

Smart City

Energy-efficient, resource-saving and low-emission - the essential factors for a smart city. The AIT is Austria's leading research and technology organisation and is currently researching promising solutions in this field. Some examples can also be found on TRA 2018.

MODE

MODE is a software technology for collecting motion data. The software automatically tracks the distances travelled by a smartphone and the method of transport used. This data will then be used to create "smart" mobility services. The MODE Software Library is state of the art and delivers the highest quality data. The data is sent to the AIT server which is used an analysis interface and for further processing. Data protection and security are of the highest priority. The data gathered can be used to develop innovative solutions such as multimodal e-ticketing systems, offering users seamless and convenient mobility. The AIT is definitely several steps ahead of the game with the MODE software solution. MODE sets a completely new standard in terms of quality, which will give transport companies a decisive advantage in terms of mobility surveys and the development of appealing transport services.

UD_INFRA SIM

Fast urban growth presents a number of challenges for municipalities. The AIT supports the following innovative solutions to assist with successful infrastructure planning:

The ATTRACTIVENESS CALCULATOR can be used to estimate the attractiveness of different regions, factoring place of residence or business location by means of geodata via remote recognition and GIS (Geographic Information System). The results of the surveys are so-called attractiveness maps, which users can use to combine various push and pull factors in order to achieve valuable results. Using the online sketching tool, attractiveness maps including urban master plans or areas to be developed in the future can be created.

The URBAN INFRASTRUCTURE DEVELOPMENT SIMULATOR enables an urban growth simulation and associated infrastructure cost estimation, which are useful for urban development decisions. The simulation model represents urban growth by providing an overview of the living habits of the population in the city and future immigration from rural areas. According to various urban areas, job creation potential, existing infrastructure and population growth, can also be identified and used.

RAPID URBAN DESIGN

AIT developed a planning tool for comprehensive urban planning and design options for the planning of a new district in Singapore. The adaptive digital tool includes various measurement factors, such as traffic and landscape planning. This makes it possible to supply a large number of well thought out planning scenarios as quickly as possible. The calculation method enables a quick adaptation or change in design and offers immediate performance evaluations. The planning tool also includes simulations of various scenarios for traffic, solar radiation, microclimate, energy demand and economic potential. The urban planning tool can also be used worldwide with great ease.

SMARTICIPATE

SMARTICIPATE is a data-based citizen dialogue system and is an interactive link between citizens, businesses and public administrations which can subsequently improve the productive efficiency of cities. The aim of the project is to integrate bottom-up processes into urban planning, harnessing the full potential of citizens by exchanging ideas in the co-production of decision making processes. In this way, citizens have full access to open data and direct feedback on their community-based ideas regarding urban development. Furthermore, citizens are thus given an active role in the public domain. SMARTICIPATE has already rolled out three pilot projects successfully in Hamburg, Rome and London.