

# Innovation Across Borders – Forum VBO-FEB

## Preparation Form Innovation Cases

### ITEA C<sup>3</sup>PO: Collaborative City Co-design Platform

#### WHO

- Welke onderneming(en) werd(en) hierbij betrokken? (grootte, bedrijfssector,...)?
- Met welke partner(s) (clusters, O&O-centrum, spin-offs, hubs,...)?

Organization	Type	Country	Value chain
ASSAR ARCHITECTS	SME	Belgium	Urbanist
Bahcesehir University	UNIV	Turkey	Univ Labs, Augmented Reality, Visualization, Simulation, Cha
Barco N.V.	IND	Belgium	OEM, Visualization, Augmented Reality
Centre d'Informatique pour la Région Bruxelloise	GOV	Belgium	Open Data, Public Sector Coordination
City of Kortrijk	GOV	Belgium	City, City trials
City of Kouvola	GOV	Finland	City, City trials
City of Oulu	GOV	Finland	City, city trials
Createlli nv	SME	Belgium	SME, Eco-system collaboration software & processes
ERARGE	SME	Turkey	SME, 3D Reconstruction, Visualization, Simulation, Augmented
FCG City Portal Oy	IND	Finland	Technical platform, co-design processes
FCG Design and Engineering Ltd	IND	Finland	Urban planning, City trials, Augmented reality, Co-Creation,
Lappeenranta University of Technology	UNIV	Finland	UNI, City trials, evaluation
Mantis Software	SME	Turkey	Opinion Mining, Voting Technique
Netcad	SME	Turkey	Geographic Information Systems, Remote Sensing, Urban Planning
NOESIS Solutions N.V.	IND	Belgium	Independent Software Vendor
Pendik Municipality	GOV	Turkey	Local Government, Public Organization
Playsign Oy	SME	Finland	Co-Creation, Gamification, Independent Software Vendor
SIRRIS	RES	Belgium	Co-design, integration, data acquisition
Studio Dott	SME	Belgium	SME, Co-Creation, Interaction Design
Tekla	IND	Finland	GIS, Urban planning
VTT Technical Research Centre of Finland Ltd.	RES	Finland	Visualization, co-creation, integration, user experience

## WHAT

- Wat was de doelstelling van de innovatie?
- Waarin bestaat precies de innovatie (toepassing, soort innovatie – product/procedé/businessmodel/support diensten/management,...)?

C<sup>3</sup>PO main focus: Enhancing the city planning by co-design

It requires:

- Simple access of different sources of information
- Visualization of information relevant for decision-making
- Simulation of different scenarios
- Support of communication within stakeholders
- Static and dynamic data
- Up-to-date quality of information

C<sup>3</sup>PO goal: Tackle the challenges confronted by urban design by ICT through a Cloud collaborative and semantic platform for city co-design

- Covers the whole urban project development process where cities empower, encourage and guide different stakeholders to develop an urban project together.
- Involves citizens, decision makers, architects, etc.

Pre-requisites:

- Utilise existing applications and data sources
- Overcome limitations of current solutions in city co-design
- Provide
  - Multi-dimensional information integration
  - Supporting stakeholder interactions
  - Design cooperation
  - Dynamic simulation of impact
  - Versatile reporting & visualisation
  - Repository & platform scalability
- Use standard and open API technologies
- Allow open access to its data assets

Will be an open and generic intermediary that enables the interaction between existing applications through a unique multi-dimensional repository covering the different types of information in city co-design (like GIS, BIM, electricity grids, traffic, etc.)

Does not intend to replace or modify existing applications offering unique but partial solutions of city co-design (simulation tools, open API, 3D modelling and visualisation, gaming tool, etc.)

Barco specific: Research and development of a low-cost, small, re-locatable, easy-to-setup and deployable immersive space with multi-touch capabilities. This consist of different innovative components, such as screen technology, frame technology (structural) including novel screen-suspension, multi-touch capabilities, auto-alignment, display video wall controller, small system modules, etc

## IMPACT

- Voor de business/ de onderneming (verwerving van een nieuwe markt, groei, kostenvermindering,...)
- Op de markt (eindafnemers, tussenpersonen)
- Over het geheel genomen, ten aanzien van de maatschappelijke thematiek

### Identified stakeholders:

- Citizens: residents, users of local services
- Planners & experts: urban area planners including civil engineering, greenspaces and traffic
- Communities, organizations and associations
- State and regional authorities
- City councilors
- Organizations within municipality, different boards and departments like healthcare, schools, leisure time, electricity, building, water etc
- Businesses: existing companies and potential new ones

### Value for stakeholders:

- Data providers
  - Data asset made available to ICT companies
  - New business opportunities
- ICT companies
  - New business opportunities
    - Vertical integration with other applications
    - New market
  - Enhancing the application value to current customers
    - Accessing to a higher amount of data compared to the current use
- Citizens
  - Living environment and sense of belonging in their city
  - New ways for citizens to participate in improving their place to live and work
- City councils
  - Improved decision making process: reducing cost and duration of the decision process
  - Mitigated urban development risk through better planning and prediction

## KATALYSATOREN & OBSTAKELS

- Hoe verloopt / verliep de ontwikkeling van het project (duur, algemene indruk)?
- Wat vergemakkelijkt / vergemakkelijkte het verloop van het project (katalysatoren)?
- Wat zijn / waren de moeilijkheden en uitdagingen waaraan het hoofd moet /moest worden geboden (hinderpalen)?

### Project basics

- Duration: 3 years
- Period: Dec 2014 - Nov 2017
- Successful 1<sup>st</sup> review by ITEA, project is progressing well

### Catalysts

- Good and complementary match of the (inter)national partners
- Strong collaboration between the partners
- Involvement of cities and government organizations is a benefit for the project. Helps to keep focus.
- Project made possible due to ITEA bottom-up approach
- Strong focus on exploitation
- Flexibility of the ITEA program
- Knowledge available that is not always present in Flanders, availability of international expertise
- Different view-points on topics due to e.g. cultural differences enhances the discussions
- High involvement in project meetings and dedicated technical workshops
- Can provide additional access to new customers

### Challenges

- Rescoping of the project has been needed due to non-funding of original partners in France
- Added European dimension adds costs
- Project started late due to independent funding decisions different countries
- Not always easy to physically meet the partners due to distances
- Long time between idea and start of the project
- Big project (especially international) requires strong project management
- Cultural differences can impact work
- Sometimes difficult to align calendars due to different country holidays, and especially holiday periods during summer
- Time-zone difference must be taken into account
- Sometimes people are not that fluent in English
- Taking joint decisions can take a long time in a big consortium
- Alignment of work done is needed (and is being done by e.g. workshops), also needed to always be “on the same page”, meaning that understanding of aspects might differ
- Communication is key! Preferably face-2-face, or through video conferencing. Challenging to do by mail or even telephone.

## LESSONS LEARNT

Wat kon er / had er kunnen verbeterd worden om deze innovatie te vergemakkelijken? (enkel invullen indien van toepassing)

- Organisatie/management van het project
- Samenwerking/partnerschap
- Beheer van de intellectuele eigendom
- Lancering van de innovatie op de markt
- Financiering van het innovatieproject (fiscaal beleid, beschikbaarheid van kapitaal, investeringsubsidies, enz.)
- Andere beleidsaspecten /regelgevingsaspecten

- Speed of timing from idea to start, especially w.r.t. funding decisions in the different countries
- Make sure to clearly identify and balance the added costs and benefits before stepping into an international (big) project. Added benefits are external international knowledge, other viewpoints, ... but added benefits must be in line with higher costs (travel, coordination, ...)
- Clear agreements on IPR, communication and issue dealing need to be in place
- Sky is the limit if all partners have the same mind-set and trust in each other.
- Working in research projects with competitors is feasible as long as there are good agreements and regulations in place