1. Record Nr. UNINA9910142645503321 Autore Bregni Stefano Titolo Synchronization of digital telecommunications networks [Place of publication not identified], : Wiley, 2002 Pubbl/distr/stampa **ISBN** 9786610554645 0-470-84588-0 1-280-55464-9 Edizione [1st edition] Descrizione fisica 1 online resource (1 v.): ill Disciplina 621.382/16 Soggetti Synchronous data transmission systems Timing circuits Synchronization **Electrical & Computer Engineering Engineering & Applied Sciences Telecommunications** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Sommario/riassunto Network synchronization deals with the distribution of time and frequency across a network of clocks often spread over a wide geographical area. The goal is to align (i.e. synchronize) the time and frequency scales of all clocks, by using the communication capacity of their interconnecting links. Network synchronization plays a central role in digital telecommunications as it determines the quality of most services offered by the network operator. However, the importance of network synchronization is often underestimated and how to solve quality-of-service degradation caused by synchronization difficulties can become problematical to all but a synchronization engineer. Systematically covers a wide spectrum of both theoretical and practical topics Features a clear and profound description of synchronous and

asynchronous digital multiplexing (PDH, SDH), jitter and timing aspects of SDH networks Expounds synchronization network principles and

implementation issues, clock modelling, time and frequency

measurement Presents recent advances in telecommunications clock characterization and measurement If you are a system engineer, researcher, designer or postgraduate student searching for both the basics and an insight into more advanced areas currently under discussion then you will find Synchronization of Digital Telecommunications Networks an enlightening read. It will also prove to be a valuable sourcebook for senior undergraduates and technical personnel in telecommunications companies.