

JPI Urban Europe

Trans-national Research on Urban Issues and Technologies in Europe

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Joint Programming – Coordinating Research in Europe
New Opportunities for the Austrian Research Community
Vienna, 28 September 2011



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

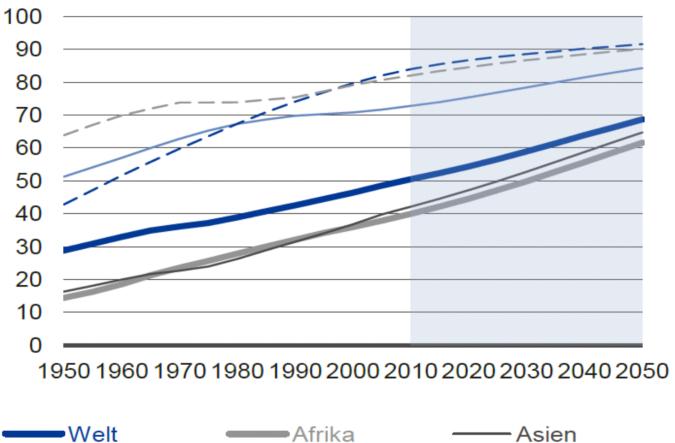


Joint Programming Initiatives

- Council decision of 1-2 December, 2008
 - Joint Programming as policy process, driven in variable geometry by the European Member States (MS)
 - Establishment of a Council working group (GPC)
 - Invitation for MS to propose topics of grand challenges and offer to coordinate joint programmes
- Joint Programmes:
 - "Neurodegenerative Diseases" as a pilot theme
 - 2 "waves" of JPI themes (3 + 6); currently 10 themes in total
 - JPI Urban Europe adopted by Council on 4 May 2010 as part of the 2nd wave



Urbanisation as a Grand Challenge



— — – Südamerika

---Nordamerika

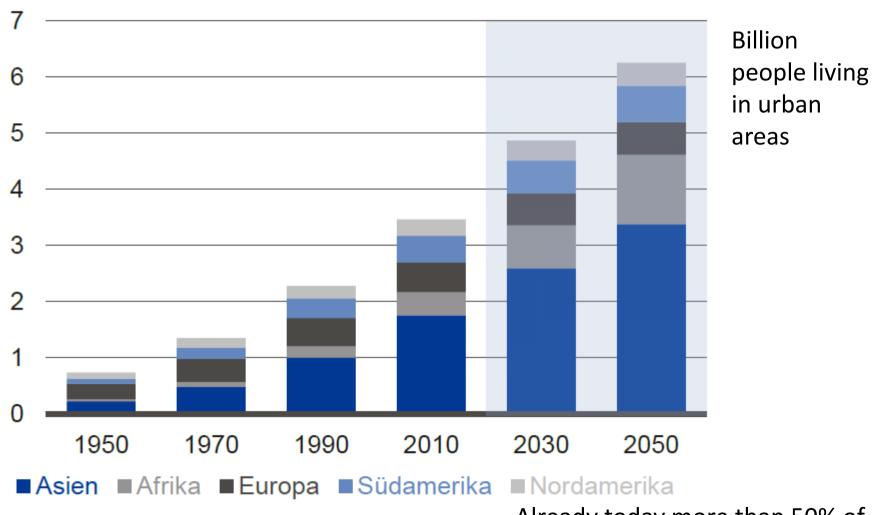
% of world populatiion living in urban areas

Quelle: UN Population Division

Europa



Global Distribution of Urbanisation

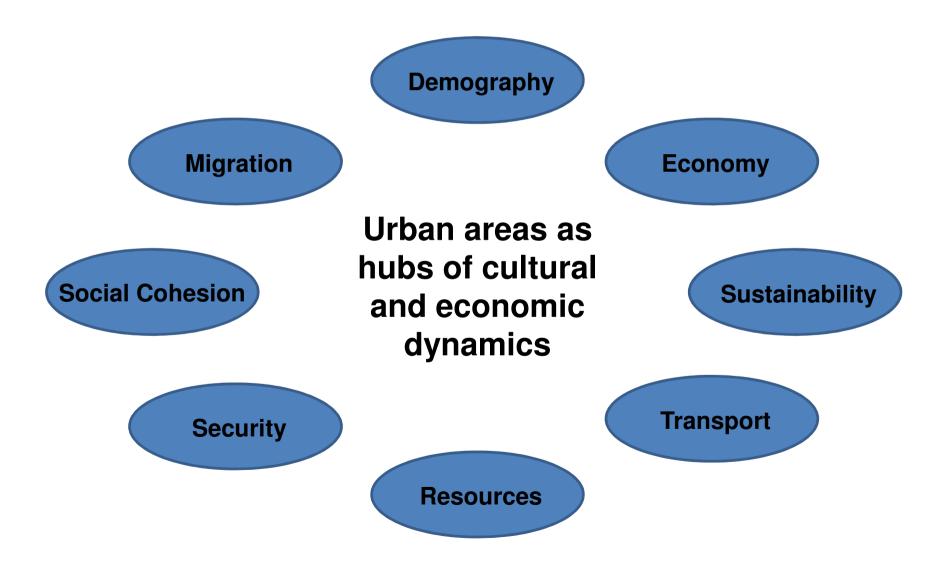


Quellen: UN, DB Research

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



Challenges of Urbanisation





Vision of the JPI Urban Europe

"Global Urban Challenges

Joint European Solutions"



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;

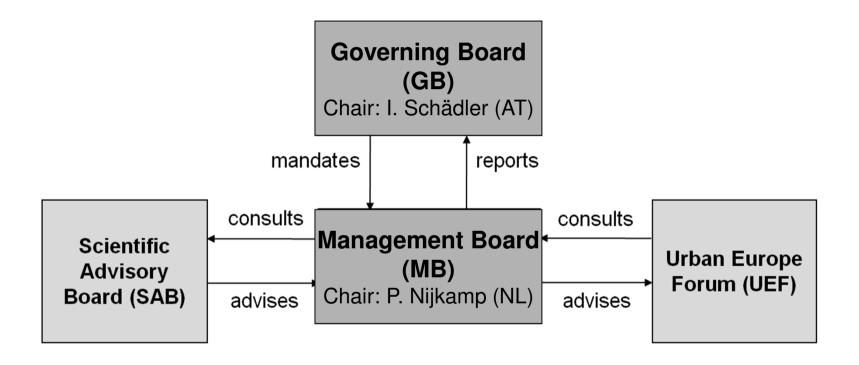


Budgets and Funding Instruments

- The JPI Urban Europe is likely to become the largest funder of urban-related R&D in Europe
- Pilot Phase: 2012 2013, Implementation Phase: 2014 2020
- Themes will evolve from fundamental to more applied research over the years
- Implementation instruments:
 - Databasess 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



Role of Urban Europe SRF

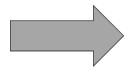
- To define the mid to long term thematic scope of Urban Europe research
- To identify the main research themes
- To set the frame for specific implementation measures as well as for the development of research roadmaps and programmes



Strategic Research Framework – Process

4 pillars

representing challenges



4 integrated city images

representing research demands

Society

Ageing Segregation

Economy

Brain drain Stagnation

Ecology

Climate change Degradation

Urban Europe Vision & Mission

Liveable

City 2050

Entrepreneurial City 2050

- (1) Human and Economic Capital
- (2) Technology and Logistics
 Capital
- (3) Environmental Capital(3) Social and Cultural
 - (3) Social and Cultura Capital

Connected City 2050

Pioneer City 2050

Mobility

Congestion Emission



Strategic Research Framework – Focus Human centred approach

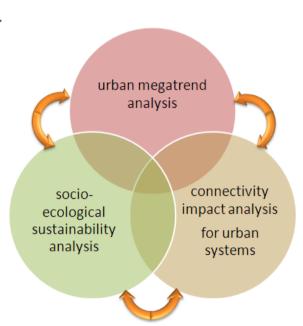


- social science-, not technology-driven
- long term perspective on research and innovation (10 years, and more)
- create input for radical innovation, technology development and implementation strategies



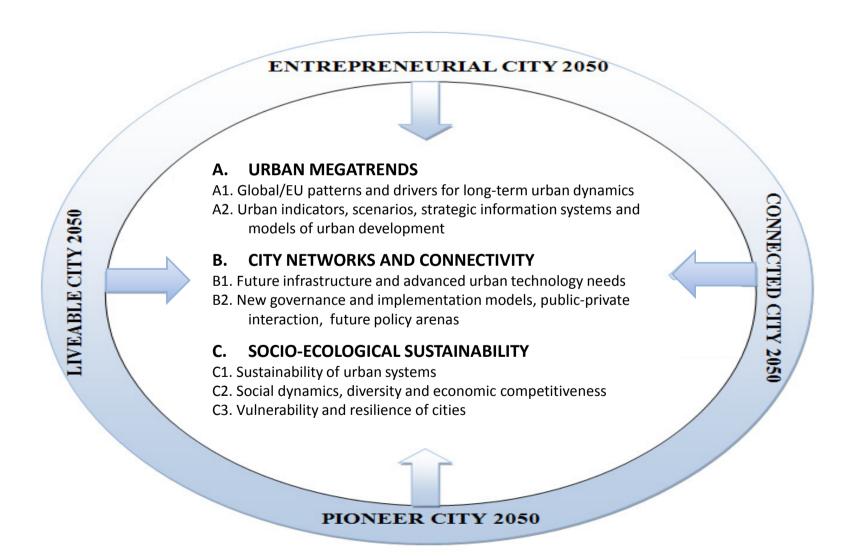
Strategic Research Agenda - Architecture

- 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?





Knowledge Arena





Pilot Phase

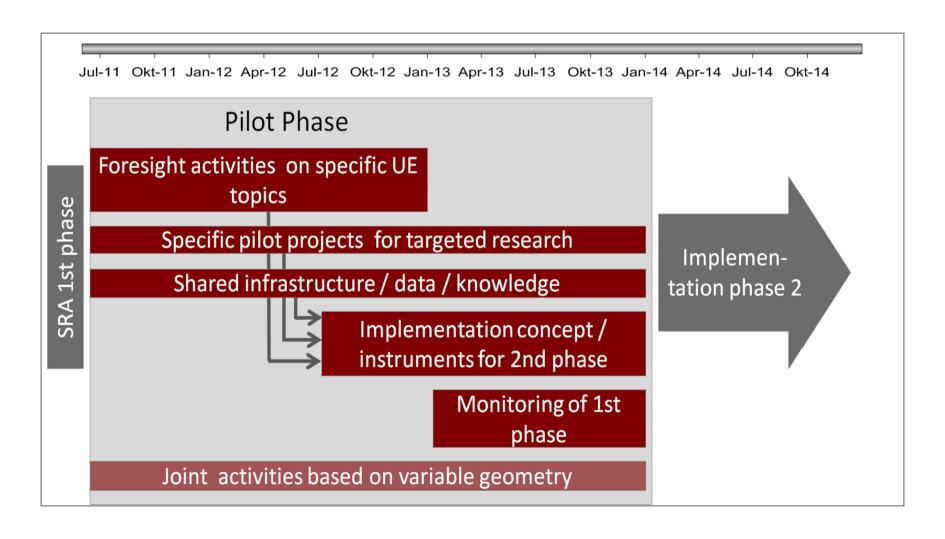


Objectives of the Pilot Phase

- 1. Identification of critical issues and stock-taking of strategic global trends and drivers of urban development;
- Final determination of the long-term Strategic Research
 Agenda for 2014 2020 (R&D roadmaps and programmes);
- 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





Joint Programming Initiative

Process of the Pilot Phase

National Thematic Stakeholder Processes

Vision **Research Themes** Issues Pilot Phase 2011-13 Global and EU patterns and drivers Foresight: Urban Innovation Liveable City fo long-term urban dynamics **Eco-Systems** Urban indicators, scenarios, **R&D Projects: Urban** Urban strategic information systems and **Megatrends Indicators** megatrends models of urban development Entrepreneu Future infrastructure and rial City Foresight: European advanced urban technology needs City networks **Network of Cities** New governance and and implementation models, public-R&D Projects: Urban connectivity private interaction and future Connected Connectivity policy arenas City Sustainability of urban systems Socio-Foresight: Adaptive Urban ecological Social dynamics, diversity and Regions sustainability economic competitiveness Pioneer City R&D Projects: Integrated Vulnerability and resilience of **Urban Management**

cities



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&D 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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