

Niels Ivar Bech

Born 1920 Lemvig, Denmark; died 1975; originator of Danish computer development.

Niels Ivar Bech was one of Europe's most creative leaders in the field of electronic digital computers.¹ He originated Danish computer development under the auspices of the Danish Academy of Technical Sciences and was first managing director of its subsidiary, Regnecentralen, which was Denmark's (and one of Europe's) first independent designer and builder of electronic computers.

Bech was born in 1920 in Lemvig, a small town in the northwestern corner of Jutland, Denmark; his schooling ended with his graduation from Gentofte High School (Statsskole) in 1940. Because he had no further formal education, he was not held in as high esteem as he deserved by some less gifted people who had degrees or were university professors.

During the war years, Bech was a teacher. When Denmark was occupied by the Nazis, he became a runner for the distribution of illegal underground newspapers, and on occasion served on the crews of the small boats that perilously smuggled Danish Jews across the Kattegat to Sweden. After the war, from 1949 to 1957, he worked as a calculator in the Actuarial Department of the Copenhagen Telephone Company (Københavns Telefon Aktieselskab, KTA).

The Danish Academy of Technical Sciences established a committee on electronic computing in 1947, and in 1952 the academy obtained free access to the complete design of the computer BESK (Binar Elektronisk Sekevens Kalkylator) being built in Stockholm by the Swedish Mathematical Center (Matematikmaskinnamndens Arbetsgrupp). In 1953 the Danish academy founded a nonprofit computer subsidiary, Regnecentralen.

Bech was assigned by KTA to the project and assisted in building DASK (Dansk BESK), a slightly modified copy of BESK, in a concentrated effort by a devoted group of people who assembled the parts by hand. In 1957 DASK became operational, and Bech was named managing director of Regnecentralen, serving in that capacity until 1971.

During these fourteen years, the most productive phase of his life, Bech was the senior Dane in computers—the spokesman for both Regnecentralen and the Academy of Technical Sciences. He was the leader of everything that Regnecentralen did, in hardware and software. For example, he guided some students from the DASK coding courses, which were started in 1955, to develop a library of subroutines, thus laying the foundation for later software projects at Regnecentralen.

Immediately after the completion of DASK in 1959, Regnecentralen developed a prototype of the GIER computer and by the end of 1962 had produced eighteen GIER systems. Bech made substantial efforts to strengthen and formalize Regnecentralen's connections with Danish universities. He tried to make permanent collaboration contracts, including a provision that Regnecentralen would establish computing centers at Danish universities. He convinced the government to acquire and install a GIER in every major university in the country, thus creating a network of university computers.

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Bech recognized the value of long-standing Danish contacts with the East and saw that the antipathy between the US and the nations of Eastern Europe offered Regnecentralen some unique commercial opportunities. In 1964 he sold an early GIER to the University of Warsaw. Shortly thereafter, Regnecentralen's equipment and know-how were introduced into Czechoslovakia, Hungary, and Bulgaria, and later into Rumania, the Democratic German Republic, and Yugoslavia.

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Biographical

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