efforts to upgrade

the Initial Graphics Exchange Specification

At the end of 1983, a group of those interested in developing extensions to IGES for architecture, engineering, and construction applications met in Gaithersburg, Maryland. The group consisted of some 35 representatives from architecture and engineering firms, CAD system suppliers, government agencies, construction firms, and the academic community.

The group discussed the existing IGES specification and how it might meet the data transfer needs of the architecture, engineering, and construction communities, and how that function might be extended. The issues discussed included: the reasons for transferring information between CAD systems; the type of information to be transferred, ways in which CAD data is generated and the "model" of a building that is or should be described in a computer system.

Although no conclusive recommendations were formulated, the group agreed that IGES use for architecture, engineering, and construction warrants further discussion. They plan to meet again this month as a subcommittee of the IGES committee.

Although some suppliers of CAD systems were present at the meeting, several heavily involved with the architectural and engineering market were not. This seeming lack of interest leads to three possible conclusions: CAD-system suppliers are not supporting IGES; they are trying to lock their customers into using their own systems by discouraging transfer of data to others; and/or they view architecture, engineering, and construction as an insignificant part of their market.

What designers can do to help the cause and themselves

The process of defining a standard for information exchange deals with technical issues outside the area of expertise of most architects. The standard that results from such a process, however, has far-reaching implications for the architectural profession. With this in mind, what can members of the architectural profession do to ensure that a data exchange standard will meet their needs? The steps one can take include the following:

- Define one's current and future needs for information exchange. What type of data is now on your computer system? What type of data do you foresee having on your computer system in the near future? With whom might you wish to exchange information? What will be done with the information once it is exchanged? Attempting to answer these questions may help clarify one's own needs for data exchange capabilities between two or more computers.
- Ask your computer suppliers if their system supports IGES. If the answer is yes, ask how far along they are in implementing their IGES interface. If no, ask why IGES is not being supported. If your suppliers do not support IGES or some other common information exchange standard, they may be trying to "lock" you in to using only their products. While this may be good for them, it is certainly not in your best interests. Many architects have been disappointed by CAD systems that have not performed to their satisfaction. The capability to transfer information to another system can give one more flexibility in upgrading CAD systems and will provide an incentive for CAD suppliers to continue striving to improve their systems.
- Find out more about IGES. The National Bureau of Standards has several publications on IGES, which are available through the National Technical Information Service. In addition, they publish an IGES newsletter. For more information, contact Fred Stahl at the Center for Building Technology, National Bureau of Standards, Washington, D.C. 20234.
- Encourage the American Institute of Architects to have a voice in the definition of computer data exchange specifications.
- Make your data exchange needs and concerns known to the IGES AEC working group. To do this you may contact: the author at Hellmuth, Obata, and Kassabaum, 100 North Broadway, St. Louis, Mo. 63102 or Dave Jordani, Ellerbe Associates, One Appletree Square, Minneapolis, Minn. 55420.

It is encouraging that an AEC working group on IGES is being formed. It will certainly benefit the architectural profession to be involved in the development of a standard that is gaining widespread acceptance by other professionals who are using computer-aided design techniques. *Jon H. Pittman*