



RC 8000

Jydsk Telefon- Aktieselskab



Jydsk Telefon



INDUSTRY
Telephone Company

COMPANY
Jydsk Telefon Aktieselskab

APPLICATION
RC 8000

PROBLEM

Jydsk Telefon Aktieselskab, JTAS, has about 700,000 subscribers demanding a high service level of the two very important functions contained in Directory Inquiry. These functions are: number information, where a subscriber's telephone number is required, given name and address information; subscriber information, where the telephone number is known and name and address information is required.

In 1974, when RC came into consideration as a possible supplier of a quicker and more effective Directory Inquiry System, 12 - 13 per cent of inquiries to the service were answered either too slowly or incorrectly. And the capacity of the system initially acquired would soon be inadequate.

As the number of subscribers increased, the work at JTAS' exchanges in Århus, Aalborg, Holstebro, and Kolding became slower and more difficult.



REQUIREMENTS

What was needed here was a modern real time EDP system allowing direct access to the computer. Instead of looking up in a telephone book the telephonists could use a computer terminal.

In the early seventies JTAS seriously considered an on-line system for the Directory Inquiry Service and for the administrative offices, so that orders, reserved cables, etc. could be directly entered. But most important was the need for a thorough modernisation of the information service.

SOLUTION

JTAS' special need for transmission control and terminal solutions could hardly be solved with the standard solutions offered by RC and other DP suppliers at that time. However, a draft for transmission control existed at RC. On the basis of this and with very good experience from other deliveries JTAS started the project at RC.

Both the Directory Inquiry System and the Administrative System are operated via the terminal system. In total 120 terminals are placed in JTAS' four districts. Via the data net they are connected with JTAS' DP centre in the central administration building, where 70 additional terminals are located.

Two RC 8000 computers are used for the Directory Inquiry System, each with a memory of 196 K words and three disc storage modules with a capacity of 198 million characters.

The third RC 8000 is a back-up computer and is used for program development, technical calculations, etc. The capacity of the Directory Inquiry System is 12,000 inquiries per hour. The average reply time of the computer is 0.7 seconds.

The Directory Inquiry System will replace the telephone books at JTAS' four information exchanges entirely. The RC 8000 computers already cover Number Information and Subscriber Information inquiries for the exchanges in Holstebro and Kolding, to which the telephonists are connected via terminals and data net. With the exchanges in Aalborg and Århus more than 700,000 JTAS subscribers can now avail themselves of the telephone company's quick service.

RESULTS

"One of the main advantages of RC 8000 is that this computer can run with more effective 'traffic rules' than can be achieved with other 'non-tailor-made' solutions", states JTAS' DP Manager, Søren Jensen.

"Investments total about 2.5 million kroner, against an estimated extension of the originally acquired equipment to a value of around 10 million kroner. It has also been estimated that acquisition of the new system will result in an accumulated payroll reduction of over 100 million kroner in the period from 1975 to 1985."

Complicated inquiries, and inquiries with incomplete search information, which before were not possible, can now be answered. RC 8000 can just as easily perform a search on 'occupation and christian name' or 'occupation and approximate address' as 'correct surname and address'. Neither will the computers reject an inquiry on an incorrectly spelled surname – it will simply supply more answer possibilities.

Søren Jensen concludes: "The average time from when the subscriber calls to the time the telephonist has answered the enquiry has now been halved. But DP development at JTAS is by no means completed. Savings, due partly to the automation of the Directory Inquiry Service, should amount to more than 10 million kroner over the 10 year period from 1975."