

ScaleNet – Converged Network of the Future

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ScaleNet is a research project partly funded by the German Federal Ministry for Education and Research. The project aims to develop an overarching, cost-effective, flexible and efficient system concept with IP-optimised integration of heterogeneous wireless and wireline networks and their access methods.

New concepts and access technologies for next generation broadband wireless and wireline access networks have been developed. One focus for that is to realise IP-optimised integration of heterogeneous access networks by flexible combination of fixed, mobile and wireless access networks. The purpose is to improve the availability, transmission capacity, and wireless coverage of broadband network access as well as the efficient support of service, user and terminal mobility to provide users simple, secure and personalised communication services over all kinds of access technologies and domains. Another focus of the project is to develop network services for the convergence of fixed and mobile networks. These include concepts for overarching mobility management, overarching AAA and security mechanisms, IP based QoS-control, overarching locating mechanisms for location based services, intelligent access network management and overarching network service platform.

An integrated ScaleNet demonstrator with the main features of a fixed, mobile & wireless IP-optimised convergent access network of the next generation have been developed by a prototypical implementation of the new concepts within the project.

The project partners are Alcatel-Lucent Deutschland AG, Deutsche Telekom AG, Ericsson GmbH, Fraunhofer Institut für Nachrichtentechnik Heinrich-Hertz-Institut, Qualcomm CDMA Technologies GmbH, Nokia Siemens Networks GmbH & Co KG, Universität Karlsruhe (TH), Institut für Telematik.