

Final Report BOOST

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Section 4.1 Final publishable summary report

Executive summary

JPI Urban Europe is based on the voluntary commitment of 14 members to work together and pool national research efforts on sustainable urban development. In order to further strengthen the establishment and implementation of this initiative, JPI Urban Europe has been awarded funding from the European Union's Seventh Framework Programme. The resulting project is called BOOST – Cooperation in urban science, technology and policy. It aims to:

- · coordinate, support and strengthen the further establishment of JPI Urban Europe
- facilitate effective internal and external communication of this initiative
- BOOST's goals include establishing an effective governance structure, addressing scientific knowledge gaps, facilitating networking, launching a Research Alliance, outreach to the scientific, policy, industry and civic actors involved in urban development.

Results of BOOST

- Main result: Strategic Research and Innovation agenda including a multi-annual call agenda and implementation plan for the next development phase of JPI Urban Europe and the further joint calls.
- The co-creative process that was established for developing the SRIA which built upon a wider stakeholder involvement from science, cities and society. This process provides a platform for the programme management and the further strategic development of JPI Urban Europe.
- A mapping of urban related research projects funded from the European Framework Programmes FP5, FP6 and FP7 providing a thematic and structural reference for the requirements and opportunities of a transnational research and innovation programme
- Two high level events to promote JPI Urban Europe, communicate the strategic aims and priorities and connect with the JPI Urban Europe research and innovation community, urban stakeholders and policy makers
- Alignment strategy, summarizing the national funding programmes related to JPI Urban Europe, proposing an alignment framework and identifying possible alignment actions
- The strategy and roadmap of the Urban Europe Research Alliance, identifying common ground for future cooperation, selecting thematic priorities according to the SRIA themes
- Strengthening and enlarging the working group of funding agencies that provided the basis for 1 joint call (2nd pilot call) and the preparation of an ERA-NET Cofund on Smart Cites and Communities¹
- Platform to connect the JPI Urban Europe projects, starting with a projects meeting to facilitate exchange on methods, results, experiences and gain feedback from the project for the further development of JPI Urban Europe
- Extending the JPI Urban Europe network towards Eastern & Southern European countries. As a result Slovenia joined as a full member in 2015; Poland, Romania, Portugal, Latvia have joined as observers or are participating in specific activities, such as the funding agencies working group.
- Relationship building with European and international organisations such as Eurocities, URBACT, UN-Habitat but also from New Zealand and China.

Conclusions for JPI UE and further work

- How did BOOST help JPI UE as a whole: According to the given results it becomes obvious that BOOST provided the frame for the strategic development of JPI Urban Europe, the realization of first joint actions and the development of concepts for future transnational cooperation. Based on these results and concepts JPI Urban Europe enters now the next development phase from the pilot phase into the implementation phase.
- Besides this, BOOST allowed to develop, extend and strengthen the JPI Urban Europe research and innovation community. Urban stakeholders – from science, cities, society and business – were connected, involved and informed. Even more, the joint calls allowed establishing a project portfolio of transnational projects which provides the basis for future research activities. This platform of co-creation will be maintained and further developed for programme management.
- Further work: implementation of SRIA and EXPAND proposal. The Management Board together with the
 Governing Board and the funding agencies is now starting with the SRIA implementation. Based on the
 experiences of BOOST in developing of joint calls, the lessons learned for new instruments and the demands
 of the JPI Urban Europe research and innovation community first implementation measures are set up. In

¹ During the first year of BOOST it became clear that the Governing Board of JPI Urban Europe had the opportunity to enter an ERA-NET Cofund on Smart Cities & Communities instead of performing a third pilot call. This ERA-NET Cofund will receive their own financing and will therefore be performed separately of BOOST. Together with the Project Officer it has been decided that the task on Call Secretariat for Call III would not be performed. The Person Months originally dedicated to the Call Secretariat for Call III have been rescheduled to the new task 'Long-term Call Planning' and additional efforts in 'Programme Management'.

addition the need for further conceptual development and piloting of such new concepts and instruments has been addressed in a follow-up proposal which has been submitted to the EC as EXPAND.

Summary description of project context

Joint Programming

JPI Urban Europe was launched in 2010 with the ambition to set-up a research and innovation programme on sustainable urban development, align national funding programmes, competences and capacities to strengthen urban research and innovation in Europe and establish as the European gateway on international level. The attractiveness of Joint Programming lies in its structured and strategic process, whereby Member States voluntarily agree to work in partnership towards common visions, encapsulated in a SRIA and implemented through joint actions.

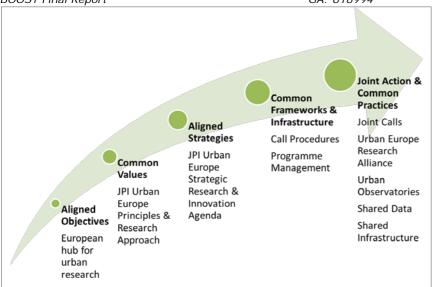
The JPI Urban Europe responds to *Global Urban Challenges* by developing *Joint European Solutions*. As a transnational initiative JPI Urban Europe aimed at connecting the European and national / local level and adding value through joint actions focusing at:

- Enhancing the capacities and knowledge on transition towards more sustainable, resilient and liveable urban developments.
- Reducing the fragmentation in funding, research and urban development; to build critical mass to realise urban transition; and to
- Increasing the profile of European urban science, technology and innovation on the global stage.

Through these aims JPI Urban Europe wants to contribute to the EU 2020 Strategy on smart, sustainable and inclusive growth and support the transition of urban areas – Europe's hubs of innovation, growth and competitiveness.



The overarching principle of JPI Urban Europe is that it actively supports the alignment and coordination of regional, national and European research, technological development and innovation in the field of urban development). Achieving this requires a cooperative alignment process defining joint objectives, developing common values; agreeing on a joint strategy which builds upon national strategies and strengths to define common frameworks for collaboration that finally provide the operational basis for joint actions.



Need for action on sustainable urbanisation

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 in the search for improved socio-economic opportunities in urban agglomerations. In 2007 the urban fraction of the 6.7B strong global population reached parity with the rural for the first time. By 2050 it is projected (assuming medium fertility) that the population will increase to 9.5B and its urban fraction to three quarters. Since urban areas are responsible for around 80% of global economic activity and a similar fraction of resource use, it follows that – under business as usual conditions – urbanisation will impose greater stress on the natural environment; and this at a time for which the intergovernmental panel on climate change is counselling the reduction of greenhouse gas emissions to 40–70% of 2010 levels by 2050, and near-zero emission by 2100, to limit global mean temperature rise to 2°C. To achieve greenhouse gas emission reduction targets will require transformative research to understand how cities' functioning can be decarbonised; replenishing not reducing natural capital in a variety of resources. But urban areas and societies are not only a substantial part of contemporary planetary challenges; as hotspots for innovation and technological development, and resource nodes (particularly financial), they have considerable potential resolve them.

Some 73% of the European population was considered urbanized in 2010. In contrast with for example Asia and South America, Europe has relatively few cities with more than 1M inhabitants and a relatively high number of small and medium sized cities (SMCs). The larger urban areas are also mainly formed of amalgamated SMCs. Urban Europe thus poses some rather specific constraints and opportunities, in particular due to a relative abundance of functional urban regions rather than of standalone or discrete administrative territories.

Comparatively speaking, European urban areas are also historically, architecturally and culturally rich, offering attractive urban and green spaces, so that quality of life is in large part considered to be high. They are also embedded within states that traditionally have highly developed welfare services. Europe's urban areas are also particularly **diverse** in their forms and organisation, spatial dynamics, local economies, governance structures, sociotechnical infrastructures, cultural heritage. Notwithstanding higher order (national, continental, global) influences, actions will ultimately need to be integrated in complex local conditions and requirements so that responses (strategies to bring about performance improvements) fit to their contexts.

The 2008 crisis hit European urban areas hard and the aftermath still presents major challenges for European urban economies, overall sustainable development and economic structures, since it resulted in increased unemployment and redirected priorities from ongoing urban development. These challenges and the opportunities available to tackle them depend on, for example, planning and management capacities and economic structures.

Hence, there is a need to maintain economic competitiveness in this era of global competition and a shift in economic and political power from G7³ to E7⁴ states, as well as to maintain, even to improve upon, citizens' social welfare. This latter is complicated by a number of factors. In general, urban Europe suffers an increase in inequalities concerning

² Note that *urban* here refers to an extremely diverse set of settlement configurations, with a rough common denominator qualified by agglomerations by 2000 inhabitants and above.

³ The Group of Seven (G7, formerly G8) is a governmental political forum of leading advanced economies in the world. It was originally formed by six leading industrial countries and subsequently extended with two additional members, one of which, Russia, is suspended. Since 2014, the G8 in effect comprises seven nations and the European Union as the eighth member. https://en.wikipedia.org/wiki/G8_(forum)

⁴ The E7 is a group of seven countries with emerging economies. The E7 are predicted to have larger economies than the G7 countries by 2020. https://en.wikipedia.org/wiki/E7_(countries)

e.g. housing, education, work, health, transport/mobility, and ICT. Marginalisation and polarisation tends to affect specifically youth, migrants, and ethnic minorities.

Reflecting the contrasting developments of south-eastern and north-western Member States, Europe continues to experience considerable migratory flows. Young, mobile and often well-trained people are leaving their home regions in search of employment and educational opportunities; changing the demography of their home regions, reducing the skill base and exacerbating economic decline, whilst increasing sociocultural diversity as well as opportunities for growth and innovation in their destination cities. Meanwhile, less mobile youth in declining economies are increasingly faced with long term unemployment prospects and insufficient opportunities and supportive structures to help themselves – to innovate and exercise their entrepreneurial capacity. Reflecting low fertility rates and increased life expectancy, Europe's population is also aging. This places greater pressure on the welfare state and also poses challenges in terms of inclusion and connectivity. As wealth is increasingly concentrated, income inequality and levels of poverty are increasing; leading to social polarisation and exclusion. Finally, although functional redevelopment of land-use increases, urban sprawl remains a challenge. This is a challenge not only for a resource efficient public service but also for e.g. biodiversity and water sustainability.

These complex challenges require coordinated efforts in Europe and globally, aligned strategies and joined forces to develop, pilot and implement new solutions and a strong commitment from all stakeholder groups to realise the ambition of sustainable and liveable urban areas.

Objectives of BOOST

To support this ambition the project BOOST was set-up with the objective to boost the establishment of JPI Urban Europe, the development of its strategy and joint implementation actions. In detail the main objectives were

- to enhance the effectiveness of the JPI Urban Europe governance structure in particular by enhancing the capacities of the Management Board, establishing a secretariat and providing a frame for managing the complex network of the JPI.
- to support the strategic development of JPI Urban Europe by developing the Strategic Research and Innovation Agenda,
- to maintain and extend stakeholder relationships to various organisations related to urban matters
- to bridge scientific gaps, in particular by fostering integrated approaches for urban development, the consideration and connection of technological and social innovation as well as the circular innovation models
- to enlarge the group of partner countries in JPI Urban Europe by at least recruiting on Eastern European country
- to enhance the scope of funding by launching two additional calls
- to start European alignment by establishing a cooperation framework and platform for funding agencies
- to support the establishment of a Urban Europe Research Alliance and facilitate an alignment of RTOs and universities across disciplines and countries
- to raise visibility of JPI Urban Europe, its strategy and research priorities as well as its joint actions in Europe and beyond
- to assess opportunities for joint actions with international programmes, such as China, India or New Zealand

Description of main S&T results/foregrounds

BOOST has successfully supported JPI Urban Europe and the development of the Strategic Research and Innovation Agenda. The main results are described here per work package. After this a reflexive conclusion is given of the BOOST project as a whole.

Work Package 2: Strategic Research and Innovation Agenda

The Strategic Research and Innovation Agenda (SRIA) represents the long-term strategy and program for JPI Urban Europe during 2015-2020. It is based on the JPI Urban Europe mission and proposes a general framework for the JPI Urban Europe research and innovation programme, including a general research approach, thematic priorities and an implementation plan regarding timelines and instruments. Developing a strong and attractive profile requires a clear positioning of JPI Urban Europe in terms of research approach, research areas and instruments in the context of existing national and European activities.

Integrated transdisciplinary and interdisciplinary research asks for co-creative processes which need to be reflected in the strategic development of an initiative such as JPI Urban Europe. Therefore, throughout BOOST a highly participative process has been conducted in order to allow input from various stakeholder groups on local, national and European level. This process towards the final SRIA document included organizing meetings and workshops on the above mentioned scales. Besides the planning of these events for gaining input for a first draft of the SRIA, consultations and a survey were organized to reflect on the proposed concept and priorities of the SRIA. The image below reflects the process for the whole period of BOOST. A close connection to other WPs of BOOST was ensured by facilitating exchange about the SRIA in the Funding Agencies Working Group, Urban Europe Research Alliance and working together with the WP on Dissemination and Valorisation to use and organize events for gaining input and discussing/reflecting on the SRIA themes and the implementation plan of the SRIA.

Based on the inputs gathered (JPI Urban Europe Reports, SEiSMiC project activities, publications from the European Commission, diverse workshops and meetings, conferences, national research strategies and priorities, etc.) the outline of the SRIA has been developed until 02/2015. This outline was used for further discussions including a public consultation process, national workshops and by an online survey. The full draft of the SRIA including roadmaps, implementation plan and a multi annual call agenda was developed until 06/2015.

Based on the SRIA outline and the gathered input from the consultation phase, roadmaps for each thematic priority of the SRIA have been developed which all add up to the "Transition towards sustainable and liveable urban areas" theme. These roadmaps have been developed with the Scientific Advisory Board based on their experience and field of expertise in combination with the input gathered from the FP7 funded SEiSMiC project and other valuable sources. These roadmaps define the main research questions and topics that should be addressed up to 2020 to ensure a consistent programme. These roadmaps are published as part of the SRIA document.

Based on the SRIA priorities and roadmaps as well as on the outcome of the other BOOST WPs (e.g. alignment strategy, UERA, joint calls, dissemination & communication) the implementation plan was developed comprising measures to allow the realization of a coherent and long-term research and innovation programme. Seven action lines have been identified which should be addressed through dedicated instruments and activities. Furthermore, the work of EC funded project JPI ToCoWork has been taken into coordination. Together with the results of the survey, the national consultations and the input gathered during all SRIA related meetings and workshops, the framework conditions and concrete action lines for the implementation of the SRIA were developed. The image on page 51 in the SRIA shows the connection between the five vertical and two horizontal action lines of the SRIA implementation plan.

International policy and research strategies are an important reference for JPI Urban Europe. Therefore, the international outreach and consideration of these strategies are of great relevance. In the second phase of the BOOST project, cooperation and exchange with Chinese Partners has been extended. A mission to China took place in October 2015 with representatives of the JPI Urban Europe Management Board and the Funding Agencies to present the SRIA and the JPI Urban Europe approach and to strengthen the links and relationships with Chinese partners. This visit to China was organized by the EC-funded project DragonStar+ in close cooperation with the ERANET Cofund Smart Cities and Communities. Meetings have taken place with CCUD, the China Academy of Science, CSTEC, NSFC, MOST and Tongji University. Together with DragonStar+ JPI UE organized a workshop on sustainable urbanization to support relationship building between European and Chinese organisations and promote the SRIA as a baseline for future joint activities.

As the URBACT programme is fostering sustainable integrated urban development in cities across Europe and is seen as an important instrument of the Cohesion Policy, strengthening links aim at developing partnerships to cities across Europe. Besides continuous exchange on the developments, two sessions at the URBACT City Festival have been

organized together with WP6. City representatives participating in JPI Urban Europe projects were invited to showcase their projects and to exchange with other cities about the added value of JPI UE projects and activities.

In addition the conclusions of HABITAT II of UN-Habitat have significantly influenced the SRIA. Furthermore, UN-Habitat was represented at the launching event of the SRIA to reflect upon the JPI UE approach in relation to the preparation of HABITAT III. Furthermore, for gaining additional input for the SRIA and to show JPI UE presence we attended the Future of Places conference co-organised by UN-Habitat in Stockholm from June 29th to July 1st. Building upon the study visits in the realm of the FRIENZ project of a New Zealand delegation to Europe in May 2014 and return visit including representative of the JPI UE Management Board and the Chair of the Scientific Advisory Board to New Zealand in December 2014, JPI Urban Europe organized part of another study visit to Europe in June 2015, particularly on urban development and sustainable infrastructure in Vienna.

From June 2015, JPI Urban Europe participated in the continuous exchange on stakeholder involvement in JPIs, i.e. in the kick-off workshop organized by JPI More Years Better Lives (06/2015), a survey and a follow up workshop organized by the ERALEARN 2020 project and JPI Climate (01/2016). The exchange within other JPIs brought important insights into the organization of stakeholder involvement in the JPIs and highlighted the various requirements. The dialogue with the EC regarding the Belmont Forum CRA Urban Pathways continued and resulted in the ERANET Call Sustainable Urbanisation Global Initiative. Finally, during the ECCA-2 conference in Copenhagen (05/2015) a workshop was organized by JPI Urban Europe, JPI Climate and ICLEI which was dedicated to strengthen joint efforts and to analyse common frameworks for trans- and interdisciplinary research.

The strong connections and relationships with various urban stakeholder and stakeholder organisations have been key in the development of JPI Urban Europe's SRIA. Throughout the development process a close connection with the FP7 funded project SEiSMiC was ensured to harvest societal input for transnational research and innovation on urban matters. Furthermore, the Advisory Board of SEiSMiC was used to reflect on JPI Urban Europe activities. The experiences of stakeholder involvement in SEiSMiC have been discussed and developed further to continue in the JPI Urban Europe with a resource efficient but yet comprehensive model of stakeholder involvement for the implementation phase.

In addition, the relations with UN-Habitat, EUROCITIES and URBACT have been strengthened by regular exchange on the latest developments, as well as by visiting and actively contributing to the conferences of the partners (URBACT Conference 05/2015; Future Places Conference/UN-Habitat 06/2015). The exchange on models for stakeholder engagement in the JPIs provided the opportunity to reflect the needs and constraints for a broad stakeholder involvement from the points of JPIs. With the kick-off meeting in 06/2015, different models and activities in regard to the involvement of stakeholders have been discussed and best practices have been assessed. The results of these activities have been used for developing a first concept for a stakeholder platform for JPI Urban Europe.

The SAB was the main partner for elaborating the SRIA document including the research areas, themes and roadmaps. Therefore, since 10/2014, three SAB meetings were organized to further develop the concept towards the final document. Furthermore, the SAB members were engaged in various events in regard to the SRIA such as the workshop with EC representatives (06/2015) or the SRIA Launching Event (09/2015).

Besides the physical meetings, telco's with the SAB members have been organized on a regular basis to ensure continuity and align the process towards the final SRIA document. The SAB was provided with background documents and material from EC funded projects as well as the results of the national consultations and the survey which was conducted. In particular, the progress produced in the SEiSMiC project was used continuously in the discussions and for sharpening the thematic orientation. The SAB members were highly engaged in the Launching Event of the SRIA which took place at the premises of the European Parliament and the Committee of the regions on Sept. 29-30, 2015. The SAB was invited to present the thematic priorities of the SRIA, moderate sessions and discuss the future thematic development of JPI Urban Europe.

Work Package 3: Pilot Calls

At the beginning of BOOST, JPI Urban Europe had already concluded the first pilot call and the activities of this Work Package therefore could be quickly aligned in an already existing framework. All operational issues with respect to joint calls were discussed in JPI Funding Agency Working Group (FAWG) meetings. Throughout the BOOST period 12 meetings were organised: London Dec.'12, Stockholm Jan.'14, Vienna Mar.'14 and Sep.'14, Rome Jun.'14, London

Oct.'14, Helsinki Jan.'15, Brussels Mar.'15, Bologna Jun.'15, Oslo Sep.'15, Vienna Nov.'15 and Brussels Jan. '16. During the FAWG meetings possibilities for upcoming calls are discussed, the topic description of upcoming calls, evaluation procedures and panel compositions, granting procedures, project and program management as well as call-related communication. Also learning experiences from previous and other calls were discussed as well as the call agenda and call development strategies. Ideas and reflections where further discussed with the JPI Urban Europe

Management and Governing Board and resulted in appropriate decisions, agenda's and strategies. The Second Pilot call has been launched and ten excellent projects have been funded, and 'kick-off' meetings for both Pilot calls have been organised.

Furthermore, plans have been developed for future joint calls of JPI Urban Europe; resulting in proposals for two consecutive ERANET Cofunds. As these Cofunds have been awarded, part of the activities initially planned for task 3.3 were taken over by the EN-Smart Cities and Communities project. The time allocation originally intended for these activities was used for the newly defined task of 'Long-term Call Planning' and for additional activities for 'Programme Management'.

In 2013, JPI Urban Europe's Second Pilot Call was developed. As much as possible 'learning experiences' from the first pilot call were already incorporated. This included the topic definition (one topic was repeated in the call because of an underrepresentation on projects in the first call) and the further specification and definition of key notions. The call was launched on 18 June 2013; ten countries and 15 agencies participated (AUT, BEL 5, CYP, DNK, GBR, IT, NLD, NOR, SWE 2, TUR). Based on experiences in the first pilot call, a two-stage (pre-proposal – full proposal) procedure has been adopted because of the large amount of expected applications. The deadline for preproposals was set at 18 September 2013.

FFG and NWO jointly formed the Call Secretariat and were responsible for the submission procedure, the proposal evaluation procedure (including recruiting expert panel members, organising panel discussion meetings, making available evaluation tools and document management), the project administration and management of the call. 145 pre-proposals were submitted via the online application system of FFG.

During the Expert Panel meeting in The Hague on 22 and 23 October 2013, all proposals have been evaluated by the ad-hoc JPI Urban Europe Expert Panel and ranked on basis of the criteria as defined in the call text. The experiences from the first Pilot Call could be used to optimise working with sub-panels. The Funding Agencies Working Group subsequently met to decide which proposals could be invited for the next stage. In this decision the ranked list of proposals as provided by the Expert Panel was followed until a break-off point up to which the available budgets of the national agencies assured a fair success rate to applicants). The applicants of 38 project proposals were invited to submit a full proposal. The deadline for the submission of full proposals was set at 21 January 2014. 37 Applications were submitted.

For every application an Evaluation Summary Report has been written that was used as a basis for the Panel Meeting discussions (and which after the procedure has been sent to the applicants). On 18 and 19 March 2014 the full proposals have been evaluated by the (same) JPI Urban Europe Expert Panel during a meeting in Vienna. Directly after the Panel meeting, the Funding Agencies Working Group discussed the ranking of the Expert Panel and the available budgets of the national agencies to decide on which proposals could be funded (following the ranked list). Some potential 'list blocking' issues were solved by agencies willing to spend more funding, even for other countries (so, effectively forming a small 'virtual pot'). Ten applications could be funded: 1) URB@Exp, 2) UrbanData2Decide, 3) GUST, 4) SimsCity ValueCap, 5) play!UC, 6) e4-share, 7) IRENE, 8) Resilient Cities, 9) ResSegr and 10) INCUBATORS. There were no significant delays in project start dates because, based on experiences in the first pilot call, we took up to coordinate contracting procedures to avoid potential delays resulting from national granting procedures.

During the first year of BOOST it became clear that the Governing Board of JPI Urban Europe had the opportunity to enter an ERA-NET Cofund on Smart Cities & Communities instead of performing a third pilot call. As this ERA-NET Cofund could receive their own financing it could be performed separately of BOOST. Together with the Project Officer it has therefore been decided that the task on Call Secretariat for Call III would not be performed within BOOST but replaced by a newly defined task on 'Long-term Call Planning' and additional efforts in 'Programme Management' (see below). Still, the learning experiences of Calls I & II (with respect to topic definition, the joint evaluation of basic research and applied research, selecting most promising pre-proposals via Wildcards) ware taken up by this third call (preparation), and also the challenge of involving even more participating countries – including countries outside the original JPI Urban Europe group – was taken up in that call.

After Pilot Calls I & II , JPI UE had 20 ongoing projects under its wings. With more calls anticipated, an anticipated total of approximately 30-35 projects in three waves to monitor was to be expected. The task of Program Management was involved with finding a resource efficient way of monitoring the progress of these projects, communicating with and about these project and – eventually – feed JPI Urban Europe with suggestions for further development: the goal of programme management is to make JPI UE more than a series of

research projects and the intention to create as much value and cross fertilisation as possible. This has been taken up by designing an approach to stimulating communities of practice to form, consisting of both researchers and stakeholders from government and companies involved in projects, arranged around themes. The themes were derived from the SRIA (WP2) and the activities of this activity were executed in collaboration with the Urban Europe Research Alliance (UERA; WP 5) and in the form of a 'Project Meeting' as a Dissemination and Valorisation (WP6) activity.

The interplay between Program Management and the implementation of the Strategic Research and Innovation agenda is crucial for the development and impact of JPI Urban Europe: eventually, project results should contribute to JPI UE goals and ambitions and given the complexity of the challenges, we need a set of *interrelated projects* and calls, together forming *a programme*. On basis of the awarded projects (topics, issues) and the later project results, the SRIA and its implementation plan a multi-year 'Call-Agenda' is generated and updated on a regular basis. In this call agenda a series of urgent topics are defined to be addressed in joint calls in the coming years. Having a multi-year call agenda opens the *opportunity* for FA's and other stakeholders to *select* most appropriate calls to participate in.

One of the tasks within the CSA-BOOST JPI Urban Europe was to suggest ways of designing and or tune call instruments in order to gather more impact from the potential inherent in joint programming, especially with a focus on urban development issues and the challenges of combining activities from basic research to applied research and innovation. A Joint Call Evaluation study analysis was performed. In this analysis recommendations could be derived from the experiences from the calls of JPI UE as well as from calls performed by other JPIs and ERANETS.

Data was collected by interviews with representatives from funding agencies and by a survey with researchers funded and not funded by previous JPI UE calls. The results from the survey of funded and not funded researchers within JPI UE calls show that a two-step procedure is preferred. The two-step procedure is, according to some of the respondents, important when developing transdisciplinary research teams and projects.

As evaluation criteria influence the ranking of the proposals, the aim of supporting transdisciplinary research including innovation, should therefore be firmly included in the evaluation criteria. Such criteria should value innovation/innovativeness, practical and societal relevance and impact – next to the more traditional criteria such as the fit to the stated topics and the required scientific excellence.

The analysis also indicated that (call) instruments supposed to support transdisciplinary research, should focus on projects for four years or more, and because it takes time to build efficient transdisciplinary research teams. Urban Living Labs were regarded suitable for all research areas within the scope of JPI Urban Europe. The concept of Urban Living Labs also supports transdisciplinary research by involving stakeholders in the research process (definition, execution, and valorisation). However, it is important to reflect that some types of research within that same scope are not or less fit to be performed as or in an Urban Living Lab. Therefore, JPI UE calls should also support other research environments. The recommendations of these surveys have been taken up during the design of the follow up calls (ERANET Cofund Smart Cities and Communities and the ERANET Cofund Smart Urban Futures) and their implementation .

The first and second JPI Urban Europe Pilot calls can be seen as more traditional research and innovation calls that encompasse most stages of scientific research. Based on the concurrent work of creating a Strategic Research and Innovation Agenda (including its multi-annual Call Agenda and the national alignment activities) we suggest maintaining this basic type of instrument incorporating for all levels of research so to ensure that all parts of the research chain are addressed in a coherent way. In this approach, transdisciplinary research is preferable. Variants can be developed to explicitly support interest driven exploratory research (open calls), very specific problem driven research (targeted calls) or implementation activities (top-ups, development calls). Such calls can be either programmed in addition to the 'core' calls or as specific parts thereof – and then to be implemented by using dedicated awarding mechanisms (including 'wild cards' for propitious proposals).

Next to joint calls, additional activities and instruments could be beneficial. For example, it could be worthwhile to support strong transnational research environments or networks that focus on the urban research area. Such environments could be developed by providing financial support to guest researchers, to organise workshops for knowledge transfer, to develop doctoral courses or schools, as well as to develop knowledge hubs. Another approach recommended to be investigated is the development of an Urban-KIC with SME companies and policy makers. As cities are typical target groups for Pre commercial Procurement (PCP) and Public Procurement of Innovation (PPI) schemes. As PCP and PPI are call instruments in H2020, a further investigation regarding the applicability and use of these instruments in JPI Urban Europe would be valuable.

Work Package 4: Alignment of National Programs

BOOST WP4 aims at paving the way to align policies, programs and research within the Joint Programming Initiative Urban Europe. JPI Urban Europe is addressing 'Global Urban Challenges' by developing 'Joint European Solutions',

therefore a complex system in terms of topics, participants and joint actions to promote an holistic and trans disciplinary approach for research in urban field.

For this reason participants in BOOST WP4 and WP4 coordinator determined, at the very end of more than 24 months activity, that no single set of procedures nor any single instrument can fulfil the diverse needs; rather a set of different typologies of actions can be proposed to tackle societal challenges, knowing that it's difficult to predict all combination of them for a possible large diversity of applications.

Alignment of national research programs has been a focus of most - if not all - the JPIs. However, the state-of-play of alignment varies profoundly. Some JPIs are at a later stage with a variety of joint activities put in place and a stronger

coordination of activities. In other JPIs the process is at a first stage of implementation. In particular alignment is proving difficult for JPIs addressing complex challenges, with a wide variety of programs and actors.

The Expert Group in the Final Report (October 2012) concluded that JPIs have yet to reach the final stage of Joint Programming which involves developing and implementing multi-annual joint programmes, aligning national programmes and engaging in the full policy cycle.

Joint calls have been a first joint activity for most of the ten JPIs. Many JPIs have conducted calls for proposals, with the explicit intention that such calls contribute to alignment. In several instances this has led to leveraging of national funds for the specific topics identified in Strategic Research Agendas. To what extent joint calls have led to deeper dialogue with national funders and ensured a permanent change of national strategy is debatable. The use of calls for proposals as instruments of leverage of national funds will ultimately be successful if it leads to a permanent change of approach and funding at national level. A change that is not yet taking place.

As already emerged in the Dublin Conference, joint activities should go far beyond joint calls and Member States have been urged to step up efforts towards an effective alignment: joint calls may be an excellent testing ground for joint activities but only the alignment of research programmes will ultimately make a change in using research resources more efficiently and in building the ERA.

The approach of the Working Group explored different pathways towards alignment and to come closer to a definition able to fit current and future Joint Programming Initiatives. The proposed definition acknowledges that there is no unified approach for alignment and the form it takes will depend on the individual JPI and the individual Member State, and that the state of alignment for a particular JPI is changing and developing over time. The definition coming from this approach is:

Alignment is the strategic approach taken by Member States' to modify their national programs, priorities or activities as a consequence of the adoption of joint research priorities in the context of Joint Programming with a view to implement changes to improve efficiency of investment in research at the level of Member States and ERA. Finally, a recommendation and a target for the future development of joint programming: JPIs should become platforms for strategic programming and foresight for Member States working jointly together according to the identified good practices for alignment.

BOOST WP4 suggestion is that to design and prepare joint solutions the use of a *joint actions framework* and *alignment pathways to joint solutions concept* are recommended, allowing for variable geometry and promoting an inclusive and integrated approach for SRIA five thematic priorities areas to pave the sustainable transitions pathways.

The support for design and implementation of joint solutions is based on the so-called Framework Conditions which were proposed by ERAC-GPC (Groupe de haut niveau pour la Programmation Conjoint) to facilitate joint cross-border funding for cooperative research projects and on the results of FP7 project JPI to co-Work (http://www.jpis2cowork.eu/) as well as on results concerning other JPIs (mainly JPI Oceans, JPI Cultural Heritage and JPI FACCE), then networks, platforms, initiatives and projects (i.e. NETWATCH, ERA-LEARN, ..), in order to provide how to promote alignment with workshops, meetings and data collection and to define a set of different typologies of actions which JPI Urban Europe could adopt.

Thanks to *pathways to joint solutions concept* it is clear that alignment is something that is not only up to one type of player: in order to align policies, programs and research it is necessary that a plurality of players take the field: stakeholder groups, such as Funding Agencies, as well as Research and Technology Organizations, but also Public Urban Authorities and, last but not least, citizen community/representatives. Then, considering the alignment pathways to joint solutions concept, it is clear that the set of different joint actions will help each different player to identify which joint action better fits to his own priority. Individual priorities will determine the choice of some joint actions rather than others; then it will be possible to define multiple pathways to alignment for each research priority in the SRIA and it will be up to each player to join or not the determined solutions allowing a variable geometry approach.

Alignment is key and constituent of the joint programming process. However different approaches have been developed across the ten JPIs established, each following different pathways. A common understanding of the concept of alignment and of the different approaches so far matured is therefore a necessary step in order to develop a consistent alignment strategy for the JPI Urban Europe. To this extent, the work of (GPC), and in particular the work

of the Working Group on Alignment, as well as the remarks coming from the Expert group on Joint Programming, represents the fundamental framework to the BOOST WP4 activities.

Joint Programming (JP) is the most strategic and all-encompassing process developed within the ERA. Joint Programming Initiatives (JPIs) are a country-to-country collaborations designed to ensure coordination of research priorities and optimization of research efforts at the level of the Member States, in order to better address grand societal challenges and strengthen the European Research Area.

As pointed out by the Commission in the Communication <u>Towards Joint Programming in Research: Working together to tackle common challenges more effectively</u>, although European national research programmes are amongst the first and best in the world, the fragmentation of public research programming leads to sub-optimal returns and prevents Europe from realising its societal objectives:

national research programmes may unnecessarily duplicate [...]

- the multitude of national procedures complicates cross-border programmes and discourages internationallyoriented research actors from accessing research funding across borders
- the lack of cross-border programme collaboration makes it difficult to address common challenges jointly, complicates the pooling of data and expertise scattered across Europe, hinders cross-border researcher mobility and training, and slows down the international dissemination of research results.
- crucially, it also hampers pan-European strategic research agenda-setting and horizontal policy coordination

The joint programming approach has been envisaged as an instrument to overcome fragmentation in given priority research areas, build critical mass of available funding at the national level by pooling and aligning existing research resources, enhance effectiveness of research in key priority research areas.

Most importantly, a coordinated approach in public research policy among Member States leads to joint vision and strategic agenda setting, providing the framework for a long-term alignment of research. Joint programming, therefore, involves the full policy cycle and address the different layers of the national research systems from the policy-making level to research organizations and individual researchers and stakeholders.

The GPC considers that 'Joint Programming can be a "test bed" to show how far transnational collaboration in the ERA can be developed. The ambition of reaching substantive alignment within the field of grand societal challenges through joint, coordinated or mutually opened programmes, are important steps forward in the development of the ERA, as they directly contribute to the ERA key priority on "Optimal transnational cooperation and competition", and indirectly to all ERA priorities'.

Work Package 5: Urban Europe Research Alliance

Coordination

The coordination of UERA creation was organized around three main activities and associated working groups:

• The development of a formal governance structure

Coordinators: Gérard Hégron (Ifsttar, FR), Madeleine Granvik (SLU, SE)

• The articulation and participation towards other initiatives and programmes

Coordinators: Annemie Wyckmans (NTNU, NO), Judith Borsboom (TNO, NL)

• The development of the scientific activities

Coordinators: Paola Clerici (ENEA, IT) Klaus Kubeczko (AIT, AT)

During this second year of activity, the number of potential UERA members has increased significantly. We went from 27 institutions from 11 countries to 37 institutions from 13 countries: Austria (2), Belgium (2), Cyprus (1), Denmark (1), Finland (3), France (7), Germany (4), Italy (2), Netherlands (2), Norway (5), Spain (3), Sweden (4), United-Kingdom (1).

The membership development will be continued in the following way:

- Consolidation of participations from JPI Urban UE Member States (via the National Contact Points)
- Identification of new potential members (Eastern countries, ...)
- · Process:
 - o Organisation of national information and recruitment workshops.
 - $\circ\quad \text{UERA tool kit: UE and UERA presentations, MoU and ToR, application form, member profile form, etc.}\\$

The Memorandum of Understanding (MoU) and the Terms of Reference (ToR) are finalized.

A light governance structure is adopted around the following formal bodies:

- The General Assembly (with a *Chairperson*) which is the decision body gathering the representatives of UERA members (one member, one vote);
- The Steering Board (with the UERA coordinator) which is the executive body reporting to the Assembly
- The Secretariat which is organizing the technical meetings and the General Assembly meetings and which is in charge of the internal and external communication.

The first General Assembly and elections will take place during the next UERA meeting in June 2016 at RMIT (Barcelona).

Two specific working groups have been set up to facilitate the operation of the alliance:

- The articulation and participation towards other initiatives and programmes;
- The development of the scientific activities.

The objective of "<u>The articulation and participation towards other initiatives and programmes</u>" WG is to increase the participation of UERA topics, methods and members in EU-funded research (JPI UE, H2020, EIP Smart cities, KICs, etc.) with an urban component:

- Upstream, to influence policy processes on a European level by providing input to scientific agenda and calls;
- Downstream to develop partnerships and to incubate projects (research, innovation, valorisation, implementation, training ...).

Concrete actions have been led:

Programmes

- Contribution to the JPI Urban Europe SRIA (Strategic Research and Innovation Agenda) during the scientific workshop in Leiden (TNO, October 23-24th, 2014).
- Contribution to the China JPI Urban Europe workshop on Sustainable Urbanisation (Beijing, 28 October 2015).
- Two matchmaking events have been organized:
- The first for the Eranet "Smart cities and Communities" in Bilbao (29th January 2015);
- The second for the Eranet Cofund "Smart Urban Futures" in Paris (19th January 2016).

Initiatives

- A cooperation between UERA and EERA has been initiated in the Smart cities field. A joint meeting has been organized in Trondheim (16th June 2015) between UERA and the EERA Joint Programme Smart Cities (JPSC). A first cooperation proposal (strategy and roadmap) has been written and is under discussion between UERA and EERA JPSC.
- First contacts and discussions with ECRA (European Climate Research Alliance) and the EuroIndia Centre has been established

The main objectives of "The development of the scientific activities" WG are the following:

• To identify a common scientific vision:

Four concrete actions have been organized:

- The clarification of concepts and terminology around the construction of glossary
- The organisation of a two-day scientific workshop (Leiden, October 2014) to enhance the inter-knowledge between UERA members and transversal activities;
 - o To define a framework to achieve UERA objectives like Cost actions, training (summer schools, Masters Erasmus Mundus), etc.
- A COST Action on the "Urban Innovative Zone" is under preparation.
- A UERA Symposium around a selection of key topics/question from the SRIA is planned for October 2016 (Brussels).

The UERA Strategy and roadmap has been established (deliverable D5.5) and discussed during the last UERA meeting in Paris (18th January 2016). The strategy is articulated around 3 pillars:

ACADEMY	CAMPFIRE	MARKET PLACE
UERA symposium around SRIA	 Thematic working 	 Sharing and
Teaching programmes	groups (TWG)	development of
Summer schools	 Partnership with 	research
European masters	initiatives (EERA)	infrastructures
 Joint PhD programs 	 Contribution to RDI 	 Multidisciplinary
 Publications (Journal, books,) 	policy/prog./calls	projects
	 Development of 	 Experts and staff
	framework	exchanges
	conditions and new	
	instruments	

The roadmap for the next 2 years will be mainly dedicated on the following activities:

- Formal creation of UERA;
- Organisation of a Symposium and creation of Thematic Working Groups (TWG);
- Development of the cooperation with EERA (Joint Programme Smart Cities);
- Identification of joint solution for infrastructures alignment;
- Contribution to RDI policies, programmes and calls;
- Development of UERA communication (website).

All the critical objectives have been reached and there is no deviation from the initial schedule.

The consumption of the resources has been better than the first year because the number of meetings and actions has increased significantly.

Work Package 6: Dissemination and Valorisation

Establish a communication platform with the web-site as hub

The communication and dissemination activities are interlinked with other activities related to JPI Urban Europe. During Boost a communication and dissemination infrastructure for long term cooperation within JPI Urban Europe has been set up, including a web-site, routines for updating websites, newsletters and routines for organising events and seminars, the use of social media such as blogs and twitters, a message platform and routines for cooperation. In

2014 the communication and dissemination strategy was updated with a social media strategy and in line with the strategy a blog & articles item introduced. In 2015 JPI UE opened a Twitter account and a YouTube account. The website has been continuously improved and during the winter 2015-2016 a complete update of the website was initiated to improve the overall functionality and to make the web-site more accessible to stakeholders of various kinds. During Boost there has been a steady rise of visitors at the web-site, subscribers of the JPI UE news item and followers of the JPI UE Twitter account.

Promoting the programme and enhancing policy relations

JPI Urban Europe has strived for and been successful in liaising with and enhancing cooperation with a wide range of city stakeholders, cities networks, researchers, policy makers and EU organisations such as UN-Habitat, URBACT, Eurocities and European institutions linking JPI Urban Europe activities to their activities such as the European Agenda and the Structural funds, thereby reaching out to a wider audience of stakeholders and further strengthening the position of JPI Urban Europe as a knowledge hub of relevance beyond the scientific sphere. In order to bring more structure and efficiency into these efforts, a tentative high visibility strategy was developed during the fall 2014, including a lobby plan and proposed measures to increase the JPI Urban Europe's visibility in Brussels. Mapping of key actors, activities in social media, involving more consortium partners as ambassadors are elements in this strategy. In line with this strategy a pilot for 'The JPI Urban Europe Research and Innovation Award' was developed during spring 2015 but put on hold until SRIA implementation phase.

During the Boost timeline most of the communication and dissemination activities have been designed to render visibility to the programme as such, to enhance policy relationships and to support the process of the Strategic research and innovation agenda (SRIA). Activities that culminated with the SRIA launching event in September 2015. Other activities have been aimed at methodological learning, piloting formats for stakeholder involvement, strategic discussions and cost efficient dissemination. During the second Boost period efforts have been intensified to promote research projects funded in the JPI UE first calls in a projects catalogue and video clips/animations.

Organising high level events

The JPI Urban Europe has successfully organized two high profile events in Brussels that have brought together a broad spectrum of speakers and participants from European institutions, city networking organisations, policy makers and stakeholders from cities, business and civil society for strategic discussions and workshops. A substantial part of the communication budget has been allocated to these events and production for support materials such as publications and video-documentations. The first event in 03/2014 'Urban Megatrends and future challenges for European Urban Areas' promoted the JPI Urban Europe, presented two reports on global megatrends ad urban challenges and marked the beginning of the work on the Strategic Research and Innovation Agenda. At the second event 'Transition towards Sustainable and Liveable Urban Futures' 09/2015 the JPI Urban Europe Strategic Research and Innovation Agenda (SRIA) for European urban areas and cities was launched and discussed. Throughout the conference a lot of support was expressed in relation to the ambitions of the SRIA and the JPI Urban Europe initiative. It was concluded that the SRIA is timely in relation to other important urban initiatives and agendas on a European and global level, for example the EU Urban Agenda the UN-Habitat's Global Urban Agenda and the recent initiative of President Juncker 'Smart Cities/Cities of the Future'.

Recurrent high level high visibility events have proven to be important platforms to strengthen JPI UE:s position as a knowledge hub of relevance beyond the scientific sphere and to establish and maintain the JPI UE growing stakeholder community. The evaluation of the last event showed that half of the participants at the event in the European Parliament had visited a JPI Urban Europe event and the other half was new. Since the events are co-organised with European institutions (European Commission, the Committee of the Regions and the European Parliament) and key note speakers and panellists are invited from European and international institutions and organisations, the events provide opportunities to strengthen already existing relationships with important players, to define common interests, to compare and align urban agendas, to attract attention and support for urban topics and to provide a platform where not only JPI Urban Europe can communicate its priorities and aspirations.

Co-organising events and seminars

During the Boost timeline JPI Urban Europe has hosted or co-hosted 16 events and workshops of various size and format. In addition to JPI Urban Europe profiled events, members of the JPI Urban Europe Management Board, Governing Board and Scientific Advisory Board have represented the initiative and disseminated results from strategic work at co-hosted events or events hosted by other parties. JPI UE has strived to be active and visible in conferences oriented towards the scientific society as well as events with a predominantly policy and practice audience. Activities include elements of knowledge sharing, piloting formats and to present and put up for discussion emerging concepts such as urban living labs and urban innovation ecosystems.

JPI Urban Europe has twice during the Boost timeline co-hosted seminars within the University Track at the Open days in Brussels, 10/2014 and 10/2015. JPI UE has further co-organised events with JPI Climate and ICLEI at the ECCA conference in Copenhagen 05/2015, the European Urban Research Association (EURA) and the Urban Affairs

Association (UAA) third Joint Conference on City Futures in Paris 06/2014. Whenever possible project partners funded by JPI UE have been invited to represent JPI UE at co-hosted events and to present research approaches and preliminary results for example in the Open days' session 10/2014 and the URBACT City Festival in Riga 05/2015. We have also taken part in conferences organized by cities networking organisations and European institutions with the aim to establish relationships, benchmark workshop formats and approach speakers and panellists for future JPI Urban Europe high level events.

Capacity building and exploitation

Yet another type of event has been devoted to capacity building among the JPI UE funded projects and to pilot formats for future valorisation and exploitation activities. The first JPI UE projects meeting, organised in 10/2014, was attended by researchers and project partners from business, cities and civil society with research funding from pilot call I and II as well as key people in the JPI UE consortium. This meeting was followed by a meeting particularly addressing the project partners from cities, investigating their challenges and knowledge needs. The results and findings from these two pilot events have paved the ground for annual projects meetings and for the activities described in EXPAND proposal, aiming at mobilising cities and business as long term research partners.

Besides the delivery of dissemination activities and products there has been continuous efforts to accumulate and aggregate findings, knowledge and learning to underpin future activities. In order to bridge gaps and align actors within the consortium we have strived to engage GB members in activities as speakers and moderators to ensure the uptake of results in the steering body. Uptake and implementation of learnings from previous activities among the partners is facilitated through a close cooperation and continuous discussions in the EMB (extended management board). Key results and learnings from events are documented in short PM:s to be shared in the EMB. Experiences and key learnings from Boost pilot activities have been fed in to the plans for future communication, dissemination- and valorisation activities described in the CSA proposal EXPAND. The CSA project SEiSMiC have further provided important forums for experiments with formats for stakeholder consultations and steps have been taken to integrate learnings from SEiSMiC in the methodological learning in BOOST. In order to receive valuable feedback from participants and improve future activities an on-line evaluation form was introduced at the Projects' meeting and Cities' workshop in October 2014 and has been sent out to participants at JPI UE profiled events after that.

Since the projects funded in the JPI UE three first calls are only beginning to report results in 2015 and 2016 there has not yet been possible to initiate concrete exploitation activities. Preparatory activities have been undertaken in order to spur methodological learning, piloting formats for stakeholder workshops, match-making and gather input for the future activities described in the EXPAND proposal. During Boost a discussion on open access policy has been initiated in the funding agencies working group.

Support material

Support material has been produced to promote the programme as such (corporate flyer, roll-ups, corporate design manual), promote and support events (PowerPoint-templates, posters etc.), promoting the Strategic Research and Innovation Agenda (SRIA report, corporate-movie) as well as to promote research results from projects funded in the program (video clips/animations, Projects Catalogue, fact sheets). Whenever possible the events have been video-streamed and broadcasted from the JPI UE web-site. Eight regular news items have been issued and in addition to this news alerts to promote JPI UE calls and events.

During 2015 the use of audio-visual communication tools has been enhanced in order to better address society and urban actors with narratives that are not built upon a scientific language. A wide range of audio-visual products were produced for the SRIA launching event including a JPI Urban Europe Corporate movie conveying the main messages of the SRIA including its longitudinal approach and the five SRIA themes, a video showing the highlights and the atmosphere from the three events as well as 20 video clips with animations presenting the projects funded in the first two pilot calls. The prolonged BOOST timeline also made it possible to produce a Projects Catalogue presenting the 37 projects funded in the three first JPI Urban Europe calls.

Reflexive conclusion

Looking beyond the SRIA, the events and workshops, and other measurable achievements of BOOST there are a couple of results to discuss in a more reflexive mode.

Through BOOST, JPI Urban Europe has moved from a conventional initiative on sustainable urbanisation to a learning organisation. Since there are no precedents in how to 'do' joint programming initiatives and in particular not in such a complex societal challenge as the field of urban development, this is perhaps less of a surprise. Nevertheless, it is an important finding since it also points at the innovativeness and experimental ethos required by JPI Urban Europe to fulfil its goals. This finding also foregrounds the suitable support BOOST delivered to this end.

Of course, one issue in such a learning organization in variable geometry network shape is the logistical and communicative challenge of 'having everybody on board'. BOOST was set up to add support to the JPI Urban Europe Management Board first and foremost. The Management Board was in this way able to develop itself as a strong executive body which could function on between the strategic level of the Governing Board members of JPI UE and the operational level of the Funding Agencies involved.

Co-creation, when substantiated by sensible activities, reaches further in a network organization with a variable geometry than more centralised, hierarchical and conventional project management would. The SRIA was made through such a co-creative process and the implementation of the SRIA is therefore also underpinned by this principle. The EXPAND proposal for a CSA for JPI Urban Europe follows up on this initiative by its main focus on a Stakeholder Involvement Platform (SIP).

Since communication activities are often seen as an add-on and one-way information, BOOST established the practice and ethos of having an experimental and learning approach to communication and dissemination: there's always a hypothesis to be tested or a question to be answered during events – whether explicitly or implicitly – and there is a clear ethos of accumulating and aggregating findings and knowledge where results and findings are fed into and underpin future activities.

Impact

Support inclusive, sustainable and green growth through urban innovation: With the development of the JPI Urban Europe SRIA, BOOST contributed to the European Agenda and the Europe 2020 Strategy⁵ by facilitating urban social and technological innovation and contributing to the establishment of competitive, inclusive and innovative urban areas. In 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 urban areas' social and economic needs are consistently addressed in its research, technological development and innovation activities; ensuring the relevance and continuity of results through an improved understanding of societal needs, business opportunities, new technologies required to optimise urban infrastructures, and the policy measures needed to maintain socially and economically vibrant and inclusive environments, whilst maximizing their resilience and sustainability; to provide environments that attract talent and investment, so enhancing European competitiveness.

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. Through BOOST JPI Urban Europe emphasised the importance of comprehensive urban research, technological development 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.

Strengthen Europe's global position: BOOST increased the visibility of Europe's urban research, technological development and innovation actors on the international stage. Promotion of scientific expertise and knowledge will not only strengthen Europe's scientific profile but will 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.

Demonstrate and showcase European solutions for global urban challenges: Solutions which address the challenge of urbanisation will be based on a new understanding of the urban system, but take on board technological innovation, in a co-creative effort of stakeholders across the board. The solidity of those solutions will give European industry the competitive edge when it comes to selling European technologies and services in the global market.

Improve quality of urban life: In addition to helping to sustain socially and economically inclusive environments, the SRIA aims to enhance Europe's position as the home to many of the world's most liveable 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 through scientific evidence, new methodologies, and new technologies, and to improve socio-economic conditions 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

Increase societal relevance: The inter- and transdisciplinary approach of the SRIA 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. With the SRIA BOOST provided such a framework for international cooperation, establishing long-term partnerships and accompanying implementation measures.

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⁵ EC, Europe 2020: A strategy for smart, sustainable and inclusive growth, COM(2010) 2020 final, Brussels, 3 March 2010, http://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%20007%20-%20Europe%202020%20-%20EN%20Version.pdf

List of attachments

When hyperlinks are given the project outputs can be found online at this link otherwise they are included as attachments, numbered according to this list.

- 1. JPI Urban Europe Logo
- 2. SRIA report
- 3. Megatrends report
- 4. Projects Catalogue
- 5. JPI Urban Europe newsletters
- 6. http://jpi-urbaneurope.eu/newsletter/
- 7. JPI Urban Europe Twitter https://twitter.com/JPIUrbanEurope
- 8. JPI Urban Europe YouTube Channel https://www.youtube.com/channel/UCpflyt6LJpE5N8Iol6jK54g
- 9. JPI Urban Europe project videos https://www.youtube.com/watch?v=e6XIShpsfjQ&list=PLveoHndnqYddyDUh0qMgFpd1M0VYI_Yxk
- JPI Urban Europe Corporate Film https://www.youtube.com/watch?v=9MTDFiC-orw
- 11. JPI Urban Europe SRIA Launching event footage https://www.youtube.com/watch?v=orcUwJTRjP0
- 12. Custom made image stock
- 13. Infographics
- 14. Corporate PowerPoint + templates
- 15. Corporate design + identity manual
- 16. Updated corporate branding
- 17. Corporate leaflet
- 18. Corporate factsheet
- 19. Business cards first and second version
- 20. Roll-up banners
- 21. Corporate posters
- 22. SRIA development diagram
- 23. Website development
- 24. List of beneficiaries