

introduction

Very, very few companies in the world have a longer history in computing than Regnecentralen. The organization received its present name as long ago as 1955, when it was set up as a private institution by the Danish Academy of Applied Science, but its history dates right back to 1947, when the Academy established a watchdog committee to follow electronic computer developments in the world at large.

The 1955 remit to the newly established "RC" was purposeful and concise: to acquire or construct and operate computing machinery as a service to the Danish nation.

In the event, RC chose to construct its own computer, and in so doing laid the foundation for the system development capacity that represents a major asset today.

Through a judicious blend of in-house development and outside purchase, the service operation amply fulfilled its initial objectives, and has since developed into the largest service bureau network in Scandinavia.



RC's factory in Præstø, 80 kilometers south of Copenhagen

RC's early emphasis on service quickly underlined the importance of software of all kinds. Basic software was required to make the hardware systems run and to assist in the production of fully finished application program packages. It was thus no coincidence that RC was deeply involved in the joint industry efforts to define the Algol 60 language, and has since undertaken compiler contracts on behalf of other computer manufacturers.

The systems RC originally developed for its own use proved marketable to other users, as a result of which production, OEM purchase, and system integration facilities have been established. Maintenance of these facilities through activities in the European and world end-user and OEM markets now forms a further cardinal point of company policy.

Despite steady growth throughout its entire existence, RC remains a small company by industry standards. Its chief asset for survival in a competitive world is, perhaps, the flexibility its relatively modest size makes possible.

Flexibility on the "make or buy" issue keeps RC alive to favorable OEM purchase opportunities as well as to possibilities for own manufacture. Flexibility enables RC to undertake special system development contracts, which keeps it technologically on its toes. Flexibility keeps RC in touch with the market and responsive to users' needs.

Flexibility through knowledge, experience, and technical skill is RC's answer to the challenge of change and progress.

⁴/s Regnecentralen Danish Institute of Computing Machinery 1955-1963

1947

The Danish Academy of Applied Science appoints a committee to follow the development of "modern electronic computers" in other countries.

1952

The Academy appoints a working committee to plan the development of Denmark's first computer. Besides the Academy itself, the committee includes representatives from the Ministry of Defence, Ministry of Education, and Federation of Danish Industries.

1962

RC introduces its first Algol compiler for the Gier computer, and, in collaboration with the Technical University of Norway, develops a hybrid link which permits the Gier to be connected to an analog computer for process control experiments.

RC establishes a Gier-based service bureau and equipment development division in Århus, Denmark's second largest city.

135 employees. Turnover: 6.0 million kroner.

1963

RC introduces the world's fastest paper tape reader, the 2000 cps RC 2000, some 1500 of which will be sold within the next ten years. The RC 3000, a general-purpose off-line data conversion and communication system, is developed for use in the RC service bureaus. RC contracts to write a series of Algol and Cobol compilers for American and European computer manufacturers.

RC's service bureaus introduce their first standard program (for payroll applications), developed in collaboration with the Danish Employers' Confederation and the Danish Federation of Iron and Metal Manufacturers.

RC establishes two additional service bureaus, a division for international equipment sales, production facilities, and an EDP education center. Bent Scharøe Petersen receives the Esso Award for the development of Dask. 259 employees.

Turnover: 8,5 million kroner.



The 2000 cps RC 2000 paper tape reader

RC 3600 peripheral processing configuration



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Gier solid-state computer system at an RC service bureau

The Dask vacuum tube computer, now at the Museum of Technology in Elsinore



RC 3000 data communication system







Operating console for the RC 4000 integrated circuit computer From the engineering workshop at RC's factory Testing computer equipment at the RC factory

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RC 4000 computer system at the RC development center in Ballerup, 10 kilometers west of Copenhagen



Some OEM versions of the RC 2000 paper tape reader

RC 7000 minicomputer in a Danish classroom



⁴/s Regnecentralen 1964-1973

12000



1964-65

Regnecentralen is re-established as a limited company with a share capital of 10,500,000 kroner. Shareholders include leading Danish financial and industrial organizations as well as many private persons including RC staff-members.

Poul Dahlgaard becomes associate managing director.

RC develops a data logging system in collaboration with the Copenhagen University Observatory, and begins production of the RC 3000 Conversion System, some 200 of which will be sold within the next eight years.

1970-71

RC introduces the RC 3200 Paper Tape Transmitter and RC 7000 Minicomputer System. The RC 1700 Telescope Controller is developed in collaboration with the Technical University of Denmark and the European Southern Observatory.

RC begins development of the RC 3600 Support System, aimed at the further penetration of the market area established by the RC 3000.

RC establishes a fifth subsidiary, in Vienna, and expands production capacity through the opening of a second factory.

RC 4000 Computer Systems are now installed at RC service bureaus in Copenhagen, Hanover, and Oslo.

810 employees.

Turnover: 92 million kroner.

Consolidated turnover: 98 million kroner.

Share capital increased to 25,000,000 kroner.

1971-72

RC introduces the RC 3600 Support System at the Hanover Fair in April 1971. The new system includes a range of central and peripheral units as well as a series of magnetic tape oriented program packages for output printing, hardcopy input and punching, and tape to tape conversion.

Also introduced during 1971–72 are the 2500 cps RC 2500 Paper Tape Reader, the RC 7100 Event Recorder for automatic process supervision, and the RC MUT, a programmable remote batch terminal.

RC develops Denmark's hitherto fastest data communication system (9600 bps via leased voice-grade telephone lines), using two RC 3600 systems for off-line communication between Copenhagen and Arhus in a point-to-point mode.

In collaboration with Storno A/S, RC develops two systems, based on the RC 7000 Minicomputer, for centralized

supervision of city bus services in Copenhagen and Gothenburg, and in collaboration with the Jydsk Telefon Aktieselskab, a programmable keyboard/display and small computer for communications and other applications. The BC service bureaus in Denmark now have over 1,000 customers. A new series of modular standard programs for payroll, financial management, banking, and other applications is introduced. At the same time, a third RC 4000 Computer System is installed, and the development of a teleprocessing system for service bureau users is begun.

Søren Larsen becomes associate managing director, in charge of RC's international industrial activities.

720 employees.

Turnover: 78 million kroner. Consolidated turnover: 97 million kroner.

1972-1973

RC introduces a series of major hardware and software improvements to the RC 3600 Support System, which enable it to be configured as a remote batch terminal, or as a peripheral system, or as a combination of both.

RC adds the low-cost, 500 cps RC 500 reader to its paper tape equipment line, and develops a series of modular message switching systems based on the RC 7000 Minicomputer.

RC introduces the RC Teledata System providing teleprocessing facilities for service bureau customers. In order to accommodate the growing number of on-line users, RC plans to increase service bureau capacity by 50 percent through the installation of two additional RC 4000 systems.

By the end of 1972–73, nearly 100 deliveries of the RC 7000 Minicomputer System have been achieved. More than a third of the systems are used for instruction at schools, colleges, and universities. At Denmark's Post-Graduate Training College, the RC 7000 is also used for pedagogical research including development of computer-assisted instruction techniques.

Niels Schreiner Andersen becomes associate managing director, in charge of RC's domestic services activities.

750 employees.

Turnover: 88 million kroner.

Consolidated turnover: 115 million kroner.



SCANDINAVIAN INFORMATION PROCESSING SYSTEMS



INTERNATIONAL SALES AND SERVICE LOCATIONS

Austria Scanips Ges.m.b.H. Graz, Innsbruck, Linz, Vienna

Denmark A/S Regnecentralen Glostrup

England Automatic Input Systems Ltd. Croydon

Finland A/S Regnecentralen Helsinki

France Tekelec Airtronic Sevres

Hong Kong Dataprep (Holdings) Ltd. Hong Kong Japan Mitsubishi Corporation Tokyo

Netherlands Regnecentralen (Nederland) B.V. Rotterdam

Norway A.S. Scanips Frederiksstad, Kristianssand, Oslo, Trondheim, Tonsberg

Sweden Scanips AB Gothenburg, Hälsingborg, Stockholm

West Germany Gier Electronics G.m.b.H. Berlin, Düsseldorf, Frankfurt/Main, Hamburg, Hanover, Munich, Nuremberg, Sindelfingen

LOCATIONS IN DENMARK

Service Bureaus Copenhagen, Odense, Aalborg, Århus

Branch Offices Ballerup, Fredericia, Rønne, Skin