SUDPLAN

Urban Planner for Climate Change Adaptation

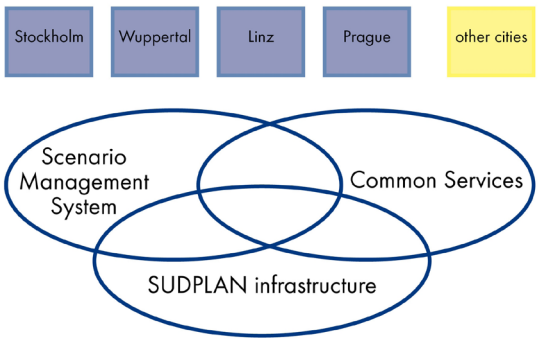
The SUDPLAN project – Sustainable Urban Development Planner for Climate Change Adaptation – will develop a web-based planning, prediction and training tool to support long term urban planning. With an open architectural design, SUDPLAN will contribute to a shared information space in Europe.

TOOL FOR CITY PLANNERS

An integrated planning approach is vital for sustainable cities. SUDPLAN services will allow the assessment of some of the most critical environmental factors - storm water flooding, river flooding, river pollution resulting from combined sewer overflows (CSOs), droughts and air pollution. European city planners can assess, for present as well as for future climate scenario conditions, the consequences of different solutions for environment, urbanization, infrastructure and transport systems.

COMPONENTS OF SUDPLAN

SUDPLAN will provide long term forecasts of environmental factors for planning of urban subsystems such as building and landscape architecture, traffic and transport, local water runoff and sewer system dimensioning. The Common Services of SUDPLAN provide models for downscaling climate and environmental data for direct visualization or use as input data to local models. The Scenario Management System offers a highly interactive, 3D/4D graphics-based decision support environment through which the users access Common Services and local applications.



USING SUDPLAN

City planning end-users can either work directly in the system or obtain SUDPLAN results through different kinds of scientific users – IT and GIS specialists, environmental modellers, statisticians etc. SUDPLAN services will be demonstrated for four city pilots: Stockholm, Wuppertal, Linz and Prague. All European cities may access the same Common Services as the pilots and also develop own local applications.

MODELLING WITHIN SUDPLAN

SUDPLAN will provide a number of climate scenarios from global climate models, downscaled first to the regional scale and further downscaled to the urban scale. This ensemble downscaling will provide a robust information of precipitation, temperature, hydrological and air quality data for a period typically stretching from 1980 up to 2050. A modeller on the urban scale will be able to generate input and boundary data to his local scale application from a chain of larger scale models.

THE SUDPLAN SYSTEM

SUDPLAN will connect to existing systems and infrastructures using service-oriented architectures, offering dynamic recombination of services in a loosely coupled fashion. The SUDPLAN communication and service infrastructure will be based on standards and specifications of the Open Geospatial Consortium, and will re-use earlier EU-developed concepts, specifications and software components, as well as other open source software.

EU FP7 PROJECT

SUDPLAN is an EU FP7 project running 2010-2012 under the Information Communication Technology programme *ICT for Environmental services and Climate Change Adaptation.*

SEVENTH FRAMEWORK PROGRAMME

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