Abstract of Proposed Talk at Infotek Conference, 6 January 1971

Subject: Data Networks and Separate Data Transmission Facilities

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Some of the Computer Network Activities in the US will be compared critically, and the important differences between them discussed. One system aims at investigating the feasibility of connecting different computers by a distributed store and forward system.   A second has the same aim in a centralised store and forward system which aims to do job control translation in the switching computer.   A third uses a network to provide back-up facility for remote batch,   editing and bulk file transfer.   A fourth uses a network to minimise communication costs to customers.   Other networks will be mentioned also.

A brief description of a number of centralised and dispersed European networks will be given.   In particular the operation of the CERN, London University, IDH and Centre File System will be contrasted.   In the CERN system, a powerful collection of machines is being connected to optimise the throughput of computer work, while maintaining adequate reliability.   In London University, the main aim is to give adequate access to a scattered group of users; reliability problems are ignored.   In Centre File, the reliability problem is all important, throughput is far less important.   In the IDH system distributed function and reduction of communication costs are the main criteria.

Finally if time permits, we will comment on the separate data transmission facilities being introduced by France, Germany and Sweden, and those proposed for Britain and the US.