Network Architecture consolidation in the evolution towards NGN

Abstract

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- Network topology design is the most important factor when migrating a PSTN towards a modern integrated multiservice network. This paper considers the main steps in the consolidation of a network topology to take benefit of the introduction of new services by introducing NGN network elements assuring services continuity and revenue increase.
- Main 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 network security design and new optimization methods.
- Combining evolution at access, local and transit levels allow a good strategy for introduction of new services in order to capture market and increase profitability in competitive revenue generation. Most typical paths are summarized.
- The migration process has to be defined with the support of adequate modeling methods and planning tools to ensure proper dimensioning and revenue increase for existing and new services which are briefly described.