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SMART MOBILITY IN SMART CITIES

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CONTENT

1. Introduction
2. Smart cities
3. Smart mobility
4. Framework and funding
5. Conclusion
2. SMART CITIES– GENERAL OVERVIEW

- **Definition**
  Smart cities can be seen as systems with people, flows of energy, materials, services and financing that catalyse sustainable economic development and high quality of life through the wise use of technology and innovative transparent urban planning that is closely related to the economic and social activity of communities.

- **Context**
  Level of urbanisation in EU above 75%, to rise to 80% by 2020
SMART CITIES – PHILOSOPHY

➢ Tackle common challenges & bottlenecks

➢ Develop innovative & replicable solutions

➢ Bundle demand from cities & regions

➢ Attract and involve business & banks

Each city is unique ...

... but there are common challenges!
3. SMART MOBILITY

Smart mobility = cooperative mobility

Cooperative Mobility means:

Interconnection of vehicles and infrastructure

- Creating and sharing of new kinds of information
- Enhanced cooperation amongst drivers, vehicles and roadside systems

Contributing to safer, cleaner, more efficient and sustainable road transport
ICT & SMART MOBILITY

- Information and Communication Technology (ICT) is a key enabler to make our transport systems safer, smarter and more energy-efficient.
- This role of ICT in transport is emphasised in
  - ITS Directive & Action Plan
  - Strategic Transport Technology Plan (STTP)
- ICT provides cross-cutting solutions in the areas of
  - Communication architectures
  - Secure transmission, processing and storage
  - Location information
  - Privacy
  - Assessment tools (e.g. data mining technologies)
COOPERATIVE MOBILITY APPLICATIONS

• Central traffic management
• Electric vehicle charging points management
• Various levels of automated driving
• Availability of open data (research, service providers)
• eCall emergency system
• In-vehicle multi modal travel information
• Electronic tolling
• Cooperative intersection safety
• Etc. etc.
4. FRAMEWORK AND FUNDING

Framework:

• Smart Cities and Communities European Innovation Partnership (SCC EIP)

Funding opportunities:

• Horizon 2020 research programme
• European Green Vehicle Initiative (EGVI)
Smart Cities and Communities EIP – the Novelties

- Seeks to break down “silos” between the energy, transport and ICT sectors, and consolidate European Commission’s initiatives under “one roof”

- Joint leadership by three Commissioners responsible for energy, transport and ICT, close involvement of Commissioners responsible for research, regional policy and environment

- Seeks to promote new business models and use of common metrics that capture the economic, social and environmental benefits (methodologies and indicators)

- Though overall goal is the triple bottom line gain for Europe, expect progress elsewhere, e.g., interoperability of service infrastructures, open data, etc.

- Focus on innovation through integration of technologies/ business models rather than research into new technologies

- Funding, bundled in Horizon2020 focus area "Smart Cities"
MOVING BEYOND THE SILO:

The European Commission will focus its efforts on smart cities across portfolios to optimise outputs and ensure public policy coherence.
INVITATION FOR COMMITMENTS; WELL-ESTABLISHED EIP TOOL

• More concerted action between cities and industries is now needed to accelerate large-scale roll-out of promising solutions -> get markets moving

• Bringing together innovative ideas and actions from across Europe for innovation exchange and partnering -> core ambition for this EIP.

• Commitment refers to the intention to provide a
  • measurable and concrete engagement
  • in support of one or more focus areas of the SIP
  • in the course of the next year and beyond.

• Existing and planned actions can be submitted

• Very light and short online application process, deadline 15 June 2014
Seven Societal Challenges in H2020

Societal Challenge 4: Smart, green and integrated transport

SC4: three calls:

- Mobility for Growth
- Green Vehicles
- Small Business and Fast Track Innovation for Transport

HORIZON 2020 SCC WORK PROGRAMME 2014

SOCIETAL CHALLENGE 3:
Secure, clean and efficient energy

- **SCC1 Light house projects**
  (large scale deployment)

- **SCC2 Performance measurement**
  (support action)

- **SCC4 Networks of public procurers**
  (support action)

Submission deadline: 7 May 2014

Horizon 2020 on the web:
http://ec.europa.eu/programmes/horizon2020/
EUROPEAN GREEN VEHICLES INITIATIVE (EGVI)

- Continuation of European Green Cars Initiative (EGCI)
- "Green vehicles" (energy efficient, alternative powertrains) → sustainable transport, innovative strength and global competitiveness of the European economy;
- Expertise of three European Technology Platforms (ERTRAC, EPoSS, SmartGrids) will be build upon, integrating the research domains of automotive, energy, ICT and smart grids.
- The proposed budget for seven years for EGVI is 3 B€, out of which EU funding 1.5 B€.
- EGVI focuses on modules, systems and energy efficient vehicles, not on transport systems, infrastructure and their integration.
5. CONCLUSION

1. Smart Cities refer to an integrated approach
2. Smart mobility = cooperative mobility
3. Policy framework and funding tools are available to contribute to the achievement of Smart City and Smart Mobility goals

GET INVOLVED AND SHOW YOUR ACTIONS!
Thank you for your attention

Are there any questions?

Smart Cities and Communities EIP on the web:  
http://ec.europa.eu/eip/smartcities/

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Horizon 2020 on the web:  
http://ec.europa.eu/programmes/horizon2020/