DPS 25

PACKET SWITCHING SYSTEM

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SUMMARY

INTRODUCTION

SESA has been active in data packet switching for more than five years. SESA's leading position in this field in Europe has been illustrated recently by the procurement, on a turnkey basis, of two large CCITT X.25 networks :

- TRANSPAC, largest packet switching network in Europe, ordered by the French P & T to constitute the all-purpose public data transmission network of the next decade.

- EURONET, covering the nine countries of the EEC and designed to support interactive inquiries to more than 100 data bases distributed all over Europe.

In the light of this extensive practical experience, SESA has decided to develop DPS 25, new generation of packet switching system based on a totally distributed architecture and on a cost effective multimicroprocessor technology.

DPS 25 constitutes today a very elegant and attractive solution to most data the transmission problems of large public or private organizations. As a result, DPS 25 has already been selected by the Union Internationale des Chemins de Fer for the HERMES network to be installed at the beginning of 1981.

Networks are generally made of several interconnected DPS 25 switching nodes controlled by a CCS network management center. The main objectives of the product design are :

. Modularity & simplicity

All DPS 25 node configurations are built from a single hardware building block : DATEM, which stands as a totally autonomous entity both mechanically and electrically. Specialization of the modules to various tasks is carried out through software.

. Adaptability & expansibility

Several coupler types meet the various requirements for both asynchronous and synchronous connections and for high, medium and low transmission rates. As required, connections modules can be added to the existing network without perturbating the operations of the network.

. Availability

Besides its very high availability, DATEM has been designed to simplify failure detection and maintenance by straightforward replacement of either complete DATEM or specific boards.

. Cost-effectiveness

Its high performance, modularity and ease of operation make the DPS 25 a very cost-effective solution regarding both one-time cost and operating cost.