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## Sommario/riassunto

This book provides a complete and comprehensive overview of 3G UMTS charging services. Evolving from offline billing of traditional telecommunications, charging for IP services in mobile networks is challenging; charging convergence is one of the major trends in the telecom industry. Advanced mobile telecommunications incorporates data applications with real-time control and management, and requires a convergent and flexible online charging system. Such convergence is essential to mitigate fraud and credit risks in order to provide more personalized information to users about charges and credit limit controls. Charging for Mobile All-IP Telecommunications provides comprehensive and practical coverage of online and offline charging based on mobile operator experiences, and the latest efforts undertaken by the UMTS specifications. Key features: . Presents a complete overview of the telecommunications charging system, including the evolution from 2G to 3G and all-IP network charging frameworks . Discusses all management aspects related to charging and billing processes, with a focus on the major trends and developments within the telecoms industry . Provides an overview of the telecom networks such as PSTN, GSM, UMTS and IMS . Covers the concepts of the telecom charging on mobile services and the new technologies for implementing online charging system, such as GTP' and Diameter protocol . Contains coverage on network nodes and data flows in relation to charging of mobile applications, such as IMS call and content downloading . Explains the IP-based online charging system, protocol details and recent trends in charging for mobile telecom industry This book is an invaluable resource for graduate students, telecoms and IP engineers, network service providers and system architects. Information technologists and networking equipment manufacturers will also find this book insightful.

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