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COMMUNICATIONS OUTLOOK 1999

TELECOMMUNICATIONS: Regulatory Issues

Country: Denmark

Date completed: 1 June 1998

The attached questionnaire was undertaken in preparation for the biennial OECD *Communications Outlook*. The responses provided by countries on telecommunication regulation were used to provide information supporting the analytical sections published in association with data. A similar questionnaire with responses on broadcasting regulation is also available. In some cases, data for individual firms, used to compile OECD totals, have not been published at the request of the respondent. For further information, including data, see **OECD Communications Outlook 1999** and <http://www.oecd.org/dsti/sti/it/index.htm>

TELECOMMUNICATIONS

Market Structure and Regulatory Status (Questions 1 -13)

1. Please provide details of the regulation of communication infrastructure, including the public switched telecommunication network (PSTN), provision in your country.

Infrastructure provision for following service	Regulatory Status (e.g. monopoly, duopoly, limited number, fully open to any applicant)	Number of licensed operators (1998)
Local PSTN	Liberalized as of 1 July 1996	Class license
National PSTN	Liberalized as of 1 July 1996	Class license
International PSTN	Liberalized as of 1 July 1996	Class license
Analogue Cellular Mobile (e.g. NMT etc.)	(NMT) Monopoly	1
Digital Cellular Mobile (e.g. GSM etc.)	(GSM 900 + GSM 1800) Limited number	4
Other Mobile Communication (e.g. PCS, PCN, CT-2 etc.)	POCSAG: Monopoly ERMES: Duopoly	1 2
Payphones	Liberalized	Class license

2. Please provide details for the major public telecommunication operator (PTO) of public switched telecommunication services in your country. (PTOs are state and privately owned entities providing public switched telecommunication services over their own infrastructure)

Name of PTO	PTO Ownership Status (1998) (e.g. state owned/private owned) If a balance of ownership exists please indicate the share (%) held by the government
Tele Danmark A/S	Privately owned

3. Please provide details of market share for the largest PTO in the following categories.

	The largest PTO's share (End 1997)
Local Access (% of access lines)	100 %
National Long Distance (% of total minutes)	95%
International (% of total outgoing MiTT)	75%

4. Please provide details of the number of subscribers by cellular and PCN mobile communication operators.

Name of Operator	Number of Subscribers (End 1997)
1. Tele Danmark A/S	871000
2. Sonofon	550000

5. Please provide a description of the most significant recent policy changes affecting the provision of telecommunications services, as well as any draft laws, or regulatory proposals to be implemented in 1998.

The following description will focus on recent or forthcoming policy changes in the provision of telecommunications services. The description will take its outset in a brief introduction to the regulation of the Danish telecommunications area.

Brief introduction: Political agreement on liberalization, effective 1 July 1995.

On the initiative of the Minister of Research and Information Technology, a broad political agreement on liberalization of the Danish telecommunication sector was made in April 1995. Under this agreement, the following telecommunications policy objectives were laid down.

Telecommunications policy objective:

Before the year 2000, Danish telecommunications customers should be offered the world's best and most inexpensive telecommunications services.

Furthermore, the agreement stipulated that liberalization was to take place in two steps, and that liberalization of the right to establish and provide broadband networks in local areas was to be introduced in 1995; that operators should have wider access to establish their own networks; that Tele Danmark's broadband rates should be reduced by an average of 65 per cent; and that mobile companies should be ensured access to direct interconnection with foreign countries as well as better and cheaper terms for their interconnection with Tele Danmark

Basic agreement on total liberalization of the telecommunications sector in Denmark by mid-1996.

On the initiative of the Minister of Research and Information Technology, another broad political agreement on liberalization of the telecommunications sector was made in December 1995. The agreement constituted a framework agreement on how to proceed with the total liberalization of the Danish telecommunications sector, and at the same time it advanced the date of liberalization by 18 months, from 1 January 1998 to 1 July 1996. In continuation of this, it was agreed to divide the specific regulation of terms for such total liberalization into two stages, known as Stage 2a and Stage 2b.

The two legislative packages, Stage 2a and 2b.

The Stage 2a package, which included the total liberalization as such, was introduced with effect from 1 July 1996. The Stage 2b legislative package, containing a number of supplementary initiatives to promote competition, was introduced with effect from 1 July 1997.

Appointment of the Universal Service Obligation (USO) provider.

Providers who have a nationwide market share of 50% or more of the overall provision of one or more telecommunications services included under the universal service obligation may be appointed by the National Telecom Agency as USO providers. For a number of years, Tele Danmark is expected to remain the only company within the Danish telecommunications sector that meets the market share criteria. As a consequence, the National Telecom Agency has appointed Tele Danmark as a USO provider for the period from 1 January 1998 to 31 December 2007.

To the extent necessitated by market conditions, the Minister of Research and Information Technology may decide that the National Telecom Agency should appoint one or more USO providers on the basis of a public tendering procedure. In those cases where it is not possible to appoint a USO provider who meets the above requirements, the Minister of Research and Information Technology may appoint one or more providers to take care of the universal service obligation.

Prices for USO services

Based on a proposal from the USO provider, the National Telecom Agency, not later than 1 September each year, will set maximum prices for the following two years for USO services that are subject to maximum price regulation.

Maximum prices should be understood as specific ceilings on how much the individual tariff elements (installation, subscription, individual traffic rates etc.) included under USO services may cost as a maximum.

The maximum prices for USO services must be cost-based, objective and non-discriminatory.

Every second year the National Telecom Agency will also demand a real fall in tariffs for USO services for the next succeeding year and the year following this (in 1998 for the years 2000/2001; in 2000 for the years 2002/2003, etc.).

The National Telecom Agency's determination of the real fall in tariffs must be arranged in such a manner that requirements for the annual real fall in prices will reflect the best practice for price developments in the competitive market for telecommunications services, both internationally and in Denmark. At the same time, it must be ensured that there will be no marked imbalance as a whole between the USO provider's total costs of providing USO services and the revenue generated by this (supranormal profits).

Service provision on fixed networks on interconnection terms.

At the end of April 1998, the Ministry of Research and Information Technology proposed to the Danish Parliament that further legislative regulation should be introduced, which is expected to enable access to service provision on mobile networks on interconnection terms, pointing out that service provision can also be made on the fixed network on interconnection terms.

So far, only one agreement on service provision on the fixed network have been negotiated (the service provision agreement on the concept DUET, mentioned below), but several agreements have been made on the mobile network. These agreements have been made on entirely commercial terms and without any other price regulation than what follows from the general regulation of competition.

The significance of the new Bill is first and foremost that competition will be further strengthened, as service provision can be made at cost-based prices for the service provider's network access. This will enable an increased number of providers to offer combination products etc. at prices which are competitive in relation to the network owner's products.

More specifically, the proposal emerged from a number of issues that came up in the wake of a combination product and a new form of subscription developed by Tele Danmark in 1997. The product involves a concept (DUET) under which a single telephone subscription includes both fixed-network and mobile telephone elements. The product is offered in addition to Tele Danmark's fixed-network subscription and is based on purchase of network capacity from the subsidiary company Tele Danmark Mobil A/S on a service provision basis.

Improved consumer protection.

At the end of April 1998, the Ministry of Research and Information Technology proposed to the Danish Parliament that further legislative regulation should be introduced, which is expected to involve a tightening of requirements for providers of telecommunications services. Such tightening will include:

- Requirements stipulating that consumers should have a written contract for all customer relations.
- Requirements stipulating that the contract should include compensation and/or repayment schemes in case of defects in the service.
- Requirements for itemized billing without special payment.

6. Please provide a brief description of the responsibilities of the national regulatory authorities for public telecommunication services.

Please see Act on the National Telecom Agency, act. no. 395 of 10 June 1997 at the following URL : www.tst.dk (an English version is available).

7. Are there any foreign ownership, size of shareholding or other ownership restrictions on individuals and corporations investing in the incumbent PTO(s) in your country?

No.

8. Are there any communication infrastructures or services (e.g. cable television, terrestrial broadcasting, satellite broadcasting) PTOs in your country are not permitted to directly provide? In addition, please specify any restrictions on PTOs investing in companies that such infrastructure or services.

No limitations

9. Is the incumbent PTO(s) in your country allowed to provide mobile communication services?

If 'yes', is there a requirement for accounting separation between the PTO's mobile and fixed operations?

Yes.

Please see Executive Order No. 657 of 18 August 1997 on Interconnection Agreements in the Telecommunications Sector at the following URL: www.tst.dk (an English version is available).

10. What selection procedures are used to determine licenses for new PTOs (e.g. calls for tenders, government appointments, license on request)?

No licenses are needed.

11. Please specify any restrictions or obligations imposed on new competitive network suppliers?

None, only general requirements on billing, consumer complaints etc.

12. Are there any restrictions on the use of leased lines nationally or internationally (including resale)?

No.

13. Under the communication regulation existing in your country how would national and international voice telephony services provided over the Internet, by entities other than a PTO, be defined and treated? Please mention any restrictions or obligations that may apply.

There is no regulation in the field.

Pricing (Questions 14 -15)

14. What, if any, conditions are applied to the tariffs set by PTOs? (Please include any price control information such as price caps and specify for which service they apply).

The details of the tariff conditions are outlined in the Executive Order No. 908 of 5 December 1997, issued by the Ministry of Research and Information Technology, entitled Executive Order on USO Services (Specification, quality requirements, prices and requirements for subscription contracts). The executive order can be found on our homepage "www.tst.dk" (click for English version). Pricing is outlined in sections 14-17, and the determination of "X" and "Y" (which determines the development in the price structure) is outlined in sections 18-20. See the response to question no. 5.

15. If communication discount schemes are available in your country please provide information on one or more popular schemes applicable to residential users, dial-up Internet access users and a low user scheme from the incumbent PTO. In the space below please indicate the main features:

Residential User Discount Scheme:

Internet Access Discount Scheme:

Low User Scheme:

Note: Residential user refers to an average consumer's home telephone service. A dial-up Internet user refers to a consumer accessing the Internet via a PC with a modem over the local public switched telecommunication network. Low user schemes is a term sometimes applied by PTOs to schemes designed for segments of the community that are financially disadvantaged.

Numbering/Domain Names (Questions 16 - 17)

16. Please describe the numbering policy in your country. Please mention the responsible authority and whether portability has been introduced and for which services (e.g. 800 numbers, cellular numbers, local PSTN numbers).

Numbering policy in Denmark

The numbering policy in Denmark is based on Act No. 392 of 10 June 1997 on Assignment And Use of Numbering Resources etc. The act can be found on at the following URL: www.tst.dk (an English version is available). The Danish numbering plan is a closed non-geographical plan using 8-digit subscriber numbers. Since August 1996 4-digit carrier preselect codes have been allocated.

Responsible Authority

The responsible authority is the Ministry of Research and Information Technology as well as the National Telecom Agency which is the national regulatory agency.

Portability

Portability will be introduced in two phases in Denmark. The first will include the most common fixed network. This phase has a deadline for implementation of 1 July 1999. The second phase will include both mobile telephony and special numbers, e.g. 800-numbers.

17. Have there been any recent government policy initiatives in your country in respect to the administration of Internet top level domain names. (An example of a top level domain name is .be for Belgium).

No.

Interconnection (Questions 18 - 21)

**18. Are PSTN interconnect or access charges a matter for commercial agreement between operators and if so is there provision for arbitration and by whom? Is there a requirement to publish the rate for PSTN interconnect or access charges?
If 'yes' please provide a schedule of interconnection charges for the PSTN.**

Yes, in principle interconnection or access charges are a matter of commercial agreements. The National Telecom Agency will arbitrate, if no agreement is met. The interconnect charges are public as well as the agreements themselves.

Interconnection charges (please indicate measure e.g. cost per minute for terminating or originating traffic):

3-minute calls cost:

Local: 0.22 (peak hour)

Single transit: 0.41 (peak hour)

Double transit: 0.50 (peak hour)

19. For the purpose of establishing interconnect or access charges is accounting separation used?

Yes, based on allocation of costs, c.f. above mentioned Executive Order No. 657.

20. Once the interconnection or access charge has been established is it available as a standard rate for other service providers (including other PTOs and resellers)?

Other rate structures can be agreed upon.

21. Does regulation specify that competitive service providers can collocate facilities on the same site as incumbent PTOs? Please indicate whether resellers and Internet Service Providers can co-locate equipment under the same terms and conditions as PTOs without being designated as a PTO?

Currently, there is a flux in the regulation on this matter. No clear answer can be given.

Information for Updating OECD Tariff Comparison Baskets (Question 22)

22. Please provide the following information for your largest PTO.

What is the average duration of a local call (i.e. average time of a call in the lowest tariff band for PSTN)?	2.0 (all calls) 2.9 (successful calls)	
What is the proportion of calls that fall within your lowest tariff band (i.e. local calls) as a percentage of total national calls?	Business (%) 54%	Residential (%) 60%
What percentage of calls from the fixed network (PSTN) terminate in mobile networks (e.g. analogue and digital cellular networks)?	Business (%) Not available.	Residential (%) Not available.
What percentage of total leased lines (i.e. leased circuits) are local (i.e. 2 km or less)?	80%	

Universal Service/Consumer Issues (Questions 23 -25)

23. In the context of universal service policies which elements of telecommunication service are considered as part of universal service in your country?

<p>1) A telephony network and an associated telephony service</p> <p>2) An ISDN network and the associated ISDN services</p> <p>3) Leased lines, except for broadband lines</p> <p>4) Special USO services for certain groups of disabled persons or special USO terms and prices for these groups</p> <p>5) Public radio-based maritime distress and safety services</p> <p>6) A nation-wide directory enquiry service containing all numbers within the public Danish numbering plan assigned to end-users as well as a directory enquiry service, with wide coverage, for foreign numbers. Act on Universal Service Obligation and Certain Consumer Interests within the Telecommunications Sector, act no. 466 of 12 June 1996 as amended by act no. 397 of 10 June 1997, in which the content of the Universal Service Obligation is stated, can be found at the following URL: www.tst.dk (an English version is available). The services are specified in the Executive Order on USO services, mentioned under question no. 14.</p>
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24. Please provide details of any explicit funding mechanism for universal service and its coverage.

See details in section 11 of the Act on Universal Service Obligation and Certain Consumer Interests within the Telecommunications Sector, mentioned above.
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25. With what institutions other than telecommunication service providers can customers lodge complaints regarding these operators? (e.g. regulators, ombudsman, Ministry, etc.) Is there a requirement for annual reporting of the number of consumer complaints? If so how are complaints measured and reported.

Complaints concerning the subscription terms of the universal service obligations as well as complaints in general concerning the providers of telecommunication services' compliance with the regulation in this area can be directed to the National Telecom Agency. The National Telecom Agency is the Danish regulator in the field of telecommunications. Complaints over rulings made by the National Telecom Agency can be directed to the Telecommunication Consumers Board or the Telecommunications Complaints Board, both independent complaints councils of which the rulings are final.