applications such as profiles of overseas embassies and countries, travel entitlements and conference room bookings.

The implementation process has kept pace with the agency's accelerating experience with the new technology. In fact, many new requirements that previously would have required major, dedicated development efforts now can be added to the corporate database with a few person-days or -weeks of work.

The client/server platform fits the agency's pressing need to minimize the very high cost of bandwidth to most of its missions. Staff members can frame queries or generate transactions using Paradox\* for Windows or a custom, Visual Basic\* application running on their standard Intel processor-based client system.

The application translates the request into an SQL query, compresses it to the minimum number of characters and sends it out as an efficient packet of data. The request is received by an SQL Server engine, which currently is in Ottawa but in theory could be anywhere in the world. The request is validated against the authority of the person initiating it, then is either processed or denied. The answer is again compressed to conserve bandwidth and sent to the originating client application for presentation all within seconds instead of days.

## 4. Benefits

Information Infrastructure Aimed at the Future

"The technology allows us to respond more quickly, which is key to doing our jobs well," says Lambert. Even with only half its users on board, DFAIT has noticed significant improvements in its major missions' abilities to stay on top of breaking world situations. Instead of wait-



DFAIT already has been able to eliminate its weekly diplomatic courier runs to each of its missions abroad.

ing hours or days for a courier, or for support staff to painstakingly transcribe and translate telex messages, everyone involved in a situation gets accurate information to work with, instantly.

Recent examples include the GATT agreement and the Canadian federal budget, both of which were sent to missions as full, formatted documents, ready for incorporation in press releases and other analyses within minutes of their being made available. Previously, missions would have had to rely on less informative, textonly telex summaries.

DFAIT already has been able to eliminate its weekly diplomatic courier runs to each of its missions abroad. In addition, most of the 130 communications support staff, who previously retyped every message on teletype machines, have been brought back to the home office.

With reliable financial information accessible promptly, missions are managing budgets more efficiently, and the Ottawa headquarters is able to track more precisely where its budgets are being spent. More and more applications are drawing from and contributing to the corporate database, so there is far less duplication of data and hence a significant improvement in data accuracy and integrity.

"We have built a platform that will take us into the next century."