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Proposal acronym: URBAN-NEXUS

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8	EUROCITIES	Belgium
9	ICLEI - Sustainability Management and Urban Governance	Germany
10	REC - Regional Environmental Center for Central and Eastern Europe	Hungary
11	ADVANCITY - French Ministry of Industry	France
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Executive Summary – URBAN-NEXUS

European cities are some of the most attractive and desirable places in the world, offering unmatched opportunities for culture, recreation, living, and working. Our cities also play a vital role in the development of Europe and contribute to economic growth and innovation, knowledge-building and a cohesive society. However, European cities must work in concert to face a number of important challenges ranging from the current economic crisis, to sprawling development and the natural environment, as well as the longer-term implications related to climate change and resource scarcity (e.g., peak oil and water). The dire implications and potential impact of these challenges for our environment, economy and society suggests that urgent action is needed to ensure for smart, sustainable and inclusive growth (Europe 2020). By working together and following a collaborative approach to problem solving Europe will emerge stronger and more resilient.

This coordination action is put forward to enable and further strategic urban research which can address these real challenges and advance sustainable urban development and planning towards reduction of the 'urban ecological footprint'. Current ESPON estimates suggest that the average European citizen's footprint is over two times the Earth's capacity (ESPO 2013 Synthesis Report, p. 75). More than a quarter of the European Union's territory has been directly affected by urban land use and by 2020 approximately 80% of Europeans will be living in urban areas. As a result, the demands for land in and around cities are becoming increasingly acute. However, through resolute, collaborative working we can address the complex, interrelated issues which drive energy and resource consumption, environmental degradation, and climate change.

In 2006, URBAN-NET was established through FP5 funding as a European Research Area (ERA) network to strengthen the pan-European approach to research on these critical issues with a remit to forge links between the member state's urban research priorities and to support the development of a common framework for urban policy orientated research and policy understanding. Our URBAN-NEXUS proposal builds directly upon the successes and efforts of URBAN-NET. Including many of the existing URBAN-NET partners, our consortium is well-placed to deliver this coordination action. As a starting point to our project, we have taken the URBAN-NET themes, developed in consultation with stakeholders in a workshop in Berlin (2008), as an overarching frame for our project framework. However, we have developed and updated our partnership to respond directly to the competencies and expertise required to successfully deliver and execute this project. The working themes which frame our Work Packages and approach are:

- adapting to climate change;
- health and quality of life;
- sustainable land-use;
- integrated urban management;
- integrated information and monitoring.

Through URBAN-NEXUS we will engage with these issues through the development of a structured dialogue designed to enable rich communication, knowledge transfer and

partnership-building. This will include engagement with a wide span of public, private, and civil society organisations involved with urban research ensuring for wide EU27 representation. Our collaborating partners – which include stakeholders in urban governance – will be instrumental to the project. These civic leaders, policy-makers, businesspeople, researchers and educators are already actively involved with addressing the challenges of urban development. In addition to the 13 partners who make up URBAN-NEXUS, we have over 20 organisations signed on to our proposed approach including, for example, the WHO European Healthy Cities Network, International Society for City and Regional Planners (ISOCARP), METREX (a European network of major metropolitan regions and areas) and Polis (a pan-European network of transport related municipalities and transportation planning agencies). This form of direct engagement will help to build upon and strengthen the relationship between stakeholders and policy-making through engagement, collaborative prioritisation, and knowledge transfer. Framed by these principles, this coordination action will pursue the following objectives:

- Promote innovative **problem-solving** approaches to the complex and interrelated policy issues concerning sustainable urban development;
- Increase awareness, knowledge exchange, cooperation and collaboration through **structured dialogue**; and
- Further the Long-term Strategic Framework for Scientific Cooperation through the enabling and building of **partnerships**.

Accordingly, we see these objectives as leading directly to significant beneficial impacts in terms of **information, knowledge and partnership**. Together, these impacts will contribute to a cohesive, problem-solving approach to the complex challenges facing contemporary European cities.

The challenge for Europe is clear; the dire forecasts for climate change and resource scarcity suggest that urgent, coordinated action is needed. This is not a time for go-it-your-own activities or silo thinking. Rather, European cities must work together across traditional disciplinary boundaries in response to the complex issues facing our environment and society. This coordination action responds directly to this agenda and aims to facilitate this engagement and support the development of a framework for long-term strategic cooperation and collaboration between urban stakeholders and interests towards the implementation of sustainable urban development.

1.1 Concept and Objectives

1.1.1 Concept Background

This coordination action is presented to further the long-term strategic framework for scientific co-operation related to urban research. This will be achieved by **enabling knowledge transfer and building a structured dialogue**. The ultimate aim is to develop long-term strategic partnerships. The call highlights a range of interconnected issues that must be considered including the environment and urban planning, energy, water scarcity, transport, tourism, technology and innovation, governance and education, social equity and cohesion, and sustainable consumption. Throughout this effort, we are reminded to focus on the critical issues and challenges facing European cities today within the overarching frame of reducing the 'urban ecological footprint'.

The essential starting point in meeting the objectives of the call and attaining the necessary impact is the **development of a common basis for communication** between the diverse stakeholder groups in order to facilitate knowledge transfer and structured dialogue. Substantial research on urban development and sustainable development at both European and member state levels provides the basis for knowledge transfer orientated towards the specific needs of diverse stakeholder groups. Structured dialogue linking sustainable urban development research to a policy-orientated understanding will be facilitated via a series of workshops (Dialogue Café's), synthesis papers and social media tools throughout the duration of the project.

Research on sustainable urban development at both European and member state levels frequently responds to specific political priorities, sometimes with little continuity in research priority, and often with little regard to and understanding of relevant research in the same field that has been undertaken elsewhere. Accordingly there is a multiplicity and diversity of urban policy research that is often overlapping, and typically disconnected. There is a **huge potential benefit therefore to be gained in reviewing and synthesising recent and ongoing urban research**, rather than to initiate new research activity. This will identify where new understanding has been gained and where good practice solutions have been applied effectively to the new challenges of climate change and economic crisis.

1.1.2. URBAN-NET

URBAN-NET was established as the European research area network precisely to address this issue and provide enhanced linkage between the urban research priorities of different member states, and to support the development of a common framework for urban policy orientated research and policy understanding. This coordination action, with its perspective in building upon the objectives, knowledge and experience of URBAN-NET aims to further develop this initiative by **extending beyond research to support policy development and implementation** by directly engaging with the entire range of EU27 urban stakeholder interests, in a structured dialogue and knowledge exchange that is entirely informed by existing urban policy research.

URBAN-NET has already initiated this dialogue process and started to explore some of the interconnected issues through activities undertaken since the project's inception in 2006. At an early stage **URBAN-NET mapped and assessed national and regional programmes** from across the European continent. By identifying gaps and synergies and, in consultation with a

broad cross-section of stakeholders, including researchers, funders, managers, city practitioners and professionals, principles and future priorities for urban research were identified and published in URBAN-NET's 'Strategic Research Framework in the Field of Urban Sustainability'.

URBAN-NET has also funded 16 transnational research projects totalling some 8 million euros and covering a number of the integrated and interconnected issues identified by the call text, including governance, climate change, energy, tourism, environment and urban planning and social inclusion. URBAN-NET partners have made concerted efforts to lobby and influence European strategies, policies and initiatives and network with other projects, platforms and associations. Particular focus has been given to influencing development of the Joint programming Initiative on URBAN EUROPE and the Urban Development Group's evolving agenda, including support to drafting of the Toledo Declaration and the Reference Framework for Sustainable Cities. This area of work continues in the current extension of the project together with collaborative work with the Social Polis network on recommendations to DG Regio for the City of Tomorrow initiative developed in response to the European 2020 vision. Experience and knowledge gained in all of the above activities will inform, support and strengthen the work of URBAN-NEXUS.

Several URBAN-NET funded projects will continue until 2013. More than 50 researchers will continue to be involved in the following projects:

- project on integrating ecosystem services into urban planning policies and instruments (SUPER);
- project on participatory planning and urban governance;
- project examining the role, evolution and impact of retail planning on urban sustainability; and
- a project concerning heat stress and the urban built form.

The results and experiences gained from these projects will feed into the URBAN-NEXUS project.

1.1.3 Developing URBAN-NEXUS

The coordination action recognises that maximum impact will be achieved in respect of these objectives by building on the current URBAN-NET project. This will facilitate knowledge transfer and the development of structured dialogue, between all urban stakeholders as the basis for the development of the long-term strategic framework for cooperation and partnership development with EU27 wide representation.

The URBAN-NEXUS consortium will deliver the essential preconditions for the successful development and delivery of this impact, as the core partners of the consortium include all principal URBAN-NET partners. Therefore URBAN-NEXUS has the substantial experience gained by URBAN-NET in the development of a strategic research framework in the field of urban sustainability.

URBAN-NEXUS has, furthermore, responded to the new challenges that lie in the development of a long-term strategic partnership for sustainable urban development, identified by call by building on the foundations of URBAN-NET. URBAN-NEXUS will extend the partnership to link directly with the principal European urban networks active in the field of sustainable urban development today, and their membership of thousands of cities throughout EU27. This

enhanced partnership will ensure the relevance of its focus on sustainable urban development, its effectiveness in connecting with all key stakeholders including partners from local and regional government, the business community and civil society for all regions of Europe, as well as providing a clear bridge and line of communication between research and urban policy at the local level.

URBAN-NEXUS therefore provides the necessary platform of continuity with URBAN-NET whilst incorporating the critical basis of knowledge and expertise essential to the refocusing of URBAN-NET towards the prime objective of this coordination action. These objectives are to secure EU27 wide structured dialogue and rich communication with all urban stakeholder groups on the key issues for sustainable urban development; to enable knowledge transfer on policy orientated urban research, and to deliver a long-term strategic framework and partnership building for urban policy development, as depicted in Figure 1.

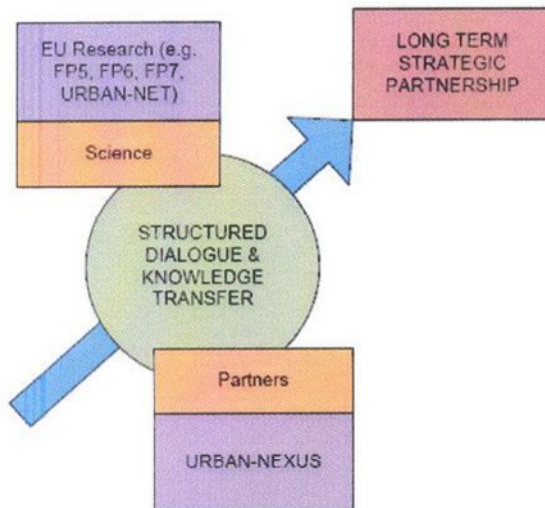


Figure 1: Vision for URBAN-NEXUS

1.1.4 Conceptual Approach to Delivery

URBAN-NEXUS will develop structured dialogue with stakeholders in relation to the key dimensions of sustainable urban management identified in the call including energy, water scarcity, transport, tourism, technology and innovation, governance social equity and cohesion, and sustainable consumption. These will be prioritised according to stakeholder consultations, via the Stakeholder Advisory Board, undertaken within the framework of URBAN-NET and following further engagement at the commencement of URBAN-NEXUS. These substantive themes will be mobilised within the framework of the project and specified as vertical work packages articulating the various thematically defined priorities for stakeholder engagement.

However, the scope of this coordination action does not permit all issues to be addressed equally, nor indeed is this desirable. The political priorities for the territorial management of cities and city region's provide the basis for understanding and structuring of the interconnected complexity of urban life and thereby the effective management of the city towards sustainable

development. Cities in Europe today must respond to a variety of sometimes conflicting (political) demands. In responding to the political imperative of climate change mitigation and adaptation cities must also ensure that cities fulfil their role as motors of economic development whilst securing appropriate conditions for a socially cohesive and healthy population, and quality of life. Our URBAN-NEXUS conceptual framework provides the basis for ordering and prioritisation of the various elements of the call, highlighting the strategically critical elements, and also providing principles to define the interconnectedness of all elements. This framework is derived directly from the previous and ongoing efforts of the URBAN-NET project.

URBAN-NET analysed during 2009 national and regional urban research programmes across all European Member States and Acceding Countries followed by extensive partner and stakeholder engagement to distil a coherent agenda for promoting collaborative endeavours on urban research across Europe and internationally. This framework aims to promote the vision of the sustainable city by focusing on future research needs and activities that will stimulate the planning, financing, performance, dissemination and utilisation of research amongst all stakeholders at all levels including local, regional, national, transnational and European.

The basis for the substantive themes adopted here is the consultation by URBAN-NET with stakeholders, notably at the June 2008 workshop held in Berlin, to identify the URBAN-NET thematic research framework. However, in development of this proposal and in response to the specifics of the call we have updated these topics to form our overall work package structure. These areas, described below, include:

- adapting to climate change;
- health and quality of life;
- sustainable land-use;
- integrated urban management;
- integrated information and monitoring.

Adapting to Climate Change

Anthropogenic climate change and its consequences are major challenges for European cities. European cities are traditionally built in strategic geographical locations along major rivers or next to the sea, consequently a substantial number of European cities are likely to experience the direct impacts of climate change including flooding as well as extreme temperatures. Climate change has severe implications for urban populations including heat stress, cardio-respiratory complications, parasitic and infectious disease, flooding, and drought. There is therefore a strong need for the establishment of resilient cities, urban areas able to absorb changes, reorganize and integrate economic, socio-cultural and ecological developments. Strategies are needed to **improve the collective responsiveness and preparedness of individuals, institutions and services to the inevitable consequences of climate change.** Education, health care, public health initiatives, infrastructure and economic development will become increasingly important in maintaining acceptable levels of quality of life.

There has been a lot of research attention focused on the mitigation of climate change. Mitigation aims to reduce emissions of greenhouse gases and curb further anthropogenic climate change by reducing energy consumption, improving energy efficiency, the substitution of fossil fuel use and changes in land-use practice. However, adaptation is a necessary imperative for responding to climate change. Urban areas and cities are particularly vulnerable due to the complexity and interdependency of activities and relationships between actors. Urban-specific

characteristics serve to amplify climate change impacts, e.g. the urban heat island effect, increased flood risk due to greater impermeable surface area and, in the majority of cases, the proximity of urban areas to coasts, rivers or watersheds. Adaptation is often overlooked in favour of mitigation, witness the international efforts of the Kyoto Protocol to address emission reductions at a global scale. However, the scale and sophistication of day-to-day relationships and interactions in urban areas across Europe and other continents belies the fragility and susceptibility of urban society, economy and infrastructure to seemingly remote or even minor perturbations arising from climate change. Changing climate trends and an increasing frequency of extreme events, such as forest fires, drought, heat waves, excessive precipitation and storms, are pushing urban societies ever closer to unpredictable and potentially chaotic futures.

Health and Quality of Life

There has been increasing recognition that the planning, design and management of urban areas has significant implications on the health and quality of life of urban populations. Reliance on cars, high levels of pollution and poorly designed and planned neighbourhoods has exacerbated problems with health and health related behaviours. Research has focused on a number of areas including for example, sustainable transport, the design of cities and suburbs, and the promotion of physical activity and the exposure of urban populations to contaminants in water, air and soil. Despite a raft of evidence and guidance, the recommendations for how to achieve healthy lifestyles remain disconnected and ineffective. What is needed is the development of an **integrated understanding and problem-solving orientation for issues concerning quality of life and sustainability in the urban realm** through bringing challenges and risks to health into the foreground. In addition, this could include a synthesis of evidence of risks and challenges to people's health arising from spatial planning as manifest in urban form and urban design in an accessible form. However, health and quality of life remains a complex issue which cannot be solved by one agency alone. Therefore, consultation is required with a range of stakeholder communities including planners, those in the health care sector, education institutions and so on, to develop a common understanding of the integration and synergy between the wider determinants of health, economic resilience and urban ecosystem services.

Sustainable Land-Use

Land-use and land management practices have a major impact on natural resources including water, soil, nutrients, air, plants and animals, landscape and landform. One of the most important tasks of a **sustainable land-use policy should be to minimise environmental impacts** and in particular the consumption of natural resources. It is still unclear how this goal could be reached and what measures would be appropriate. The Polycentric City Region model has been suggested as a basic orientation model and vision of Urban Sustainability in which autonomous cities create a continuum of densely developed and mixed-use areas and landscapes; integrating energy, food production, open space and spatial concentration of buildings. The model of a Polycentric City Region appears to combine the advantages of a Compact City such as density, mix of functions, public transport with the individual qualities of suburban areas e.g. green spaces, child-friendly environments and home ownership. This model seems more valid for some parts of Europe than for others, for example not immediately for the lower dense parts of the European continent. However, research is needed to understand the driving forces, interactions and dependencies and to find innovative solutions as part of a participatory decision-making process between citizens, local government and other actors.

The achievement of sustainable land-use and settlement structures seem to be mainly a question of decision-making and implementation. Thus, research should also contribute to implementation through scientific analyses, advice and evaluation. Research for and about implementation has a role other than implementation alone. It is about observing or preparing and analysing decisions and their implementation which in turn will also be about lessons learned and best practices.

Integrated Urban Management

The interconnectedness of the social, economic and environmental dimensions of urban life and the associated drivers of change at the urban level, also create complex conditions for urban management, and fundamental barriers to the effective implementation of sustainable urban development. In response to this interconnectedness and complexity, the principles for integrated urban management have become the pre-eminent framework for the development of appropriate policy responses to these urban challenges.

One basis for policy failure in relation to the land-use - transport - environment nexus can be attributed to difficulties of securing an integrated policy response between the responsible agencies. Two fundamental poles of this integrated policy response concern first, the **horizontal policy integration necessary between the sectoral agencies** responsibilities for land-use management, and transport and environmental planning, at the local and regional levels of governance. Failure to secure an integrated policy response is attributed to variety of factors including notably organizational and procedural barriers to achieve central coordination, as well as problems of communication between organisations.

The second dimension of policy integration concerns **vertical coordination between agencies responsible for policy delivery** at local, regional, national and EU levels. The factors identified above operate in the horizontal perspective and are equally applicable, but in land-use management in the European context in particular, a special focus is required on how to reconcile subsidiarity with necessary coordination of actions.

Integrated Information and Monitoring

Effective monitoring of the pressures, state and impacts at the urban level, as well as the effectiveness of policy responses in controlling the urban development, is clearly essential. One of the prime barriers to integrated urban management is identified in the difficulties of measurement via indicators and in the creation of assessments of urban impacts that effectively relate to policy needs. **The complexity of urban interactions is clearly a major challenge** in this regard, but the generation of integrated information and effective monitoring of policy implementation this is also undermined by information management systems that are primarily designed to meet the needs of a particular agency and which do not communicate with other agency information systems. **The fragmentation of the information and intelligence essential to support integrated policy solutions and policy implementation** naturally seriously impedes the effective response of cities and regions of Europe to these challenges. Improved integrated intelligence offers a major opportunity to address and overcome these deficiencies in policy responses necessary to secure sustainable urban development.

The concepts reviewed above provide a prime basis for analysing the various interconnected issues identified in the call. These concepts deliver structuring principles, focus and a basis for prioritisation of the thematic focus for knowledge transfer and the delivery of structured dialogue to the urban stakeholder communities. The thematic focus for knowledge transfer and structured

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dialogue in URBAN-NEXUS is also developed according to stakeholder assessment of the priorities for the delivery of sustainable urban development as generated by URBAN-NET.

1.1.3. Objectives

The URBAN-NEXUS coordination action will **build upon and strengthen the relationship between stakeholders and policy-making** through engagement, collaborative prioritisation, integral dialogue and knowledge transfer. Our partnership is formed from the stakeholders in urban development and will be further enriched by an additional Strategic Advisory Board of external stakeholders. Framed by these principles, through collaboration, knowledge-exchange and partnership-building, this coordination action will accomplish the following objectives:

- Promote innovative **problem-solving** approaches to the complex and interrelated policy issues concerning sustainable urban development;
- Increase awareness, knowledge exchange, cooperation and collaboration through **structured dialogue**; and
- Further the Long-term Strategic Framework for Scientific Cooperation through the enabling and building of **partnerships**.

1.1.4 The URBAN-NEXUS Approach

URBAN-NEXUS will comprise **three vertical thematic strands** focussed on adapting to climate change, health and quality of life and sustainable land use (WPs 2, 3 and 4; Figure 2). There will also be two **horizontal integration strands** (WPs 5 and 6) focussed on integrated urban management and integrated information and monitoring (Figure 2). The activities in these strands will be supported and managed by a further horizontal strand: project coordination and reporting. All three horizontal strands will take an overarching approach to integrating and synthesising the structured dialogue outputs and activities from the thematic strands.

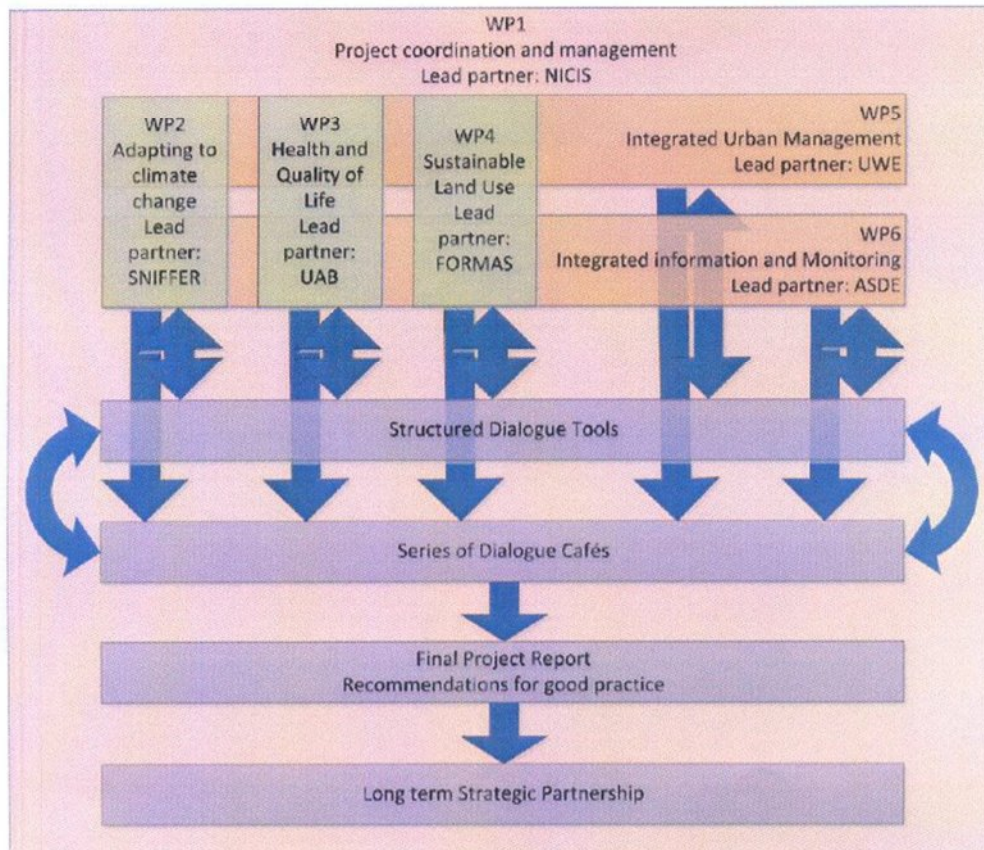


Figure 2: Work package Structure for URBAN-NEXUS

The three vertical strands and the two integration strands will follow a similar approach developed around the three project objectives:

Objective 1: Problem-Solving: Innovative Approaches to Sustainable Urban Development
 This objective consists of two primary tasks: a review and synthesis of the existing EU research and innovation in sustainable urban development and a stakeholder analysis.

Review and Synthesise Existing Data and Research

This coordination action is backed by several years of European research on the complex issues related to urban development. However, the URBAN-NEXUS project seeks to add value to this work by bringing information together in a usable and coherent way.

The substantive focus and source material for the structured dialogue will be created by scoping, assessing and synthesising relevant EU research.

This will include research delivered by URBAN-NET over the past 5 years, the EU Research Framework Programmes including the rich resources of the City of Tomorrow and Cultural Heritage (FP5), subsequent research in FP6, and ongoing research in FP7. In addition all other relevant sources of urban research at the European level will be reviewed, including that arising from, for example, the European Environment Agency, European Topic Centres, ESPON programme, URBACT.

This phase will be primarily desk-based reviews and systematic reviews of evidence from the EU and elsewhere including research, methodologies, data and current practices. Provide. This material will be assessed and analysed to support the preparation of a series of **synthesis papers** which will present this material in an accessible manner. These papers will form the basis of discussion in the **Dialogue Cafés**. There will be one Dialogue Café for each of the thematic strands and the two integration strands. The production of the synthesis paper and the corresponding Dialogue Café will be led by the respective WP but with input from all the relevant partners (see 1.3). The integrated urban management strand (WP5) will ensure that the synthesis papers follow a standard format and build upon one another as the project develops. The overall aim is to develop an **integrated problem-solving perspective** on issues concerning sustainable urban development and the reduction of the ecological footprint. Similarly, the integrated information and monitoring strand (WP6) will develop a tool for supporting the sustainable urban management and for the **reliable estimation** of the urban ecological footprint; strengthening the use of objective and accurate spatial databases and sources.

Towards the Structured Dialogue – prioritisation and the thematic work packages

Following the desk-based review of research, we will engage with stakeholders in a process of refining individual themes of research. This will be accomplished via an URBAN-NEXUS kick-off meeting (Month 1) with our Strategic Advisory Board and a diverse set of representatives from cities, research entities, business representatives, and NGOs who will provide stakeholder valuation and prioritisation informed by political imperative. Critically, our broad goal here is to **join up scientific research and policy**. As noted above, a great deal of high quality research already exists; through this coordination action we seek to create strong links and synergies between these two arenas through the Urban Knowledge Arena.

In addition, each thematic strand (WP2, 3 and 4) will conduct a **stakeholder analysis** across all relevant sectors and tiers and dimensions of governance, i.e. horizontally and vertically; including representatives from cities, regional government, national ministries, European institutions, public utilities and bodies, emergency services, civil society and grass-roots organisations, enterprise and small businesses, professional associations and academia. This will allow us to expand our external audience to those stakeholders that are not currently represented on the Strategic Advisory Board to ensure that they have the opportunity to participate in the structured dialogue.

This material will highlight the major thrust of thinking and research in each theme within a framework of critical drivers, issues and opportunities. Our purpose here is not only to confirm the challenges facing European cities today but to identify solutions and promote collaborative problem-solving. By identifying a range of potential policy responses (e.g. recommendations for good practice) we can frame each theme by real opportunities and move towards the development of long-term partnerships towards reduction of the urban ecological footprint.

In concert with our partners, URBAN-NEXUS will prioritise the themes for the development of structured dialogue with the urban stakeholders according to the principles of political priority and the associated and interconnected impacts at the urban level, as well as the priority for integrated urban management supported by integrated information and monitoring.

Objective 2: Structured Dialogue: Increase Awareness, Knowledge Exchange, Cooperation and Collaboration

As objective 1 detailed, to successfully realise this project will require bringing together and coordinating existing data and research related to urban environmental issues in Europe. However, we must also **add value and further this work**. We must animate the urban research discussion through a programme of communication, information and experiential sharing, and collaborative engagement and learning – **the structured dialogue**. The structured dialogue will be framed by our thematic and integrated strands (WPs 2-6) and reflect the **diverse, interconnected issues and challenges** facing urban areas today. This process is designed to build awareness – not only on the critical issues – but also on the innovative solutions already being applied across Europe. Furthermore, it is crucial to **building partnership and finding long-term solutions** for the challenges facing contemporary European cities and regions.

Towards accomplishment of this objective we must take a wide view of the notions of engagement and dialogue. This ranges from informative and useful web and online resources to active, hands-on engagement in workshop events and the development of **Urban Knowledge Arenas (UKAs)**. In this section we detail our approach to the structured dialogue – founded in the concept of UKAs as well as our approach to networking and communication (e.g. social media; web, etc.). We position this process within **Innovation Europe** – one of the seven flagship initiatives of the Europe 2020 Strategy which seeks to strengthen Europe's position as a world class science performer. Applied here towards the structured dialogue, innovation relates to transforming the relationship between public and private stakeholders through the facilitation and support of innovation partnerships.

Building Awareness

The URBAN-NEXUS project must build awareness and foster meaningful dialogue on the issues of urban sustainable development. However, we recognise that those involved with urban issues have demanding schedules and limited time for idle debate. As such, our programme must be clear and understandable and be framed by a tangible, solution-oriented agenda. We propose a **repertoire of structured dialogue tools** which, we believe, will not only provide useful information and opportunity for participation and knowledge transfer, but support a programme of continuity and longevity which is crucial to partnership approach. These tools will necessarily take into account the overriding objective of the call 'reduction of the urban ecological footprint', not only in the chosen topics of dialogue, but also in how this dialogue takes place (place of meeting, means of transportation, what instruments/tools for dialogue are used, etc). These instruments include, for example:

- an URBAN-NEXUS **website** which would serve as the primary communication portal to the general public as well as an interactive forum for partners and stakeholders.
- an URBAN-NEXUS **social media** component including an **Open Forum** discussion platform as well as, for example, LinkedIn or Twitter to keep the dialogue current, easily accessible and to provide a means for online debate and question/answer;

This will include research delivered by URBAN-NET over the past 5 years, the EU Research Framework Programmes including the rich resources of the City of Tomorrow and Cultural Heritage (FP5), subsequent research in FP6, and ongoing research in FP7. In addition all other relevant sources of urban research at the European level will be reviewed, including that arising from, for example, the European Environment Agency, European Topic Centres, ESPON programme, URBACT.

This phase will be primarily desk-based reviews and systematic reviews of evidence from the EU and elsewhere including research, methodologies, data and current practices. Provide. This material will be assessed and analysed to support the preparation of a series of synthesis papers which will present this material in an accessible manner. These papers will form the basis of discussion in the Dialogue Cafés. There will be one Dialogue Café for each of the thematic strands and the two integration strands. The production of the synthesis paper and the corresponding Dialogue Café will be led by the respective WP but with input from all the relevant partners (see 1.3). The integrated urban management strand (WP5) will ensure that the synthesis papers follow a standard format and build upon one another as the project develops. The overall aim is to develop an integrated problem-solving perspective on issues concerning sustainable urban development and the reduction of the ecological footprint. Similarly, the integrated information and monitoring strand (WP6) will develop a tool for supporting the sustainable urban management and for the reliable estimation of the urban ecological footprint; strengthening the use of objective and accurate spatial databases and sources.

Towards the Structured Dialogue – prioritisation and the thematic work packages

Following the desk-based review of research, we will engage with stakeholders in a process of refining individual themes of research. This will be accomplished via an URBAN-NEXUS kick-off meeting (Month 1) with our Strategic Advisory Board and a diverse set of representatives from cities, research entities, business representatives, and NGOs who will provide stakeholder valuation and prioritisation informed by political imperative. Critically, our broad goal here is to join up scientific research and policy. As noted above, a great deal of high quality research already exists; through this coordination action we seek to create strong links and synergies between these two arenas through the Urban Knowledge Arena.

In addition, each thematic strand (WP2, 3 and 4) will conduct a stakeholder analysis across all relevant sectors and tiers and dimensions of governance, i.e. horizontally and vertically; including representatives from cities, regional government, national ministries, European institutions, public utilities and bodies, emergency services, civil society and grass-roots organisations, enterprise and small businesses, professional associations and academia. This will allow us to expand our external audience to those stakeholders that are not currently represented on the Strategic Advisory Board to ensure that they have the opportunity to participate in the structured dialogue.

This material will highlight the major thrust of thinking and research in each theme within a framework of critical drivers, issues and opportunities. Our purpose here is not only to confirm the challenges facing European cities today but to identify solutions and promote collaborative problem-solving. By identifying a range of potential policy responses (e.g. recommendations for good practice) we can frame each theme by real opportunities and move towards the development of long-term partnerships towards reduction of the urban ecological footprint.