Why a new journal?

Research on very high speed communication networks is expected to increase drastically during this decade in countries moving towards prominent positions in tomorrow's telecommunication and computer industries. Several R&D testbeds have already been established in the USA to develop gigabit technology, while significant interest is also being shown by researchers in Japan and Europe.

The next generation of networks will have to meat the ever-increasing demand for new services requiring high bandwidths. These services include high definition television (HDTV), video telephony, video conferencing, video library, and high speed data transfer. Fiber optics, a new communication technology, supports the high-speed, low-delay data transfer requirements a high-bit-rate applications. Fiber optic networks will provide the high performance demanded by broadband services in Broadband Integrated Services Digital Network (B-ISDN).

I believe that a journal is needed to report on significant advances in high speed networking, which appears to be a major technology frontier of our time. The Journal of High Speed Networks (JHSN) will be such a journal. I except the Journal of High Speed Networks to become a major publication in the area of high speed networking.

The journal will be published quarterly. Submissions to the journal will be refereed consistent with the review process of leading technical journals. This issue contains information about submission of manuscripts.

Topics covered

The aim of JHSN is to present original results of lasting significance in both the theory and practice of high speed networks. The journal will publish contributed papers on original research, survey papers on topic of current interest, technical notes, and short communications to report progress on long-term projects. The topic covered will include, but will not be limited to: the design and analysis of high speed networks; protocols for high speed communications; high speed LANs, MANs, and WANs; broadband ISDN and services; optical networks; control and management of high speed networks; high speed switches, interfaces and controllers; routing, flow control and congestion control in high speed networks; formal approaches to high speed protocol development; network management; multimedia applications; applications of high speed networks; experiences with operational high speed networks.

Editorial board

I have established a distinguished international editorial board for the Journal of High Speed Networks, with both breadth and depth in high speed networking. Additional editors are being invited from Japan and other areas of the world which are not currently represented on the board. I am grateful to the editors for their willingness to serve on the board to establish this timely publication.

This issue

The first issue contains four articles. The articles deal with important issues in the design and development of next generation high speed networks. I hope that readers will find these papers useful. The planning for this journal started about a year ago. I wish to thank the authors and editors involved in preparing this issue ready in a short time. I am grateful to Dr. Bob Kahn for his kind words about the journal.

I see this journal as an outgrowth of three annual workshops I organized in Maryland on Very High Speed Networks. This issue contains two articles based on presentations at these workshops. I am indebted to Dr. Larry Davis, Director of the Institute of Advanced Computer Studies (UMIACS) at College Park, for his continued support of the workshops.

Deepinder P. Sidhu *Editor-in-Chief*