ITU-T Workshop

"Mobile Telecommunications and Fixed/Mobile Convergence - the realities going forward"

Abstract

Kyiv, 12 – 14 **September 2005**

Speaker: PATRICK SMITH

MOTOROLA, USA

Session: 2.3: Case Studies on Mobile Networks in a Fixed-Mobile Convergence World

Title of Presentation: Converged Services Framework in an NGN Environment

Successful fixed-mobile convergence (FMC) requires more than creating a common backbone. The ability for operators to integrate wireless and wireline services across access networks is needed to provide an understandable, efficient user experience. At the same time, FMC is evolutionary, and expected to leverage existing infrastructure investments. A natural approach to FMC when faced with legacy infrastructure requirements and a graceful migration path is three-fold. First, steps must be taken to decouple services from access networks. Next, an overlay "service convergence layer" is added above the multiple transport technologies. Third, connections to the resources and needs of component access networks, and similarly the component services, must be drawn into the convergence layer to provide a rich set of context on a per-user basis. This last step is made more difficult by the different protocols, requirements, administration and ownership of the various components.

Good examples exist for decoupling services from access networks, and IP is, in its own way, a transport convergence layer. But the unification of latent resources and service behaviors across different domains is as yet an unsolved problem. An overlay service convergence framework provides a highly flexible deployment of advanced services, coordinated across access technologies and making maximum reuse of existing infrastructure at every point in network evolution. By including a service coordination function in one or more network locations and adding support functions where it is most cost-effective, traditional services can be made to function in a unified way, even across different administrative domains.