

ASSESSING SMART CITY INITIATIVES FOR THE MEDITERRANEAN REGION

Prof. Andrés Monzón

Transport Research Center (TRANSyT)

Polytechnic University Madrid



23RD April 2015
3RD Annual Meeting of the Knowledge Programme



Project objectives for 3 years

Overall purpose:

Develop a comprehensive framework for **assessing Smart City Projects**:

- A. Help public and private stakeholders to make informed proposals for **smart city projects investments**
- B. Develop an **Assessment Procedure** specific for SC projects
- C. **Build the skills to prioritize, develop and implement SC projects**

Other objectives:

- **Characterization of Mediterranean City challenges**
- **Transferability guidelines for SC projects**

Mediterranean Context

Smart City Concept &
Urban Development Priorities

Assessing &
Prioritizing Smart City Projects

Implementation, Management &
Governance of Smart City Projects

Project team



UPM TEAM

ASCIMER RESEARCHERS



MSc. Fiamma
Perez



MSc. Guillermo
Velazquez



MSc. Victoria
Fernandez-Anez

SUPERVISORS



Dr. Andrés Monzón



Dr. Rosa Arce

UPM EXPERTISE



Prof. Javier
Uceda



Dr. Jose Manuel
Vasallo



Dr. Jose María
de Lapuerta



Dr. María Eugenia
López-Lambas



Dr. Manuel
Alvarez-Campana



Dr. Oscar
García



Dr. Claudio
Feijóo



Dr. Sergio
Ramos

EXPERT REFERENCE GROUP



Amman (Jordan)
University of Petra



Baakline
(Lebanon)



Lyon (France)
ENTPE



Malaga (Spain)
Municipality



Milan (Italy)
University



Tangier (Morocco)
Urban Agency of
Tangier



Vienna (Austria)
TU Wien



activities and outputs

ACTIVITIES

- Smart City Concept review
- 1ST Workshop

- Review of Mediterranean Urban Challenges
- Networking

- Review of projects web-based search
- Survey

- Field Visits
- Mediterranean Challenges review
- 2ND Workshop

- Evaluation features
- Indicators identification
- Validation

- Communication and dissemination activities

OUTPUTS

Deliverable-1A:
**Smart City
Concept and
Challenges**

Deliv-1B:
**Projects
Catalogue**

**Smart City
Projects
Assessment
Guidebook**

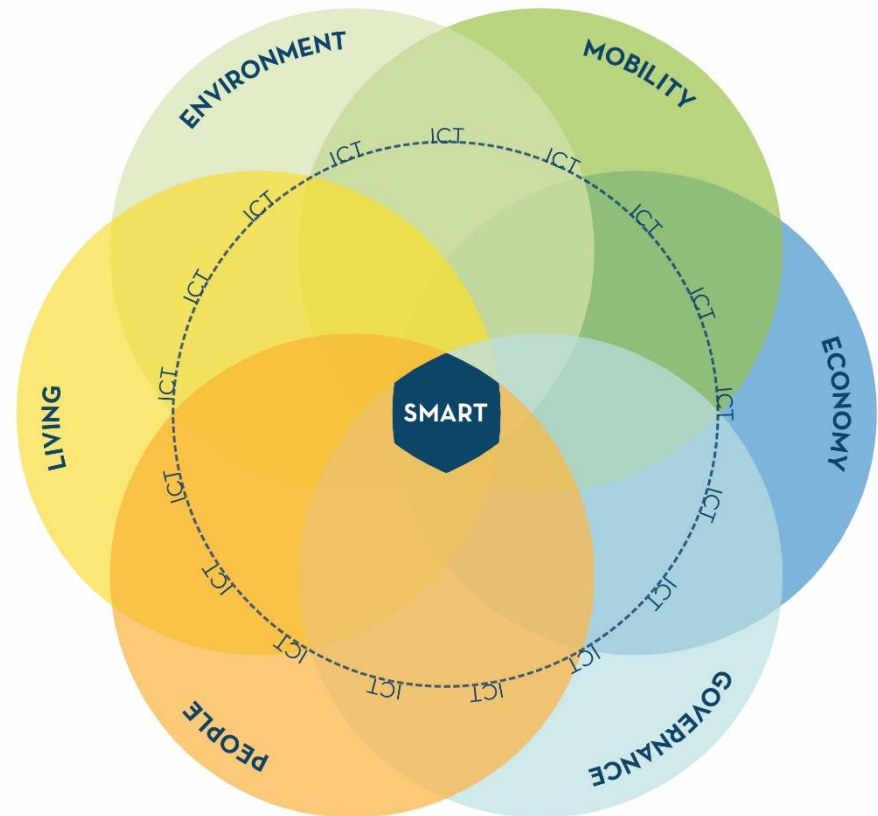
OBJECTIVES

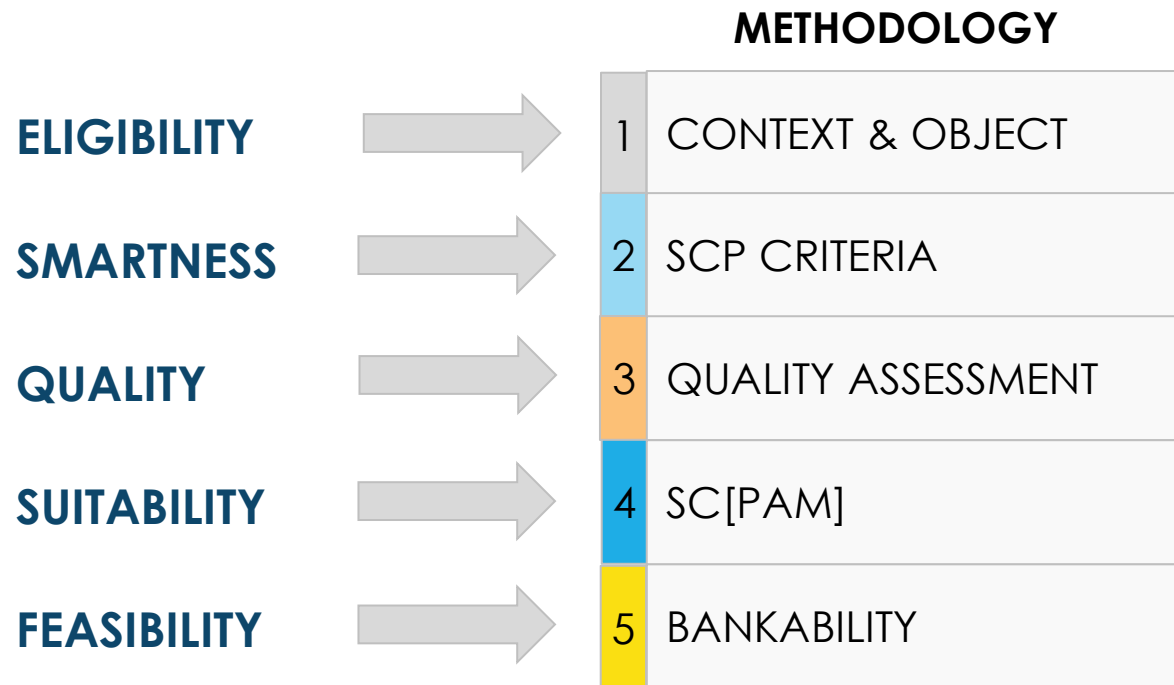
1ST YEAR
**BASES OF THE
ASSESSMENT
METHODOLOGY**

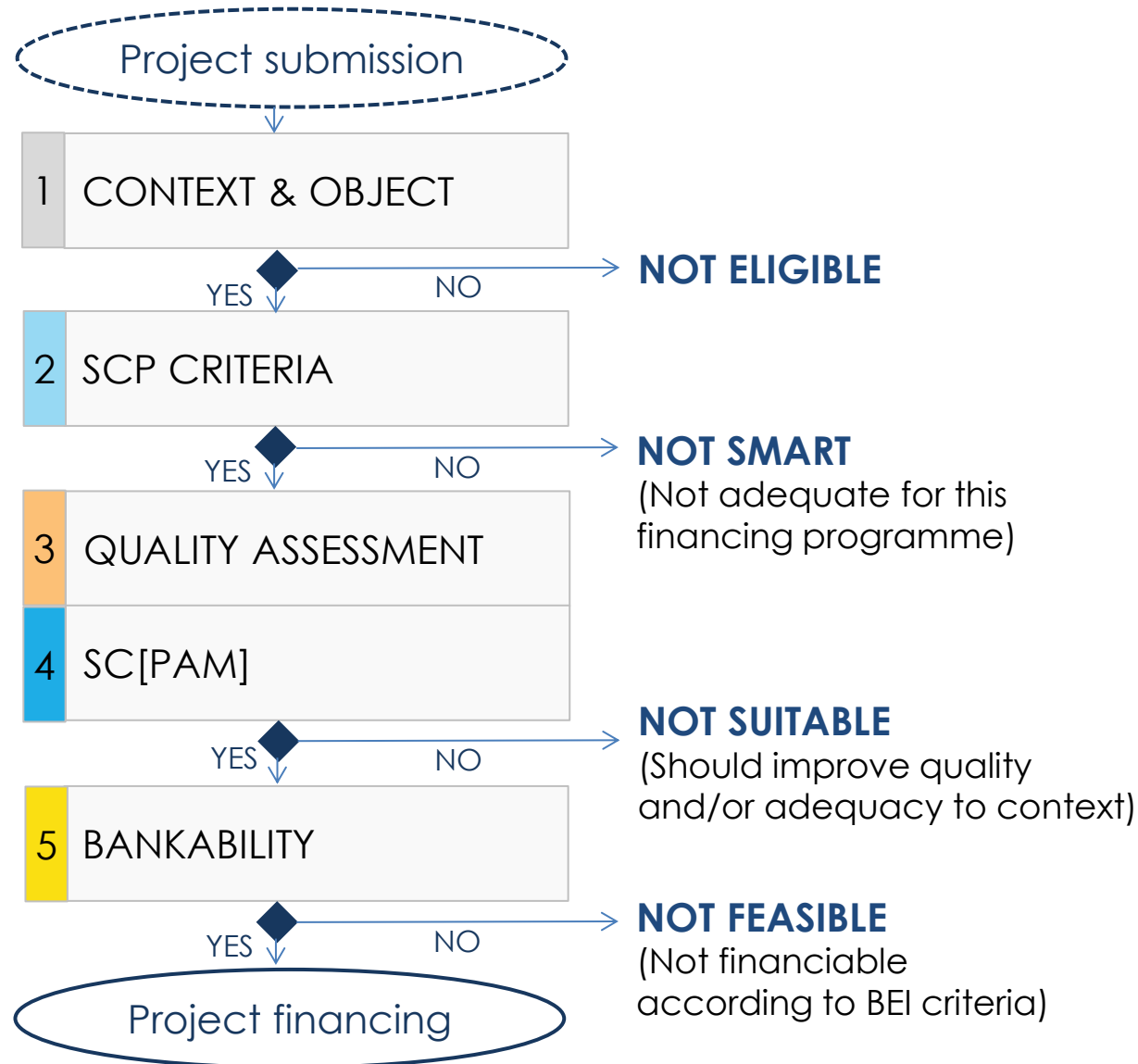
2ST YEAR
**ASSESSMENT
METHODOLOGY**

Assessment Framework

SMART CITY DEFINITION
SMART CITY ACTION FIELDS
MEDITERRANEAN CONTEXT
SMART CITY CHALLENGES
FIRST SMART CITY WORKSHOP
EIB's ASSESSMENT THRESHOLDS







- understand **specific challenges** of each city
- Get a realistic picture of the main **advantages and difficulties** regarding the **implementation and management of SC projects**

FIELD VISITS

Jordan:

-Amman, the capital.

Morocco

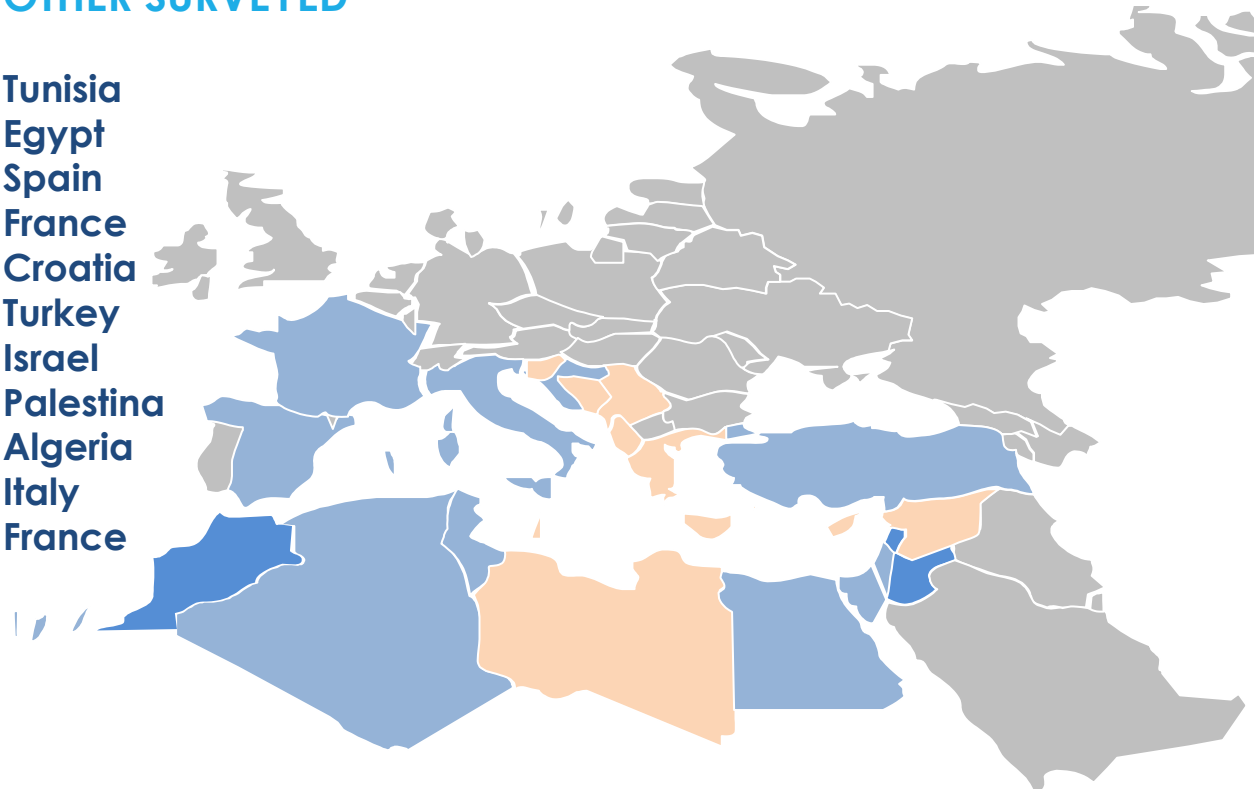
-Tangier
-Tetouan
-Chefchaouen
-Asilah
-Rabat

Lebanon

-Beirut, the capital
-Baakline
-Chouf Souayjani
Federation of Municipalities.

OTHER SURVEYED

Tunisia
Egypt
Spain
France
Croatia
Turkey
Israel
Palestina
Algeria
Italy
France



1st ASCIMER WORKSHOP

July 2015,
La Granja

Objectives

- SC Project characteristics and definition
- SC Projects Best Practices identification

40 - Participants

Some cities and experts in different fields of city development

2nd ASCIMER WORKSHOP

October 2016,
Barcelona

Objectives

- Methodology: general validation
- Challenges validation
- Project Actions Validation

50 - Participants

Mediterranean Municipalities and Experts collaborating in ASCIMER Project

Facilitator: Sergio Jara (U.Chile)



Facilitator: Mario Aymerich (EIB)



CONFERENCES

- **Smart Greens. Lisbon**, 20-22 May 2015.

MONZÓN, A. (2015) Smart Cities Concept and Challenges Bases for the Assessment of Smart City Projects.

- **I Congreso Ciudades inteligentes**. Madrid, 24-25 March 2015.

FERNÁNDEZ, V.; PEREZ, F.; MONZÓN, A.; TORREGROSA, A. (2015). Buenas Prácticas en Ciudades Inteligentes: Respondiendo a los retos urbanos.

- **II Congreso Ciudades inteligentes**. Madrid, 13 -14 April 2016.

VELAZQUEZ, G. ;FERNÁNDEZ, V.; PEREZ, F.; MONZÓN, A.; TORREGROSA, A. (2015). Buenas Prácticas en Ciudades Inteligentes: Respondiendo a los retos urbanos.

- **International Conference on City Sciences**. Tongji University. June 2015 – Shanghai.

FERNANDEZ-ANEZ, V. (2015) Smart Cities Definition: discourses and Stakeholders.

PUBLICATIONS

- ***Economía Industrial***. PÉREZ PRADA, Fiamma; VELÁZQUEZ ROMERA, Guillermo; FERNÁNDEZ AÑEZ, Victoria; DORAO SÁNCHEZ, Javier. (2015). “Movilidad inteligente” *Economía Industrial*, 395, 17-28.

INSTITUTIONAL EVENTS

- **First TECSOS workshop. Smart Cities**. Red Cross Headquarters. 24th April 2015, Madrid.

- **Summer course “Transport and sustainable mobility in Smart cities”**. 20-24th July 2015, Madrid.

- **7th Meda City Forum - 9th Mediterranean Week of Economic Leaders**, 26th November 2015, Barcelona.

SMART CITY PROJECTS

- **3 characteristics** to fulfil: INNOVATION, INTEGRATION AND INCLUSION
- **Multidimensional projects**: division in project actions

SC ASSESSMENT TOOL

- Fulfilment of **3 objectives**:
SUSTAINABILITY AND RESILIENCY, EFFICIENCY AND QUALITY OF LIFE
- Need of **context adaptation** and assessment through real **urban challenges**.

MEDITERRANEAN CITIES

- Different **ICT penetration level linked to size** (higher in big cities)
- Easier for **medium/small cities** to reach **holistic approach**
- **Excessive governmental centralization** and **lack of participation** as the **greatest challenges** to face for SC projects implementation.