Internet of Services and Things and Compliance of Technical Infrastructure with Environmental Standards – A Conceptual Study for Schwerin and its Surrounding Areas

Project

Duration

Aug 2015 - Dec 2017

Several regions, notably in eastern Germany, are faced with the challenge of maintaining infrastructure and services while coping with shrinking populations and financial constraints. Could up-to-date information and communication technologies, such as the internet of services and things, be part of the solution? A conceptual study focusing on Schwerin and its surrounding areas has been launched to help answer this question.

Many regions in Germany are experiencing changes such as a decline in overall population, an increased percentage of the elderly in the population, and reduced numbers of economically active people. In many cases, this calls into question the viability of infrastructure due to a reduced utilization of capacity and dwindling financial resources. The need to adapt to the expected effects of climate change poses additional challenges. At the same time, technological innovations and the envisaged expansion of broadband internet access may offer opportunities to provide infrastructure services in a more cost- and resource-efficient way.

With the city of Schwerin and its surroundings as a pilot region, the Institute for Innovation and Technology and Ecologic Institute will jointly explore possibilities to adapt technical infrastructure systems to these changing conditions. Regional experts and decision-makers have been consulted to select representative case studies from the following sectors: information and communications technology (ICT), transportation, energy supply, water/sewage, and waste/circular economy. For each of these case studies, the team will analyze problems, possible solutions, and the potential role of ICT. The results will be discussed with experts and subsequently converted into concepts with concrete recommendations. The ultimate aim of the project is to provide concepts for smart solutions suitable for implementation to help achieve affordable, environmentally- and user-friendly infrastructure systems for Schwerin and its surroundings.

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expert interviews, expert consultations, workshops
