

# JPI Urban Europe: Transition towards sustainable and livable urban areas

## Outline of the Strategic Research and Innovation Agenda

### Executive Summary

In preparing the Strategic Research and Innovation Agenda, the Scientific Advisory Board (SAB) has reviewed and deliberated upon: Results from dedicated stakeholder focus groups; reports relating to the urban research priorities of national research councils (UK ESRC, the French ANR...) and the EC-funded projects Social Polis, Urban Nexus and SEiSMiC, responses from national research councils on the SAB's Urban Megatrends report. From these deliberations and continuing from the conclusions of the Urban Megatrends, it is evident that:

- There is a common desire to support cities in improving their attractiveness and liveability whilst improving their economic competitiveness, their resilience to economic and climatic disruptions and their environmental impacts.
- There is a dearth of research relating to the rigorous definition, measurement and modelling of complex and interwoven factors influencing urban (social, economic and environmental) sustainability. Several research programs have tackled aspects of this research challenge, but none have done so in an integrated and comprehensive way.
- Without the ability to define, measure and model, it is not possible to define ambitious yet realisable context-specific targets for the improvement of cities' sustainability and liveability, nor to identify the most promising transition strategies for their achievement.
- Europe's cities are also facing some specific challenges relating to: migration and cultural diversity and the associated desire for socio-economic vibrancy and equality in cities with changing economies; the successful devolution of public services to citizens; resilience to social, economic and climatic influences, whether internal or external; accessibility to and connectivity between public utilities, services and nature in the city; open innovation in the invention and subsequent implementation of governance and policy making frameworks and supporting technologies, ensuring productive, creative and non-conflictual engagement.

From these deliberations we have developed an SRIA that consists of two instruments:

- An ambitious longitudinal research programme that is focused on the development and application of methodologies supporting sustainability assessment, the definition of transition targets and strategies to achieve them. This will be chronologically structured, enabling the outcomes from earlier projects to inform the methods employed in later projects; to ensure that our ambitious vision is realised in a cost effective way.
- Transverse projects that are directly relevant to this longitudinal programme, but which are destined to enable research teams to tackle a thematic societal urban challenge in detail.

Through careful programme management, backed up by investments in shared resources including urban observatories, datasets, models and living labs, this structure will ensure that the whole is greater than the sum of its parts; that outcomes from research projects and the methods employed in realising them are mutually informative. This will be complemented by ongoing alignment with national and institutional research programmes, to build European urban research capacity.

## Preamble

The Joint Programming Process was opened in 2008 with a Communication of the European Commission<sup>1</sup> and subsequent Conclusions of the European Council<sup>2</sup>. The setup of the Joint Programming Initiative (JPI) Urban Europe was started following respective Council Conclusions in 2010<sup>3</sup>, with a formal launch by the European Council in 2011<sup>4</sup>. For the JPI Urban Europe, Joint Programming is a structured and strategic process whereby Member States agree, on a voluntary basis, and in a partnership approach, on common visions, a Strategic Research and Innovation Agenda and joint actions for implementation.

The JPI Urban Europe responds to 'Global Urban Challenges' by developing 'Joint European Solutions'. By creating joint actions the JPI Urban Europe aims to:

- (1) enhance the capacities and knowledge for urban transition and develop urban solutions,
- (2) reduce the fragmentation in funding, research and urban development and build critical mass to realise urban transition and
- (3) increase the visibility of European urban science and innovation on a global scale.

With this, JPI Urban Europe contributes to the EU 2020 Strategy on smart, sustainable and inclusive growth. The European Commission, in its Recommendations from 2011<sup>5</sup>, stresses the relevance of the JPI Urban Europe and its importance to support the transition of urban areas, as cities are innovation hubs and therefore spearheads of growth and competitiveness.

The JPI Urban Europe has now developed a framework for a common Strategic Research and Innovation Agenda with medium and long-term research needs and objectives in the area of urban development in the context of increasing globalization, including instruments for implementation. The European Commission and the European Council's High-Level-Group for Joint Programming emphasise the importance of a Strategic Research and Innovation Agenda as an integral element of the Joint Programming Process. For the JPI Urban Europe the starting point for the Strategic Research and Innovation Agenda are the findings of its Urban Megatrend Study<sup>6</sup>. This framework has been inspired by high level scientists active in the Scientific Advisory Board of the JPI Urban Europe<sup>7</sup> and co-created by stakeholders, including city authorities, city networks, companies, NGOs, etc., in a series of consultation workshops. The Strategic Research and Innovation Agenda of JPI Urban Europe therefore considers the diversity of research needs across Europe, and decidedly opens the door for small and less RTDI intensive countries to join the activities of the JPI Urban Europe.

The overarching endeavour of the Strategic Research and Innovation Agenda is the alignment and coordination of regional, national and European research and innovation in the field of urban development. This includes the alignment of

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<sup>1</sup> EC, Towards joint programming in research: Working together to tackle common challenges more effectively, COM(2008) 468 final, Brussels, July 2008.

<sup>2</sup> 16775/08

<sup>3</sup> 10246/10

<sup>4</sup> 17424/11

<sup>5</sup> EC, Commission recommendation on the research joint programming initiative „Urban Europe – Global urban challenges, joint European solutions’, C(2011) 7406 final, Brussels, October 2010.

<sup>6</sup> JPI Urban Europe (2014): JPI Urban Europe: Policy Paper - A Screening of Urban Megatrends. <http://jpi-urbaneurope.eu/documents/>

<sup>7</sup> O. Coutard, G. Finnveden, S. Kabisch, R. Kitchin, R. Matos, P. Nijkamp, C. Pronello, D. Robinson: Urban Megatrends: Towards a European Research Agenda; A report by the Scientific Advisory Board of JPI Urban Europe, March 2014

- national and regional research and innovation policies and programmes (via targeted and open calls),
- institutional funding (via Urban Europe Research Alliance) and
- research infrastructures (via Urban Models, Observatories, Datasets and Living Labs).

Through the alignment principle, JPI Urban Europe contributes to the development of a European Research Area and attempts make the whole of European urban RDTI more than the sum of its parts.

The Strategic Research and Innovation Agenda will be finalised in autumn 2015, and will include an implementation plan, as this is one of the most critical issues, also emphasised by the GPC in its biannual reports<sup>8,9</sup>. It will provide the basis for more intensive cooperation with the European Innovation Partnership on Smart Cities and Communities, the European Urban Agenda and with Structural Funds. It will ensure that JPI Urban Europe can set the scene for a new paradigm in RDTI, embracing the complexity of the grand challenge of urbanisation, and bridging the innovation space from strategic research to implementation.

## The Challenges of an Urbanized Europe

With the 21st century we have entered *the urban age*. The megatrend of urbanization is the result of the sigmoidal growth in world population and rural-urban migration based on the expectations to benefit from the higher socio-economic opportunities in urban agglomerations. This goes along with a diffusion of an urban way of life that reaches far beyond cities and affects all corners of human activities and societal practices. At the same time this urbanization leads to **manifold challenges** like severe environmental impacts, the need for jobs and an urban economy that allows for a high quality of life and the consequences of demographic developments and the resulting urban dynamics regarding urban sprawl, social inclusiveness or the provision of urban services and infrastructure. Prognoses indicate an even increasing gap between growing and shrinking urban areas across Europe. This might result in an increasing divide in the economic development of urban areas in Europe which calls for dedicated measures and new solutions to manage both growth and shrinkage in a sustainable way.

At the same time **cities are diverse** in their forms and organisation, spatial dynamics, local economies, governance structures, sociotechnical infrastructures, cultural heritage; and their footprints extend far beyond metropolitan areas. Although we need to anticipate global developments and conditions we have to act upon local conditions and requirements. On the European scale the different urban dynamics in Eastern and Western European countries as well as the different needs of Northern and Southern European cities have to be addressed and solutions are required that fit to local and regional circumstances. The urban pattern in Europe is characterized by its high number of small and medium sized cities which show different constraints and opportunities than most of the capital cities. Since these smaller cities play a pivotal role for the regional development solutions are needed to support their development as well.

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<sup>8</sup> ERAC-GPC 1310/14

<sup>9</sup> ERAC-GPC 1301/13

## The Science and Policy Debate on Urban Sustainability

In its latest progress report of the UN-HABITAT II implementation<sup>10</sup> (July 2014), UN-HABITAT clearly emphasizes to strengthen urbanization as the engine for sustainable global development and to overcome the current unsustainable model of urbanization. Cities and towns contribute significantly to the economic growth – about 80% of GDP and of new jobs are generated in urban areas with only 54% of the world’s population. While urbanization brings growth and development, helps to reduce the vulnerability of rural communities and enhances productivity, cities have not succeeded in solving major challenges, such as urban sprawl, congestion, air pollution, poverty, segregation or CO2 emissions. The urbanization model in place is still not sustainable and according to the report new conditions need to be defined to achieve inclusive, people-centered and sustainable global development.<sup>11</sup>

This line of argument is also central for the European debate. The **European Urban Agenda**<sup>12</sup> which is currently under development takes up the European sustainable urban development model of the **Cities of Tomorrow Report**<sup>13</sup>. It is concluded that the integration of policies across sectors is difficult to achieve and multi-level governance is in many cases not functioning. Initiatives such as the **EIP Smart Cities and Communities** and the overall objective for **Europe 2020** is thus relevant for this integrative activity. This calls for new policy action which should better coordinate policies, actors and governance levels and a better understanding of urban development contexts for policy making is needed. European policy should therefore support cities capacity for transition and structural change and bring EU policymaking closer to the citizens.

For developing such new cooperation mechanisms and policy frameworks the conclusions from the EU-funded project **Urban Nexus**<sup>14</sup> are particularly poignant. The project characterizes sustainable development as a super-wicked issue that results in an implementation gap. They call it super-wicked since it is complex in nature and the challenges are fluid at the same time. However, proposed solutions and remedies are still mainly sectoral with the risk that they produce counter-productive activities. So far this resulted in a failed ambition of policy to react to the demands of the heterogeneous population and other affected parties. Consequently a transition is needed from a current (technocratic) policy process to a broader societal dialogue that recognizes the validity of multiple, subjective stakeholder viewpoints. In addition the implementation gap between science, policy and societal needs have to be addressed and closed. The advantage of ‘multiple pathways’ to sustainable development needs to be taken and a shift from dialogue to action is demanded. Finally it is stated that the implementation of new policies and solutions is not so much an issue of a lack of funding but due to a high fragmentation of policies and funding that work contradictory because of sectoral competition.

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<sup>10</sup> Progress to date in the implementation of the outcomes of the second United Nations Conference on Human Settlements (Habitat II) and identification of new and emerging challenges on sustainable urban development, Report of the Secretary-General of the Conference, July 26<sup>th</sup> 2014

<sup>11</sup> UN, Progress to date in the implementation of the outcomes of the second United Nations Conference on Human Settlements (Habitat II) and identification of new and emerging challenges on sustainable urban development. Report of the Secretary-General of the Conference, A/CONF.226/PC.1/5, 26 July 2014, United Nations General Assembly

<sup>12</sup> DG Regio: The Urban Dimension of EU Policies – Key Features of an EU Urban Agenda, EC COM(2014) 490 final, July 2014

<sup>13</sup> DG Regio: Cities of Tomorrow – Challenges, Visions, Ways Forward. European Commission, Directorate General for Regional Policy, Oct 2011

<sup>14</sup> Synthesis Urban Nexus Results, Final Conference, June 18<sup>th</sup> 2014

## JPI Urban Europe: Global Urban Challenges – Joint European Solutions

The ongoing policy debate on urban development clearly indicates that (1) sustainability is still (or again) high on the agenda, (2) efforts have to be intensified and enlarged to develop new concepts and solutions that go beyond current approaches to achieve sustainable pathways and (3) for these solutions the fragmentation in policy and in research has to be overcome and multi-stakeholder involvement in a process of co-creation has to be ensured.

The **Joint Programming Initiative Urban Europe** has the ambition to support the transition of European urban areas into sustainable and livable ones through establishing a transnational mission oriented research and innovation programme and acting as the European research and innovation hub on sustainable urban development towards international cooperation.

We know that **cities are complex systems**, or indeed systems of systems, whose emergent physical, social and economic structures depend on the interactions of the firms and individual that inhabit them, as well as on their interactions with other cities in this era of globalization. Cities are incredibly vibrant springs of education, employment and commerce, social encounter and recreation; they are the nerve centres of the modern global economy and as such they continue to attract migrants in search of a better quality of life for themselves and their families; these migratory flows being increasingly from poorer to wealthier more economically productive cities. This economic and social activity entails the metabolism of energy, matter, finance and information<sup>15</sup>. The throughput of these resources can have negative implications for raw materials depletion, greenhouse gas emissions and climate change. To minimize this dependency, we need to radically improve our understanding of how the functioning of our cities can be made more sustainable and resilient to climate change. Urbanisation brings with it other societal challenges. Increased rural-urban and transnational migration in conjunction with economic growth can lead to increased disparity in income and in social inequality, it can adversely affect social capital and cohesion and in the worst of cases exclusion of access to home ownership, education, welfare and healthcare. We need to better understand how we can balance economic growth with social and economic equality, to balance vibrancy with accessibility, within carefully defined and measurable environmental limits.

The demand for new urban governance concepts, new approaches for urban planning and development following such an integrated approach has been confirmed by various city representatives and local and European policy makers<sup>16</sup>. Economic disparities that lead to social ones, the pressure on urban development due to financial constraints and high in-migration, the reinforcement of the European economy and the creation of new jobs, the call for more social innovation and an increased participation of civil society up to environmental risks due to climate change and resource scarcity have been raised as high priority issues that need multi-stakeholder involvement and a better understanding of urban complexity.

Hence, through a better coordination of national research and innovation funds and the application of dedicated instruments and measures the following **objectives** should be achieved:

- Enhancing capacities and knowledge for urban transition through developing (radical) new ideas and solutions that meet the needs of cities and citizens

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<sup>16</sup> Panel Discussions at the Urban Megatrend Conference organized by JPI Urban Europe and the European Commission, March 27<sup>th</sup> 2014

- Reducing the fragmentation in funding, research and urban development and building critical mass to realize urban transition
- Increasing the visibility of European urban science and innovation at the global scale and promoting European expertise and solutions

To reach these targets a **set of principles** has been identified which build the fundament of the JPI Urban Europe programme:

- **A mission- and demand-oriented, long-term programme taking up city and societal needs.** To achieve sustainability requires a long-term strategy which sometimes conflicts with very short term needs of urban governance or civil society. A mix of activities has to be ensured that follows a long-term vision, gives room for radical new approaches but supports short term action and strengthens urban innovators at the same time.
- **Take advantage of interdisciplinarity to raise the level of understanding of urban complexity** and generate radical new knowledge and concepts to tackle the urban challenges. The expertise of the various urban-related disciplines needs to be exploited much better through intensifying interdisciplinary research. Scientific, technological, economic, environmental, social, cultural, planning, arts – all these fields of endeavour provide capacity that should be used more effectively to address the increasingly pressing need to make our cities more vibrant and resilient hubs of economic and social activity, whilst minimizing unintended social and environmental consequences.
- **Transdisciplinarity as key for ensuring impact and relevance.** Research has to provide conceptual capacities and evidence for new urban policies and strategies, and by that enhance cities' capacities for transition. This requires a collaboration between interdisciplinary research teams, companies, cities and others urban stakeholders; to ensure the relevance of research, that the entire innovation cycle is addressed, that a milieu for co-creation is established and that outcomes successfully inform policy and implementation and subsequent monitoring of effectiveness. These aims may be supported through shared resources including integrated urban models, datasets, urban observatories and urban living labs.

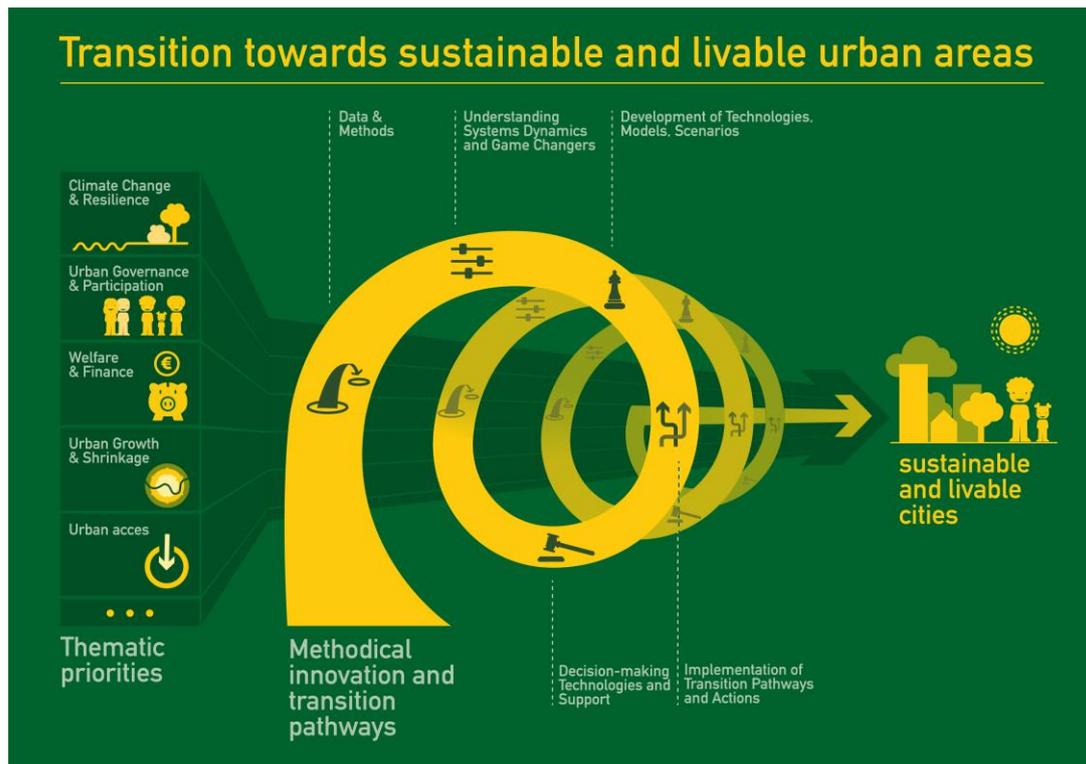
## A Programme on Transition towards Sustainable and Livable Urban Areas

Translating these into a coherent Strategic Research and Innovation Agenda (SRIA) and identifying its research priorities also requires a process of co-creation. The involvement of urban stakeholders and the national research and innovation community is needed, as is commitment towards its subsequent implementation; the reflection of these needs and priorities with a panel of distinguished scientists provides the opportunity to go beyond current concepts and boundaries.

Anticipating the ongoing policy debate, national urban research strategies and the outcomes of recent EU-funded projects and initiatives<sup>17</sup>, a framework has been drafted for development into the Strategic Research and Innovation Agenda of JPI Urban Europe. This is set out below.

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<sup>17</sup> In particular the EU-funded projects SEiSMiC and Urban-Nexus are considered. The conclusions of the Urban-Nexus project ([www.urban-nexus.eu](http://www.urban-nexus.eu)) provide an important reference for the elaboration of the research priorities. In addition the



## Transitioning towards sustainability & livability

The dominant theme emerging from debates of the challenges facing European urban society is the need to improve upon its sustainability, in all of its complexity; to better understand how we can balance economic growth with social and economic equality – to balance vibrancy with accessibility, within carefully defined and measurable environmental limits. The core issues at hand are

- enhancing our understanding of the complexity of urban sustainability in all its dimensions (social, environmental, economical)
- providing a framework to assess and monitor urban sustainability
- identifying and quantifying the levers that influence sustainability and its constituent factors as well as the interrelationships between them
- preparing and testing context-specific transition strategies
- providing tools and methods that support cities in this decision making process as well as to support the implementation of the most promising strategies
- taking advantage of new data sources, the opportunities provided by big data and their potential for urban decision making and governance

There is at present no theoretically rigorous and empirically grounded **definition of and framework for sustainability**, accounting for its social, economic and environmental factors. The development of an advanced framework is therefore proposed to define and measure sustainability and to determine where a city lies in its transition towards the achievement of its sustainability goals; be these short, medium or long term.

There have been numerous endeavours to rate city sustainability, with environmental sustainability and its myriad potential factors having received particular attention; yet we still do not have a comprehensive and theoretically rigorous understanding of and rating system for characterising city sustainability. Without this we cannot meaningfully identify what future targets should be and how cities should best transition towards the achievement of these targets.

These **transition targets** should be ambitious yet feasible as well as inclusive; representing for example the range of city specialisations (culture and tourism, industry, innovation...), spatial scales (small to medium sized cities, mega-cities and city regions), economic growth trajectories (declining and depopulating, through stability to growing and populating) and geographic contexts (coastal, inland, mountainous...) and the interests of the range of core stakeholder groups.

Of equal importance to identifying, understanding and quantifying the factors influencing all key aspects of sustainability is identifying, understanding and quantifying the **policy interventions that can bring about change**, be these positive or negative, and the potential interrelationships between them. These interventions and instruments may for example be social (peer influences), educational (public engagement; primary, secondary and tertiary teaching), socio-technological (more efficient utilities and transport infrastructure; e-governance tools), regulatory (planning instruments; construction regulations...) or financial (taxation, subsidy, loan). Whilst these may take many forms, it is important to understand where the greatest potentials, or indeed risks, lie to help prioritise transition strategies.

This requires a **decision making framework** that enables the effectiveness of city-specific transition strategies to be studied; to identify the most promising transition pathways from cities' current to target states. To inform urban governance and policy making processes, it is important that relevant stakeholders have access to and utilise decision support systems with which to test and compare alternative strategies to improve services and performance. These services might relate to healthcare, mobility, welfare, energy supply; whilst performance might relate to social (cohesion, inclusion, housing provision...), economic (employment levels, income equality, local authority indebtedness...) or environmental (greenhouse gas emissions, urban heat island...) measures. New models, methods and tools need to be investigated to provide such a framework for integrated urban decision support.

Such decision support systems require that data of different scales (region, city, district, street, building) and rates of change (from slow changing infrastructure to instantaneous flows of traffic, energy and water) be managed and integrated. Science is at an embryonic stage in investigating the potential of **big data for urban development and urban economy**. Data acquisition, analysis and management for decision making as well as for urban governance, needs to be investigated support the development and implementation of new concepts for integrated urban planning and governance to support sustainable urban transitions.

### Thematic Priorities

Transition towards sustainable and livable urban areas requires a focused longitudinal programme of research, developing new methods, tools, concepts and processes. But this research needs to be complemented by related transverse research projects on themes of particular importance for Europe's urban society. These thematic urban challenges also aim to support open innovation in the

invention, development and application of enabling technologies and processes; likewise to encourage the co-creation and execution of new urban plans and policy measures.

The following themes have been identified as particular priorities, where JPI Urban Europe and the research directly or indirectly under its auspices, can make a significant and lasting contribution:

**Vibrancy in changing economies:** Although the urban fraction of Europe's population is not expected to grow significantly (it is already large), there is and will likely continue to be significant migration from cities in shrinking economies to those in growing economies; particularly from countries in Southern and Eastern Europe to their Northern and Western counterparts. New strategies are needed to support shrinking cities to prevent excessive decline; indeed to reverse the process, proactively creating new growth opportunities. This is counterbalanced by the need for strategies to support cities in taking advantage of the increasing cultural diversity resulting from net in-migration and thus to reduce the risks of social polarisation and exclusion. In short we need to find new ways of achieving and sustaining socio-economic vibrancy and equality in cities with changing economies.

**Welfare and finance:** Stimulated by post-2008 austerity measures, civic services and the size of the welfare state are reducing as "big society" is being increasingly called upon to fill the void through bottom-up voluntary efforts. This leads to changing roles of public services and the need to redefine the contribution of and cooperation with community-based activities. It also results in the call for new business models to finance sustainable urban transitions. The role of social entrepreneurship, local economy and shared economy is under debate and frameworks are needed to tap the full potential of these opportunities.

**Resilience:** Cities are subject to external and internal influences that can have transformative impacts on their fortunes, even for human life. They may be subjected to: extreme weather events (storms, floods, heat waves exacerbated by their urban heat islands); regional, continental or global economic downturns; social unrest, even terrorism. In this era of globalization, climate change and cultural diversity cities need to be agile. They need to be able to accommodate and proactively respond to disruptive events. This requires that disruption are foreseen and planned for, that necessary infrastructural and regulatory changes are implemented and that governance processes are in place to manage transitions to new target states following from these events.

**Accessibility and connectivity:** Cities' economic competitiveness and citizens' quality of life are directly influenced by the accessibility of or connectivity with urban amenities and services within and beyond cities. Infrastructural, technological and social developments are having transformative impacts on this connectivity. These are yielding: efficiency improvement in last mile delivery of goods; efficiency and safety improvements arising from driverless vehicles; efficiency improvements due to on-line shopping, etc. New forms of organization and management, new services and business models are being experimented with in response to market pressures, environmental regulations, or in expectations and practices of urban dwellers. Understanding the sectoral changes at stake, their interrelationships and their overall effects on urban performance is needed.

**Urban Governance and Participation:** Strategies to transition cities to a more sustainable and resilient future state will, if they are to be successfully adopted and implemented, be defined as part of a collaborative process involving all key stakeholders, from public and private organisations to (representative) individual citizens. But this requires new collaborative governance and policy making frameworks to ensure productive, creative and non-conflictual engagement. The utilization of big

data, new enabling technologies and methods to support these participatory approaches has particular promise here. Linked to this is the need for better and better managed participatory planning and design in the quest for optimal solutions to satisfying demands for new public space, affordable housing, the management of urban sprawl or the provision of cost- and energy efficient urban infrastructure and systems.

## Implementation of the JPI Urban Europe Programme

The Strategic Research and Innovation Agenda outlined above combines an ambitious longitudinal research programme with a series of smaller transverse thematic research project. The longitudinal programme, which is focused on the development and application of methodologies supporting sustainability assessment, the definition of transition targets and strategies to achieve them, will be chronologically structured. This will enable the outcomes from earlier projects to inform the methods employed in later projects; to ensure that our ambitious vision is realised in a cost effective way. Transverse projects are directly relevant to this longitudinal programme, but are destined to enable research teams to tackle a particular thematic urban challenge in detail.

The success of the JPI Urban Europe research and innovation programme will require careful **programme management** to ensure the cross fertilization of research results and methods amongst and between both transverse and longitudinal programme projects. Our vision would also be considerably through careful **strategic alignment** with national research strategies, national funding programmes and those of related research institutions and organisations; as well as the alignment of research infrastructure. With this ambition a set of instruments has been identified, some of which are already under implementation:

- **Joint Calls:** The development and execution of joint calls is an essential measure for a targeted implementation of the Strategic Research and Innovation Agenda. The two pilot calls (2012, 2013) have provided useful experiences in designing the framework conditions for a demand-oriented, trans- and inter-disciplinary programme. With an increasing number of funding agencies joining these joint calls, dedicated research questions can be promoted to a wider European audience; addressing the diversity of Europe's cities and enabling the best possible European talent to be brought to bear in tackling their challenges.
- **Alignment of national programmes:** Although joint calls are crucial to start multi-national cooperation, the ambition is to establish an alignment with national programmes to tap the full potential of joint programming. Based on the established cooperation procedures additional bi- and multi-national calls are envisaged, opening up national programmes for international cooperation and aligning these programme strategies and priorities with the SRIA.
- **Urban Europe Research Alliance (UERA):** Besides these funding programmes substantial national resources are allocated directly to research institutions. Universities and research organisations can decide on their strategic research priorities and activities. Building upon and aligning these resources and competences with topics of common strategic importance will strengthen the overall capacity of the European Research Area. 2013 saw the launch of the Urban Europe Research Alliance; allowing member organisations to contribute to the SRIA development and jointly defining procedures and targets. It is expected that the UERA –

once fully in force – will support community building, foster transnational exchange of knowledge and people and amplify the implementation of the SRIA.

Sustaining successful programme management and strategic alignment will require careful and continuous coordination, to ensure that the whole is greater than the sum of its parts; that knowledge and resource are successfully exchanged, that research activities are well aligned, that individual and yet closely interrelated research projects building upon one another. Strategic alignment will be the province of the Governing Board of JPI Urban Europe, whereas programme management will be ensured by the Management Board, with the Scientific Advisory Board maintaining oversight of and providing strategic input to these activities.

Strategies and tools for programme management will include:

- **Workshops:** strategically timed, research teams will be requested to present their projects' aims and objectives, the methodologies employed and, depending upon the stage of advancement, the results derived from them. These introductory sessions will be followed by workshops focussed upon discussing, sharing and improving upon research methodologies and the results derived from them. A project will also be dedicated to the development of an IT platform for the archival and open exchange of research data (albeit respecting confidentiality, as appropriate).
- Dedicated **dissemination activities** will also be coordinated to bring together scientists, urban policy makers and urban actors with a view to building a strong European community on urban sustainability and livability and to support sustainable urban transition.
- **Research infrastructures:** *Urban Observatories* in strategic located cities will support the acquisition and management of detailed longitudinal datasets to: deepen our insights in to the functioning of cities; support the calibration and validation of *urban decision support* tools. *Urban Living Labs* and will be strategically used for testing and validating research results, involving relevant urban stakeholders; to prepare for full scale implementation of new solutions.

The integrated approach which is emphasized in the JPI Urban Europe framework complements research activities supported in other European or international programmes. JPI Urban Europe aims therefore to take advantage of **synergies with other urban-related programmes**, in particular H2020, URBACT or ESPON and assessing opportunities to team up with European Structural Funds, EIP Smart Cities and Communities, The World Bank or International Development Banks for larger-scale implementation or other JPIs for dedicated joint calls and actions. In addition an assessment will be performed to build relationships to international programmes and initiatives such as UN-HABITAT or the Belmont Forum.

## Impact

**Support inclusive, sustainable and green growth through urban innovation:** JPI Urban Europe aims at contributing to the European Agenda and the Europe 2020 Strategy<sup>18</sup> by facilitating urban social and technological innovation and establishing competitive, inclusive and innovative urban areas. In

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<sup>18</sup> EC, Europe 2020: A strategy for smart, sustainable and inclusive growth, COM(2010) 2020 final, Brussels, March 2010.

this context, urban development provides great potential for innovation and the commercialisation of new services, systems, or products. To manage and realise urban innovation the engagement and contribution of companies is indispensable, as is alignment with the 'smart cities' initiatives. With our holistic approach JPI Urban Europe seeks to ensure that cities' social and economic needs are consistently addressed in its research and innovation activities; ensuring the relevance and continuity of results through an improved understanding of users' needs, business opportunities and the policy measures needed to maintain socially and economically vibrant and inclusive environments, whilst maximizing their resilience and sustainability; to provide environments that attractive talent and investment, so enhancing European competitiveness.

**Improve quality of urban life:** In addition to helping to sustain socially and economically inclusive environments, we wish to enhance Europe's position as the home to many of the world's most livable cities; to work towards the improvement of quality of life for all. Through joint efforts to reduce the environmental impact of urban activities and its infrastructure on the one hand, and to improve the social and societal environment on the other, we aim to support the achievement and maintenance of places where all people can engage, where societal and cultural life prospers and urban services, affordable housing and jobs are accessible for all.

**Raise the scale and ambition of research in the urban domain:** Although there are many links to urban research in Horizon 2020, there is no urban challenge defined so far. JPI Urban Europe emphasises the importance of comprehensive urban research and innovation and provides an integrated framework for future activities. This framework also serves to align and reduce fragmentation in research funding, to deliver an ambitious and integrated programme of research destined to support Europe's cities in setting and achieving ambitious yet realisable transition targets; to improve their social, economic and environmental performance.

Related to international activities, JPI Urban Europe has the ambition to increase the international visibility and scientific excellence of European urban research and innovation, and to enhance the impact of these activities far beyond Europe's boundaries. In particular we aim to:

- **Increase societal relevance:** The participatory and interdisciplinary approach will enhance and consolidate current urban research. Supporting evidence based policy measures and decision making is at the heart of this initiative, to ensure the applicability and utility of the developed knowledge.
- **Ensure long-term continuity:** Urban development has to be addressed in a comprehensive way and with a long-term perspective. Limitations of short-term programmes and activities need to be overcome by a long-term commitment and appropriate framework conditions. JPI Urban Europe aims at providing such a framework for international cooperation, establishing long-term partnerships and accompanying implementation measures.
- **Strengthen our global position:** The platform JPI Urban Europe will be used to increase our visibility on the international stage. Promotion of scientific expertise and knowledge will not only strengthen our scientific profile but also result in economic benefits to European products and services. Sustainable partnerships between academia and business as well as with cities and civil societal organisations will be supported to ensure the best possible knowledge transfer.