## 2.3.2.3 Message Handling Services

In 1989 Embratel launched its STM-400 service, a CCITT X.400-based store-and-forward messaging service, with presently 7,000 active users, out of an installed capacity of 16,000 electronic mail boxes. Nationwide access is provided via the Renpac and the PSTN systems. Outgoing telex and fax message conversion is also supported. An international gateway via Sprint-Mail provides access to similar systems in 13 countries (Infonet access is also provided).

The main users are from the retail, distribution, manufacturing, automotive and, more recently, finance industries. The current number of private domains (PRMD's) is 20, and this is expected to grow, as LAN interconnection and microcomputer networking develop. From an application point-of-view, Embratel is concentrating its efforts on establishing itself as a competitive value-added networking option to the fast-growing demand for standard EDI services.

In this context, Embratel is gearing up for X.400 88/92, X.435 (EDI) and store-and-forward fax systems the next two years. Directory services X.500, store-and-forward voice X.440 and the integration with mobile Standard C are also planned for the next 2 to 4 years. Embratel's international division will issue specific tender for STM-400 integrated store-and-forward fax equipment before end of 1992.

Following the same market strategy attitude as with the Renpac network, Embratel is also engaged in providing enhanced IBM protocol connectivity, at the message level, via Profs, Office Vision, TCP/IP and AS-400 machines. Telephone access capabilities are being improved via the use of X.32 and V.32 bis modems. Given that service is currently offered out of a single switching center located in Rio de Janeiro, STM-400 network decentralization is also in Embratel's mid range plans.

Table 4 - Message Handling Service Figures shows Embratel's 1991-effective and forecasted number of commercialized mail boxes/users and the associated investments in the 1992-1996 period.

Table 4 - Massage Handling Service Figures

<u>Year</u>	1991	1992	1993	1994	1995	1996
Mail Boxes (thousands)	5.9	10	18	28	40	54
Investment(US\$ millio	4.6	3.7	6.9	15.2	3.0	0.3