



EUROPEAN CITIES AND REGIONS NETWORKING
FOR INNOVATIVE TRANSPORT SOLUTIONS

Polis policy paper: Sustainable Urban Mobility and the Smart City

Scope – Finance – Community Building
November 2015

Polis members about Smart Cities

“The Smart City knows what it wants, knows how to intervene, is interested to assess results and change course if needed, and in this process is able to take everybody along. It is a place where citizens have all the information they need to make informed choices about their lifestyle, work and travel options.”

“The Smart City develops customer focused ICT applications that resolve real citizens’ needs and help to unlock the city: the city becomes more accessible and better used by different stakeholder groups.”

“Integration and joint-up thinking are key. It is important that different sectors talk. In this view mobility cannot be seen as a subsector, but as an integral part of the Smart City. The focus should be on transversal issues. Also other less obvious sectors (social services, health care) should be involved.”

“Citizens should come first when designing, planning and building the Smart City. Without citizens, the Smart City has no real purpose.”

Contents

- Polis members about Smart Cities 2
- About Polis 16
- 1. Enhancing the role of Transport in the Smart City 4
- 2. Transport: Central building block of the Smart City 5
- 3. Scope 6
- 4. EU Institutional scope 8
- 5. Finance 8
 - 5.1. Avoid - Deciding when to invest, and when not to 8
 - 5.2. Reduce - using procurement to get innovation and value for money 9
 - 5.3. Diversify – finding the appropriate balance between public and private financial involvement 10
 - 5.4. Financing: what role for the EU to play? 10
- 6. Building a Smart City community 11
- 7. Polis recommendations on Smart Cities to the EU level 12
 - Governance 12
 - Financing Smart Cities and Smart Cities research and innovation 12
 - Building a Smart City community 12
- ANNEX I: Smart Cities: the EU policy context 13
- ANNEX II: EFSI Background 15

1. Enhancing the role of Transport in the Smart City

Europe is currently underexploiting the potential of urban transport in its Smart Cities policies. Urban transport can contribute substantially to quality of life, health, economic and urban development, competitiveness, energy efficiency and 'smartness' in cities. It is inefficient to put the urban transport sector in a subsidiary role.

On a global scale, cities and industry are developing coherent operational tools to better plan and manage the urban territory and improve quality of life of citizens. These tools are the practical translation of a deeper understanding of interdependencies and synergies between sectors such as transport, energy, urban planning, economic development, environment, health, etc. This trend proves that the 'Smart City' concept is not just a buzzword.

The EU is addressing the challenge to make cities smarter by means of a package of instruments: research and innovation (Horizon2020), policy development and community building (European Innovation Partnership Smart Cities and Communities) and finance (European Investment Bank, Connecting Europe Facility and EFSI).

Polis, representing leading cities and regions working on innovation in local transport, experiences that currently the role and potential of urban mobility in making the city smarter, is not sufficiently recognised.

- The transport sector in general leaves ample room for improvement in terms of (energy) efficiency, environmental performance (AQ and noise) and leverage for economic development; For several of these objectives, actions in transport will be more cost efficient than in other forms of urban infrastructures and sectors, where the quick wins have been made and 'low hanging fruit' has been harvested.
- The urban transport field in particular can and should contribute to realising EU policy goals, whether they are overarching strategic goals (jobs and growth, energy targets), or targets applied to transport specifically (road safety, 2030 clean logistics targets etc.).
- The transport sector is currently shaping and experiencing a paradigm shift, with coinciding transitions in the field of energy use (electrification), technologies (ITS, RTTI) and behavioural change (sharing economy, focus on active travel). These changes affect passenger as well as freight transport, business as well as leisure travel. This paradigm shift can be directed to achieving Smart City objectives such as stimulating the local innovation market, mainstreaming best available technologies and knowledge based decision making.
- At the same time, urban transport is one of the sectors with a high and continued share of public investment.

Transport has a lot to offer to the Smart City¹. Polis wants to ensure that local urban mobility stakeholders can take their full responsibility in co-creating the Smart City and pursuing Smart City objectives, without transport being made subsidiary to other sectors, such as energy². This can be the basis for appropriate EU institutional arrangements to support local transport actions in Smart Cities.³ Further EU actions with regards to Smart Cities should be developed in two areas: finance⁴ and community building⁵.

¹ See section: Transport: Central building block of the Smart City

² See section: Scope

³ See section: EU institutional scope

Concrete recommendations are included at the end of this document, as well as background to the EU policy foundation of the Smart Cities initiative.

2. Transport: Central building block of the Smart City

There are good reasons to put urban transport at the heart of Smart Cities policies.

- Urban Mobility has the framework for integrated planning.

The need for more sustainable and integrative planning processes as a way of dealing with the complexity of urban mobility has been widely recognised. New approaches to urban mobility planning are emerging as local authorities seek to break out of past silo approaches and develop strategies that can stimulate a shift towards cleaner and more sustainable transport modes. The 2013 Urban Mobility Package sets out a concept for Sustainable Urban Mobility Plans (SUMP) that has emerged from a broad exchange between stakeholders and planning experts across the European Union. The concept describes the main features of a modern and sustainable urban mobility and transport plan.

All over Europe, cities are engaging in bringing such a plan together. A unique opportunity for joint up thinking, and a building block for the Smart City in your reach.

- Transport helps to make the health challenge more concrete.

The past decade, the relation between health and urban transport has become increasingly more apparent. Both the active travel dimension and the air quality dimension are important in this regard. The transport sector can bring in the health dimension in the Smart Cities' concept.

- Electrification is happening.

In all modes of transport, and for both transport of goods and passengers, electrification is happening. This brings - with the advantages such as clean air, energy independency etc. - also a set of challenges (deployment of charging infrastructures, links with shared mobility).

- Urban transport embraces the sharing economy.

Urban transport is a key area for the transition towards the sharing economy. Both public initiative (public bicycles, shared cargo-bikes, etc.) as private initiative (ridesharing applications, car sharing, peer to peer parking apps) see the benefit of making better use of urban transport assets. Also in the freight sector this is taking shape.⁶

- Transport is an endless source of interesting data.

⁴ See section: Finance

⁵ See section: Smart City community building and research.

⁶ <http://www.citylab-project.eu/implementations.php>

The traveler is becoming more and more connected. Vehicles are connected, public transport users check in and check out with smart cards, cyclists and pedestrians use apps to monitor their movement. Traffic flow but also parked vehicles are monitored. These data are becoming increasingly available through open data portals of cities – in standardized formats such as Json or DATEX II. The definition of the most appropriate data format is ongoing, and cities are instrumental in testing the best solution.

- The urban transport sector knows how to manage intermodal hubs.

Transport in cities is not only using linear infrastructures (streets, tracks, sidewalks and bicycle paths), but also building: hubs to change between different transport modes. Parking garages, stations, connecting underground and surface transport... are an interesting arena for innovative environmental and energy management of buildings.

- Transport technology systems are becoming more and more open and interoperable.

The urban ITS sector is moving away from proprietary systems to open systems. This enables interaction with legacy systems, and with systems used in other sectors (energy management). Transport connectivity is key in this regard. Connectivity in this context means more than automation and driverless vehicles, it is about connectivity between all modes involved (vehicle-to-vehicle, vehicle-to-infrastructure and vehicles-to-users).

- The urban transport sector is experienced in enabling, restricting and enforcing.

The urban transport sector is quite unique in the Smart Cities discussions: it is a sector which uses clear push and pull strategies, and has broad experience with restrictions (access restrictions, parking, speed enforcement etc.).

- The urban transport sector provides the assets to enable the smart city.

Ownership of the roads itself are an asset for enabling a smart city – from being the conduits for the bandwidth of fixed broadband infrastructure, to providing the backbone for all other forms of fixed urban infrastructure.

As stated before, the urban transport sector is in full transition, and is experiencing a paradigm shift. The Smart City deployment should find synergies with this movement.

3. Scope

European cities come across several theoretical or analytical models of what a Smart City is and which sectors should be captured within an integrated Smart City strategy. For European cities, the approach chosen in the EC Smart Cities and Communities communication focussing on the integration of energy, ICT and transport, provides the most visible framework. The framework determines the EC's institutional arrangements to oversee Smart Cities deployment

In practice, **the EC's framework is too narrow**, considering the daily practice of urban transport professionals in European cities:

- Smart transport solutions can address other objectives than energy and decarbonisation: health, environment, road safety, economic development urban development, equality etc.

In other words: within transport, measures can be smart (e.g. they are saving lives) without that they directly save energy.

- Digital technologies are an enabler of many smart mobility measures, but still, not all transport solutions need ICT to make them smart. The use of ICT should not be an end in itself but is a means to an end. Also simple solutions can enable place-making and can help to enjoy the city and urban life.
- Urban mobility (planning) is closely linked with land use (planning). The absence of any territorial policy reference framework in the Smart Cities discussion (in practice managed by the DG Regio) is therefore problematic.⁷

We have to recognize that the definition of Smart Cities will never be uniform, and the Smart City concept is not yet statically defined. This does not have to hamper its further promotion and improvement.

- European cities, with their specific scale, complexity, and in their current economic situation, have the experience to locally negotiate objectives and policy approaches to combat urgent local problems. We have to trust the local democratic processes in this regard.
- European cities are building strong partnerships with economic actors that help to enable the Smart City. These partnerships are taking shape in the different stages of research and innovation: cities are test beds and living labs to allow experimental piloting of innovative concepts. Local authorities play a role in the further (commercial) deployment of new solutions as innovation advocates and showcases for change. Cities care about the local economic fabric and engage with local SMEs to accelerate the innovation cycle.
- Cities gather the intelligence to make best use of available frameworks, indicators, rankings etc.

Innovation is not only happening in larger cities. Small and medium-sized cities can play a significant role in the transition towards smart cities by offering the city as a living lab⁸ to pave the way towards large scale deployment and upscaling. In many cases, smaller cities can test new technologies more easily than larger cities in real life conditions. Also, smaller cities do have very good working relationships with their local partners, e.g. local transport companies. In this, the fully operational Smart City (mobility) solutions will come to the market faster.

Polis members emphasise the importance of putting the citizen at the heart of the Smart Cities process, and suggest using the UK government definition as a basis for EU Smart Cities initiatives: “A Smart City should enable every citizen to engage with all services on offer, public as well as private, in a way best suited to his or her needs. It brings together hard infrastructure, social capital including local skills and community institutions, and (digital) technologies to fuel sustainable economic development and provide an attractive environment for all.”⁹

⁷ Land use transport interaction models are the current ‘smart’ connection using data from the two: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/427140/webtag-tag-supplementary-luti-models.pdf

⁸ An excellent example in this regard is the Polis member Helmond. Helmond was one of the partners in the European FREILOT-project. The city was able to show in a real traffic environment with real drivers from a local transport companies that C-ITS technology could bring benefits to both cities and citizens (a.o. 13% less emissions) and to the users (business case for transport companies: 13% fuel savings). These findings from Helmond pilot site are still very important for further deployment and large scale uptake.

⁹ Hence disregarding narrow definitions such as: ‘The Smart City is ‘a city seeking to address public issues via ICT-based solutions on the basis of a multi-stakeholder, municipally based partnership’. (EP Mapping Smart Cities, 2014).

4. EU Institutional scope

We understand that it is challenging to capture the versatility and local adaptability of the Smart City concept in a strategic vision and operational framework at the EU level. Ideally, the EU institutional scope for Smart Cities should reflect local dynamics and a planned collaborative and iterative strategy development, including a continuous open dialogue with stakeholders, and the involvement of institutional bodies (DGs, but also the CoR, EESC, Council and EP) when needed. However, relevant DGs can only be involved by mandate, based on policy priorities.

Polis has some prerequisites with regards to this 'institutional scope'.

- Polis supports the central role the Commissioner for Transport can play in establishing institutional coherence across the Smart Cities initiative.
- The institutional scope should establish a clear link with the EU goals that provide the policy framework for urban transport in decentralised authorities. This can be 'hard' legislation (ITS Directive, Euro class legislation, Air Quality legislation, Noise legislation, PSO regulation, Clean Vehicles Directive etc.) or soft policy (Covenant of Mayors, road safety targets, SUMP guidance, etc.).
- The close link at the local level between land use and transport should be reflected on the European level, by involving DG Regio, enlarging the scope of activities of the European Spatial Planning Observatory Network (ESPON) and/or involving the JRC (Joint Research centre).

5. Finance

Smart Cities are seen in Europe as one of the mechanisms to create 'jobs and growth' and in this respect are unlocking several funding streams local investment:

- Horizon 2020 with the Smart Cities priority under the Energy Challenge creates room for research and innovation;
- The CEF makes budget available for infrastructure investments in urban nodes, and TEN-T related innovative infrastructure investments – including fuel infrastructures and ITS;
- The EFSI is establishing a pipeline of innovative projects;
- Decentralised funds and channels of public investment banks offer regions and cities the opportunity to engage in local larger scale investments.

In parallel, the EU has recently brought the public procurement legislation up to date to enable public authorities to include research and innovation into the procurement chain.

So it seems that the toolbox for local deployment through innovative financing and procurement is complete, and cities and regions can start investing. However, there are some questions to be answered – some of which may seem provocative.

5.1. Avoid - Deciding when to invest, and when not to

The Smart Cities concept is creating a lot of expectations towards cities to provide services, infrastructures and to deliver policies – that are often taking shape in areas outside their formal local competence. At the same time, cities' budgets are under pressure, and discussions about core

competences occur at all levels of governance. At a time when cities have to make clear (and hard) choices about what to do, there appears to be many more options than ever of what to do.

Cities need to develop policies to help them understand when and when not to engage in the development of Smart Cities measures. Such an assessment framework can be supported by several instruments, e.g.:

- a comprehensive and strategic long term vision and plan for transport, energy, land use etc. (concretely captured at the EU level in the SUMP and SEAP concepts);
- impact assessment methods such as CBA, TCO;
- local assessment methods (such as developed by Barcelona)¹⁰;
- transferability analysis based on a dialogue with early adopters of Smart City solutions.¹¹

After this assessment, cities can decide to what degree they become involved, and which role they will play: regulator, procurer, financier, owner, enabler etc.

5.2. Reduce - using procurement to get innovation and value for money

Smart city solutions are by definition multi-component systems. Procuring systems is complex, as they include hardware and software. Current procurement approaches are often focused on purchasing components and are not appropriate to enable connectivity – an important part of Smart City solutions.

Smart cities make use of smart procurement to get value for public money in the acquisition of systems to support the Smart City. Polis members implement procurement principles such as:

- the use of functional specifications rather than technical specifications in the tenders;
- standardized solutions;
- open data;
- an open systems approach, such as developed in the POSSE project to avoid vendor lock-in and enable open development of ITS systems, based upon legacy systems. Investments are not just about new systems but also about using/incrementally developing existing systems in a smarter way to deliver improved integration, intelligence, etc.
- the appropriate procurement model for EV charging infrastructures related to the deployment phase of these vehicles.

¹⁰ The City of Barcelona has developed a multi-stakeholder dialogue format reflecting upon the policy relevance, business model potential and relation with legacy systems. A new service has to link to needs derived from the stakeholder ecosystem, has to incorporate legacy elements and has to support the local economy. Operational, financial and governance aspects of the new service are mapped and help decision makers to conclude on the implementation of the new service. The participants appreciate the methodological approach Barcelona uses. This structured method helps to address various open issues (stakeholders, data, equipment, etc.).

¹¹The Smart London Board is an example of this – a mayoral advisory board involving a range of stakeholders including vendors and academics, some of which have worked with cities that are early adopters to see if these solutions can be scaled up for major cities.

5.3. Diversify – finding the appropriate balance between public and private financial involvement

An important challenge in Smart Cities measure implementation is to determine the public – private balance.

To what degree and to what purpose can the market be involved (to design, to finance, to build, to operate, to maintain, to own?). Answering this question is a complex exercise that should be treated with caution, especially in a context where market players develop services in those fields that cities have left aside (e.g. ridesharing applications).

The Smart City concept inherently carries the capacity to diversify the funding options:

- it can help to capitalise on the fact that Smart City solutions serve to accomplish objectives in different public sectors. This could lever budgets across departments, linked to the actual return in reaching policy objectives.
- Smart City solutions include building blocks of a different nature: governance, infrastructure, services, data and vehicles. This diversity offers opportunities. It adds to the complexity, but should not be seen as a threat. E.g. It can be led by showing the power of open data for citizens and businesses, and the first evidence for smart cities is in transport (e.g. The open data based citymapper apps suite).

5.4. Financing: what role for the EU to play?

There is a growing perception that market uptake, upscaling and roll-out are the only issues that play in the introduction of Smart Cities concepts. In this view, fundamental research is considered to be accomplished and R&I budgets are decreased. Polis disagrees with this. Research is still needed to understand synergetic effects, choice of measures, behavioural aspects, evaluation and impact assessment etc. In this regard, Polis will further monitor the balance between EU financial instruments for R&D, innovation take-up and capital investment¹².

Concerns about the inconsistency between research agendas and market needs can be solved by a coordinated dialogue with the relevant European Technology Platforms.

Polis welcomes financial instruments and facilities that target the needs of cities in their ambition to reach EU and local policy objectives. In this regard, Polis especially appreciates the efforts by the EIB and the EC to enhance and further develop the ELENA facility with an ELENA-transport strand of activities.

To make best use of the leverage of EU funded projects, and generate a maximum local impact, the concept of top-down coordination of territorially grouped projects could be tested. Several EU funded and financed projects might be active in the same geographical area, without being connected nor integrated. A gradual integration (awareness – understanding – cooperation – integration) could be trialled and tested to become common practice in the next Multi-annual Financial Framework.

Coherence across EU and national research initiatives should be envisaged through a close cooperation with initiatives such as the JPI Urban Europe, ERA-NET and COST actions – all having urban and Smart Cities activities.

¹² See Polis activities on EFSI, CEF and H2020

6. Building a Smart City community

The stakeholder dialogue that is essential for building local Smart city strategies, has its counterpart at the EU level. This dialogue should be strengthened, to capture all essential elements:

- The target of this dialogue and interaction should be to take cities to the next level of smartness! On the basis of lead examples, discussions about replicability, benchmarking, KPIs can take place - aimed at helping cities to develop their level of smartness.
- Build on local success stories rather than on EU-level challenges. Polis wants to emphasise the positive role that cities play in developing and procuring smart solutions. Cities are the stakeholders that are making the 'Smart City' concept into a reality. In practice, the local understanding of how to operationalise Smart Cities concepts by both cities and market players coincide and are similar. Positive stories of local successful partnerships and approaches show the way!
- Ensure a balanced representation of cities and business representatives in high level smart cities and communities representative groups. A better balance between industry, research and policy makers should be struck. In this regards, the current efforts of the EC as well as many local authorities to create SME accelerator opportunities are of great importance. SMEs should be better represented.
- Link CEF and EFSI funding to capacity and community building initiatives: There will be very valuable information to be shared between the implementers of CEF and EFSI funded Smart Cities' related projects. Why not enable peer learning between the stakeholders involved?
- Make the lighthouse projects best practice strongholds for European innovation Partnership for Smart Cities and Communities activities. The successful CIVITAS community builds on a lively interaction between demonstration projects and follower (Forum) cities. This is a very interesting approach to initiate peer-to-peer learning, and prepare for take up of innovation.
- Include global cooperation as essential part of community building. European cities of all sizes and regions actively engage in the establishment of a global community and a global body of knowledge with regards to smart cities. It would be a loss not to include this dimension in the European networking about Smart Cities.

7. Polis recommendations on Smart Cities to the EU level

Governance

- The Commissioner for Transport is the best advocate for a strong role for urban mobility in the Smart City policy development and to raise the profile of sustainable urban mobility within the Smart Cities concept.
- The dynamics of the Smart City concept should be reflected in the EU support structure that can manage this flexibility. In this regards, it is recommended to Include within the EU Smart Cities governance those DGs that govern EU legislation affecting Smart City objectives: a.o. DG Environment, DG Regio, DG Connect, DG Move, DG Energy. Involve bodies such as the JRC and ESPON as knowledge hubs.
- Ensure the presence of urban transport stakeholders in high level Smart cities and communities representative groups, and within this group aspire parity in with regards to representation of cities, business and research.

Financing Smart Cities and Smart Cities research and innovation

- Engage in dialogue with transport ETPs about the Smart City concept, and about Strategic Research and Innovation Agendas and roadmaps shaped to enable Smart Cities.
- Ensure the continuation of EU funding of research and innovation for Smart Cities, including through the Horizon 2020 programme. Within this framework, urban transport should be fully included within the Smart Cities research and innovation agenda.
- Test and trial voluntary top-down coordination of territorially grouped EU financed projects.

Building a Smart City community

- Link CEF and EFSI funding to capacity and community building initiatives.
- Include global cooperation as essential part of community building.
- Make local success stories and the Lighthouse projects the best practice providers for EIP SCC activities.

ANNEX I: Smart Cities: the EU policy context

The EIP – SCC was initiated in July 2012. The Smart Cities concept was originally foreseen for the first time under the **Action 111¹³ of the digital agenda** for Europe within the EU2020 Strategy¹⁴ proposed in March 2010, as a direct response to the ambitious **European Union 20-20-20 targets** set by EU leaders in 2007 and enacted in 2009 under the climate and energy package¹⁵. The digital agenda contains 132 actions divided in 7 pillars aiming at boosting the EU economy and enable Europe’s citizens and business to get the most out of digital technologies and infrastructures.

The Action 111 outlines the EU general course of action in order to focus, develop and implement the Smart Cities, Active and Healthy Ageing, Green Cars, Energy Efficient Buildings Public Private Partnerships. It led to the adoption of the European Innovation Partnership on Smart Cities and Communities, alongside with a Partnership’s Strategic Implementation Plan¹⁶ (unleashing €200 million under Horizon 2020 for the next two years to create smart cities) and an Operational Implementation Plan¹⁷ (OIP) adopted in October 2013. The OIP contains 12 priority areas, each of them broken down into several potential actions, which impact on transport system in urban area. Under the Priority Area “Sustainable Urban Mobility”, 7 priority actions are foreseen:

- Improve clean power for transport: vehicles and infrastructure
- Foster seamless door-to-door multimodality in urban transport
- Further clean logistics
- Open up intelligence in urban transport systems
- Enable tools for seamless doors-to-door multi-modality
- Promote sustainable and integrated mobility planning
- Promote use of cleaner vehicles.

In turn, the SIP led to the **first Calls for Proposals for Lighthouse Projects** in the Horizon 2020 focus area “Smart Cities” published in December 2013.

This overarching digital agenda also laid down the European Framework toward the adoption of the **Digital Single Market**¹⁸ accompanied with a staff working document¹⁹ and an EU roadmap for completing the Digital Single Market²⁰ lately adopted in May 2015. This foreseen legislation on improving TIC will heavily impact on the Smart Cities concept. 4G broadband coverage is one of the key element for reaping the benefits of **Cooperative ITS**²¹ in terms of improving road safety, reducing congestion, optimising the performance and available capacity of existing transport infrastructure, enhancing mobility in a multi-modal transport chain, increasing travel time reliability, improving the

¹³ <http://ec.europa.eu/digital-agenda/en/pillar-vii-ict-enabled-benefits-eu-society/action-111-focus-and-develop-and-implement-appropriate>

¹⁴ <http://ec.europa.eu/digital-agenda/digital-agenda-europe>

¹⁵ http://ec.europa.eu/clima/policies/package/documentation_en.htm

¹⁶ http://ec.europa.eu/eip/smartcities/files/sip_final_en.pdf

¹⁷ http://ec.europa.eu/eip/smartcities/files/operational-implementation-plan-oip-v2_en.pdf

¹⁸ http://ec.europa.eu/priorities/digital-single-market/docs/dsm-communication_en.pdf

¹⁹ http://ec.europa.eu/priorities/digital-single-market/docs/dsm-swd_en.pdf

²⁰ http://ec.europa.eu/priorities/digital-single-market/docs/roadmap_en.pdf

²¹ Directive 2^o1^o/40/EU on the framework for the deployment of ITS: <http://bit.ly/1M7zA96>

efficiency of logistic operations and thus reducing energy use as well as diminishing the environmental impact of road transport.

The Smart Cities is also clearly stated within **the 2011 White Paper on Transport, under Action 31 on “Urban Mobility Plans”** which included the Smart Cities Innovation Partnership. The general objective of the 2011 White Paper was to define a long-term strategy that would help the EU transport system achieve the overall goal of the Common Transport Policy, i.e. to provide current and future generations with access to safe, secure, reliable and affordable mobility resources to meet their own needs and aspirations, while minimising undesirable impacts such as congestion, accidents, air and noise pollution, and climate change effects.

The smart cities concept is also affected through several other actions within the White Paper, inter alia the deployment of road safety technologies (action 16 towards a zero-vision on road safety), seamless door-to-door mobility (Action 22), the construction of a European Transport Research and Innovation Policy (action 24); the regulatory framework for innovative transport (action 26), an EU framework for urban road user charging (action 32), the strategy for near-“zero-emission urban logistics” 2030 (action 33), a European Mobility Network (action 34) and the new funding framework to support it (action 37 which includes support toward decarbonisation), and smart pricing and taxation (action 39).²²

Currently under stock-taking exercise by the European Commission and under an own initiative report of the European Parliament, some of the foreseen actions might be reviewed²³.

Another legal element which impacts on the Smart Cities is the initiative taken by the European Commission toward decarbonisation of transport as foreseen within the **Energy Union Package**²⁴, which set up EU global target of 40% reduction of greenhouse gas emissions together with 27% of renewable energy sources in the global energy mix by 2030. At the EU level, this will require further deployment of alternative fuel vehicles infrastructures²⁵, as well as promoting electrification of cars and public transportation systems which requires a full integration of electric vehicles in urban mobility policies and in the electricity grid, both as energy consumers and potential storage facilities. Under the action 14 of this package, the European Commission is also expected to present a strategic transport R&I agenda by 2016. Under action 11, the EC will propose a comprehensive road package promoting more efficient pricing of infrastructure, the roll-out of ITS, as well as creating the right market conditions for an increased deployment of alternative fuels. And to further promote procurement of clean vehicles.

To financially support the development of Smart Cities in Europe, on top of Horizon 2020 as previously stated, local and regional authorities can also use the **Connecting Europe Facility (CEF) Fund**²⁶. Originally developed as the financial backbone of the Trans European Network for Transport (TEN-T) programme²⁷, €24.05 billion²⁸ are made available to co-fund the identified TEN-T projects in the EU Member States²⁹.

²² 2011 Transport White Paper: <http://bit.ly/1NIFdsy>

²³ This is particularly the case in terms of smart pricing and road user charging, which are both currently challenged within the INI report of the European Parliament on the midterm Review of the White Paper on Transport as well as under the INI report of the EP on Sustainable Urban Mobility.

²⁴ http://ec.europa.eu/priorities/energy-union/docs/energyunion_en.pdf

²⁵ As laid down under Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure.

²⁶ Reg 1316/2013 establishing the CEF, <http://bit.ly/1HFFeYW>

²⁷ Reg 1317/2013 redefining the TEN-T network, <http://bit.ly/1O31dxv>

ANNEX II: EFSI Background

The Commission adopted the legislative proposal for the European Fund for Strategic Investments (EFSI) on 13 January. Member States unanimously endorsed it on 10 March and the European Parliament voted in committee on 20 April. Finance Ministers are now expected to approve the Regulation at the ECOFIN Council on 19 June, and the European Parliament plenary vote on the Regulation is now expected to take place on 24 June, allowing the EFSI to be operational by September as planned.

In line with the European Council conclusions of December 2014, which invited the European Investment Bank (EIB) Group to "start activities by using its own funds as of January 2015", the EIB has already announced several projects to be pre-financed in the context of the Investment Plan for Europe, in which it is the Commission's strategic partner.

Negotiations came to an end on June 24th (document available in footnote)

Smart cities are also included in the current discussion in regard to the EU urban agenda. In 2011 the European Parliament adopted a resolution³⁰ arguing for a strengthening of the urban dimension of EU policies and the intergovernmental co-operation on urban development policies, calling for a joint working programme or European Urban Agenda. In mid-2013 a group of Member States led by the Netherlands and Belgium made a proposal for an urban agenda in the context of the intergovernmental cooperation on urban development, which has been taken forward by the Lithuanian, Greek and Italian Presidencies of the Council. In late 2013 the Committee of the Regions initiated its own initiative opinion entitled "Towards an integrated urban agenda for the EU". The opinion calls for a new Integrated Urban Agenda for the EU giving the urban dimension a structural basis in European policies and legislation. After the Ministers responsible for Cohesion policy met in Athens in April 2014, the EC released its communication "The Urban Dimension of EU Policies – Key features of an EU Urban Agenda"³¹ in July 2014. This was discussed in Riga, under the Latvian Presidency in June 2015³². Although the smart cities concept is not specifically addressed, the Declaration underlines the role that local and regional authorities should play in policy development and territorial impact assessment where EU policies could provide a clear added value. Member States invites LRAs in that sense to launch partnerships in sustainable integrated urban development aiming to deliver effective urban solutions, elaborate and implement integrated local strategies well-balanced in terms of spatial planning, and to take into account the strategic objectives for a smart, sustainable and inclusive Europe.³³

²⁸ Initially of €26,25 billion euro, the CEF was cut to feed in the European Fund for Strategic Investment (EFSI).

²⁹ Further information on the identified projects: <http://bit.ly/1K408oB>

³⁰ EU Agenda and its Future in Cohesion Policy, <http://bit.ly/1LdHdsV>

³¹ <http://bit.ly/1TxFwtj>

³² https://eu2015.lv/images/news/2015_06_10_EUUrbanDeclaration.pdf

³³ Point 23-24, *ibid*.

About Polis

Polis is the leading European network of cities and regions focusing on urban transport innovation. We work together to develop sustainable urban mobility solutions for the city of today and tomorrow. Polis draws its expertise from a network of decision makers, technicians and managers working in transport authorities at local and regional level across the European Union. Building on results developed in European projects and in thematic working groups that touch upon key transport challenges, we link innovation and public policy orientations on urban and regional mobility at European level.

Polis is involved in the European Smart Cities Marketplace as manager of the Action Cluster for Sustainable Urban Mobility, and is partner in the European GrowSmarter Lighthouse project - co-funded by the Horizon2020 Framework Programme for Research & Innovation. Several Polis members are involved in the Marketplace, are partner in Smart Cities and Communities Lighthouse projects, and generally are European pioneers in making their cities smarter.

www.polisnetwork.eu | www.polisnetwork.eu/smartcities