

# ITU-T Workshop

## “New Horizons for Security Standardization”

### Abstract

Geneva, 3 –4 October 2005

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Session: **7:Overview of some specific areas of current interest for security standardization**

Title of Presentation: **Security of Voice in an IP Environment**  
- Enabling carrier-grade security for NGN services

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This presentation deals with the means to ensure the carrier-grade end-to-end security for VoIP services. The proposed methodology focuses on the analysis of the end-to-end infrastructure architecture with regard to the fundamental functional requirements for VoIP security. Since the paper aims at providing an overview of the essential security stakes, we propose to address the end-to-end architecture security rather than digging into the technical details (Interfaces, Protocols ...). In a first place presenting the guidelines for the design of a carrier-grade enabled end-to-end VoIP architecture, we afterward illustrate the application of those guidelines through an architecture design case study. This case study is driven according to four main levels: support network security, isolation between services, security of the VoIP service itself and security of 3<sup>rd</sup> party operators VoIP interconnection. Lastly we present the potential proposals to the international standardizations.