

manufacturers and consolidates figures of sales in terms of number of lines, systems and telephone sets. Equipment categorization by Abinee has not been subdivided to closely follow the technological evolution of IOS systems, as is the case of ACD - Automatic Call Distributors, hybrid PBX/KS system and small size digital distributed Key Systems equipped with multi-function sets. Abinee data is recognized by the users and suppliers of systems as a precise and reliable source of strategic planning data, and suppliers continue to actively participate in this monthly exchange of aggregate information.

2.2.2. IOS Market Structure and Competitors

The Brazilian IOS market structure follows international standards with regard to product manufacturing and distribution channels. Many traditional international manufacturers such as Ericsson, NEC, Siemens, Philips, Northern Telecom and Alcatel are present in the Brazilian market (some for more than 60 years), manufacturing and distributing their products either through their own sales structure or through associated distributors and resale partners. The local content of equipment is currently 80% for high end systems, 30% to 40% for recently arrived hybrid PBX/Key Systems and 95% for the locally developed small size mPBX systems.

IOS distribution networks, formed by small and medium size companies, usually resell low cost systems by means of commission agreements. Factory based marketing, installation, training and technical sales assistance teams support the major accounts by means of appropriate proposal and financing structures.

Since 1985, the local telcos have not participated in this roughly 700,000 line per annum market. Federal investment restriction policies had dictated that telcos had to abandon this traditional activity of IOS equipment sale and rental. Presently telcos only maintain special advisory groups, to give advice to their customers, for system dimensioning and for options of equipment. Telcos have not yet explored the Centrex capabilities of their electronic SPC exchanges, due mainly to a lack of marketing planning. Sales are therefore restricted to trunk circuit rental and, more recently, to such limited functions as 800 type service, DID, conference, follow me, sequential trunk groups and other primitive trunking and signaling features. ISDN basic rate and common channel signaling between PBX and public networks is expected to arrive in the next 2 to 3 years, as well as many of the benefits derived from the intelligent network concept.

The Brazilian market regulatory environment (see Appendix) has greatly influenced the competition in the IOS market. All major multinational telecommunications companies presently participating in the Brazilian IOS market were forced, in the mid 80's, to engage in minority