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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Lawful Interception (LI).

Modal verbs terminology

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Executive summary

The present document describes a comprehensive blueprint for a Lawful Interception (LI) system, designed to align with the mandates of Law Enforcement Agencies (LEAs) for the surveillance of telecommunications with utility across varying legal and regulatory environments. The LI architecture detailed herein sets out to meet stringent requirements, outlining the necessary high-level entities, procedures, and the functional roles essential for the operation of interception. It specifies how lawful authorizations, such as warrants, are processed and executed by Communication Service Providers (CSPs) to deliver Intercept Related Information (IRI) and Content of Communication (CC) to LEAs through secure channels.

The present document emphasizes a security-centric approach, incorporating Zero Trust principles across the architecture to ensure secure operations. This security view is intertwined with the functional aspects, ensuring that both data integrity and privacy are preserved throughout the interception process. The architecture is designed to enable distinct LEAs to carry out interception activities simultaneously and independently, safeguarding against the risk of inter-agency or other non-authorized detection.

Through the definition of a methodical LI lifecycle, starting from authorization and ending with the delivery of intercepted communications, the present document covers the operational protocols, the interplay between the various entities, and the safeguarding mechanisms in place. The described LI system is adaptable to the dynamic and evolving landscape of national laws and telecommunication technologies, ensuring future-proof applications across different jurisdictions and technological paradigms.

Introduction

The present document explains thoroughly the intricate architecture of Lawful Interception (LI) systems as stipulated across varying regulatory environments, a cornerstone for maintaining the delicate balance between national security, law enforcement, and individual privacy. Mapped out herein are the protocols that govern the interception of telecommunications as per the legal frameworks established by ETSI TS 101 331 [1]. Commencing with a broad overview of the key players and their respective roles within the LI ecosystem, the present document progressively narrows down to a more detailed analysis of the functional and security viewpoints.

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