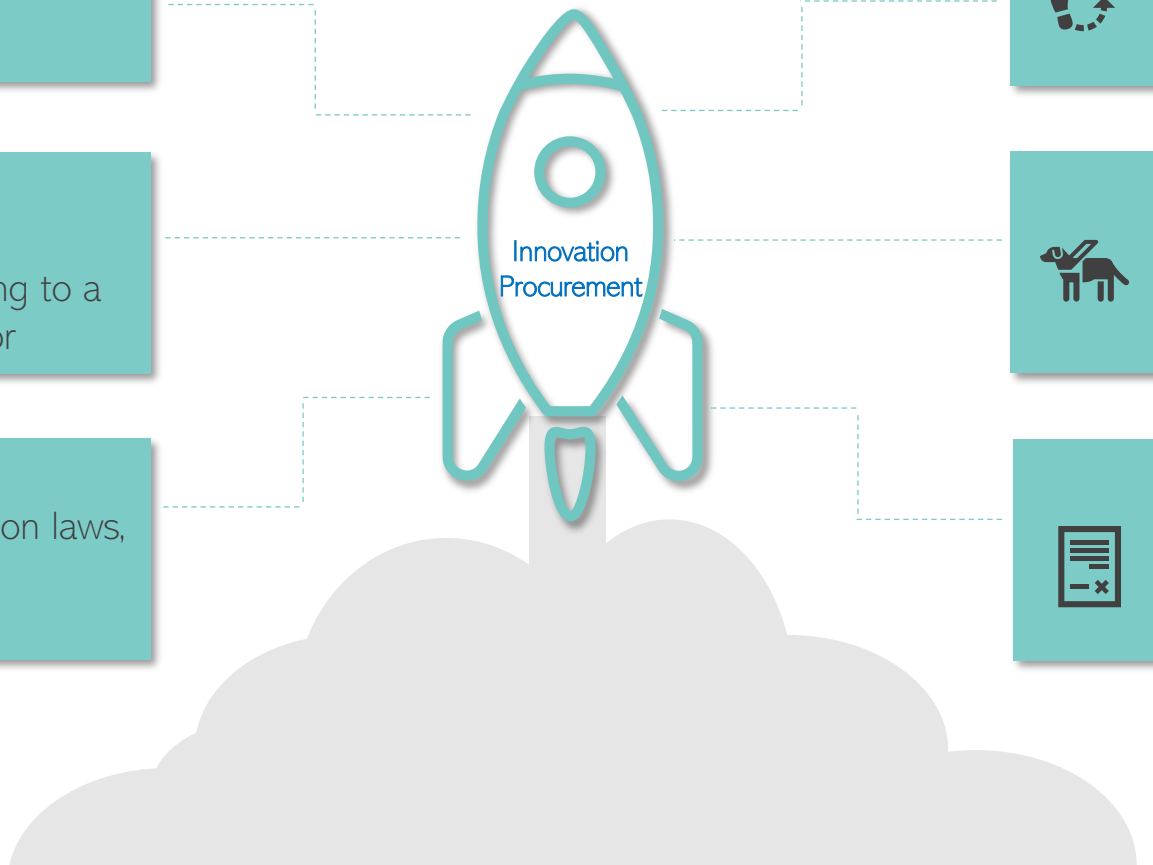
**Encourage**  
Recommend innovation procurement for transitioning to a green & digital public sector

**Explain**  
Build knowledge and skills on laws, contracts and methods for innovation procurement

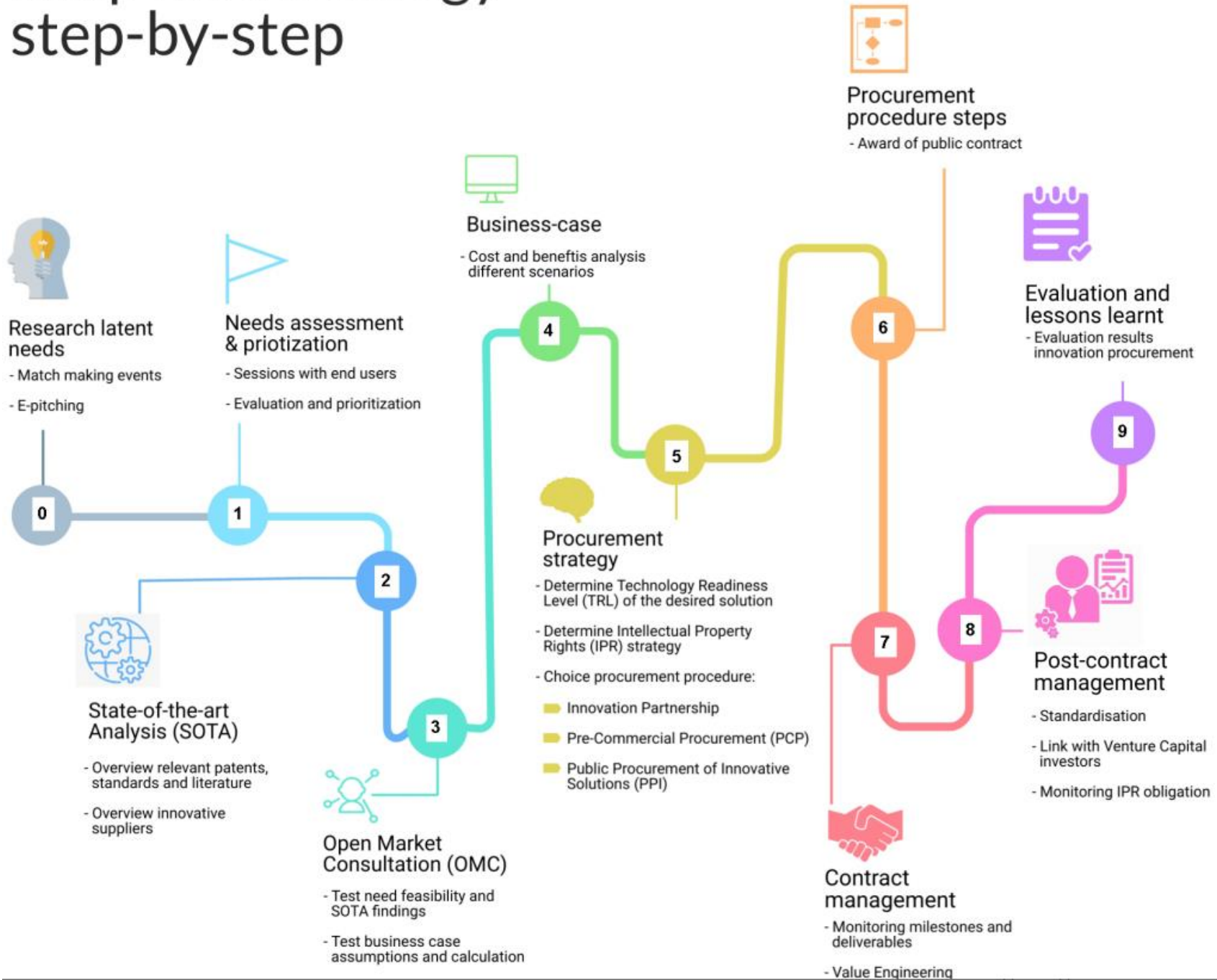
**Facilitate**  
Be an active facilitator and offer arenas for innovation procurement: StartOff

**Support**  
Contribute as a project adviser and expert in preparing and executing innovation procurements

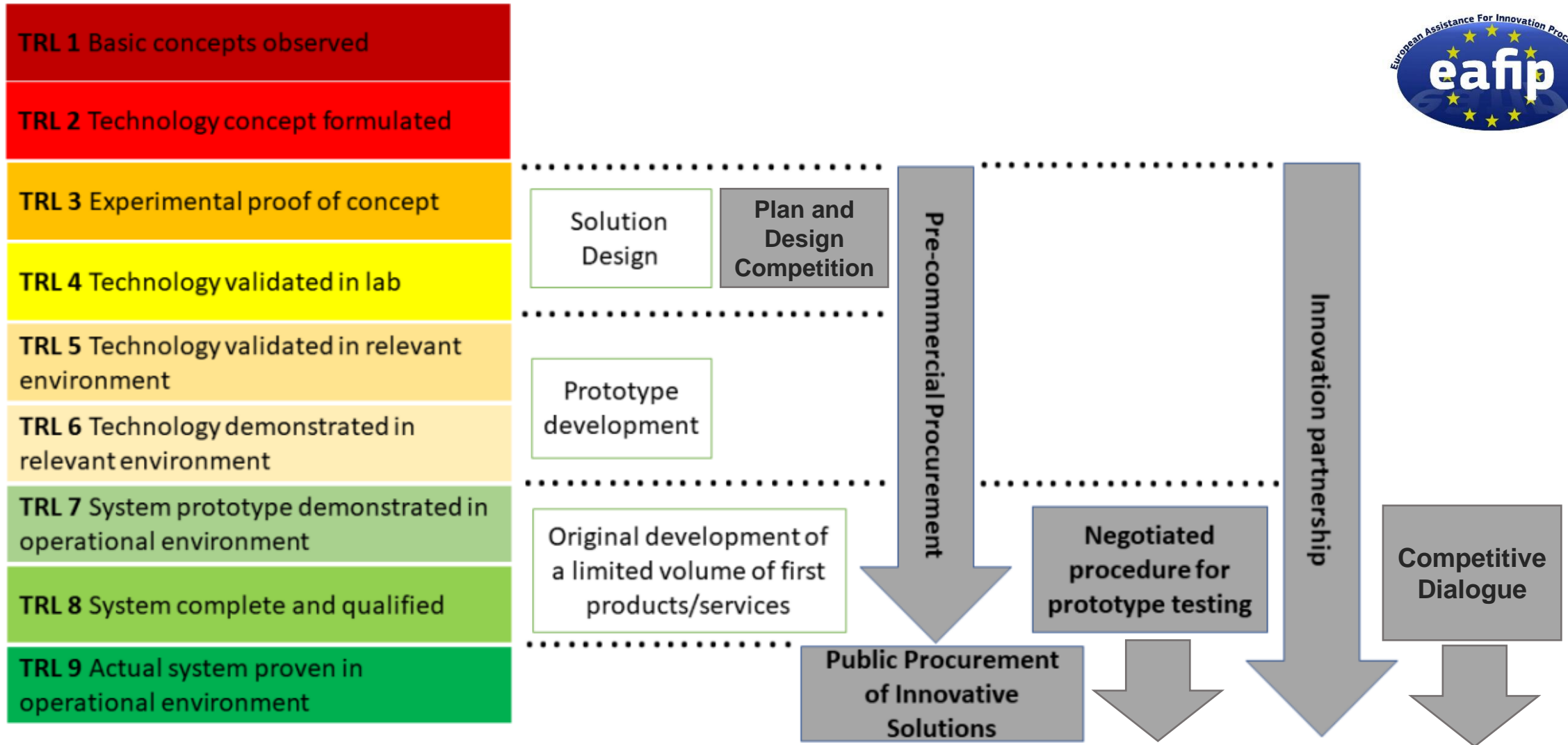
**Equip**  
Developing procurement documents and contract templates used in innovation procurements



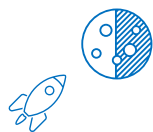
# eafip methodology step-by-step



# Different procedures/methods for different stages of development



# Procedures or Methodology for Public Procurement of Innovation



How much innovation is needed / how far from an end product are we?



Does the development end with procurement of the final solution?



Does the Public Procurer pay for the development?



Necessary development budget



How many parallel development processes / suppliers is possible?



Need for a competitive market situation?



Estimated time available for development



Degree of involvement by the public procurer necessary in the development process



Procedure / Method complexity and necessary experience

	How much innovation is needed / how far from an end product are we?	Does the development end with procurement of the final solution?	Does the Public Procurer pay for the development?	Necessary development budget	How many parallel development processes / suppliers is possible?	Need for a competitive market situation?	Estimated time available for development	Degree of involvement by the public procurer necessary in the development process	Procedure / Method complexity and necessary experience
Pre-Commercial Procurement (PCP)	A little <del>Some</del> A lot	No	Yes	Small Medium Large	2 - 5	Few Many	18 - 48 months	No Some Large	Low Medium High
Plan and Design	A little Some A lot	Yes	Optional	Small Medium Large	2 - 5	Few Many	3 - 12 months	No Some Large	Low Medium High
Competitive Dialogue	A little Some <del>A lot</del>	Yes	Optional	Small Medium Large	2 - 4	Few Many	2 - 6 months	No Some Large	Low Medium High
Negotiated Procedure	A little <del>Some</del> A lot	Yes	Optional	Small Medium Large	2 - 4	Few Many	2 - 6 months	No Some Large	Low Medium High
StartOff	A little Some A lot	No	Yes	Small Medium Large	1 - 3	Few Many	6 months	No Some Large	Low Medium High
Innovation Partnership	A little Some A lot	Yes	Yes	Small Medium Large	1 - 2	Few Many	18 - 36 months	No Some Large	Low Medium High

# Pre Commercial Procurement (PCP)

- Method to procure research and development of new innovations, where:
  - There is a substantial need for development and innovation
  - Several different types of solutions can be explored and you need to verify if they can be developed, and which of these types of solutions are best addressing your need
- Does not include the procurement of a final solution, only research and development.
- Exempted from the rules of procurement legislation (Article 14) for development of new innovative solutions as long as:
  - (a) the benefits accrue not exclusively to the contracting authority for its use in the conduct of its own affairs, or*
  - (b) the service provided is not wholly remunerated by the contracting authority*

# 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**

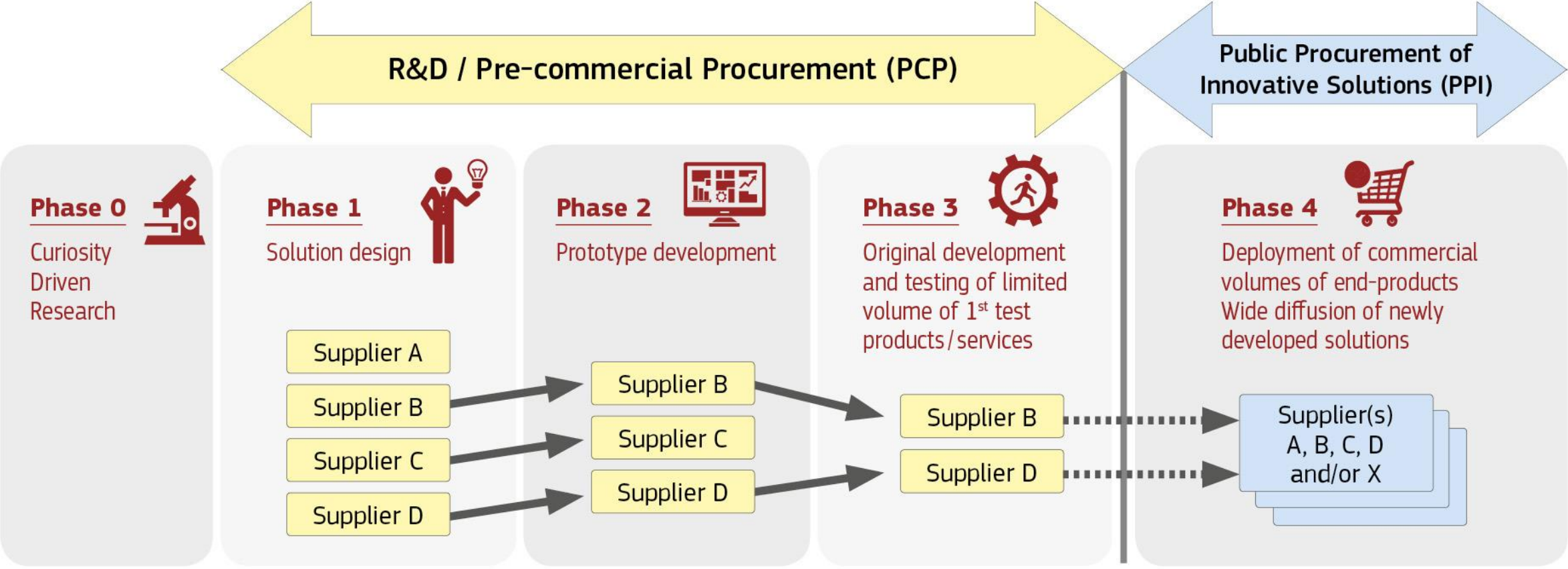
- Public sector buys R&D to **steer development** to its needs, to collect info about pros / cons of alternative solutions to make specs for a possible follow-up PPI, to create a future competitive supply base



- **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

# Pre Commercial Procurement (PCP)





# Examples



## MONGSTAD

[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 CO<sub>2</sub> emissions across the entire EU.



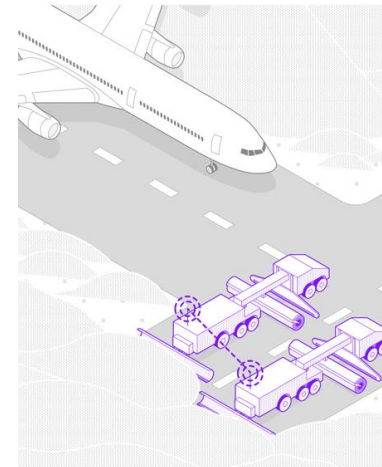
## CatchID

Directorate of Fisheries challenges market participants to develop solutions for automated collection of verified data on harvesting. The solution will eventually be put into use across the entire range of the catch fleet.



## New safe surface products for playgrounds

Oslo and Bergen Municipality want to work together with the supplier market to develop health-promoting, environmentally friendly and reliable fall surfaces.



## Autonomous Vehicles

Norwegian Airport Authorities wants to develop new technology within control and management of vehicles inside the airport area - To optimize operations in terms of cost/benefit, safety, environment and efficiency.

# Plan and Design Competition

**Tender procedure for design, planning or engineering works where a jury announces the winner(s) based on an anonymous evaluation of proposed designs.**

Procedure for the development of a new (innovative) design or concept when:

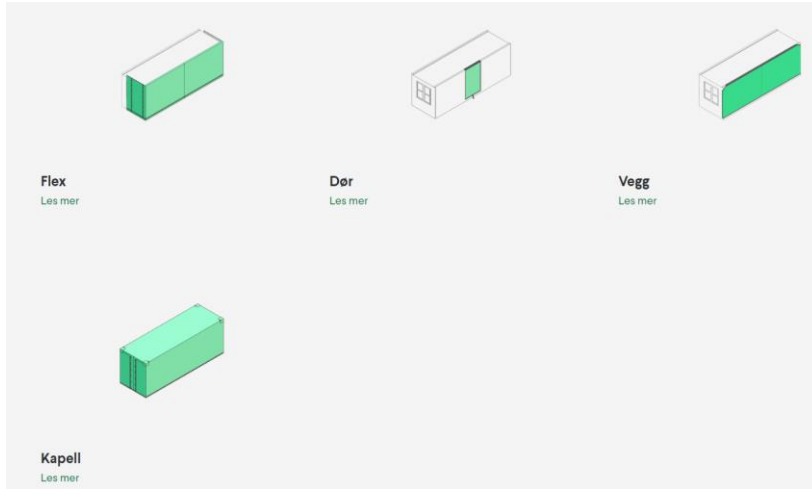
- Design is crucial or necessary for a solution or concept to work
- Concept experimentation before further (product) development can take place (often in cooperation with end users)
- Developing brand new approaches to services

The procedure is regulated by law and innovative solutions is one of the criteria that allows for its use.

A direct procurement without of the design or concept without a new tender process is available under some circumstances – If the end product is a service.



# Examples



[Reusable packaging for the construction industry](#)  
[– Bærum Municipality](#)

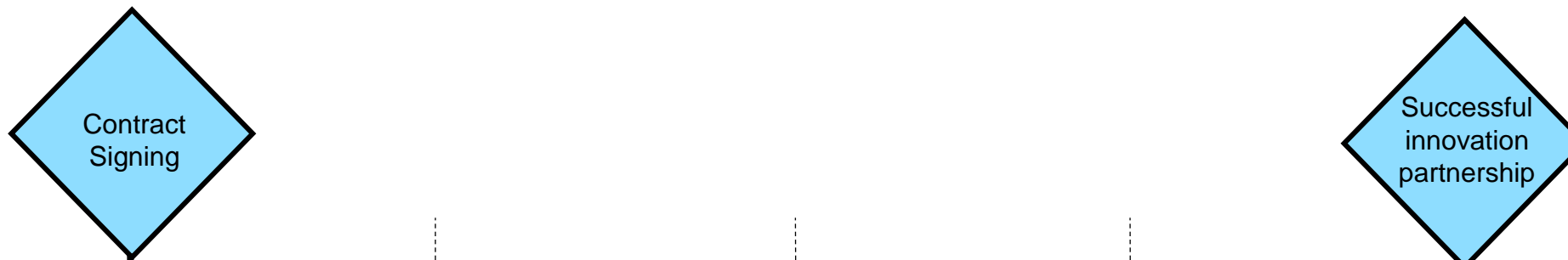


[Autonomous cleaning vehicle for underground drinking water infrastructure](#)  
[– Bergen Municipality](#)

# Innovation Partnership

- Method to procure research and development of new innovations + buy the final product, where:
  - There is a substantial need for development and innovation
  - You have the ability to decide on the most promising type of solution before signing a development contract
  - Close cooperation between the public client and supplier(s) is key to arriving at a successful solution (specialised need)
  - Complex project of some size
- Defined in procurement legislation as a procedure (detailed rules on use of IP):
  - (a) Only for development of innovative solutions*
  - (b) When the value of the products or services to be developed is greater than the costs of developing them*

# Phases of an innovation partnership



## Tender process

## Preparatory phase

## Phase 1

## Phase 2

## Phase 3

## Buying Option

- Market research
- Market dialogue
- Tender documents and contract
- Pre-qualification process
- Negotiations
- Final offers
- Contract award

The contracting parties works out a detailed work description, time plan, milestones, and testing and approval criteria for each phase

### Development phase

- Sub-delivery 1
- Sub-delivery 2
- Sub-delivery 3



The Supplier's test and development of a proto-type

The Client's test and approval of the solution

### Procurement of the Solution

Option to buy the solution (if successful and within what has been decided as the maximum cost)

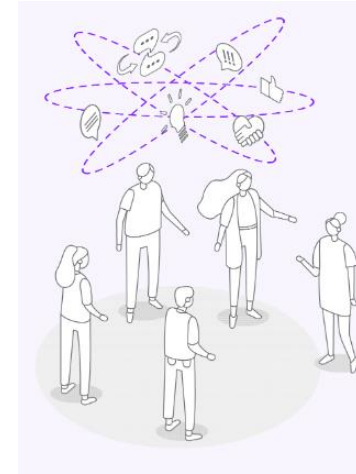


# Examples



## Dried Blood-plasma

To ensure access to and become self-sufficient in dried blood plasma, Helse Bergen wants to establish technology for its own production of dried blood plasma. The goal is to meet the demand and preparedness of dried blood plasma at all hospitals



## NAV Human

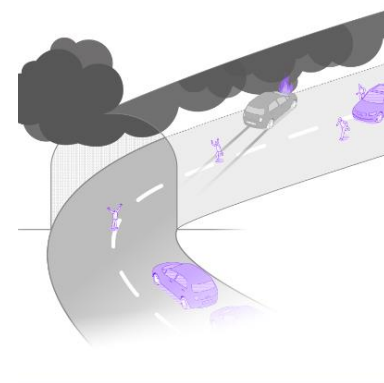
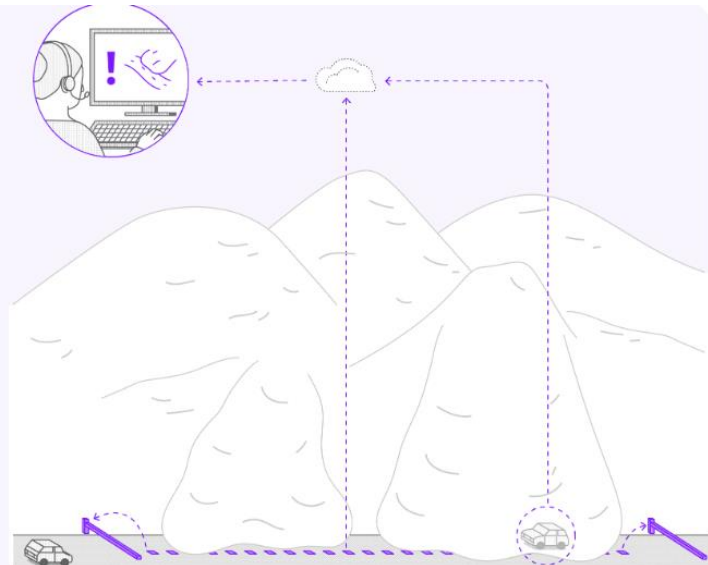
Social exclusion amongst young people is a huge societal challenge with complex reasons why young people drop out of the labour market and school.

NAV wants to develop a comprehensive methodology with digital tools for relationship building and increased user involvement.

## Effective detection and warning of avalanches over roads

Along Norwegian roads we currently have around 1,500 avalanche points, in addition we expect an increase in avalanche activity due to climate change.

The project wants to find a solution that can detect the avalanche and close the road before anyone runs into it.



## Tunnel evacuation assistant

On our vision 0 for seriously injured and killed in traffic, the Norwegian Public Roads Administration wants a solution that make it possible to detect incidents, provide information about what is happening and help with self-rescue.

# Competitive Dialogue

A procedure for innovation friendly procurement, or the procurement of new innovative solutions when:

- The need assessment is very defined, but you need help from the market on how to define the service or product
- The solution(s) are close to market-ready with a need to validate or test different solutions before procuring large scale or
- When new technological / digital solutions become available in a sector, but not yet fully commercialised

Procedure regulated by law with the need for innovation being one valid use of the procedure.

All parts of the offer and tender documents can be subject to negotiations.



# Examples



**Ampere** – The World's first fully electrical ferry Norled won the competition. It started in traffic February 2015. The ferry has a capacity of 120 cars, 360 passengers. 10 tonnes of batteries replace the large diesel engines and have a total capacity of 1040 kWh. The ferry is completely silent. MF Ampere needs 10 minutes at the dock to recharge the batteries. Ampere was named "ship of the year" in 2014.



# Negotiated Procedure

A procedure for innovation friendly procurement, or the procurement of new innovative solutions when:

- The need assessment (+ functionality and requirement) is very defined
- The solution is close to market-ready with a need to validate or test solutions before procuring or
- When new technological / digital solutions become available in a sector
- There is a competitive market (but not fully matured)

Procedure regulated by law with the need for innovation being one valid use of the procedure.

The offer and contents of the tender documents can be subject to negotiations (e.g price, quality, performance, test specifications, quarantees) except:

- Substantial changes to the need
- Minimum requirements
- Substantial changes to the offers

# Example

Innovative  
anskaffelser



Felles anskaffelse av innovative løsninger

## Elektronisk medisineringsstøtte

Larvik kommune leder an når 29 kommuner gjennomfører en felles innovativ anskaffelse av elektronisk medisineringsstøtte. Prosessen gjennomføres i samarbeid med Nasjonalt velferdsteknologi-program.



Larvik leder an

29 kommuner

7 fylker

1/5 av Norges befolkning

Elektronisk medisineringsstøtte innebærer bruk av elektroniske medisindispensere som varsler når medisinen skal tas



## Electronic medication support

Larvik municipality is leading the way when 29 municipalities carry out a joint innovative procurement of future solutions for electronic medication support (automated dispensers). The competition consisted of 4 user stories that were to be "answered out". Dignio and Evondos won 2 user stories each. The municipalities will now make choices on purchase or rent, whether to call off some or all of the solutions and whether to start in a limited zone or roll out fully.

# TREATMENT OF IPR IN INNOVATION PROCUREMENT



# THE REGULATION OF IPR HAS TO BALANCE THE INTEREST OF BOTH THE SUPPLIER AND THE PUBLIC ENTITY

- The Supplier
  - Need to commercialise the solution and the protection of software, trade secrets in the solution
  - Illegal state aid
- Public entity
  - Need to avoid supplier lock in (in case of supplier bankruptcy, M&A or change of strategic focus)
  - Illegal state aid

# State Aid – in pre-commercial procurement (R&D contracts)

- [State aid for research and development and innovation \(eftasurv.int\)](http://eftasurv.int)

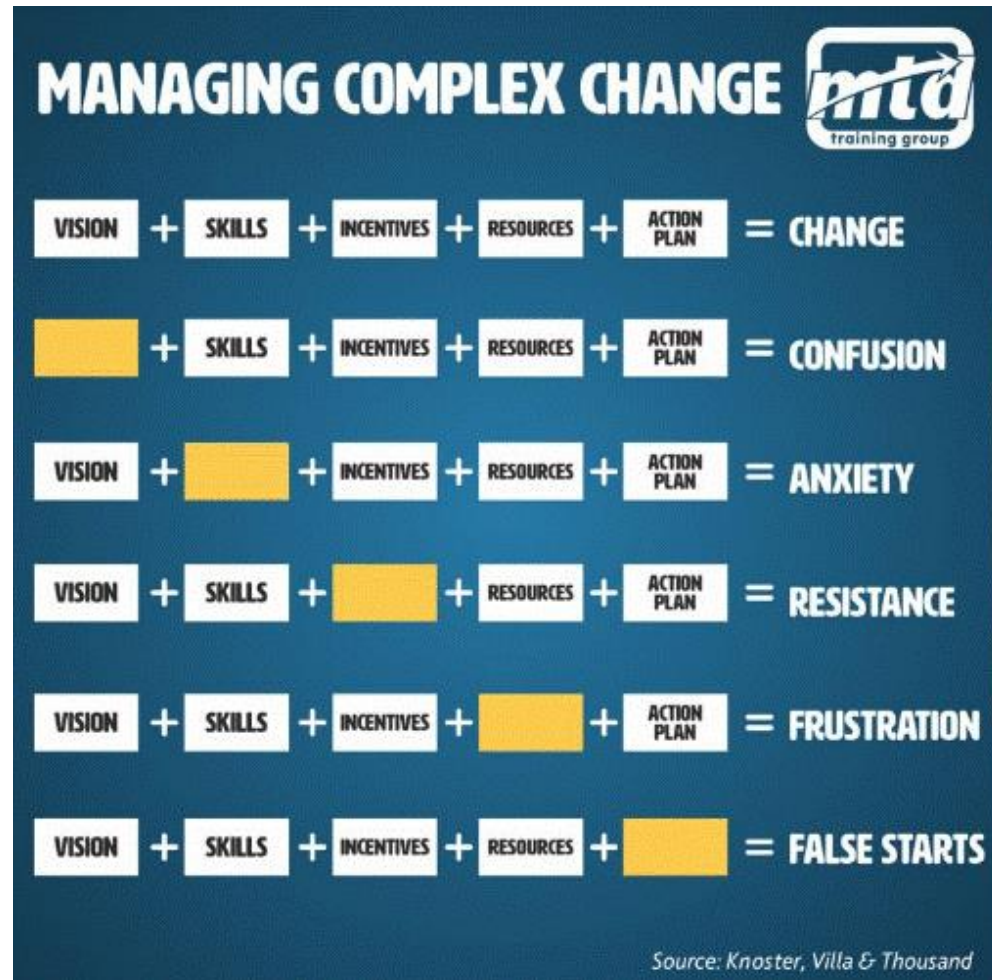
# Our contracts

- Standard agreement for agile software development (p. 10)
  - [ssa-s\\_generell\\_avtaletekst\\_2018-english\\_0.docx \(live.com\)](#)
- Standard agreement for innovation partnership (p. 10)
  - [Innovation Partnership Agreement English version 2022.pdf \(anskaffelser.no\)](#)
- Standard agreement for pre-commercial procurement (p.9)
  - [PCP Agreement English 2022.pdf \(anskaffelser.no\)](#)
- StartOff R&D contract (p.8)
  - [StartOffs FoU Contract English version.pdf \(anskaffelser.no\)](#)

# LEARNING POINTS ON HOW TO SUCCEED WITH INNOVATION PROCUREMENT



# Basic Rules for Innovation Processes Apply also in Innovation Procurement



Innovation procurement shares a lot of similarities with innovation and change management processes in general.



# Key topics

Needs assessment → Needs Matrix → Award criteria

Projects of strategic value to the organisation (Management involvement)

Project scaling – Find the right size (keep it simple stupid)

Funding for procurement of final solution (PPI)

No risk - No reward



Direktoratet  
for forvaltning og  
økonomistyring