traveling the information highway
Doing IEEE business electronically
with Bob Alden

1997 may well have been a pivotal year for the IEEE. At its November 1997 meeting, the IEEE Board of Directors made the decision to change the way we do business.

After a full year of careful planning, several key pilot projects, and consensus building among our staff, the Board approved a three-year, multimillion dollar plan to modernize our business infrastructure and enable our members and volunteers to use the Internet for most IEEE activities. This will ultimately encompass a full range of services, from joining and renewing our membership to changing our own membership record, on-line ordering of products and services, and finding the information we need as IEEE members and volunteers.

> *Information about IEEE's information highway is available electronically. To find out what is available, view the Web page at "www.ieee.org/eleccomm" or send a message to "fileserver@ieee.org" and place the file name "info.email" by itself at the start of the first line in the message.*

TRACK RECORD. The year started with wide-ranging input from Sections Congress '96, the Power Engineering Society Chapters Congress, the IEEE Strategic Planning Committee, IEEE society initiatives and direct input from many members and staff.

The Electronic Communications Steering Committee was asked to recommend a response to the top five action items from Sections Congress — all of which related to the Internet and its use to provide improved IEEE services. The concept for "The IEEE Internet Project" was presented to the Board in February 1997 and reported in this column in the April 1997 issue.

IEEE staff, led by IEEE Executive Director Dan Senese, picked up the challenge and added two related projects that address bidirectional electronic access to our member/customer database and business practice changes to ensure efficient service provision.

The result of these three projects will be a real capability to do business electronically — whether or not the final product or service is in traditional or electronic form.

Several pilot projects have been successfully developed. Several hundred students have joined the IEEE as student members by filling in a Web application and paying their dues electronically using credit cards. A smaller number of new IEEE members have joined over the Internet using a similar process.

The alpha test phase of the Web page hosting project has been successfully completed and the beta test phase is underway, with close to 20 sections operating their Web sites from a server located at the IEEE Operations Center in Piscataway, N.J., USA. Before long, assuming all goes well, we will have a production grade facility for all IEEE entities. (For more details, view the site at "www.ewh.ieee.org" or see my September 1997 column.)

There are two other pilot projects that our staff are working on: an IEEE product catalog with searching capabilities, and a membership renewal Web form.

These pilot projects are enabling the IEEE to realistically plan for new services to be made available over the next three years. With the approval granted this past November, detailed implementation plans are now being developed.

1997 has seen three other areas of progress. The IEEE network that links the IEEE servers at Piscataway and elsewhere, and the connection to the Internet, have been strengthened and reconfigured to enhance reliability and security and to enable future increases in capacity as needed.

The second area is that of converting IEEE information to a form whereby it is accessible over the Internet. This is a huge job that's being planned and coordinated by the IEEE staff.

The third area is that of improving the member/customer database at the IEEE, where the current renewal cycle is proceeding with improved performance each year. Errors are down, response rate is up. In fact, we would not be moving to "doing business electronically" if we had not been able to solve our past database problems. John Witsken and his IT crew — and indeed, the entire IEEE staff — deserve a round of applause for a job well done.

1998 AND AHEAD. The coming years should be exciting ones for IEEE members. We can look forward to seeing results from these 1997 planning and prototyping activities. I see the short term (three year) expenses on infrastructure as an investment in the kind of quality services that IEEE members need. This investment should pay for itself, not only in improved member satisfaction but on the bottom line, with increased (primarily) nonmember revenue and reduced costs.

Members should be able to find information at the IEEE first and fastest, register on-line for virtually all conferences and other technical and professional events, read the latest technical material on-line or down-load conveniently, and interact with each other as never before. The era of just-in-time information is about to become a reality.

But we need to be careful. There are differing views as to how we use Internet technology. In my view, IEEE membership must have its advantages for the IEEE to survive. IEEE membership could mean faster access to information and better searching capabilities than are available for nonmembers.

We now have restricted on-line access to *IEEE Spectrum* and some other publications. Some of our publications — THE INSTITUTE, for example — are available to anyone.

What about technical papers? The interest of the author to have wide access to his or her publication needs to be weighed against the collective interest of the IEEE membership to have "an edge on access." Should papers be available to anyone? Should abstracts be available to anyone?

Should abstract or full paper searching tools be available to anyone? I heard recently that a market survey indicates that a critically important service is answering the question "does a particular abstract exist?" Not the content but the existence! In my mind this raises the question: should abstract searching be a member benefit?

I urge everyone to get involved in the decisions that are being made now and will be made shortly. These decisions will significantly affect how our IEEE evolves.

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