# Technology Transfer in the Area of Smart Cities

#### **The CINI Smart Cities National Lab**

#### **Giuseppe Anastasi**

Director, CINI Smart Cities National Lab

Dept. of Information Engineering University of Pisa

giuseppe.anastasi@unipi.it www.iet.unipi.it/~anastasi/





### How to make cities smarter

- Environment
- Economy
- People
- Living
- Mobility
- Energy
- Planning
- Governance





## **Technology Transfer**

- More complex than in other areas
  - Multi-disciplinary field
  - Integrated approach required
  - Many actors involved
    - Public administrations
    - Citizens
    - Associations
    - Industries
    - Academia





## **Technology Transfer**

- Should not be limited to industry
  - City administrators
  - City operators
  - Citizens
  - Associations
  - •

Actively involving city administrators/operators and citizens (citizen associations) is not so easy



## **Technology Transfer**

- Just want to present an Italian initiative
- Smart Cities National Lab
  - Promoted by CINI
  - Activated in January 2015



#### CINI

- Italian University Consortium for Informatics
  - Founded in 1989
  - Includes 41 public universities
- Involves 1.300<sup>+</sup> Researchers
  - Computer science & engineering
- Mission
  - Promotes research activities and technology transfer
  - Stimulates cooperation with industries and Public Administrations (PAs)
  - Facilitates participation to research programs





#### **CINI National Labs**

- Adaptive Software
- Assistive Technologies (AsTech)
- Bio-Informatics (InfoLife)
- BigData
- CyberSecurity
- ICT Certification
- Smart Cities & Communities



### **Smart Cities National Lab**

#### **Mission**

Serving as national competence center in the field of ICT for Smart Cities & Smart Communities



Developing innovative solutions, in cooperation with other actors, for improving the citizens' quality of life

### Motivation

#### Reaching the critical mass

- to participate in major research initiatives
- both at national and international level

#### Stimulating the cooperation

- among researchers from different Universities and ...
- ... between academia and industry
- making the development of innovative (complex) solutions feasible

#### Promoting collaborative actions

based on common needs and shared strategies



### Motivation

- Providing a single academic Interface
  - Industries
  - Public institutions
  - **—** ...
- Offering the available know-how
  - Mainly in the ICT field, but also in other fields
  - To solve complex problems



## Organization

## The Lab consists of 26 Nodes

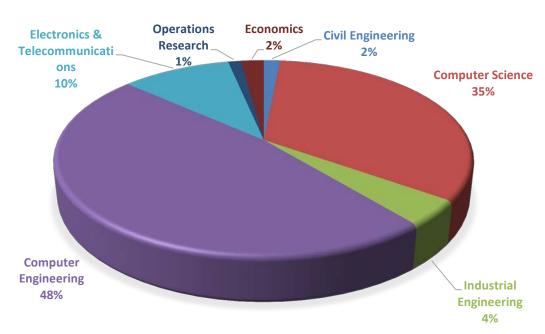
- Distributed throughout the national territory
- Corresponding to physical labs
- Located at different italian universities

Each node is directed by a local coordinator



## Organization

- Nodes (Local Labs): 26
- Researchers Involved: 349







### Research Areas

- E-Health
- Food
- Smart Energy & Smart Buildings
- Mobility, Transports & Logistics
- Climate & Environment Management
- E-tourism & E-culture
- E-education
- E-government
- E-inclusion
- Urban Security



## Focus Groups

- FG are aimed at stimulating the collaboration with
  - industrial partners
  - city administrators/operators
  - citizens' associations

#### Goal

- joint research projects
- technology transfer programs



## Focus Groups

- E-tourism/culture
  - Gian Paolo Rossi, University of Milano
- E-government
  - Eugenio Zimeo, University of Sannio
- Smart Energy/Buildings
  - Michela Milano, University of Bologna
- Smart Mobility
  - Paolo Nesi, University of Florence
- Smart Education
  - Giuseppe Visaggio, University of Bari
- E-health & Well-being
- IoT for Smart Cities



## **I-CiTies 2015 Workshop**

http://www.dicgim.unipa.it/networks/icities2015/



**CINI Annual Workshop on** 

#### **ICT for Smart Cities & Communities**

October 29-30, 2015 - Palermo, Italy







#### I-CiTies 2015

Making cities and communities smarter is a very relevant goal, but also an extremely complex process that involves several actors and poses a number of challenges in different fields. In this context the role of ICT is essential and ubiquitous to all challenges and smart city related sectors.

The workshop, at its first edition, is an opportunity for people from academia, industries and public institutions to meet and define new collaborations in the perspective of next national and international project calls. It is not intended to disseminate theoretical scientific activities. Instead, its main goal is to present available innovative solutions and active research projects, as well as novel ideas for new project proposals.

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#### Home

Organizing Committee														
	Т	e	ch	nic	a	P	ro	gr	a	m				

Call for Projects & Ideas

Submission Instructions
Registration

Venue & Hotel

Local Information

#### Important Dates

Submission Deadline: July 13, 2015

Notifications: July 27, 2015

Early Registration: September 30, 2015

Workshop Dates: October 29-30, 2015

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## **I-CiTies 2015 Workshop**

- Opportunity for people from academia, industries and public institutions to meet and define new collaborations
  - in the perspective of next national and international project calls
- No dissemination of theoretical scientific activities
- Goals
  - Elaborate novel ideas for new project proposals
  - Form new partnerships



## **I-CiTies 2015 Workshop**

- About 100 participants
  - Academia, industry, public institutions, associations
- Major Industrial Stakeholders
  - Telecom Italia, ENEL, Engineering, HP, Vitrociset, IREN, ...
- More than 70 contributions
  - Active projects or novel project ideas
- Thematic Tables
  - To elaborate new project ideas
- Keynote speakers
  - Mathias Reddmann, DG CONNECT, European Commission
  - Simona Vicari, Vice Minister for Economic Development
  - Davide Faraone, Vice Minister for Education & Research



## **2014 Report on Active Projects**

#### Analysis of Active Projects

- Funded Projects: 132
  - Type of Funding
  - Application Domain
  - ...
- Other Relevant Activities: 51
  - Self-funded research projects
  - Postgraduate Courses
  - PhD Summer Schools
- Delivered to the Italian Ministry of Economic Development

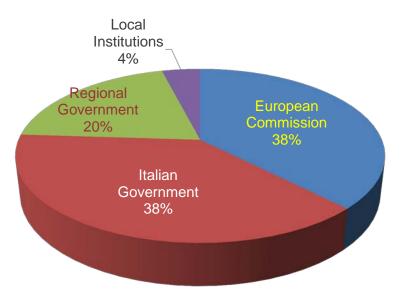
The 2015 Report is under construction



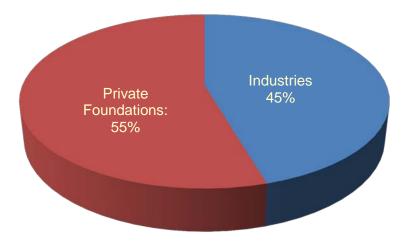
## **2014 Report on Active Projects**

#### Projects Funded by

**Public Institutions: 92%** 



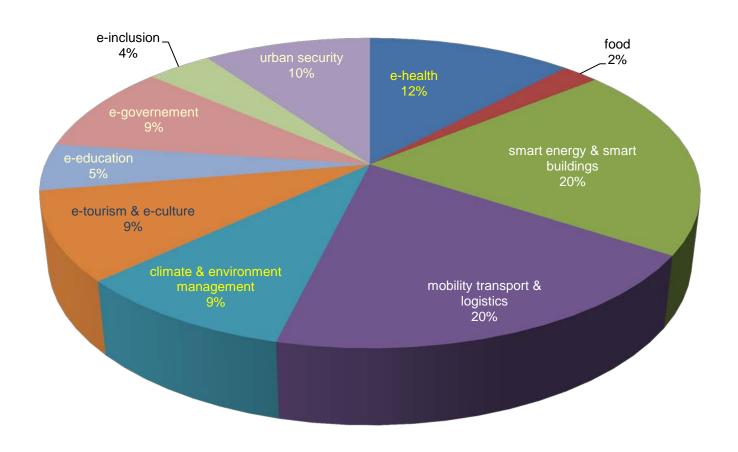
Private Institutions: 8%





## 2014 Report on Active Projects

#### **Application Domains**





#### Conclusions

#### No definitive solution

 for speeding up the technology transfer process in the smart city context

#### Just presented an Italian initiative

- in the ICT field
- The National Smart Cities Lab promoted by CINI

#### Expected results

- Research projects and other technology transfer programs active by the next year
- involving the Lab and other industrial partners



# Thank you!

