



**Flanders**  
State of the Art

# **Innovation Procurement – Best practices from Belgium (Flanders)**

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**VLAIO**

# Agenda

- ① Introduction to PIP (Programme for Innovation Procurement)
- ② PIP Project 'Incontinence Care 2.0'

# Programme for Innovation Procurement – PIP

- **MISSION** Stimulate public organisations in Flanders (purchasing power > 30 bn) to use procurement as a strategic instrument for innovation (to buy innovation)
- **WHY** It doesn't seem to happen spontaneously
- **RESULT** Procuring innovation with triple P impact
  - Improving performance of *public* sector
  - Strengthening competitiveness of *private* enterprises/industry
  - Contributing to solving major societal challenges (missions, *people*)
- **FOCUS** Develop and validate INNOVATIVE SOLUTIONS (new and better products, services, systems) in response to public needs
- **HOW** Calls every year to public sector entities (demand driven programme)  
With a team of 6 dedicated advisors and a budget of ± 3 mio/year

# What do we offer?

To public sector organisations :

- Guidance, expertise and support throughout the whole procurement process
- Financial support
  - Consultancy to prepare tender: needs and market analysis + market consultation (!)
  - Co-financing (50/50) of final awarded contract

To private enterprises :

- Early involvement in procurement track, to gain insights in public needs, opportunity to co-define possible development tracks, contribute to 'realistic' tender documents, ...
- Easily accessible and enterprise friendly tender procedures with interaction
- More resources for innovation, more possibilities for developing, testing, validating, launching new solutions on the market, ...

# Added value of Innovation Procurement

- More attention on identification of needs
  - Purchase based **functional demands** instead of technical specifications
  - **In depth interaction** with stakeholders, end users to validate needs
  - Prioritizing of desired functionalities/use cases (must-haves vs nice-to-have's)
  - How? Workshops, focus groups, polls, surveys, bootcamps, etc. in order to define roadmap or innovation agenda/strategy (short-term, long-term)
- In depth interaction with market, preceding the tendering
  - Open workshops to assess risks, working out possible directions or solutions
  - Bilateral talks
- Transparency by publishing results and reports on PIP website and e-procurement

# Attracting innovative SME's and start-ups

- **Open market consultations**
  - 62 since the start of PIP
  - On average 20-30 participating enterprises but often more (up to 100)
  - Significant share of start-ups and young SME's
  - 1-on-1 discussions (↑)
  - Possibility to public pitch



# What do enterprises think of PIP's OMC?

Thank you everyone for this interesting session

Thank you for an excellent session

*Thanks for the very structured meeting. I will certainly remember the concept: it made for a good discussion!*

Very interesting process. Excellent moderation. Thank you!

Was a great experience, good luck with the continuation!

Nice format- cocreation!

*Thanks for the well organised voting session, nice concept*

Good session!

Thank you for this interesting market consultation

Thank you for the clear explanation!

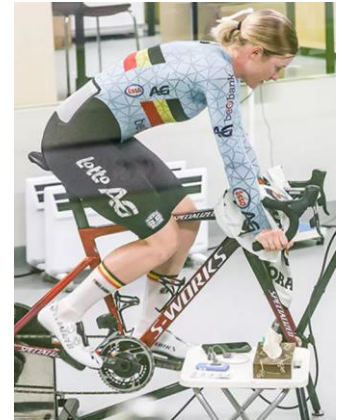
Thanks for the interesting meeting and discussion

*I was surprised about the interactivity and the quality of the moderation. Congrats!*

Source: chatlog

# + 100 projects in PIP-portfolio – Interested?

- PIP project portfolio: business opportunities?
  - [VLAIO helps entrepreneurs grow | Flanders innovation & entrepreneurship](#) - EN
  - Search and filter on policy field, topic & status (in preparation, in procurement, in execution....)
  - Project site: challenge, status, documentation and reports available
- PIP Newsletter (in Dutch)
  - [Programma Innovatieve Overheidsopdrachten - PIO | VLAIO](#)
- Contact PIP- team
  - [pio@vlaio.be](mailto:pio@vlaio.be)





# PIP Projects in Health Care



## **Remote interpreting services**

Flemish Agency for Persons with Disabilities



## **Excellent meal care in residential elderly care**

Zorg-Saam ZKJ



## **Customized online access for youth in community facilities: Parental Controls & Mobile Device Management**

Agency Growing Up

# Agenda

② PIP Project 'Incontinence Care 2.0'

## Challenge

## Preparation

## Tender

## Implementation

## Results

Initiator(s)

**vzw Zorg-Saam ZKJ**

Topic

**Digitalisation**

Domains

**Care and health**

Status

**Realised**

Contact

**vzw Zorg-Saam ZKJ**

## Challenge

More than 80% of residents in residential elderly care suffer from unwanted urine leakage. Systematic incontinence rounds are therefore carried out day and night.

On the one hand, this is disturbing for the users themselves and, on the other hand, takes up a lot of the care's time and resources that could be better spent on providing tailored care.

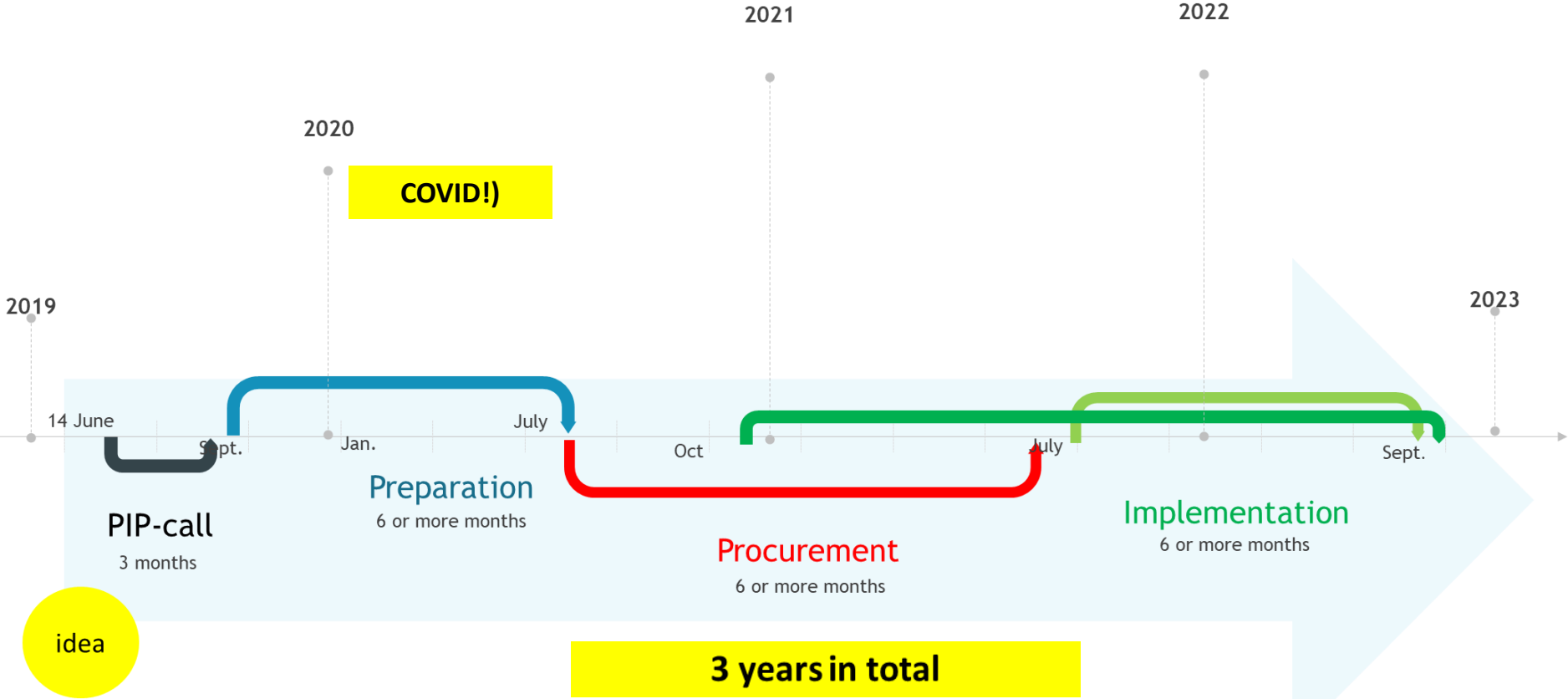
With this project, the non-profit organisation [Zorg-Saam ZKJ](#)<sup>nl</sup> wants to have a solution developed and tested to offer more comfort to residents in residential care for the elderly who experience unwanted urine loss. At the same time, such a solution could realise significant time savings for caregivers.

ZorgSaam aims for an innovative solution that eliminates the need for systematic checking of incontinence pants, with numerous benefits for both carers and caregivers.

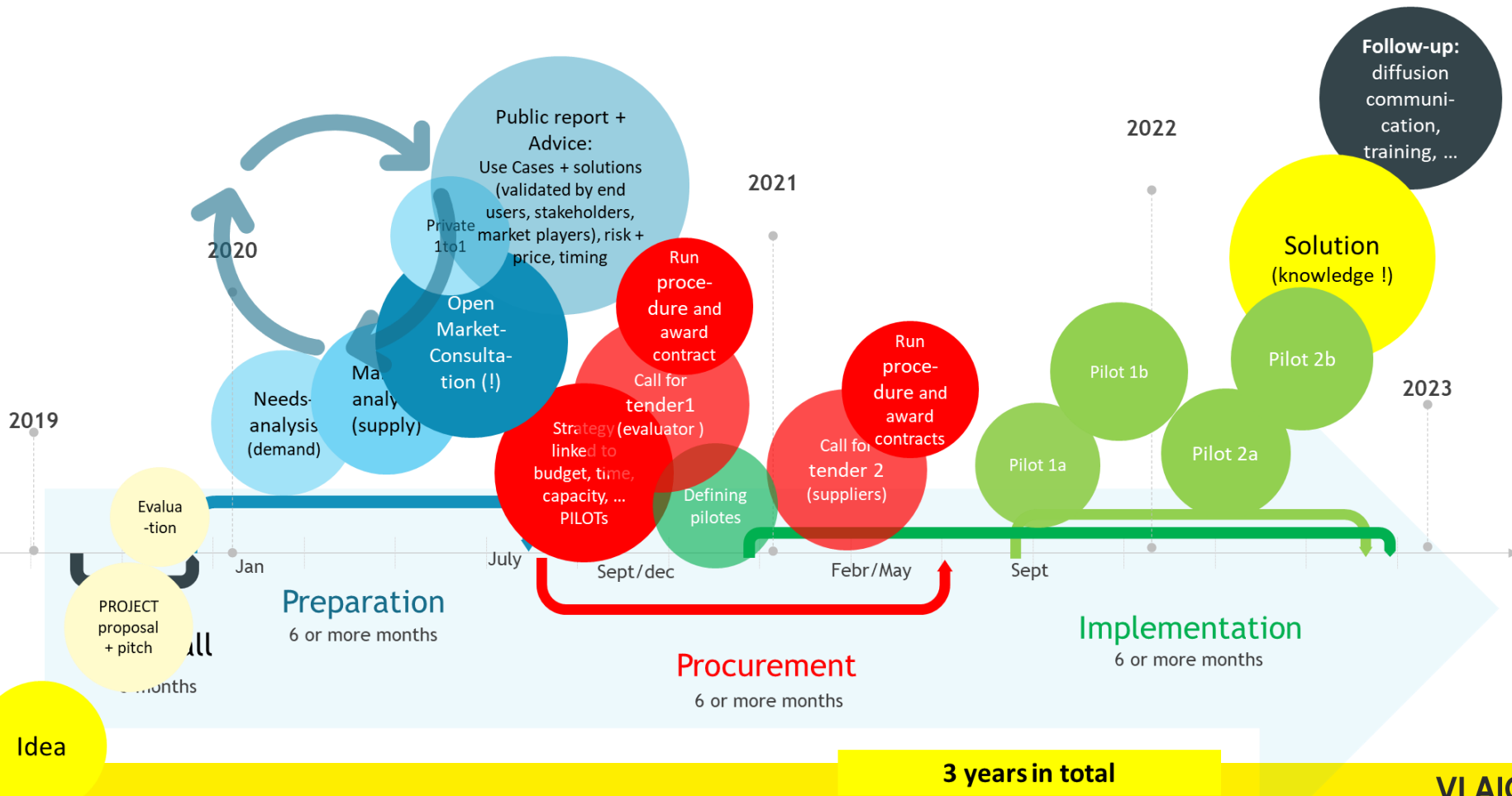
ZorgSaam wishes to deploy new technology that detects when incontinence pants are saturated, linked to a call system. In doing so, ZorgSaam also wants to collect data that can support and improve the approach to incontinence and the policy around it.

Share: [!\[\]\(1ed10657a19f9137278430c48fd18626\_img.jpg\)](#) [!\[\]\(4dcc4b4891182a8bcced7bb00d8b5889\_img.jpg\)](#) [!\[\]\(9a1f7076567d0e28a0a931f5e8bfa44c\_img.jpg\)](#) [!\[\]\(7e305d7ecf670f410b6e3e32d571b72d\_img.jpg\)](#)

# PIP Journey - Intense guidance and (financial) support during whole PIP-trajectory



# PIP Journey - Intense guidance and (financial) support during whole PIP-trajectory



# To prepare the procurement process – needs assessment (consultants)

Jan 2020

## Needs-assessment

- HOW? Workshop(s), interviews, surveys... with users, stakeholders, other potential buyers, visits on the work floor etc.
- What do we want for whom?
- In which context?
- Define (DEscribe not PREscribe) the ‘unmet’ needs functionally and score/prioritize use cases
- Describe in functional terms (not technical) ‘as is’ and ‘to be’ situation
- Engage users: important for smooth uptake afterwards
- Wishlist of Prioritised Use Cases

### Needs of end users captured in ‘use cases’ (workshops, visits, etc.)

#### Brainstorm



- Brainstorm with end users and stakeholders to define use cases
- High level of ‘dreaming’ – maximum of creativity – long wishlist
- Feasibility of use cases not important

#### Tangible



- Use cases should be sufficiently specific and tangible
- Translating explicitly the needs of various user groups/roles
- Often current sore points/problems in the ‘as is’ situation of users are defined in the use cases

#### Fixed format



- AS [stakeholder]
- I CAN [do something]
- SO [that I reach a certain goal]

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**Innovation potential from demand side (people + context)**

# Results: estimating USER (PEOPLE) value by defining and prioritizing use cases

Workshops defining use cases with all end-users (nurses, residents, IT, etc)

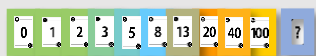
What are we looking for? What do we need, what do we want? For Whom?

Needs are captured in use cases/functional requirements in workshops with end users

AS A [Stakeholder/user]  
I CAN [do / have something]  
SO THAT [I can achieve a certain goal]

Workshop prioritizing use cases

using Planning poker



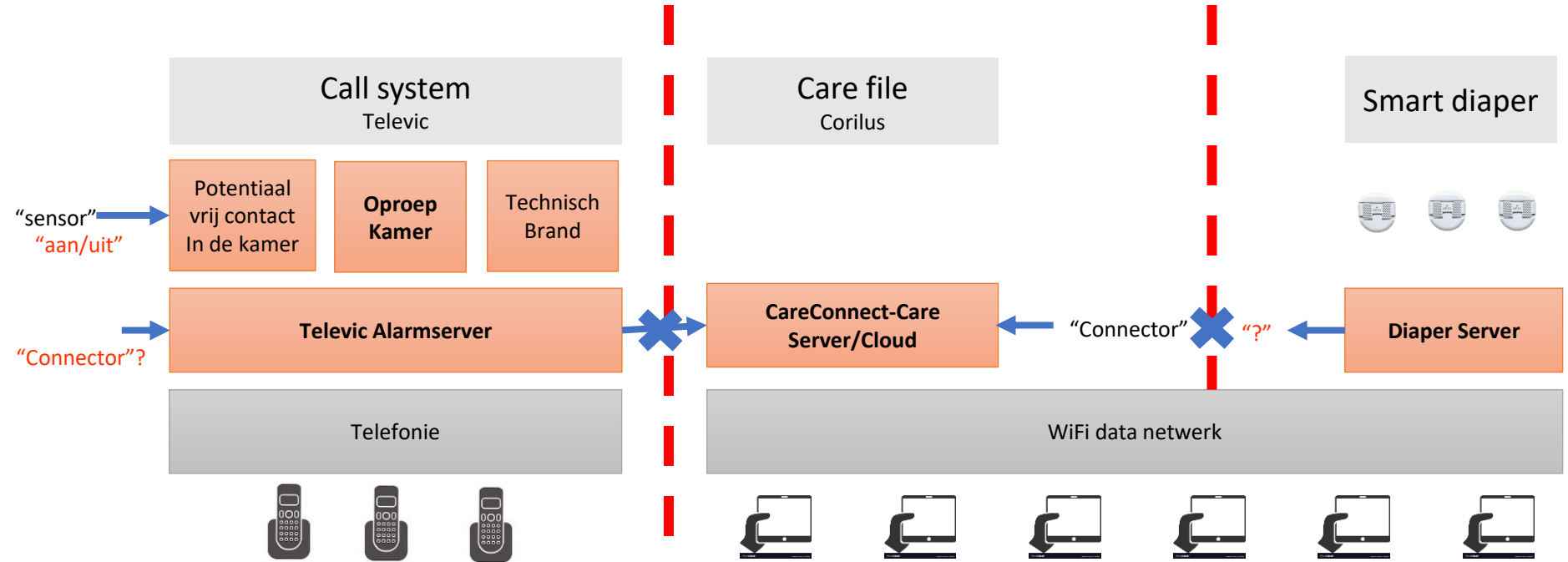
<https://www.planitpoker.com/>

Preliminary!

Incontinentiezorg 2.0

7	Zorgkundige Verpleging Zorgpersoneel	een signaal krijgen als er stoelgang is (zeer gericht per bewoner in te stellen)	ik weet wanneer ik moet materiaal wisselen	40
9	Nacht Zorgkundige	ik kan zeer gericht, per bewoner (zorg beslist), een signaal krijgen wanneer iemand wakker is/of uit zijn bed komt	we die mensen naar het toilet kunnen begeleiden en wildplassen vermijden	13
10	Zorg	een signaal krijgen als de bewoner zijn luier uitdoet : wel een melding als de bewoner naar het toilet gaat, maar niet als de zorg hem begeleidt	we valrisico vermijden, comfort verbeteren, wassen van kledij uitsparen, hygiene verbeteren, verstopping sanitair vermijden	20
12	Verpleegkundigen Arts	de hoeveelheid vochtverlies meten in ml	zodat ik de vochtbalans kan uitrekenen	5
13	Verpleegkundigen	ik kan een minimum plasniveau instellen in ml/24h, die resulteert in een indicatie die oplicht in het zorgdossier	we dehydratatie te voorkomen, een signaal dat er iets verandert in de conditie van de bewoner (objectiveren/ik heb ook andere manieren -afhankelijk van rol)	3/13
14,1	Zorg	een betrouwbaar systeem gebruiken	zodat ik valse alarmen kan vermijden	100
14,2	Zorg	verschil maken tussen zweet en vochtverlies	zodat ik weet de het materiaal verzadigd is, onafhankelijk van de bron	3
15	Verpleging Arts	in het zorgdossier een indicatie van infectie krijgen	ik kan infectie detecteren (een extra gegeven bij het beoordelen)	20
17	Zorgkundigen	een systeem gebruiken dat compatibel is met het bestaande oproepsysteem, op DECT maar met andere toon	ik maar één systeem moet gebruiken: geen verschillende toestellen moet meezeulen (niet iedereen heeft een tablet/DECT is afhankelijk van de afdeling)	40
18	Bewoner	me vrij bewegen: de sensor is draadloos, max 20g, zacht, heeft geen uitstekende randen, is flexibel en beweegt mee met de persoon	het comfortabel is voor de persoon, de bewoner het niet kan voelen	100
20	Zorgkundigen	een systeem gebruiken dat is ingewerkt in de luier. maw wegwerp [maar moet idealiter wel luier leverancier onafhankelijk zijn - cfr nood om goedkoopste leverancier te kiezen]	zodat er geen extra handelingen nodig zijn	40
21	Zorgkundigen	een systeem gebruiken waarbij de sensor kan niet gemakkelijk verwijderd worden door de bewoner	het systeem betrouwbaar is	40
22	Zorgkundigen	een systeem gebruiken waarbij de sensor minimum dertig dagen autonoom kan werken	ik niet elke week de sensoren moet opladen	40
23	Directie	een betaalbaar systeem gebruiken	er een terugverdien effect is	40

# CONTEXTual constraints (existing infrastructure): third silo on top of two existing silo's



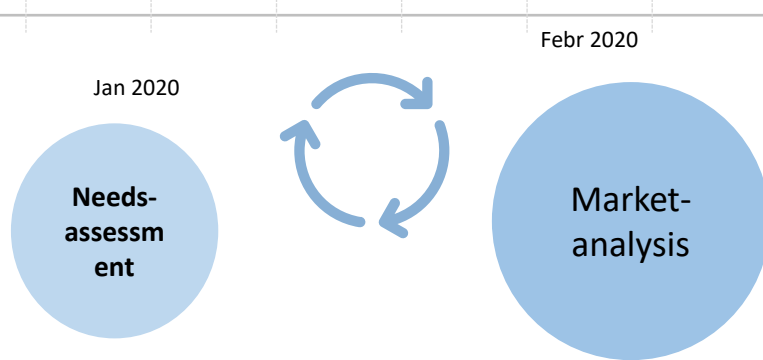
**Integration** possibilities are **limited** and demand **specific developments/investments**

- By suppliers existing infrastructure Televic and Corilus
- By suppliers of Smart diapers



# To prepare the procurement process

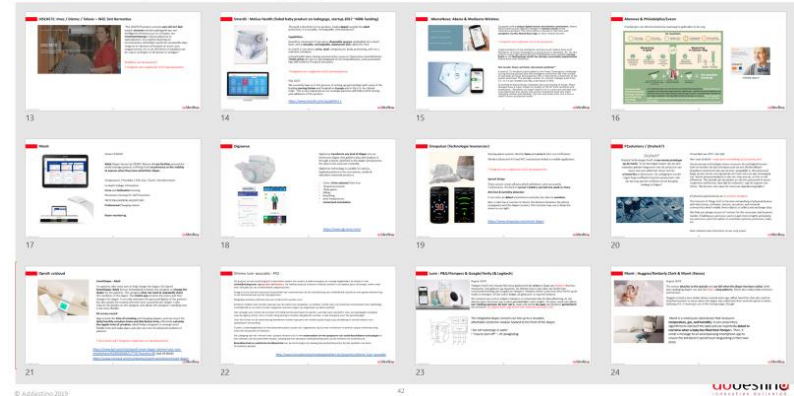
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- Workshop(s), interviews, surveys... with users, stakeholders, other potential buyers
- What do we want for whom?
- In which context?
- Define (DEscribe not PREscribe) and score
- *use cases*
- Important for **smooth uptake**
- Wishlist of **Prioritised Use Cases**
- **Innovation potential from demand side**

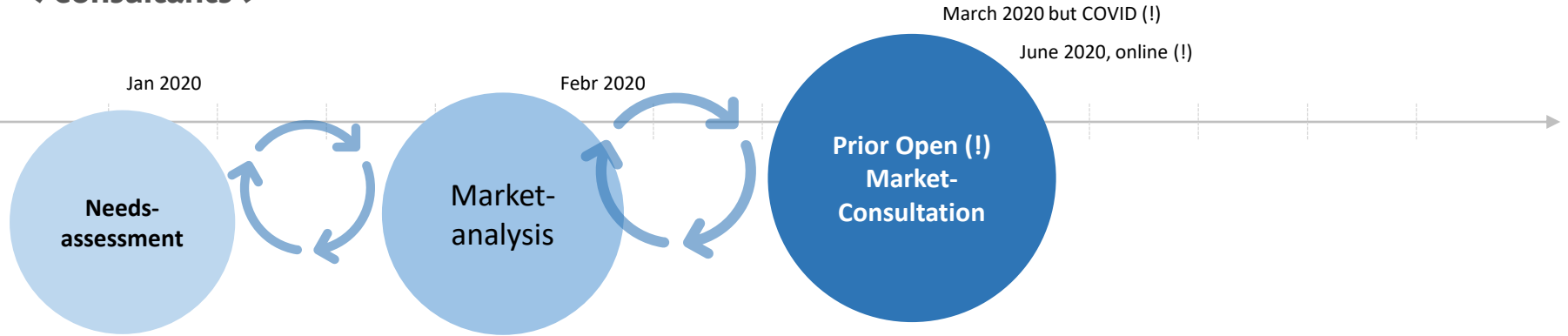
- State of the art analysis (SotA)
- How? Desk research, literature, expert interviews...
- What is available by whom?
- List of
  - possible (partial) solutions
  - market players, research institutions, possible suppliers

## Market exploration – Identifying partial solutions and suppliers



# To prepare the procurement process

< consultants >



- **HOW? Open** workshop, interviews, pitches, ... with all possibly interested suppliers
- **Advertise widely** PIN (!) and well in advance
- to **validate SotA and assess maturity** of what suppliers seem to promise ...
- To **score** use cases on techn. risks, availability, feasibility, complexity, ...
- Possibility for networking, building consortia among industry, etc.
- To co-draft **realistic and successful** call for tender
- To **re-define or re-prioritize the needs** in function of risk, budget, etc

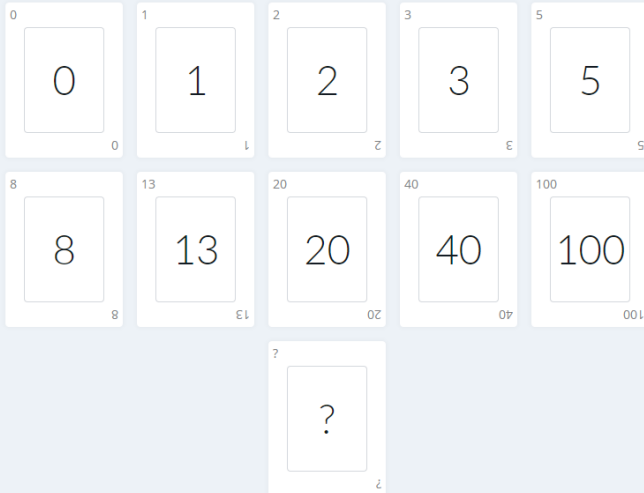
**Innovation potential  
from supply side**

# Screenshots of PlantPoker tool

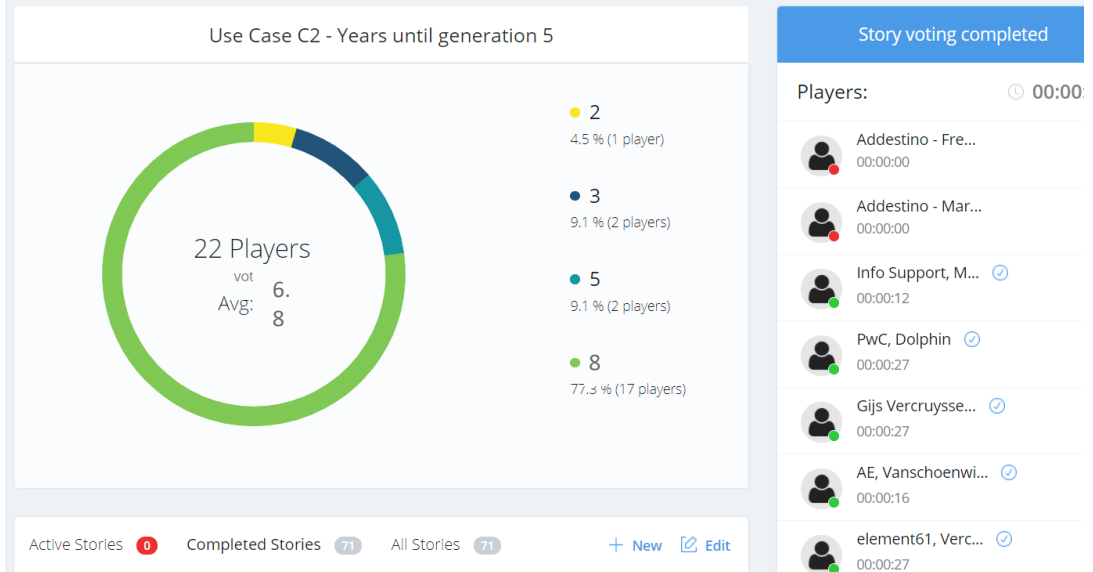
Online Open Market Consultation Incontinence Care 2.0, June 2020:

- 44 participants
- Afternoon
- International: NL, DK, UK, ...

Open Market Consultation: Measurement kit for exposure t...

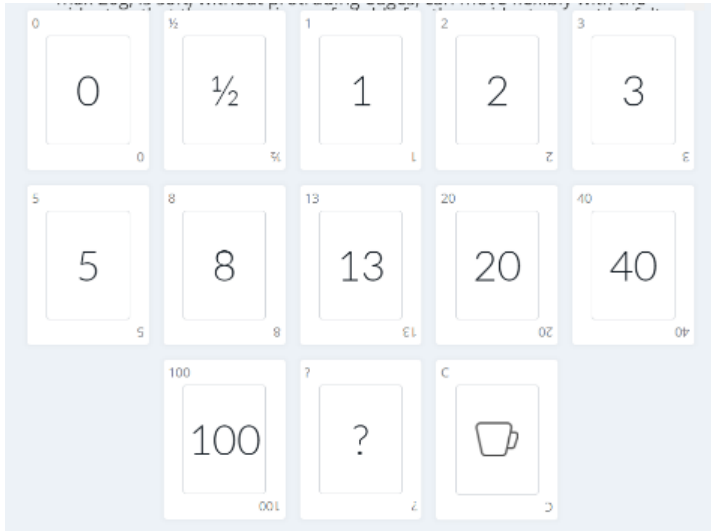


Market Consultation - CATE



## Use Case: 7

as Care staff, I can get **an alert when feces are detected**  
(a detailed setting to be enabled/disabled on a per resident basis)  
so that I know when a diaper change is necessary



### Scoring:

- 0 No issues, of the shelf
- 2-3 A frequent problem, can be solved.
- 13 Not a standard problem at all yet a decent chance at success
- 100 Impossible, requires breaking physical laws.
- ? No idea, no experience regarding this topic.

# Results: estimating user value and technological risk

## Workshops **defining** use cases

What are we looking for? What do we need, what do we want? For Whom?

Needs are captured in **use cases/functional requirements** in workshops with end users

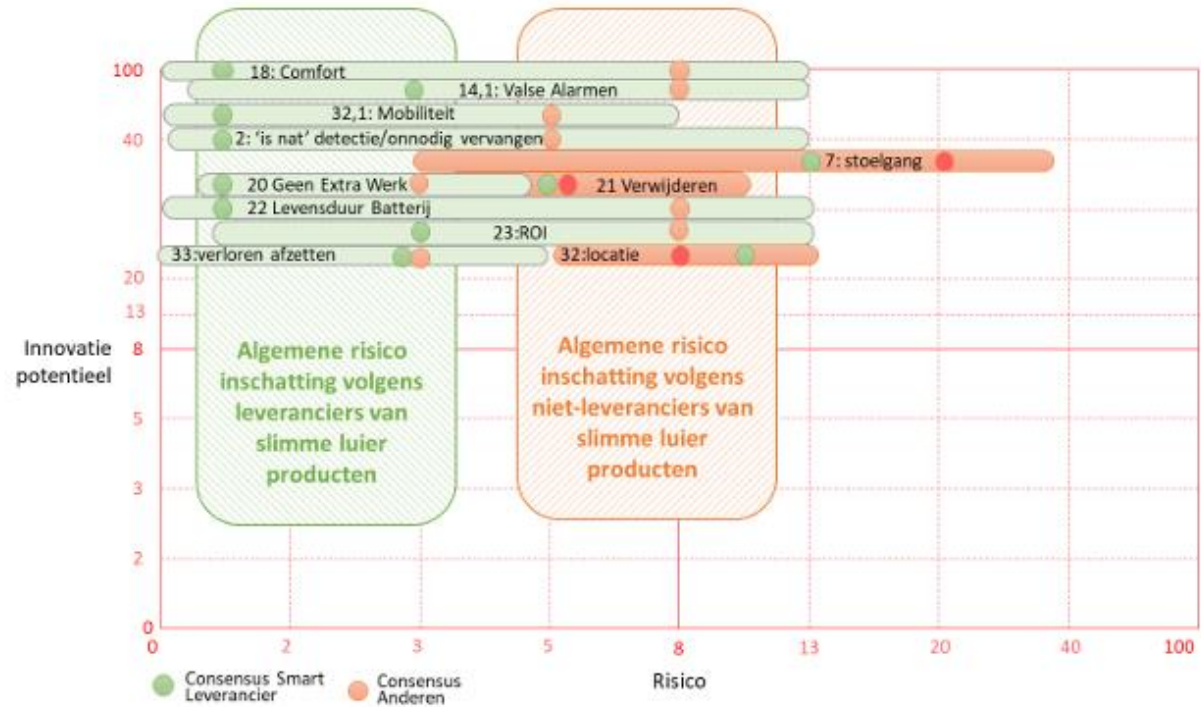
AS A [Stakeholder/user]  
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## Workshop **prioritizing** use cases

using Planning poker



<https://www.planitpoker.com/>



# To prepare the procurement process

< consultants >



- Workshop(s), interviews, surveys, .. with users, stakeholders, other potential buyers
- What do we want for whom?
- Define and score use cases/functionalities
- Important for **smooth uptake**
- Wishlist of **Prioritised Use Cases**

**Innovation potential from demand side**

State of the art analysis SotA (Desk research, literature, expert interviews, ...)

What is available by whom?

List of

- possible (partial) solutions
- market players, research institutions, possible suppliers

Open workshop, interviews, pitches, ... with possible interested suppliers

to validate SotA and assess feasibility

- Advertise widely PIN (!)
- To score use cases on techn. risks, availability, feasibility, complexity, ...
- **To co-draft call for tender**
- **Possibility for networking, building consortia**

**Innovation potential from supply side**

## **Public (!) report:**

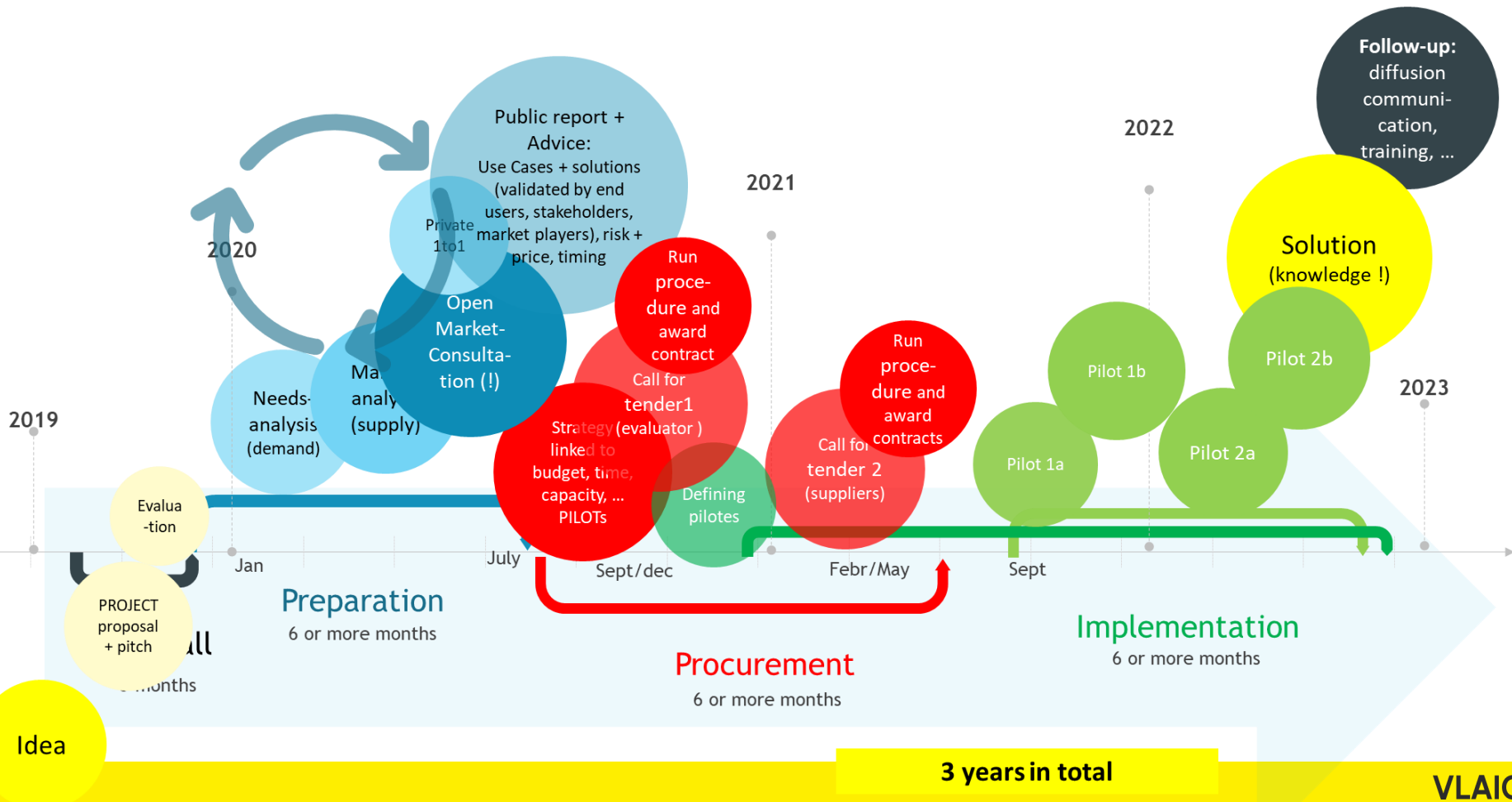
- Estimate of user value and technological risk
- Key framework conditions
- Attachment in later tender

## **Confidential advice:**

Relevance for call for tender and vendor selection.

- Cost / risk estimation
- Input technological specifications (min/max)
- Input selection criteria
- Input award criteria (extra points)
- ...

# PIP Journey - Intense guidance and (financial) support during whole PIP-trajectory



# Incontinence 2.0 - Translating gained insights in tendering strategy

## INSIGHTS:

- Several vendors/solutions available but doubts about **real performance** – How mature? Which added value? What changes needed in daily processes? Costs? Can they meet expectations?
- Possible **high investments** needed for integration with existing infrastructure - avoid (early) vendor lock-in

## ADVICE:

- Prior **small pilot(s) in real setting** before tendering the bigger contract
  - Define design pilot setting (residents, wards, period, etc) that match budget and time
  - Appoint neutral evaluator
  - Run parallel pilots (several solutions) and have them evaluated

*"The real worth, success, or effectiveness of something can only be determined by putting it to the test [proof] by trying or using it, appearances and promises aside—just as the best test of a pudding is to eat it."*



*the proof of the pudding  
IS IN THE EATING*



# Incontinence 2.0 – Running the procedures

## 2 CALLS FOR TENDER

### TENDER FOR NEUTRAL EVALUATOR:

- To design pilot set-up
- To draft criteria for evaluation
- To prepare call to suppliers
- Evaluate pilots
- Report results

### TENDER FOR PARTICIPATION IN PILOTS:

- Challenge described in functional criteria (must have vs nice to have's)
  - Technological
  - Operational
  - Financial/Market/Rol/Costs

## 2 PROCEDURES

### TENDER FOR NEUTRAL EVALUATOR:

- Launched end of September 2020, info session on scope
- 3 bids on 27 October, oral presentation
- Award of contract to Kunigi in November 2021
- Start in December 2020
- End of contract in September 2022

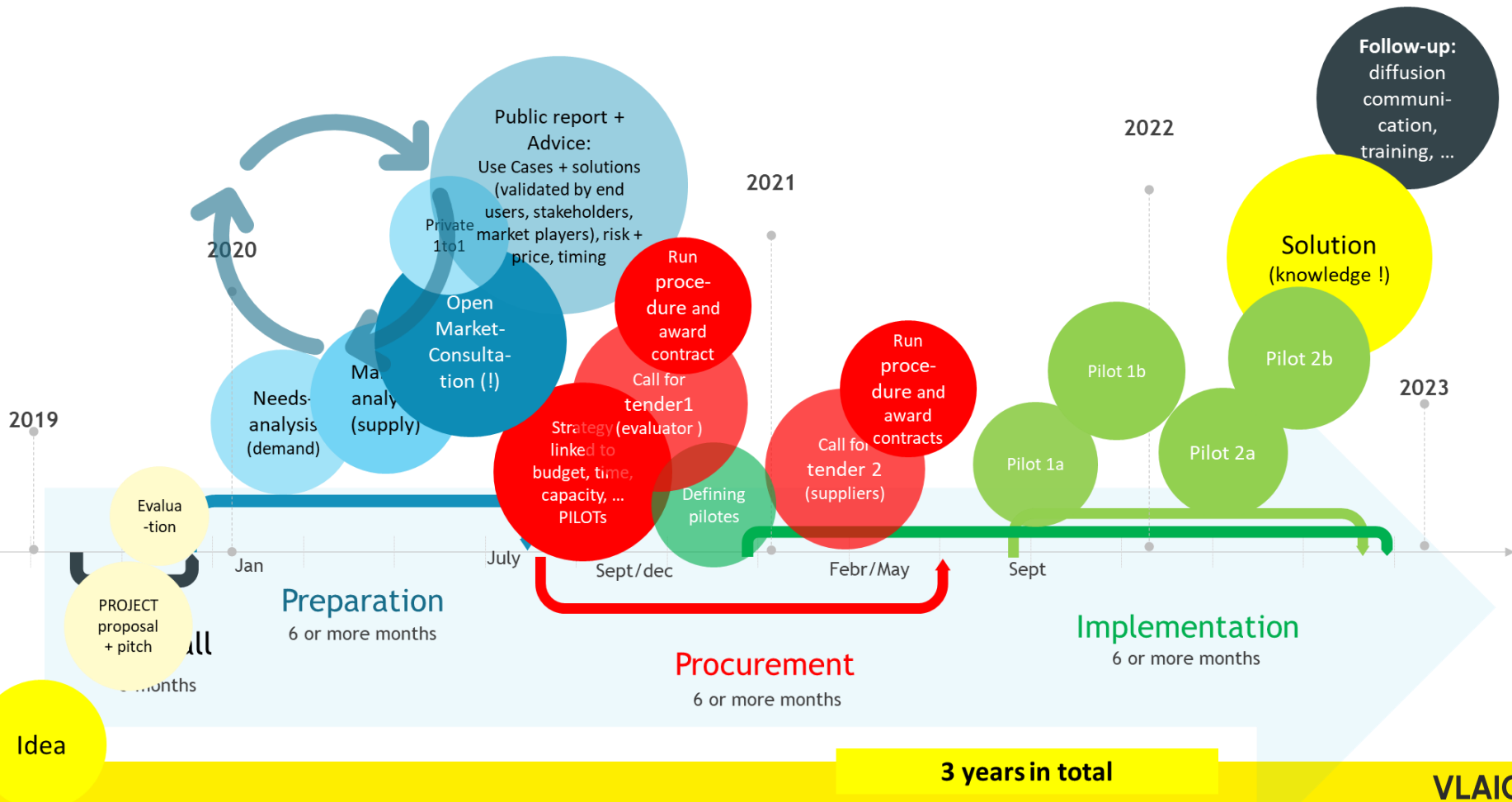
### TENDER FOR PARTICIPATION IN PILOTS:

- Launched February 2021, info session on scope
- 5 bids on 3 March 2021, oral presentation
- Award of contract to Ontex and Essity (only 2) in May 2021
- Start in September 2021
- End of contract in September 2022

# Results of market insights: feasibility/complexity of needs – redefining/re-prioritizing (!) needs in function of your budget, capacity, risks, time limits, etc.

				Users	Suppliers	Tender
7	Zorgkundige Verpleging Zorgpersoneel	een signaal krijgen als er stoelgang is (zeer gericht per bewoner in te stellen)	ik weet wanneer ik moet materiaal wisselen	40	✗	
9	Nacht Zorgkundige	ik kan zeer gericht, per bewoner (zorg beslist), een signaal krijgen wanneer iemand wakker is/of uit zijn bed komt	we die mensen naar het toilet kunnen begeleiden en wildplassen vermijden	13	✓	Must have/ Min. requirement
10	Zorg	een signaal krijgen als de bewoner zijn luier uitdoet : wel een melding als de bewoner naar het toilet gaat, maar niet als de zorg hem begeleidt	we valrisico vermijden, comfort verbeteren, wassen van kledij uitsparen, hygiene verbeteren, verstopping sanitair vermijden	20	?	Nice to have
12	Verpleegkundigen Arts	de hoeveelheid vochtverlies meten in ml	zodat ik de vochtbalans kan uitrekenen	5	?	
13	Verpleegkundigen	ik kan een minimum plasniveau instellen in ml/24h, die resulteert in een indicatie die oplicht in het zorgdossier	we dehydratie te voorkomen, een signaal dat er iets verandert in de conditie van de bewoner (objectiveren/ik heb ook andere manieren -afhankelijk van rol)	3/13	✗	
14,1	Zorg	een betrouwbaar systeem gebruiken	zodat ik valse alarmen kan vermijden	100	?	
14,2	Zorg	verschil maken tussen zweet en vochtverlies	zodat ik weet de het materiaal verzadigd is, onafhankelijk van de bron	3	?	Nice to have
15	Verpleging Arts	in het zorgdossier een indicatie van infectie krijgen	ik kan infectie detecteren (een extra gegeven bij het beoordelen)	20	✗	
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# PIP Journey - Intense guidance and (financial) support during whole PIP-trajectory



# Incontinence 2.0 – Results – making a difference!

- **Learnings for suppliers – ‘Perfect pilots’** as many things went wrong – **‘failure forward’**
  - Technological:
    - **optimisations** in several aspects (used material, accuracy of alerts, variety of types and sizes of material, analysis of individual micturition pattern, connectivity, dashboarding of alerts, ...),
    - **future challenge:** capacity to detect stool, integration with existing infrastructure, ...
  - Operational:
    - gained insight in daily routines
    - coaching and training (interim) staff is key (correct attachment of logger or strip to diaper) – **e-manuals (!)**
    - Future organisation of hands-on **customer service** and 24/24 helpdesk
  - Financial:
    - Relevant insights for business case: (less handling and less material)
    - Further investments needed in technology to detect stool

# Incontinence 2.0 – Results – making a difference!

- *Press conference on 29 September 2022*
- **Learnings for ZorgSaam** (staff, care givers and residents)
  - Overall, after 'trial and error', **very positive user experience** for residents and care givers (staff): better quality of care
    - Less checks, also overnight (more comfort and sleep)
    - Less handling (more workable work)
    - Less waste
    - Data allowing for personalised incontinence policy
  - All were disappointed the pilots could not be prolonged.
  - In spite of severe COVID outbreaks much enthusiasm and energy to participate in pilots (extra work)
  - Importance of **user-friendly design** and **change management** to daily processes/routines for smooth adoption
  - **Negative:** false positive alerts: more work and more material (deception, irritation)
  - Future need: all alarms in one device (integration of alert systems is key)



# Incontinence 2.0 – Results – making a difference

- Before application, Zorg-Saam feared insufficient innovative character of project -> PIP's experience: also so-called "incremental innovation" can be very challenging, risky and even 'disruptive' for its end-users. It requires more work, cooperation, coordination, resilience and flexibility, than one could have envisaged upfront.
- Input and feedback of end-users in each phase of innovation trajectory crucial for successful innovation. -> testing in a real-time environment essential
- Incontinence 2.0 innovation trajectory turned into a very successful co-creation story; intense cooperation between all parties involved cooperated -> win-win for each.
- Scale up: exploring possibilities on-going

# PIP Philosophy

Innovation Procurement

“You FOOL, It’s about knowing + checking your needs with users



knowing + checking the market

assessing feasibility (technical/financial/judicial)

assessing & mitigating risks

interaction & cooperation

making choices

time & team

quality > price

procurement principles

being NICE & CLEAR

eating pudding 😊



**Flanders**  
State of the Art

**Thank you!**

**Questions?**

**Your experiences?**

**VLAIO**