

## 1. What is EDI?

As well as moving goods around the globe, freight forwarders are major movers of information, which is their lifeblood. Its swift and accurate movement through the organization and externally to domestic and foreign trading partners is essential. Much of the information contained in these messages is generated by computers. Thus it should be possible to transmit the information in electronic form over telephone lines directly from one party, such as a freight forwarder, to another party -- a customs broker or transport carrier, to name a couple of examples. Information sent electronically obviates the need for paper documents that have to be read by a person on the receiving end prior to their manual entry into yet another computer. Electronic transfer of information reduces human handling, paper and time, not to mention potential errors.

Electronic Data Interchange (EDI) is the term used internationally to refer to this electronic exchange of standardized messages. Several elements are used together to constitute an EDI exchange from one trading partner to another. **Figure 1** illustrates these elements. At either end are the trading partners, any two organizations -- forwarders, carriers, banks, customs brokers, government agencies, etc. -- who wish to send each other information. Let's examine how EDI typically handles the flow of information; in this case, a waybill:

1. The freight forwarder's computer generates a file containing the electronic data which is *translated* by software in the same computer into a standard waybill format. The standards used include ANSI X.12 and EDIFACT, both of which will be explained later.
2. The standardized EDI message is then transmitted through telephone facilities to a Value-Added Network (VAN), a company which runs a computer that has an electronic mailbox system for routing transactions. The VAN's mailbox is used like a private electronic post office. The incoming EDI message is electronically *posted* to the electronic *address* of the recipient.
3. The carrier's computer then dials up the electronic mailbox to retrieve the EDI message, which is *un-translated* (sometimes called interpretation) and is finally submitted for processing to the appropriate computer application running on the carrier's computer.

The entire series of transactions can take as little as 60 seconds to complete, from beginning to end. If necessary, one can send thousands or even hundreds of thousands of messages a day. It is economical, efficient and fast. The costs can be substantially