

SWEDEN

the low-regulated alternative



Telecommunications

Sweden - the low-regulated alternative

THE TRANSFORMATION OF the telecom sector is an inevitable consequence of relentless technological developments, combined with ever increasing demands from consumers for high-quality telecommunications.

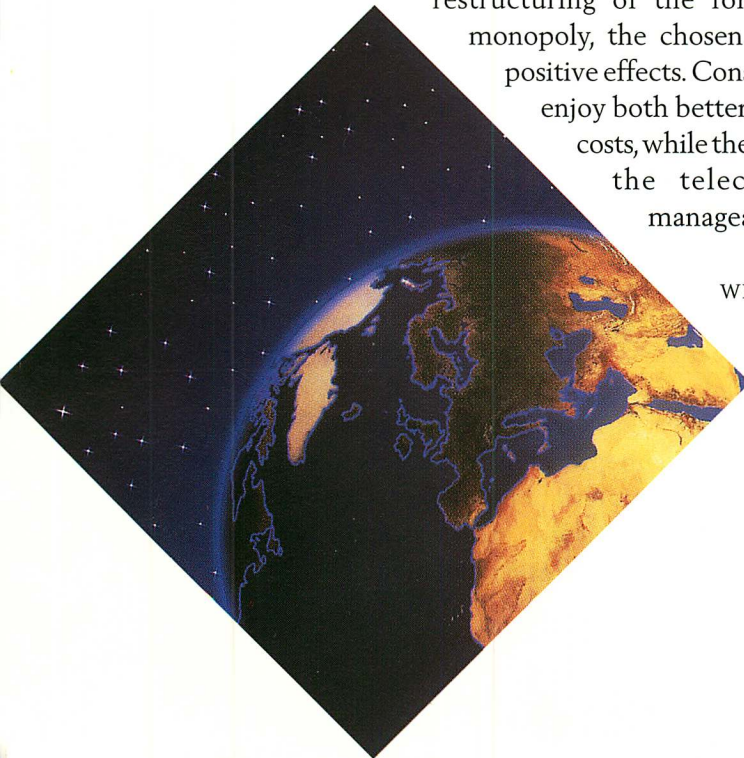
CHANGES ALWAYS INVOLVE elements of discomfort. But regulators and dominant operators alike must first and foremost see the advantages that unfold. All parties should realize that this change is very difficult to anticipate and that it is futile to regulate in detail services and systems that are under constant transformation.

This has been realized in Sweden.

THE CHOSEN REGULATORY solution has been to maintain a broad state responsibility for the citizens' basic communications needs while giving almost completely free room for competition. This has been done by way of general rather than detailed regulation.

IN SPITE OF some initial problems, and some inevitable restructuring of the former telecommunications monopoly, the chosen path has on balance had positive effects. Consumers and enterprises now enjoy both better services and lower average costs, while the employment effects within the telecom sector have been manageable.

WE HOPE THAT our European neighbours find inspiration in our example as the January 1998 deadline approaches.





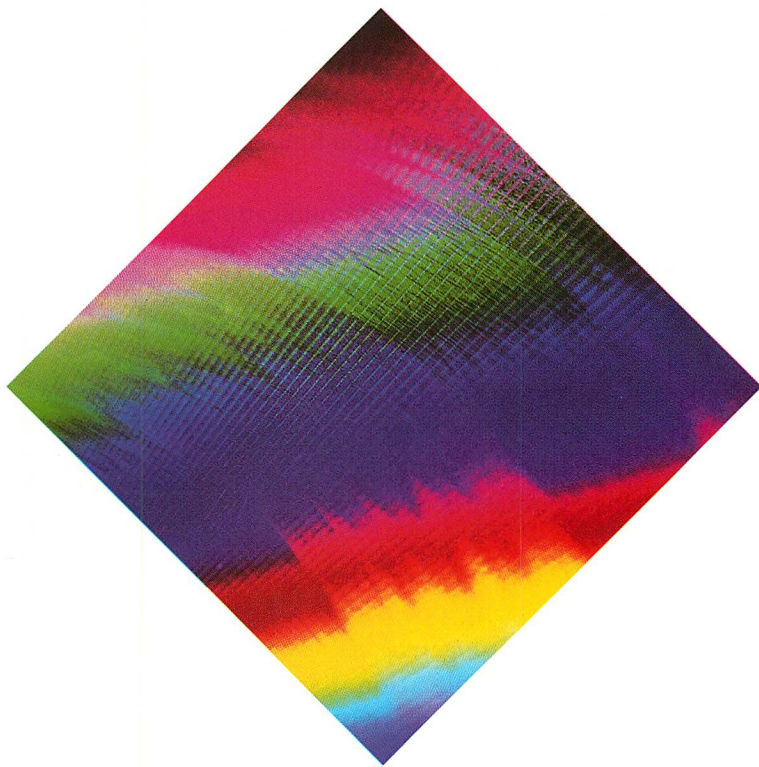
From the light monopoly regulation of yesterday...

TELECOMMUNICATIONS SERVICES HAVE never formally been a monopoly affair in Sweden. Where monopoly did exist was in the connection of terminal equipment to the network.

AS THE CONNECTION monopoly was gradually lifted during the 1980's, competitors had free access to the services part of the telecommunications market - services that were unburdened by regulation. As it was, at the beginning of the 1990's, there was too little regulation!

... to the competition of today

TO ENSURE THE functioning of the already liberalised sector, a Telecommunications Act was introduced in July 1993. On the day the Act came into force, the former monopoly provider, Televerket, was transformed into the state-owned limited company Telia. The remaining regulatory powers of Televerket were transferred to the new, independent regulatory authority, the National Post and Telecom Agency.



THE MINISTRY OF Transport and Communications prepares legislation and gives long-term instructions to the National Post and Telecom Agency. The Agency in turn implements the rules and instructions without interference from the

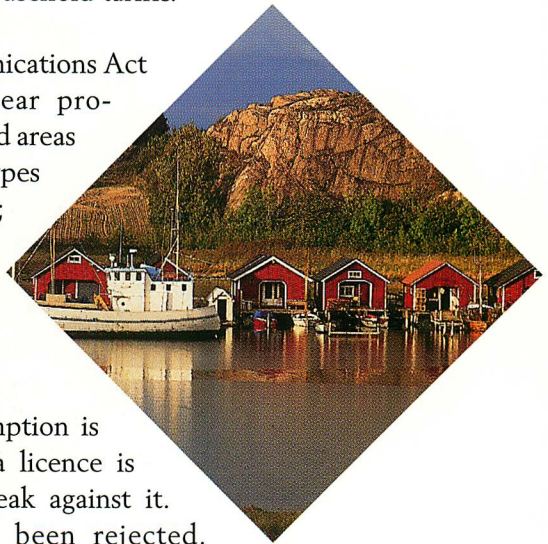
Ministry. It handles licensing procedures, acts as a mediator in interconnection disputes and keeps a general overview of the functioning of the telecommunications market.

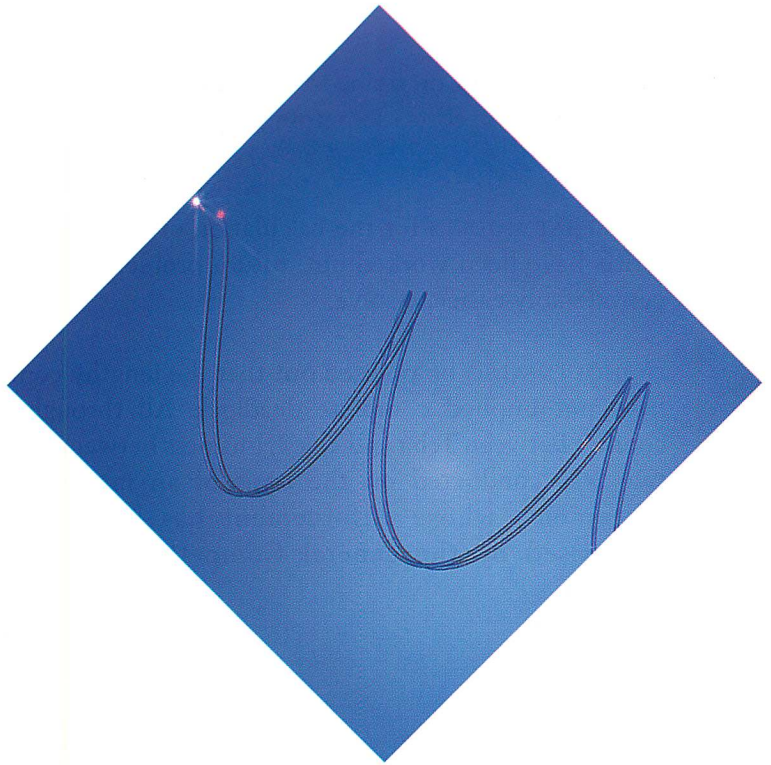
UNIVERSAL SERVICE IS explicitly stated as an objective in the Telecommunications Act. Its second paragraph says that "... anyone shall be enabled to use, at his/her permanent place of residence or regular business location, telephony services within a public telecommunications network". The services should, according to the Act, be of such a standard as to permit not only basic telephony, but also telefax transmission and data communication with low speed modems.

THE NATIONAL POST and Telecom Agency secures the universal service provisions by including them in the licensing conditions when necessary. Furthermore, a special agreement has been made between the State and Telia, ensuring some specific universal service obligations. Most important among them is the price-cap scheme on household tariffs.

THE BRIEF AND general Telecommunications Act (only ten pages long) has a clear pro-competition approach. The regulated areas are kept to a minimum. Only three types of services require licensing; telephony between fixed points, mobile services and the provision of leased lines. No specific restrictions on infrastructure exist.

A CLEARLY STATED positive presumption is used in the licensing procedure: a licence is provided unless strong reasons speak against it. Until today no application has been rejected. Furthermore, small operators without a significant market share - less than five per cent - do not need a licence to operate.





The transitory problems of interconnection

THE ACT REQUIRES operators holding licences for fixed telephony and leased lines to provide interconnection on a cost-oriented basis. The National Post and Telecom Agency may act as mediator when disputes arise and has done so on a few occasions.

BY ITS VERY nature, interconnection negotiations are difficult, and a dispute between Telia and its main competitor Tele2 arose very soon after the Telecommunications Act had come into force. It took almost one and a half years for the parties to agree.

THE PROLONGED PROCESS was, however, not only due to reluctance from Telia's part. A great deal of energy was used, both by the mediating National Post and Telecom Agency

and by Telia itself, on trying to define and calculate the true interconnection costs - something that had never been done before.

NOW THAT MODELS for the calculation of interconnection tariffs have been worked out, future problems should be considerably easier to solve.

IT SHOULD ALSO be pointed out that the lengthy conflicts have not implied complete deadlock. All through the conflict between Telia and Tele2, business between the two was conducted on the basis of an interim agreement, whose enforcement has been supervised by the general Competition Authority.

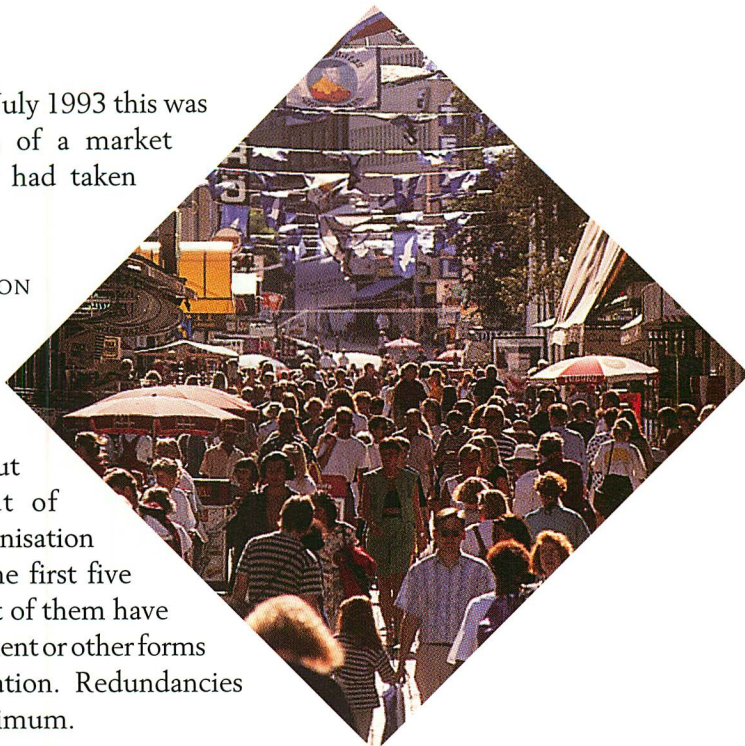


From Televerket to Telia: a necessary and fruitful adaptation

EARLY IN THE 1980's Televerket realised that it had to adapt to an ever increasing degree of competition. All through the process the organisation has tried to see the merits rather than the menace of competition. When the operator was

formally corporatised in July 1993 this was actually a confirmation of a market orientation that already had taken place.

THE PERSONNEL REDUCTION in the organisation has been inevitable, but Telia has tried to make it as gradual and considerate as possible. About 15.000 employees out of 50.000 have left the organisation in three stages during the first five years of the 1990's. Most of them have been offered early retirement or other forms of retirement compensation. Redundancies have been kept to a minimum.

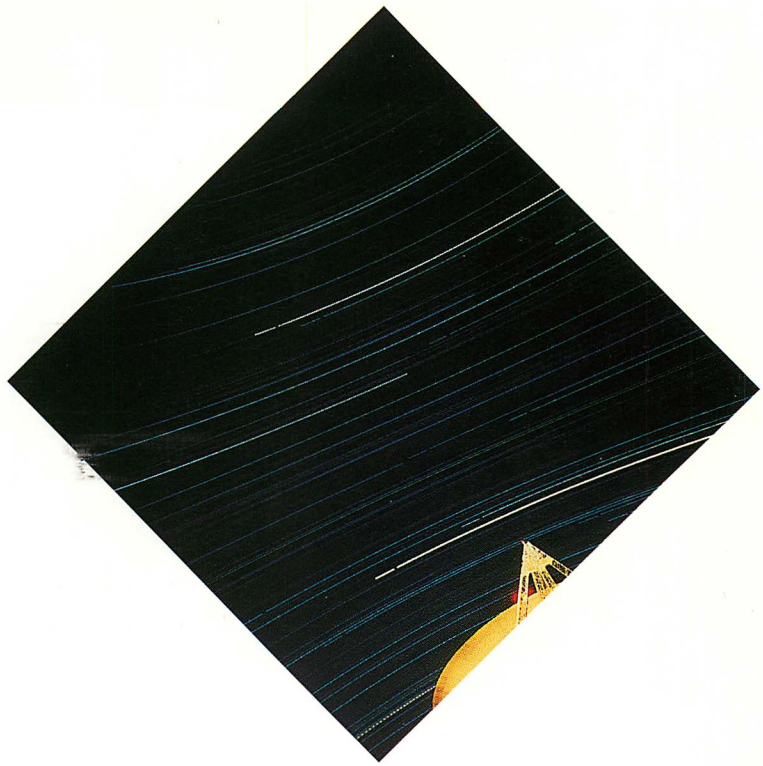


THE EXACT DESIGN of the liberalisation of the telecom sector is of course a highly individual matter for each country. It must be in line with the statutory traditions of individual states. However, the experience of the Swedish liberalisation shows that a lower level of regulation is preferable to a higher one.

EUROPEAN COLLEGES AND friends curious to know more about Sweden's liberalisation are welcome to learn from our experience. More information can be obtained on the following numbers:

The ministry of transport and Communications,
Communication Unit: (46)-8-405 10 00

The National Post and Telecom Agency,
Licensing Department: (46)-8-678 55 00

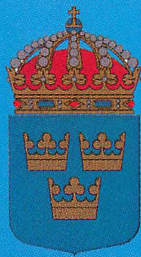


Telecommunication policy objectives

THE OVERALL OBJECTIVE in the telecommunications area is that individuals, organisations and authorities in the different parts of the country should have access to efficient telecommunications. The aim should be that this should be achieved at the lowest possible cost from the society.

THIS OVERALL OBJECTIVE contains five sub-goals:

- ◆ The telecommunications system should be designed to give good access to basic telecommunications.
- ◆ The telecommunications system should be designed to contribute to the efficient utilization of resources in the society as a whole. The system should at the same time be efficient in itself.
- ◆ The telecommunications system should be designed so that development possibilities are taken care of.
- ◆ The telecommunications system should be designed to contribute to regional balance and to make social considerations possible.
- ◆ The telecommunications system should be durable and available during crises and wartime



THE MINISTRY OF TRANSPORT AND COMMUNICATIONS