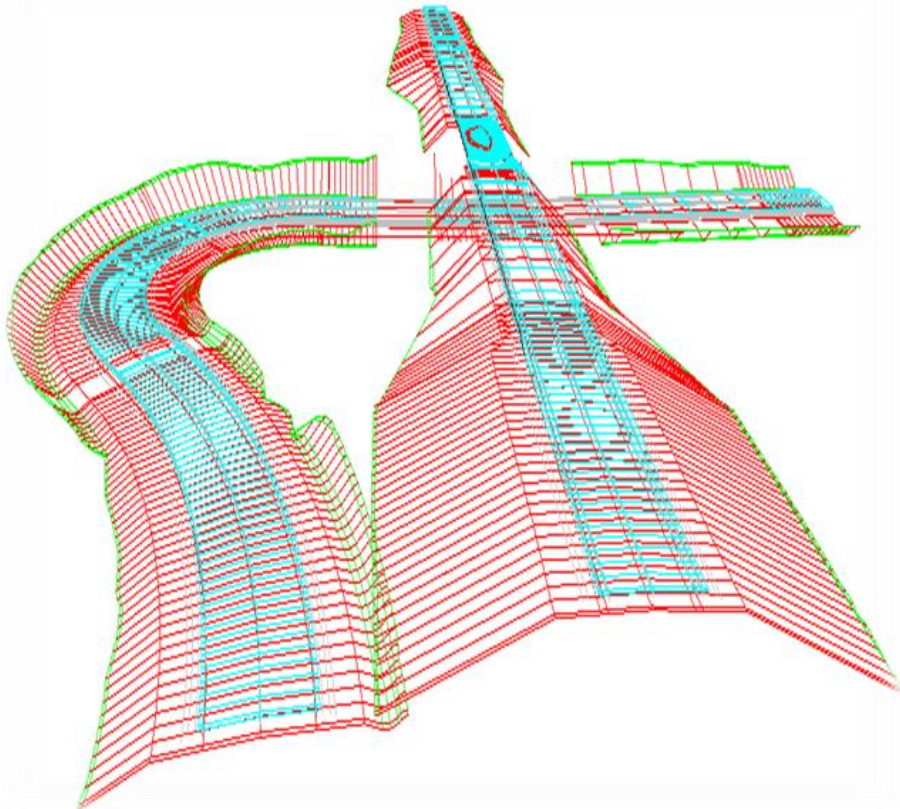




Rijkswaterstaat
Ministry of Infrastructure and the
Environment



V-Con project (October 2012 - March 2017)

EAFIP 18, 19 Oct 2016, Athens

Benno.Koehorst@rws.nl

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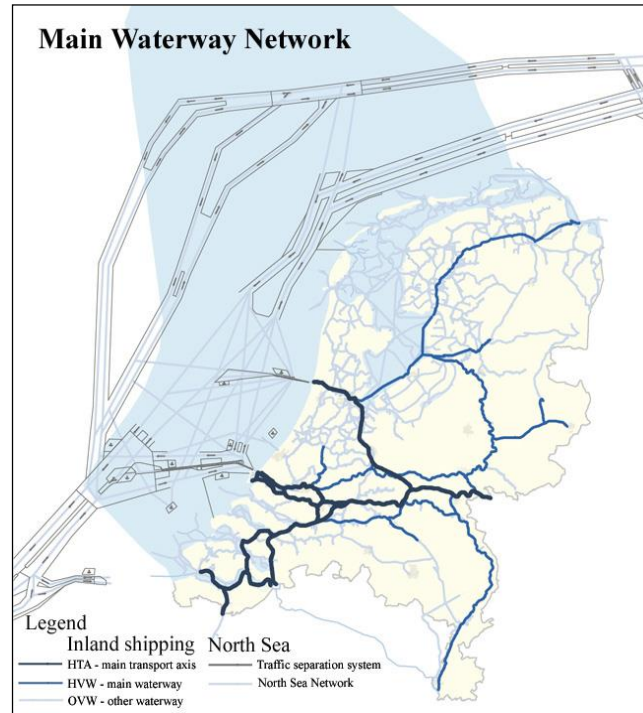
European Commission 7th Framework Programme for research and technological development (FP7)



Rijkswaterstaat's area of management

Rijkswaterstaat manages three National Infrastructure Networks

Rijkswaterstaat is the biggest procurer in NL (3 - 4 billion euro/year)





Why innovation?

- More intensive use of network
- New demands/requirements for the network
- Network need to meet new european/national regulation
- Change of role of Rijkswaterstaat in infrastructure (change towards procurement and information manager)



Why procurement of innovation?

- It fits with our role as procurer
- Procurement can have a big effect on the level innovation
- Procurement sets the conditions for innovation
- Maximum use of the innovative capacity of the market
- Client is able to provide functional specifications
- Enable contractors to optimize their own processes and bring in innovative solutions
- Client is able to select on quality and price
- Innovation can be applied directly in the project





What to achieve with V-Con (Virtual Construction)?

- Efficient information management in infrastructure
- Development of IT solution based on open standards

Public authority V-Con Consortium

Ministry of Infrastructure and the Environment – Rijkswaterstaat (<i>coordinator</i>)	The Netherlands
Trafikverket	Sweden
Centre Scientifique et Technique du Bâtiment	France
TNO: Nederlandse organisatie voor Toegepast Natuurwetenschappelijk Onderzoek	The Netherlands



V-Con's PCP: typical features (1)

- Published at www.tenderned.nl
- Duration PCP: two years
- Three phases (exclusive phase 0)
- Having a fixed set of dialogues per phase (resp 2,3,4)
- Tenderers have the opportunity to raise formal questions, Q&A are shared with all tenderers
- Tenderers have the opportunity to request a specialist meeting
- The last dialogue session also used to discuss refined specs
- End-of-phase-report includes offer for next phase (saves time)





V-Con PCP: aim of dialogue

- React on refinement of specifications
- Check if specs are elaborated enough to submit a bid
- Check if specs are understood correctly
- Check if specs are correct or need improvement

- To inform tenderer about result of evaluation
- To emphasize importance of commercialisation





V-Con award criteria

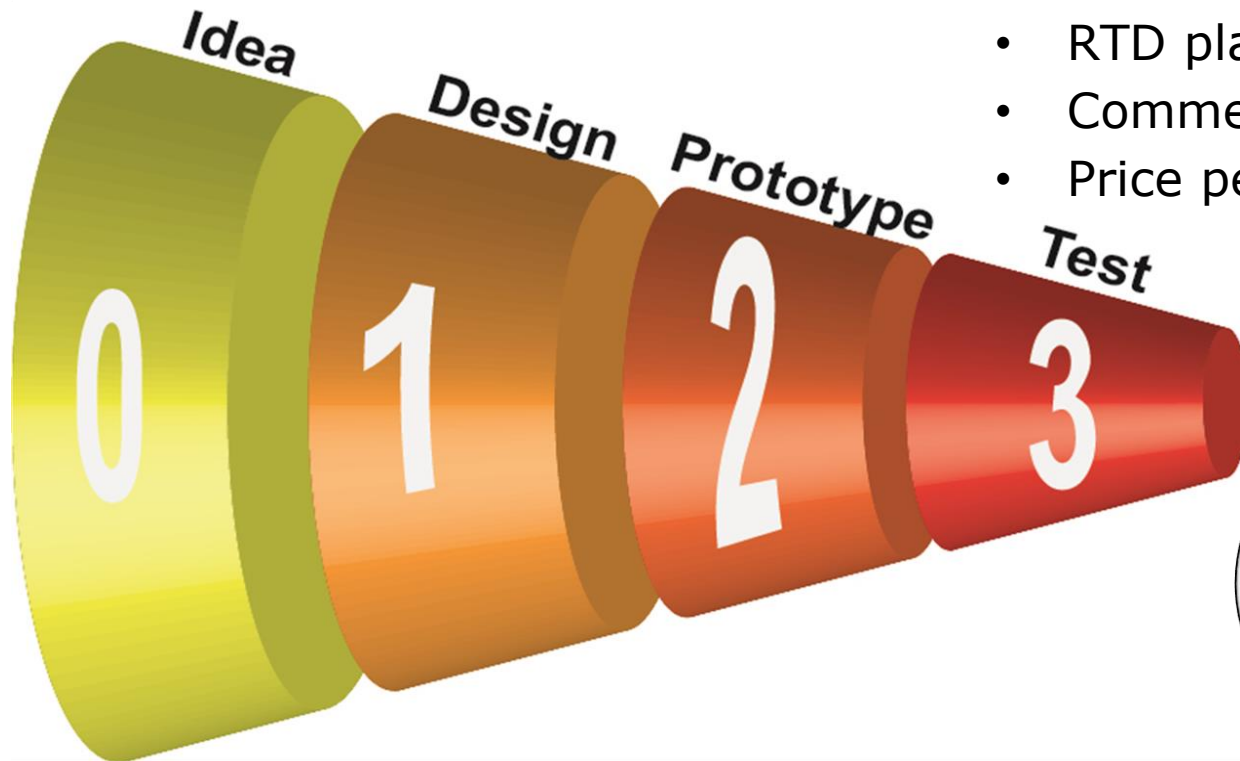
Weighting of Quality Criteria	From Tender to Phase 1	From Phase 1 to Phase 2 (indicative)	From Phase 2 to Phase 3 (indicative)
1) Technical excellence and relevance	40%	40%	45%
2) Quality and efficiency of the RTD process	40%	40%	25%
3) Potential impact and dissemination of result	20%	20%	30%

Weighting of Quality and Price to calculate the Total Score	From Tender to Phase 1	From Phase 1 to Phase 2 (indicative)	From Phase 2 to Phase 3 (indicative)
Quality	80%	80%	80%
Price	20%	20%	20%



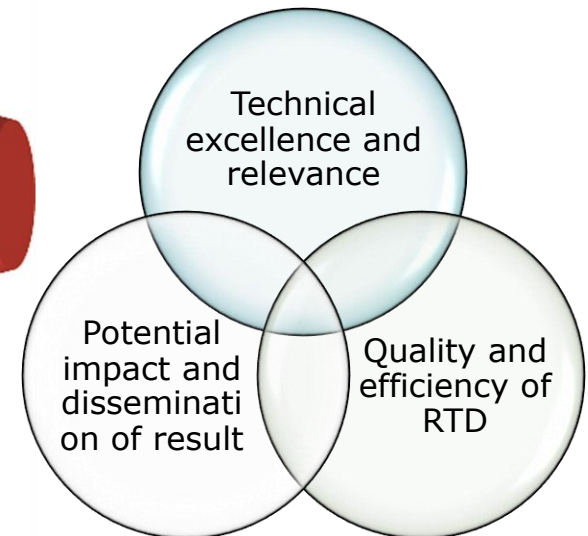


Elaboration PCP V-Con



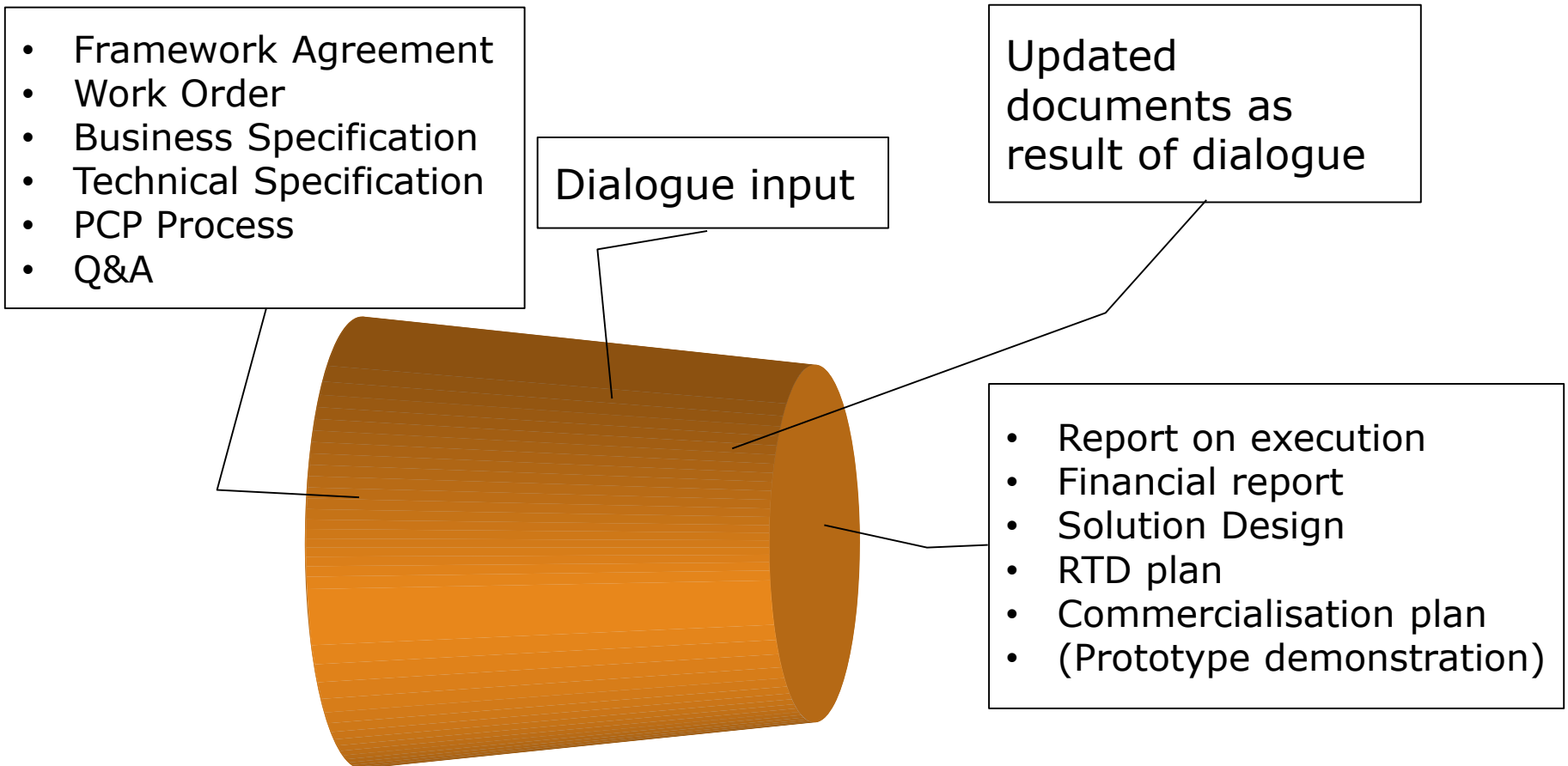
Main deliverables:

- V-Con Solution description
- RTD plan
- Commercialisation plan
- Price per phase



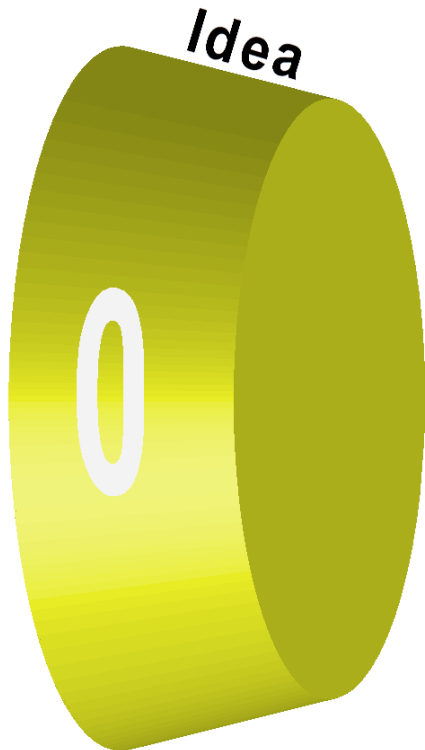


Per phase



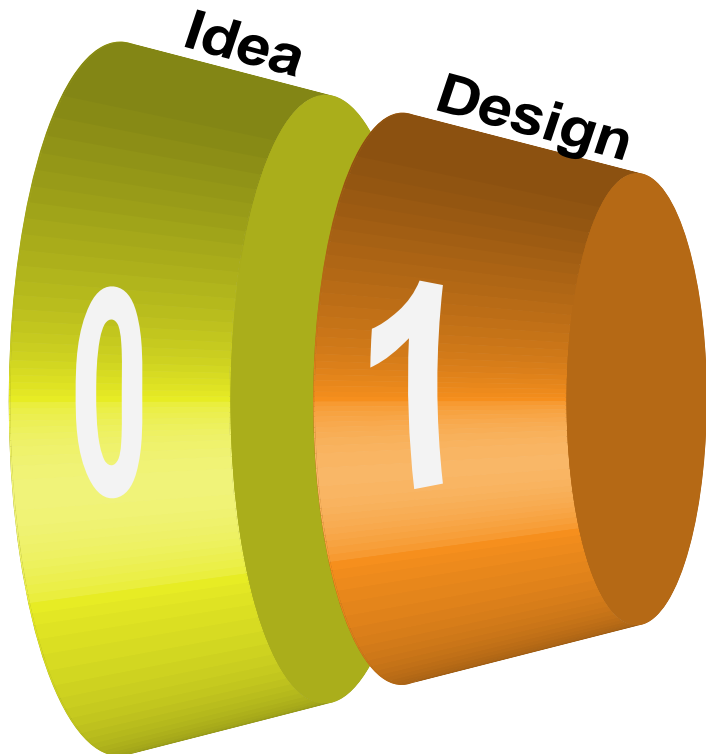


Phase 0 PCP V-Con



- Start Q&A process
- Industry Day (30 companies)
- 14 Tenderers offer their tenders:
 - Legal check: 2 invalid bids
 - Administrative and selection requirements
 - First Idea V-Con Solution Design
 - How are they going to conduct RTD
 - Initial plans commercialisation V-Con Solution
 - Price consecutive phases
- Framework Agreement with selected tenderers (contractors)

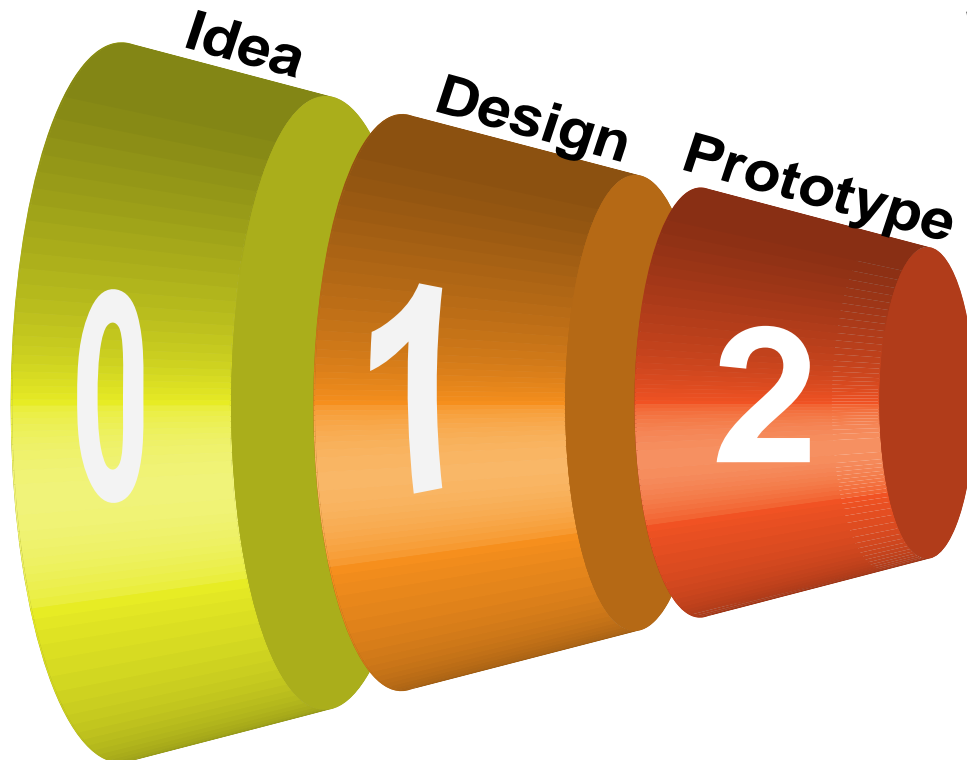
Phase 1 PCP V-Con



- 6 Selected Contractors develop their Solution Ideas to Solution Designs
- 2 Dialogue sessions
- Contractors substantiate technical, organizational and commercial feasibility of their Solution Designs:
 - Solution design
 - Updated RTD plan
 - Updated commercialisation plan
 - Price consecutive phases

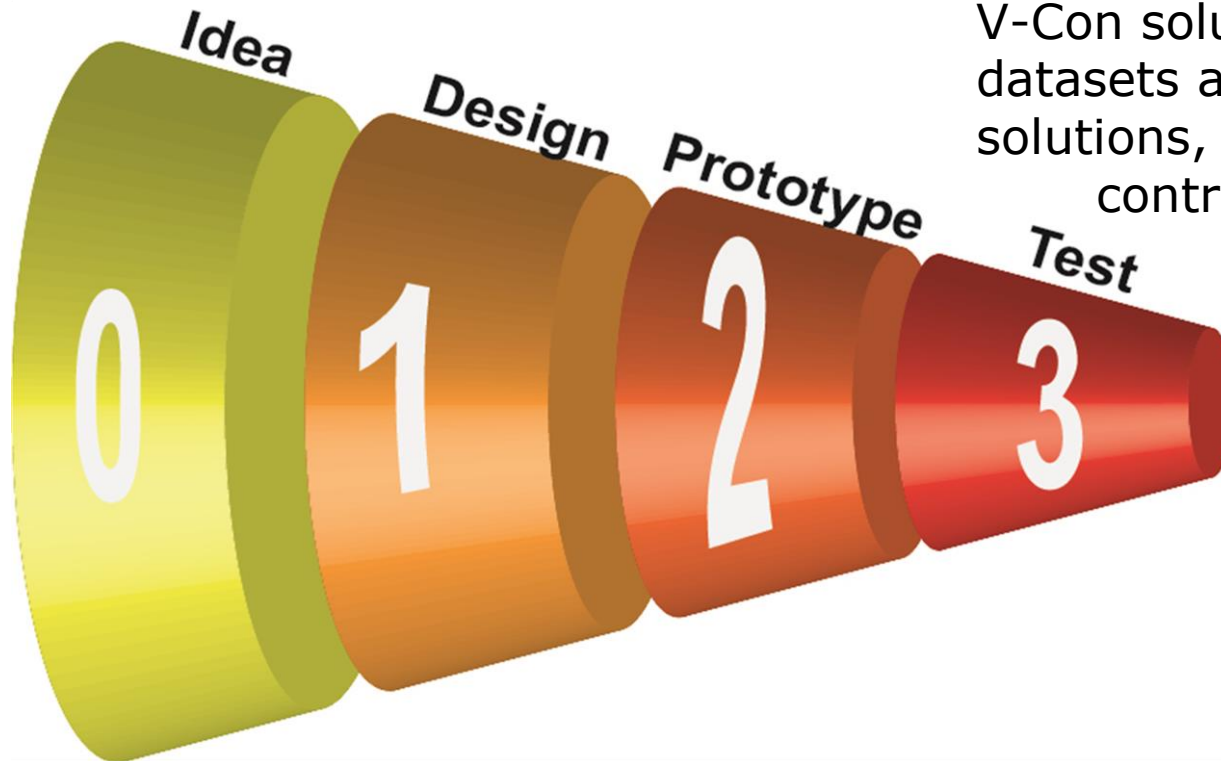


Phase 2 PCP V-Con



- Aims at showing, through a prototype implementation, to what extent the proposed solution meets the requirements.
 - 4 tenderers
 - 3 Dialogue sessions
 - Prototype demonstration
 - Updated R&D plan
 - Updated commercialisation plan
 - Price phase 3

Phase 3 PCP V-Con



- Aims at developing and testing complete, still pre-commercial V-Con solutions, using real datasets and refined/enhanced solutions, as developed by contractors

- 2 tenderers
- 4 dialogue sessions
- Demonstration V-Con solution
- Presentation on end-conference



Lessons learnt V-Con(1)

- It was advised to structure the bids according to the challenges described in specifications and present the bids via video
- Companies are used to a commercial setting, not so much experience in public tender
- Companies need to get used to more generic requirements rather than detailed requirements for tailor made solution
- Tenderers tend to ask for approval on their technical solution idea
- Tenderers tend to focus on solution design rather than business case





Lessons learnt V-Con(2)

- Escrow agreement not earlier than phase 2
- Bid as part of end-of-phase report saves time and keeps momentum in development
- A quick evaluation proces is recommended in order to keep momentum
- The way V-Con's PCP was setup worked well: set of documents, dialogue sessions, three phases, criteria, etc.
- Legacy of parties who dropped out was very limited
- Market parties interested to know the roadmap after V-Con





Lessons learnt V-Con(3)

- Market parties were interested to have had a larger consortium
- The final parties considered themselves too small to fulfill the full challenge
- Hence try to steer the size of the consortium right from the beginning via your requirements.
- An extra step to enlarge the consortium before contracting might be beneficial for all parties
- A public procurement after the pcp might be of interest in order to get maximum quality out of the final phase





Lessons learnt RWS(3)

- ***PCP as a method indeed stimulates innovation and widens the network of market parties***
- ***More than 75% of V-Con's market parties needed V-Con (Clients challenges + V-Con's investment in capacity, time and budget) to take steps into new territory***
- ***PCP is adopted at RWS as one of the methods to procure innovation***
- ***BIM programme on european level is needed in order to create a market for BIM based on open standards: led by public sector and co-financed by EC***





Thank you for your attention!

