

# PART V

## RECENT HIGH-SPEED NETWORK ENVIRONMENTS

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Recent high-speed networks have two major additions: information highways (mostly fiber) that span the regions, the nation and the globe, and distribution systems (fiber or hybrid-fiber coaxial) to carry the information to residences, homes, desk tops, campuses and even the private LANs and MANs within corporations. Supporting switches and signaling networks, components and multiplexers and de-multiplexers are also essential to build viable networks from transmission systems. More recently, knowledge banks and intelligent network components (the SSPs, the STPs, the SCPs, the INAPs, the IPs, the SMSs, etc. listed in companion volume, *"Intelligent Broadband Multimedia Networks"*, see Reference 15.1) have also been introduced to make networks service and society oriented. The older concept of considering the networks being broadly subdivided into trunks and subscriber systems is challenged, if not eradicated by the quantum leap of the transmission rate up from voiceband data to optical rates, and the spiraling down of cost from the expensive electronic switching systems to the (very) cheap ATM switches.