

# COIN

Enterprise **CO**llaboration & **IN**teroperability



**COIN – SP7**

**ROMANIAN CIVIL ENGINEERING SCENARIO**

**ICE Conference, Aachen, 21-06-2011**

Prof. Aurelian Mihai Stanescu

As. Dr. Mihnea Moiescu

As . Ioan Sacala



# UPB cluster

## University Politehnica of Bucharest



Faculty of Automatic Control and Computers

Information Systems Laboratory

Our experience:

Project team

Prof.dr.eng Aurelian Mihai Stanescu -UPB

Dr.eng Mihnea Alexandru Moisescu -UPB

Phd. Std. eng. Ioan Stefan Sacala - UPB

Dr. Bogdan Barbulescu – Digital Bit

2 FP7 projects

5 FP 6,5 projects

1 European Social Fund project

20 National Research projects

# UPB cluster

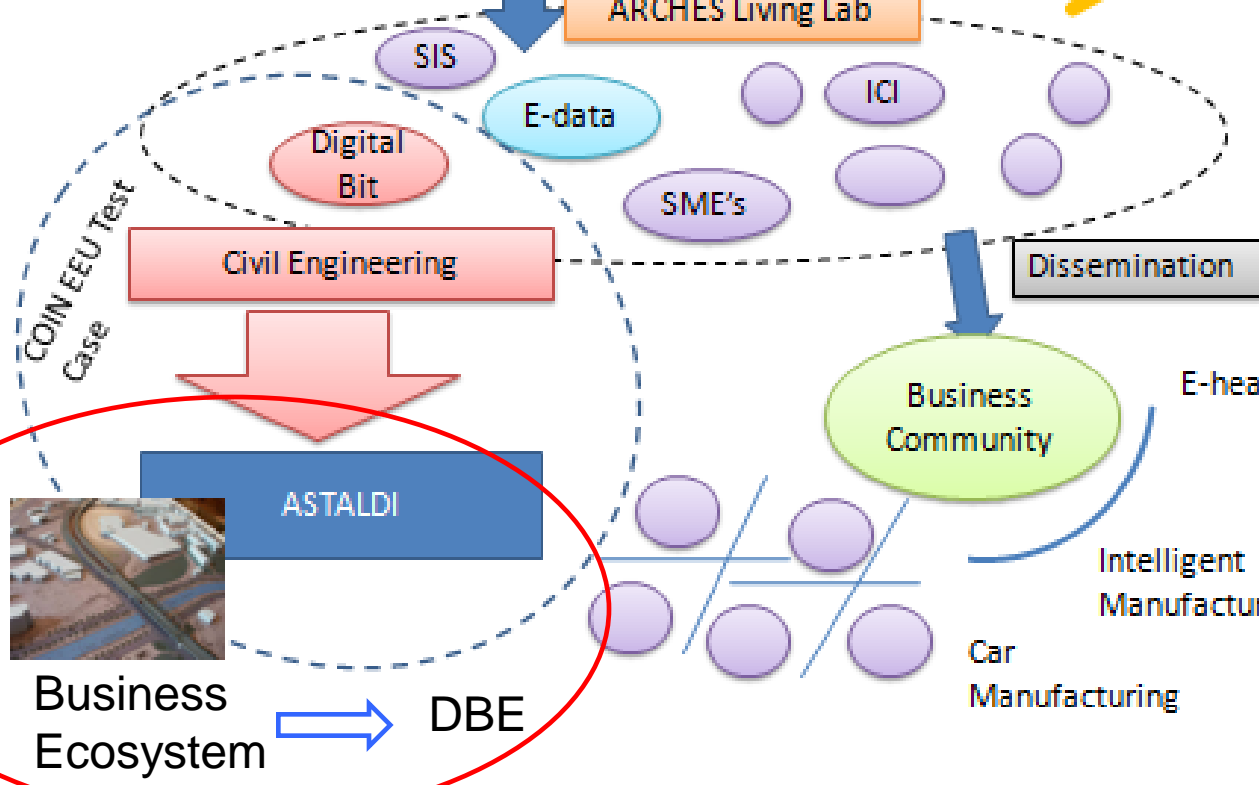
Member of

**European Network of Living Labs**

Catalyst

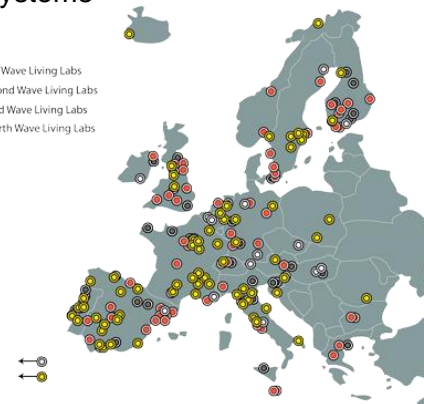
University "Politehnica" of Bucharest

ARCHES Living Lab



- A - Automatic control systems
- R - Robotic systems
- C - Computer science
- H - e-Health care systems
- E - Energy and safe, higher Education & e-learning
- S - Complex Adaptive System of Systems

- First Wave Living Labs
- Second Wave Living Labs
- Third Wave Living Labs
- Fourth Wave Living Labs





# Barriers for service adoption

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- **Political:**
  - The legislation is in constant change
- **Economical:**
  - Economical crisis:
    - Has encouraged the use of legacy systems as opposed to developing new services
- **Research**
  - The research initiatives have less financial support



# Gaps in use of services

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- Collaboration
  - Basic communication services: mobile phone network, fax and e-mail Vs collaborative services
  - “Real” meeting Vs Virtual meeting rooms
- Interoperability
  - Use of basic, standard applications: docs, spreadsheets Vs interoperability oriented services

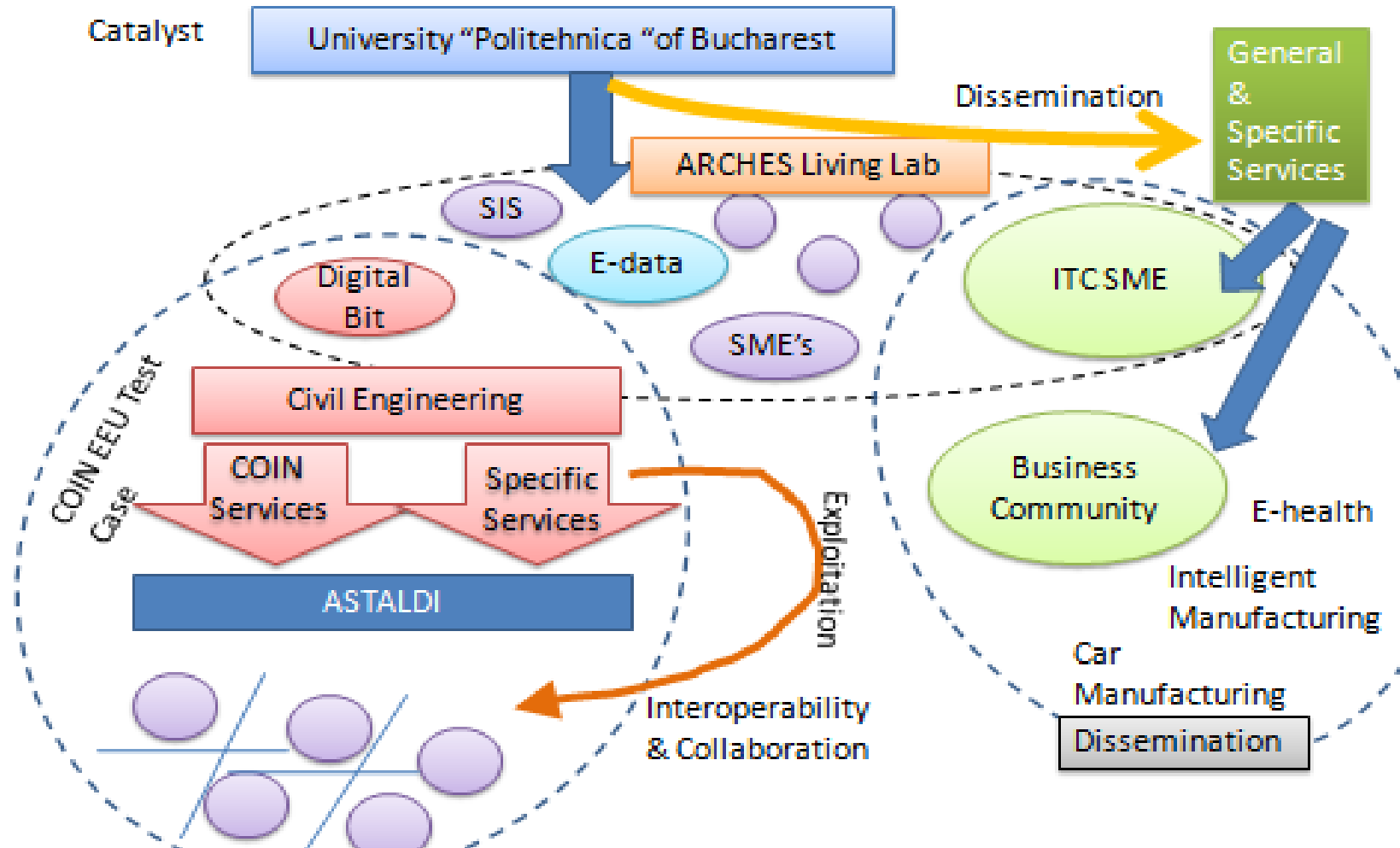


# Improvements and specific initiatives

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- Dissemination during research conferences
- Dissemination during business events
- Development of new collaborative project proposal
- Improving regional collaboration
- Improving collaboration between partners in EEU

# Dissemination in Living Lab





# Best practices required at National Policy level

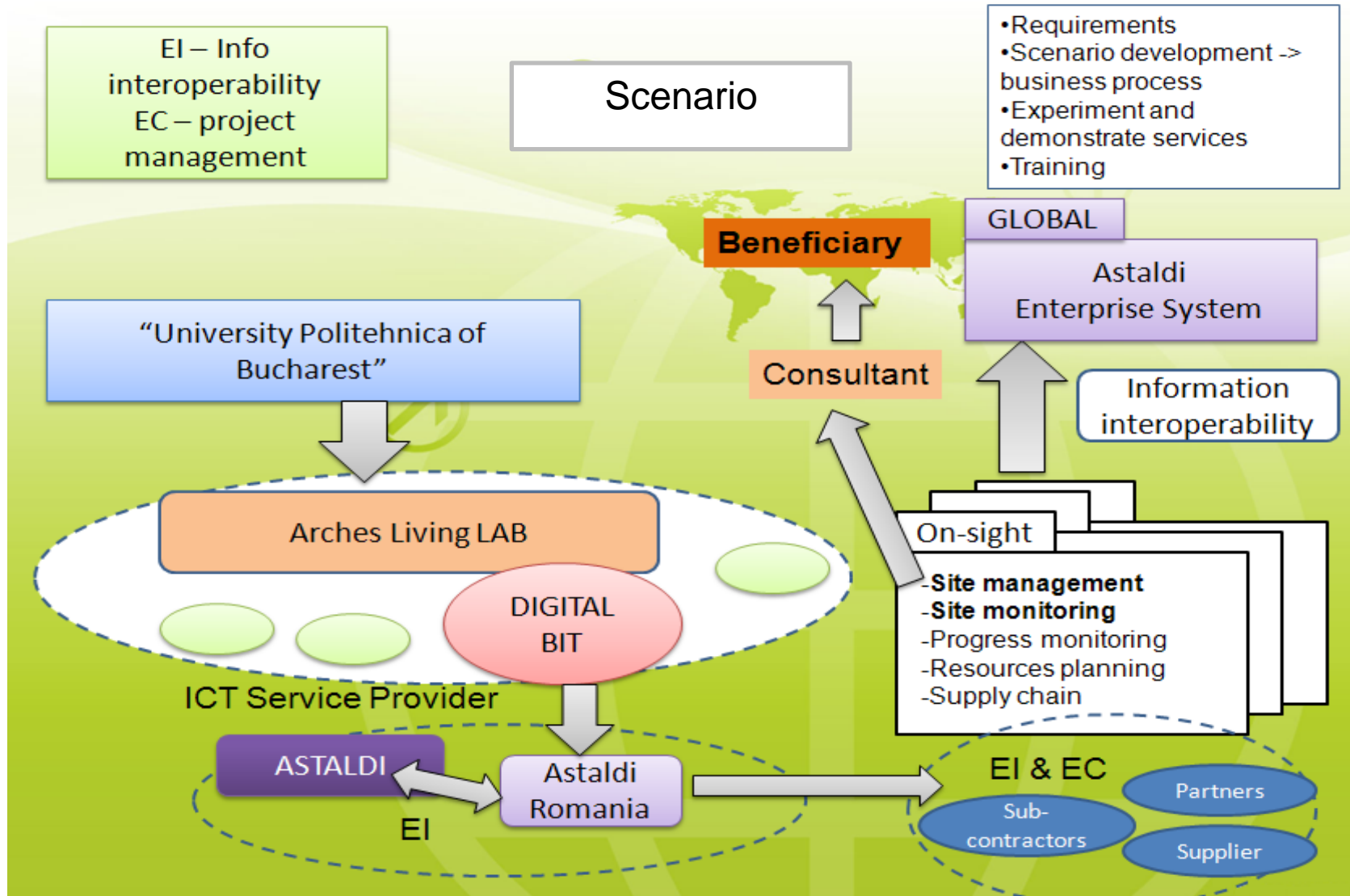
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- Research programs in the area of FInES
- Training for service development and integration – sustained by European Social Fund
- Including FInES concept for Master programs in: enterprise management and software engineering



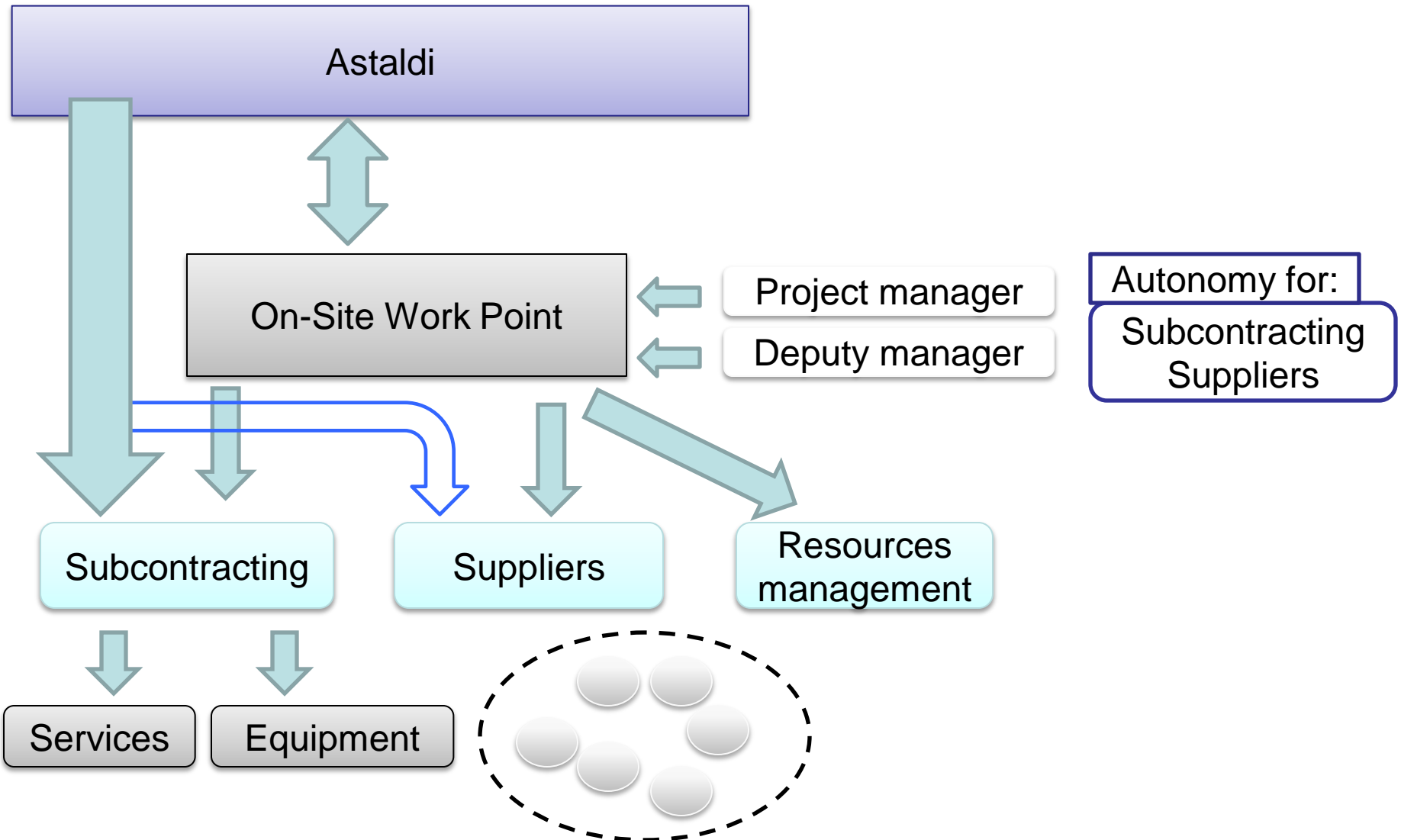


# UPB Civil Engineering Scenario





# UPB Civil Engineering Scenario



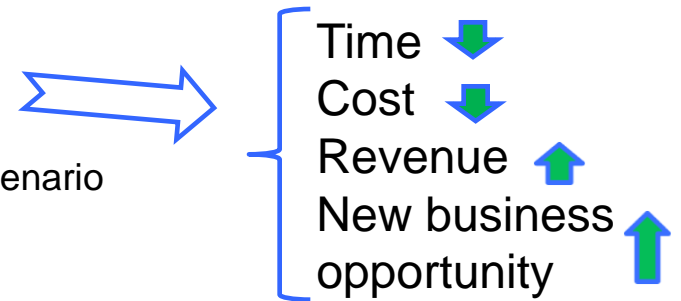


# Business expectations

**As is: major investment in infrastructure to compensate for economic crisis effects / lack of ICT support for EI and EC**

The implementation of the COIN innovative services and the new developed service, as described in the use cases will contribute in closing the ICT gap within the civil engineering sector.

- The activities to be carried out include:
  - Development and integration of COIN services
  - Demonstration of COIN services for civil engineering scenario
  - Providing COIN services to civil engineering sector
- The COIN tools and services can be
  - integrated with existing legacy systems
  - provided independently of existing systems



## Benefits from COIN project:

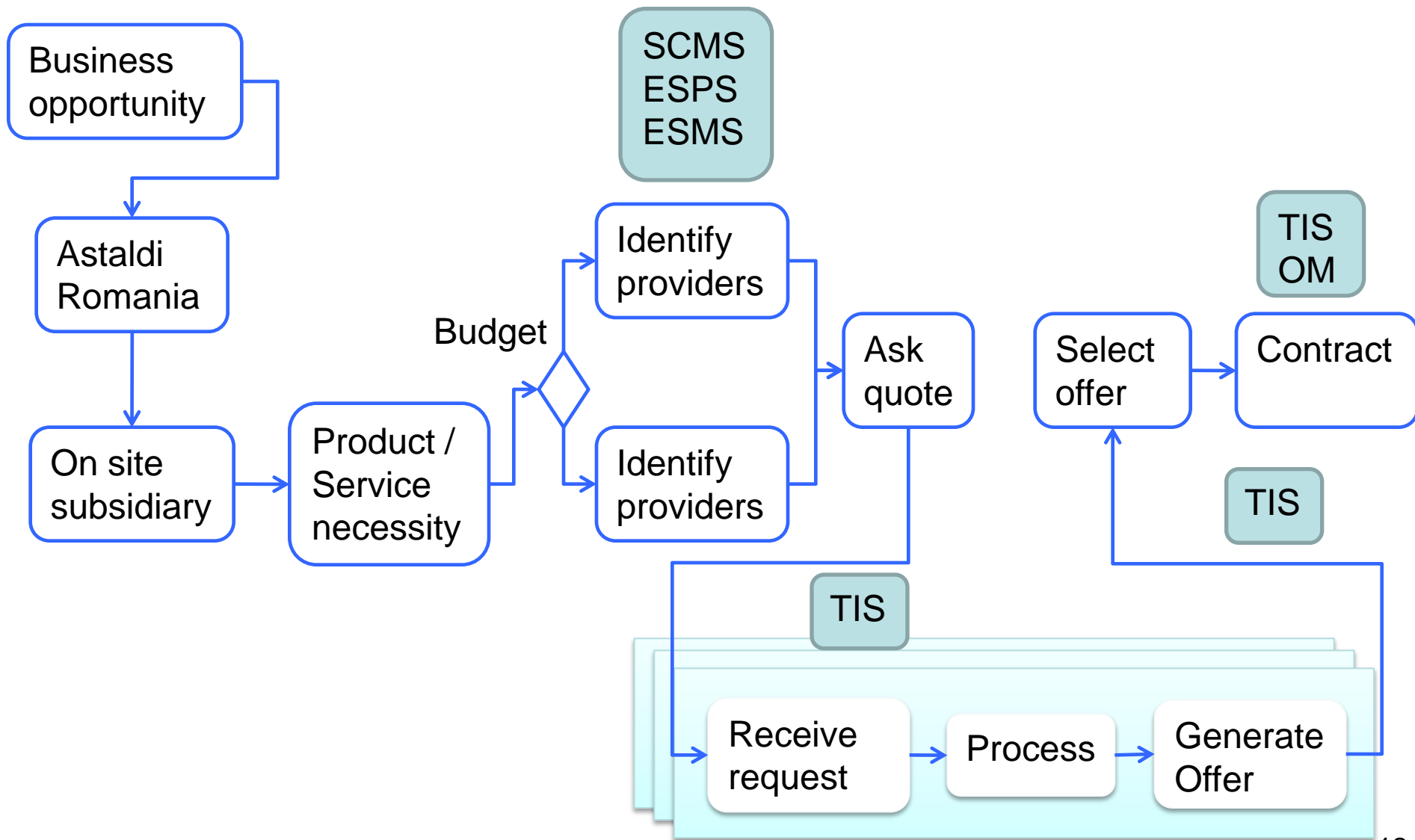
- **Business Benefit #1 – Reduce time for ordering products from suppliers**
- **Business Benefit #2 – Improve efficiency of co-operation process for project planning**
- **Business Benefit #3 – Reduce time for project monitoring and reporting**
- **Business Benefit #4 – Improve efficiency of construction planning**

## Contribution to COIN:

- Adoption of EI & EC services in civil engineering sector
- Proof of concept indications to civil engineering ICT market



# Use Case 1 - Order construction materials from suppliers





# UC 1 Gaps Identified

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Current major gaps:

1. No electronic platform to supervise ordering the construction materials from the suppliers.
  2. Ordered made by phone or by mail
  3. Offers received by fax.
- ⇒ Delays in implementation

COIN services gap:

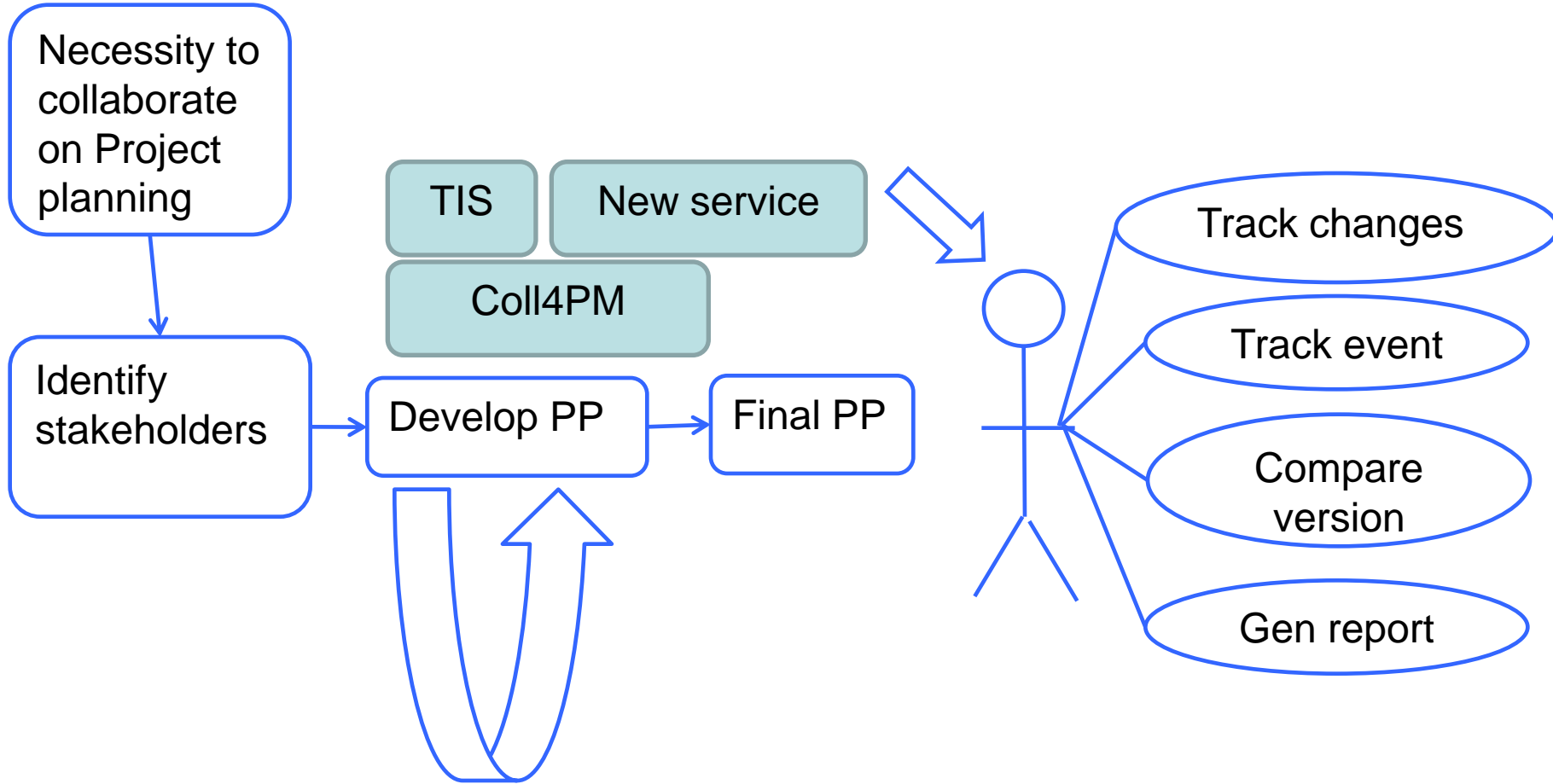
1. The project manager will not be able to correlate the changes made in legacy system documents, and give feedback to the rest of the Astaldi team in real time

Solving the gaps:

1. Developing a new service to track changes and inform on changes made in order to trace all the orders from the suppliers



# Use Case 2 - Collaborative project planning and change management





# UC 2 Gaps Identified

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1. no electronic platform in creating the project plan in a collaborative environment
2. the status of the project cannot be monitored.
3. If any change appears, the project manager acts instantly, based on his experience, with no pre-planned steps.

## Solution:

1. Using the Coll4PM service :
  1. The work for the management team will be reduced,
  2. Gaps that appear in the time needed for collaboration and validation of the changes.
2. Integrating a new service on top of the COIN selected services
  1. Reduce time by offering an easy to use service for the project manager.
  2. change are tracked,
  3. the team is notified
  4. Report on changes is generated



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# THANK YOU!

## Questions & Answers

