



URBAN EUROPE

Global Challenges – Local Solutions

A European Joint Programming Initiative

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European Policy Perspective

High visibility for urban issues

→ Large investments in close-to-market R&D&I

- E2B PPP (€ 2bn over 10 years)
- SET-Plan EII SMART CITIES (€ 11bn over 10 years)

→ Innovation Partnership SMART CITIES

- Foreseen under the Flagship Initiative „Innovation Union“
- Focus on smart, liveable cities, combining energy efficiency, clean transport and fast internet:
- Intention to coordinate all European R&D&I efforts related to urban issues, but a concept will only be presented in 2011

→ Joint Programming Initiative Urban Europe

- Member State driven transnational programme to address the challenges of urban development

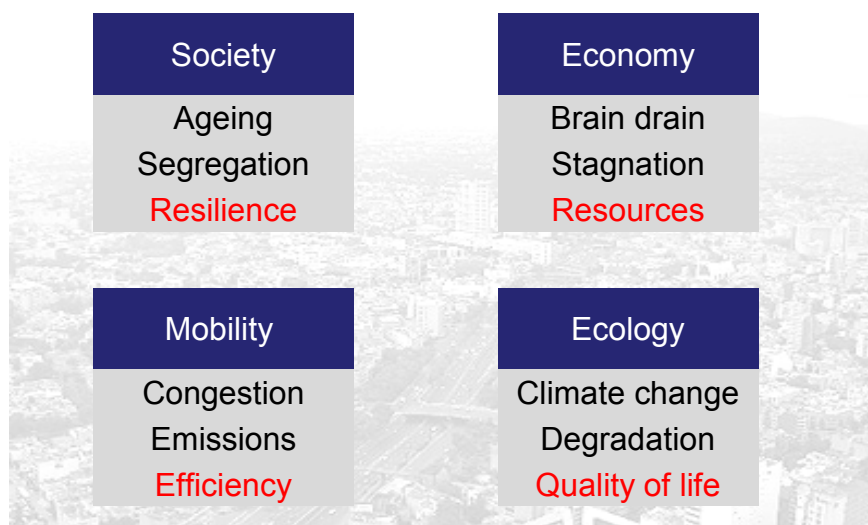


Joint Programming

- Joint Programming was introduced by the European Commission and the European Council in 2008
- Joint Programming is a concept for the creation of **Member State driven** trans-national R&D programmes in Europe
- Joint Programming is one of the five initiatives for implementing the European Research Area (ERA)
- 10 “**grand challenges**” have been selected by the European Council as thematic areas for European trans-national Joint Programmes
- Each Joint Programme is being coordinated by a different member state
- The Joint Programme “Urban Europe” is being developed under the leadership of Austria and the Netherlands



Urban Europe – Global Challenges





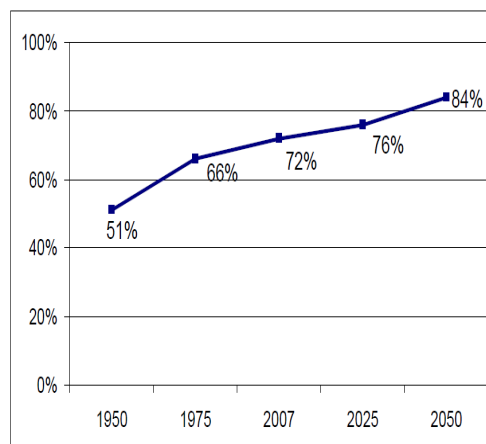
Urban Europe – Strategic Objectives

- Rethinking and managing the dynamics of urban development in Europe to sustain and enhance urban areas as a place of vitality, liveability and accessibility
- Addressing the complexity of the grand challenges in an urban context by a systemic and multi-stakeholder approach
- Reinforcing European competitiveness by mobilising the advantages of European urban agglomerations and of new technologies in urban contexts



Urban Europe - Society

Trends in Urbanisation in Europe 1950-2050, UN 2009



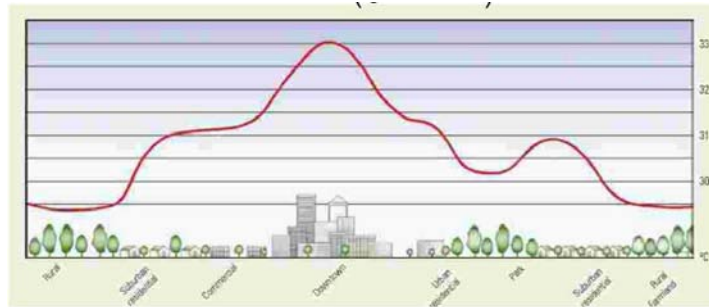
- ✓ Immigration makes up 1/3 of urban growth
- ✓ Migrant circulation
- ✓ Social Restructuring (60+, ethnic variety,...)
- ✓ (Re)emerging problems:
 - poverty,
 - homelessness
 - crime

<http://esa.un.org/wup2009/unup/index.asp>



Urban Europe – Ecology

Cities as “heat islands“



- Higher temperatures in urban areas - “heat island” effect
- More energy consumed by cooling appliances
- Peak electricity load increases 3-5% for a 1°C increase in temperature



Urban Europe – Global Challenges – Mobility

- Congestion in urban areas costs 100 billion Euros or 1% of the EU's GDP annually
- Urban areas - 40% of all CO² emissions of transport
- Accidents: health effects, damage to vehicles, expenditure for police and emergency services

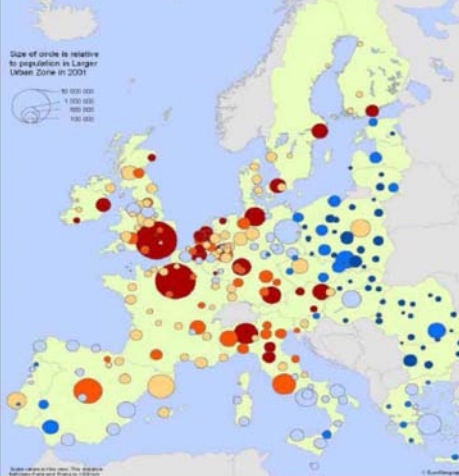




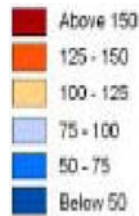
European Research Area

Urban Europe – Economy and Innovation

GDP per capita in PPS



- Centres of economic and innovative activities (80% of GDP, R&D)
- Competition of cities on a global scale
- Specialisation in and connections between urban areas



9 / 25



European Research Area

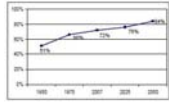
Urban Europe at the Crossroads: Quo Vadis?



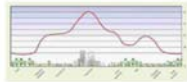
10 / 25



Urban Europe – Local Solutions



→ **Social Cohesion and Integration**



→ **Sustainability and Minimization of Ecological Footprint**



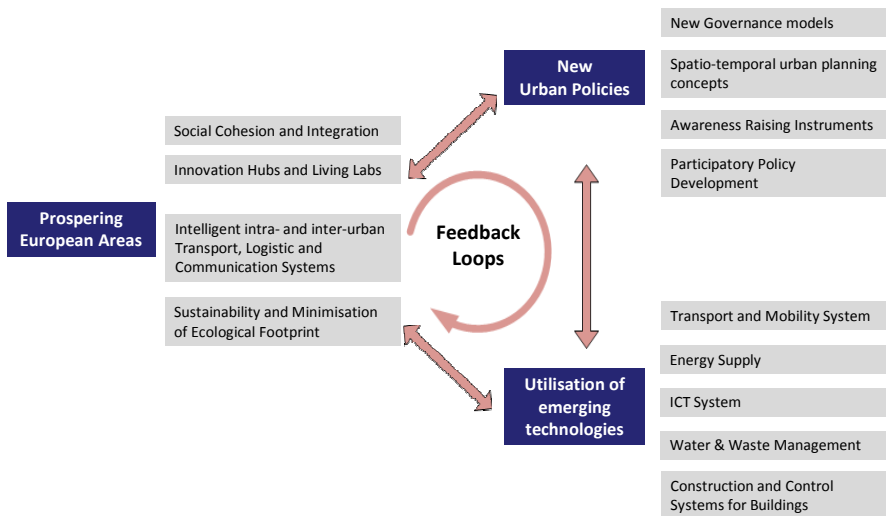
→ **Intelligent intra- and inter-urban Transport, Logistics and Communication Systems**



→ **Innovation Hubs and Living Labs**

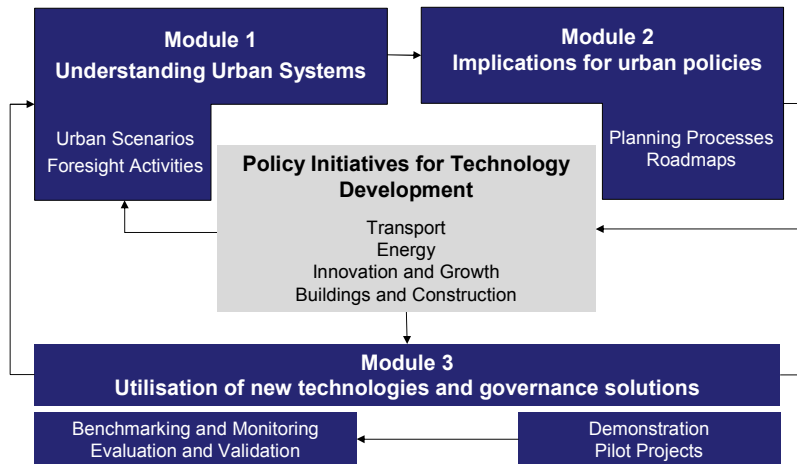


Urban Europe – A Systemic Approach





Urban Europe – Modules



Urban Europe - Research Issues

Module 1

Understanding urban systems

→ Develop **integrated models for simulation and optimisation** of urban development scenarios:

- operational methodologies for foresight experiments on urban issues
- option of starting with a large forward looking activity across Europe

→ **Create and integrate data bases** as a basis for evidence-based policies. Utilise the wealth of data on urban and transport issues (e.g. Eurostat, Urban Audit)



Urban Europe - Research Issues

Module 2

Implications for urban policies in the 21st century

- **New planning, management and governance models** leading to “cities as service centres” and “cities of excellence”
- **Participatory Policy Approaches**
- Planning and design for **minimising slums & deprived areas**
- **Concepts for integration** of social (and ethnic) groups
- **Spatio-temporal planning** for land use systems



Urban Europe - Research Issues

Module 3

Utilisation of new technologies and governance solutions

- **Co-modal transportation systems** on local, regional and international levels: environmentally friendly, safe, sustainable, available
- **Zero tolerance of fatalities and injuries** (sensor web, web2.0)
- **Smart Grids, electric mobility** (i.e. electric vehicles, hybrid electric vehicles, plug-in hybrid electric vehicles, hydrogen/fuel cells)
- **Model-cities and demonstration projects**: e.g. Stockholm (ecocities), Amsterdam (modal split), Vienna (eco-renovation), Mannheim (smart grids)
- **New housing and building concepts** (intelligent homes, energy efficient buildings, smart cities)



European Research Area

Urban Europe – Added Value



- **An integrative perspective** understanding and shaping urban future
- Creating feasible **tools for European policy makers**
- **Learning community** – Increasing research on EU level in **efficiency** and **comprehensiveness**
- An **opportunity to explore solutions** to challenges which lie **far ahead**

17 / 25



European Research Area

Urban Europe – Joining Forces

13 participating countries

Austria, The Netherlands, Denmark, Finland, France, Germany, Ireland, Italy, Malta, Spain, Sweden, Switzerland, Turkey

40 institutions

from 17 countries involved in proposal development



Participating Countries (13): Austria, Denmark, Germany, Finland, France, Ireland, Italy, Malta, The Netherlands, Spain, Sweden, Switzerland, Turkey
Non-participating Countries (21): Belgium, Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Portugal, Slovakia, Slovenia, United Kingdom



18 / 25



European Research Area

Urban Europe – Creating Complementary Approaches

Initiatives Involved

- ERA-net “urban-net”
- European Energy Research Alliance (EERA)
- Trans European Transport Networks (TEN-T)
- ERA-net “transport”
- The Freight Logistics Package 2007
- European Construction Technology Platform (ECTP)
- POLIS
- ...



Taking care to not double up existing R&D&I activities

19 / 25



European Research Area

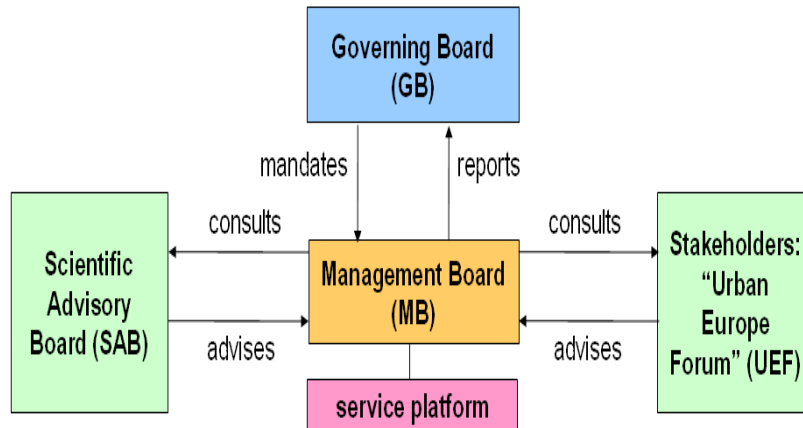


Urban Europe – the way forward

20 / 25



Urban Europe: Governance Model



Governance Structure

- ✓ Governing Board (GB)
 - overall political, strategic and financial orientation
 - core group countries and the interested countries
- ✓ Management Board (MB)
 - funding structure, application procedures, monitoring and evaluation processes, working and communication methods
- ✓ Scientific Advisory Board (SAB) and Urban Europe Forum (UEF)
 - Input for strategic research agenda
 - Support of the JPI



Urban Europe – Next Steps

- Adoption of governing and supporting bodies (12/2010)
- Development of a Urban Europe Vision (12/2010)
- Development of the SRA (April 2011)
- Development of framework conditions for scientific cooperation and funding (April 2011)
- First calls for proposals (end of 2011)



Urban Europe – Contact Points

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Coordinated by:

- Austrian Ministry of Science and Research
- Austrian Ministry of Transport, Innovation and Technology
- Dutch Ministry of Infrastructure and the Environment



European Research Area

Thank you for your attention!

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