Provision of Multimedia Service Mobility within the Next Generation Network (NGN)

Leo Lehmann
Rapporteur Q.29/16 (Mobility for Multimedia Systems and Services)
Federal Office of Communications (OFCOM)
Biel - Bienne, Switzerland

Within the last two years the consideration of Fix - Mobile Convergence (FMC) has obtained an increased focus on the deployment of Multimedia Services like video telephony, video conferencing or video broadcast over telecommunication networks. The development of the Next Generation Network (NGN) by ITU (International Telecommunication Union) creates an opportunity for customers to ubiquitously access subscribed services by a variety of terminals and network connections. Thus Service Mobility becomes an important design issue with regard to network and service development. Service Mobility defines the ability of a user to access during an ongoing session the particular (subscribed) (Multimedia) services irrespective of the location of the user and the terminal that is used for that purpose. Service Mobility also implies the possibility to suspend any running service on one device and to pick it up on another one. The presentation describes the current work of standardization on Mobility Management for Multimedia Systems and Services in ITU-T especially considering the joint activities on this topic by Q.2/19 (Mobility management), Q.5/19 (Convergence of evolving IMT-2000 networks with evolving fixed networks), Q.6/13 (NGN mobility and fixed-mobile convergence) and Q.29/16 (Mobility for Multimedia Systems and Services) within the scope of NGN-GSI. A short description of the Generic Multimedia Service Architecture Model is followed by the consideration of different Roaming- and Handover- Scenarios. Hereby home centric and visited centric (break out services) service control scenarios are considered. Keeping in mind the constraints of user and service profiles the presentation furthermore gives some guidelines, how to adopt the various media components of a multimedia application according to the restrictions of the currently used terminal and network access (e.g. bandwidth, delay, delay variation, processing power). The presentation also summarizes appropriate requirements with regard to the underlying network structure as well as to the application layer.