Trans-Atlantic Symposium on ICT Technology and Policy
Panel: Smart Transportation and ICT: Topics for Collaboration
HUMAN SMART CITIES MOBILITY
19-20, 2017, Minneapolis, Minnesota, U.S.A.

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President Emeritus of the Network of Human Smart Cities
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Agenda

Smart Transportation Scenarios

Smart Mobility Trends and New Urbanism

Human Smart Cities

Urban Living Labs ,Participatory Methodologies

Open Platforms. Technologies

Cooperation proposal

Smart Transportation Scenarios

Diverse Mobility
- On-demand business models
- City policies discouraging private vehicles
- Model shift away from vehicle ownership to shared mobility
- Multi-modal transportation solutions

Autonomous Transportation
- Development of safe and reliable multidomain technical solutions (Sensing/actuating,processing powertrain, communicatios,edge computing,AI,cognitive computing,IoT,security,,etc). Cognitive mobility with personalisation and IoT.
- Regulatory challenges are adressed
- Consumer acceptance and willingness to invest
- LegalFramework for safe and successful autonomous transportation
- Infrastructure Investment

Electrification
- Regulator-driven emission restrictions
- Battery cost decline
- Consumer demand for electrified powertrains
- Electric robot-vehicles

Connectivity
- Update of vehicle connectivity globally
- Consumers regularly using paid content
- Standardized global solutions
- Privacy,cybersecurity and legal challenges adressed

Human Smart Cities
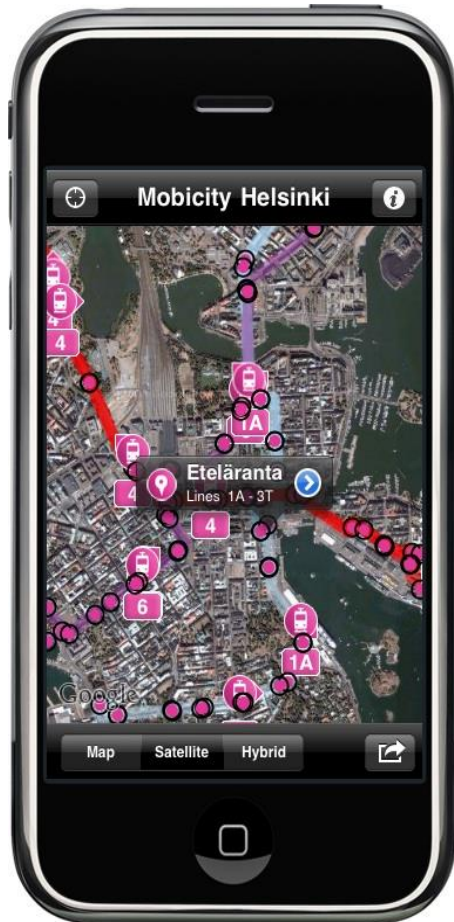## Mobility Trends and Impact. Sustainability
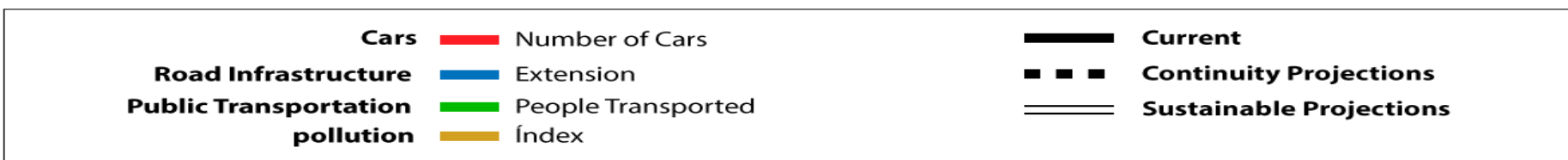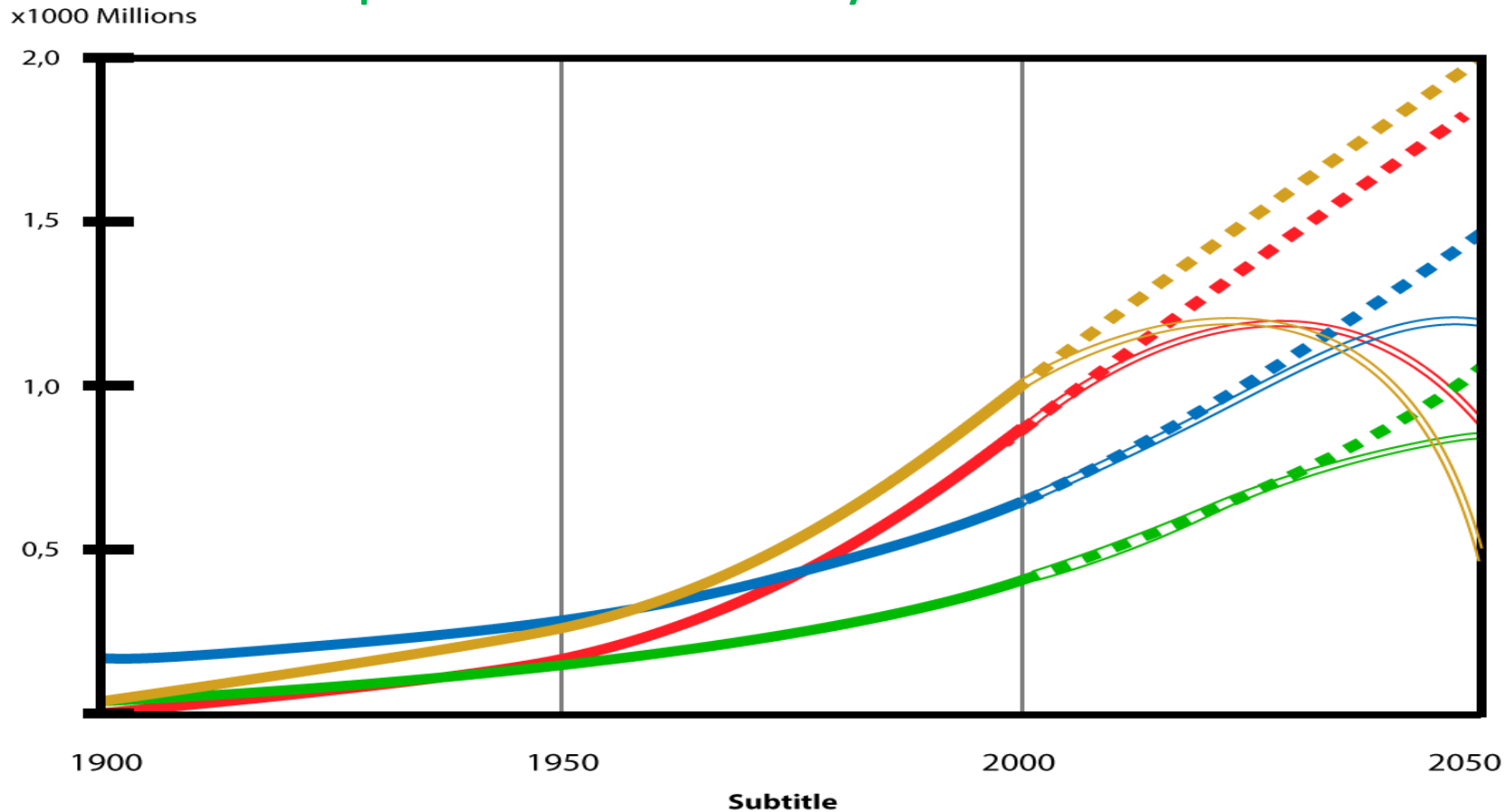
Mobility in Helsinki
Integrated and Flexible System

Mobility in Helsinki
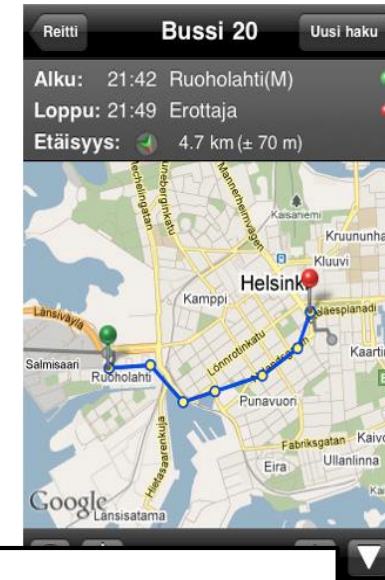## Open Data and Dynamic innovation

OKODE Mobicity

Stop Map Helsinki

Minun lähdöt

ReittiGPS

Helsinki Regional Transport Authority (HSL) data
- **Open interfaces. Free, requires registration.**
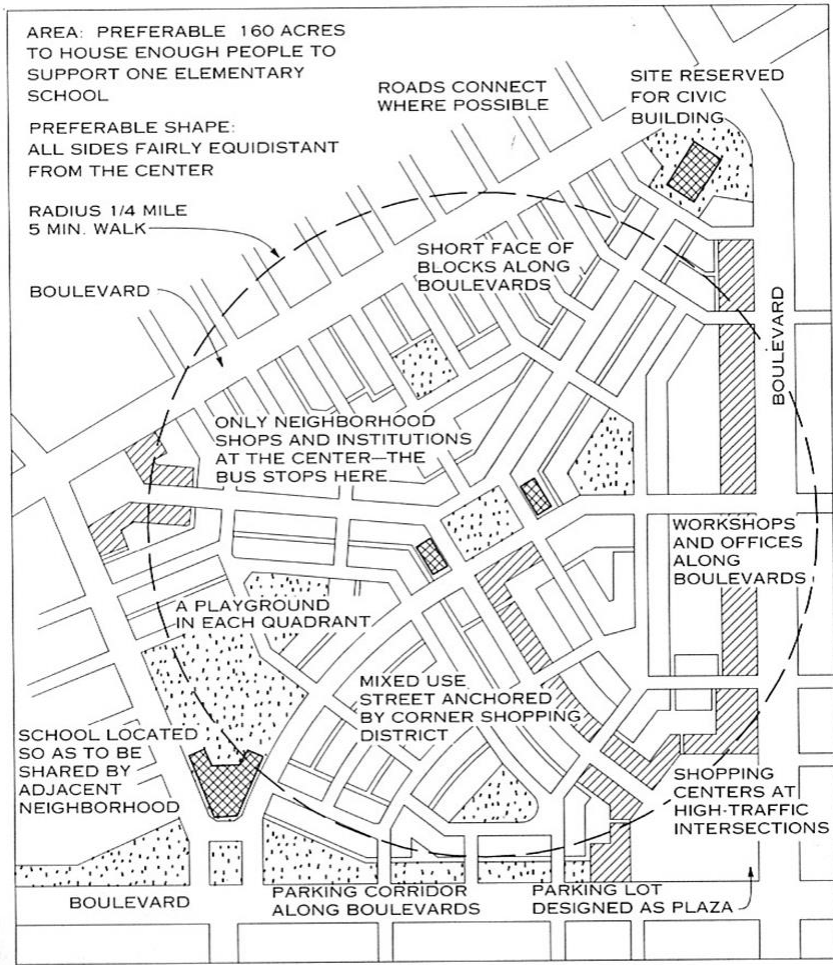- **Journey Planner, Timetables, Bus stop locations, Live vehicle data**

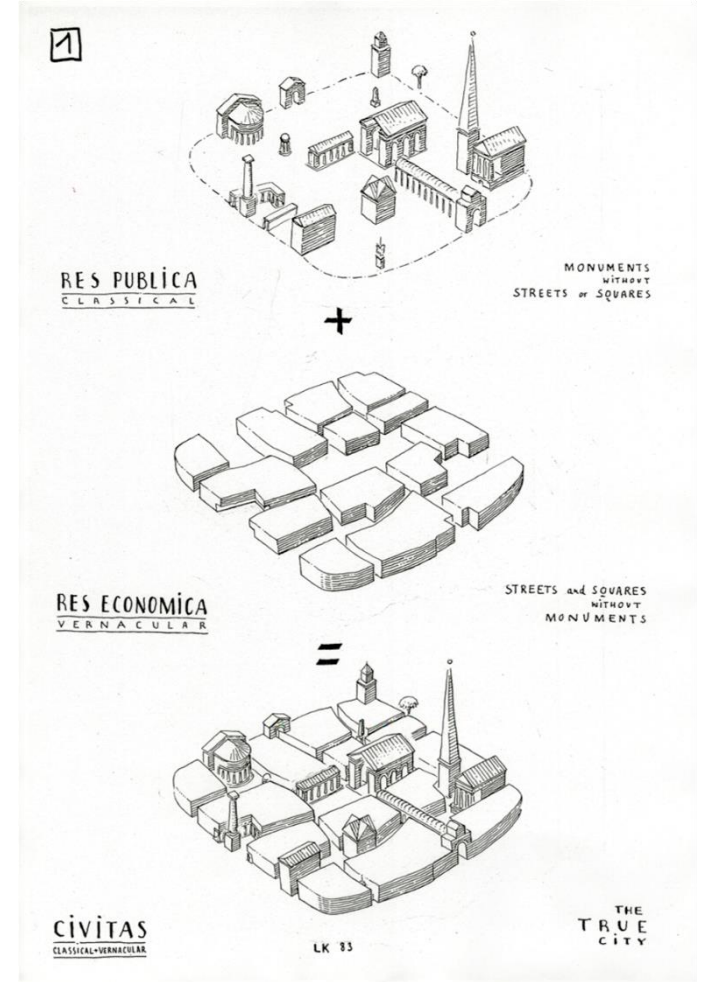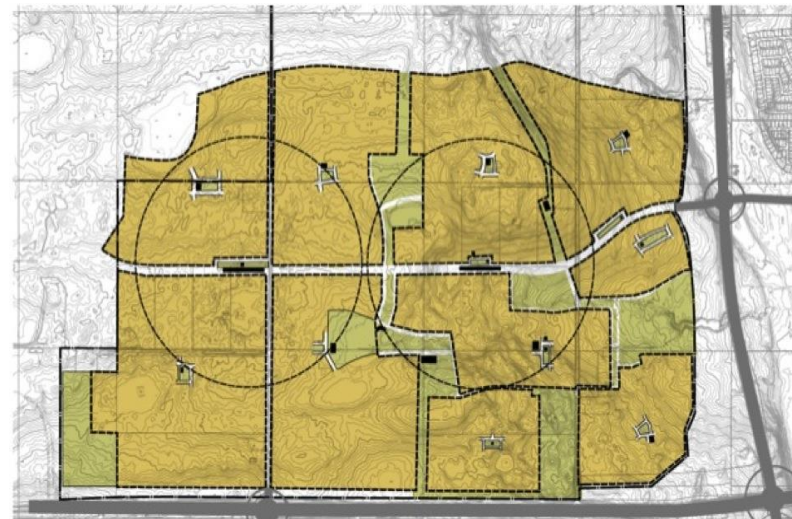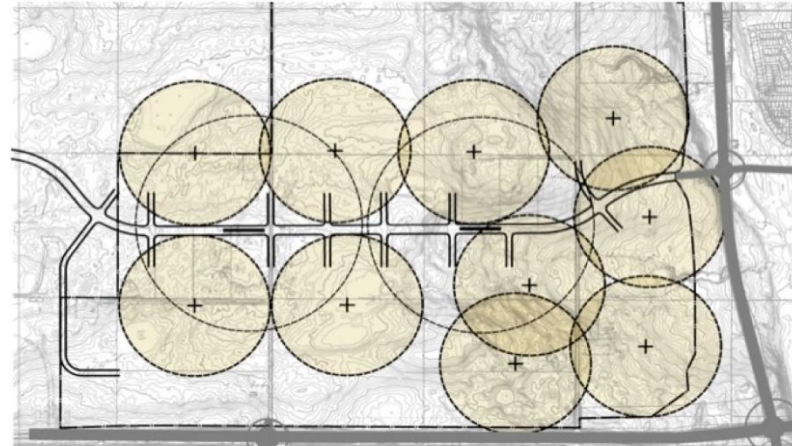# Sustainable Integrated Mobility
Urban Trends. Behaviour Transformation

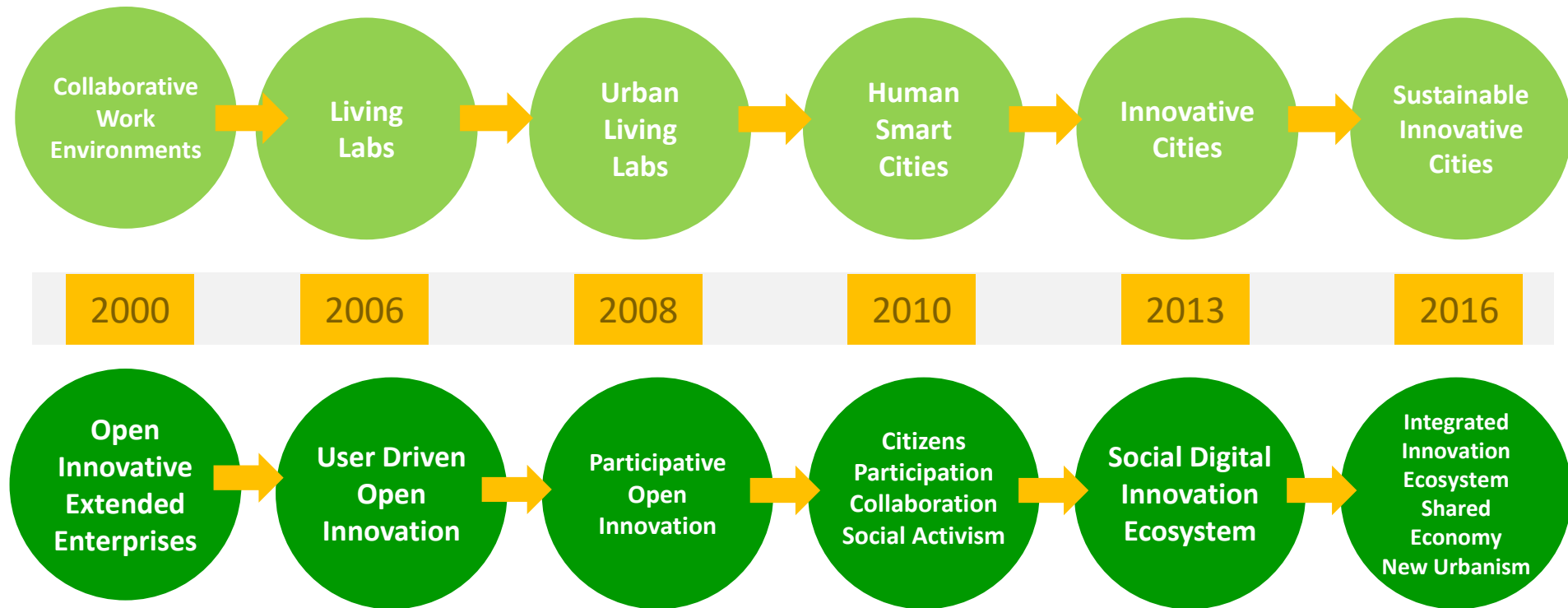# Urban Planning. New Urbanism
Participative democracy at work

Urban Innovation Ecosystems

From Colaborative User Driven Innovation to Urban Democratic Participation

Collaborative Work Environments → Living Labs → Urban Living Labs → Human Smart Cities → Innovative Cities → Sustainable Innovative Cities

2000   2006   2008   2010   2013   2016

Open Innovative Extended Enterprises → User Driven Open Innovation → Participative Open Innovation → Citizens Participation Collaboration Social Activism → Social Digital Innovation Ecosystem → Integrated Innovation Ecosystem Shared Economy New Urbanism

Human Smart Cities
Evolution of Concept, Model, Technologies and Methodologies
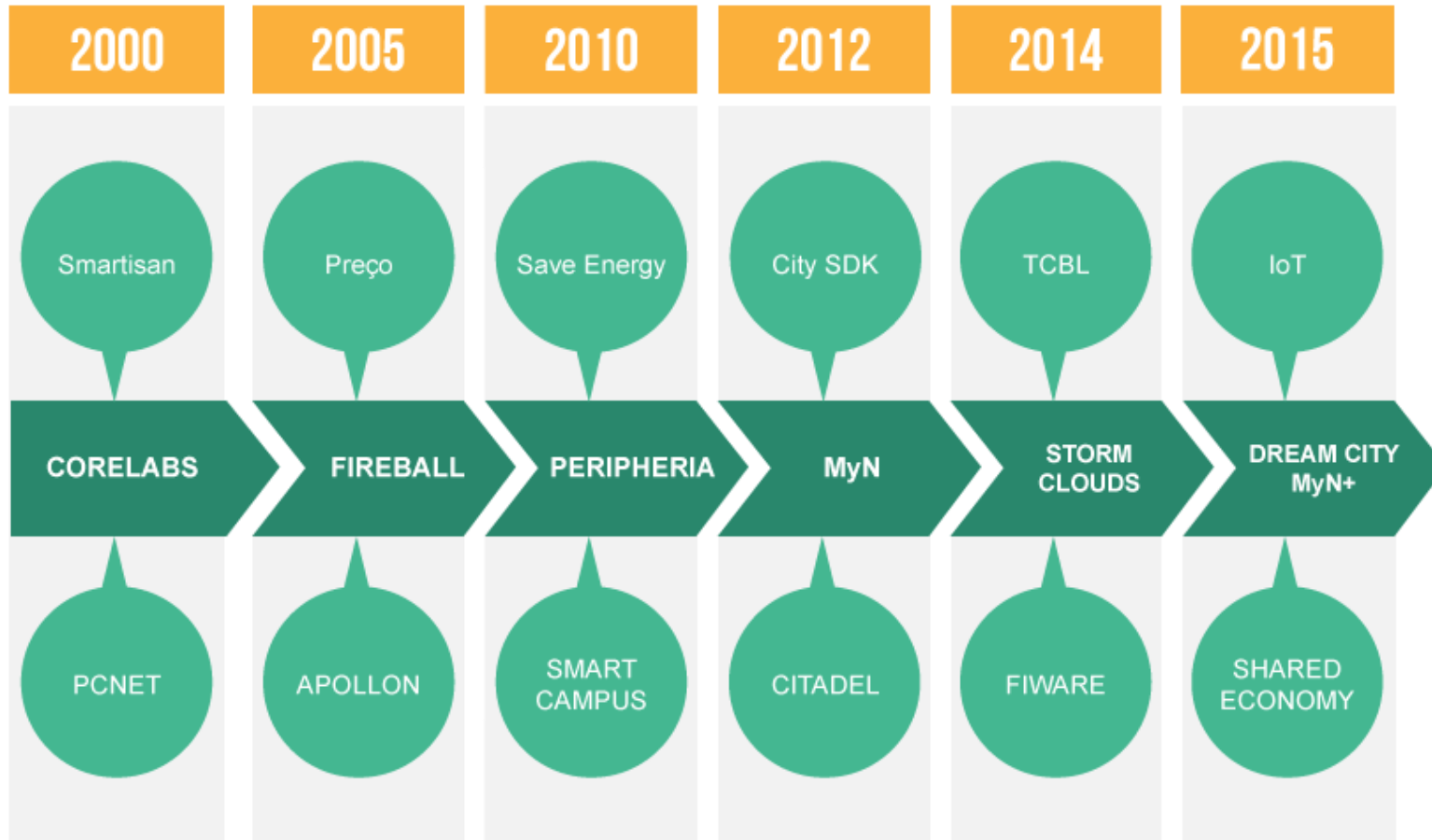
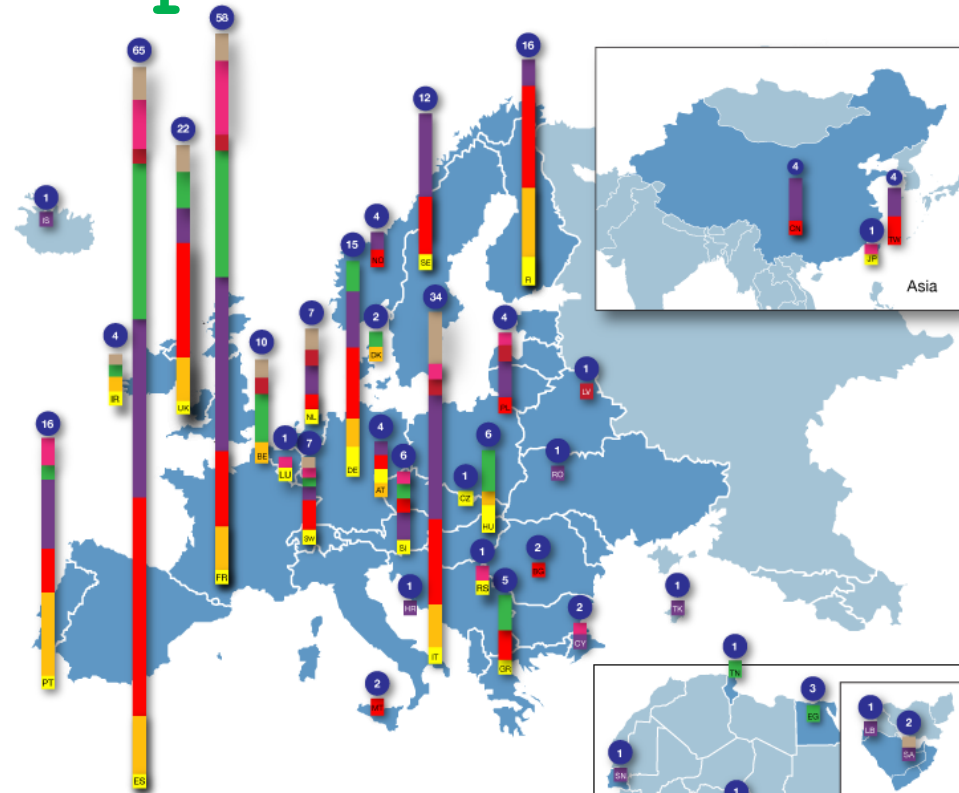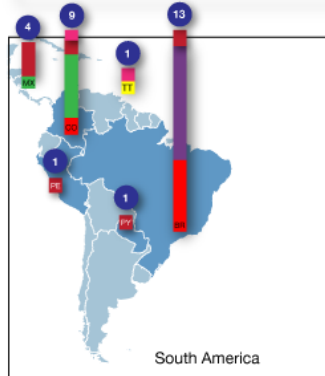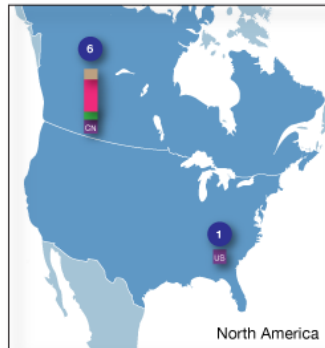# European Network of Living Labs
Global Membership

www.openlivinglabs.eu
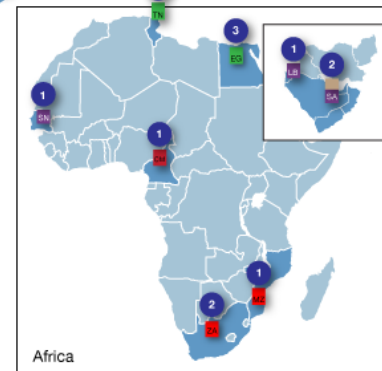
Urban Innovation Ecosystems
Urban Living Labs

- The Human Smart Cities are open-minded eco-systems (**Living Lab Urbano**) focused on people (**Social Inclusion**), which promote wealth and job creation (Economic Development) in a green economic model (**Environmental Sustainability**).

- The Municipal Government, urban planners, universities, technology-based companies and financing institutions are organized in a dynamic and innovative ecosystem (**Top Down Support**).

- Citizens are involved in identifying need, creating new services, prototyping (**Bottom-up**).

- Citizens are **agents of transformation**. Technologies are tools to support the generation of knowledge communication. Large, medium and small companies are creating agents of new services and processes.

- **Urban Living Lab** contributes to creating and locating knowledge as well as generating wealth

Human Smart Cities
Urban Transition
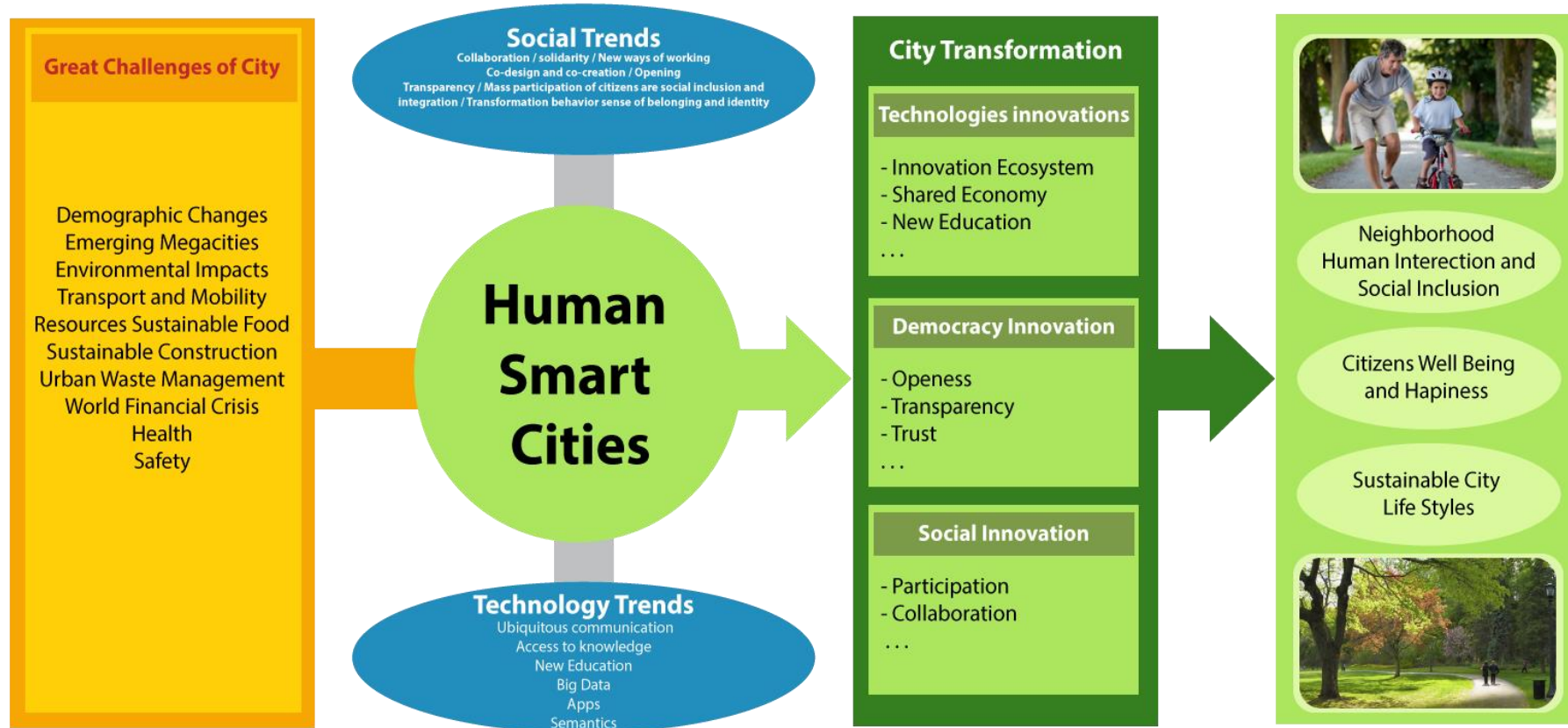
Modern cities have
Became places of
Human isolation
Social Exclusion
Environmental impact
Serious challenges to
sustentainability
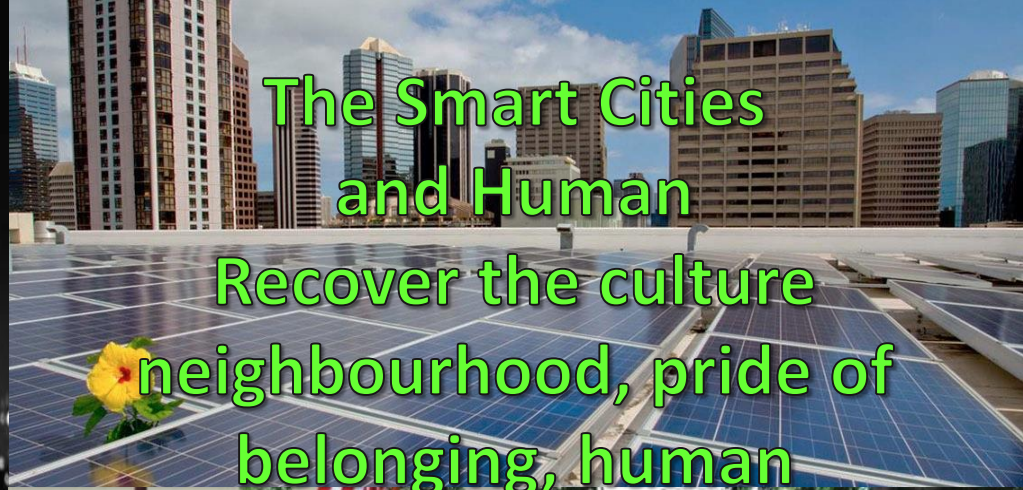
The Smart Cities and Human
Recover the culture neighbourhood, pride of belonging, human interection and social inclusion
Trust
Participation
Collboration

Technologies, Methodologies and open services are the basis of open and transparent government that transforms the city innovating democracy

Co-designed Solutions
Participatory Meetings and Workshops

Community Engagement
MyNeighbourhood Projects - Meetings, workshops and events
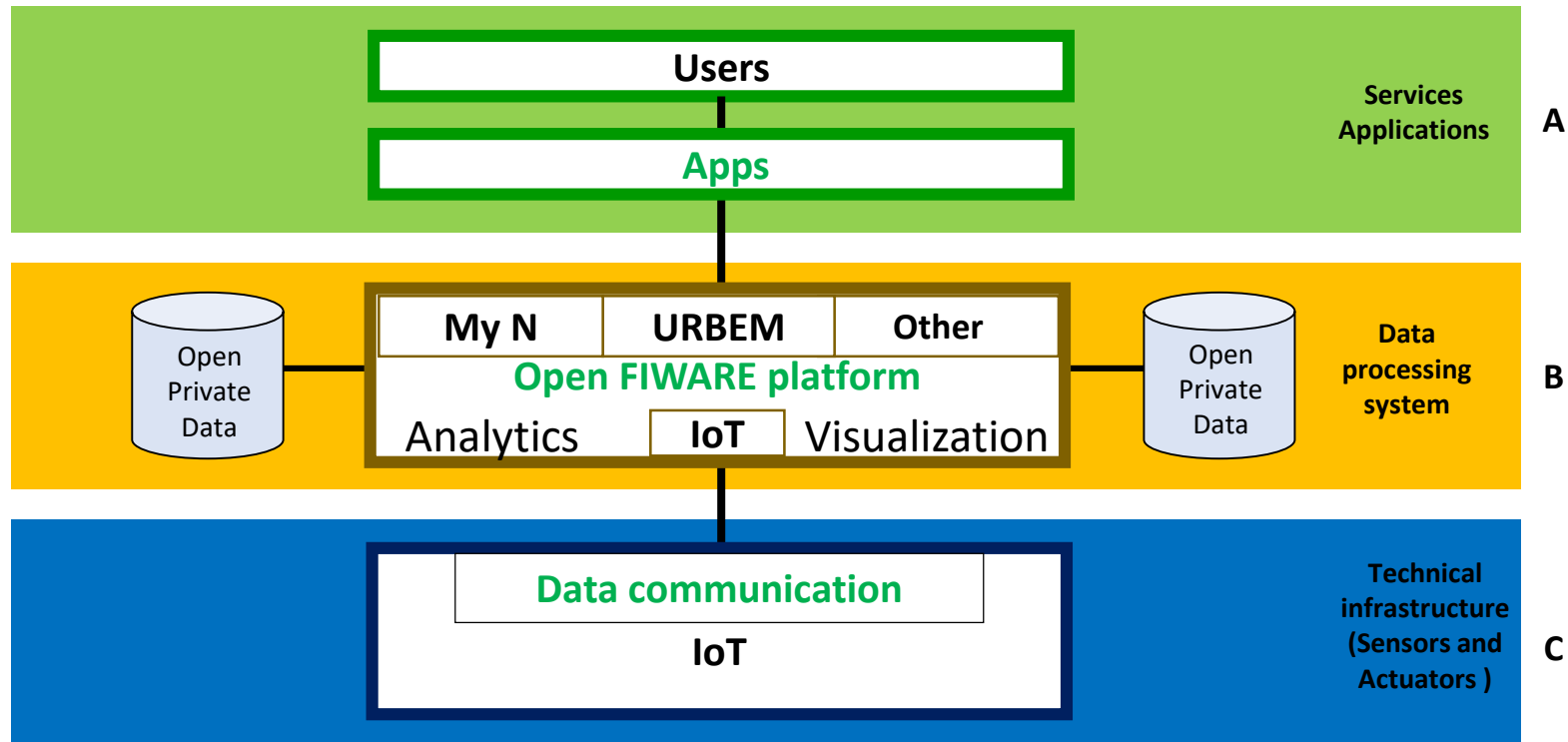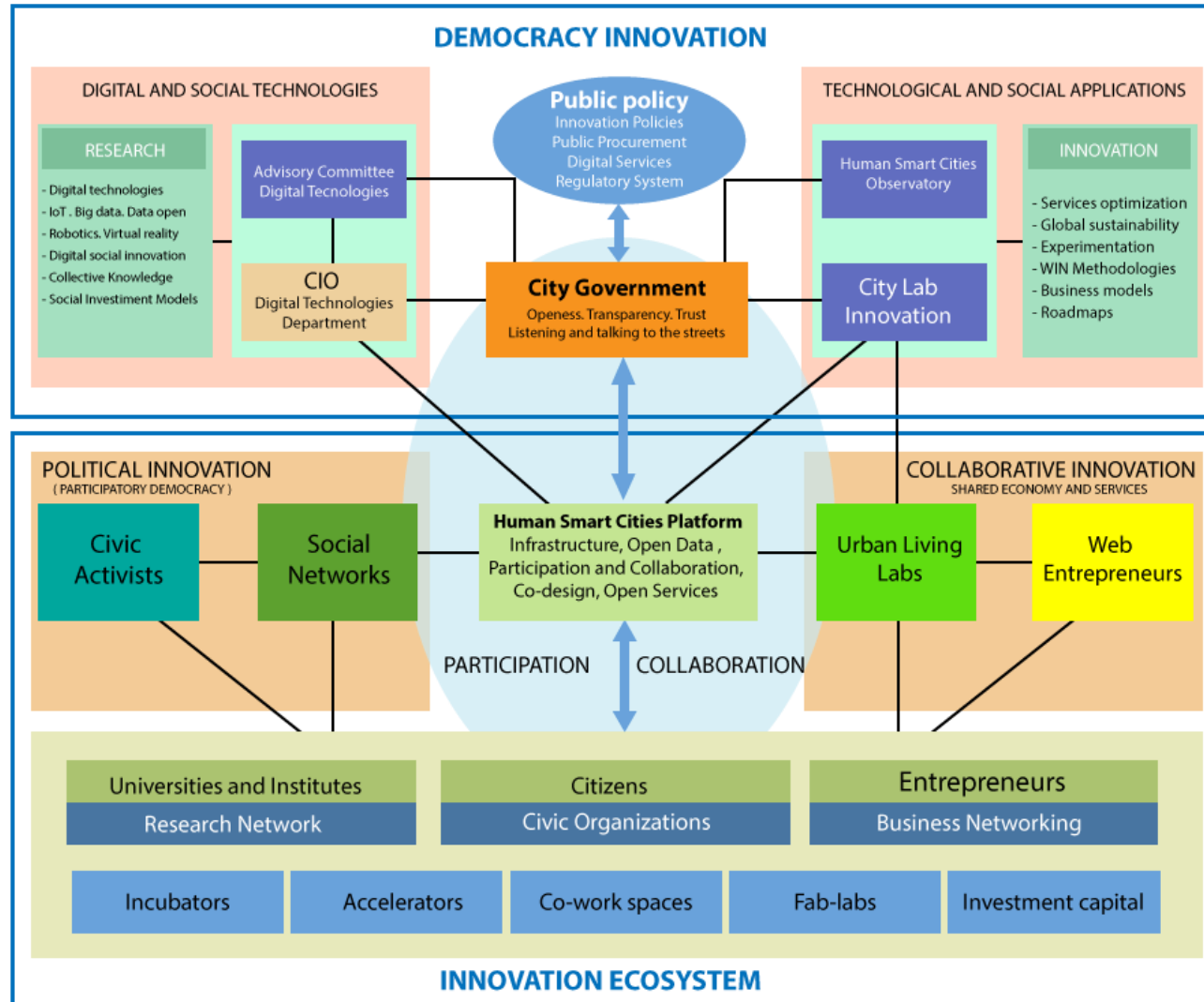

Lisbon
Milan
Aalborg
Birmingham

Implementation of Human Smart Cities
Architecture Overview

Open and transparent government
Trust. Participation. Collaboration

Human Smart Cities
Participative Environment

- In the **Human Smart Cities** , technological infrastructure gathers, connects and processes big data providing efficient municipal services open and transparent.

- In the **Human Smart Cities**, the government is open to engage and to be engaged at the initiative of citizens on the basis of an open , transparent and trusting relationship.

- In the **Human Smart Cities**, information technologies are used to solve social, economic and environmental problems, with the participation of citizens (WIN Methodology)

- In the **Human Smart City** the Government stimulates and supports an urban innovation ecosystem (Urban Living Lab), that applies a culture of co-design and co-creation methodologies and technological and social innovation processes to solve problems with a focus on the **Well Being and Quality of Life** of citizens.

Human Smart City
Roadmap for a sustainable innovation strategy

- Participation, transparency and openness between Government and citizens **(MyN)**

- Establish an environment of trust among the various actors. Strengthen the link between large companies, SMEs and startups **(Living Labs)**

- Participation of all actors in the innovation process **(WIN)**

- Improve the link between the Scientific and Technological System and the Companies **(Innovation Policies)**

- Collaboration and empowerment of citizens **(Gamification)**

- Promote, encourage and support the culture of Co-design and co-creation **(Design Thinking)**

- Promote pilot projects for validation **(Urban Living Lab)**

- Promote new financing models **(Public, Private, PPPs)**

- Governance and Quality Management, independent and balanced **(Compliance)**

- Develop global internationalization and expansion strategies **(Globalization)**

- Effective multichannel and bidirectional communication **(Communication strategy)**

Lisbon Human, Smart,Innovative and Sustainable City
Structural Collaborative Projects
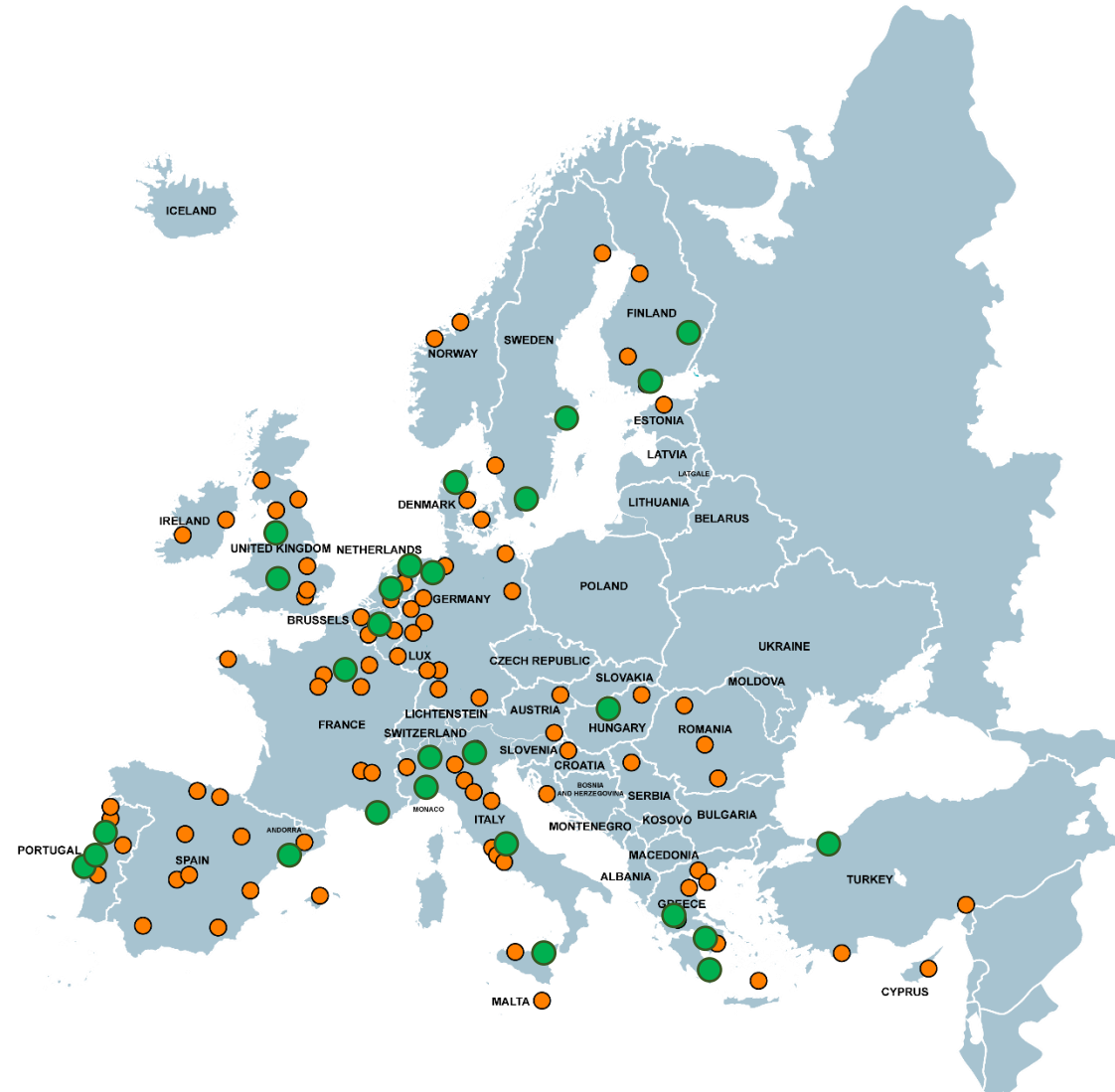
Lisbon Human,Smart,Innovative and Sustainable City Co-design activities

European Human Smart Cities Initiative
106 European cities

Institute for Human Smart Cities
Proposal Concept for EU-US Cooperation.

- Establish a joint EU-USA initiative for Human Smart Cities in the format of a **HUMAN SMART CITIES INSTITUTE** covering all the relevant and important specific aspects for EU-USA countries: vision, strategy, policies ,technologies , methodologies, applications and services. **Adopt a policy to exchange actively best practices** and create mechanisms to support it. Co-create EU-USA value by collaboration.

- Establish a **list of objectives shared by EU and USA**. Create a joint vision, strategy, roadmap and action plan with clear monitored milestones. Use **WIN** participative methodologies (**W**ishes, **I**nterests and **N**eeds).

- Establish a **program for joint Research, Development and Innovation** focused on EU and USA specific needs. Address current and future scenarios. Identify a number of strategic projects, including funding opportunities, to be jointly implemented aiming to experiment and validate the EU-USA Human Smart Cities model

- **European and American Initiatives** to inspire local adaptations and evolutions under the operational framework to be established and the vision to accelerate the Well Being , Quality of Life and Happiness of EU and USA citizens, including the creation of Sustainable Wealth and Jobs.

Institute for Human Smart Cities
Preliminary organisation ideas

Observatory for Human Smart Cities.Co-design Models and guidelines

Forum to analyze,discuss and propose Human Smart Cities models and policies

EU-USA Human Smart Cities Network.Understanding.Frameworks, methodologies and Tools. Urban Transition Strategies and Validation.Integrated Urban Modelling Framework and Roadmap for Implementation

EU-USA Interaction among related Research and Innovation Institutions. Increase added value through Joint programs and projects.

New Education. Joint Initiatives exploring eLearning and neuroscience

Collaboration and Communication. Collaborative Portals. Conference. Workshops. Best Practices exchange. Standards

Institute for Human Smart Cities
Preliminary RDI ideas

New Urbanism. Sustainable and Resilient Urban transformation.

Urban Innovation Ecosystems.Innovation dynamics. Urban Living Labs. Frugal technologies. Methodologies driven by EU-USA WINs

Sharing Economy. EU and USA perspectives and models. Impact and adaptations.

Urban 4.0 Manufacturing, Logistics and distribution.Collaborative initiatives. Platforms.Technologies. Methodologies.

Establish **partnerships for** RDI on integrated technological and social matters. Example: initial discussions have started for a partnership focused on new urbanism, including the participation of citizens, organizations and using advanced technologies in an Urban Living Lab environment (Cognitive Computing, Behaviour Transformation, User Driven Open Innotavion, WIN, Design Thinking, Transport as a service, etc.). Initial core group: Fraunhofer Institutes, Aalto University, Politecnico di Milano, University College London, Berkeley University, MIT Media Lab,TM Forum,etc

Institute for Human Smart Cities
Implementation Recommendations

- **Human Smart Cities Model** for Citizens Well Being and Quality of Life. Aim at sustainability objectives
- **WIN** participative and collaborative methodologies Use Open and Interoperable Platforms
- **Citizens participative** services.
- **Standardization. Interoperability** . Process modelling. Smart City Maturity and Benchmark Models
- Dynamic **Innovation Ecosystems** as pillars of the Urban Transformation
- **Open and transparent** municipal governance
- Promote and support **civic participation and collaboration. PPPs.**
- Stimultate **open data** policies. Stimulate efficient urban services and solutions

Human Smart Cities
Some references
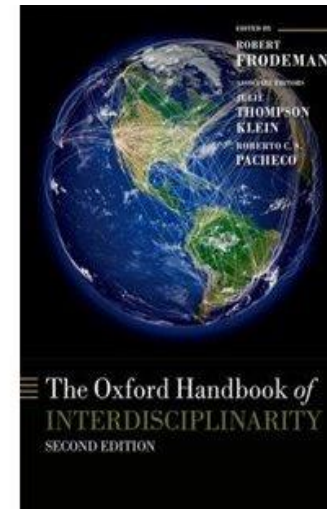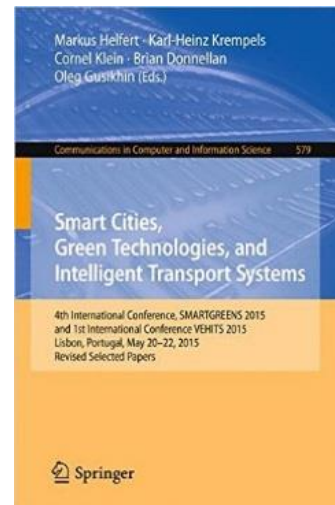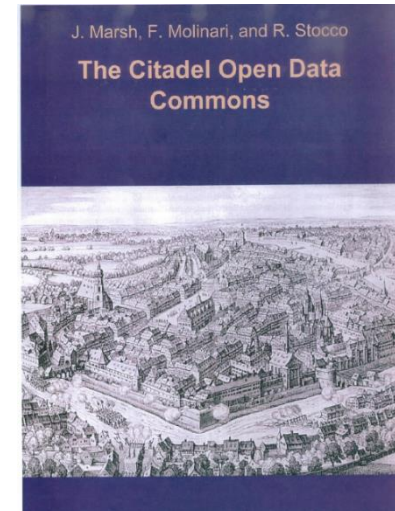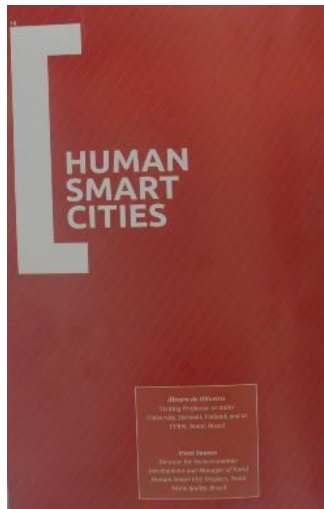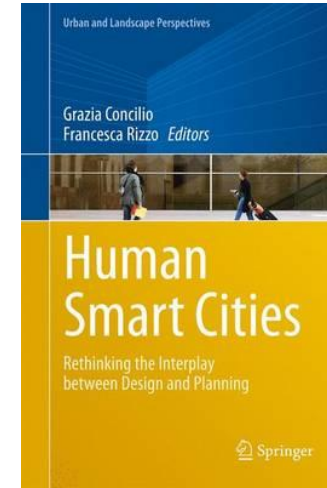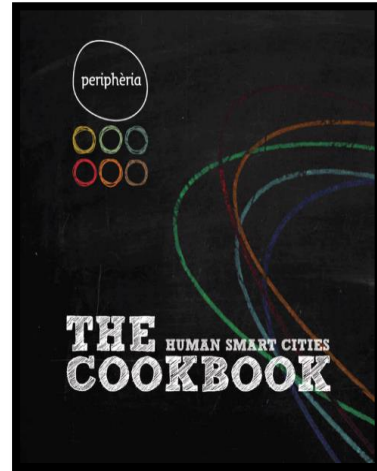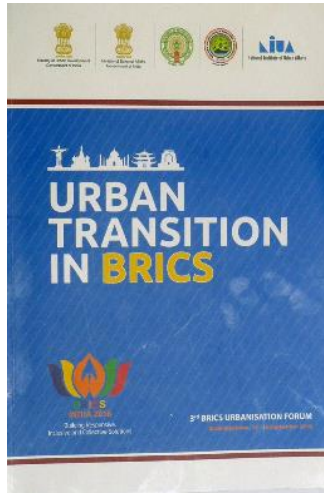
Thank you

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000351 91 6666666