

## Chapter 2.23

# ICT as an Example of Industrial Policy in EU

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### INTRODUCTION

A substantial part of the economic growth that has taken place within the past 2 decades is related to information and communication technology (ICT). First, the ICT sector itself has achieved very high growth rates. Second, productivity gains in other sectors have been achieved, to a large extent, through implementation of ICT-related innovations. It is, therefore, no surprise that ICT plays an important role in virtually all industrial policy programs. Policies stimulating e-government are one of the ingredients in such programs.

In 2000, the leaders of the European Union (EU) adopted the Lisbon strategy to make the EU the most dynamic and competitive knowledge-based economy in the world (CEC, 2000). ICT was seen as a key component in achieving these goals<sup>1</sup>, and a special program—eEurope—has been designed to realize the Lisbon goals in the ICT area. This program is, however, also a con-

tinuation of a wide range of ICT initiatives taken by the EU Commission since 1984.

### BACKGROUND

In the eEurope program, the Commission mentions three types of benefits stemming from ICT:

1. The ICT sector itself accounted for 6% of employment in the EU in 2000
2. ICT improves productivity in other sectors
3. ICT boosts citizenship and quality of life (CEC, 2004a).

Although the third point may, in part, be outside the scope of industrial policy, as it does not directly address the economic sphere, the three points reflect very well the dual aspect of the EU

ICT policy, which has been inherent from the early beginning:

- **International Competitiveness:** Telecom is considered to be a high-tech sector of strategic importance with regard to the generation of employment and economic growth. In addition, telecom is a sector in which the EU has a relatively strong position compared to the United States (U.S.) and Japan.
- **The Information Society:** Telecom networks constitute an essential infrastructure for the information society. Cheap and ubiquitous access to advanced telecom services is, therefore, important for the generation of employment and economic growth in any industry.

The first point is typical for sector-specific industrial policy. The objective is to strengthen an industrial sector deemed to be of particular importance to maintain or even improve the EU position in the international division of labor. The major reason is a high growth potential with regard to employment and contribution to GDP.

The second point is somewhat more related to horizontal industrial policy aiming at improving the business environment in general. Here, ICT is seen as a part of the overall infrastructure used by all industries. It should be noted that this distinction is not completely clear-cut. The argument for industrial policies directed towards a specific sector will often be that a particular sector possesses important spillovers to other industries. For instance, one of the arguments used as justification for the support to the agricultural sector is that agricultural production generates employment in food-processing industries.

The telecom sector itself has often used its importance for the entire economy as an argument for support. This argument has also been widely used by other sectors if they had an interest in affecting political decisions. However, with

regard to telecom, there has also been a strong pressure from users—in particular, business users—depending on access to more advanced communication services.

A strong ICT sector may support the development of an information society, and an advanced information society will benefit the ICT sector as it stimulates demand and innovation of ICT products and services. Still, the two objectives are addressing two different groups—users and producers of ICT—and these groups often have contradicting interests.

## THE EU RESEARCH PROGRAMS

The first initiative taken by the Commission was the introduction of a number of European-wide research programs. The ESPRIT program supporting IT research was commissioned in 1984 and the first phase of the RACE program, supporting telecom research, was commissioned the year after. Both programs offered support for so-called pre-competitive research. In this way, any accusations of industry subsidies could be avoided, and it was easier for competing companies to exchange information. The core of the RACE program was to develop technologies for developing a broadband in Europe (a distant goal at that time), and the focus was mainly on providing the basic infrastructure, although very few applications justifying the need for huge investments in optical networks were available. An important objective of the program was also to create an international forum for discussions and cooperation between European telecom companies to establish a common vision for the future European telecom networks and, thereby, facilitate integration of a market fragmented along national borders.

The RACE program was extended and followed by a series of other telematic research programs. However, there has been a gradual shift in focus from development of basic technolo-

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