

Case No COMP/M.1439
- TELIA / TELENOR

Only the English text is authentic.

REGULATION (EEC) No 4064/89
MERGER PROCEDURE

Article 8 (2)
Date: 13/10/1999

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PUBLIC VERSION

Commission Decision

of 13 October 1999

**declaring a concentration to be compatible with the common market
and the EEA Agreement**

Case No IV/M. 1439 Telia/Telenor

(Only the English text is authentic)

(Text with EEA relevance)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to the Agreement on the European Economic Area, and in particular Article 57 thereof,

Having regard to Council Regulation (EEC) No 4064/89 of 21 December 1989 on the control of concentrations between undertakings¹, as last amended by Regulation (EC) No 1310/97 of 30 June 1997², and in particular Article 8(2) thereof,

Having regard to the Commission decision of 15 June 1999 to initiate proceedings in this case,

Having given the undertakings concerned the opportunity to make known their views on the objections raised by the Commission,

Having regard to the opinion of the Advisory Committee on Concentrations³,

¹ OJ L 395, 30.12.1989, p. 1; corrected version OJ L 257, 21.9.1990, p. 13

² OJ L 180, 9.7.1997, p. 1.

³ OJ C ...,...199. , p....

WHEREAS :

1. On 28 April 1999 a notification was received pursuant to Article 4 of Regulation (EEC) No 4064/89 ('the Merger Regulation'), by which the Swedish and Norwegian Governments announced that they would acquire joint control, within the meaning of the ECMR of a newly created company, Newco, set up to hold the shares of Telia AB ("Telia") and Telenor AS ("Telenor").
2. On 25 May the notifying parties submitted certain proposed undertakings, which were conditional on the Commission's adoption of a decision pursuant to Article 6(1)(b) of the Merger Regulation.
3. After examination of the notification, the Commission concluded that the notified operation fell within the scope of the Merger Regulation and raised serious doubts as to its compatibility with the Common Market, because it could create or strengthen a dominant position as a result of which effective competition would be significantly impeded in the common market or in a substantial part of it and in the territory covered by the EEA Agreement. Therefore, on 15 June 1999, the Commission decided to initiate proceedings pursuant to Article 6(1)(c) of the Merger Regulation.

I THE PARTIES

4. Telia is the largest telecommunications operator in Sweden and is wholly owned by the Swedish State. It is also the parent undertaking of the Telia group. Telenor is the largest telecommunications operator in Norway and is wholly owned by the Norwegian State. Both companies provide within their respective countries the full range of telecommunications services as well as television services, and also provide such services elsewhere in the Nordic area and internationally.

II THE OPERATION AND THE CONCENTRATION

5. Under the terms of the notified operation, Newco, a new company to be incorporated under the laws of Sweden, will acquire all the shares in Telia and Telenor from the respective governments. In return, the Swedish and Norwegian governments will be issued shares equal to 60% and 40% respectively of the equity share capital of Newco.
6. The Swedish and Norwegian governments have entered into a Shareholders' Agreement, dated 30 March 1999. Under the Agreement, each government will have a veto over the approval of the group business plan and consolidated budget of Newco, major strategic acquisitions and disposals, appointment and authorisation of committees of the Board of Newco and the appointment of the Boards of Directors of Telia and Telenor (as subsidiaries of Newco). Each government will therefore have the possibility of exercising decisive influence over Newco, and hence the governments will share joint control over it. As Newco inherits the two telecoms and television businesses formerly owned by the respective States, it will perform the functions normally carried out by a telecommunications company, and therefore can be expected to perform on a lasting basis all the functions of an autonomous economic entity.

III COMMUNITY DIMENSION

7. The worldwide turnover of the Telia group in 1998 was just over EUR 5 600 million and its Community-wide turnover was just over EUR [.....]*million. The worldwide turnover of Telenor was just over EUR 3 400 and its Community-wide turnover was in the order of EUR [>250]*million. Telia achieved more than two thirds of its community turnover in Sweden but Telenor does not achieve more than two-thirds of its turnover in any Member State. Both Telia and Telenor achieve over two-thirds of the EFTA-wide turnover in Norway, and the combined turnover of the undertakings concerned in the EFTA States equals 25% of more of their total turnover in the EEA territory. The notification therefore falls to be treated as an EEA co-operation case.

IV COMPATIBILITY WITH THE COMMON MARKET

I. Telephony and related services

Introduction to telephony and telecoms services

8. This is the first case to be considered under the Merger Regulation which involves the merger of two incumbent national operators in Europe. There have been earlier cases involving the merger, or possible merger, of European telecoms operators, but one of the two parties to the operation has always been outside Europe (for example, BT/MCI(II)⁴). There have also been arrangements notified under Regulation 17/62 which fell short of a full integration of two parties' entire telecoms activities⁵. However, as the present case goes a step further, it raises issues which did not need to be considered in such detail in those earlier cases, and therefore some initial review of market definitions is required.
9. Before dealing with the overall assessment and with individual product markets in detail, it may be helpful to set out some basic explanation of how the industry operates and also to clarify certain essential principles involved.

Structure and operation of switched circuit telephone networks

10. For most of this century, and for most countries in Europe, the telephone industry has been structured in the form of vertically integrated national monopolies, usually publicly owned. These PTOs (public telephone operators) offered their final user customers ('subscribers') basic voice services. Such basic voice services provided connection to any other subscriber within the country and, through international agreements with other PTOs, access to the international PSTN (public switched telephone network).
11. In recent decades efforts have been made in a number of countries to liberalise national telephone markets by introducing competition. For these purposes national telephone networks have generally been considered as consisting of three

⁴ Case No IV/M.1069, decision of 8 July 1998

⁵ See, for example, Commission Decision 96/546/EC (case IV/35.337 - Atlas), OJ L 239 of 19.9.96, p.23 and Decision 96/547/EC (case IV/35.617 - Phoenix/GlobalOne), OJ L 239 of 19.9.96, p.57.

distinguishable segments: *local loop*, which is essentially the network between subscribers and the point of interconnection⁶ at their local exchanges; *long distance*, that is, the network of cables and switching equipment which connects the local exchanges to higher levels of exchange known as transit exchanges; and *international*; namely the network of cables and related switching equipment which leads traffic from the international gateway (often in a capital city or at some key node in the network), via 'backhaul' cables to the international cable head or landing point, and hence out of the country and to PTOs in other countries.

12. A subscriber for such voice telephony services gains access to the network by paying a subscription fee which generally covers the operator's cost for the provision of the infrastructure, in particular the fixed line from the local exchange to the subscriber's premises. The line itself is usually a pair of copper wires twisted in a certain characteristic fashion and referred to as a 'twisted copper pair' or 'twisted pair'. The physical shape of the two wires between subscriber and exchange can be thought of as a loop, consisting of one elongated piece of wire which starts on the main distribution frame and runs down to the subscriber, is connected across the handset, and returns via the return wire to the main distribution frame, where all the loops from that exchange area are connected.
13. When a call is made, it is necessary to set up a complete voice path⁷ by connecting the loop of the originating subscriber to the loop of the intended recipient. If the recipient is connected at the same local exchange as the originating subscriber, the two callers can be connected at that exchange.
14. A call destined for a subscriber on a more remote local exchange might be sent direct to the local exchange concerned. This is unusual however, and it will normally be sent first up to one or more 'transit' exchanges⁸, from which the call will then be directed back down the network to the relevant local exchange and hence to the subscriber.
15. As the call is set up, an appropriate connection must be made across each intervening bridging point or switch in order that a complete voice path from originator to recipient can be constructed. Once made, this circuit has to remain in place for the duration of the call, irrespective of how much voice traffic is actually carried during the call.
16. An international call will be sent to a convenient international switch or 'gateway', from which it will be sent on international connections (cables, satellite or radio links) either to the network operator in the country where the recipient subscriber is

⁶ The point where the twisted copper pairs are brought together at the local exchange, and from where switching can take place, is usually referred to as the main distribution frame.

⁷ In traditional switched telephony over copper lines, the voice path would require a completed electrical circuit between the two subscribers. With fibre-optic cables, satellite or radio links, there may no longer be a complete electrical circuit, as some components of the voice path may be light pulses, radio waves, etc.

⁸ The precise architecture of the system, and the terminology, may vary from network to network and country to country.

located, or transited through the networks of other operators if no direct network-to-network connection is available.

17. The only reason for which monopoly PTOs needed to interconnect with each other was to exchange international traffic. The physical connection between the two networks was usually made by an international cable terminating in each of the countries concerned. The relations between operators were generally described as correspondent relations. Under such relations, the price of traffic between the two countries would be agreed at a fixed per-minute cost known as the accounting rate⁹.

Different methods for new operators to access the local loop

18. In principle new entrants could build their own networks. However, all the existing local loop networks were normally built up over substantial periods of time, and financed when the telephone companies concerned were public sector bodies. For an entrant facing an established incumbent, the high cost and long time periods involved in building out new networks means that there is a significant economic disincentive to entry in this way.
19. Where there is a powerful incumbent, the potential entrant faces some basic challenges. The first is to persuade potential customers, who are currently subscribers of the incumbent, to switch to the new entrant as their chosen service provider. A second is that subscribers will probably remain physically linked to the incumbent, and it will be necessary for traffic to pass through some of the incumbent's network in order to get to and from the new entrant. A third is that the vast majority of outgoing calls from the new subscribers will still have to be terminated on the network of the incumbent, and the entrant has to be able to hand off these calls to the incumbent without incurring charges for the use of the incumbent's network which make his offering uncompetitive.
20. Competition in the territory of former monopolies has generally begun by entrants attacking the incumbents on their most profitable routes, namely the international and long distance routes for outgoing calls. The simplest form of entry is resale, whereby the entrant purchases an 'end to end'¹⁰ retail service from the incumbent. The entire line continues to be owned and operated by the incumbent, but the entrant 'resells' the retail services provided by the incumbent. The customer will remain connected to the incumbent for all technical and practical purposes other than for the ordering of services, billing, branding and customer care, and sales and marketing. The supplier of resale will generally receive the resold services at a wholesale price or at a discount compared to the price at which the incumbent offers them. The opportunity to make a profit depends on the reseller's ability to keep the costs of the overheads under his control (generally for sales and marketing, billing and a service centre) lower than the equivalent costs which the incumbent would have incurred.

⁹ The precise rate, usually expressed in SDR (special drawing rights) might vary depending on the time of day at which the call was made.

¹⁰ In this context an 'end-to-end' service is one where all the network elements between the subscriber making the call and the subscriber receiving the call are owned by, or under the control of, the same operator.

21. The problem for resellers is that the bulk of the costs of providing the telephony service remain under the control of the incumbent. Resellers can only re-offer services which the incumbent has itself provided over its own network. There is therefore no possibility of innovation, in terms of offering new technical solutions which go beyond those which the owner of the line is able or prepared to offer. Furthermore, the exercise is only profitable insofar as the incumbent (or the regulator) is prepared to allow the resellers to survive. If there are no regulatory obstacles to its doing so, the incumbent can easily cut its retail prices whenever it chooses in order to make the offering of resellers uncompetitive, and thus force entrants to reduce their margins to the point where their operations are no longer profitable.
22. The next form of entry, which involves a more substantial commitment in terms of network development by the entrant, is call-by-call carrier selection. The final user remains a subscriber to the incumbent, but also becomes a subscriber to whichever other entrant operator(s) provides the competing outgoing call service. At all times the subscriber remains physically linked to the network of the incumbent, and still remaining a subscriber of the incumbent. When the subscriber wishes to use the services of the competing operator, he enters a special code before dialling the desired number. The code is recognised at the local exchange as the access code of the competing operator. The call is handed off to the competing operator at the nearest interconnection point between the two networks.
23. Another form of entry, carrier pre-selection, is essentially the same as described above, except that all outgoing calls are automatically diverted to the new operator, unless the diversion is manually overridden by the subscriber.
24. Carrier pre-selection or call-by-call selection are normally used mainly for long distance or international calls, where the prices charged by incumbent carriers are sufficiently high above cost to allow an entrant the opportunity to compete by running traffic over its own network, and charging its customers less for doing so.
25. Under either type of carrier selection the domestic subscriber continues to pay the incumbent the subscriber fee for the fixed line. In principle there is no direct charge levied by the incumbent on its subscribers when those subscribers make a call using carrier pre-selection or call-by-call selection, even though the traffic must travel over some of the incumbent's network. Instead the chosen entrant has to pay the incumbent for the use of its networks from the subscriber up to the point of interconnection with the entrant's network. This payment is sometimes referred to as 'originating interconnection', and will usually be recovered by the entrant from the subscriber as part of the entrant's call charges.
26. The calls taken over by the entrant might have to be terminated back on the incumbent's network, on the entrant's own network, or on a third party network. The majority of domestic calls will need to be terminated back on the incumbent's network, simply because the vast majority of subscribers in the country concerned will remain connected to the incumbent. A further payment therefore, terminating interconnection, has to be made by the entrant to the incumbent to cover this service.

27. An important limitation to these ways of entry is that both carrier pre-selection and call-by-call selection apply only to outgoing calls. A carrier who manages to attract 1% of the incumbent's customers may be able to persuade the customers to use it for all their outgoing calls, but all incoming calls destined for the subscribers concerned will still have to be terminated on the incumbent's network. Therefore an entrant offering carrier pre-selection or call-by-call selection cannot earn the call-terminating revenue which an operator in full control of the local loop can expect to earn.
28. A more substantial form of entry is local loop unbundling (sometimes referred to by the acronym LLU). Although the details may vary slightly according to the way it is implemented, the new entrant will generally connect his cables directly to the subscriber's copper pair at the point where the subscriber's twisted pair has previously been connected onto the incumbent's main distribution frame. Local loop unbundling will usually require the new operator or operators to co-locate in the same local exchange building, which implies the entrant setting up its own network switch to take the traffic off from that point onto its own networks.
29. The effect of such unbundling is as if the subscriber concerned had had his cable connections taken from one local exchange operator and placed onto the main distribution frame of another operator (the entrant). All the subscriber's relationships are with the entrant. The only respect in which the incumbent continues to have control of any of the diverted network is that it retains ultimate ownership of the twisted copper pair to the final user. The entrant must generally pay the incumbent for the lease of the copper pair from the incumbent's premises to the subscriber.
30. In theory there is no reason why the new operator should not take over outright ownership of the copper pair. In practice however, the copper pair usually runs for a substantial portion of its length in cables which contain other twisted pairs, and which will continue to be controlled by the incumbent. It is therefore important that the use of the diverted copper pair does not create unacceptable interference with the other wires in the cable, for example by 'crosstalk' or radio interference with other circuits in the incumbent's local loop cables. A cable in which several specific circuits were owned outright by someone other than the owner of the cable might give rise to difficulties in allocation of responsibilities for maintenance. For these reasons leasing arrangements are generally preferred.
31. There are other possibilities for getting local loop access, - that is fixed access to final subscribers - but which avoid the need to use the incumbent's fixed links. The most usual alternative to the incumbent's fixed links is the use of cable television connections.
32. Cable networks were usually designed to transmit traffic in one direction only, and so have a 'trunk and branch' or 'cascade' structure which is not ideal for telephony. By contrast, in the traditional telephone system each subscriber has his individual local loop to the local exchange, which only ever carries his own traffic. The copper loop wires are less likely to be overloaded no matter how many subscribers are simultaneously using their phones. By contrast, with traditional cable networks there is a risk that the 'trunk' connections within the system can be overloaded by return telephone traffic. However the networks can be adapted. The first step is to

reserve some of the bandwidth on the cable to create an outward and a return path for telephony traffic. The system must be reconfigured so as to break it down into separately served units of say, 500-1000 subscribers, in order to ensure that the arterial routes are not overburdened at times of peak demand. There may be a need to create more capacity in the key trunk lines, by putting in extra cables, or replacing the copper co-axial system with fibre optics, in order to enable the system to deal with all the traffic. If so, investments are needed in the electronics required to 'light up' - to bring into operation - the optical fibres. Cable modems are required at each end of the line. Undeveloped cable networks are therefore not an immediate substitute for the telecom network, but can be made so with some investment.

33. In some countries, the UK being one example, cable networks were built out not only with the usual co-axial cable for the supply of television services, but with an additional twisted copper pair with the intention that it might be used for telephony. In other countries the cable networks consist only of co-axial cable and so the technical and financial challenges involved in developing the network for telephony are greater.
34. Other alternatives to the use of the incumbent's fixed lines involve the use of relatively new technologies, such as the conveyance of traffic over electricity cables entering the subscriber's premises. However, as this is not commercially developed, it does not provide an immediately available competitive alternative for the bulk of telephone users.
35. There are also methods designed to avoid the use of fixed links entirely, such as radio link. This requires the use of high frequency radio signals beamed at receiving/transmitting equipment located at the subscriber's premises. The disadvantage of this system are that it uses very short wave radio signals. These require line of sight transmission, so the use of radio-loop systems might be limited to country areas rather than built-up town and city centres, or to businesses with high buildings or aerial masts on which to locate the receiving antennae. The use of such radio frequencies might generate unacceptable levels of interference with other equipment. Moreover significant investments must be made in the equipment at the subscriber's end of the line. An attempt to set up a commercial operation in the UK using such radio links has recently failed.
36. An important distinction should be drawn between local loop services which give the entrant the subscriber's outgoing call business only, such as carrier pre-selection, and call by call selection, and technologies which place the new operator in a position analogous to that of the incumbent (unbundled local loop access, radio link, access by power cables and cable networks). The second group gives the operator the possibility to earn revenue from incoming as well as outgoing calls. Arguably only the second group, and of these only unbundled local loop access at least in the short term, is really capable of allowing competitors to enter on the same terms as the incumbent.

Interconnection: correspondent relationships and the accounting rate

37. Interconnection is the means by which two separately owned networks exchange traffic between one another. The accounting rate system, which was referred to briefly above, is a particular form of interconnection. It is essential for any

telephone company to have sufficient interconnections to be able to send traffic to, and receive it from, virtually everywhere on the PSTN, including the international PSTN.

38. In the era of monopoly national telephone operators, calls which had to be switched between local and transit exchanges, or to international gateways, were switched entirely within the network of the national PTO. In this context 'interconnection' would have had relatively little meaning. The price of the service as paid for by the subscriber, a combination of the fixed rental charge and a usage charge for individual calls based on their duration, destination and perhaps time of day, would be a bundled charge which covered all the necessary switching activities within the network.
39. Where international operators deal with one another, the financial relationship between them was and usually still is governed by a system referred to as the accounting rate system. A price is agreed between the two national telephone operators concerned, and the originating operator (the operator whose subscriber initiated the call) pays an agreed percentage, usually 50% of the accounting rate, to the other operator for delivering, or terminating, the call. As there is usually a two-way exchange of traffic between the two operators, the accounting rate is usually accompanied by a settlements system, in which the net flows of traffic between the two operators over a period are counted up, and payments in one direction or the other made at regular intervals on the basis of the imbalance.
40. The physical cable structure between the two PTOs would be considered as owned by each up to a notional mid point (either on their common border or on the mid point of an undersea cable). The subscriber making the call would pay his operator the full price of the call (which in theory should be related to the accounting rate but might not be), and this operator on whose network the call began would then generally pay the terminating operator an agreed proportion, usually 50% of the accounting rate, to terminate the call on the receiving network. The fact that traffic might be roughly in balance between the two operators concerned, and that payments would be subject to a settlement regime, means that the actual amounts of money changing hands between the two operators would be relatively small compared with the overall traffic volume. It will be noted that under this system the price of a call to the telephone companies involved reflects the agreements reached between the two countries concerned, and the terminating operator gets paid the same irrespective of how far the call has to travel on his network to reach his intended subscriber.

Interconnection at local or long distance level

41. With the advent of liberalisation, there was a need for the new competing networks who entered within a domestic incumbent's territory to be interconnected with the incumbent, and of course with one another. Such interconnection is especially important to new entrants, because the vast majority of their subscribers will probably want to make calls to subscribers who are still on the incumbent's network.
42. The model for domestic interconnection usually differs slightly from the accounting rate model used in international calls. The originating operator (that is the one on whose networks the call begins) usually pays the receiving operator a minimum set-

up charge for each call, as well as a per-minute charge for the termination of traffic sent over the physical points of connection between the two networks. The per-minute usage charge may vary depending on the time of day at which the traffic is being sent, and how far it has to be sent on the receiving network from the point of interconnection.

Interconnection models

43. The pricing structures for interconnection vary from country to country. A country may be divided up into regions, and the entrant will have to decide on the specific regions in which it wishes to interconnect, and to fulfil certain minimum standards set by the incumbent. For example, it might be required to interconnect at specific points within the region as designated by the incumbent, and/or at a certain minimum number of points within the region as stipulated by the incumbent. Under this system an entrant will pay a certain charge if a call can be delivered within a region, or segment, where it is interconnected, and it might pay more if the incumbent has to take the call to another region where the entrant is not interconnected.
44. An alternative, which may amount to much the same thing depending on the geographical layout of the PSTN, is where the entrant can choose to interconnect at various levels in the exchange hierarchy. Thus if he interconnects at a high level in the hierarchy, he may have access to all the exchanges in the country or a substantial part of it, and if he interconnects at local level, he may have access only to the local exchanges served from the exchange he has chosen.
45. The incumbent will generally set prices based on the amount of his network which the interconnecting operator will need to use. Thus in order to reach a specific customer on the incumbent's local loop the cheapest interconnection is generally at or as close as possible to the local exchange where the relevant twisted pair is terminated. If the point of interconnection is at a transit exchange - higher up the exchange hierarchy - then the call will have to be carried over more of the incumbent's network in order to reach the local loop. The entrant can then expect to pay a higher charge than for the same call terminated at a local interconnection point. Hence individual local exchange level interconnections are more direct and cheaper, but give access to fewer overall customers. In general the fewer points of interconnection an entrant has, the more it will have to pay the incumbent for call termination. Conversely the more points of interconnection it has, the less it will have to pay the incumbent, but the more it will have to spend on building out its own network.
46. In principle the way for an entrant to lower his interconnection costs is to make as many interconnections as possible, as far down the exchange hierarchy as possible. However this involves significant capital costs of building out networks to each and every local exchange which it might wish to reach. Furthermore, if interconnection charges are high relative to the price at which the incumbent offers services to its own subscribers, it can be difficult for an entrant to make a profit on the operation. But even if the prices of interconnection are reasonable, a possible disincentive to large investment in new networks is that new entrants are entirely dependent on the incumbent, absent regulatory action, for the price at which interconnection is offered. If the price of interconnection rises so as to make the entrant's operations

uneconomic, their investments in rolling out networks will be of little value. Thus entrants may be unwilling to have their costs at the mercy of the incumbent unless they are satisfied that sufficient regulatory controls are in place to keep interconnection costs low enough to make their offerings competitive, and to prevent the incumbent from abusing its position of power.

47. For new entrants the most desirable state of affairs would be to interconnect at chosen points, whether at transit exchanges or local exchanges, selected on the basis of where it was necessary for them to send the most traffic. Thus in an area where a new entrant found itself delivering a high volume of traffic, say to a particular group of subscribers in a specified area of a city, it might want to interconnect at some selected local exchanges, or even at all of them in the area. In another area where a new entrant sends little traffic, it might want to interconnect only at the transit exchange level in order to avoid significant investment in little-used capacity. It could even choose not to interconnect at all in such regions, and to accept that this means paying the incumbent higher interconnection charges in respect of the delivery of such traffic.
48. Incumbents sometimes insist on interconnections being made in accordance with certain criteria which make it difficult for the entrant to 'cherry pick' the most desirable points of interconnection. It is common for example for an entrant operator to be required to interconnect at a minimum number of points, normally two, in each region in which he desires to interconnect. The incumbent may refuse to allow any interconnection at the local exchange level (as distinct from the more expensive interconnection via a transit exchange) unless the entrant is prepared to interconnect at a minimum number of exchanges, or perhaps even at each and every local exchange within the region. The incumbent may impose limitations on the networks to which it will connect
49. As to who pays the costs, there is usually a one-off cost for setting up each interconnection, and a continuing periodic payment. The incumbent may insist that the entrant pays the entire cost of setting up the physical infrastructure required to make the interconnection, even if the incumbent will be able to benefit from being able to send some traffic over the physical link. Such strategies give the incumbent a significant degree of control over entrants' costs because they determine the level of investment which the entrant has to make before it can begin operations. In addition the incumbent may carry out quality degradation strategies.

Supply of capacity or capacity-related products

50. A national telephone operator is a significant owner of network infrastructure in the form of cables and switches. Most such operators lease out some of their unused capacity. Such leasing can be of the 'wholesale' variety, whereby products are offered to other telecoms operators or large users, or it can be retail, whereby products are offered on an end-to-end basis, sometimes to suppliers of telephone services, but also to private users, such as data network operators.
51. The alternatives for the supply of the raw cabling may include utilities such as railways and electricity companies, which have their own private telephone systems or rights of way along which networks can be rolled out more quickly. Such offerings may provide 'backbone' alternatives, but may not have the coverage or

'capillarity' of the incumbent's own networks. Consequently the incumbent may be better placed than any other supplier of leased capacity in terms of the reach and coverage of his physical network.

52. The price at which leased lines and related products are offered have a relationship with interconnection prices and prices for local loop access. It was noted in the discussion of interconnection above that it was generally cheaper for an entrant to keep its traffic off the incumbent's network as far as possible, and to make the interconnection with the terminating network as near as possible to the point of delivery of the traffic. However, this assumes the entrant has the capital resources to build out his networks to each desired local exchange point. If the entrant chooses to lease lines, and is substantially dependent on the incumbent for the supply of such leased lines, then its ability to avoid hostile interconnection pricing on the part of the incumbent is further undermined by its being financially and operationally dependent on the incumbent for his leased lines. The ability of the incumbent to take such action may be lessened however, to the extent that regulation or other competitive constraints provide an effective constraint on its freedom to set prices for such offerings.

Circuit switching versus packet switching

53. In the model of telephony described above, one of its features is that a complete end-to-end voice path must be set up between the originating subscriber and the intended recipient of the call, and must remain in place for the duration of the call, irrespective of how much or how little is said on the line by the participants to the call. Accordingly significant amounts of network resources (cables, switching equipment) have to be dedicated exclusively to individual calls.
54. Packet switching is an alternative to traditional circuit switching, initially used to enable computers to exchange data over telephone lines, but increasingly being used as a means of carrying traditional voice telephony messages. In packet switched data communication, the information contained in the message is broken up into separate 'packets' of data. Packets are sent from the originating terminal to a computer known as a router, which examines the heading information on the packet and directs it on to another router, and so on until the packet reaches the intended addressee. Packet data systems are described as connectionless¹¹, in that the connection between two cable runs need only be held open for as long as it takes one packet to cross over the switch point from one cable to the next.
55. The first experimental packet switched networks were locally confined, often within a university, and would be described today as LANs (local area networks). However, the types of routers and switches used in packet-switched data networking can be placed at the 'nodes'¹² of traditional physical telecoms cable networks. By this means data networks can make use of the underlying physical cable of telecoms

¹¹ Some types of data network, such as Frame Relay and X25, are 'connection oriented', in that a connection is set up before a data transmission begins. To that extent they share some features of traditional circuit-switched telephony.

¹² The points where network connections intersect with one another

networks, thus obtaining the wide reach and coverage of the relevant networks, whilst avoiding the physical switching required at the nodes in a traditional circuit switched network. The advantage is that the same physical circuitry no longer needs to be dedicated to each user on a call by call basis, but can be used to carry the traffic from many simultaneous data transmissions.

Packet switched data networks in use: business data communications and the Internet

56. A data network can be constructed using cabling, switches and routers which are entirely divorced from the PSTN, and which have no connection with it. Many LANS, e.g. those found within an office building can be considered examples of such private data networks. Larger wide area networks ("WANs"), such as those which may connect the multi-national sites of a large company, might use some telecoms fibre leased from PTOs (such as private international leased lines) but in principle these too are private networks and they do not need to be connected to the PSTN.
57. Direct connection with the PSTN might be required in the case of a combined voice and data network. An example might be the case of a company with a global network with its headquarters in country X but a regional office in country Y. If the system breaks out onto the PSTN only at the head office in country X, then an employee in the regional office in Y who wants to speak to a customer in Y will need to make a call routed through the head office in X, out onto the PSTN, and back over international links to the customer in Y. Thus the call from the Head Office to the customer would be priced as an international call between X and Y. But if the company's voice/data network has an interconnection with the PSTN in country Y, then any traffic which has to be exchanged between the employees of the company in their regional office in country Y and the customer in country Y can be broken out directly onto the PSTN in country Y, thereby incurring lower termination costs.
58. The normal interaction of the private data network with the incumbent will not be in the form of requests for interconnection to the PSTN as such, but in terms of a demand for network infrastructure (capacity) products. In order to construct the data network, it will be necessary to lease capacity, or buy, probably from the incumbent, virtual network transport services such as Frame Relay or ATM (asynchronous transfer mode), which can serve to some extent the function of leased capacity. Thus a company seeking to construct its own data network (or to construct such a network for others) is dependent on the prices at which such capacity products and related equipment can be obtained.

Internet

59. The Internet is basically a series of interconnected and overlapping networks which all use the same protocol, the TCP/IP protocol, to exchange traffic. Internet networks can either interconnect horizontally in an arrangement known as peering, or vertically where one network becomes a customer of another for connectivity. The largest Internet data networks may have world-wide coverage, while smaller networks may have coverage only of a region, or of one country, or of a local area.

All Internet networks are ISPs (Internet service providers) both to each other and to final users.

60. Obtaining access to the Internet means getting access to an ISP. This can be done by 'dedicated access', that is to say, a dedicated fixed line cable link between the final user and his ISP, or by 'dial up' access over a normal PSTN line.
61. Insofar as an ISP has any dial-up customers, it needs connection with the PSTN in order to be able to reach customers who can only be reached via the PSTN. For these purposes, an ISP can be treated either as a business customer of the relevant telephone operator, or as another telephone operator.
62. If the ISP is treated as a (business) customer, it will pay a line rental to the telephone company, like any other user of telephone services. Calls from Internet users, (that is, customers of the ISP) to the ISP will be treated exactly like any other switched telephone call, except for the fact that modems are placed at each end of the line (i.e. by the customer's telephone and at the ISP's modem port) to render the data stream capable of being transferred over the circuit-switched PSTN. There will be line rental payments made by the final user and by the ISP, there will be usage charges paid by the final user for his use of the PTO's network, and the final user will separately pay the ISP for the provision of Internet services.
63. However, if the ISP is entitled under national law to be treated as another telephone operator, then the relationship will be different. In this case the ISP (which generally receives more calls than it will make) is the recipient of a stream of calls originating in the network of the PTO, and may be entitled to receive payments from the PTO for call termination services. Because the calls will in general be originated by the customer, and not by the ISP, it is normally the ISP who benefits financially from providing the incumbent with call termination services.
64. Some so-called 'free' ISP services are financed by settlement payments made by the PTO to the ISP, thus relieving the customer of any need to pay his ISP. A PTO may be obliged by regulation to treat the ISP as a telephone operator or, if it is exposed to significant competition for ISP business, it may find itself commercially obliged to offer call termination payments. If it does not, it could risk losing its subscriber outgoing Internet call traffic to a different carrier (by means of a carrier pre-select arrangement, for example).
65. ISPs thus need connection with the PSTN, which may be interconnection, if they are treated as a telephone operator, or as a customer, if they are not. Where there is little competition for access to the local loop, a PTO may be able to insist that all ISPs be treated as ordinary telephone subscribers. If it is not capable of doing so, the PTO may be able to lower termination payments to such ISPs to the point where the ISP is little better off than if it were a retail customer.

Higher bandwidth (broadband) services

66. The term 'bandwidth' relates to the physical characteristics of a telecommunications systems and refers to the speed at which information can be transferred. In analogue systems, such as traditional circuit switched telephony, it is measured by frequency (in Hertz). In digital systems it is measured in the number of binary bits per second. The higher the bandwidth, the higher the speed of the line, and the more

information a telecommunications system can transfer. A conventional voice telephone circuit connected at each end to a subscriber by means of a twisted pair can be regarded as a low speed 'narrow band' connection, which has a only a limited capacity to transmit data. Modern applications, such as Internet, and in particular video on demand require the transmission of much more information, and hence require high speed broadband interconnections if they are to be usable by the final subscriber.

67. There are two difficulties with the delivery of broadband services to final users. One is the bandwidth limitations of the twisted copper pair. Although many telephone operators upgraded their long distance and international capacity with fibre optic cable in order to make optimum use of packet switched technology, the local loop represents the point of the network where traditional circuit switching represents an impediment to the use of broadband technologies. The substantial costs of replacing the local loop infrastructure represent a disincentive, even for the incumbent, to upgrading the links, and thus the challenge is to find ways of delivering the service over existing facilities.
68. Broadband services can be offered over the existing copper line if it is hooked up to so-called 'enabling' technologies such as one of the 'xDSL' (Digital Subscriber Line)¹³ technologies. The xDSL technologies are capable of effectively converting a copper pair into a high speed digital line, and so overcome the technical limitations of the traditional copper local loop. The technology must normally be fitted at the local exchanges, on both the incumbent's and the customer's side of the main distribution frame.
69. Competing operators who want to offer broadband services via xDSL technologies to customers who are still connected to the incumbent face three main difficulties. First, they must wait for the applicant to install the technology, and hence their technical offerings are limited by the equipment which the incumbent installs. Second, they must interconnect somewhere further up the telephone line, further away from the main distribution frame, and thus expect to pay higher interconnection charges for the use of more of the incumbent's network. And finally such entrants are vulnerable to the incumbent's policy on the pricing and/or quality of his interconnection. If the incumbent increases his prices for interconnection or degrade it, a competitor's xDSL offering may become uncompetitive.

Interconnection between fixed and mobile networks

70. The principles described above apply equally to interconnection with mobile networks. However, it is customary for interconnection charges to be somewhat higher for mobile networks. This is said to be justified on the basis that the mobile operator has to incur more work in establishing where his customer is, so that calls to that customer can be directed to the appropriate point on his network. In their Reply to the Statement of Objections ("the Reply") the parties argued that charges

¹³ There are a number of variants of DSL technology such as ADSL (Asymmetric Digital Subscriber Line), HDSL (High data rate Digital Subscriber Line) and VDSL (Very high data rate Digital Subscriber Line). They are collectively referred to as 'xDSL' technologies.

were higher on the basis of the higher costs for mobile compared to fixed networks, and the fact that mobile infrastructure is still in the “build-up” phase.

71. ‘Roaming’ refers to the possibility of a mobile phone user taking his phone out of the area of the company to whom he subscribes for mobile phone services, and using it in the catchment area of another mobile phone company. In order for him to do this, there must be a roaming agreement between the two companies. In general, the main features of roaming agreements are as follows: the subscriber of network X arriving in the territory of operator Y will be treated as a customer of network Y. Operator Y will bill Operator X for any calls made by the customer when in Y’s territory. The bill will reflect the rate charged by operator Y to its own customers, plus a surcharge to reflect that fact that the caller has no subscription with operator Y. Operator X will in turn bill his customer for the calls, with a surcharge based on the additional administrative costs involved.
72. Roaming occurs both on a national basis, when a subscriber of a mobile phone company goes into the area of another mobile operator, and on an international basis, when a mobile phone user uses his phone in another country, and his call is handled by a service provider in that country.

A Relevant product markets

73. In their notification the parties identified seven relevant product markets, covering their activities in telephony and related services. These included fixed switch telephony services; business data communications; Internet access (including retail and dial-up); PABX distribution; local telephone directories – local; business to business telephone directories; and mobile telephony.

Markets within the fixed switched telephony segment

74. The parties’ proposed relevant product market for fixed switch telephony covered local calls, long distance calls (meaning those made within a single country), international calls, and calls to mobiles. The Commission considers that, from either a demand or supply point of view, the range of activities falling within this definition comprises offerings which cannot be regarded as economic substitutes for one another. An assessment is accordingly required on the basis of narrower segmentations.

Narrower segmentations

75. Many respondents to the Commission’s market investigations agreed that definitions more in line with previous cases should be used, under which basic telephony services would be split into separate segments. One such segmentation was into local loop, long distance, and international. However, local loop access services are relevant both to subscribers and to other operators seeking to interconnect. A distinction can also be usefully drawn between the supporting infrastructure, and the actual services which are offered.

Provision of local loop infrastructure

76. Before he or she can access any higher level telephone services, a subscriber has to be physically connected to the PSTN, which is usually done by allocating him or her

a twisted copper pair to his nearest local exchange. There is accordingly a demand on the part of subscribers and telecom entrants for connection to the local loop.

Provision of long distance and international infrastructure

77. There has to be a means of connecting local exchanges together within a country, and to bring traffic to and take it from the international gateways or switches. These services require a physical network of cables and a means of switching between them. The main suppliers of such network infrastructure in the past were the telephone companies themselves, but new options have emerged in recent years, notably utilities such as gas, electricity and rail companies who are prepared to lease out some of the capacity on their private networks.
78. In terms of demand, the provision of long distance transport is relevant not only for entrant PTOs, but also for companies running private networks, such as Internet Service Providers, suppliers of network services for business data communications, and companies seeking to 'self provide' by constructing their own data networks. Each of these types of player needs access to capacity to complete networks in a given service area, and possibly also interconnection with the incumbent in order to be able to exchange traffic originating or terminating in the country concerned.
79. In terms of such network infrastructure, a distinction has been drawn in the past between 'wholesale' offerings, namely those which are offered on an operator-to-operator basis only, and 'retail' offerings, which are offered to end users (normally businesses) and usually consist of private lines.
80. In principle the buyer of network infrastructure may be indifferent as to whether the product is obtained from a telephone operator or from any other competing supplier of network infrastructure. There may be advantages in buying a bundled product from a telephone company, that is one in which interconnection is taken for granted, but if the price rises too high by comparison with the offerings of competing suppliers, the user may be ready to buy 'dark fibre' (unused and unconnected cable) and to light it himself and to seek interconnection arrangements for it. From the point of view of the person buying access to such infrastructure therefore, the offerings of suppliers such as utility companies may represent a substitute for offerings traditionally provided by PTOs
81. It is possible that, where the lessor is a dominant telephone company, it may discriminate between customers whom it recognises as other telephone companies and to whom it will offer not only fibre but also interconnection, and other customers (e.g. business customers attempting to set up data networks or entrant operators), and to whom it will not offer interconnection. A dominant PTO could also refuse to interconnect with (or offer a lower quality interconnection in respect of) fibre leased from a competing (non-PTO) supplier. To that extent a dominant telephony monopoly may be able to limit the attractiveness of competing fibre offerings, simply by refusing or making it more difficult for entrant networks to interconnect if they use fibre obtained from suppliers other than the incumbent.
82. Thus from the point of view of telephone companies seeking infrastructure, there may be one market covering not only the offerings of other telephone companies, but also those of alternative providers. However, from the point of view of private buyers, such as private data network providers, the market for the supply of network

infrastructure may be more limited if they need interconnection with the incumbent, as they may be forced to rent from the incumbent telephone company.

83. Notwithstanding the above, for the purposes of the present assessment however, separate markets for network infrastructure, at both long distance and international, have been considered to exist, and such markets are considered to cover all supplies of network infrastructure, whether supplied by telephone companies or not.

Subscriber access to telephone services: (local, long distance and international)

84. Once the physical connection to the network is in place, services can be run over the lines. Basic telephony consists of incoming and outgoing calls. Incoming and outgoing calls can be classified according to whether they are 'local calls', i.e. they originate and terminate on the same local exchange network; or long distance, i.e. they have to be sent to or are received from somewhere else in the country, or international, i.e. they have to be sent to or received from a foreign country.¹⁴
85. Irrespective of whatever any additional segmentations might be applied, a question arises as to whether separate markets should be defined for incoming and outgoing calls. This is particularly relevant to the question of the treatment of services such as carrier pre-selection and call-by-call selection, which apply only to outgoing calls.
86. Subscriber access to telephone services is generally offered by the incumbent on the basis of a bundled product for both call termination and call origination. The price of the service to a final user who receives but never originates calls consists only of the line rental. The price to a final user who originates but never receives calls consists of all the variable usage charges as well as the line rental. The calculation of pricing between the two services is more difficult where a fixed line is used both to receive and to make calls, as part of the fixed line rental has to be considered as attributable to the cost of outgoing calls, and part as a charge for the incoming calls.¹⁵ The proportion of the fixed costs to be attributed to outgoing calls will vary according to the relationship between usage for incoming and usage for outgoing calls. Therefore it is difficult to unbundle the individual price elements of the service for a final user, suggesting that incoming and outgoing calls should be treated together.
87. Despite the foregoing, it might nonetheless be argued that call origination and call termination constitute different service markets, because in theory a subscriber facing local loop competition could rent one line only for incoming calls, and a

¹⁴ A number of segmentations are possible depending on the types of users (e.g. private and business segments, and urban and rural segments). For the purpose of the present assessment such further segmentations are not necessary as they would not affect the outcome. However, such segmentations might however be relevant to consideration of any measures which might be offered to remedy the effects of the concentration, as different types of remedy might have different impacts on different types of consumer group.

¹⁵ In some countries certain telephone offerings usually charged on a usage basis are offered free, such as local calls. This does not however apply in the countries under discussion in this assessment.

separate line only for outgoing calls, thus allowing him to buy different services from two different providers. But he would then incur two charges for fixed line rentals instead of one, and the exercise is unlikely to be cheaper than having the one line for both incoming and outgoing calls. Accordingly, the relevant markets are taken for the purposes of the assessment as comprising incoming and outgoing calls.

(a) local calls

88. Conventionally the service markets for basic telephony are split into local, long distance and international. In demand terms it is the subscriber who decides whether he or she wants to make a local, a long distance or an international call. However, if the various layers of the telephone hierarchy are separated, then the supplier of local loop services may not necessarily be able to offer long distance or international calls directly to their subscribers, and may have to refer the call to another operator. Thus the layers can be treated as separate markets.

(b) long-distance calls

89. Where a PTO is a vertically integrated operator, the transition between local loop and long distance is merely a switching between different exchange levels. But where the different layers are segregated, a long distance operator will need to interconnect with the local loop network on which the call originated in order to accept the call, and carry the traffic to somewhere else in the country or region. From there it may be sent back onto the incumbent's local loop network closer to the point of delivery, or handed off to some other operator. Demand for such long distance services would also arise where local loop operators need to send traffic to, or receive traffic from, an international 'gateway' or access point leading to the international public switched network, and equally when traffic has to be routed to a mobile network.
90. The product or service which is offered can comprise a combination of elements. It comprises an offering by the long distance network operator of transport over its fibres, and can include interconnection with the receiving network(s) at each end. The transport element could be provided over fibre which is owned by the long distance operator, or fibre which is leased by him from another telephone operator. There are also other capacity products which can be used for the transport of long distance traffic. For example, it could be done by the purchase of wholesale switched minutes from the incumbent, or even by running communications over virtual networks, such as data networks provided on a retail basis by another operator.
91. Competition for the carriage of long distance calls (and also international calls) is generally introduced by means of resale, carrier pre-selection and carrier call-by-call selection. Such services generally apply only to higher margin areas such as long distance or international calls, and are not used for purely local calls. They allow the customers to access another operator or reseller who will handle the call for them.

(c) international calls

92. From within any given country there will be a demand from subscribers for the carriage of telephone traffic to other countries. This is the area in which resellers and call-by-call or preselect carriers are most likely to be active.

(d) calls from fixed to mobile

93. Calls to mobile can be considered, for the purposes of this assessment, as similar to long distance calls, insofar as they require access to the incumbent's network for call origination, and have not been dealt with separately below.

Mobile telephony

94. The parties proposed mobile telephony, which means the operation of mobile communications networks, as a separate relevant product market. Most third parties who responded to the Commission's investigations seemed to support a market definition at this level, and there was little or no suggestion from third parties as to the need for further sub-division of the market (for example into analogue and digital). As to the question of 'convergence', namely the tendency for mobile telephones to become substitutable for fixed line telephony, many respondents made the point that mobile telephony services cannot be considered yet as substitutable for fixed line telephony as, inter alia, fixed lines can be used for purposes, such as Internet access, for which mobile phone services do not provide the same functionality. Mobile phone services are therefore taken as a separate product market in their own right.

Operator access to networks (local, long distance, and international)

95. In the same way as subscribers need access to networks in order to be able to make calls, operators need access in order to terminate calls on other networks, or to receive calls for termination. There is thus a parallel, at the operator level, with the discussion above about outgoing and incoming calls.

(a) Operator access to local loop networks

96. Just as a subscriber needs access to the local loop in order to make outgoing and to receive incoming calls, other operators also need to be able to interconnect with local loop networks. Thus a demand for such access services exists, and some form of contractual consideration, either payment or a return of reciprocal services, must normally be given.
97. Interconnection will normally be arranged in the form of an agreement often referred to as terminating interconnection. Under such an arrangement, the operator with the traffic to hand off will pay the terminating operator for his services in delivering the call. Thus the total cost can include a set up charge for origination for each call, and a per-minute charge which may vary depending on how much of the incumbent's network the call has had to travel through before it reaches the local loop subscriber.
98. The Commission therefore considers that, where deregulation has permitted the entry of competing operators, a market exists for operator access to the local loop network.

(b) Operator access to long distance or international networks

99. In practice most of the incumbent telephone companies in Europe are vertically integrated, and have sufficient capacity not to need (apart from international calls) to

hand off their traffic to local, long distance or international operators. However, new entrants without their own facilities may want to make use of the services provided either by the incumbent or by another telephone company with the ability to deliver long-distance or international traffic.

100. Because the physical networks in most countries were constructed in the era of national monopoly telephone operators, there are usually a limited number of international switches which connect, via backhaul, to 'gateways' - international cable landing points or cable heads. All outgoing internationally-bound traffic handled under the correspondent regime (that is excluding self corresponded traffic and traffic over private circuits) must therefore be brought to the international switches. All incoming traffic to a country arrives at the international switches for termination within the country concerned.

Business data communications

101. Business data communications are services involving the transfer of often large quantities of data, securely and quickly, nationally and internationally. Business data communications services connect a company's local area network (LAN) in one location with its other LANs located elsewhere; these services can also link third parties to a company's network. The customers of these type of services are companies with substantial communications requirements.
102. 'Business data' services form separate product markets from those related to traditional switched voice telephony. From a technical point of view, data networks are based on the physical configuration of the underlying telecom cable network, but use different types of switches and routers at the points of interconnection and access ('the nodes'). Business data communications often use of packet switching or similar technology, such as Frame Relay or ATM. Business data networks are commonly described as 'virtual' networks. When a connection is set up a "virtual circuit" is created, a data stream is broken into packets which are then placed on lines which are shared by different streams. This technology provides the advantage that it is not necessary to reserve network resources for a given connection and that switching time is minimised.
103. Providers of business data communications services may either build their own network, combining their own infrastructure with leased lines, or buy network transport services (such as Frame Relay services) from the telephone operator and in general from network infrastructure providers. In any event business data communications providers need to have access to the local loop. To this end they may use leased lines, optical fibre, PSTN and ISDN¹⁶. Long distance connectivity may also be obtained from providers of network infrastructure by using leased lines and/or network transport services.
104. The provider of such data communications services assembles the offer from these various elements, and presents it to the customer as one 'seamless' package. For many business customers the attraction of buying such a product is that it avoids the

¹⁶ Integrated Services Digital Network - a type of network based on the existing digital PSTN which provides digital links to customers and end to end digital connectivity between them.

need to deal with multiple national level telephone companies in each of the countries required to be covered by their data networks.

ISP services

105. ISPs offer their customers connectivity to the internet at large, in other words, access to any point on the internet to which a customer may want to have access. A demand exists, therefore, for the supply of Internet access services. In the assessment below figures have been provided to show market shares for dial up and dedicated access combined and separately. However, as competition concerns would arise whether they are defined separately or together it has been unnecessary to decide between the two.

Wholesale" ISP services

106. Wholesale ISP services comprise the resale of transit in Internet terms, which involves an obligation by the offering ISP to provide connectivity to the whole of the Internet to its customer ISP. This market is global. The information supplied by the parties show that neither of the merging parties would have fitted the definition of a top level network as applied in Commission Decision 1999/287/EC (WorldCom/MCI)¹⁷ and they are in part resellers of transit obtained from such networks. Moreover, as will be described below in the internet section of the competitive assessment Telenor's business as an internet transit providers is marginal; Telia is stronger at a European level, but still small on a global basis. Therefore, this market does not need to be considered further as the notified operation does not raise any competitive concerns in the field of wholesale ISP services.

Internet advertising

107. In the Scandinavia OnLine decision¹⁸, concerning the creation of the joint venture Scandinavia OnLine (« SOL ») between Telia, Telenor and the Norwegian media group Schibsted, the Commission identified, amongst others, a market for advertising over the internet. On this market providers of internet content compete with each other for advertising revenues. In their reply to the Statement of Objections, the parties disagreed that there was a separate market for Internet advertising, claiming that it was extremely rare for companies to use Internet as an exclusive market channel, and that this activity should be regarded as part of a more general market for advertising via newspapers, direct mail, TV and radio, etc. The parties have, however, provided no evidence that those other marketing channels exert a competitive constraint on the behaviour of suppliers of Internet advertising spaces. The fact that most advertisers market their products through several advertising channels does not demonstrate that these different channels are demand substitutes. It simply shows that advertisers pursue a diversified marketing campaign aimed at as many people as possible.

¹⁷ Case No M.1069; OJ L116, 4.5.1999, p.1, at paragraphs 44-46.

¹⁸ Case No IV/JV.1 – Telia/Telenor/Schibsted.

Sale of advertising space in local telephone directories

108. In Sweden and Norway, like in many other countries, local telephone directories are produced once a year and delivered to households and businesses free of charge. Publishers earn revenues from selling advertising space to a range of advertisers, mainly large and medium sized businesses. Both Telia and Telenor publish and supply local directories and sell advertising space in their directories. In Sweden Telia publishes under the brand DinDel and Telenor operates through its subsidiary Lokaldelen Sverige AB (« Lokaldelen »). Telia has no operations in Norway.
109. The parties maintain that advertising in local directories is not a market as such, but is a segment of the wider market for advertising in other media (e.g. local free newspaper and radio). However, the information gathered in the course of the Commission's investigation suggests that there are a number of features distinguishing telephone directories from other advertising media. First, telephone directories are published once a year. This reduces their advertising strength and makes of them a static advertising medium as the information which is made known to the public through telephone directories cannot be changed, integrated or updated. The once a year issue has a bearing on the price for advertising spaces in telephone directories compared with other printed media. Advertising in telephone directories tends to be less expensive, if the longer lifespan of the directory is taken into consideration, than advertising in daily newspapers or monthly magazines. For these reasons, customers would not easily switch between the advertising media because of a small, but not negligible price increase. In their reply to the Statement of Objections, the parties claimed that the 'annuality' of business to business directories, i.e. the fact that subscriptions were taken out for longer intervals at a time, typically 12 months, was not a reason to distinguish them from shorter-cycle advertising media. The parties said there were other types of advertising which were let on a full-year basis, such as hoardings at football or ice hockey stadiums, or magazines which only appeared two to six times a year. On this basis they suggest that the market in which directories compete for advertising revenues at least include other forms of longer term advertising opportunities. However, the parties have provided no evidence that these other advertising means may restrain the competitive behaviour of the sellers of advertising in local directories. For example, the parties have not shown a correlation between the local directories advertising fees and the other advertising fees, nor any other evidence indicating that these different products are demand substitutes. Therefore, the sale of advertising space in local telephone directories can be taken as a distinct relevant product market.

Sale of advertising space in business to business directories

110. Business-to-business directories are different from the ordinary local directories as they are mainly used by businesses searching for suppliers of products and services. They are generally distributed free of charge as publishers earn revenues through the sale of advertising space. Both parties are publishers and suppliers of business to business directories. In Sweden Telia publishes under the Emfas brand and Telenor publishes through its Swedish subsidiary Telenor Företagsinfo AB under the Stortele, Sveriges Handelskalender and ISO-guiden brands. Telia has no operations in Norway.

111. The parties claim that the publishers of this type of directory compete for advertising revenues on the general market for advertising. However, for the same reasons given above for local directories, the Commission considers that advertising in business-to-business is a distinct advertising market. Advertising in business-to-business directories constitutes also a separate market from advertising in ordinary local directories. Business-to-business directories are not generally available to the public, but are targeted at specific users, namely the business community. Advertising in business to business directories seems to be less expensive than advertising in ordinary telephone directories. In their reply to the Statement of Objections, the parties claimed that, as for local telephone directories, the 'annuality' of business to business directories is not a reason to distinguish them from shorter-cycle advertising media. The same reasoning set out above in relation to local telephone directories can be used to dismiss the parties' arguments on business-to-business directories market definition. In addition, it is self evident that because of the specificity of business-to-business directories (these directories are addressed only at the business community) other forms of advertising such as advertising on buses and trams, which are directed to the general public, cannot be considered as demand substitutes.
112. On the basis of the foregoing, there is a relevant product market for the sale of advertising spaces in business-to-business directories.
113. It is to be pointed out that the parties distribute, beside the printed version, CD Rom and Internet versions of the business-to-business directories. The parties earn also income from CD Rom and Internet version advertising, accounting for less than [0-10%]*of the business-to-business directories income. The parties consider that the CD Rom and Internet version belong to the same market as the printed version. The information collected in the course of the Commission's enquiry tends to confirm this view. However, it is to be borne in mind that the Internet version has not the same lay-out as the printed and CD Rom versions. In the Internet version the names and addresses of the companies are set out in an objective and even way. The only source of advertising revenues are banner ads, which surround the relevant site, and sponsorship. These ads and sponsorship are separate from the text of the directory, are not necessarily related to the relevant business information displayed in the directory, and are sold separately to the companies wanting to advertise on that site. On the contrary, in the printed or CD Rom versions of the directory the information on the relevant companies may be displayed in a biased way or in advertising spaces of different size, which are not separate from the text of the directory. The advertisers pay for having the name of their company displayed in a more noticeable way or for advertising spaces. In any event it is not necessary to take a position on this issue since the operation raises competition concerns irrespective of whether or not internet advertising is included in the relevant product market.

PABX

114. Another type of infrastructure product, albeit used within an organisation rather than as part of the public network, is the PABX. The parties are both distributors of PABXs. These are essentially switches with the capacity to handle a number of telephone lines simultaneously, and are used by businesses and institutions as switchboards for their internal voice telephone systems. Switches vary according to the number of lines they handle. A PABX able to handle less than one hundred lines

tends to be considered small, and models with capacity of over 100 lines are considered large.

115. The parties consider that large and small PABXs belong to the same product market, as their function is the same regardless of the size and customers seek solutions which may include both large and small PABXs. Customers do not generally want to deal with different suppliers for large and small PABXs. The information gathered by the Commission in the course of its investigation tends to confirm the parties' view. However, as shown below, for the purpose of the assessment of the present case it is not necessary to conclude on whether or not small and large PABXs belong to the same relevant product market.
116. Distributors of PABX systems tend to focus on the aftermarket, i.e. supplying upgrades to customers already having PABX systems (whether large or small), and service contracts with customers following installation to provide ongoing maintenance and support. After sale services account for an important part of the PABX business. Most customers expect to take all these services from the company which sold and installed the original equipment. However, as shown below, for the purpose of the assessment of the present case it is not necessary to decide whether or not after sale services are part of the same product market as PABX distribution.

B Relevant geographic markets

Markets national or wider than national

117. The parties argue that all the relevant telecoms markets affected by this concentration are national. It could be argued however that even if the markets are currently national, the merger¹⁹ would expand markets, such as for fixed telephony, and possibly also for some other services, and create a two-country market consisting of Norway and Sweden. However, even though this may be the outcome of the merger, it is not its automatic consequence, and the assessment has proceeded on the basis of essentially national markets for fixed and mobile telephony.
118. Notwithstanding the foregoing, it is difficult to generalise across the range of possibly affected telecoms markets, and the position of each must be considered separately.

Provision of local loop, long distance and international infrastructure

119. These three markets are considered to be national in scope. If the local loop under the control of one operator were enlarged to cover an area that was wider than national, and if the network is reconfigured to reflect the fact that it is now all under the control of the same operator, then the geographic reach of the market could be wider than national. However, it is not necessary to determine this issue, as competition concerns arise even if, as suggested by the parties, the market is defined as national.

¹⁹ For the sake of convenience the notified operation is sometimes referred to as a merger, although within the terms of the Merger Regulation it is technically a joint venture

120. As regards long distance and international infrastructure, similar principles may be applied to determine the geographic dimension of the market definition. Long distance telecoms transport in any given country has been historically provided by the monopoly incumbent who, for similar reasons as those applying to its local loop offering, offered them within a specifically defined national territory.

Subscriber access to telephone services, (local, long distance and international)

121. The markets for subscriber access to telephone services are, from the subscriber's point of view, also generally considered to be national. Service offerings have tended in the past to be nationally limited, because the telephone operators supplying them have not been able to provide services across national borders.

Operator access to networks (local loop, long distance and international)

122. In the same way as subscriber access services must be considered a national market, the same is true for operator access to the local loop. In the historical situation of monopoly incumbent telephone operators, the question of access to local loop networks was not usually relevant to an outside operator seeking to terminate calls in the country concerned. Responsibility for terminating the call would have been handed off to the receiving telephone operator at a notional mid-point on the cable between the two countries. From there on the call would be handled on the incumbent's vertically integrated network, with call termination on the local loop as the last stage in that process.

123. International calls, in the sense of access to international call services, can be looked at as a separate segment of business in their own right. In appropriate cases however it may be necessary also to examine narrower relevant markets on the basis of specific 'country pair' relationships, which means the routes over which traffic can be exchanged between two given countries. The assessment below has considered the position in terms of a market for access to international services, and also the impact of the merger on specific country pairs such as (Norway-Sweden) and Norway or Sweden to Denmark and Finland.

Mobile Telephony

124. The parties considered that the markets were national, for a variety of reasons, including in particular: that different licensing conditions were imposed on operators in different Member States; that frequency availability limited the number of operators in countries to between two and four, so an operator in one country could not necessarily expect to get a licence in all neighbouring countries; and the conditions in most licences obliging operators to build infrastructure in the territory concerned. Another important factor is roaming charges imposed on calls made while outside the home territory of the service provider, which rarely make it economic for customers in one country to obtain their mobile services on a permanent basis from a supplier operating in a different national market, largely because they would have to pay all domestic calls in their country of residence as international calls.

Business data communications

125. The parties asserted that the relevant markets for business data communications were national, and provided figures on that basis. In many previous such cases, the market for business data packages was taken to be wider than national, possibly European or even world-wide. Indeed, one of the incentives for businesses to buy such services was the desire to avoid having to deal with a multiplicity of national telephone operators, as would be the case if they had attempted to set up their own trans-border networks on their own account. However, on the basis of the parties' own assertion that the markets for such services are national the assessment has been carried out accordingly.

ISP services and advertising

126. It is a common view that the geographical market for ISP services is essentially national, based on the need for a local loop service or the installation a fixed line in order to connect physically the subscribers with their consumers. This limits the extent to which existing access markets could be wider than national.
127. As regards internet advertising, the Commission considered in the SOL decision (case No IV/JV.1, referred to in paragraph 107) that such a market should be considered at least national in scope, possibly on a linguistic basis. A competitor has suggested that, given the considerable linguistic and cultural similarities between Sweden and Norway the merged entity could provide the same internet content in Sweden and Norway and thus compete for advertising revenues in both countries. Translation, which given the great similarities between the two languages should be rapid and inexpensive, would not always be required as Swedes can normally read Norwegian and vice-versa. Therefore, as a result of the merger the relevant geographic market could be wider than national. In their Reply the parties argued that the same Internet content could not be provided in both Sweden and Norway as, notwithstanding the proximity of the States and the similarity of the languages, there are cultural and linguistic differences. They claimed these differences were significant and that there was no evidence of advertisers procuring advertising space on a combined Sweden and Norway basis. However, it is unnecessary to determine this point as competition concerns arise even if the market is defined at its narrowest extent, namely national.

Directories local and business to business

128. The parties consider that the relevant geographic market for the sale of advertising spaces in both local and business to business directories is national. Both their sales and distribution systems are organised at a national level. They also mention language differences as a barrier to entry into the sale of advertisements market. Third parties seem generally to agree on a national definition of the relevant geographic market. Therefore for the purpose of this assessment, the relevant geographic market will be considered as national.

PABX

129. The parties consider the market to be national in scope, *inter alia*, as it is necessary to have a local sales force, service and marketing staff with the relevant language skills and local contacts. The parties also pointed to the fact that some of their competitors were substantially active in one country but not in the other. The

Commission's findings, following its enquiry, do not contradict the parties' position as regards the geographic market for PABX.

C Competitive assessment

130. Before dealing with specific markets, some broader consideration must be given to the overall effects of the merger. The merger would bring together two national operators who, prior to the merger, provided the full range of telephony services and who have very strong positions in the markets least exposed to competition (fixed switched telephony markets), but also relatively strong positions even in those markets where competition has made greater inroads, such as Internet and business data communications. In particular, they have an extremely strong position, amounting to dominance, over the local loop infrastructure. These operators also have reasonable access to the Danish and Finnish infrastructure because of the more liberalised local loop access provisions existing in these countries. Moreover, they constitute the main source of competition for each other. The merger would raise significant competition concerns because of (a) the elimination of actual and potential competition as between the parties; and (b) the increased ability and incentive of the new entity to eliminate actual and potential competition from third parties. As a result of the enlarged footprint which the combined entity would have in the Nordic region it would have the ability to carry out commercial practices which others would not be able to carry out, such as the ability to bundle product offerings encompassing the whole Nordic region..

The regulatory position

131. An important element of this broader picture is the difference between the regulatory regimes in Sweden and Norway on the one hand, and Denmark and Finland on the other. The most important differences concern methods of price regulation, and access to end users (by way of local loop unbundling as well as other means such as, for example resale and carrier selection). On price regulation, control on interconnection charges in both Norway and Sweden tends to be ex-post rather than ex-ante. This implies that the incumbents may apply excessive interconnection rates and implement other anticompetitive practices immediately without prior regulatory approval. In Norway and Sweden, the incumbents are not required to provide the same level of access to end users to their competitors as in Denmark (where the regulatory regime provides for competitive end user access, including the obligation to provide unbundled local loops; the obligation to provide wholesale telecommunications services for competitors to resell; co-location; carrier selection and national roaming), and in Finland (where the regulatory system provides for competitive end user access, including the obligation to provide unbundled local loops; the obligation to provide wholesale telecommunications services for competitors to resell and carrier selection).
132. In their Reply, the parties have stressed that effective mediation concerning the interconnect conditions imposed by Telia is possible. However, in the course of the investigation competitors have pointed out that the resolution of a disputed condition can be very time-consuming, and might take up to two years. Mediation is also required in Norway as the preliminary step to any regulatory action to resolve disputes.

133. At the Oral Hearing the parties contended that the regulatory systems in Sweden and Norway acted as the most important constraint on the parties' behaviour. For example, they argued that interconnection tariffs in Sweden are regulated and cost-oriented. However, it appeared on examination that the obligation on cost orientation is limited to voice services only. And although Telia is obliged to make available a reference interconnection offer, which is published on the Telia homepage, it is not subject to any formal approval by the National Regulatory Authority (NRA) before it is published. Thus there is no ex-ante control, nor is there any *de iure* obligation on the NRA to give such approval. Rather the reference interconnection offer is used as a basis for negotiations between the parties. In effect therefore all interconnect tariffs other than for voice services are set after negotiations between the parties. In Norway, Telenor's obligation to offer cost-oriented interconnection comprises access to PTN, public telephony services and transmission capacity. However, such offers are not subject to ex-ante control since there is no legal requirement for their formal approval, nor does the regulatory authority give such approval in practice.
134. According to the parties the Commission overstates the differences between the regulatory regimes in the Nordic area. The parties maintain that, despite the fact that local loop unbundling legislation exists in Denmark and Finland but not currently in Norway and Sweden, the regulatory regimes in the Nordic area are essentially similar.
135. The parties do not deny that, unlike Denmark/Finland, there is no mandatory local loop unbundling in Sweden/Norway. This is a material difference since the unbundling of the incumbent's local loop allows new entrants to enter the market at a lower cost. It is worth clarifying that in Sweden and Norway, in the absence of local loop unbundling, in order to have access to end users, entrants may either build their own infrastructure or resort to switched access (which includes call by call selection, carrier pre-selection, and interconnection) or dedicated access (leased lines and permanent virtual circuit). These forms of access are not equivalent to local loop unbundling as they bundle the use of the incumbent's switching or transport infrastructure with the use of local loop. This results in an additional per call margin to be paid to the incumbent. In contrast, with local loop unbundling competitors can access the user by paying only a fixed monthly charge for the lease of the loop. Moreover, the forms of access available in Sweden/Norway, unlike local loop unbundling, would not allow the provision of services such as xDSL, IP, ATM and digital video, or in any case rely on technology controlled and priced by the incumbent.
136. With respect to the cost base used for the purposes of calculation interconnection prices, the parties say that the use of historic costs in Norway and Sweden is in compliance with Community law and, in particular, with Directive 97/33/EC of the European Parliament and of the Council of 30 June 1997 on interconnection in telecommunications with regard to ensuring universal service and interoperability through application of the principles of Open Network Provision (ONP) (the « Interconnection Directive »)²⁰, as amended by Directive 98/61/EC²¹. Two points

²⁰ OJ L 199 of 26.7.97, p. 32.

have to be made in this connection. First the fact that interconnection is cost oriented would not remove the parties' ability to eliminate actual and potential competition from third parties. Interconnection enables incumbents to force new entrants to continue to rely on their services and is therefore the source of constant revenues for incumbents. Even if interconnection charges are calculated in accordance with Community law, the parties could still degrade the technical quality of the interconnection offered to third parties. As a result, the mere fact that interconnection is available does not remove the advantages which the parties gain from controlling the local loop. Second, as regards the chosen cost base, it can be said that in an increasingly competitive environment telecom companies struggle to reduce their cost base by, for example, replacing old high cost equipment with cheaper more efficient equipment. In the face of this, historical costs should be higher than current operating or incremental costs and would thus enable incumbents to earn higher interconnection margins.

137. The Commission also observes that the question at issue is not the adequacy of the regulatory system(s) in constraining the merged entity's future behaviour, but rather whether the merger between Telia and Telenor would create or strengthen a dominant position. The regulatory systems in Sweden and Norway are designed to control the behaviour of the incumbent telecommunications companies and to protect consumers. Even on the assumption that these regulatory systems are effective, they cannot be expected to prevent the creation and/or strengthening of a dominant position that the combined entity will enjoy as a result of the merger. Telecommunications regulation is a complex task, which requires careful consideration by the regulator and extensive consultation of the industry. Regulation cannot be expected to address the structural competition problems raised by the merger. Indeed, if, as was confirmed by the Commission's market investigation, the merger between Telia and Telenor were to create or strengthen a dominant position, merger control and not ex-post regulation is the only adequate tool to prevent these effects.

Elimination of actual competition between the parties

138. It was noted that Telia, through Telia Norge²², was one of the most active entrants in Norway and that Telenor, through Telenordia²³, was one of the more active entrants in Sweden. This entry could be observed not just in specific segments, but across a range of telephony activities, from local to long distance and international activities, as well as in business data communications.
139. The merger would remove Telia Norge as a competitor from a Norwegian market. Indeed, Telia Norge would become a subsidiary of the merged entity. Telenordia

²¹ OJ L268,3.10.98, p.37.

²² Telia Norge is active in Norway in the provision of domestic and international voice and data communications services.

²³ Telenordia is a joint venture between Telenor, BT and TeleDanmark (see Case No. IV/M.570 – TBT/BT/Tele Danmark/Telenor, Commission Decision of 24 April 1995; OJ C154, 21.6.95, p.4.). It provides domestic and international voice telecommunications in Sweden as well as enhanced global services (through Concert).

would become an entity jointly controlled by the merged entity. As will be explained in detail below, the removal of one of the most active entrants in each country would strengthen each party's dominant position on a number of markets.

Divestment of overlapping interests would not be an adequate remedy

140. In the Phase I investigation of the case, the parties had offered to divest their overlapping activities in order to remove any doubts which they considered might arise.
141. Such divestments might help strengthen one of the other competitors on the market, or they might allow the arrival of another new entrant. But, in the opinion of many respondents, the concerns about this concentration, and in particular those relating specifically to telephony, could not be wholly removed by the divestment of their present overlapping activities. Telia Norge derives advantages from its association with Telia, such as: branding; technical/financial support; the relative proximity of its relevant supporting networks, and its bargaining position as the subsidiary of an incumbent telecommunications operator in a neighbouring country. Telenordia derives similar advantages from its association with Telenor. An acquirer without a presence in the region might be able to provide financial support, but would be unable to provide the same advantages to anything like the same extent. Telia is the most significant and largest potential competitor in Norway and Telenor is the most significant and largest potential competitor in Sweden. As a result, divestment of either of their interests will significantly reduce the restraint on competitive behaviour imposed by both Telia in Norway and Telenor in Sweden, owing inter alia to their unique geographic positions and the advantages conferred on them by their respective regulatory positions in terms of access to their local loops.
142. In their Reply and at the Oral Hearing the parties argued that there is nothing unique about Telia and Telenor when compared with other possible buyers of the interests to be divested. The parties suggest that the requirements which, according to the Commission, make Telia and Telenor the most formidable potential competitors, would be fulfilled by other operators. In general, the Commission does not deny that there are other telecom companies fulfilling some of the above mentioned requirements, but no company other than Telia and Telenor is able to satisfy all these conditions. It is the combination of these conditions and their cumulative effect, rather than each one of them considered in isolation, which is important and which makes Telia and Telenor unique as potential competitors one of the other.
143. The parties maintain that the key elements for effective entry into the home market of a telecom incumbent are the entrant's financial resources and technical expertise. Telia and Telenor do not have, according to the parties, unique financial resources and expertise which may not be duplicated by third parties. The Commission is of the opinion that financial resources and technical expertise are certainly pre-conditions for successful competition in the telecom sector as in any other. The Commission, however, considers that they are not the only element to be taken into account; there are other elements such as brand recognition, as well as the incumbent's subscriber base and the local long distance and international network (including cable networks) and knowledge of the business environment, which play an equally important role and may determine effective entry into an incumbent's market.

144. The parties maintain that Telia and Telenor brands confer no particular advantage as, especially for household customers, it is the pricing strategy of a new entrant, which is important. The Commission does not deny that for certain categories of customers competitive pricing may be the key. Nevertheless, the Commission considers that for some other customers brands may be more important as a guarantee of reliability of the telecom services offered. The parties seem to recognise that for business customers brand recognition is important, even if they say that for these customers the major European and international brands, such as BT and AT&T, would be at least as attractive as Telia and Telenor. However, the parties have provided no evidence showing that in Norway and Sweden those foreign brands have achieved or are likely to achieve the same brand recognition as Telia and Telenor. In this context, it is worth noting that BT chose to enter the Swedish market in combination with Telenor and Tele Denmark using a trademark different from its own but rather related to that of Telenor.
145. The parties contend that proximity of the neighbouring networks does not offer any significant advantage and there are no business/linguistic/cultural ties or knowledge of the markets unique to Telia and Telenor.
146. As regards proximity of the network, it cannot be disregarded that the possibility of using neighbouring backbone represents (at least for some purposes) an alternative to payment of interconnection charges, which is available only to the parties. In addition, it is self evident that an adjacent operator enjoys some advantages such as the possibility of providing services (such as the trans-border dispatching of maintenance department technicians) in the neighbouring area using personnel employed in their domestic market, or using its domestic infrastructure as a basis to develop its infrastructure in the neighbouring market. In their Reply, the parties themselves acknowledge, in a rather contradictory way, that “as liberalisation has progressed some operators have looked first to opportunities in neighbouring markets. This pattern is typical of undertakings in any industry as they consider the possibility of expanding out of their domestic market”.
147. As regards the business/linguistic/cultural ties or knowledge of the Nordic market the Commission does not claim that these are unique to Telia and Telenor, but that Telia and Telenor meet this condition and have, in dealing in particular with business customers, an historical advantage over an operator from outside the region.

Elimination of potential competition between the parties

148. Telia and Telenor represent the strongest potential entrants in each other's national markets. Once they are merged, this competitive pressure would be lost. This would be true irrespective of whether or not they were, prior to the merger, actual competitors. In addition to that, given their relationship of mutual dependency with regard to the termination of their respective traffic (that is to say that Telia had to terminate a substantial portion of Telenor's outgoing traffic – international calls, mobile calls, and others - and Telenor had also to terminate a significant proportion of Telia's outgoing traffic), the parties were in a position to exercise an influence over the level of accounting rates/termination charges applied by each other. This competitive constraint would be also eliminated as a result of the merger.

149. In their Reply, the parties have contended that they have not represented any greater threat of entry to one another than a number of other operators; and that they did not constitute a competitive constraint to each other prior to the merger based on their bargaining position as suppliers of termination. They claim, in particular, that it would have been illegal for either of them to offer more favourable terms of entry (such as interconnection charges) to each other than those that they offered to other new entrants.
150. However, in order to foster sustained and strong entry, access to the local loop on competitive terms is an important if not an essential requirement for many telecommunication markets, in particular for broadband services. Within the Nordic region, Telia and Telenor have, prior to the merger, been uniquely well placed not only to use the advantages outlined above in terms of financial capacity, expertise, brand image, etc. but also to 'trade' access to each other's networks. Because of the position which the incumbents enjoy in regulatory terms in both Norway and Sweden, as dominant providers of local loop infrastructure, and as major providers of cable networks, each can afford to negotiate access to the other's network on the basis of reciprocity. Given the situation of mutual dependence on each other's network to provide a significant number of telecommunications services (international services, regional services, mobile telephony, internet, etc.), Telia and Telenor are equally well placed to "negotiate" access on the best possible conditions. Other telecommunications operators, such as those in Sweden, Norway, Denmark or Finland, cannot 'trade' such access, either because their networks are not big enough to give them any negotiating power against the incumbent, or the regulatory regime in their home territory means that they cannot "trade" access to their own home networks, and thus they have nothing to bargain with.
151. As stated above, the heightened potential for entry by the two merging parties also arises from geographical adjacency. It has been observed elsewhere in Europe that operators of neighbouring territories are often the first entrant into each other's markets; for example, Belgacom has interests in France and the Netherlands; BT and Cable & Wireless have expanded their interests from the United Kingdom to Ireland, and Deutsche Telekom has its main interests in Austria, Hungary and the Czech Republic. There are also various further factors at work here, including higher brand recognition of a nearby operator, and relatively greater business, linguistic and cultural ties, as well as greater knowledge of close-by markets, and the proximity of their networks (which allows them *inter alia* to by-pass some of the access prices). This is evidenced by the fact they are already among the strongest entrants in each other's countries.
152. Although it is true, as the parties stated in their Reply, that any discrimination in relation to the terms offered for entry may have been caught by Article 82 of the Treaty (or by national law), this is clearly irrelevant, as the purpose of the Merger Regulation is to prevent the creation or strengthening of structures where the abuse of dominant positions would be made possible or enhanced. In any event, the possibility to trade entry is not based on discriminatory entry since the effects of mutual dependency between Telia and Telenor could also benefit other market players.
153. As to the elimination of the effects of mutual dependency between Telia and Telenor as a competitive constraint on the termination fees charged by the parties prior to the

merger the Commission considers, on the basis of the information submitted to it, that the prevailing interconnection charges in Sweden and Norway result from the combined downward pressure of regulation and mutual moderation. The fact that Telia, on the Swedish market, has had to grant non-discriminatory terms of access to Telenor and all other entrants effectively means that all entrants have been able to benefit from, not only the downward pressure on termination charges exercised by regulatory measures, but also that stemming from mutual moderation. The same argument applies to the Norwegian market. This therefore highlights the negative effects flowing from the removal of the mutual dependency exercised as between the parties. Once the merger has been implemented, the effect of this mutual dependency will be lost, as no other operator has exclusive control over an access network to bargain with.

154. According to the parties the Commission is relying, when claiming that potential competition will be lost, on conduct that would be illegal. In particular the parties could not "trade" entry into each other's market or mutually moderate their behaviour without infringing either national or Community competition law (Articles 81 and 82 of the EC Treaty). The Commission considers that the theory of "trading" entry and the effects of their mutual dependency are based on the common economic interest of both Telia and Telenor and do not require any prior agreement or abusive behaviour. Even if an agreement were required it would not necessarily and automatically be illegal under Article 81 of the Treaty.

Increased ability and incentive to eliminate actual and potential competition from third parties.

- Increased ability to raise rival's costs to competitors, by increasing (or not decreasing) the price of interconnection or degrading the quality of interconnection

155. The merger will increase the ability and the incentive to raise (or not decrease) termination charges, or to degrade the quality of interconnection. This is so because the merger would eliminate one of the main moderating factors prevailing before the merger, namely the parties' incentive to reach a mutual reduction of their accounting rates, roaming charges, and/or termination charges. It will also eliminate any concerns they might have had about losing revenue as a result of reducing the volume of calls between each other. Finally, because there is now a much larger area under the control of one player rather than two, and because the former incumbents have ceased to be actual and potential competitors, each of them would effectively benefit from the anti-competitive effects of the strategies pursued in the territory of the other, thus removing any incentive on their part to resist such a strategy (foreclosure).²⁴

²⁴ By making it difficult for an entrant in, say, Sweden to get call termination in Norway except at high prices or low quality, the Norwegian incumbent would have been able to disadvantage potential competitors operating out of Sweden who would otherwise have been unaffected by the interconnection prices of the Swedish incumbent. The fact that such behaviour would have led to retaliatory action would have constrained the two incumbents from developing such a strategy. After the merger the only constraint which prevents them from behaving in this way is the constraint provided by regulation.

156. In addition, before the merger, neither of the incumbent operators would have gained from degrading termination, since degradation reduces volumes but has no impact on the incumbent operator's margin. After the merger, the new entity would have the ability and the incentive to degrade the termination of calls carried by any entrants, because doing so artificially raises rivals' costs. Indeed, after the merger the parties can single out the entrant for the purposes of degradation²⁵.
157. Another advantage for the merging parties is the possibility of 'internalising' accounting rate and/or interconnection payments, in particular on the Sweden/Norway route. The merging entities would no longer need to exchange payments between themselves for calls (formerly treated as international) between Norway and Sweden. Only their competitors would have to pay prices determined by accounting rates and/or interconnection agreements. Other players would thus be at a competitive disadvantage as a result of the merger.
158. In their Reply, the parties contend that the net revenues from international traffic between the parties is small compared to their total fixed telephony revenues, and that any advantage for Telia would be negated by an equally sized disadvantage for Telenor, and *vice versa*. This argument is, however, largely irrelevant. First, the net revenue between the parties can only measure whether traffic between the two countries is balanced in financial terms. It says nothing about the absolute size of the traffic, and therefore the importance of the revenues from these services. Second, the argument that any effects of increasing accounting rates or interconnection charges may result in a zero-sum game *between* the parties, obviously says nothing about the effects that such a strategy can have on competitors. Instead, for the purposes of assessing the importance of the merged entity's ability to internalise these costs, the relevant point is to note that, for all entrants, these international services constitute a significant part of their total turnover. New entrants will be forced to terminate the majority of their calls on the incumbent's local loop. Indeed, operators offering carrier pre-selection or call-by-call selection for calls on the Norway-Sweden route would in all likelihood need to originate calls on the incumbent's local loop as well, and would thus be doubly disadvantaged since the new entity could 'internalise' both their termination and origination charges. At the Oral Hearing the parties argued that third parties could easily find a way of moving off the accounting rates, if they chose to, either by self-corresponding or finding someone other than the incumbent with whom to correspond. However, even if they did this competitors would be in a disadvantageous competitive position *vis à vis* the merged parties. They would still incur origination and/or termination charges that Telia and Telenor would have internalised through the merger. They could also pay more because, as seen above, the parties will have the ability and incentive to increase termination and origination margins or to degrade the quality of interconnection as a result of the merger. Finally, in order to self correspond the competitors would have to incur additional costs by acquiring switching and transport services to have access to the incumbents' interconnection points.

²⁵ The same argument applies to every competitor servicing international calls between Norway and Sweden. It applies twice to competitors offering international calls both ways.

159. It is important to note that ‘internalisation’ applies not only to the costs of providing all types of fixed telephony services²⁶ but also to regional services (such as business data communications) provided over the Nordic countries and mobile telephony in relation to both roaming and interconnection. In their Reply, the parties essentially agree that the same issues are relevant in relation to internalisation of roaming charges for mobile telephony, as described above for fixed telephony. It can therefore be concluded that the merger would provide the parties with the same advantages as described above in relation to fixed telephony also in relation to their mobile activities. In particular, they would gain the power to abolish roaming charges between each other or to bring them to the level where the price of a call between Norway and Sweden attracts no extra international supplement. If other Norwegian and Swedish mobile telephony operators were to attempt to replicate this by agreeing to abolish roaming rates between themselves, they would be faced with the difficulty that, unless the flow of traffic is entirely balanced, one would effectively be subsidising the other. Moreover, they would remain subject to the merged entity for a large proportion of their costs, as they would continue to need access to the local loop in both countries for termination of calls.

Increased ability to “bundle” products across a wider geographic area

160. The parties will have a unique position in the Nordic region in relation to local access. They will control access in Norway and Sweden, and have a legal right to access in Finland and Denmark. As a result, the merged entity will be the only entity able to offer “bundled” products (for example combined mobile and fixed telephony packages, combined data/voice/Internet packages) across the Nordic region at terms and conditions that no one else will be able to match. Whereas prior to the merger there were two providers, or at least potential providers, of such a service on a similar basis in the Nordic region, the result of the merger is that there will be only one remaining supplier able to have local access in all four countries.

161. In their Reply the parties argued that they would not enjoy any special ability to bundle in the Nordic region. However this proposition was based on their contention that the regulatory regimes in all four territories were essentially the same, whereas it is clear that a significant difference is that local loop unbundling is available in Denmark and Finland but not in Norway and Sweden. This difference alone would be enough to provide them with the advantages referred to above.

The parties would be able to leverage a secure captive home market in order to prevent entry by operators in Finland and Denmark.

162. A number of third parties commented that the regulatory regimes in Finland and Denmark were more favourable to entrants than the regimes in Sweden and Norway, inter alia due to the existing requirements of local loop unbundling in the former countries.

163. This means that the merged entity would gain increased abilities to protect its home market from new entry by operators based in the more liberalised markets in Finland

²⁶ This is so because access to the local loop, and thus the need for interconnection, is an essential element of all telephony offerings.

and Denmark. Not only will the merged entity have a total business volume which is significantly larger than any operator in Denmark and Finland, it will also be able to obtain unbundled access to the local loop in Finland and Denmark, which will not be possible for the operators from those countries if they want to enter the home countries of the merged entity. This will deter Danish and Finnish operators from entering Sweden and Norway, as they will know that any entry would provoke retaliatory action from the merged entity in their home markets, where the merged entity can finance its entry by extracting economic rents from its captive customers in the Norwegian and Swedish markets.

164. Prior to the merger, neither Telia nor Telenor were as well equipped to prevent entry into their respective 'captive home market'. The reason for this is that both of them needed access to each other's market to provide a number of services for their own customers, such as international calls and regional services that effectively cannot be provided on competitive terms without reasonable access to the local access network in all relevant countries.
165. Prior to the merger, the parties therefore had an incentive to allow each other entry on mutually beneficial terms. This can be seen from the establishment of Telenordia and Telia Norge. The establishment of Telenordia is also an example that the parties were uniquely positioned to provide a platform for third parties to enter the Nordic region through an alliance. If the operation were allowed to go ahead in its notified form, the combined entity would become the single operator in the Nordic region with complete control over the local access network in its home market. It would therefore gain an increased ability to restrict entry from operators established in Denmark or Finland (or any other country).
166. In addition to raising barriers to entry from other operators in the Nordic region, the unique position of the new entity in terms of access to essential facilities (local loops) across the Nordic region would also give it a strategic advantage as it effectively would become the only telecom operator in the Nordic region with whom non-Nordic operators could form alliances, for example, for the provision of the Nordic component of a European or global business data solution.
167. The parties consider that the Commission invokes conduct that is effectively precluded by regulation as an indication of additional market power created by the merger. In particular, the parties claim that any attempt by the merged entity to raise prices, or avoid a decrease in prices, would be precluded by law in the absence of genuine cost justification. The Commission has already pointed out that its reasoning hinges on the parties' ability to eliminate actual and potential competition from third parties rather than on cost orientation of interconnection conditions. In any event the Commission considers that the historic basis of cost accounting accepted in Sweden and Norway may lead to a situation where interconnection rates are higher than actual costs. This would result in high profit margins for the incumbents which will thus be able to avoid any decrease in interconnection charges. As regards the regulatory control over interconnection charges, it is to be borne in mind that under the Merger Regulation the test is whether a concentration leads to the creation or strengthening of a dominant position. Once the Commission has been able to prove the existence of strengthening of a dominant position, the dominant position is not negated by the existence of regulatory control over prices or other anti-competitive behaviour. The examples given by the Commission are not

the reason for prohibiting the concentration, but are indicators of the existence or strengthening of a dominant position.

MARKET BY MARKET ASSESSMENT

Provision of local loop infrastructure

168. Telenor estimates its total local loop capacity in Norway at [...] *Mbits/s x km. Telia estimates its local loop capacity at [...] *Mbits/s x km. An indication of the importance of their capacity holdings in relation to that of their competitors is given by the market shares for local loop calls, as detailed below. Telia in Sweden, and Telenor in Norway, are respectively the dominant providers of local loop infrastructure in their respective countries, and own the vast majority of such connections. Entry by other competitors, in terms of building or upgrading new competing networks, is difficult because of the cost of replicating, upgrading or expanding networks.
169. In Sweden, since unbundled local loop access is not available, the firms identified as competitors must generally, therefore, offer local loop services by other means. The parties pointed out that some local municipalities (for example, Stokab, Gotnet, Linköping Energi, Bitnet and Gavlenet) owned optical fibre networks and offered Internet services over cable-TV lines. These networks are, however, comparatively very small. The parties contended that cable TV networks could be used for telephony. This is probably correct insofar as the networks can be upgraded for voice telephony. So far, the upgrading of cable TV networks has generally focused on modifications to the network architecture (from 'cascade' or 'trunk and branch' to star-shaped) in order to allow the use of high-speed Internet downloading, but not on the work required to introduce traditional telephony services over cable TV networks. This would involve investments in high-capacity return paths, which is significantly more costly (a ratio of 5:1, according to one competitor). Another disadvantage is that cable TV networks are geographically limited to the extent of the network owner's subscriber base. Therefore, the new entrants will be dependent to a considerable extent on the incumbent because most of their outgoing traffic will still have to be terminated on the incumbent's network, while only a very small proportion of the incumbent's outgoing traffic will have to be terminated on the new entrants' networks. Thus the bargaining power of these entrant networks against Telia is very small when it comes to the price of interconnection. By raising the price of interconnection, or by imposing onerous technical compliance requirements, the notifying parties would be in a position to raise the costs of entrant networks in relation to all the traffic that they are obliged to hand over to Telia for termination, which is likely to form a substantial proportion of their entire traffic. Although it might be argued that the parties are constrained by regulation from raising prices, they would still be in a position not only to impose the maximum prices rise possible within the regulatory system, but also to disadvantage new entrants by tactics which do not involve price, for example, by practising degradation strategies. In addition to that, regulation in Norway and Sweden with regard to interconnection

is ex post and cannot thus be considered for the purposes of merger control as an effective constraint on the market behaviour of dominant companies.²⁷

170. The parties also identified as actual or potential entrant companies who offered dedicated access to business over radio links (Teracom, Rymdbolaget). It was noted however that all these offerings were either confined to relatively small or localised customer bases, such as the networks of a municipality, or were not yet at the stage of full commercial operation (radio links).
171. Moreover, none of these companies are able to compete head on with the incumbent across the whole range of local loop subscribers, and in the main they either target high volume business users, or offer some technological variant (cable TV, radio link) which avoids the problem of being unable to get unbundled access to the local loop.
172. Finally, it should be noted that one of the most important potentially competitive networks, namely the biggest cable TV network in Sweden, is already in the hands of Telia. In Norway Telenor owns the second-largest cable TV network, Telenor Avidi²⁸. Although the parties' cable TV networks would be capable of being upgraded to provide telephony services, there is no incentive for either Telia or Telenor to do so, given that they would be competing with themselves in the provision of local loop infrastructure. These networks can therefore not be considered to provide the customers connected to them with a potential alternative telephony connection as long as they remain controlled by the parties.
173. In Norway, other actual or potential competitors include: Janco Multicom (offering telephony through its cable television network); Eltele (offering local loop access via optical fibre to larger public bodies and businesses); Enitel (offering optical fibre and radio link access services but not apparently voice telephony as yet); and NetCom (offering local loop via leased lines as part of a business package).
174. The arguments in relation to Norway are similar to those developed above in relation to Sweden. The entrants on this market are not able to obtain local loop access other than through the incumbent's networks. They can offer either carrier pre-selection or call by call carrier selection, or access through cable television networks. They are, however, hampered in the way described above by being unable to earn revenue through call termination. They are therefore unable to pose a significant competitive threat to Telenor's dominance.
175. The low level of entry in this market highlights the difficulties of entry generally. Without unbundled local loop access, new entrants cannot develop a market position of their own for both incoming and outgoing calls unless they are prepared to invest in their own networks. The upgrading and expansion of existing cable networks can present a viable alternative to the incumbent's network, especially where the new entrant can provide cable TV, telephony and Internet access over that network in

²⁷ See judgment of 25 March 1999 in Case T102/99 - Gencor Ltd v Commission, at paragraphs 317-319; not yet published in the ECR.

²⁸ See Section II on television services; paragraphs 261 ff.

competition with the incumbent. However, as noted above, Telia owns the largest cable network in Sweden and Telenor the second largest network in Norway. In addition, building out entire new networks, or upgrading and expanding existing cable and/or other networks for bi-directional use by individual subscribers would certainly require substantial amounts of time and capital. Although, in particular, cable TV networks can in the medium to long-term provide an interesting economic proposition for the provision of the full range of telecommunication services, there are no indications that such a development is underway in a way that would reduce the competitive concerns related to the parties control over the only existing local access network for telecommunication services. Accordingly the barriers to entry remain high. As explained above, the concentration will have the effect of removing Telia and Telenor as the most significant potential sources of competitive constraint to open up their respective local networks to access by competitors.

176. For these reasons, the proposed operation would strengthen the dominant position already enjoyed by the two incumbent operators in their respective domestic market for the provision of local loop infrastructure in each country.

Provision of long distance/international network infrastructure

177. Telenor estimates its total long distance capacity as some [...] Mbits/s x km, and its international capacity (or more accurately the national part of its international capacity) at [...] Mbits/s x km. About [55-65%] of the long distance capacity is used by Telenor or by third parties (e.g. through interconnection). About [35-45%] of it is available for leasing. According to the parties' estimates, about [65-75%] of all long distance capacity leased in Norway was leased from Telenor.
178. There are other suppliers of network infrastructure in Norway, including Telia Nättjänster Norden AB (see Section IV). A number of competitors were concerned that all the possible supplies of alternative cable infrastructure were substantially in the hands of utilities which were said to be owned by the government or potentially subject to its influence, such as Jernbaneverket (the rail administrator) and Enitel (a consortium of Electricity companies) and ElTele. In its market investigation the Commission has however not found any evidence of the existence of a conflicts of interest that would reduce the incentives for these alternative providers to offer their capacity as an alternative to that of Telenor.
179. For Sweden, Telia (whose capacity holdings are categorised in a different way) estimates its regional capacity at [...] Mbits/s x km, and its long distance capacity as some [...] Mbits/s x km. Approximately [20-30%] of Telia's network capacity is leased out to third parties (customers and operators) Telia say no particular capacity is earmarked for its own use. In an independent report referred to by the parties²⁹ it was estimated that 43% of long distance leases were leased from Telia. There are other suppliers of long distance network infrastructure in Sweden, of which Banverket and Svenska Kraftnät were said to be the largest suppliers. Other alternative suppliers include, *inter alia*, Tele2, Stokab and a large number of municipalities. Although none of these other suppliers of long distance infrastructure have a capacity equal to that of Telia, it nevertheless cannot be

²⁹ A report by Price Waterhouse Coopers to the PTS (Swedish telephone regulatory authority)

disregarded that they individually and in combination have access to substantial amounts of alternative capacity, which they offer on the market (including dark fibre). Again, the Commission's market investigation has not produced evidence of the existence of a conflicts of interest that would reduce the incentives for these alternative providers to offer their capacity in competition with Telia.

180. At present, if the prices for capacity in one country were to rise compared with the prices in the other country, operators seeking capacity could be tempted to look for solutions which enable them to use capacity on the other side of the border (which is land-based and has several connection points for telecommunication, whereas the infrastructure in other neighbouring countries such as Denmark, Finland or Russia would not be suitable for this purpose, either because it would require a new connection across water, or because it has fewer connection points). Thus if, say, Telenor's capacity prices were to rise too high in Norway, the possibility exists that Telia Norge could make use of its special position by offering long distance transport for at least certain parts of Norway, and in particular communications in the North-South direction, by bringing the traffic over the border into Sweden on leased lines, running it over Telia's long distance networks, and re-delivering it back to Norway, again over leased lines, but close to the point of delivery. The same could of course work in reverse. In their Reply, the parties have indicated that this is an unlikely scenario, given that the majority of all customers are located in the Southern parts of Sweden and Norway respectively. Nevertheless, the fact remains that for a certain part of the business, such a routing solution may be a viable option. Although Telenor might be tempted to dismiss any such claims as a negotiating tactic, it would be unable to rule it out entirely as a competitive response, and as such the threat would impose a constraint on Telenor's pricing to some extent. In any event, each side has as much to lose as the other, because if Telia Norge is disadvantaged by high prices in Norway, Telenordia could be the subject of reciprocal action in Sweden. In their Reply the parties claim that any such action would breach national or Community law. It is to be said in this connection that the possibility of controlling future abuses under national law or Community law does not constitute a justification for the creation or strengthening of a dominant position. Once the merger had gone ahead, such constraints would disappear, and the parties' dominance on both markets would be strengthened.
181. In addition, before the merger each of the parties could, at least for sales to business customers, have by-passed the incumbent's national infrastructure in the territory of the other through dedicated access, i.e. leased lines or virtual private networks. This possibility would also be eliminated through the merger.
182. As a result, the proposed operation would strengthen the dominant position held by Telenor on the market for the provision of long distance and international network infrastructure in Norway. Given the undertakings offered by the parties concerning the divestiture of their overlapping activities, their cable TV businesses and the provision of LLU (see section IV below), it is not necessary to determine whether the transaction would have lead to the creation or strengthening of a dominant position on the Swedish markets for the provision of long distance and international network infrastructure.

Subscriber access to telephone services

Subscriber access to local services

183. In Sweden Telia has [90-100%]*of the market based on revenues. There are a number of competitors with very small market shares, who account for the remaining [0-10%]*, including Tele 2 and Telenordia. With a market share of this size, Telia is clearly dominant.
184. In Norway, Telenor is the incumbent, with a [90-100%]*share of the market. Such a high market share indicates a dominant position. Telia has a [0-10%]*³⁰ share, through Telia Norge, and Tele 2 has less than a [0-10%]*share.
185. The merger would eliminate actual competition from Telenordia in Sweden and from Telia Norge in Norway³¹. It would also eliminate the most effective potential competitor in Norway and Sweden. Finally, the merger would increase the ability and incentive of the new entity to raise interconnection prices (or not decrease prices) or degrade access to the local loop for the provision of domestic services for the reasons outlined above. For example, before the merger, Telenor would be restrained in its ability to raise interconnection charges vis a vis its domestic competitors because this move would have affected Telia Norge which in turn might have caused Telia to use its bargaining position vis à vis Telenor's or Telenordia's activities in Sweden. After the merger this restraint would disappear.³²
186. For the reasons outlined above, and for the other more general reasons outlined in the introductory section of the competitive assessment, the concentration would strengthen the incumbents' existing dominant positions on the market for subscribers access to local services.

Long distance services

Long distance in Norway and Sweden

187. According to information supplied by the parties, there were some [...] million minutes of long distance traffic in Norway and some [...] million minutes in Sweden.
188. The table below shows the market shares for long distance in 1998 based on revenues.

	Sweden only	Norway only
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³⁰ In a later submission the parties quoted a figure of [0-10%]*by call minutes and [0-10%]*by revenue reflecting the shares at the end of 1998. However, the argument is not substantially affected by whether the later or earlier figures are taken.

³¹ Although the increments of market share which would accrue to the merged entity in Norway and Sweden are very small, they would represent the disappearance of a substantial proportion of the small slice of market share not already in the incumbent's control.

³² Competitors offering local calls would be more or less affected by the parties' increased ability to raise rivals' costs depending on whether they offered domestic services in only one country or in both, or whether they offered domestic and international services in one country or both, or any combination of the above:

Long distance		
<i>Telia</i>	[65-75%]*	[0-10%]*
<i>Telenor</i>	[0-10%]*	[90-100%]*
<i>Telenordia</i>	[0-10%]*	[0-10%]*
<i>Tele 2</i>	[15-25]*	[0-10%]*
<i>Tele 8</i>		[0-10%]*
<i>Global One</i>	[0-10%]*	
<i>Sonera</i>	[0-10%]*	
<i>RSL Com</i>	[0-10%]*	
<i>Netnet</i>		[0-10%]*

189. In Norway, Telenor has a dominant [90-100%]*market share, with Telia Norge having [0-10%]*. Telia Norge therefore has one-sixth of the market share not already controlled by the incumbent. In Sweden, Telia has a [70-80%]*share. Telenor is represented in the Telenordia joint venture, which has a [0-10%]*market share. This [0-10%]* represents around one-quarter of the part of the market not held by the incumbent.
190. The merger will result in the removal of actual competition from Telia Norge in Norway and from Telenordia in Sweden, as Telia Norge and Telenordia will disappear as competing suppliers. For the reasons outlined above, the merger will also result in the removal of potential competition which Telia and Telenor would have been able to bring. An important element of providing a long distance service is the ability to get interconnection with the incumbent's network and with other competitors. A competitor wishing to transport long distance traffic may have to pay the incumbent for the use of his networks (for example, if the call has come by carrier pre-selection or call-by-call selection), pay the cost of leasing the long distance lines, again possibly from the incumbent, and then pay for interconnection to deliver the call back onto the incumbent's network for termination. The incumbent is in a position to control all these costs.
191. The merger will give the parties an enhanced ability to eliminate competitors by raising the prices of or degrading interconnection to third parties seeking to terminate calls, or by offering its own customers a better deal on long distance calls than competitors can offer once they have paid for the necessary interconnection rates. They would have an increased ability and incentive to raise rival's costs for the same reasons as outlined above with regard to local calls because their own subsidiaries operating in the other's territories would no longer be harmed by retaliatory price increases by the other incumbent. When Telia and Telenor were separate entities the prices at which they offer long-distance services and associated support were constrained by the knowledge that they cannot raise prices to competitors, including each other, without harming their own interests in the adjacent territory, and possibly that their customers could have the incentive to look for ways of using cross-border infrastructure as a means of putting price competition on their main supplier. After the merger this constraint would be gone. In addition to that, they could leverage their control of the local loop in their dealings with operators seeking interconnection because that local loop control gives them an advantage their competitors cannot offer. They could also offer long distance products over a much wider geographic area, and undercut competitors whose offerings remain constrained by national boundaries. This would be compounded

by the fact that they have a very strong position in their respective national territories for the supply of underlying infrastructure (cable capacity).

192. As a result, the proposed operation would strengthen the dominant position held by the parties on the markets for the provision of long-distance services in Sweden and Norway respectively.

International

193. The international market can be regarded as either a market for the supply of international telephone services, or as a market for specific country pairs.
194. Taking the market first as a whole, according to the information provided by the parties in their form CO, international calls traffic in 1998 amounted to [...] million minutes in Norway and [...] in Sweden.
195. The table below shows percentage shares of a national market based on overall call revenues from this sector.

	Norway only	Sweden only
International		
<i>Telia</i>	[0-10%]*	[60-70%]*
<i>Telenor</i>	[80-90%]*	[0-10%]*
<i>Telenordia</i>	[0-10%]*	[0-10%]*
Combined		
<i>Tele 2</i>	[0-10%]*	[20-30%]*
<i>Tele 8</i>	[0-10%]*	
<i>Global One</i>		[0-10%]*
<i>Sonera</i>		[0-10%]*
<i>RSL Com</i>		[0-10%]*
<i>MCI WorldCom</i>		[0-10%]*
<i>Netnet</i>	[0-10%]*	

196. On a national market basis, the shares clearly indicate that Telenor, with [80-90%]*market share, has a dominant position on the Norwegian market. Also for Sweden, Telia's [60-70%]*share of international calls is indicative of a dominant position.
197. These market shares show dominance measured by the parties' shares of overall international traffic. The following analysis will consider the flow of international traffic between specific countries. As regards traffic to individual countries, in 1998 Telenor sent [20-30%]*of its international traffic to Sweden, [10-20%]*to Denmark, and [0-10%]*to Finland. Telia sent [15-25%]*of its international traffic to Norway, [10-20%]*to Denmark, and [0-10%]*to Finland.
198. The table below shows international voice traffic flows amongst Nordic countries as a percentage of calls from originating country in 1997 (source "Direction of traffic 1999" Traffic Statistics, ITU)

This text is made available for information purposes only and does not constitute an official publication.

	FROM	FROM	FROM	FROM
TO	Sweden	Norway	Finland	Denmark
Sweden	-	26	28.7	15.5
Norway	12.7	-	3.6	9.4
Finland	13.6	2.5	-	1.8
Denmark	10.3	14.6	2.9	

199. The above tables demonstrate that the Nordic traffic flows represent a significant volume of traffic.
200. The merger will result in the removal of actual competition from Telia Norge in Norway and from Telenordia in Sweden, as Telia Norge and Telenordia will disappear as competing suppliers. For the reasons outlined above, the merger will also result in the removal of potential competition which Telia and Telenor would have been able to bring.
201. Moreover, as seen above, the merger will also increase the incentive and the ability of the merged entity to discriminate against third parties. In terms of the impact on specific country pairs, as outlined above, the merger will increase the ability and the incentive to raise (or not decrease) termination charges, or to degrade the quality of interconnection. Although not all calls will require termination in Norway or Sweden (inter alia because some competitors on the route may offer only outgoing call services) even these will still incur charges for the origination of traffic on the incumbents' networks, and thus the operators concerned are dependent on the incumbent for a proportion of their costs.
202. The parties have maintained that the size of their traffic across that border is very small, representing no more than a small percentage of their business turnover. However, it was noted that [20-30%]*of Norway's international traffic went to Sweden, and around [10-20%]*of Sweden's international traffic went to Norway. Third-party competitors said that international traffic between the two countries represented a substantial portion of their revenues. International routes are often a means by which competitors are able to enter countries whose telecoms markets were hitherto dominated by incumbents. Evidence supplied to the Commission by third parties confirmed that the cross border traffic was much more important to them in overall revenue terms than the parties claimed it was to themselves. This merger would thus have far more of an impact on the cost base of competitors because competitors tend to rely more on Norway/Sweden international traffic than the incumbents appear to do not only for the route in question but also for bundled products.
203. As regards calls to Denmark and Finland, the merged entity will have no fear of retaliation if it increases its accounting rate with other operators in the Nordic region. It can terminate its own outgoing traffic in those countries through its own subsidiaries. Telia or Telenor subsidiaries in Denmark or Finland can either

terminate traffic using their rights to unbundled local loop access, or interconnect with the local incumbents on regulated terms, with the comfort of knowing that competitors in Denmark and Finland have less opportunity to retaliate because they have no means of landing traffic in Norway or Sweden which enables them to avoid the incumbent's accounting or interconnection rates.³³

204. As a result, the proposed operation would strengthen the dominant position held by the parties on the markets for international telephony in Sweden and Norway respectively, in particular with regard to the Swedish/Norwegian country pair.

Mobile Telephony in Norway and Sweden

205. Telia and Telenor operate mobile telecommunications businesses in Sweden and Norway respectively. Telia Norge has been granted a GSM licence in Norway and Telenordia has been granted a GSM licence in Sweden. The merging parties would benefit from the licence holdings they would possess in Denmark and Finland.
206. In 1998 the Swedish market for mobile telephony was estimated to be in the order of EUR [1500-2000]*million. On this revenue basis, Telia was estimated to have a [50-60%]*share of the Swedish market, with Europolitan having [20-30%]*and Comviq having [10-20%]*. On a call minute basis the market was [...]*billion call minutes. Telenor's market share in Norway for mobile telephony (GSM) was [65-75%]*, and the competitor, Netcom GSM ASA had [25-35%]*. On this basis the parties have a very strong, if not dominant position, on their respective markets.
207. On the basis that the markets are national, the parties argue that no overlaps arise in Norway or Sweden, because neither of their subsidiaries uses the GSM licence which they have been allocated. However, the fact that the respective subsidiaries already have spent the effort and funds necessary to acquire these GSM licences must be regarded as indicative of a clear intention to enter each other's market. Moreover, given the above indicated importance of traffic between Sweden and Norway, and the parties' ability to terminate calls at cost in their home markets, it has to be concluded that both parties, absent the merger, would have been in a good position to utilise their GSM licences to make a forceful entry into each other's home market. Such an entry could, in the same way as will be explained below, have been based on abandoning roaming charges between Norway and Sweden. The merger will therefore eliminate a significant potential competitor in both Norway and Sweden.
208. As to mobile telephony in the Nordic region the same concerns arise as those identified in relation to fixed telephony. The merger would give the parties the opportunity to eliminate roaming charges or to bring them to the level where the price of a call between Norway and Sweden attracts no extra international supplement. They would have an incentive to do this as a business strategy for removing competitors. Indeed, the concept of roaming charges becomes academic, as payments made from one network to another would be simply payments from one

³³ It should be noted that Telia owns cables between Sweden and Denmark which, according to third parties, have sufficient capacity for taking all Telia/Telenor traffic to Denmark and in addition, Telia owns whole circuits running from Sweden to Finland and Sweden to Norway.

side of the merged entity to the other. Consumers in Sweden could order their service in Norway or vice versa and use the telephone permanently in roaming mode. The parties, by abolishing roaming charges (or reducing roaming charges on calls made over their shared networks to the point where the calls were effectively treated as national calls) could undercut the prices offered by competitors who were forced to remain with the roaming charge regime or risk cross-subsidising each other if the traffic were out of balance.

209. In addition, for the reasons outlined in relation to fixed telephony above, the merger will increase the ability and the incentive to raise (or not decrease) termination charges, or to degrade the quality of interconnection. Indeed, access to mobile is subject to the same considerations as any of the other services for which access to the local loop is important in order to be able to offer services. The fact that other mobile operators would have to turn to the parties for termination of their call traffic in Norway and Sweden on the parties' local loop puts the parties in the same position as they would be when terminating traffic from a conventional fixed network.

Mobile telephony in Ireland

210. The only current overlaps outside Sweden and Norway arise in relation to Ireland. Telia and Telenor respectively have joint control of the mobile phone operators which together represent the only two current active operators in the Irish mobile telecoms market. Telia has joint control, with KPN and the Irish State, of Eircom (formerly known as Telecom Eireann). Eircom's mobile operator is Eircell, with a [60-70%]*market share. Telenor has joint control, with ESAT Telecom, of ESAT Digifone, the only current competitor, which has a [30-40%]*market share.
211. At the Oral Hearing the parties declared that they would divest their overlapping businesses so that the overlap between Telia and Telenor in Ireland will be entirely removed. This offer was repeated in the undertakings put forward by the parties (see Section IV). Without such a divestiture, the operation would give the combined entity joint control of all the mobile telecommunications operations, namely two, currently operating on the Irish mobile telecommunications market. By giving the merged entity joint control over all players active in the market, the merger would thus, in the absence of appropriate divestitures, lead to the creation of a dominant position in Ireland.

Operator access to local loop networks (Norway and Sweden)

212. The market power of operators supplying local loop services may be a function of the amount of traffic they can terminate, which in turn depends on the number of subscribers and the volume of traffic directed to them.

Market shares for local loop traffic through Telenor's network³⁴, 1998

³⁴ The parties pointed out that these figures include market shares only for traffic originated through Telenor's network, and that their market shares would be lower if traffic through the other networks were added. However, given that Telenor does not provide unbundled local loop access, the majority of traffic originated by local loop competitors will be originated on Telenor's network through carrier pre-selection or call by call selection. On call termination, only those networks with their own fixed

Company (Norway)	Market share in revenues (call minute %age in brackets)	Market share in terms of subscribers ³⁵ (business/residential)
Telenor	[90-100%]*([90-100%]*)	[90-100%/90-100%]*
Telia	[0-10%]*([0-10%]*)	[0-10%/0-10%]*
Tele 2	[0-10%]*([0-10%]*)	[5-15%/0-10%]*
Tele 8	[0-10%]*([0-10%]*)	N/A
NetNet	[0-10%]*([0-10%]*)	[0-10%/0-10%]*
Others	[0-10%]*([0-10%]*)	

213. It will be seen that, whether the figures are taken in terms of revenues or call minutes, or subscriber numbers, Telenor still controls access to the local loop. Telenor does not offer unbundled access to the local loop and before 1998 it had a 100% share. Since 1998 competition has developed. The parties say that Telia Norge registered some [...] *carrier pre-selection customers, Tele 2 some [...] *customers and Tele 1 Europe some [...] *customers. However, these new competitors are unable to gain revenue from call termination, and only competitors who have their own fixed access, such as radio loop or business customers with a fixed link to another operator, are truly able to compete against the incumbent.
214. In Sweden the parties estimate that Telia had some [90-100%]*of local loop revenues and [90-100%]*of call minutes, or [90-100%]*of subscribers. Such a high market share indicates a dominant position. Carrier pre-selection is not yet available in Sweden, but was due to be introduced on 11 September 1999. Owing to disputes over the implementation of the select procedure, where Telia has refused to transfer customers to other operators unless certain conditions are fulfilled, there has been an agreement to prolong the transfer period by another two months (11 November 1999).
215. Both Telia and Telenor can therefore be considered as dominant in this market. The merger will strengthen Telenor's dominant position in Norway by eliminating Telia, which is together with Tele 2 its strongest actual competitor. Moreover, as explained in the introductory section of the competitive assessment, the merger will eliminate the potential competition existing between the parties.

local loop access would be able to terminate traffic anyway, and they could only expect to terminate a proportion based on their size relative to that of Telenor. The distortion element would therefore amount to no more than a few percentage points.

³⁵ Figures sum to more than 100 because some subscribers have carrier pre-selection/dial-up and therefore use more than one telecom operator.

216. Because of the elimination of actual and potential competition, the new entity will be in a stronger position to increase rival's costs for access to the local loop network, for the reasons outlined in the introductory part of the competitive assessment.
217. As a result, the proposed operation would strengthen the dominant position held by the parties on the markets for operator access to local loop networks in Sweden and Norway respectively.

Operator access to long distance and international networks

218. The market share figures shown above for long distance and international calls illustrate the parties' dominant position in the handling of long distance and international call traffic. Within the national territory, operators seeking to offer long distance or international network access would be hampered by their inability to offer call termination services as a quid pro quo. Although they might agree to take long distance or internationally-bound traffic from entrant local loop operators, they would find it difficult in the long distance market to offer competitive pricing, because of the need to interconnect with the incumbent in order to terminate the call. In any case, operators will rely on the incumbents' network for call origination, and therefore will be dependent on the incumbents for a proportion of their costs. On the international side, they would be unable to drive an effective bargain with operators outside Norway and Sweden looking for an operator to terminate calls on their behalf in Norway and Sweden, because their prices would have to include an element for access to the local loop. The incumbent could at any time render their efforts nugatory by rebalancing strategies. Because the incumbent would be able to combine networks across the two countries, and control access to final users, it would enjoy a cost position which rivals could not replicate. As a result, the proposed operation would strengthen the dominant position held by Telenor on the market for the operator access to long distance and international networks in Norway. Given the undertakings offered by the parties concerning the divestiture of their overlapping activities, their cable TV businesses and the provision of LLU (see section IV below), it is not necessary to determine whether the transaction would have lead to the creation or strengthening of a dominant position on the Swedish markets for the provision of long distance and international network infrastructure.

Business data communications

219. The table below breaks down the market shares on the basis of a national market definition:

%age shares in business data communications	Telia	Telenor	Combined
In Norway alone	[10-20%]*	[60-70%]*	[70-80%]*
In Sweden alone	[65-75%]*	[10-20%]*	[80-90%]*

220. The parties' dominance would be increased as a result of the merger by an increase of their market shares. The merger would eliminate the first largest competitor of the

incumbent operator in both Sweden and Norway. In Sweden, the four largest competitors would be Tele2, with [5-15%]*, Global One, with [0-10%]*, MCI WorldCom, with [0-10%]*, and Sonera, with [0-10%]*. In Norway, the largest competitors would be Posten SDS, with [0-10%]*, IBM, with [0-10%]*, Global One, with [0-10%]*, Equant, with [0-10%]*, and Fellesdata, with [0-10%]*. In addition, the merger would eliminate the most effective potential competitor.

221. There are examples of companies active in this market who supply essentially a “Nordic” business data communications product. One such company is Telenordia, the joint venture between Telenor, BT, and Tele Denmark, which is specifically aimed at providing such services in Sweden and in the Nordic region, inter alia to customers looking for business communications solutions in the Nordic area; and Nordicom, a service provided by Telenordia, Tele Danmark and Telenor whereby they offer high speed business communications services in the Nordic region. Third parties have also provided a significant number of examples of Nordic companies which have expressed an interest in services limited to their specific Nordic telecommunications needs.
222. The merger could have an impact on the business data communications market in two ways. One concerns access to local loop and the other concerns access to infrastructure. Those competitors in the business data market who seek to have access through the PSTN would suffer vis à vis the parties from the competitive disadvantage that they would be unable to offer equivalent services to those which the parties were capable of offering. Specifically the parties could use their control of the local loop to ‘bundle’ business data communications offerings with local loop services, such as voice services, across the whole Nordic region. In this context, the parties are able to offer products which have been specifically designed for the Nordic market and which offer a coverage of the four Nordic countries. Although it is not necessary to conclude whether these products could be regarded as constituting a distinct market, the Commission’s investigation has found that some Nordic companies have expressed an interest in services limited to their specific Nordic telecommunications needs. All other things being equal, such “Nordic” products would therefore be attractive to a buyer choosing a business data communication product. In Norway and Sweden at least, the parties’ competitors would not be able to offer business data products which included local loop services, as they would be dependent on the parties if they needed to offer local loop access, and the parties would have an increased ability to increase their costs or to discriminate against them, for the reasons outlined above. Therefore competitors would be at a disadvantage.
223. In addition it is to be borne in mind, as explained in the introductory section of the competitive assessment, that the parties are capable of implementing anticompetitive practices in respect of all data communication services (as well as other telecom services) in the Nordic region. In Denmark and Finland local loop access is regulated and, consequently, access to the local loop is available in a more cost effective manner than in Norway and Sweden, where there is no local loop unbundling obligation. This situation and the cost internalisation resulting from the merger is likely to raise the access costs that the merged entity’s competitors will have to incur in Sweden and Norway to provide Nordic regional services to their customers. On the contrary the combined entity will keep benefiting from the more liberal access provisions in Denmark and Finland and be able to terminate calls in

those countries in cost related way. Therefore, by leveraging its strengthened position at the local loop level the merged entity will have the possibility of foreclosing competition in the Nordic region.

224. The parties would be able to rely on their strong position on leased line capacity(see discussion above).
225. If the merger strengthens the position of the combined entity in its dealings with other telecom operators, then private data networks seeking to interconnect like operators are likely to be among the first casualties, because of their relatively limited bargaining power in such negotiations. Telia/Telenor will be able to offer favourable terms for bundled packages which include loop access, at a price designed to ensure the data network operator has little or no choice but to accept to become a customer of the services in question from Telia/Telenor. The merged entity can thereby render the offerings of would-be competitors uncompetitive as least as far as local call termination is concerned, and over a much broader area than would have been possible prior to the merger.
226. In Norway, Telenor provides network transport services to a number of business data communications providers. Its main customer is Telia Norge, which in 1998 acquired network transport services for EUR [...]million. Telia Norge bought also EUR [...]million physical components from Telenor. The merger will enable the parties to internalise these costs and thus bring about another competitive advantage to the merged entity.
227. So far as concerns the possibility of offering pan-Nordic telecoms services, the merger will eliminate the potential competition existing between Telia and Telenor. Indeed these were the only two companies prior to the merger who were in a position to offer a service encompassing their own countries as well as Finland and Denmark, with a privileged access to the local loop, and the only ones in a position to “trade” access to their local loop in exchange for reciprocal concessions. Finally, it should be borne in mind that Telenordia, TeleDanmark and Telenor have established Nordicom, a joint venture with the aim of providing high speed communications services to business users in the Nordic region. After the merger, the actual and potential competition existing between Telia and Nordicom will be eliminated.
228. As a result, the proposed operation would strengthen the dominant position held by the parties on the markets for business data communication in Sweden and Norway respectively.

Description of Internet

Internet network, peering and transit agreement

229. From a technical point of view, internet is a global network of routers and computer servers connected through cables, normally telecom cables. Both Telia and Telenor own capacity, which is used for internet purposes, but not all their internet traffic is transmitted through their networks. Internet traffic can be divided into three groups :

- the traffic sent by an ISP to a transit provider(s) ;

- the traffic terminated by an ISP in its own network (i.e. directly to its end-user customers or to ISP networks which are its customers) ; and
- traffic sent by the ISP to secondary peering interfaces (traffic transmitted under peering agreements do not result in any payments between the contracting parties).³⁶

230. The parties have given the following description of their networks, and have broken down their traffic flows figures to show traffic falling within each of the three categories above:

Telia

231. At the top of Telia's network infrastructure in Sweden there are [...] core nodes, [...]. At the level below Telia manages [...] distribution nodes. In addition to these [...] nodes, Telia manages [...] PSTN dial-up nodes. Telia has entered into peering agreements with [...] ISPs at the national interexchange point in Stockholm (the D-GIX), and [...] private peering [...] with [...]. Amongst the [...] ISPs there are Telenor and Telenordia. Telia does not sell national 'transit', (i.e. the provision, to ISPs, of Internet-protocol-based transport of their Internet communications within national boundaries), or termination, but sells transit for international use to other ISPs. Its share of the EEA transit market is approximately [5-15%], on the global market its share would go down to [0-10%].
232. In Norway Telia has an internet network having a node in [...] as the centre. This is connected with Telia's Swedish network and with its international network. Telia has peering agreements with [...] ISPs, amongst which there is Telenor, at Oslo's internet interexchange point (NIX). Telia has [...] transit customers.
233. Telia's international internet infrastructure («the backbone») consists of [...] nodes in Europe and [...] in the US. Telia's US internet traffic is directed from Sweden through the [...] cable system and onwards through either the [...] cable systems.³⁷ In the US, Telia buys transit from [...]. Telia also peers with approximately [...] ISPs in the US. As regards European traffic, Telia purchases transit from carrier's carriers [...] from [...]. Telia also peers with [...] ISPs at the LINX (London InterNet exchange).
234. Telia estimates that about [25-35%] of the traffic originated in its network is sent to transit providers, [20-30%] is terminated in its network, and [40-50%] is sent to secondary peering interfaces.
235. As regards the geographical destination of internet traffic, Telia estimates that about [50-60%] of its end user traffic from the Swedish domestic market is sent to the US. The remaining [40-50%] is towards Europe, of which [30-40%] is domestic/Scandinavian (i.e. [25-35%] directed to Sweden, [0-10%] to Norway, [0-10%] to Denmark and [0-10%] to Finland). Of its total Swedish traffic, [0-

³⁶ Commission Decision in the WorldCom/MCI case, referred to in paragraph 106 above.

³⁷ [...]

10%]*goes to Telenordia, and less than [0-10%]*to Telenor. As regards traffic originating in Norway, Telia estimates that [25--35%]*of this traffic is terminated in Norway, [0-10%]*to Sweden, [0-10%]*to Denmark, and [0-10%]*to Finland. Of its total Norwegian traffic, [0-10%]*goes to Telenor and less than [0-10%]*to Telenordia.

Telenor

236. At the top level of its infrastructure in Norway Telenor operates [...] core nodes ([...]*). At the level below Telenor operates [...] distribution nodes and [...] access nodes. Telenor enters into peering agreements with any ISP having a presence at Oslo's internet interexchange point. Telenor sells transit services to [...] ISPs, its share of the EEA transit market is negligible and below [0-10%]*.
237. In Sweden, Telenor, through Telenordia, owns a high capacity internet infrastructure. At the top level of its network Telenordia operates [...] core nodes [...]*. At the level below Telenordia operates [...] distribution nodes. Telenordia owns radio local loop which connects less than [...] businesses to its internet backbone. Telenordia access the remainder of its customers through interconnect agreements with Telia.
238. Moreover, Telenor, through Telenordia, owns [...] at the internet exchange in [...]*, where it has entered into [...] peering agreements; in addition Telenordia controls a cable connected to a node at [...]*. Telenordia controls a link between [...] and [...] and is sending internet traffic over [...]*. Telenordia buys transit services from [...] for its European traffic. It has also entered into a transit agreement with [...]*. About [55-65%]*of Telenordia's internet traffic is international and about [70-80%]*of the international traffic is to the US. Its US traffic is transmitted over a cable built by the TAT consortium (the 12 cable).
239. As to the Telenor's backbone network, Telenor owns [...] nodes in [...]*, [...] at the international exchange point in [...] and [...] in [...]*. Its US directed traffic is routed from Norway to [...] through the [...] cable, on to Canada through the [...] cable, then from Canada is routed over the [...] to Telenor's node in [...]*. Telenor leases capacity on the [...] network and the [...] network from [...]*.
240. Telenor considers that approximately [50-60%]*of its total internet traffic is directed to transit providers, [20-30%]*is terminated in its own network and [15-25%]*is exchanged through peering arrangements.
241. As regards the geographical destination of its traffic, Telenor estimates that approximately [70-80%]*of its internet traffic originated in Norway is international, and [50-60%]*is sent to the US, [0-10%]*is terminated in the Nordic countries [...] and remaining [0-10%]*in other European countries. Telenor estimates that [0-10%]*of its total internet traffic is terminated on Telia's network and less than [0-10%]*is terminated on Telenordia's.

ISP services

242. Telia and Telenor are active as ISPs in both Sweden and Norway. In Norway, taking dial up and dedicated access together, Telenor has a market share (by value) of [50-60%]*, and Telia has [5-15%]*. The combined market share would thus be [60-

70%]*. As to fixed access, Telenor has a market share of [30-40%]*(by value and by subscribers), Tele2 and EUNet are the next largest players with [5-15%]*each, followed by Telia with [0-10%]*. For dial up access, the figures (by value) are Telenor [60-70%]*, Telia [10-20%]*, Tele2 [5-15%]*; based on number of subscribers the parties would achieve a higher combined market share of [80-90%]*(Telenor [65-75%]*and Telia [10-20%]*).

243. In Sweden, combining dial up and dedicated access, Telia has [30-40%]*(by value), and Telenordia [0-20%]*. This gives a combined market share of [40-50%]*. As to fixed access, the market shares (by value) are as follows: Telia has [30%-40%]*, Tele2 [20-30%]*, Telenordia [10-20%]*, MCI WorldCom [5-15%]*and Global One [0-10%]*. By subscribers (both "dial-up" and "fixed access" subscribers), the parties would achieve a higher combined market share of [50-60%]*. As regards dial up access, the shares (by value) are Telia having [30-40%]*, Telenordia [10-20%]*, Tele2 [30-40%]*, and BIP [0-10%]*. By number of "dial-up" subscribers, the parties' combined market share in Sweden would be [50-60%]*. According to the information submitted in the notification, the parties' market shares have remained relatively stable over the last three years, in particular when compared to the largest competitor, Tele2, which according to the same source has been on a consistent downward trend over the same period (both for "dial-up" and "fixed access" subscribers).
244. As a result of the merger the parties, because of their stronger position in the capacity markets and their stronger control over the local loop, would become dominant in Sweden, and their already dominant position in the Norwegian market would be strengthened. In particular, the parties are already capable of discriminating against their competitors in favour of their own ISP activities, for example by bundling telephone subscriber and ISP services. Moreover, the parties will be able to cross-subsidise their ISP activities from the increased profits from local loop services.
245. In the absence of local loop unbundling, ISPs in Norway and Sweden would be in an increasingly poor competitive position when compared with the merging parties. First, both merging parties have publicly announced that they will migrate all of their telecommunications traffic to an Internet protocol ("IP") platform with dedicated access points close to end users. Without LLU, if competitors also migrated to IP technology they would not be able to provide high speed access because they would not be in a position to place their own electronic equipment both at the user's premises and at the main distribution frame. It will be difficult for ISPs to compete with this large integrated and technically advanced network (covering at least Sweden and Norway, and possibly including the parties' infrastructure throughout the Nordic region). ISPs could then be left with only being able to reach end users via dial up access through an increasingly obsolete PSTN.
246. Second, the merging parties could eliminate competitor ISPs entirely in the absence of LLU. Without LLU, there is no assurance that ISPs can offer broadband services (fast Internet connections) as they could not provide high speed access without placing their equipment both at the user's premises and the main distribution frame. Broadband is essential for emerging Internet applications involving video and speech transmission. The merging parties could decide to offer wholesale broadband services to competitors, but there is no guarantee that they would do so at

competitive prices. It is more likely that the merging parties would retain broadband exclusively for themselves, so only their ISP operations would be able to offer fast Internet service to end users.

247. As a result, the proposed operation would create a dominant position for the merged entity on the market for Internet access in Sweden and strengthen the dominant position already held by Telenor on that market in Norway.

Internet advertising

248. According to the parties the Swedish Internet advertising market is an immature emerging market and little reliable information exists on it. The parties maintain – a position repeated in their reply to the Statement of Objections - that Telia's activities are extremely limited and are all conducted through SOL. The information collected by the Commission in the course of its investigation suggests that this is not entirely accurate. The Commission has been informed that Telia and Telenor, through SOL, control the first and seventh largest Swedish sites, Passagen and Evreka. In addition Telia operates in the Swedish Internet advertising market through at least four sites: Telia Internet, Telia Email search catalogue, Telia's yellow pages site, Gulasidorna, and Telia's corporate site. Telia sells or barter banner ads and sponsorship on each of these sites.
249. According to the parties Telia's market share (and thus SOL's market share) is approximately [10-20%]*. The [10-20%]* figure is contradicted by a complainant according to which only three of the above mentioned Internet sites (Passagen, Evreka, and Telia Internet) account for 50% of Internet advertising revenues. It should be pointed out that the complainant has not been able to provide any evidence to substantiate the proposed 50% market share. Accordingly, the Commission has no reason to believe that the figures put forward by the parties are not accurate. In addition, Telenordia, which is jointly controlled by Telenor, has a market share of approximately [0-10%]*. The parties disputed this claim, saying that the total Swedish market for Internet advertising in 1998 was estimated by IRM (the Institute for Advertising and Media) at SEK 207 million, of which SOL's revenues were SEK 29.9 million, or 14.4% of the market. For 1999 the equivalent figures (estimates) were SEK 408 million and SEK 50 million, giving SOL a 16.4% share. When the revenues for Telia's other sites, Gula Sidorna and Emfas were taken into account, total estimated share was 16.4%.
250. In Sweden, Telia, with the exception of its two sites mentioned above, Telia operates exclusively through SOL. Telenor has no internet advertising operations in Sweden outside SOL. Given the fact that the parties have already joined their activities in SOL the concentration will have no direct competitive effect on internet advertising in Sweden.
251. In Norway, the parties control, through SOL, the largest Norwegian site (Scandinavian OnLine) with a market share of [40-50%]*(by value). Telenor, outside SOL, is active through ABC Startsiden AS and Telenor Media. For example, Telenor sells or barter banner advertising on its yellow pages. However, these activities have negligible economic significance. SOL is the market leader with a market share of [40-50%]*; its three largest competitors are Nettavisen with [10-20%]*, Aftenposten with [10-20%]* and Dagbladet with [0-10%]*. For the same

reasons given above for Sweden the merger will have no direct competitive effects on internet advertising in Norway.

252. Following the hearing and on the basis of the arguments put forward by the parties in their Reply, the Commission considers that the parties will not be able to leverage their increased market power as ISPs to control the internet advertising market. The Commission has come across no evidence (in the form of statistics or studies, for example) showing that the control over the internet “start-up page”, provided by the ISPs as default start-up page is the decisive competitive force in the internet advertising market. In particular, nothing prevents a user from changing to another start-up page and nothing demonstrates that changing to other start up pages occurs infrequently.
253. Therefore, the Commission considers that the concentration will not create or strengthen a dominant position in the market for internet advertising in Sweden and Norway.

Sale of advertising spaces in local and business telephone directories

254. During the course of this procedure, Telenor has entered into an agreement to divest its Swedish subsidiaries Lokaldelen and Företagsinfo, thereby removing any overlaps between the parties’ activities on these markets in Sweden, and thus removing all competitive concerns the operations might have raised in these markets. No further assessment of these markets is therefore necessary.

PABX

255. Telia is mainly active in the installation and distribution of PABXs in Sweden and has a market share of approximately [45-55%]*. In that country Telenor operates through Internordia, a joint venture with TeleDanmark, which has a market share of about [0-10%]*. The major competitors’ market shares are as follows, Alcatel [20-30%]*, Philips [0-10%]*, Siemens [0-10%]* and Enator Dotcom [0-10%]*.
256. In Norway, Telenor has an estimated [50-60%]*market share. Telia is active through Telia Norge in the supply of large PABXs and has an estimated [10-20%]*market share. The main competitor is Alcatel with a [25-35%]*share.
257. Market shares of such a magnitude are strong indicators of dominance enjoyed by each party in its home country. The parties’ strong positions are due historically to the fact that Telia and Telenor, as incumbent telephone operators, have had a privileged position in connecting such equipment to the telecommunications system. This is confirmed by the high awareness of Telia and Telenor brands as suppliers of PABXs in Sweden and Norway, respectively.
258. The parties maintain that barriers to entry are low, in particular, for existing manufacturers wanting to enter the market as distributors instead of selling through third parties. However, the producers’ strength is somewhat diminished by the standardisation of PABX technology, which reduces the producer’s brand recognition and permits distributors to service a range of PABXs from different manufacturers

259. Customers attach a great deal of importance to installation, maintenance and other after sale services, it is the distributor who takes full responsibility for the product and corresponding service is à vis the customers. A distributor who has built a reputation for supplying PABXs and for providing after sale services is in a position to capitalise on this strength. The manufacturers do not have the necessary service organisations (which is why they use distributors, such as the parties). The parties argument concerning the threat of entry by manufacturers is therefore doubtful.
260. At the Oral Hearing the parties declared that they will divest their overlapping businesses so that the overlap between Telia and Telenor in Sweden and Norway will be entirely removed. Unless such a divestiture is confirmed, the notified merger would strengthen Telia's and Telenor's dominant position in Norway and Sweden respectively in the market for the installation and distribution of PABXs.

II. Television services

A Relevant product markets

261. Telia and Telenor are active in various fields of what may generally be described as distribution of television services. For Telenor, this includes; the provision of satellite transponder capacity in the Nordic area (that is, Norway, Sweden, Denmark and Finland); Direct-to-Home ("DTH") Satellite TV distribution in the Nordic area (conducted by "Canal Digital", a joint venture with Canal+); cable television activities in Norway (Telenor Avidi AS) and activities relating to technical services for Pay-TV (including the proprietary Conax system). Telia's main activity in this field is its cable television activities in Sweden (Telia InfoMedia Television AB) and in Denmark (Stofa). Both companies are active on the markets for content buying and wholesaling of rights to content.
262. A general feature of the markets for distribution of television services is the ongoing evolution from analogue to digital techniques. In their notification the parties did not indicate that separate relevant markets should be established for analogue and digital techniques at the various distribution levels. In Decision 1999/242/EC³⁸ the Commission stated that pay-TV services cannot be subdivided into analogue and digital services. Although analogue and digital services currently exist side by side, most industry sources agree that digital services gradually will replace the analogue ones in the medium to long term. In parallel with this development the TV distribution, Internet and telephony sectors are also widely expected to converge.
263. In this context of migration to the digital world and the consequent development of new services of enormous potential growth for pay-TV and value-added services, including Internet, Telia's customer base is particularly decisive for the assessment of the notified merger. As it will be explained below, the main driver of the expansion in the relevant geographic market for cable TV, DTH and SMATV³⁹, has been the introduction of advertising financed and "mini-pay" channels. Advertising appeal and the corresponding revenues stem from the customer base that can be

³⁸ Case No IV/36.237 - TPS; decision of 3 March 1999; OJ L90, 2.4.1999, p.6.

³⁹ Small Master Antenna TV.

offered to the content suppliers and/or advertisers. In the digital environment, access to a large customer base will be even more important in determining the success of service providers such as the merged entity ("Newco").

264. The present market power of each of the parties, which results directly from their respective customer base, will be reinforced by the benefits of the full vertical integration achieved by this merger at all the levels of the TV distribution chain. Newco's benefit of the reinforced market power resulting from the vertical integration will be significantly increased in the future digital context described above. Newco's competitors, including Netcom/MTG, have a much smaller customer base, which though valuable in terms of analogue TV revenues, in the future digital context, would be insufficient to contest Newco's competitive advantages resulting from its customer base size and, therefore, from its unparalleled appeal to advertisers and content providers.
265. The above-mentioned market position of Newco, as a result of its unparalleled customer base and the consequent irresistible appeal to content providers, which will be reinforced in the digital environment, has to be analysed in conjunction with the reinforcement of Newco's position in related markets. Newco will, due to the vertical integration brought about by its establishment, have a strong or dominant position across all relevant infrastructures for the carriage of telecommunication services, as well as in cable TV, DTH and digital terrestrial television (DTT), and is in a strong position to develop Internet and interactive services. Following the concentration, not only the content suppliers would have a strong incentive to contract with Newco, but Newco itself will have an incentive to leverage its privileged position at the infrastructures level into the downstream distribution levels. In particular, Newco will have the economic incentive to invest heavily in the acquisition of the most valuable content from content providers and broadcasters in order to irreversibly tilt in its favour the emerging multi-media markets in the Scandinavian countries. In doing so, Newco would have the incentive and ability to target existing competitors, such as Netcom/MTG, which prior to the proposed concentration are important players on the market, in terms of ownership of content and relations with individual subscribers (through analogue decoders).

Satellite capacity

266. Satellite transmissions are used for distribution of TV-signals, telephony and other communication services. In respect of TV-signals, the customer can be either a broadcaster (CNN, Eurosport, Canal+ etc.) or a TV distributor (such as Canal Digital, Telia and Telenor). The service may include the provision of uplink services (transmission to the satellite), encoding and various other technical services.

Acquisition and distribution of television signals

267. In the notification the parties do not differentiate between the provision of TV distribution infrastructure (whether satellite transmission or cable infrastructure) and the packaging and sales of various individual TV-channels or bouquets thereof.
268. The parties, however, argue that distribution of DTH and cable television should be regarded as separate markets and that, on that basis, there is no overlap between the existing activities of Telia and Telenor. The parties base this argument on the

contention that DTH and cable, from a broadcaster's perspective, are complementary rather than alternative: the broadcaster simply wants to reach as many viewers as possible. In support of this contention, the parties have submitted that all broadcasters sell rights to their programming in the Nordic region separately for DTH and cable. Moreover, for the consumers, it is stated that the substitutability is negligible: the customer is either passed by cable, in which case he will not be interested in DTH, or he is "forced" to use DTH, as he is not passed by cable. Telia has submitted that its cable operation has not lost a single customer to a DTH operator over the last three years. The parties also consider that their definition of separate markets is supported by Commission Decisions 94/922/EC⁴⁰ and 96/177/EC⁴¹ in previous merger cases (Case IV/M.469 MSG Media Services and Case IV/M.490 Nordic Satellite Distribution).

269. The Commission's investigation, however, indicates that the issue of market definition may be more complex than proposed by the parties. The function of a cable TV network or a DTH operation is to provide a connection between broadcasters and viewers. The TV distributor is therefore active both on the upstream market for the acquisition of rights to content (as a buyer), and on the downstream market for the provision of TV services to individual viewers and/or intermediaries, such as landlords or owners of apartment buildings and operators of small and medium sized cable TV networks (SMATV). It may be appropriate to distinguish between the substitutability between cable and DTH on, on the one hand, the up-stream market for acquisition of content, and, on the other hand, the downstream markets for retail and wholesale TV distribution, despite the competitive link between these up- and downstream activities.
270. First, for the downstream market (that is where a cable or DTH operator sells its services to final customers), the parties' views that cable and DTH are separate markets has been contested by third parties. Whereas some technical and commercial differences do exist between these distributions methods, such differences are not necessarily more significant than between, for example, two competing cable TV operators.
271. For example, a distinction may be possible between the provision of the infrastructure service as such (meaning the physical connection of the cable structure in the building with, for example, Telia's network) and the transmission of the TV signals. In most cases the owner of the infrastructure will be the same entity as the transmitter of the TV signals. This is, however, not necessarily the case. For example, in SMATV the infrastructure may be owned by a housing association, whereas a third party may, in addition to transmitting the TV signals, also be contractually responsible for operation and maintenance of the cable structure in the building.
272. Also on the customer side there may or may not be identity between the buyer of infrastructure and content. Such identity normally exists for DTH, where an individual household will install a satellite dish and a decoder and subsequently

⁴⁰ OJ L364, 31.12.1994, p.1.

⁴¹ OJ L53, 2.3.1996, p.20.

purchase smart cards (infrastructure) in order to receive a selection of TV signals. However, in cable, the party who contracts with the broadcaster on behalf of the viewer (the infrastructure customer) is normally a building owner, landlord or housing association, which will charge the tenants the cost of this service as part of the rent. In addition, the individual households may, in a similar way as DTH households, purchase the right to view certain TV signals.

273. A difficulty in separating the infrastructure and transmission services is that the suppliers, to varying degrees, bundle the provision of these two services. Telia, for example, includes a wide selection of "basic tier" channels, which are sold to the owner of the building as a package together with the infrastructure services (connecting the building's internal network to that of Telia, and, possibly, maintaining and operating the building's internal network). This means that Telia's cable networks have a disproportionately low number of individual households as direct customers. Other cable operators offer a narrower "basic tier" and, consequently, have a proportionally higher number of individual households as direct customers.
274. Some third parties have submitted that the mode of distribution is unimportant, since both DTH and cable will give the viewer access to more or less the same range of TV-channels (although some channels are only available from one of the two DTH operators). In this respect it may also be noted that customers appear to pay more or less the same price for comparable cable and DTH services. For example, individual households in Sweden pay the same price (199 SEK) for comparable packages of TV-channels from Telia's cable operation (or any of its competitors) and Telenor's DTH operation. The only competing DTH package (Viasat) is about 10% more expensive. Third parties have also submitted examples of individual households in cabled areas (including those operated by Telia) which have invested in DTH reception equipment, and stated that this development may be expected to increase with the introduction of digital services, where the available capacity for TV-channels, as well as other services such as internet and telephony could make the cable and DTH offerings less homogeneous, thereby increasing the incentive for customers to switch.
275. In the near future, in the above-mentioned context of convergence, Newco would, if the proposed concentration was approved, offer a package of services such as voice, fast Internet access, digital pay-tv and digital interactive services. These services will naturally lead Newco to have an increasingly higher number of individual contractual relations directly with households which would complement the current collective contracts between Telia and landlords/building owners. As with analogue decoders, landlords will not accept responsibility for the payment by individual users for their use of digital decoders (Internet, interactive services, pay-TV, pay-per-view TV). These services will therefore necessitate direct individual contracts between Newco and the users. This, however, does not mean that the advantages that Telia has drawn from the landlord contracts will disappear. On the contrary, Newco will be in a position to use this collective bargaining model to significantly reduce the time and effort needed to switch over to the new digital multi-market

environment, and its ability to bundle various services will be a key factor in its ability to win such contracts⁴².

276. The alleged distinction between cable and DTH is therefore likely, in due course, to become less relevant in the new digital environment. First, as stated above, the trend in the relevant geographic markets will be towards an increasingly similar competitive structure, in the sense that all retail TV distributors will have individual subscription agreement with their viewers (which, as indicated above is needed for the digital decoders). Landlords will no longer act as the sole representative of the majority of viewers, and will consequently play a less important role in the distribution chain. Both cable and DTH will be distributed via individual contracts direct with viewers. Second, it is clear that customers will assess the new digital offerings by their ability to supply an attractive and broad range of services. Most customers are unlikely to have any strong preference for any particular technical means of delivering the new digital services, whether by DTH, broadband cable or cable/satellite in combination with a traditional copper telecommunications network as a return path for the interactive services. However, Newco's control over all of those delivery forms, would significantly reduce competition at the level of local access to viewers.
277. Second, in the upstream markets (that is to say where a cable or DTH distributor acquires the right to distribute content) it may be appropriate to distinguish the buying of rights to transmit TV-channels from the buying of individual content, such as individual films, sport and other events. Another potential distinction is between content in the form of advertising-financed TV channels and TV channels financed by low subscription fees (so called "mini-pay" channels), where the cable or DTH distributor acts as a wholesaler and normally bundles several channels into a bouquet on the one hand, and premium pay-TV channels on the other. In practice many TV channels in the first category have a revenue-base, which is a mix of advertising income and subscription fees. Moreover, both types of TV channels share a common interest in achieving as wide distribution as possible, as this, with minor incremental cost, will increase the revenues from advertising (which is directly linked to the number of connected households), and/or subscription fees. For this reason, most such broadcasters will seek to be included in the "basic tier" offering of any DTH-, cable- or SMATV operator, regardless whether the viewers of that operator will need a decoder to receive the "basic tier" offering. Broadcasters of premium pay-TV channels (mainly films and sport) generate their revenue from relatively high subscription fees paid by the viewer to access that specific channel, and are never included in the "basic tier". The cable or DTH distributor will often act as an agent for the premium channel, and the latter will normally set the prices. Broadcasters of premium pay-TV channels focus mainly on households that have already invested in decoders or other means to receive scrambled TV signals.
278. Several broadcasters have indicated that they regard cable, DTH and SMATV as competing distribution channels. The reason for this view, notwithstanding their wish to be as widely distributed as possible, is that although the economic model on

⁴² On 27 August 1999 Telia announced an agreement with HSB Malmö, by which it will connect 34 000 apartments to a broadband solution including high-speed Internet, telephony, mobile telephony and digital TV services.

which their broadcasting activities is built require a certain minimum degree of distribution in any given area, it is not necessary for them, in order to maintain a profitable business case, to achieve 100% penetration. According to these broadcasters, this fact has, prior to the notified concentration, allowed broadcasters a certain degree of flexibility in their negotiations with various distributors, which would disappear with the emergence of Newco.

279. In conclusion, there are a number of aspects which indicates that a certain degree of substitutability may exist between the cable-, DTH- and SMATV activities of Telia, Telenor and Canal Digital, both as far as the downstream retail TV distribution and the upstream content buying is concerned. However, for the reasons set out below, the question of market definition is not decisive for the assessment of the proposed concentration. If the parties' contention, as to the lack of horizontal overlap, were to be accepted the proposed concentration would, on the down-stream distribution markets, strengthen Telia's dominant position in the Swedish market for cable TV. If any of the alternative market definitions were to be adopted (combined national markets for Cable TV and DTH, or Scandinavian or Nordic markets), the proposed concentration would still create or strengthen a dominant position. Equally, on the content buying market, the notified operation would create a dominant position regardless of whether the parties' cable, DTH and SMATV activities are considered to be on the same or on neighbouring markets (see below).

Wholesaling of rights to content

280. The parties have stated that they, as well as their main competitors in DTH and cable distribution, contract directly with the broadcasters. The market for wholesaling of rights to content is therefore, at present, essentially limited to sales to small and independent cable operators (SMATV). Telenor and, to a lesser extent, Telia, are active in this market, which is linked to the markets for buying of content, in the sense that a distributors' right to use certain content for its own distribution activities and for its wholesaling activities is normally regulated in a single agreement with the broadcaster.

Technology for technical services relating to pay TV

281. Technical services relating to pay TV includes services such as encryption and decryption of TV-signals, handling conditional access systems, marketing of decoders and smart cards. Telenor has developed a proprietary conditional access system for the scrambling and unscrambling of TV signals (Conax). Some of the technical functions are highly sensitive from a commercial viewpoint, as they allow access to customer data and details of agreements with broadcasters. Both parties provide these services "in-house". In addition, they provide some of these services to competing cable TV operators.

B Relevant geographic markets

282. For the TV distribution markets, the parties have, largely relying on past Commission decisions (see above), argued that the markets for provision of DTH distribution, cable television, content buying, wholesaling of rights to content and technical services relating to pay TV are national. They have also stressed that these activities need the support of national service organisations, that legal regimes differ and that broadcasters normally sell the right to content on a national basis.

283. In their Reply to the Statement pursuant to Article 18 of the Merger Regulation ("the Reply"), the parties have stated that the market for satellite transponder capacity is European, and that other satellite companies (Eutelsat and Astra) provides a service which is substitutable to those of Telenor.
284. The parties' contention in the Reply is however contradicted by the facts relating to Telia's lease of transponder capacity from NSAB. At the time when Telia made this strategic investment, one of the alternatives considered was to lease capacity from Eutelsat, where Telia, as the Swedish telecoms incumbent, is a shareholder. Telia, however, rejected the Eutelsat alternative, despite the fact that the required capacity was available from Eutelsat for roughly half the price offered by NSAB (and also that the shareholding in Eutelsat would have provided better possibilities to influence the strategic decisions of the satellite provider). The reason why Telia, despite these advantages, decided not to lease capacity on Eutelsat is that it does not provide an attractive footprint for transmissions aimed at the Nordic countries, and that almost all potential viewers in that area have their dishes directed to the Telenor and NSAB satellites. Consequently, from a broadcaster's perspective, the use of any other satellite position for the purposes of broadcasting to Nordic viewers would involve very significant costs related to convincing a sufficient proportion of viewers to either stop viewing all the Nordic interest programming offered from Telenor's satellites (and that of NSAB), or to invest in a second dish. From a viewers perspective, it is not possible to simply turn the dish towards Eutelsat or Astra, as there is no Nordic broadcaster transmitting from those satellites. The parties' contention in their Reply, as to the European market for satellite transponder capacity, can therefore not be accepted. For these reasons, the Commission maintains the view expressed in the NSD case, that the market for satellite transponder capacity is Nordic.
285. A number of third parties have suggested that the markets for retail TV distribution and content buying should be seen as Scandinavian (that is, Norway, Sweden and Denmark) or Nordic (that is, the three countries mentioned plus Finland). The main reasons given for this viewpoint relate to the wider-than-national nature of the parties' upstream activities. First, there is general agreement that satellite transponder capacity is provided on a Scandinavian or Nordic basis. Second, contrary to the view of the parties, most third parties have submitted that contracts for the right to distribute content (commercial channels and pay-TV content, such as films and sport rights) are often concluded on a Scandinavian or Nordic basis. Cultural and linguistic factors are not considered as significant obstacles to transmitting largely the same material in all Scandinavian countries, for example, all countries share the common tradition of having programmes with subtitles. Moreover, third parties expect Newco to develop further its pan-Scandinavian (or pan-Nordic) purchasing in order to feed all its downstream TV distribution activities, with the consequence that the conditions of competition will become even more homogeneous. The parties' argument, according to which individual cable-TV customers cannot switch to suppliers from outside their country, is clearly not an obstacle for considering a wider market definition as far as content buying, wholesaling of rights and technology for pay-TV is concerned. For retail TV distribution, the customers' (in particular cable TV viewers) choice of suppliers is currently restricted by the available technical means of access and the broadcasting rights held by the various distributors. However, in view of the transition to digital services, in combination with the trend towards pan-Nordic contracts for distribution

rights, it may be appropriate to take a broader (that is Scandinavian or Nordic) view also on this market.

286. However, for the purposes of this decision it is not necessary to conclude on the exact geographic scope of the market, given that the notified operation would create or strengthen a dominant position at several levels of the distribution chain for the provision of television services, regardless of whether this is assessed on a National, Scandinavian or Nordic basis (see below).

C Competitive assessment

Satellite capacity

287. Telenor is the largest provider of satellite transponder capacity in the Nordic area. Its Thor and Intelsat⁴³ satellites at 1° West have a total of 48 transponders. In their Reply the parties' have stated that all of Telenor's transponders are suited for the transmission of television signals. However, only 34 of Telenor's transponders are so-called BSS transponders, which for technical reasons are suited for transmission of DTH television signals. The 14 remaining transponders (the Intelsat transponders) can be used, for example, to feed cable TV networks, but are not suited for DTH transmissions. All of Telenor's satellite transponders have a "Nordic footprint". Furthermore, Telenor has concrete plans to increase its capacity even further in the near future, through the launch of another satellite. Telenor and Canal Digital have invested significant amounts in its technical facilities, and have established the only Nordic platform for the transmission of digital TV-signals.
288. Telia does not own any satellite capacity but has been, since 1997, one of the most significant customers of NSAB, Telenor's only competitor with a specific "Nordic footprint". In their Reply, the parties have argued that Telia is not a strategic customer for NSAB. However, this argument is flawed, since it relies on the contention that Telia will not use its leased transponders to develop any services that could induce other customers to want to be on the same satellite as Telia. As will be explained below, to the extent that this contention is correct, this is one of the consequences of the proposed concentration. Therefore, the fact remains that Telia, at the time when it entered into a [long-term]*lease for [...]*NSAB transponders, had concrete plans to develop a DTH-business in competition with Telenor, and therefore leased BSS transponders, which, as explained above, are specifically adapted for the transmission of DTH-signals. The leasing period corresponds to the expected life-time of the satellite.
289. At the time of the leasing agreement, these transponders represented [...]*of NSAB's capacity, and from NSAB's viewpoint it was clear that Telia intended to develop a competing DTH service. The contention that Telia is not a customer of strategic importance for NSAB can therefore not be accepted.
290. Apart from the investment in the lease of satellite transponders (the annual cost of which represents a significant proportion of Telia's cable TV turnover), Telia has also made a strategic investment in uplinking facilities in Stockholm. From a

⁴³ Telenor leases all available transponders on the Intelsat satellite at 1° West.

technical viewpoint Telia would therefore, in the absence of the proposed concentration, be in a good position to commence distribution of television and other signals direct to individual customers via satellite (see below).

291. Following the concentration, Newco would control 34 to [...] BSS transponders (depending on whether the NSAB-transponders leased by Telia are included or not) out of a total of 51 BSS transponders at 1° West and 5° East. Thus, Newco would control [60-80%] of the total number of transponders suitable for DTH television broadcasting to the Nordic area. As stated above, Telenor is of the view that [...] of its [...] transponders are suitable for television broadcasting to the Nordic area. If all of those [...] transponders were to be included in the calculation, Newco's share of the available transponder capacity for television broadcasting would increase to [...] out of [...] (again depending on whether the NSAB-transponders leased by Telia are included or not). This would represent [70-80%] of the total capacity available.
292. In their Reply, the parties contend that the number of transponders available to NSAB is higher than indicated above. This is incorrect. NSAB currently has two satellites at its 5° East orbital position (Sirius I and Sirius II). The former has four effective BSS transponders. The latter has 32 transponders. However, out of these 32 transponders, six are only suitable for communication purposes (not for television broadcasting). Thirteen of the remaining 26 transponders are not owned by NSAB. These transponders are owned by GE Americom, and are not directed towards the Nordic region⁴⁴. Consequently, the total number of transponders for television broadcasting that is currently available to NSAB is 17 (or 11 if the transponders leased by Telia are deducted), as indicated in the above percentage figures.
293. The parties are also of the opinion that NSAB's transponders should be increased with the number of transponders available on the Sirius III satellite, which is owned by NSAB. This satellite is currently leased to Astra, and not used for Nordic broadcasting. However, when this lease arrangement ends in October 1999, the satellite is planned to be moved to NSAB's own position at 5° East. If such a move is done, Sirius III would replace Sirius I (which, due to the fact that both satellites transmit on the same frequencies, cannot be used simultaneously). The total number of transponders available to NSAB would then be 27 (or 21 if the transponders leased by Telia are deducted), and not 31 as claimed by the parties in their Reply.
294. As with any future occurrence there is a certain degree of uncertainty as to whether or not Sirius III will actually be moved to 5° East and kept in this position. One of the factors influencing this decision will be the impact of the proposed concentration on NSAB's ability to attract broadcasters. However, even if Sirius III is positioned at 5° East, the parties have not provided convincing arguments as to why this would improve the competitive position of NSAB. First, even in the present analogue situation (where one transponder is needed to transmit one TV channel), Telenor as well as NSAB have significant spare capacity. In the digital environment, the

⁴⁴ When Telia evaluated its various options for DTH transmission, it concluded that it could only use the GE Americom transponders if it were to lease all thirteen transponders, since the entire beam would have to be redirected towards the Nordic region.

existing capacity will be multiplied, since one transponder can be used to broadcast 6-8 TV channels. This will mean that the currently available Telenor satellites, from a technical viewpoint, will be able to transmit all current analogue signals in the digital format. The same is true for NSAB. It is therefore not clear, as the parties argue, in what sense NSAB's market position could be strengthened by the addition of more transponder capacity at its satellite position. Second, as mentioned above, Telenor also has plans to add another satellite at 1° West (Thor IV) According to the notification, Thor IV is planned to be launched in 2002⁴⁵. Thus, any potential advantage flowing from the addition of new capacity is likely to be replicated or exceeded by Telenor within the near future. Third, as will be explained below, there are strong indications that the proposed concentration, in its notified form, would have significantly weakened the competitive position of NSAB. The question of NSAB's available capacity is therefore largely irrelevant for this assessment.

295. NSAB's owners are SSC, Teracom (37,5% each), and Tele Denmark (25%). NSAB is not vertically integrated into any of the vertically related activities performed by Telia and Telenor. The investigation has indicated that Newco, in view of its position as the only vertically integrated provider of satellite transponders with a Nordic footprint, would be the only supplier able to offer broadcasters a bundled service consisting of satellite infrastructure and retail distribution (cable and DTH). Following the concentration, the number of viewers connected to Newco's retail distribution would have increased significantly, and would have covered up to 70% of all TV households (see below). Given that Telia would have contribute the largest cable-TV network in Sweden to Newco (with approximately 1.3 million connected homes), this would have considerably strengthened Newco's ability to convince buyers of satellite transponder capacity not to purchase such capacity from its only competitor, NSAB.
296. Telenor has already started an aggressive strategy to induce broadcasters to move from NSAB to the Telenor satellites (and it is alleged that transponder capacity has been offered free of charge to at least one of NSAB's customers⁴⁶). In their Reply, the parties' have contested this, and stated that they have not offered free capacity, but a penetration based contract, according to which the payment for the satellite capacity is based on the number of viewers that the broadcaster will reach. It is difficult for the Commission to take any firm view on these arguments before the National Competition Authority has reached a decision on this dispute. However, the relevant conclusion from this example confirms that broadcasters can be persuaded to choose their satellite provider on the basis of contracts linked to the achieved penetration. Following the concentration, Newco would therefore have been in a significantly stronger position than NSAB, which, due to its lack of downstream integration, will not be able to guarantee access to any cable or DTH viewers. Moreover, the concentration would not only have increased Newco's ability to offer broadcasters access to retail distribution, it would simultaneously have decreased the ability of NSAB to do so, as it no longer may have found Telia's cable TV unit to be as interested in carrying services provided through NSAB.

⁴⁵ According to information on Telenor's home page, Thor IV may be launched already in 2000 or 2001.

⁴⁶ This matter has been brought to the attention of the Swedish Competition Authority, case number Dnr 353/1999. No decision has been adopted at this stage.

297. It further appears that third parties now doubt the viability of NSAB as a competitor if the proposed transaction were to proceed in its notified form. It could be argued that this view was shared by Telenor, as it, shortly before the notified transaction was announced, choose not to continue the previously existing cooperation with NSAB in the promotion of the "Nordenparabolen" dish. This analogue dish is capable of simultaneous receiving the signals from Telenor and NSAB. Had Telenor believed that a significant number of broadcasters would remain on NSAB after the completion of the notified operation, it would have been logical to continue this cooperation. In their Reply, the parties have stated that Telenor's agreement with NSAB for the promotion of the "Nordenparabolen" dish expired in 1998, and that the company decided that it was in its commercial interest not to pursue this cooperation, but that it nevertheless still promotes the "Nordenparabolen" dish. This argument, however, fails to address the key-issue, which is that the actions of Telenor confirms that it regards itself as likely to gain if viewers use dishes directed at only one of the two Nordic satellite positions⁴⁷. In any event, Telenor's decision to end the "Nordenparabolen" cooperation will no doubt have an impact on the competitive position of NSAB, given that a significant number of viewers in the Nordic region will not be able to receive signals from its satellites.
298. The investigation therefore shows that the notified concentration, would have enabled Newco to significantly reduce or even eliminate the existing competition from NSAB. This would not only have created a dominant position on the market for the provision of satellite transponder capacity, but would also have considerably strengthened Newco's control over all levels of the TV distribution chain. It would have put Newco in a gatekeeper function, where any company wishing to participate at any level of the distribution chain would have to contract for transponder capacity with Newco.
299. The parties have argued, first that Newco will not become a "bottle-neck provider" of satellite transponder capacity in the Nordic region. They base this primarily on the existence of a competing provider of such services, NSAB, and the key-role of NetCom/MTG⁴⁸ as a buyer of transponder capacity and provider of broadcasting services for its own TV-distribution interests. NetCom/MTG is active as a broadcaster through, inter alia, TV3 and TV1000, which are distributed in all Scandinavian countries. It is also, through Kabelvision, active in cable TV in Sweden, and, through Viasat, in analogue DTH distribution in all Scandinavian

⁴⁷ Canal Digital's home page contains the following statement: "All channels that we distribute can be received from one and the same satellite position. This means that you do not have to install multiple microwave heads on your dish."

⁴⁸ Netcom, MTG and Kinnevik are quoted separately on the Stockholm Stock Exchange, while Netcom and MYG are also separately quoted on NASDAQ. The Commission has been informed that maintaining those separate listings requires the companies to comply with Stock Exchange requirements as to independent management and arm's length dealing. Nevertheless, the parties have assumed that the Netcom and MTG should be seen as a group for the purposes of this assessment, given that Kinnevik (the Stenbeck family) has significant interests in both companies. For the purposes of this decision the Commission has followed this assumption, which is the one most favourable to the notifying parties. (The telephony interests of Netcom/Tele2 are described under the section dealing with such services.)

countries. It has no own interests in any satellite operation, but leases capacity from Telenor and NSAB.

300. The parties' argument concerning the role of Netcom/MTG as a buyer of transponder capacity, however, fails to fully take into account the medium- to long-term effects of the proposed concentration. It is true that Netcom/MTG has certain competitive strengths, including the brand names of its TV channels. However, these strengths should not be overstated. First, Netcom/MTG acquires most of the content for its channels from third parties, including US and other production studios and sports organisers. As such the company is to a certain extent vulnerable, given that most viewers will be loyal to specific content (which can be acquired by another broadcaster in the future), rather than to the channel brand. This means that Netcom/MTG is dependent on maintaining its current distribution level (which is the basis for its advertising and other revenues) in order to finance the continued acquisition of attractive content and thereby maintain the loyalty of its viewers. In their Reply, the parties have argued that Netcom/MTG has already concluded a number of agreements, some of which are exclusive, with various US and other production studios and sports organisers. This argument relates mainly to the present position of Netcom/MTG on the downstream markets for retail distribution, which will be analysed below. For the purposes of assessing the concentration's impact on the satellite transponder market, it is sufficient to conclude the majority of the indicated contracts are due to expire between 1999-2003, and therefore, regardless the level of protection that Netcom/MTG currently has on the basis of its concluded agreements, these agreements are of limited duration. One of the "major sports deals" relied on by the parties to show the alleged strong position of Netcom/MTG concerned Italian League football. In their Reply, the parties indicated that Netcom/MTG held these rights until 2001. However, on 1 September 1999, it was announced that Canal Digital had acquired the Nordic rights to Italian League football, and will commence transmissions on 12 September 1999. Therefore, since Canal Digital apparently is able to outbid Netcom/MTG for these "major sports deals", it is not possible to regard the existence of these supply agreements as a permanent feature of the market, when assessing whether Netcom/MTG will have the ability and incentive to support NSAB as an alternative satellite provider to Newco.
301. Second, the relative strength of Netcom/MTG compared to Newco can be illustrated by the fact that Netcom/MTG, even prior to the proposed concentration, has been forced to accept a very disadvantageous distribution agreement with Telia. In fact, Netcom/MTG has to pay Telia to have its most popular channel, TV3, distributed in Telia's cable network. In their Reply, the parties have sought to challenge this conclusion by stating that TV3 is not the only broadcaster who pays Telia for distribution in its cable TV network. However, this argument is flawed. Even if Telia, as a dominant cable TV operator, has been able to impose disadvantageous terms on all broadcasters, this does not in any way weaken the conclusion that Netcom/MTG is dependent on Telia for distribution, and that this dependence would have increased after the creation of Newco.
302. In view of these circumstances, the parties' argument that Netcom/MTG would be able to balance Newco's apparent strengths in the provision of satellite transponder capacity (or on any other level of the distribution chain) appears doubtful.

303. However, even if it, despite the above, were to be accepted that Netcom/MTG, as the main competitor of Newco may have an incentive to use the NSAB satellites, so as not to become entirely dependent on Newco, it would be increasingly difficult for it to continue to support NSAB if most other broadcasters were to move to Newco's satellites. First, the fewer customers that NSAB will have, the higher the prices it will have to charge to cover its operating costs, including future investments in digital capacity. It is not reasonable to assume, as the parties do in their Reply, that NSAB will reduce its prices if its spare capacity were to increase as broadcasters moved to Newco. Whereas it is true that investments in satellites to a large extent represents sunk costs, it cannot be assumed that NSAB would continue to operate its Nordic broadcasting business, unless a reasonable return on the invested capital can be generated through the lease of satellite capacity. If, following the concentration, NSAB could no longer attract Nordic broadcasters, it is more likely to sell or lease the satellites to another operator, who would move them to another orbital position, than, as the parties suggest, to assume that it would continue a loss-making operation. Nor is it correct to state, as the parties have done in their Reply that NSAB is not dependent on revenues from its Nordic broadcasting activities, since such revenues make up a large majority of NSAB's total revenues..
304. The situation for Newco would be the reverse, namely that the more customers it could attract by offering vertically bundled services, as illustrated by the above mentioned penetration based contracts, the lower the prices it would have to charge. Newco would therefore have had an important cost advantage compared to NSAB. Second, Netcom/MTG would in its capacity as a broadcaster of commercial and pay-TV have become even more dependent on Newco for distribution than it has been so far on either Telia or Telenor. This would have further reduced Netcom/MTG's ability to negate the market power of Newco by supporting NSAB. Third, NSAB is for technical reasons, not able to reach a significant number of viewers, primarily in Norway and Denmark, whose reception equipment is directed only towards Telenor's satellite position, and therefore cannot receive signals from NSAB. Any broadcaster, including Netcom/MTG, would therefore lose a significant proportion of their DTH viewers if it were not carried on Telenor's satellites.
305. In their Reply, the parties have indicated that this will no longer be the case in the digital environment, since these customers will have to buy a new decoder and, usually, a new microwave head.
306. Whereas there is general agreement that all viewers need a new decoder to receive digital signals, this clearly has no impact on the possibility to reach DTH customers who are tuned in only to Telenor's satellite position. Concerning the need to exchange the microwave head on the dish, the parties have justified their view that this will be necessary by stating that "a new LNB (microwave head) is usually necessary because old LNBs are not compatible with new analogue and digital decoders". The parties have not explained why, in their view, it would be relevant to assess the requirements for the transition to digital by comparing the need to replace old analogue microwave heads, that apparently are incompatible also with new *analogue* decoders.
307. Third parties do not agree that it is technically necessary for the switch to digital to replace existing dishes or microwave heads. Furthermore, from a commercial viewpoint, Canal Digital and Telia have both started to operate digital services and

are offering subsidised prices to customers for proprietary decoders that will not accept Netcom/MTG's smart cards. Therefore, the argument put forward by the parties at the Oral Hearing - that Netcom/MTG would be able to "piggy-back" on digital technology investments made by the parties - is not supported by the facts. In view of the above, the parties contention that the move to digital services will reduce Netcom/MTG's dependency on Newco's satellite services cannot be accepted. Consequently, neither can the parties second contention be accepted - Netcom/MTG would not have been able to provide support to NSAB, thereby removing the above-mentioned negative effects of the concentration for NSAB's competitive position.

308. Finally, in their Reply, the parties argue that they face the threat of new entry from Intelsat. As stated above, Telenor currently leases and operates all broadcasting capacity at the Intelsat satellite on 1° West. The parties have not provided any explanation as to why it would not be reasonable to assume that Telenor would also be involved also in any further capacity that Intelsat may position at 1° West. The impression that any new capacity introduced by Intelsat would be more likely to co-operate with Telenor is strengthened by the fact that Telenor apparently have access to confidential business plans of Intelsat. Moreover, the parties have not been able to provide any reason as to why Intelsat, if it were to enter the market independently of Telenor, would not face all the difficulties to attract broadcasters that have been described above in relation to NSAB. If anything, Intelsat's difficulties would be even greater, given that it has no market position to build such an entry on. The Commission cannot therefore accept that there is any indication that Newco's position in the market for satellite transponder capacity would be constrained by new entry from Intelsat.

309. In view of the above, it must be concluded that the proposed concentration, in its notified form, raised significant concerns relating to the provision of satellite transponder capacity. Moreover, the effects of Newco's position in this area would also have produced competitive concerns on the downstream markets (see below). It therefore has to be concluded that the notified concentration would have created a dominant position as a result of which effective competition would have been significantly impeded in the Nordic market for the provision of satellite transponder capacity.

Retail TV distribution (to individual households)

310. As indicated above, the parties consider that the relevant market for retail TV distribution should be assessed nationally, on the basis of separate markets for cable TV and DTH. On the other hand, there are a number of indications that the market should be seen in a wider context, both from a product and geographical viewpoint. However, as it is the Commission's view that the proposed concentration would create or strengthen a dominant position, regardless of which of these approaches is followed, this section will assess the impact of the proposed concentration on the level proposed by the parties, as well as on a combined market for cable TV and DTH (nationally and Scandinavian/Nordic).

i. National markets for cable TV and DTH (taken separately)

A. Cable TV

311. In Norway, Telenor owns the second largest cable TV network, which connects approximately [30-40%]*of all Norwegian cable TV households. Similarly, Telia owns the second largest cable TV network in Denmark. According to the notification, Telia has a share of [10-20%]*of all connected households in Denmark ([30-40%]*if cable and SMATV are combined). Tele Denmark's share is indicated as [80-90%]*in cable TV and [50-60%]*if SMATV is included. On the hypothesis that the relevant market for cable TV distribution is national, it is not necessary for the purposes of this decision to consider the effects of the proposed concentration in Norway and Denmark.
312. Telia owns the largest cable TV network in Sweden. In 1998, 1.250.000 households were connected to its network ([50-60%]*of all Swedish cable-TV households)⁴⁹. In addition, 50.000 SMATV households were connected to Telia's network. The number of households connected to Telia's network has grown over the last four years. Of the competing operators Kabelvision (the Netcom/MTG group) has [10-20%]*, Stjärn TV has [10-20%]*and Sweden on Line [0-10%]*.
313. In the notification, the parties expressed the opinion that market shares should be measured by pay-TV revenues instead of number of connected households. On that basis, and if pay-TV revenue, as proposed by the parties, were to be defined as revenues paid by individual households for pay-TV services, Telia's market share in Sweden has been stated to be [20-30%]*Kabelvision would then have [30-40%]*, Stjärn TV [20-30%]*and Sweden on Line [10-20%]*.
314. The large variations resulting from the two methods of calculation can be explained by the commercial methods employed by Telia compared to its competitors. Telia normally sells a bundled package of infrastructure services and a relatively large number of TV-channels as a "free basic tier" to landlords and other building owners. Telia does not consider the revenues from these sales as pay-TV revenues. Instead, it includes only revenues resulting from individual households that pay for receiving additional channels on top of the basic tier. Kabelvision and the other cable operators have a different commercial strategy. They provide only a relatively narrow basic tier (mainly consisting of the "must-carry" terrestrial channels), and therefore sell most of their services as "pay-TV" according to the parties' definition. The weaknesses of this definition are evident, as it effectively means that all Telia customers who subscribe only to the "basic tier" will generate zero turnover according to the proposed market definition. However, if another customer subscribes to exactly the same channels in one of the competing cable operator's networks, most of the generated turnover would fall within the parties' definition. More than [45-55%]*of Telia's revenues from cable TV comes from landlords and building owners. It is therefore remarkable that the parties have sought to exclude this part of Telia's turnover from their defined "pay-TV"-market, in particular, as they have done this without taking the excluded turnover into consideration at all. On the basis of its most recently submitted figures, Telia's market share would be [55-65%]*greater than that of Kablevision, if total revenues were used as a basis for the calculation.

⁴⁹ According to Telia, [...]Swedish households (of a total of 3 980 000) are passed by its cable network, i.e. are located within 50 metres of the cable.

315. More importantly, the investigation has shown that Telia, as well as its competitors, normally states its market significance by reference to connected households, rather than "pay-TV revenues" (see, for example, Telia's 1997 Annual Report). Moreover, in cases of acquisitions of cable networks, the valuation is generally made on the basis of connected households. Digitalisation is widely expected to further increase the importance of the size of the cable TV network, *inter alia*, as it will allow to spread the considerable investments over a larger number of customers. In view of the above, The Commission concludes that the relevant measurement for the market power of the parties is the number of connected households.
316. The parties have submitted that there are no geographical concession areas for the provision of cable TV services in Sweden. This means that in the analogue environment, the single most important factor for a cable TV operator to be competitive is the ability to supply sought after channels and programming, at prices which are attractive to landlords and/or individual households, depending on the chosen distribution methodology. As has been indicated above, Telia has already prior to the proposed concentration, on the basis of its control over more than [55-65%]*of the market, been able to achieve significantly better conditions from broadcasters than other Swedish cable TV operators (including the terms negotiated for the distribution of TV3, which the parties consider to be a "must-carry" channel). This ability to achieve preferential conditions is indicative of Telia's dominant position on the Swedish market for cable TV services. Furthermore, the growth of Telia's cable TV business over the last four years confirms that none of the smaller cable TV operators have been able to significantly challenge this position.
317. The vertical effects resulting from the proposed concentration would significantly strengthen Telia's dominant position. First, Newco would, as has been explained above, acquire a gate-keeper position for the provision of satellite capacity. TV channels that are supplied in a cable TV network normally reach the cable operator through satellites. This means that Newco will be able to offer broadcasters a bundled service consisting of satellite transmission and access to Telia's cable TV network. Prior to the concentration, Telia did not have this ability⁵⁰. None of the other Swedish cable TV operators is vertically integrated into satellite services. Following the concentration, Newco would therefore gain a unique ability to attract broadcasters.
318. Second, as will be explained below, Newco would, in its capacity as a buyer of content, become an obligatory partner for any broadcaster wishing to address Swedish (and other Nordic) viewers. From a broadcaster's perspective, the market is not restricted to Swedish cable TV. Instead broadcasters normally wish to receive as widespread distribution as possible. The investigation has shown that distribution agreements between broadcasters and Nordic cable TV and DTH operators often include the whole of Scandinavia or the Nordic area and covers rights to cable TV, SMATV and/or DTH. Under the assumption of separate national markets for cable TV and DTH, it is therefore clearly relevant that Newco would have significant activities on a number of neighbouring markets, and that it would, in total, control access to almost twice as many Nordic households as Telia did before the

⁵⁰ Telia's plans for launching DTH transmission will be explained below.

concentration. Newco will therefore be in an even stronger position in negotiations with broadcasters that Telia has been so far.

319. Third, as will be explained below, Newco would be in a position to impose Telenor's proprietary technology as a *de facto* Nordic standard for TV broadcasting. This would mean that other Swedish cable TV operators would have to license their encryption technology from their dominant competitor. Therefore, as a consequence of the proposed concentration, a new form of dependency would be created between Telia and the other Swedish cable TV operators.
320. In their Reply, the parties have stated that Telia's position as a cable TV operator in Sweden is contestable, by other existing cable TV operators, broadband network specialists and even by individual cable TV customers, who own the intra-building network, and, in the parties' view, could operate these themselves. This contention is not supported by the facts. In their Reply, the parties state that "Telia has not lost a significant number of contracts so far". In fact, as indicated above, the number of households connected to Telia's cable network has grown over the last four years. It must therefore be concluded that the parties have not been able to demonstrate that there is such a likelihood that Telia's current growth trend would be reversed, in particular in view of the competitive advantages resulting from the proposed concentration, so as to allow a finding that Telia's market behaviour is likely to be significantly constrained by the fear of significant loss of customers through any of the indicated means.
321. In conclusion, the pre-existing dominant position of Telia on the Swedish cable TV market would be significantly strengthened through the vertical integration into the provision of satellite services, and Newco's strengthened position as a buyer of content. It is likely that these effects would enable Newco to achieve even more preferential distribution agreements than those that Telia has concluded in the past. Consequently, the proposed concentration would further reduce the competitive ability of other Swedish cable TV operators. Moreover, Newco's position as a provider of technical services, would create a new form of dependency between Telia and the other Swedish cable TV operators, that would further reduce the ability of the latter to compete effectively with Newco.
322. The parties have submitted that the on-going transition from analogue to digital transmission techniques will provide new opportunities for existing and new competitors. In that context it may be noted that Telia has already introduced digital services in its cable TV network⁵¹. Most of the smaller Swedish cable TV operators have not so far been able to undertake the significant investments that Telia has made, which are needed to upgrade the cable TV networks to digital. As was stated above, Telia has adopted a strategy whereby most households connected to its cable network receive a relatively large number of TV channels in the analogue "basic tier", which means that the decoder penetration in the network is low compared to other cable operators. The fact that Newco's cable TV networks have a low level of (analogue) decoder penetration can be expected to facilitate the introduction of digital decoders, as the viewers will not have to be persuaded to make a second investment. Moreover, the system where Telia contracts with the landlord or

⁵¹ Telenor plans to launch digital services in its cable TV network next year.

building owner, rather than with the individual households directly, can be expected to facilitate the launch of digital services. In their Reply, the parties have contested this by providing an example from the United Kingdom, which in their view indicates that operators with high analogue decoder penetration are in a better position to introduce digital decoders. Whereas that may be true for the United Kingdom, the market conditions appear to be different in the Nordic countries. According to a press-release from Canal Digital⁵², only 20% of its new digital customers had previously had analogue equipment. Telia has not submitted any corresponding figures from the introduction of digital services in its cable TV network. The parties' contention that they will be at a competitive disadvantage for the introduction of digital services can therefore not be accepted.

323. Once the cable TV network is converted into digital, each household will need a digital decoder to receive the signals. Telia offers households who subscribe to its digital services subsidised digital decoders. As will be explained below, Newco would be able impose Telenor's proprietary technology in the digital decoders used in its distribution networks after the concentration has been implemented. The digital decoder will be necessary to introduce value-added services, such as Internet connectivity, video-on-demand (VOD) and near video-on-demand (NVOD) or pay-per-view (PPV). These services should be attractive to viewers. It therefore has to be concluded that there is no reason to believe that the introduction of digital services would weaken the position of Telia on the Swedish cable TV market. On the contrary, the fact that Newco is in a significantly stronger position as regards the introduction of digital cable TV services than any of the other Swedish cable TV operators is likely to constitute another significant competitive advantage, and will further reduce the ability of smaller cable TV operators to challenge the strengthened dominant position of Newco.
324. In conclusion, as has been demonstrated above, the proposed concentration would, if the parties' proposed market definition was to be accepted, strengthen Telia's dominant position on the Swedish market for cable TV services.

B. DTH distribution

325. Telenor (Canal Digital) is one of the two existing analogue DTH operators in Sweden (and in the Nordic region in general). The other analogue DTH operator is Viasat (the Netcom/MTG group). According to the parties, there are currently about [5-600.000]*Swedish households connected to the two analogue DTH providers. The analogue DTH receivers used in Sweden (and in the rest of the Nordic region) normally contains two slots for smart cards. Moreover, as described above, most Swedish DTH households use the "Nordenparabolen" dish, which can receive signals from both 1° West (Telenor) and 5° East (NSAB). In the analogue environment, most DTH households can therefore simultaneously subscribe to both Canal Digital and Viasat (dual users). Traditional market share calculation is therefore difficult and not particularly meaningful. In 1998, Canal Digital's analogue DTH distribution in Sweden reached [60-70%]*of all analogue DTH households. Viasat reached [70-80%]*of all such households.

⁵² 5 July 1999.

326. Analogue DTH distribution in Sweden (and the other Nordic countries) differ from the cable TV distribution in one significant respect. Whereas historically, in cable, most TV-channels are available in all cable networks, the DTH packages offered by the two DTH operators are less homogeneous, given that some TV-channels are available only from one of the two DTH distributors. For Viasat, this is the case for the channels produced by the Netcom/MTG group (the Swedish, Norwegian and Danish TV3 channels, TV1000 etc), for Canal Digital, this is the case for Canal+ and Kanal5 (and its sister channels in Norway and Denmark). TV3 and Kanal5 are respectively the first and second largest non-terrestrial TV-channels in Sweden. Both are advertising financed commercial channels. Whereas TV3 has a larger viewership share (about [5-15%]*), Kanal5 has almost doubled its share over the last years, and now reaches about [0-10%]*. Premium pay-TV channels is the other category of channels that are exclusively available on Canal Digital (Canal+) and Viasat (TV1000).
327. As can be seen from the above, the parties are correct in stating that prior to the proposed concentration, Viasat had been relatively more successful in marketing its analogue DTH service. The importance of this should, however, not be overstated. The fact remains that the analogue decoders used by most DTH households are able to receive the signals from both Canal Digital and Viasat. In order to switch supplier these customers need only to insert a new smart card into their decoder. Newco will therefore be able to reach the majority of existing analogue DTH households, and will already from day one have a contractual arrangement with [60-70%]* of all such households.
328. The relevant question is therefore whether the competitive advantages that Newco would gain from the proposed concentration are such that it will be significantly more difficult for Viasat to remain competitive in the DTH market. This assessment must be made in the light of the on-going transition to digital transmissions. As stated above, Canal Digital is the only provider of digital DTH signals in Sweden (as well as the rest of the Nordic region). This means that the company currently has a 100% share in this segment of the market. In their Reply, the parties have stated that Viasat could introduce digital DTH services within six months, and that one of the reasons why Viasat has not yet introduced such services is that it wishes to reduce the costs for double illumination (analogue and digital). From a technical point of view, it is not contested that Viasat could introduce digital DTH within a relatively short period of time. However, it is likely that the more significant constraint will be commercial. As the parties have pointed out the cost for double illumination is a significant factor. The fact that Canal Digital has been able to take on these costs can be explained by its vertical integration into Telenor's satellite services. Canal Digital does not, unlike Viasat, have to lease satellite capacity on commercial terms. Moreover, as indicated above, Netcom/MTG would not be able to "piggy-back" on the digital technology investments made by the parties, as the digital decoders that Canal Digital and Telia are providing to their subscribers will not accept smart cards from Netcom/MTG.
329. In any event, the fact remains that Canal Digital, at least in the short to medium term, is the only provider able to offer digital services to any new subscriber (or existing analogue DTH subscriber who would like to receive the value-added services available in the digital format). Moreover, Canal Digital has been able to conclude a number of exclusive agreements with broadcasters for digital

transmissions. Canal Digital's exclusive rights are more extensive in digital than in analogue. Moreover, for the same reasons as stated above regarding cable TV, the purchasing power of Newco will significantly greater than the pre-existing position of Canal Digital and Telenor. Finally, again as stated above in relation to cable TV, digital transmissions allows the introduction of value-added services, such as high speed internet downloading, NVOD, VOD and PPV, and Canal Digital will be the only supplier able to offer its customers these services. Consequently Canal Digital is in a strong position to gain additional market share as the existing dual users will convert from analogue to digital services.

330. This applies also to the SMATV segment, where, in the analogue environment, it has so far not been economically feasible to install value-added services that require relatively expensive upgrading of the infrastructure and the use of a decoder. It has, however, been suggested that digitalisation will allow the introduction of such services at a reasonable cost. Newco could therefore offer SMATV networks a "head-end in the sky", which would give these networks access to services that would otherwise be unavailable to them. Telia is currently using a similar concept to feed television signals into its Danish cable TV operation from its leased satellite transponders. Apart from the potential revenues of extending this activity, such a strategy would further increase the number of households connected to Newco's distribution system and further increase the buying power of Newco (see paragraphs 347 ff).
331. In addition to the above-mentioned effects that would strengthen Canal Digital's position in the DTH market, the concentration would remove Telia as a potential competitor in DTH. Prior to the announcement of the proposed concentration, Telia had positioned itself to enter the DTH segment. In 1997, when Telia took the decision to make the investment to enter into a [long-term]*lease for satellite transponder capacity from NSAB, it had plans to launch DTH distribution activities in competition with Telenor (and Netcom/MTG). Telia has argued that its decision not to go ahead with any DTH activities was adopted independently of the plans to merge with Telenor, and that the concentration therefore does not result in the removal of potential competition. Telia has, without providing any supporting evidence, argued that its abandoning of the DTH plans was due to its inability to convince broadcasters to grant it distribution rights for DTH. Apart from being unsupported by any evidence, this explanation therefore implies that Telia, after several years of contacts with broadcasters, would enter into a massive long-term investment in satellite capacity, without having ascertained that broadcasters could be convinced to provide it with the DTH rights needed to start the business. It is difficult to attach any importance to this explanation.
332. Moreover, it should be noted that Telia's decision to make the investments to enter the DTH segment was adopted by its top-level management and announced in the 1997 Annual Report. This is in contrast with the alleged "independent" decision not to go ahead with those plans (which essentially made the investment in satellite transponders redundant [...]*years before the leasing agreement is due to expire). Telia has been unable to provide any supporting evidence to indicate that its top-level management were involved in this decision, much less that it was adopted independently of the plans to merge with Telenor.

333. In conclusion, as has been demonstrated above, the proposed concentration would, if the parties' proposed market definition was to be accepted, strengthen Canal Digital's position on the Swedish market for DTH services, and remove Telia as a potential competitor. Nevertheless, the Commission considers that Viasat's existing position in the provision of analogue DTH services and the possibility that Viasat might be able to overcome the commercial obstacles involved in establishing a digital transmission business may be seen as a counterweight to the Newco's future market position. However, the Commission considers that the existing evidence clearly supports a finding that Newco, in future negotiations with broadcasters, will be able to credibly claim that it can guarantee access to a majority (or even all) analogue and digital DTH households. Viasat will not be able to make a similar claim, unless it leases additional satellite capacity from Newco and launches its digital transmissions.
334. There are thus strong indications that the proposed transaction may lead to the creation of a dominant position on the DTH market, in particular for digital DTH transmissions. In any event, given that the competition concerns on the DTH market are due to the same reasons as those relating to the strengthening of Telia's dominant position on the cable TV market, this question can be left open, as it would not materially affect the assessment of the notified concentration.

ii. Combined national market for cable TV and DTH

335. Some third parties have suggested that an assessment on a combined level for cable TV and DTH would be appropriate, in particular in view of the transition from analogue to digital broadcasting technologies. If this were to be accepted, the negative effects of the concentration would be the same as those indicated above. The only difference would be that, under this assumption, the concentration would involve an accretion of market shares, that is the addition of the market share held by Telia in its cable TV business, and the market share held by Canal Digital in its DTH business. The Commission's view is therefore that such a widening of the market would not materially affect the assessment of the notified operation.
336. On the basis of figures provided by the parties there are about four times as many cable TV households as there are DTH households in Sweden. The number of SMATV households is similar to that of DTH. As explained above, one complication in calculating market share figures for DTH is that there is a large number of dual users. If, regardless of this difficulty, market shares are calculated on a combined market for cable, SMATV and DTH distribution, the Swedish market share of Telia and Canal Digital would be about [35-45%]*and [5-15%]*respectively.
337. Consequently, Newco's market share would be [45-55%]*, or twice that of its closest competitor, Netcom/MTG. However, if the fact that, as mentioned above, Canal Digital is able to address all Swedish analogue DTH viewers is taken into account, it can be concluded that Newco would have direct access to households representing about [55-65%]*of the total number of cable, SMATV and DTH households.
338. If the market was to be assessed at this level Newco would still derive all the above indicated competitive advantages from the proposed concentration, meaning the

combination of Newco's main Swedish distribution activity (Telia's cable TV network) with Telenor's satellite activities; Newco's position as a buyer of content would for the reasons explained above be significantly stronger than that of either Telia or Canal Digital; and Newco's position as a provider of technical services would still create a new form of dependency between Newco and the other Swedish cable TV operators. Moreover, Newco would still be in a significantly stronger position for the transition from analogue to digital services.

339. It therefore has to be concluded that also under these assumptions, the proposed concentration would create or strengthen a dominant position.

iii. Combined Scandinavian/Nordic market for cable TV and DTH

340. Some third parties have suggested that an assessment on a Scandinavian level (or, possibly even Nordic level) may be appropriate. Again, the Commission's view is that such a widening of the market would not materially affect the assessment. Measured on the basis of a Scandinavian market, the above indicated position of Canal Digital and Viasat remains largely unchanged in DTH, as the market situation is similar across the Nordic countries, in that most households are able to receive analogue signals from both Canal Digital and Viasat. The available figures indicate that the current market share balance between the two providers is similar to the Swedish situation as far as Denmark is concerned, whereas in Norway and Finland the situation is reversed. For cable TV, Newco would combine the largest network in Sweden with the second largest in Denmark and Norway.

341. For the purposes of calculating market shares the same complication applies regarding DTH (dual users). In addition, there are various available sources for the total size of the market⁵³. If, regardless of these methodological difficulties the parties' figures are used as a basis for the calculation of market shares for a combined Scandinavian market for cable, SMATV and DTH distribution, the market share of Telia and Telenor/Canal Digital would be about [25-35%]*and [15-25%]*respectively. Consequently, Newco's market share would be [45-55%]*, or more than twice that of its closest competitor, Netcom/MTG, and four times or more that that of any other competitor⁵⁴.

342. In their Reply, the parties have tried to contest these figures by quoting from the Annual Report of MTG, where it is indicated that MTG offers broadcasters connection to 1,9 million Nordic households. This figure, however, includes a significant proportion of wholesale customers, and is therefore not comparable with the figures indicated above. To make the above figures comparable to those relied on by the parties in their Reply, the wholesaling customers of Telenor would therefore have to be added. In the Scandinavian region, Telenor supplies [6-

⁵³ All of the alternative sources have indicated a smaller total market than that indicated by the parties. Consequently, the parties' estimate tends to understate their combined market position, relative to that which would appear using any of the alternative sources (by up to 10%). However, for the purposes of this Decision it is sufficient to indicate the figures provided by the parties.

⁵⁴ Neither party has significant activities in Finland. However, given the relative size of Finland compared to the three Scandinavian countries, the parties' share of the Nordic market would remain [40-50%]*.

700.000]*SMATV viewers on a wholesale basis. This represents [65-75%]*of the total number of such viewers. Newco's share of all retail and wholesale to DTH, cable TV and SMATV households in Scandinavia would then be [60-70%]*(or [50-60%]*on the Nordic level). This would still remain twice that of Netcom/MTG.

343. It should also be noted that the parties' market shares would be even higher if the fact that approximately [85-95%]*of all Scandinavian DTH customers will be able to receive analogue DTH broadcasts from Telenor's satellites, without changing their equipment (or even moving their dish) was taken into account. This means that the number of directly addressable households of Newco would be higher than indicated above. On this basis, Newco's market share would increase further to [70-80%]*of all DTH, cable TV and SMATV households in Scandinavia (or [60-70%]*on the Nordic level).
344. In addition to reaching at least twice as many households as its closest competitor, Newco would also, if the market were to be assessed at the Scandinavian or Nordic level, derive all the above competitive advantages from the proposed concentration, namely the combination of Telia's Swedish and Danish cable TV networks with Telenor's satellite activities; Newco's position as a buyer of content would be significantly stronger than that of either Telia or Telenor/Canal Digital; and Newco's position as a provider of technical services would still create a new form of dependency between Newco and cable TV operators competing with Telia. Moreover, Newco would still be in a significantly stronger position for the transition from analogue to digital services.
345. It therefore has to be concluded that also under this last assumption, the proposed concentration would create a dominant position.

iv. Overall conclusion on retail TV distribution to individual households

346. In conclusion, according to information submitted to the Commission, Newco would, on the basis of the parties' proposed market definition, control access to more than [55-65%]*of all cable TV households in Sweden. The same would remain true if the market were to be assessed on a combined Swedish market for cable TV, DTH and SMATV. Even if the markets were to be assessed on a Scandinavian or Nordic basis, Newco would control access to [45-55%]*or more of all households. Thus, regardless of the exact market definition, the combination of the parties' distribution activities would give Newco a volume of distribution that exceeds, by far, the position of any of its existing competitors. For the above indicated reasons, the Commission has come to the conclusion that this, in combination with the vertical effects relating to the integration of Telia with Telenor's above described satellite activities, Newco's strengthened position as a buyer of content and provider of technical services, would create or strengthen a dominant position on the relevant market for retail TV distribution.

Content buying

347. The parties are of the view that neither of them is significantly active as a buyer of content, since their activities are limited to packaging and distribution of TV-channels. The investigation has however shown that this statement is true only in respect of premium pay-TV content (mainly films and sport rights), where the parties so far have been relatively minor buyers (although at least Telia has acquired

both film and sports rights, and has recently launched a specific Golf channel in its cable network). Telenor is, nevertheless, via its interest in Canal Digital, linked to Canal+, which is one of the world's largest buyers of such content. Canal Digital is active, inter alia, in the distribution of premium pay-TV content. It has, for example, contracted for the Scandinavian rights to a number of important Hollywood studios (including Paramount, MGM and Fox), as well as for premium sports rights, such as English Premier League football and NBA basketball. As mentioned above, Canal Digital has, on 1 September 1999, acquired exclusive Nordic rights to Italian League football (which previously were held by Netcom/MTG). These rights have been acquired by Canal+, which is also responsible for the acquisition of PPV-rights for Canal Digital.

348. Furthermore, it has been indicated that Newco could expand its content buying activities in the field of premium films and sports rights, by acquiring the Nordic rights to, for example, Hollywood films for all relevant existing "windows" (PPV, VOD, premium and second pay, free and basic pay). Newco would have an incentive to adopt such a strategy in order to attract customers to its PPV, NVOD and VOD services as it expands its digital distribution (cable and DTH). The premium and second pay rights could be used by Canal+, which is exclusively distributed by Canal Digital in the Nordic area. Finally, it could wholesale the free and basic pay rights to other broadcasters (or develop its own basic pay services). The Hollywood studios normally prefer to deal with one buyer for as many "windows" as possible, as this decreases the cost and risk of selling the Nordic rights to their content.
349. The parties have contested this argument by stating that NetCom/MTG is a larger buyer of content than the parties. In this comparison the parties, however, omit to include Canal+, which in addition to broadcasting its premium pay-TV channels exclusively on the Canal Digital DTH platform, is also responsible for acquiring PPV rights for Canal Digital. Canal+ has more than 10 million subscribers in Europe. Consequently, it cannot be sustained that Newco would have fewer resources than Netcom/MTG for content buying. On the contrary, on the basis of the relative sizes of Newco and Netcom/MTG, it is likely that Newco would have greater resources for content buying. The parties also maintain that Netcom/MTG is a larger provider of pay-TV services than Newco (see above). However, in order to be able to reach this conclusion, the parties have again argued that the number of connected households (where Newco will become the clear leader) is irrelevant. As indicated above, this argument is not sustainable. Moreover, in addition to the above-described weaknesses of NetCom/MTG, it should be noted that it is not able to transmit digital DTH or cable signals. Value-added services, such as PPV, NVOD and VOD, require substantially larger transmission capacities than is feasible to achieve with analogue techniques. NetCom/MTG will therefore not be able to compete effectively with Newco as a buyer of all "windows" for attractive film rights, as long as it has not managed to introduce digital techniques. Moreover, even after this transition, Netcom/MTG will be at a competitive disadvantage, since it will have access to a significantly smaller number of connected households.
350. The premium pay-TV content is, however, not the only (or even the main) field of interest, as there is general agreement in the industry that premium pay-TV has not been the main driver of the expansion of cable TV, DTH and SMATV in the Nordic region. Instead, the main driver has been the introduction of advertising financed

and "mini-pay" channels. Both Telia and Telenor are active as buyers of content, in the sense that they both conclude agreements for the distribution of various commercial TV-channels by cable, DTH and SMATV, which they subsequently sell either as packages or à la carte to individual households (retail sales), or to other cable and SMATV operators (wholesale sales). As indicated above, both Canal Digital and Viasat have acquired exclusive DTH rights for various channels. Cable TV rights have traditionally been granted on a non-exclusive basis. Canal Digital has, however, been able to acquire a number of bundled [...]*, including DTH, SMATV and cable. In this capacity, Newco would, following the implementation of the notified transaction, regardless of whether its above-described Scandinavian TV distribution activities are considered as being on one relevant market, or on a number of neighbouring markets, be able to leverage its reinforced, vertically integrated position in negotiations with content providers.

351. According to the investigation, Newco will become an obligatory partner for any broadcaster of advertising financed and/or "mini-pay" channels wishing to target the Nordic market. Such broadcasters will consider the decisive element to be the ability to reach a sufficient number of households, in order to attract sufficient advertising and/or subscription revenue. Following the concentration, this will not be possible in Sweden without access to Newco's distribution networks (where Newco would control access to [60-70%]*of all cable TV households, and have access to most DTH and SMATV households). Newco would also be the only distributor with good coverage of TV households in all major population centres. Households in these areas are particularly interesting to advertisers, and therefore to commercial broadcasters. No other distribution system, such as that of Netcom/MTG (which has less than half the number of connected households), would be regarded as a substitute for Newco's distribution network.
352. In their Reply, the parties have sought to reduce the importance of their advantage in having the access to a greater number of households, by stating that Netcom/MTG and Stjärn TV are alternatives to broadcasters who are not included in the "basic tier". However, such broadcasters will still face the difficulty that they will wish to be received by as large a number of households as possible. The operator of cable TV network can choose to charge its customers for a large "basic tier", which does not require the use of decoders (as Telia and Telenor have done), or to transmit only the "must carry" channels unscrambled (as most other cable operators do). Other cable TV operators, even if they have adopted a decoder based analogue strategy, will typically offer a "basic tier" and one or more extended, and therefore more expensive, channel bouquets. The inclusion of a channel in the extended bouquet offer of other cable TV networks will, in the same way as in the parties' cable TV networks, mean that the channel in question is received by only a limited proportion of all connected households. These commercial decisions by the cable TV operator do not affect the basic fact that advertising financed channels are dependent on reaching as many viewers as possible in each individual distribution system. Advertising financed channels will therefore, in the same way as in the parties' cable TV networks, strive to be included in these "basic tier" offerings. Consequently, any advertising financed channels which is unable to be included in the "basic offering" in the parties' distribution networks will find largely the same difficulties in being distributed in the equivalent "basic offering" by Netcom/MTG and Stjärn TV. Therefore the parties' contention cannot be accepted. The parties' argument will become entirely irrelevant when the transition to the digital environment has been

completed, since, as indicated above, all households will need a digital decoder to receive television signals⁵⁵, so that even the must-carry signals will not be available unscrambled.

353. The parties have also contended that Stjärn TV, would have an equally strong bargaining position to Newco due to its ownership by UPC. However, the investigation does not support a finding that UPC's TV distribution activities outside the Nordic region are likely to have any impact on its ability to compete with Newco as a buyer of content. On the contrary, the investigation indicates that Stjärn TV or UPC would have to pay a significant premium to any TV channel, for it to be granted exclusive Nordic rights, given that it could only guarantee access to less than 10% of all Nordic viewers. Consequently, any TV channel that considered to grant exclusive or preferential Nordic rights to Stjärn TV or UPC would have to charge a significant premium for the risk that the TV channel may not be able to reach the remaining Nordic viewers, and in particular those connected to Newco's various distribution networks. For any broadcaster who has created an advertising financed TV channel with specific Nordic interest, it is unlikely that distribution by Stjärn TV/UPC would be a viable alternative, irrespective of the level of the premium that it theoretically could receive. For these reasons, the parties' contention as to the bargaining position of Stjärn TV cannot be accepted.
354. Another contention by the parties in their Reply is that the introduction of digital terrestrial transmissions (DTT) will reduce the dependency of broadcasters on Newco. DTT was introduced on 1 April 1999 in Sweden. Due to the relatively limited available bandwidth, the number of licences is equally limited. Licences have been granted to the three existing "must carry" analogue terrestrial channels. In addition, four commercial channels (TV3, Kanal5, Canal+ and TV8) and four educational/regional channels have been given licences. So far only SVT, the existing state-owned "must-carry" channels have commenced DTT broadcasting. Sales of DTT decoders are very low (about 350 in the first four months⁵⁶). Thus, the parties suggestion that DTT will significantly constrain their power vis-à-vis broadcasters cannot be accepted.
355. For Norway and Denmark, Newco would control access to approximately [35-45%]*and [25-35%]*of the cable TV households and have a strong position in relation to SMATV (see below), whereas the situation in DTH appears to be similar to that in Sweden.
356. Newco could adopt a commercial strategy to leverage this gatekeeper position in Sweden (which has about twice the number of households compared to either Norway or Denmark) to achieve preferential or exclusive distribution rights (cable, DTH and SMATV) for the whole Nordic area. Whereas it is obviously true, as the parties have stressed in their Reply, that Newco will need attractive content in its TV distribution business, Newco's dependency on any single content supplier will be lower than the individual content supplier's dependency on Newco. Advertising financed and "mini-pay" broadcasters active in the Nordic region operate on

⁵⁵ The parties (as well as other distributors) will continue to offer a "basic tier" in the digital environment.

⁵⁶ Aftonbladet, 1 September 1999.

financial models that require access to the viewers connected to Newco's distribution networks in Sweden. They would have limited possibilities to resist Newco's demands, and, as long as Newco provides them with an opportunity to maintain and develop their business, would have no reason to do so. Moreover, Newco would not only be able to credibly threaten to take broadcasters off its distribution (as Telia has done in the past with one of Netcom/MTG's channels). It could also request payment to carry the channel in its distribution networks and/or package any resisting broadcaster's channel(s) in a way that is less remunerative for the broadcaster. As an example of the effects of a distributors tiering decisions, it can be mentioned that Telia for several years has carried the English language version of Eurosport in its "basic tier", which is accessible to all of its 1,3 million connected households. At the same time Telia has put the Eurosport Nordic signal in its extended offer, which can only be accessed with a decoder. The consequence is that the large majority of households connected to Telia's cable network (who pay only for the "basic tier"), despite the broadcasters' efforts to offer a more attractive service, have been unable to receive this channel in their own language⁵⁷.

357. As concerns packaging, it has also been brought to the Commission's attention that the possibilities for a distributor to leverage its strengths against broadcasters will increase with digitalisation. The reasons for this is that the increased capacity will allow the distributor to create multiple packages or "tiers", each of which would appeal to different groups of subscribers (and therefore have varying potential revenues for broadcasters). Digitalisation will therefore increase the ability of Newco as a dominant distributor to offer it's favoured suppliers increased revenues.
358. Newco's ability to achieve preferential or exclusive distribution rights, will significantly weaken the competitive situation of other TV distributors (cable, DTH and SMATV), as the latter's products would suffer from a cost disadvantage and/or a reduced number of TV-channels to offer to their customers. As existing distribution agreements come up for renewal, broadcasters will not have any viable alternative for their Nordic distribution. This would therefore ultimately create a dominant position for Newco as a buyer of content for TV distribution.
359. This fear is strengthened by Newco's vertical integration into the provision of satellite transponders with a Nordic footprint. Since NSAB, its only competitor on the satellite side is not vertically integrated, Newco would be the only supplier able to offer a bundled service consisting of satellite infrastructure and retail distribution covering a significant share of all TV households. Such bundling practises are to a certain extent already employed by Telenor and Canal Digital. This can, for example, be seen in Canal Digital's agreements with several broadcasters, where the broadcasters do not [...]*. This is attractive to broadcasters, since the transponder capacity, if rented separately, can represent 30% or more of the channel's total costs. Given its control over 65-77% of the Nordic transponder capacity suited for television purposes, Newco's ability to engage in such practises cannot be matched by any alternative distributors, whose only possibility to copy Newco's strategy would be to lease, on commercial terms, a block of transponders from Newco and/or NSAB. In addition to this cost advantage, Newco would, following the merger, be

⁵⁷ In their Reply, the parties have pointed out that since May 1999 Eurosport Nordic is carried in Telia's "basic tier", as a consequence of a new agreement, which, however, is of limited duration ([...]*).

able to credibly threaten broadcasters with less attractive distribution terms (outside the "basic tier" for example), in particular on Telia's cable network, unless they agree to take Newco's bundled services.

360. The likelihood that Newco would adopt various bundling strategies aimed at leveraging its strong position in one area to strengthen its overall position as a distributor must be considered to be high. Canal Digital has, for example, concluded several exclusive distribution agreements, not only covering its core business - analogue and digital DTH - but also digital cable TV and SMATV distribution. Similarly, Telia has concluded agreements giving it not only advantageous distribution rights for cable TV, but also rights for SMATV and DTH distribution (which it is currently not using in its business). In their Reply, the parties have contested these findings, stating that Canal Digital, and, in particular, Telia only have a limited number of exclusive rights, that these are not advantageous, that all rights are being used, and, finally that Netcom/MTG has more important exclusive rights. None of the parties' contentions can be sustained. According to their own information Canal Digital has an extensive catalogue of exclusive rights. For example, in Sweden it has exclusive digital rights to [...] channels in DTH, [...] in cable TV and [...] in SMATV. This is far more extensive than the rights held by Netcom/MTG. It is not surprising that channel providers have been less interested in granting exclusive rights to Netcom/MTG, as many broadcasters may hesitate to rely on a competing broadcaster for their distribution in the Nordic area. As to the parties' other contentions, information submitted by broadcasters and other distributors clearly indicates that Telia does have advantageous distribution rights. Finally, the relevant issue is not whether Telia, prior to the proposed concentration, has already acquired a large portfolio of SMATV and DTH rights. Instead, the relevant point is that Telia's ability to do so (without already being active in those areas) provides an indication of the combined strength of Newco after the concentration.
361. The parties have also been able to secure rights [...] from several of their existing suppliers. Moreover, Telenor has started an aggressive strategy to induce broadcasters to move from NSAB to the Telenor satellites. As mentioned above, one broadcaster was recently convinced to move to 1° West by being offered a penetration based agreement. Newco could use such strategies to further reduce or eliminate competition from other DTH, cable and SMATV distributors and/or NSAB, which would have the effect of further strengthening its position as an obligatory partner to all commercial broadcasters. This would considerably strengthen its gatekeeper function and control over all levels of the TV distribution chain in Scandinavia.
362. In conclusion, for all the above reasons, the Commission has come to the conclusion that the notified concentration would create a dominant position for Newco as a buyer of content for TV distribution.

Wholesaling of rights to content

363. Both parties (and Canal Digital) are active as wholesalers of rights to content. Telenor (including Canal Digital) is the largest existing wholesaler and has more than [...] wholesale customers in the three Scandinavian countries. The customers are mainly SMATV and cable networks. According to Telenor's 1998 Annual

Report 686.000 viewers in Scandinavia were offered access to pay-TV through these activities. This represents 70% of all SMATV households in the region. The second largest wholesaler in all three countries is Netcom/MTG, which in 1998 reached a slightly smaller number of viewers than Telenor. According to the notification Telia's activities have so far been limited to Denmark, where it supplies approximately [...] SMATV networks⁵⁸. A general feature of the wholesale market has been that a significant proportion of the customers have been supplied by both Telenor and Netcom/MTG.

364. However, it appears that the proposed concentration, would enable Newco to further develop and significantly strengthen this business activity, which could have significant strategic importance to the merged entity. Newco's wholesaling activities could be further strengthened by using the above described gate-keeper position in the provision of satellite services (in particular as concerns digital services), combined with its position as an obligatory retail distribution partner for commercial TV channels. Based on these strengths, Newco would be able to create several analogue and digital packages. As mentioned above, Newco would be the only company in the Nordic region that could include value-added services, such as PPV, NVOD, VOD and Internet access, in its digital packages. Newco could offer such packages to any cable or SMATV operator in the Nordic market. Newco's incentives to adopt such a strategy would be strong, since the additional cost of supplying, on a wholesale basis, any such package which it will develop for its own distribution activities, will be very low or even inexistent.
365. Even prior to the proposed concentration, Telia, Telenor and Canal Digital have been able to use their strong position in their respective core-activities to achieve significantly better terms from broadcasters than their competitors (or, expressed from the suppliers' point of view, broadcasters have accepted distribution in the parties' networks on significantly less attractive terms than they have accepted in competing distribution systems). Telia has, for example, in the period between 1995 to 1998 been able to significantly reduce the total fees it pays to broadcasters, despite having increased the number of broadcasters with whom it has distribution agreements from [...] over the same period. In their Reply, the parties have contested this conclusion. In their view Telia's reduced costs are due to a reduction in the number of households with decoders in its network (from [...] to [...]), and that the comparison should be made on the basis of Telia's pay-TV revenues. First, although it is unclear how a reduced number of decoders would reduce Telia's costs, the fact remains that in 1995 Telia paid, on average, [...] to each broadcaster. In 1998 this figure had gone down to [...], a reduction by [...]. Second, as has been indicated above, the Commission does not accept the parties definition of pay-TV revenues, as this excludes more than half of Telia's turnover from retail TV distribution. Consequently, the argument put forward by the parties in the Reply cannot be accepted.
366. It is widely expected that Newco, following the proposed concentration would use its position as an obligatory partner for broadcasters to achieve even better terms for bundled retail and wholesale rights. Given its competitive advantages, it is therefore

⁵⁸ Telia has not indicated the number of households that receive services through its wholesale activities.

likely that Newco would be able to offer programme packages at prices that would provide a strong incentive for other cable and SMATV operators to acquire these rights from Newco, rather than directly from individual broadcasters (including Netcom/MTG). As indicated above, these broadcasters would also be increasingly dependent on Newco for retail TV distribution in the three Scandinavian countries, which will limit their ability to challenge Newco on the wholesale level. Although a development where Newco at least initially would offer attractive conditions for its wholesale packages may in the short-term have certain cost advantages for competing cable and SMATV operators, it would be likely in the medium- to long-term to have significant adverse effects on competition.

367. First, Newco would be able to largely eliminate competition from competing cable and SMATV operators, not only by having full information on the volume of their business and their cost structure, but potentially also through imposing exclusivity or other restrictive obligations, which would eliminate their ability to compete by providing new or innovative content.
368. Secondly, for content providers, such a development would mean that they would be faced with a dominant or even monopsonistic purchaser of content in Scandinavia. This would not only have a negative impact on their profitability, but also significantly reduce their ability to influence the packaging and sales of their content or channels. Under such circumstances, it is likely that broadcasters will have reduced incentives to invest in improving quality and/or in innovation of new content. As a result of the proposed concentration, the Scandinavian markets for TV distribution may therefore enter the digital era with a prognosis of reduced consumer choice, instead of, as foreseen, an increased choice.
369. The proposed concentration would therefore create a dominant position for Newco in the field of wholesaling of rights to content, regardless whether this market is assessed on a Scandinavian level, or separately for the three countries.

Technology for technical services relating to pay TV

370. The market for the provision of technical pay-TV services is currently limited, since most major cable and DTH operators perform these activities in-house (Telia, Telenor, Netcom/MTG and others). The parties are, however, active as providers of technical pay-TV services to third parties. Telenor provides these services in its own right, as well as through Canal Digital. The latter is currently the only provider of digital technical pay-TV services in the Nordic area, and has an agreement with [...]*, as well as with other Swedish cable and SMATV operators. Telia provides such services to cable and SMATV operators in Denmark, and has an agreement with [...]*, by which the latter is licensed to use Telia's SMS data management software system. Telenor has invested significant amounts in the development of a proprietary digital Conditional Access (CA) and Applied Programme Interface (API) system called Conax. Telenor's investment in this technology has been increased by about [...]*over each of the last four years.
371. The parties have stated that the adoption in 1997 of the Eurobox standards by several European cable TV operators, and in 1998 of common specifications for a decoder box based on European standards by all major Nordic TV distributors and broadcasters in the context of the Nordig discussions, will enable customers to

switch to a new supplier without changing their equipment. The parties, however, accept that further harmonisation would be needed in the context of the Nordig project before this is to become possible, and also that Conax cannot be applied to the Eurobox standard.

372. During the investigation, concerns have been raised that the proposed concentration will give Newco the incentive and ability either to abandon the Nordig project and focus on the proprietary Conax system, or to impose Conax as the conditional access technology to be used in the Nordig project. If Newco were to use its advanced position in terms of digital services (Telia's cable network and Canal Digital's DTH operation) to impose Conax as a de facto standard on the market, it would, given the number of households connected to Newco's distribution systems, be extremely difficult for any other market player to introduce a competing system⁵⁹. As examples of how Newco could use its proprietary technology to lock customers into its distribution system, third parties have submitted that Telenor is already charging a significant additional fee for up-linking a TV-signal which is not encrypted with the Conax technology. Another example is that the digital DTH decoders, which are sold in the Scandinavian countries, are locked to Canal Digital's programme guide and the built-in telephone modem cannot be used to reach other suppliers. Consequently, if NetCom/MTG or any other supplier were to launch digital DTH services, Canal Digital's customers would be unable to switch supplier, unless they were to buy a new decoder. Although Telia has, so far, used Viaccess, a technology competing with Conax, in its digital decoders, the number of such decoders that have been installed in Telia's cable network is still relatively limited (about [...] of all connected households). Moreover, according to the parties, a combined digital decoder (able to receive cable and DTH-signals) could be produced at a cost which is only EUR [...] (less than [0-20%]) higher than for the current signal specific decoders. It is therefore widely expected that Newco would use the Conax technology also in the existing Telia cable network, and adopt a similar strategy for the digital cable TV decoders, as described above for DTH.
373. It would therefore appear that Newco will be able to use its current position in the field of technical services, including the proprietary Conax technology, to further strengthen its control over the above mentioned markets. Moreover, as it is likely that Newco would be successful in imposing its digital technology as a de facto standard for the Nordic market, the proposed concentration would create a dominant position in the provision of technology for technical services to pay TV.

Conclusion on TV distribution markets

374. The proposed concentration would create a vertically integrated entity, combining all the activities and strengths of Telia and Telenor in the field of TV distribution. Given that the ultimate aim of all the above described activities is to allow individual households to receive programming produced by various broadcasters,

⁵⁹ Directive 95/47/EC of the European Parliament and of the Council of 24 October 1995 on the use of standards for the transmission of television signals; OJ L281, 23.11.1995, p.51 ("the Directive") states that operators of conditional access systems must offer non-discriminatory access to all broadcasters. It is to be noted that the advantages available to Newco by imposing its technology as a *de facto* standard, in no way would require it to act in breach of the Directive.

there is a strong link between the different levels of the distribution chain. This will provide Newco with a commercial incentive to leverage its particular strengths at each individual level to further its position on all the other. It has been identified above that the proposed concentration would create or strengthen a dominant position for Newco in: the provision of satellite transponder capacity; retail TV distribution; content buying and wholesaling, and in the provision of technology for technical services to commercial TV. Due to the link between these activities, the overall concern raised by the concentration is even greater than the sum of the concerns for each individual level of the distribution chain. It is particularly worrying that Newco's position, as has been described above, would be even stronger in the digital environment. The creation of Newco could therefore lead to a situation where one company would have the power to decide the shape of the new converged multi-media landscape, without any significant restraints from its competitors, customers or final consumers.

375. Moreover, these concerns are compounded by the fact that Telenor is set to take a controlling position in Norkring (the Norwegian terrestrial TV transmission company, which owns about 6.500 transmission stations in Norway) within the near future. This would mean that Newco would control all existing technical platforms for TV distribution in Norway. Furthermore, on the convergence of the media and telephony sectors (including the approaching switch from analogue to digital techniques), Newco would, through its ownership of the necessary infrastructures, have unparalleled possibilities to bundle various telephony, Internet and TV-services. It would therefore be able to create a loyalty from its customers that no competitor offering a more limited number of services would be able to match, and consequently to create insurmountable barriers to entry covering its entire scope of activities.

III. OVERALL ASSESSMENT OF THE NOTIFIED TRANSACTION

376. The notified transaction would create or strengthen dominant positions on the above markets for telephony services in Sweden, Norway and Ireland, as well on various levels of the TV distribution chain in the Nordic countries. These negative effects would follow partly from the superior market power of the combined entity, as evidenced by its high market shares in relation to its smaller and weaker competitors. However these effects would be substantially reinforced by the vertical effects, resulting from the combined activities of Telia and Telenor. The result of the operation is therefore to create a combined entity with strong or dominant positions covering the whole value-chain of the telephony and TV sectors. Seen in contrast with the fact that most of Newco's competitors on the various levels are not at all vertically integrated, this strengthens the overall dominance of the company, and further reduces the possibility that its competitors would be able to engage in effective competition with Newco. The combined entity's wide-ranging activities, and advanced position concerning digital technologies, will also serve as a significant barrier to entry on all levels of its activities.
377. For the above reasons the Commission has come to the conclusion that the notified concentration, in the absence of any modifications, would be incompatible with the common market and the functioning of the EEA agreement, since it would create or strengthen dominant positions in the markets for telephony and TV services, as a result of which effective competition would be significantly impeded in the common

market within the meaning of Article 2(3) of the Merger Regulation, and in the EEA within the meaning of Article 57(1) of the EEA Agreement.

IV. UNDERTAKINGS PROPOSED BY THE PARTIES

378. In order to resolve the competitive concerns identified by the Commission, the parties have, on 17 and 24 September 1999, submitted undertakings to resolve the competition concerns raised by the concentration⁶⁰. It is true that the latter undertakings were submitted outside the time period provided for by Article 18 of Commission Regulation (EC) No 447/98⁶¹; however, that Regulation also provides that the Commission may in exceptional circumstances extend the three-month period. In this case it should be noted that the parties had already submitted undertakings within the three month period, and that a request for a one-week extension to propose the undertakings contained in the second submission was received by the Commission within the three month period. Moreover, the request for extension set out the nature of the commitments that would be submitted after the additional week, which allowed the Commission to begin assessing the remedies before they were formally presented.
379. Telia and Telenor are owned by the Swedish and Norwegian states. For this reason their plans to merge had to be approved by their respective parliaments. The Swedish and Norwegian parliaments granted such approval for the transaction after significant debate, not only about the transaction as such, but also about its impact on a number of other policy issues of public interest, such as media plurality and development of the future information technology society. Against this background, it should be recognised that the two Governments, in their role as owners, were required to pay additional attention to the potential impact of the later remedies on such other policy issues, including discussions with representatives of the respective parliaments. The fact that the parliament had to be involved in these issues added further constraints on the process. The fact that political bodies from two different countries were involved was an additional obstacle in meeting the deadline provided for in Regulation (EC) No 447/98. The exceptional circumstances are therefore not related to the state ownership as such, but to the fact that the business activities of the parties, and indeed those affected by the additional commitments, include businesses with an impact on wider policy issues of national concern which require political consultation. Moreover, the publication by PTS (the Swedish telecom regulator) of a report with a proposal for new LLU legislation on 16 September 1999 will have had a delaying impact on the Government's evaluation process as concerns the parties' plans to submit the LLU and cable-TV remedies. Finally, the parties would have been required to return to their parliaments in order to renotify the agreement, so that the agreement could not have been withdrawn and renotified with modifications as easily as another transaction might have been.

⁶⁰ Following the Commission's evaluation, the parties made a number of technical clarifications of their proposals on 1 October 1999. The term "final proposal" is used to describe the undertakings submitted on 17 and 24 September 1999, including the clarifications of 1 October 1999.

⁶¹ OJ L61, 2.3.1998, p.1.

380. It must therefore be recognised that the parties faced additional and exceptional constraints in submitting these undertakings, compared to those faced by other companies (whether publicly or privately owned), whose activities do not have a direct impact on policy issues of public interest. Finally, the fact that third parties had already submitted comments on a possible LLU undertaking in phase one, together with the clear-cut character of the proposed undertakings has enabled the Commission's services to conduct a full and proper assessment of the modified proposal, including adequate consultation with Member States and third parties.

381. The parties final proposal for undertakings are as follows:

(a) Telia divestitures

1. Telia Norge, including Telia's Norwegian activities in the provision of domestic and international voice telephony services, data communication services, the supply of PABXs and related services as well as the provision of Internet services,
2. the provision of network services currently undertaken through Telia Nättjänster Norden AB,
3. Telia InfoMedia Television AB, including Telia's cable TV business in Sweden.

(b) Telenor divestitures

1. the 33% shareholding in Telenordia, with activities in domestic and international voice telephony services, Internet and data communication services and enhanced global services including Nordicom,
2. the 50% shareholding in Internordia, active in Sweden in the supply of PABXs,
3. the shareholdings in Lokaldelen and Telenor Företagsinfo AB, active in Sweden in the supply of local and business-to-business directories,
4. Telenor Avidi AS, including Telenor's cable TV business in Norway.

(c) Telia or Telenor divestiture

The undertakings provide that either Telia will divest itself of its entire shareholding in Eircom (formerly Telecom Eireann), or Telenor will divest itself of its entire shareholding in ESAT Digifone.

(d) Local loop unbundling

The undertaking provides that Telia and Telenor will allow competitors access to their respective local access networks in order to provide any technically feasible services on non-discriminatory terms. The undertaking will enable competitors to establish a sole customer relationship with telecommunications customers.

382. The undertaking to provide unbundled local loop access will take effect within 3 months from the date of the Commission's decision. The divestiture of the parties' respective cable-TV networks and other businesses set out above are subject to the conditions normally imposed by the Commission in such cases, and will be effected within [...] of the Commission's decision.

383. Each of the businesses to be divested will be sold as a going concern, and will include sufficient sales staff, production and administrative personnel, all existing contracts and all licences necessary to continue using the existing technology currently used by the respective businesses on the same terms as at present. Each divestiture will be made to a viable existing or prospective competitor, unconnected to and independent of Telia and Telenor, and possessing the financial resources and proven expertise enabling them to develop the divested business into an active competitive force on the market. Each divestiture will be subject to the Commission's express approval.
384. Prior to the divestitures, the parties commit to hold these businesses as distinct and saleable businesses. Telia and Telenor will each appoint a trustee, subject to the Commission's approval. The trustee's mandate, the terms of which will also be subject to the Commission's approval, will include determining and monitoring the management and operation of the businesses to be divested and to report to the Commission on Telia's and Telenor's adherence to their commitments, as well as on the characteristics of potential buyers. There will also be a reporting obligation to the Commission and the national telecommunication authorities as regards compliance with the LLU commitment.
385. Finally, the parties have undertaken, in the event that the divestitures have not been completed within certain periods, to give the trustee(s) an irrevocable mandate to find a purchaser for the businesses to be divested.

V. ASSESSMENT OF THE PROPOSED UNDERTAKINGS

386. In the field of television services, the proposed cable TV divestiture would remove the additional business activities brought by Telia into the merged entity. Therefore, the merged entity's television activities would not be more extensive than those previously carried out by Telenor. More importantly, the total number of households connected to the merged entity's retail TV distribution system would not be greater than that previously connected to Telenor. Given that, as was described above, the increase in connected households was the main cause for competitive concerns also on the vertically related markets, the cable TV divestiture would also remove the concerns on these related markets. Thus, although the merged entity would retain a strong position in several of the vertically related markets, it would not, following the divestiture of the cable TV activities be in any appreciably stronger position than Telenor has already been, for example, as concerns the bundling of satellite transponder services and retail TV distribution services.
387. The buyer(s) of the parties' Swedish and Norwegian cable TV businesses will become a significant force on the markets for the acquisition and distribution of TV services, and will, at least as far as the Telia cable TV network is concerned, immediately be in a position to offer value-added services on the basis of a digitally equipped distribution system. It is understood that the buyer(s) of the parties' cable TV networks, in line with the established practice on ancillary restraints, may demand that the parties undertake contractually not to compete with the divested cable TV businesses for a period of three to five years.
388. In the course of the market test, it has been suggested that the parties would be able to replace the divested cable TV activities with similar services based on xDSL

technologies over the PSTN network. There are, however, several limiting elements for the upgrading of the PSTN networks with xDSL technologies for TV distribution. First, these technologies are primarily suited for the provision of fast Internet access, not TV distribution, as the bandwidth is insufficient to carry a traditional "bouquet" of channels at least as far as the commercially available forms of xDSL technology is concerned (ADSL). Second, as the PSTN network is also used for voice and data telephony, the introduction of xDSL technologies is likely to entail technical problems relating to reliability and interference of services. Third, the investment needed to upgrade the existing PSTN network for xDSL technology is very high, in particular for the more advanced technology, VDSL, which can only be used over copper lines up to 500-800 meters from the customer's premises. Moreover, as the parties would have to do such upgrades across the entire PSTN networks, this could not realistically be done in the short to medium future, even if it were to be assumed that the necessary funds were available. Consequently, it must be concluded that the effectiveness of the cable TV divestiture is not threatened by the parties' ability to replace the divested cable TV activities with similar services based on xDSL technologies over the PSTN network.

389. In conclusion, therefore, the parties' final proposal for divestiture of the cable TV networks in Sweden and Norway would remove all of the competition concerns identified above as regards the acquisition and distribution of TV services.
390. The proposal to introduce LLU in both countries is comprehensive, and takes as its starting point the third party comments to the LLU proposal made in phase one. The comments received by the Commission do not raise concerns that the final proposal would be ineffective due to limitations that are not justifiable by objective criteria relating to network security. The LLU proposal will therefore greatly reduce the competitive concerns identified for the various telecom services, and will, by granting new entrants the ability to establish a unique customer relation with their clients, assure that the merged entity will remain subject to at least the same degree of competition as each of Telia and Telenor were prior to the proposed merger.
391. However, it should be recognised that, at least initially, the main beneficiaries of the LLU-proposal are likely to be larger business users. In that context, the divestiture of the parties' cable-TV activities will also have the effect of complementing the LLU proposal. The new owner of the cable-TV networks will be able to offer competition to the parties' telecommunication networks by allowing increased competition on the various telecommunication markets for residential users and small businesses, who are less likely to benefit from LLU.
392. Finally, the divestitures of the existing nationally overlapping businesses, as set out above, will enable the new owners of the respective businesses to create or develop a stronger foothold on the Swedish and Norwegian telecommunication markets, which they will be able to develop further on the basis of the above described LLU-commitment. For these reasons, the parties final proposal for remedies would remove all the identified competition concerns in the telecommunication area as well.

HAS ADOPTED THIS DECISION:

Article 1

The concentration notified by Telia AB (publ) and Telenor AS on 28 April 1999, by which the Swedish and Norwegian Governments propose to acquire joint control of a newly created company, Newco, set up to hold the shares of both notifying companies is, subject to full compliance with the final proposal for undertakings submitted by the parties and set out in Annexes I and II compatible with the common market and the functioning of the EEA Agreement.

Article 2

This Decision is addressed to:

Telia AB (publ)
Mårbackagatan 11
S-123 86 Farsta
Sweden

and

Telenor AS
PO Box 6701, St. Olavs plass
N-0130 Oslo
Norway

Done at Brussels, 13 October 1999

For the Commission,

Mario Monti,

Member of the Commission

NON-CONFIDENTIAL VERSION OF

COMMITMENTS OFFERED TO THE EUROPEAN COMMISSION PURSUANT TO ARTICLE 8(2) OF COUNCIL REGULATION (EEC) NO 4064/89

Pursuant to Article 8(2) of Council Regulation (EEC) No 4064/89 (as amended) (the "Regulation"), Telia AB ("Telia") and Telenor AS ("Telenor") hereby give the commitments set out below to the Commission of the European Communities in respect of their proposed concentration. These commitments shall take effect on receipt of the Commission's decision declaring the concentration compatible with the common market pursuant to Article 8(2) of the Regulation. These commitments are made following discussion with, and with the support of, respectively the Swedish and Norwegian States.

1. Telia undertakes to divest as going concerns:
 - (a) the following businesses and activities in Norway:
 - Telia Norge AS ("Telia Norge") which is active in inter alia the provision of domestic and international voice telephony services, data communications services, the provision of Internet services and the supply of PABXs and related services¹; and
 - the provision of network services currently undertaken through Telia Nättjänster Norden AB;
 - (b) Telia InfoMedia TeleVision AB ("TIMTV")²

(the businesses and interests listed in this paragraph 1 being collectively referred to as the "Telia Divestments").
2. Telia also undertakes to divest its indirect 14 per cent shareholding in Telecom Eireann ("Telia's TE Holding")³, which is active in the provision of a wide range of telecommunications and related services in Ireland, including the provision of mobile

¹ The divestment of Telia Norge excludes the call centre business Direkte Response Sentret AS.

² The cable TV business carried on within TIMTV and to be divested hereunder shall include all assets, tangible and intangible, related to TIMTV's Swedish cable-TV business (including, but not limited to cable TV infrastructure and provision of network services, distribution of analogue and digital TV channels and other services, customer data base and technical pay-TV services, and all contracts related thereto). The divestment commitment does not include TIMTV's 90.4% shareholding in Starman Kaabeltelevisiooni AS (Telia's Estonian cable TV business).

³ Telia and KPN (of the Netherlands) respectively own 40% and 60% of an Irish private unlimited company, Comsource, which has a 35% equity interest in Telecom Eireann - see Case IV/M.802 Telecom Eireann. Telia therefore has a 14% indirect shareholding in Telecom Eireann.

telephony services, unless Telenor shall have divested its 49.5 per cent shareholding in ESAT Digifone.

3. Telenor undertakes to divest the following businesses and interests as going concerns:
- (a) its 33 per cent shareholding in Telenordia, a joint venture whose other shareholders are British Telecommunication Plc and TeleDanmark A/S and which provides domestic and international voice, Internet and data communications services in Sweden, as well as enhanced global services;
 - (b) its 49.5 per cent shareholding in ESAT Digifone, which is active in the mobile telephony market in Ireland, unless Telia shall have divested its minority shareholding in Telecom Eireann;
 - (c) Telenor Avidi AS⁴;
 - (d) its 50 per cent shareholding in Internordia, a joint venture whose other shareholder is TeleDanmark A/S and which supplies PABXs and related services in Sweden;
 - (e) its 92.6 per cent shareholding in Lokaldelen, a company which publishes local directories in Sweden; and
 - (f) its interest in Telenor Företagsinfo AB which publishes business-to-business directories in Sweden

(the businesses and interests listed in this paragraph 3 being collectively referred to as the "Telenor Divestments").

4. Pending the divestments undertaken at paragraphs 1 and 3 above, Telia and Telenor commit:
- (a) to ensure that the Telia Divestments and the Telenor Divestments are held separate and managed as distinct and saleable businesses;
 - (b) to use all reasonable efforts to ensure that the Telia Divestments and the Telenor Divestments are maintained, pursuant to good business practices, at their current level, and that all contracts necessary to preserve them are entered into

⁴ The cable TV business carried on within Telenor Avidi AS and to be divested hereunder shall include all assets, tangible and intangible, related to Telenor Avidi AS Norwegian cable-TV business (including, but not limited to cable TV infrastructure and provision of network services, distribution of analogue TV channels and other services, customer data base and technical pay-TV services, and all contracts related thereto).

or continued in accordance with their terms, consistent with good business practice and the ordinary course of business;

- (c) to use all reasonable efforts to maintain sufficient administrative and management functions relating to the Telia Divestments and the Telenor Divestments;
 - (d) not to obtain from the management of the Telia Divestments or of the Telenor Divestments any business secrets, know-how or commercial information of a confidential or proprietary nature relating to these businesses other than in certain circumstances as approved by the Commission. Notwithstanding any of the commitments in this paragraph, Telia and Telenor may receive on a regular basis from their respective businesses aggregate financial information necessary to permit Telia and Telenor respectively to prepare consolidated financial reports, tax returns and personnel reports; and
 - (e) to use all reasonable efforts to provide and maintain sufficient working capital and any existing lines of credit for the Telia Divestments, and for the Telenor Divestments (having regard to the extent of their respective shareholdings).
5. In order to maintain and enhance the commercial viability of the Telia Divestments and the Telenor Divestments to prospective purchasers of Telia and Telenor's respective interests in these businesses, Telia and Telenor shall undertake all reasonable efforts to ensure that the Telia Divestments and the Telenor Divestments will include, to the extent permitted by law or by contract, unless agreed to with the purchaser:
- (a) sufficient sales staff, production and administrative personnel to operate the respective businesses as going concerns;
 - (b) all existing contracts and all contracts entered into between the date of these commitments and the sale of Telia and Telenor's respective interests in the businesses; and
 - (c) all licences necessary to continue using the existing technology currently used by the respective businesses on the same terms as present.
6. Pending the divestment undertaken at paragraph 2 above, Telia commits:
- (a) to ensure that Telia's TE Holding is held separate and managed as a distinct and saleable interest;
 - (b) not to obtain from Telecom Eireann's management any business secrets, know-how or commercial information of a confidential or proprietary nature relating to its businesses other than in certain circumstances as approved by the Commission. Notwithstanding any of the commitments in this paragraph, Telia may receive on a regular basis from Telecom Eireann any aggregate financial

information necessary to permit Telia to prepare consolidated financial reports, tax returns and personnel reports;

- (c) to cease any and all direct involvement in the management of Telecom Eireann to which it is otherwise entitled under the terms relating to Telia's TE Holding;
 - (d) to treat Telia's TE Holding as a financial investment only; and
 - (e) to take reasonable steps to ensure that employees of Telia who have had access to confidential or competitively sensitive information relating to Telecom Eireann's mobile telephony business shall not pass such information to, or in any way be involved for a period of two years from the date of adoption by the Commission of its Decision approving the notified concentration ("the Commission's Decision") in, ESAT Digifone.
7. In so far as Telenor has the power to manage and control Telenordia, Internordia or ESAT Digifone, Telenor shall use all reasonable endeavours to manage and control the relevant company or companies in a manner consistent with paragraphs 4 and 5, and paragraphs 4 and 5 shall be construed accordingly.
8. In so far as Telenor does not have the power to manage and control Telenordia, Internordia or ESAT Digifone, Telenor shall only be required by paragraphs 4 and 5 to exercise such powers as it may have in a manner consistent with paragraphs 4 and 5, and paragraphs 4 and 5 shall be construed accordingly.
9. In the event that Telia agrees to dispose of Telia's TE Holding, Telenor shall be released from its obligations under paragraphs 4 and 5 and 18 in relation to ESAT Digifone, once Telia has completed such disposal in accordance with its obligations under these commitments.
10. In the event that Telenor agrees to dispose of its shareholding in ESAT Digifone, Telia shall be released from its obligations under paragraphs 4 and 5 and 18 in relation to Telia's TE Holding, once Telenor has completed such disposal in accordance with its obligations under these commitments.

11. Telia and Telenor undertake, subject to the provisions set out below, to effect the sale of, respectively, the Telia Divestments, Telia's TE Holding, and the Telenor Divestments to one or more independent third party purchasers approved by the Commission (whose approval shall not be unreasonably withheld) within [...] from the date of the Commission's Decision. In the case of Telia's business described at paragraph 1(b) above, the Telia TE Holding described at paragraph 2 above, and Telenor's businesses and interests described at paragraphs 3(a), (b), and (c) above, the Commission may, upon Telia or Telenor's request showing good cause, grant a further period of [...] within which the sales may be effected.
12. Telia and Telenor recognise that for proposed purchasers of the Telia Divestments or the Telenor Divestments to meet with the Commission's approval pursuant to paragraph 11 above, such purchasers shall be viable existing or prospective competitors unconnected to and independent of Telia and Telenor and possessing the financial resources and proven expertise enabling them to maintain and develop all or such part or parts of the divested businesses as they may acquire as active competitive forces in the television or telecommunications sectors as the case may be. In addition, TIMTV and Telenor Avidi AS will be sold to purchasers who are unconnected to and independent of each other. If independent purchasers cannot be found, Telia/Telenor may request a derogation from this requirement.
13. Telia and Telenor shall have complied with paragraph 11 if, within the applicable period stated therein (or any extension thereof), they have entered into a binding sale contract conditional only upon necessary regulatory approvals provided that such sale is completed as soon as possible thereafter and in any event within three months of the date of the contract.
14. Telia and Telenor shall:
 - (a) promptly inform the Commission in writing of the identity and characteristics of any prospective purchasers (subject to the consent of such prospective purchasers) with whom they are negotiating the sale of all or part of the Telia Divestments, Telia's TE Holding and the Telenor Divestments and the Commission will promptly indicate if it considers any such purchasers to be unsuitable; and
 - (b) notwithstanding the provisions of paragraph 14(a) above, every two months (or otherwise at the Commission's request) report in writing to the Commission on developments in their respective negotiations with potential purchasers of all or part of the businesses to be divested.
15. In addition to the obligations at paragraph 14 above, Telia shall promptly inform the Commission of any other plan [...] for the disposal of Telia's TE Holding.
16. Any sale contract entered into by Telia or Telenor, as the case may be, pursuant to these commitments, shall be made conditional upon the prior express approval of the

Commission (such approval not to be unreasonably withheld). The Commission shall use reasonable endeavours to communicate its approval of the sale contract, or any reasons for its non-approval thereof, within 14 days of receipt of the contract.

17. Telia and Telenor shall immediately after the Commission has notified them of its decision under Article 8(2) of the Regulation, each appoint a trustee (respectively the "Telia Trustee" and the "Telenor Trustee", together "the Trustees") in accordance with the provisions below:
 - (a) Telia and Telenor shall each propose to the Commission, within seven days of the Commission's decision, the names of at least two institutions, independent from them, either of whom Telia and Telenor, as the case may be, consider appropriate to be appointed as respective Trustees;
 - (b) The Commission shall have the discretion to approve or reject one or both of the names submitted. If only one name is approved, Telia and Telenor, as the case may be, shall appoint or cause the institution concerned to be appointed as Telia Trustee or Telenor Trustee. If more than one name is approved, Telia and Telenor shall be free to choose the Trustees to be appointed from among the names approved;
 - (c) If all the names submitted are rejected, Telia and Telenor, as the case may be, shall submit the names of at least two further such institutions (the "further names") within seven days of being informed of the rejection. If only one such further name is approved by the Commission, Telia or Telenor, as the case may be, shall appoint or cause the institution concerned to be appointed as Telia Trustee or Telenor Trustee. If more than one further name is approved, Telia and Telenor shall be free to choose the Trustees to be appointed from among the names approved; and
 - (d) If all further names are rejected by the Commission, the Commission shall nominate a Telia Trustee or Telenor Trustee, as the case may be, which Telia and/or Telenor will appoint or cause to be appointed.
18. Immediately upon appointment of the Trustees, Telia and Telenor respectively shall give the Trustees a mandate whose terms shall have been previously agreed with the Commission, and which may not be altered thereafter without the express written consent of the Commission, and which will include the following functions:
 - (a) in consultation with Telia and Telenor, as the case may be, determine the best management structure to ensure the viability, marketability and competitiveness of the Telia Divestments and of the Telenor Divestments;
 - (b) monitor the management and operation of each part of the Telia Divestments and of the Telenor Divestments in order to report on their continued viability, marketability and competitiveness. For the purpose of, and to the extent

necessary for, such monitoring, the Trustees will have access to the personnel and facilities as well as documents, books and records of the Telia Divestments and of the Telenor Divestments;

- (c) provide to the Commission, a written report every two months concerning the monitoring of the operation and management of the Telia Divestments and of the Telenor Divestments. In addition to these reports, the Trustees shall promptly report in writing to the Commission if either of them concludes on reasonable grounds that Telia or Telenor, as the case may be, is failing to fulfil its obligations under paragraphs 4 and 5 above;
- (d) at any other time, to provide to the Commission, at its request, a written or oral report on the matters referred to in paragraph (c) above;
- (e) in conjunction with Telia and Telenor's reports to the Commission pursuant to paragraph 14, indicate to the Commission whether they believe that each proposed purchaser mentioned in those reports would satisfy the requirements set out in paragraph 12 above; and
- (f) cease to perform their duties as Trustees after the closing of the sale of the last of any part of the respective businesses.

19. With respect to Telia's TE Holding, the Telia Trustee will:

- (a) in consultation with Telia, determine the best structure to supervise Telia's TE Holding;
- (b) monitor Telia's handling of Telia's TE Holding;
- (c) provide to the Commission a written report every two months concerning the monitoring of Telia's TE Holding. In addition to these reports, the Trustee shall promptly report in writing to the Commission if the Telia Trustee concludes on reasonable grounds that Telia is failing to fulfil its obligations under paragraph 6;
- (d) at any other time, to provide to the Commission, at its request, a written or oral report on the matters referred to in paragraph (c) above; and
- (e) cease to perform its duties as Telia Trustee with regard to Telia's TE Holding after the closing of the sale of Telia's TE Holding.

20. In the event that the divestments committed hereunder have not been divested by the end of a period of [...] from the date of the Commission's Decision, Telia and Telenor, as the case may be, undertake to give the Trustees an irrevocable mandate to find a purchaser for all or part of the businesses for the best possible price and other terms, in accordance with paragraphs 11 and 12, within the remainder of the applicable period specified in paragraph 11 (or any agreed extension thereof). Telia and Telenor, as the

case may be, undertake to provide the Trustees with all reasonable assistance and information necessary for the execution of such divestment and shall be kept informed by the Trustees of all negotiations regarding finding a purchaser for all or part of the businesses. In the case of the businesses identified in the second sentence of paragraph 11 above, the mandate shall be given after [...] from the date of the Commission's Decision (if no request for an extension is made or granted) or after [...] from the date of the Commission's Decision where a request for an extension is granted.

21. Telia and Telenor, as the case may be, will sign a binding sale and purchase agreement with a purchaser found by the Trustees pursuant to paragraph 20. Approval of the Commission shall be obtained in accordance with the provisions described at paragraph 16 above.
22. The Commission may, upon Telia or Telenor's request showing good cause, extend the applicable period for divestment by a period to be agreed.
23. If the Trustees are given a mandate to find a purchaser in accordance with paragraph 20, the reporting obligation on Telia and Telenor, pursuant to paragraph 14 shall be transferred from Telia and Telenor, as the case may be, to the Trustees.

1 October 1999

 duly authorised for and on behalf of Telia AB (publ)

 duly authorised for and on behalf of Telenor AS

CASE IV/M.1439 – TELIA/TELENOR

UNDERTAKING FROM TELIA/TELENOR TO THE EU COMMISSION

1ST OCTOBER, 1999

Telia and Telenor hereby commit to this Undertaking on the basis that the Commission agrees to clear the notified transaction under Article 8(2) of the EU Merger Regulation and on the basis that the notified concentration is implemented. These commitments are made following discussion with, and with the support of, respectively the Swedish and Norwegian States.

Purpose

1. The purpose of this Undertaking is to allow requesting parties to lease links on the local access networks of Telia and Telenor in Sweden and Norway (including bitstream) in order to provide any technically feasible end user services. This Undertaking will give lessees the opportunity to establish a sole customer relationship with customers. Telia/Telenor shall apply similar conditions in similar circumstances to other Parties providing similar services, and shall offer *inter alia* access to links, planning and testing possibilities to others under the same conditions and with the same quality as they provide for their own services, or those of their subsidiaries or partners, where applicable. All conditions and limitations shall as far as possible be based on approved international recommendations and specifications.

Definitions

2. For the purposes of this Undertaking, "local access network" is the local network of optical fibre, radio or coaxial cable links existing at the date hereof and copper wire links, which extends from the network interface at the subscriber premises to the main distribution frame located at the facilities where the links are terminated; "main distribution frame" refers to *inter alia* the point in the network where direct connections from customers can be made to a concentrator and/or switching equipment; a "requesting party" is a person who approaches Telia or Telenor with a view to leasing a link; a "lessee" is a person who has leased a link from Telia or Telenor under this Undertaking; "transmission protocol" is a format such as PSTN, ISDN or HDSL or other approved protocols.

Implementation

3. This Undertaking shall take effect within three months from the date of the Commission's decision approving the Telia/Telenor concentration. Telia and Telenor shall submit the standard framework agreement for leasing (including *inter alia* terms and conditions of access, requirements for the requesting party, obligations of the incumbent, procedures for delivery of services, pricing, terms of payment and non-discrimination provisions) and co-location (including *inter alia* conditions of access, product and performance specifications, procedures for access, obligations of the parties, prices and non-discrimination) to the Commission for approval within two months of the Commission's decision. Within this three month period, the standard framework agreement shall be published and the standard prices for leasing of the local access network and co-location services shall be set out in a price list and shall also be

published. The Commission may extend this period by no longer than three months on the basis of a reasoned request by Telia/Telenor showing good cause based on technical reasons.

Lease of links

4. Telia and Telenor shall lease links on the local access network upon request to any requesting party who can satisfy the minimum legal requirements in Sweden and Norway for operating as a provider of any type of telecommunications service, including switched voice telephony, internet, business data and value added services, and that complies with objective and justifiable criteria as set out in the framework agreement.
5. If the existing number of established copper wire links is insufficient to meet a request made pursuant to this Undertaking, Telia and Telenor shall be obliged to provide additional copper wire links. Telia/Telenor shall be obliged to make copper links available by *inter alia* (i) appropriate reconfigurations of the local access network or (ii) by moving a subscriber line from multiplexed sections to unoccupied copper lines where such action is necessary.
6. There shall be no limitation on the usage of the links leased pursuant to this Undertaking, other than such as are required for security of network operations, maintenance of network integrity, interoperability of services, protection of data and compliance with national laws and regulations.

Co-location

7. Telia and Telenor shall offer requesting parties upon reasonable request the ability to locate their telecommunications equipment at the same location where Telia or Telenor's relevant main distribution frame is located ("co-location"), and also all necessary ancillary services such as rights of access, supply of power, cooling and ventilation.
8. Where the available space or technical capacity for ancillary services at a site, for which co-location services has been requested, is not sufficient to meet a reasonable request made pursuant to this Undertaking, Telia/Telenor shall be obliged to make available additional space and/or technical capacity. Pending the provision of such additional space and/or technical capacity Telia/Telenor shall provide the requesting party with transmission capacity from the alternative co-location site to the originally requested co-location site free of charge where this is technically feasible.

Terms and conditions and pricing

9. Any lease of links or co-location services granted or provided under this Undertaking shall be offered on fair, reasonable and non-discriminatory conditions based on objective and transparent criteria. The price for the lease of links shall be based on current costs calculating methods (as specified in Commission Recommendation 98/322/EC of 8th April 1998 on interconnection in a liberalised telecommunications market as amended or revised). Where additional copper wire links are provided under paragraph 5 and where the investment in such additional links cannot in the reasonable view of Telia/Telenor be commercially justified, having

regard to the actual and potential demand that goes beyond the individual requirements of the requesting party, Telia and Telenor shall have the right to set a price on a case by case basis based on costs which are fair and reasonable and to require the relevant requesting party to make a reasonable investment contribution; alternatively the requesting party may elect to pay the total investment made by Telia/Telenor in which case the requesting party is not to pay for the lease of the link. Telia and Telenor must upon request justify the pricing for lease of links and co-location as cost based. Challenges as to the pricing for lease of links and co-location shall be resolved under the Fast Track Procedure as set forth in this undertaking. Further Telia and Telenor must upon request show that the listed end-user-prices (especially for subscription) do not harm the lessee (no predatory pricing) and at all times exceed the quoted price for lease of links and co-location in the standard framework agreement by at least a reasonable mark-up factor.

10. Where the available space or technical capacity for ancillary services at a site, for which a request for co-location services has been made, has to be increased in order to satisfy the request and where the investment required cannot in the reasonable view of Telia/Telenor be commercially justified having regard to the actual and potential demand that goes beyond the individual requirement of the requesting party, the price for co-location services will be set on a case by case basis based on costs which are fair and reasonable and the relevant requesting party may be required to make a reasonable investment contribution.

Procedure

11. Each requesting party shall submit a written request to Telia or Telenor specifying the details of the links which it wishes to lease, the transmission protocols to be utilised and its co-location requirements. Telia/Telenor shall respond to all such requests within two weeks. Telia/Telenor shall provide links within one month from the date of a positive response where the requesting party has already established co-location at the relevant main distribution frame and the requesting party already utilises the required transmission protocol at this main distribution frame, except for situations covered by paragraph 5. Co-location shall be provided within two months from the date of a positive response, except for situations covered by paragraph 8. In other circumstances envisaged in paragraphs 5 and 8, the parties shall comply with their obligations within a reasonable time.

Operation and maintenance

12. Telia and Telenor will remain responsible for the operation and maintenance of their respective local access networks. However, lessees shall be able to operate and maintain their own co-located equipment or to sub-contract such services from a suitably qualified provider of their own choice, subject to the approval of Telia or Telenor (such approval not to be unreasonably withheld).

Fast Track Dispute Resolution

13. In the event that Telia/Telenor responds to a request under paragraph 4 of this Undertaking by stating that the number of established copper wire links is insufficient to meet a reasonable

request or that the requesting party does not comply with the objective and justifiable criteria as set out in paragraph 4 or that there is not sufficient space or technical capacity for ancillary services at a site, for which co-location has been requested under paragraph 7, and the requesting party wishes to challenge the validity of such response hereunder, the dispute resolution procedure in paragraph 14 will apply ("Fast Track Procedure"). The Fast Track Procedure shall also be available to any requesting party who wishes to challenge the reasonableness of the time period indicated by Telia or Telenor for either increasing the number of links or space or technical capacity under paragraphs 5 or 8 and actual and potential demand as referred to in paragraph 9. The Fast Track Procedure shall also be available with regard to pricing disputes as set out in paragraph 9.

14. Any requesting party who wishes to avail itself of the Fast Track Procedure must notify Telia/Telenor in writing specifying the decision challenged, brief reasons for the challenge and nominating an arbitrator. Telia/Telenor shall within two weeks nominate its arbitrator and provide reasons for its challenged decision(s). The arbitrators nominated by Telia/Telenor and the requesting party shall, within one week from the nomination of the former, agree to appoint a third arbitrator. The arbitrators shall be instructed to take a decision within one month of the establishment of the arbitral tribunal as to the compliance by Telia/Telenor with their obligations under this Undertaking. The relevant provisions of national Swedish and Norwegian arbitration laws referred to in paragraph 15 shall apply. The arbitrators shall be instructed not to disclose confidential information.

General Dispute Resolution

15. In the event of a dispute in relation to this Undertaking to which the Fast Track Procedure does not apply, requesting parties and lessees may bring the matter before the national regulatory authorities in accordance with the dispute resolution procedures under national telecommunications law. For as long as the settlement of disputes arising from services provided under this Undertaking are not regulated by law or binding administrative regulations in Sweden and Norway, Telia and Telenor undertake to submit to arbitration pursuant to the Swedish Act on Arbitration (*Lag om skiljeförfarande* (1999:116)) or the Norwegian legislation on arbitration (*Tvistemalsloven Kap 32*). The arbitrators shall be instructed to settle disputes within three months with the possibility of an extension to six months. During arbitration (whether Fast Track Dispute Resolution or General Dispute Resolution) Telia and Telenor shall not solicit the customer(s) concerned by the dispute.

Reporting

16. Telia and Telenor shall every three months (or otherwise at the Commission's request) report in writing to the Commission on the compliance to this undertaking with copy to the national regulatory authorities in Sweden and Norway.

Amendment of the Undertaking

17. The parties reserve their rights under Community law to request the Commission to review the whole or any part of this Undertaking in particular in the event that the Swedish and/or Norwegian law is amended to include provisions substantially equivalent to this Undertaking.

FOR AND ON BEHALF
OF TELENOR AS

FOR AND ON BEHALF
OF TELIA AB (publ)
