Preface

The evolution of telecommunication networks continues throughout the world because networks must evolve in response to demand for new features and services. The process of digitalization that began in the late 1960s is nearing completion, but this alone is not sufficient. The digital telephone network is now evolving into an integrated services digi-tal network (ISDN). The key components of this evolution are digital network synchro-nization and the CCITT common channel signaling system no. 7 (CCS 7). Engineering Networks for Synchronization, CCS 7, and ISDN therefore focuses not only on ISDN but also on network synchronization and CCS 7 and presents a comprehensive and unified treatment of these three subjects.
Today, the telecommunication scenario is characterized by the opening up of mar-
kets and the entry of several new operators in the national networks. The resolution of interconnection and interworking issues in a multiple-operator environment requires com-pliance to standards. Thus, this book gives an in-depth presentation of current interna-tional and regional standards including North American and European standards. To meet the needs of network operators, planners, and practicing engineers, the planning, engi-neering, and testing aspects are presented with a view to bridge the gap between theory and practice. Also included is a tutorial introduction to network synchronization, CCS 7, and ISDN; thus, students of telecommunication need no specialized knowledge to follow the text. The organization and structure of the book is discussed in Chapter 1.
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Although I acknowledge the support of all the people cited above, I remain respon-sible for the book and any residual imperfections. I welcome suggestions for improve-ment and for making the book more useful.

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