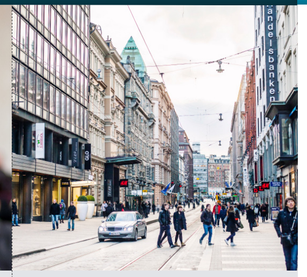
» How will our cities develop in the future? «

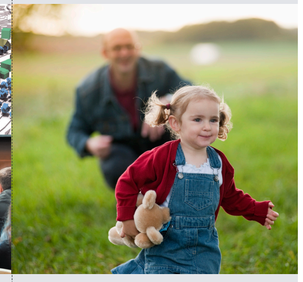
» How to best present city planning alternatives? «



» Where do people travel within their city and why? «

» Where to plan new neighbourhood facilities and green open space? «

» How to decide on future development priorities? «



» How to make better use of public spaces? «

FUTURE DEVELOPMENT CATEGORIES | PARTICIPATION | SOCIO-ECONOMIC DYNAMICS

www.urbanapi.eu

urbanAPI contact

If you are interested in using our tools to support stakeholder engagement in your city or if you need any further information, please contact:

zeitform Internet Dienste OHG
Darmstadt, Germany
Phone: +49 6151 155 637
E-Mail: po@urbanapi.eu

urbanAPI project partners

Fraunhofer Institute for Computer Graphics Research IGD
Darmstadt, Germany
www.igd.fhg.de

University of the West of England
Bristol, United Kingdom
www1.uwe.ac.uk/et/research

Austrian Institute of Technology
Vienna, Austria
www.ait.ac.at

GeoVille GmbH
Innsbruck, Austria
www.geoville.com

AEW srl
Rome, Italy
www.aew-environment.com

urbanAPI city partners

Centro de Estudios Ambientales
Vitoria-Gasteiz, Spain
www.cea.vitoria-gasteiz.org

Agency for Sustainable Development and Eurointegration - ECOREGIONS
Soña, Bulgaria
www.asde-bg.org

Municipality of Ruse
Ruse, Bulgaria
www.ruse-bg.eu

Magistrat der Stadt Wien
Vienna, Austria
www.wien.gv.at

Commune di Bologna
Bologna, Italy
www.comune.bologna.it

urbanAPI supports the urban governance of smart cities

TOWARDS MORE SUSTAINABLE EUROPEAN CITIES

The urbanAPI project has received funding from the European Union's Seventh Programme for research, technological development and demonstration

Background of urbanAPI

Europe's cities renowned worldwide for their cultural heritage and quality environments, also provide homes for approximately 80% of Europe's population. But today the cities of Europe are increasingly under threat from various socio-economic and environmental challenges, including climate change, that undermine the quality of life of many citizens. In response city managers are defining visions for the future form of urban Europe, and are seeking to manage city-regions to ensure that the full benefits of urban quality of life are passed on to future generations.

The governance of these city-regions is clearly critically important, but the effectiveness of urban governance and management is substantially undermined by urban complexity. In particular the complexity arising from the interconnectedness between socio-economic and environmental factors in a territorial context create major barriers to the effective implementation of policies promoting sustainable urban development.

Fortunately, the governance of cities is increasingly supported by the application of smart city solutions, based on Information and Communication Technology (ICT) tools and methodologies that produce an effective basis for the assessment of urban complexity, decision-making support, and the creation of robust solutions. These ICT enabled innovations not only support formal processes of urban governance and policy making, but also facilitate direct participation in the decision-making processes by a wide range of urban stakeholders including citizens.

The urbanAPI project, funded by the 7th Framework Programme of the European Commission, based on the principles of top-down and bottom-up up engagement in the decision-making process, delivers intelligent and integrated tools supporting effective citizen centred urban governance targeting both pan-European and global markets.

> HOW TO SUPPORT CITIZEN AND STAKEHOLDER ENGAGEMENT IN THE PLANNING DECISION MAKING PROCESS?

> HOW TO UNDERSTAND THE SOCIO-ECONOMIC DYNAMIC OF CITIES AND CITY REGIONS?

> HOW TO COMMUNICATE THE FUTURE DEVELOPMENT PERSPECTIVES OF CITIES AND CITY REGIONS?

How does urbanAPI support urban governance?

> POTENTIAL OF THE URBANAPI TOOLS

The urbanAPI tools assist in managing urban problems which arise as the drivers of change, including climate change, economic transformation and migrations of population, that have global origins and impact European cities to greater or lesser extent. In this context urbanAPI tools enhance understanding of the socio-economic dynamic of the city, visualise its future evolution and support the democratic basis of decision-making by enhanced stakeholder engagement.

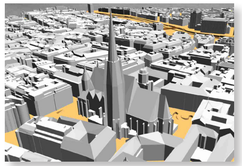
Realising the enormous potential of these tool applications, urbanAPI tools not only offer solutions to the specific problems identified in the project demonstration cities of Vienna, Bologna, Vitoria-Gasteiz and Ruse, but also point the way to the development of generic solutions that can be universally applied in urban management.

> SUPPORTING EFFECTIVE URBAN GOVERNANCE

urbanAPI tools provide ICT enabled innovative applications which address 3 critically important facets of city management today. These include:

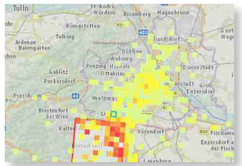
- > SECURING FULL CITIZEN AND STAKEHOLDER ENGAGEMENT in the planning decision making process;
- > UNDERSTANDING THE SOCIO-ECONOMIC DYNAMIC of cities and city regions, and the ways in which this dynamic interacts with the built environment of the city;
- > COMMUNICATING THE FUTURE DEVELOPMENT PERSPECTIVE of cities and city regions, including between planning agencies and between planning agencies and the public.

The urbanAPI tools



3D SCENARIO CREATOR

The **3D SCENARIO CREATOR** directly addresses the issue of stakeholder engagement in planning processes by the fully realistic visualisation of development proposals. Interactive control of planning interventions and the visual presentation of real time changes in zoning and building formation greatly assist citizens to fully understand the planning proposals. The tool furthermore permits interactive modifications of planned alternatives, allowing different stakeholders to fully engage in the decision-making process.



MOBILITY EXPLORER

By using GSM data, the **MOBILITY EXPLORER** permits the analysis and visual representation of different socio-economic activities across the territory in relation to the backdrop of the various land-use elements of the city. As a consequence it is possible to create new and highly detailed intelligence regarding mobility within the city, and the various interactions between people and their environment. This intelligence can be used, for example, to support the design of transportation infrastructure, or to observe people's preferences for certain open spaces, parks, or recreation areas, as a basis for urban planning proposals.

URBAN DEVELOPMENT SIMULATOR

The **URBAN DEVELOPMENT SIMULATOR** addresses multiple challenges in responding to the demands from urban planning in addressing the needs of both expanding city populations, and elsewhere declining and frequently ageing populations. The simulator assists in understanding the large scale consequences of spatial planning decisions in a complex urban system, including future representation of socio-economic activity across the territory. As a consequence the application provides vital decision-making aids for urban planners in the management of the territory, as well as supporting associated activities concerning political negotiation, and stakeholder engagement regarding the future development of the territory.