Urban Europe - A Joint Programming Initiative

Addressing the Grand Challenge of Urbanisation

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What is Joint Programming?

• Commission Communication of 17 July 2008

• Hypothesis: Current funding instruments are not effective for creating a European Research Area
  
  ○ EC Communication July 2008: ERA-NETs have not lead to harmonisation of national R&D strategies and programmes (budgets were too small)

• New focus on grand challenges which cannot be solved on level of individual countries

• Member States shall pool resources in creating joint transnational R&D programmes
Joint Programming Initiatives

• Council decision of 1-2 December, 2008
  o Joint Programming as policy process, driven in variable geometry by the European Member States (MS)
  o Establishment of a Council working group (GPC)
  o Invitation for MS to propose topics of grand challenges and offer to coordinate joint programmes

• Joint Programmes:
  o „Neurodegenerative Diseases“ as a pilot theme
  o 2 “waves“ of JPI themes (3 + 6); currently 10 themes in total
  o JPI Urban Europe adopted by Council on 4 May 2010 as part of the 2nd wave
Urbanisation as a Grand Challenge

% of world population living in urban areas

Quelle: UN Population Division
Global Distribution of Urbanisation

Already today more than 50% of all urban dwellers live in Asia!

Quellen: UN, DB Research
Challenges of Urbanisation

Urban areas as hubs of cultural and economic dynamics

- Demography
- Migration
- Economy
- Sustainability
- Social Cohesion
- Security
- Transport
- Resources
Vision of the JPI Urban Europe

“Global Urban Challenges
– Joint European Solutions”
Thematic Focus of the JPI Urban Europe

Managing complexity through a human centred approach

- **complementarity** regarding existing technology-driven and sectoral approaches
- **driven by social science**, not technology-driven
- **long term perspective** on research and innovation (10 years, and more)
- **create input** for radical innovation, technology development and implementation strategies
Mission of the JPI Urban Europe

Urban Europe

• represents a forward-thinking and long-term oriented, coordinated research and innovation initiative to shape urban development in times of a global shift.

• is an integrative, interdisciplinary and horizontal approach across the interfaces of economy, society, mobility, and ecology, serving society by raising public awareness and acceptance, and consequently putting expertise into practice.

• promotes intensive interactions between researchers, policy makers, business and civil society, resulting in an innovative and impact-oriented approach.

• endeavours to become recognisable as the EU entry point open to all relevant stakeholders with an interest in urban development.
Objectives of the JPI Urban Europe

• To establish a world class research environment in Europe for all “City of the Future” developments;
• Based on relevant scenarios and patterns, to create input for radical innovation, technology development and implementation strategies;
• To design tools, models and concepts for technology assessment and dissemination as well as for urban governance and urban management
• To develop policy recommendations for the European Union, its Member states and cities
Budgets and Funding Instruments

- The JPI Urban Europe is likely to become the largest funder of urban-related R&D in Europe
- Themes will evolve from fundamental to more applied research over the years
- Implementation instruments:
  - Databases and exchange of information
  - Alignment of national R&D programmes
  - Trans-national joint calls
  - Collaborative R&D programmes of the Urban Europe Research Alliance
Governance Structure

Participants: 16 Member States and Associated States (in alphabetical order): Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and Turkey
Strategic Research Framework and Pilot Phase
Role of Urban Europe SRF

• To define the mid to long term thematic scope of Urban Europe research

• To identify the main research themes

• To set the frame for specific implementation measures as well as for the development of research roadmaps and programmes
Strategic Research Framework – Process

4 pillars representing challenges

- Society
  - Ageing
  - Segregation

- Economy
  - Brain drain
  - Stagnation

- Mobility
  - Congestion
  - Emission

- Ecology
  - Climate change
  - Degradation

4 integrated city images representing research demands

- Entrepreneurial City 2050
  - (1) Human and Economic Capital
  - (2) Technology and Logistics Capital
  - (3) Environmental Capital
  - (4) Social and Cultural Capital

- Liveable City 2050

- Connected City 2050

- Pioneer City 2050
Strategic Research Framework - Architecture

• What are the prominent demographic, economic and technological megatrends that are decisive for the future of urban systems?
• What are new developments and policies in mobility, logistic and land use that are needed to create vital and attractive cities and networks of cities in the decades to come?
• Which ecological and social constellations have to be met and implemented in order to shape sustainable and balanced long-run urban development patterns (including energy systems) in Europe?
Objectives of the Pilot Phase

1. **Identification** of critical issues and **stock-taking** of strategic global trends and drivers of urban development;

2. Final determination of the long-term Strategic Research Agenda for 2014 – 2020 (**R&D roadmaps and programmes**);

3. Development of Key Performance Indicators (**KPIs**) for the **four city images** of Urban Europe;

4. Creation of **databases reflecting good practice** in pilot and demonstration of new urban technologies and solutions.

5. Develop strategic **Research cooperations beyond Europe**
Modules of the pilot phase

<table>
<thead>
<tr>
<th>Set-up Phase</th>
<th>Pilot Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MODULE 1:</strong> National stakeholder processes on pilot topics based on pilot concept</td>
<td>Foresight activities according to pilot topics</td>
</tr>
<tr>
<td><strong>MODULE 2:</strong> Build-up of a common ground to support research, innovation &amp; implementation</td>
<td>Joint research activities (call): joint pilot projects according to pilot topics</td>
</tr>
<tr>
<td><strong>MODULE 3:</strong> Alignment of existing and emerging national programmes to UE</td>
<td>Sharing of data, knowledge and infrastructure</td>
</tr>
<tr>
<td></td>
<td>Joint activities based on existing and/or emerging national programmes and variable geometry</td>
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</tbody>
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Integration of all results into the framework for the 2nd phase

Concept for 2nd implementation phase incl. research programme and instruments
Process of the Pilot Phase

**Vision**

- Liveable City
- Entrepreneurial City
- Connected City
- Pioneer City

**Issues**

- Urban megatrends
- City networks and connectivity
- Socio-ecological sustainability

**Research Themes**

- Global and EU patterns and drivers for long-term urban dynamics
- Urban indicators, scenarios, strategic information systems and models of urban development
- Future infrastructure and advanced urban technology needs
- New governance and implementation models, public-private interaction and future policy arenas
- Sustainability of urban systems
- Social dynamics, diversity and economic competitiveness
- Vulnerability and resilience of cities

**Pilot Phase**

- 2011-13

**National Thematic Stakeholder Processes**

- Foresight: Urban Innovation Eco-Systems
- Foresight: European Network of Cities
- Foresight: Adaptive Urban Regions
- R&D Projects: Urban Megatrends Indicators
- R&D Projects: Urban Connectivity
- R&D Projects: Integrated Urban Management
Expected Outcome of the Pilot Phase

1. Common ground and **understanding of key drivers and trends**;
2. Input for the **grand challenges debate** of the 8th Framework programme (EU Common Strategic Framework – CSF);
3. **Long-term SRA** as a basis for R&I roadmaps and programmes, funding and implementation concepts of the JPI Urban Europe for 2014 – 2020;
4. Establishment of a **Urban Europe Research Alliance**, uniting European RTOs and universities in the implementation of the SRA of Urban Europe;
5. First **strategic research projects** based on joint calls and the work of the Urban Europe Research Alliance;
6. First **joint activities based on variable geometry** in alignment with the Strategic Research Framework (SRF) of the JPI Urban Europe;
7. **Databases and Key Performance Indicators** for urban development;
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Thank you for your attention!

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