

BMBF project DEMAPLAN: demand-oriented planning and management tools for a sustainable water infrastructure - KMU-innovativ – high-tech strategy Federal Government

DEMAPLAN: New software for demand-oriented infrastructure planning

Be it big city, little town or village: safe drinking water supply and waste water treatment are of major importance for citizens, economy and the environment. Within the DEMAPLAN research project – which is funded by the BMBF through the SME instrument "KMU innovativ" – inter 3 develops new software which can be used by water supply companies to adjust their pipes and water works to the trend of demand. Today, the design of sustainable water infrastructures requires a profound knowledge of changes in demand trends. Traditionally, water supply companies implement what is technically feasible in order to meet a given water demand. This prevalent supply oriented approach results in oversized sites and networks, whose operation and maintenance lead to increasing water and waste water tariffs. Based on the assumption that planning and management need to be more demand-oriented inter 3 and the Herzberger Wasser- und Abwasserzweckverband (HWAZ) have developed a software toolbox DEMAPLAN – DEmand-oriented MAnagement and PLANning.

Who needs how much, when and for which purpose? Understanding water demand trends

By 2015 inter 3 analyses influential factors on the water demand of private households as the largest consumer group of municipal water supply, and develops prognosis models. Moreover, the water use of private households is measured using high-resolution flow meters at toilets, washing machines etc. For these data – which depend on the technological development and user behavior – a special data analysis methodology is developed. This way starting points for a demand-oriented water management can be derived.

Practice-oriented information systems for efficient water infrastructures

The aim of the project is to develop a toolbox that involves two software products that enable water supply companies as well as planning and engineering offices to adjust networks and sites to the actual demand:

- DEMAPLANSTRAT for strategic planning and decision making, and
- DEMAPLANOPERA for operative management issues.

DEMAPLAN will enable water supply companies to optimize (re)investment programs and operating procedures. The toolbox will be offered as web service and is available for water supply companies and planning agencies from 2015 on.



Project name:

Software-Toolbox DEMAPLAN:
DEmand-oriented MAnagement and
PLANning of water infrastructures

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Duration:

2013 – 2015

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