years. One should also consider that there is no tradition in Brazil of third-party networks and outsourcing. This market shall develop slower than projected by the present vendors, unless it receives substantial infrastructure investments, along with management, marketing and operations expertise not available in Brazil.

2.3.2.6 Summary remarks

As a whole, DC services accounted for 32% of Embratel's 1991 revenues (US\$ 470 million out of US\$ 1.46 billion), while it only accounted for 9 % of the Telebras group's revenue (US\$ 517 million out of US\$ 5.9 billion). If we add the total revenue collected by the private network service providers, approximately US\$ 150 million, we come to a total DC market of about US\$ 667 million in 1991.

Given that Embratel is in the process of duplicating its data communications services over the next two years, one could expect the Brazilian market for DC services to reach US\$ 1 billion in 1993 and growth at an aggregate yearly rate of 20%, to US\$ 1.7 billion in 1996.

As VAN providers forecast a steady 30% yearly growth in demand between 1992 and 1996, the VAN's share of this market could reach US\$ 400 million by 1996. The remaining US\$ 1.3 billion would likely be split between Embratel and the local Telcos (even if partially privatized) at a ratio of approximately 3/2, with data communications representing 35% of Embratel's business.

Considering that Telesp alone is planning to invest close to US\$ 350 million in data communications services in the next 3 years (one US\$ 250 million bid issued for 1992), and that this service segment only represented 1% of Telesp's 1991 revenue it is clear that substantial business opportunities exist in this market.

2.3.3 Data Communications Equipment Market

The development of the market for data communication equipment was also driven by Embratel's moves in the 1980's, by government policies stimulating local R&D and production, and by the proliferation of private intracompany on-line networks and of large corporate networks, built atop Embratel's and the telco's basic services.

Present and future market conditions are largely determined by TELEBRAS's on-going and planned procurements and by large corporate users in their struggle to best take advantage of newly