Network Architecture in the evolution towards NGN and IMS

Abstract

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- Network topology design is one of the most important issues when performing the migration of a PSTN towards a modern integrated multiservice network. This paper considers the main factors and steps in the migration of a network topology towards the new architecture of NGN with the new network elements

- Architecture alternatives are analyzed as a function of geo-scenarios, network level of development and aging, country growing rates, etc. New network topology with less number of nodes and links of higher capacity are required which imply to review the location of network elements, the network security design and the design methods.

- Combining evolution at access, local and transit levels allow a good strategy for economic evolution paths towards a full functionality of NGN. Special importance is given today to the introduction of IMS in order to facilitate the introduction of new services and the reduction of service operational cost in order to capture market and increase profitability in competitive revenue generation environment. Most typical paths are summarized.