## **Book Review**

Magnus Karlsson, The Liberalisation of Telecommunications in Sweden, Linköping: Linköping Studies in Arts and Science no. 172, 1998.

The change of governance regime in the telecommunications industry during the last two decades has indeed been revolutionary. In the seventies, the industry was still organized as a national monopoly run by public enterprises. Telecommunications were considered a vital part of the national infrastructure, the purpose of which was to provide the citizens with universal service of standard quality at affordable prices. As the industry was characterized by a natural monopoly and an integrated network applying sensitive technology, these policy objectives could only be achieved by monopoly and long-term planning. The major proponents of this ideology were the engineers and civil servants who dominated the staffs of the public telecommunication administrations. Even among politicians and in the business community, this ideology was practically uncontested. Today, all parts of the telecommunications industry have been opened to competition, the national administrations have been corporatized and privatized, and the concept of an integrated national infrastructure has disappeared.

In his book (a Ph.D. thesis), Magnus Karlsson studies the change of governance regime as it developed in Sweden which was one of the first countries to liberalize its telecommunications. Televerket, the Swedish telecommunications administration, was established in the last century as a ministerial enterprise and achieved a national monopoly (non-statutory) early in this century. In post-war Sweden, Televerket was a successful enterprise that seemed to fit well into the Social Democratic ideology of a strong public sector. It was technologically advanced and provided services of high quality at low prices. How could the regime changes then be so radical from the late seventies to the early nineties?

The book provides a comprehensive historical description of the political process of liberalization in Sweden, the proposals, actions and conflicts among its main actors: Government, Televerket, political parties, regulatory authorities and private business firms and associations. The introduction of new technologies plays an important role in the author's explanation of the process. His approach is inspired by the analysis of large socio-technical systems applied by Thomas Hughes in his book on the early development of the electricity supply industry in USA, UK and Germany (Networks of Power - Electrification in Western Society, 1880-1930, Baltimore: Johns Hopkins University Press). Its central thought is to try to understand technological systems as being integrated into a social context that includes a set of values related to their proper development, utilization and governance. These theoretical perspectives are discussed in the first chapter of the book.

New telecommunications technologies became available during the sixties and seventies and threatened the traditional telecommunications system, its pattern of configuration and control. These technologies primarily came from the computer industry that represented a very different tradition, first of all a competitive approach

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to the organization of markets. Televerket was interested in exploiting the new technological possibilities to expand its services (examples are mobile telephones, satellite communications, data transmission, telefax and teletex). However, the tradition of vertically integrated monopoly (terminal equipment was included in the monopoly) soon ran into difficulties. The computer industry reacted against an extension of Televerket's monopoly and was supported by the non-socialist parties. The internal organization of Televerket was not well suited for the expansion into new services, and it was considered necessary to establish subsidiaries organized as private companies. Televerket's policy was supported by the Social Democrats.

External opposition and the internal problems increased during the eighties. Not all elements of the new services could be included under the monopoly regime and, therefore, it became an embarrassment that Televerket both acted as a business enterprise and as the regulatory authority. At that time, the thinking on public utility organization and regulation had also started to change in favor of competition in leading Western centers such as the USA, UK, Japan and the European Community. As a reaction to all this, Televerket gradually shifted its attitude from promonopoly to pro competition. The Social Democrats followed suit and ended as the designers of the policy acts that in the early nineties finally turned Sweden into one of the countries in the world with the most liberal regulations of its telecommunications industry.

The main part of the book provides a detailed account of the changes taking place during the eighties until the final abolishment of all remaining monopoly, the substitution of Televerket by Telia Ltd. in 1993 and the establishment of an independent regulatory authority (*Telestyrelsen*). The story is organized into three chapters, each dealing with one important aspect of the process: 1. organizational changes; 2. competition in terminal equipment; and 3. infrastructure competition. In the final chapter, these aspects are combined into an integrated understanding of the change of governance regime.

The radical changes of public utility organization and regulation that have taken place during the last two decades of this century are an important object of study. Magnus Karlsson's detailed and well-documented study of the Swedish telecommunications industry has provided us with useful insights into this process. The choice of theoretical perspective, the large socio-technical system, seems both relevant and fruitful. It will be interesting to see to which extent it can be generalized to telecommunications in countries with different political and business traditions or to the reorganization of other utility industries such as electricity and railways where technological change has been much less radical than in telecommunications.

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