



COMMUNICATIONS OUTLOOK 2001
Telecommunications

Country: Denmark

Date completed: 17.08.2000

TELECOMMUNICATIONS

Market Structure and Regulatory Status (Questions 1 -10)

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, certain number, fully open to any applicant)	Number of licensed operators (2000)
Fixed PSTN (Local, National and International)	Fully open	License not required
Network infrastructure capacity (Includes only companies not licensed to provide voice services)	Fully open	License not required
Analogue Cellular Mobile (e.g. NMT etc.)	Certain number	1
Digital Cellular Mobile (e.g. GSM, PCS etc.)	Certain number	4
Wireless local loop (fixed wireless)	Fully open (DECT) Certain number (FWA)	n.a. Licenses not issued yet
IMT-2000 Operators (i.e. UMTS and 3 rd Generation)	Certain number	n.a. Licenses not issued yet

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 (2000) (e.g. state owned/privately owned) If a balance of ownership exists please indicate the share (%) held by the government
Tele Danmark	0 % shares held by Danish Government
Telia	0 % shares held by Danish Government
Mobilix (France Telecom)	14 % shares held by Danish Government (Banestyrelsen)
Sonofon	0 % shares held by Danish Government

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

	The largest PTO's share	
	End 1998	End 1999
Local Access: % of access lines	n.a.	n.a.
Local Access: % of local calls	n.a.	n.a.
National Long Distance (% of total minutes) ¹	n.a.	n.a.
International (% of total outgoing MiTT)	64 % (PSTN)	56,3 %
Internet Subscribers ²	n.a.	n.a.

1. If % of minutes is not available, please indicate the % of revenue

2. If share of subscribers is not available, please indicate number of Internet subscribers for the PTO.

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

Name of Operator	Number of Subscribers (End 1999)
1. Tele Danmark	1 230 672
2. Sonofon	774 903
3. Mobilix	318 818
4. Telia	170 111
5. debitel (service provider)	133 581

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 2000 to 2001.

Please provide details:

New legislation as of 1 July 2000 (Act no. 418 of 31 May 2000) regarding aspects of competition and consumers in the provision of telecommunications services. Most significant changes are:

- a) Introduction of LRAIC in 2002 regarding switched traffic, local loop and collocation
- b) Easing access and entrance of virtual network operators.
- c) Establishment of means to prevent protraction, when entering into interconnection agreements.

For further information on the new legislation, see our website www.tst.dk.

- 6. Please provide a brief description of the responsibilities of the national regulatory authorities for public telecommunication services. Please highlight any changes over the last 12 months.**

Please provide details:

Please see Act on the National Telecom Agency, act no. 395 of 10 June 1997, and amendment hereto in the new legislation mentioned in question 5, on the homepage www.tst.dk (English version)

- 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. mobile, cable television, terrestrial broadcasting, satellite broadcasting*) that PTOs in your country are not permitted to provide directly? In addition, please specify any restrictions on PTOs investing in companies that provide such infrastructure or services. Please include information on requirements by the incumbent PTO to divest cable networks.**

Please provide details:

PTO's provision of cable television must be divested from the provision of telephony services.

- 9. What selection procedures are used to grant licences for new Wireless Local Loop (WLL) and IMT-2000 services? (e.g. spectrum auctions, calls for tenders, government appointments, licence on request)?**

Please provide details:

WLL:

FWA (WLL) licences will be issued via a public tender (beauty contest).

The tender takes place in two rounds – an initial round inviting indications of interest and a final round of competitive bidding.

The licences are expected to be awarded in December 2000.

IMT-2000:

Licences for IMT-2000 will be awarded via spectrum auction.

The exact procedure and timetable remain to be decided upon, but licenses will be issued in 2001.

- 10. 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.**

Please provide details:

As any other type of provision of voice telephony services, no specific restrictions apply.

Pricing (Questions 11 -12)

- 11. What, if any, conditions are applied to the tariffs set by PTOs? (Please include any price control information such as price caps or approvals and specify for which services they apply).**

Please provide details:

Price caps for the incumbent operator (concerning USO services except leased lines) is set by the National Telecom Agency

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

Low User scheme:

The quarterly fixed tariff is reduced.

Internet Access Discount Scheme:

Several schemes apply, see our price survey on www.tst.dk, "publikationer".

(Additional pamphlets from the PTO in English or French, or with the main points translated into one of these languages, would be most appreciated. Please provide data in local currency).

Note: Low user schemes is a term sometimes applied by PTOs to schemes designed for segments of the community that are financially disadvantaged. 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.

Numbering/Domain Names (Questions 13 - 14)

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

Please provide details:

The National Telecom Agency is the responsible authority for the allocation of numbers. Non-geographic portability was introduced in 1999 between fixed networks. By 1 January 2001 total portability will be introduced, that is portability fixed/fixed, mobile/fixed and mobile/mobile.

- 14. Which organisation is responsible for the administration of your Internet country code top level domain names. (An example of a country code top level domain name is .be for Belgium). Please provide any details of any recent policy initiatives relating to country code domains.**

Please provide details:

An industry association (on certain specific conditions) carries out the administration.

Interconnection (Questions 15)

15. Interconnection between fixed networks.

	Yes /No	Details
Are PSTN interconnect or access charges a matter for commercial agreement between operators? And if so, is there provision for arbitration and by whom?	Yes	Except for SMP-operators where they have to be cost based and non-discriminatory. The National Telecom Agency can determine the charges based on Best Practice.
Is there a requirement on the incumbent to publish the rate for PSTN interconnect or access charges?	Yes	The interconnection rates are published in the RIO's. The agreements are publicly available in the National Telecom Agency.
For the purpose of establishing interconnect or access charges is accounting separation used?	Yes	
Once the interconnection or access charge of the incumbent has been established, is it available as a standard rate for other service providers (including other PTOs and resellers)?	Yes	
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 collocate equipment under the same terms and conditions as PTOs without being designated as a PTO?)	Yes	All parties (including resellers and ISP's) having an interconnection agreement (switched traffic, local loop) with the incumbent has right to collocation.
What kind of interconnection accounting methodology (e.g. LRIC, FDC, etc.) is used for calculating the incumbent's interconnection charges?		At the moment, modified historical cost method together with best practice is used. From 2002 LRAIC will be used for the following products: switched traffic, local loop and collocation.
Is carrier pre-selection implemented? If so, please describe the coverage of carrier pre-selection (e.g. local, long-distance and international).	Yes	Covering local, long distance and international.

16. Fixed to Mobile Network Interconnection

	Details
Are termination rates to mobile networks published?	Interconnection agreements involving SMP-operators are publicly available in the National Telecom Agency.
How are the termination rates for fixed-to-mobile calls determined in your country (e.g. commercial negotiated between operators, determined by mobile operator or other)?	Commercial negotiations
Are these rates subject to any regulation (e.g. must they be cost orientated if operators have significant market power)?	No immediate requirement for cost based prices, but rates have to be applied on a non-discriminatory basis.

Unbundling (Questions 17 -18)**17. Please describe initiatives for local loop unbundling and indicate when unbundling policies were put in place or the expected date of implementation.**

Please provide details:

Access to the unbundled local loop was introduced explicitly in the regulation in July 1998.

18. Please provide the prices for access to unbundled local loops and specify the service on offer (e.g. raw copper, DSL subscriber line).

Please provide details:

Based on cost analysis, the price of an unbundled loop (irrespective of its length) has been fixed at 740 Danish Kr. (plus VAT) per year.

Consumer Issues (Questions 19 -20)**19.**

	Details
In the context of universal service policies, which elements of telecommunication service are considered as part of universal service in your country?	In Denmark the Universal Service Obligation includes: - A PSTN network and service - An ISDN network and service - Leased lines, except broadband lines (>2Mbit/s) Additional Services: - Special services for disabled persons - A nationwide directory enquiry service and an extensive enquiry service for foreign numbers - Public radio-based maritime distress and safety services
Please provide details of any explicit funding mechanism for addressing universal service and its coverage (this can include initiatives related to infrastructure in respect to addressing digital divide issues).	No funding mechanism in use
Is the cost of providing universal service calculated? If so please provide the latest annual costing.	No
What percentage of telephone subscribers do not have access to an Internet service provider's point of presence with a local call?	0
What is the average monthly online time for a subscriber to the largest PTO's Internet access service (e.g. number of hours).	n.a.
What is the average household consumption expenditure of telecommunication services in your country? Please provide the data in local currency and specify the year of the survey. Please indicate which of the following telecommunications services are included or excluded -- fixed PSTN services, cellular mobile services and Internet access -- or provide a definition of the indicator used in your country.	n.a.

20.

	2000	2001	2002	2003
Please report any estimates of the potential coverage of access lines with DSL by the end of the following years (as a % of total subscriber lines) by the	n.a.	n.a.	n.a.	n.a.

incumbent(s):				
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