products, according to Robert Jeanbart, Reuters' head of risk management.

As well as Risk Manager, which it sold as a thirdparty application prior to its takeover of Sailfish, Reuters also markets Kondor+, developed by its Paris-based software subsidiary Effix Systèmes. The information vendor also markets a product called Deal Manager, which it developed itself.

Reuters officials describe the three products as complementary, with Deal Manager aimed at the foreign exchange and money markets and Kondor+ aimed at derivatives users in competition with products such as SunGard Capital Markets' Devon Derivatives System and Renaissance Software's Opus.

Unlike its siblings in the Reuters line-up, Risk Manager is not market-specific and covers a range of instrument types. It supports portfolios containing derivatives, foreign exchange, money markets, equities and bonds.

The software is also capable of interfacing with digital data distribution and deal-capture systems other than Reuters, including CSK Micrognosis' Real-time Mips platform. Extraction of data from deal-capture systems is via an ASCII-delimited file.

## ELECTRONIC TRADING

## LIFFE TO DEVELOP VARIANT OF APT+ FOR INDIVIDUAL EQUITY OPTIONS

THE London International Financial Futures and Options Exchange (Liffe) has announced plans to switch its individual equity options from open-outcry to electronic screen-based trading. Technology officials at the exchange say they will develop software based on Liffe's existing trading systems specifically for individual equity options. Separately, Liffe has released the first batch of a series of CD-ROMs containing price histories of its contracts. It has also launched a World Wide Web site on the Internet.

Liffe announced its plans to develop an order-driven automated market in individual equity options last month, taking the contracts off its trading floor. Industry observers say the individual options hadn't been as successful as other Liffe products, thus prompting the exchange's decision to switch them to a dedicated electronic trading system.

According to Neil Blurton, managing director of technology at Liffe, the individual share options will be traded on software based upon the Liffe's Automated Pit Trading (APT) and APT+ systems. Both these run on Ethernet local area networks of Sun Microsystems' SPARCstations under Sun's Solaris Unix variant and the Motif graphical user interface.

The exchange has yet to set a date for when the new system will go live. Blurton says that there will be a period of at least three to four months for member consultation. "We're going to closely determine the requirements that members and market users have for these specific products," he says, adding that the results of these consultations will be incorporated into the new system's design.

Aspokesperson for Liffe says work on the new system will be finished in 1996. Sources at the exchange add that the new system is being seen as an urgent project, now that the decision to automate individual equity options trading has been made.

Liffe's existing derivatives trading systems comprise APT, a futures trading application that has been in use since November 1989, and APT+, an options trading system developed by the exchange last year (DE&T, November 14, 1994).

## Yet to Go Live

APT+ has yet to go live, adds Blurton. "We are in the final stages of training and are ready for implementation," he says. "APT+ is due to go on-line within the next couple of months. We've developed this system further over the past 12 to 18 months and have added some financial options functionality."

Blurton says the principal difference between the APT+ system developed for interest rate options and the soon-to-be-developed equity options application is that APT+ can only be operated through dedicated workstations at Liffe. In contrast, the equity options system will run on the standard Sun SPARCstations that the exchange supplies to its members, he says.

Equity options trading is more directed towards the retail market," explains Blurton. "Even though we've got the central system, we need to find a better method of distributing the service to members." This is why the equity options version of APT+ will be accessed through Sun boxes already on members' desks, he says.

Blurton adds that Liffe officials are exploring possibilities of establishing strategic relationships with quote vendors and network specialists. "We're going to look for these strategic linkages so that they can add automated trading functionality to their networks and interface through to the trading engine," he says.

In other technology-related news at Liffe, the exchange has followed the example of other derivatives exchanges and launched a Web site. The Liffe Web site