

Joint construction and use of UMTS network parts

A memorandum of the NMa, OPTA and V&W

Disclaimer

This translation is an unofficial and therefore non-binding translation of the original Dutch document. The Dutch text is the leading version. The NMa, OPTA and V&W accept no responsibility whatsoever for misunderstandings arising from any discrepancy or as a result of mis-translation. In such circumstances reference will be made to the authentic Dutch text.

This definitive memorandum has been drawn up after studying the responses to the “NMa, OPTA and V&W draft memorandum regarding the joint construction and use of UMTS networks”. The draft memorandum was published on 19 July 2001, after which there was the opportunity to submit written responses up until 17 August 2001. Several market parties¹ have made comments and suggestions relating to the draft memorandum.

INTRODUCTION

1. Mobile operators are currently investigating the possibilities for collaboration in the construction and use of networks for Universal Mobile Telecommunications System (UMTS), both in order to limit the costs of establishing a UMTS network and to be able to provide UMTS services as quickly as possible, as well as further reducing the number of antenna sites required.
2. A number of market parties have asked the Director-General of the Netherlands competition authority (the NMa), the Independent Post and Telecommunications Authority (OPTA) and the State Secretary of Transport, Public Works and Water Management (hereafter referred to as the NMa, OPTA and V&W) to clarify the prevailing conditions with regard to the relevant laws and regulations that must be observed in developing collaboration in the construction or use of UMTS networks. The NMa (under the terms of the Competition Act), OPTA and V&W (under the terms of the UMTS auction² and licence conditions as they relate to the Telecommunications Act) hereby respond to these requests by means of this memorandum.
3. The NMa, OPTA and V&W have acquainted themselves with the European Commission's Communication regarding UMTS³ in which infrastructure sharing is cited as one of the specific options for advancing the introduction of UMTS. In view of the potential economic benefits the Commission takes a positive view in principle, provided that competition rules and the provisions of other General Community Legislation are respected.
4. The NMa, OPTA and V&W have also acquainted themselves with the document published in early May 2001 by the British Office of Telecommunications (Of tel) in collaboration with the Department of Trade and Industry and the Radio Agency.⁴ This document describes the various possible types of collaboration in the construction and use of UMTS radio networks as well as the general starting points for regulations that apply to infrastructure sharing. Such collaboration can vary from the shared use of antenna sites and masts to allowing a separate undertaking to operate one UMTS network on behalf of two or more licence holders. The shared use of antenna sites and masts is encouraged. Most types of infrastructure sharing restrict competition and are therefore prohibited by virtue of general competition rules. However, they may qualify for exemption from such prohibition where collaboration can achieve greater benefits than disadvantages.
5. In addition, the NMa, OPTA and V&W have acquainted themselves with the *Thesenpapier*⁵ of early June 2001 in which the Regulierungsbehörde für Telekommunikation und Post (RegTP) further clarified the prevailing German UMTS licence conditions. The paper states that joint construction of parts of networks is allowed, provided that individual operators retain control over the deployment and use of their networks, thereby effectively maintaining separate networks. This does not affect the applicability of the competition rules.
6. The NMa, OPTA and V&W are of the opinion that joint construction and use of the radio part⁶ of UMTS networks can, in principle, secure important advantages:

¹ Responses have been received from the Association of Competitive Telecom Operators (ACT), Ben Nederland BV, Dutchtone NV, KPN Mobile The Netherlands BV, Libertel NV, Rabobank International, Servicebureau Overheidsdienstverlening BV, Telfort Mobiel BV, UPC/Priority Telecom as well as Versatel Telecom International NV/Versatel 3G NV.

² This refers to the Regulations for the auction of user rights for radio frequencies for IMT-2000 and the Regulations for the application of a licence for IMT-2000 (both in the Netherlands Government Gazette 71, 10 April 2000) as well as the explanation given on these regulations in the question and answer procedure within the context of the UMTS auction.

³ Communication of the Commission to the Council, the European Parliament, The Economic and Social Committee and the Committee for the Regions. The introduction of third-generation (3G) mobile communications in the European Union: Status quo and the way forward (20 March 2001). See the web site: http://europa.eu.int/information_society.

⁴ 3G Mobile Infrastructure Sharing in the UK – Note for information May 2001. See web site: www.of tel.gov.uk.

⁵ *Thesenpapier*. See RegTP web site: www.regtp.de

⁶ See chapter 1 for a further elaboration on the term radio part of a UMTS network.

- operators can reach a larger number of users faster with less investment;
 - the initial loss-making period of UMTS market development can be shortened and competition at service level can therefore get underway sooner;
 - users can be offered a better service faster, with broader coverage and at lower prices;
 - furthermore, collaboration can reduce the total number of antenna sites required, limiting the planning and environmental impact of masts and antennae in line with the aims of the national antenna policy.
7. On the other hand, collaboration in the construction and use of parts of UMTS networks may lead to a reduction in competition to a lesser or greater degree. An important government aim is to guarantee sufficient competition, both between UMTS service providers and between UMTS networks. Collaboration should not weaken competition too much.
 8. The licence conditions state that every licence holder is required, *inter alia*, to roll out its own network, in all towns and cities with more than 25,000 inhabitants. This condition was imposed so as to secure competition between networks. It must therefore be verified that own networks continue to exist within concrete collaborative agreements. For the same reasons, the licences have been issued to five undertakings operating fully independently from one another. The shared use of frequencies thus acquired is also not permitted and furthermore, the transfer of UMTS licences is subject to certain limitations.⁷ The licence holders must have rolled out their networks by 2007 in accordance with the licence regulations. This does not prevent UMTS services being provided before that time, however, there is no formal obligation to provide services before 2007.⁸
 9. Where collaboration in the construction and use of UMTS networks may lead to a restriction of competition, the NMa must assess the collaboration under the terms of the Competition Act. Agreements that restrict competition are not permitted, however they may qualify for an exemption. In such cases the advantages and disadvantages of actual types of collaboration are weighed up against each other. This subject will be dealt with in greater detail in the section discussing the Competition Act.
 10. This memorandum aims to provide a general understanding of the starting points for assessing collaborative ventures in the light of existing legislation. The definitive assessment by the NMa based on existing regulations in the areas of competition can only take place on the basis of clearly defined collaboration plans. The NMa will then monitor compliance with the Competition Act. OPTA is to monitor the licence conditions and the obligations arising from the Telecommunications Act, whereby the V&W Inspectorate will monitor the technical aspects of the use of frequencies. This memorandum therefore does not replace the assessment of actual collaboration agreements under the terms of the Telecommunications Act and the Competition Act.
 11. For reasons of clarity, it must be noted that this memorandum applies only to voluntary types of collaboration instigated on the undertaking's own initiative. This does not affect the obligations under the terms of the existing Telecommunications Act.⁹
 12. The mere fact that a participant has been designated by OPTA as a participant with substantial power in a particular market within the meaning of Article 6.4 of the Telecommunications Act does not form an obstacle to collaboration with other market parties. The clearly defined collaborative ventures will be judged on their own individual merits in each case, whereby the market positions of the participants involved play a role.
 13. The starting point of this memorandum is the existing legal framework. This legal framework will be adjusted with the implementation of the new regulatory framework for communication infrastructures and associated communication services.¹⁰ Implementation is expected to take place in 2003.

⁷ Under the terms of Article 3.8 of the Telecommunications Act, the approval of the Minister of Transport, Public Works and Water Management is required for the transfer. In view of the auction conditions, transfer to another licence holder will not be permitted under any circumstances.

⁸ Besides this date of 1 January 2007, the application document for UMTS also contained the date 1 January 2003: "In the interests of an efficient use of frequencies, a licence holder must actually put into use the frequency space allocated to it. As from 1 January 2003, the RDR will ensure that this actually occurs". Since the date of 1 January 2003 is not contained in the licences for UMTS, strictly speaking this date does not constitute an obligation for the UMTS licence holders. The requirement of efficient use of the allocated frequency space, however, remains in force. The V&W Inspectorate will monitor this.

⁹ Such as, for instance, the obligation of parties with significant market power, and the obligation for site sharing.

14. Amendments to the licence conditions with regard to access for third parties are not desirable. Nevertheless, it cannot be ruled out that, using the OPTA analyses based on the new regulatory framework for communication infrastructures and associated communication services, or by the NMa based on the Competition Act, obligations will be imposed on the licence holders regarding access for third parties to their UMTS networks.
15. The further structure of this memorandum is as follows. First, a brief overview is provided of the various types of collaboration for the joint construction and use of parts of UMTS networks. Accordingly, an indication is given of the extent to which these types of collaboration are allowed under the existing communications regulations (licence and auction conditions in conjunction with the Telecommunications Act), before, finally, these issues are discussed in relation to the Competition Act.

DESCRIPTION OF TYPES OF COLLABORATION

16. This chapter briefly describes the various types of collaboration. Such types of collaboration are possible separately but also in a number of combinations.
17. A UMTS network consists of a radio access network, the radio part of a UMTS network (hereafter referred to as the radio network) and a core network. The core network is the nucleus of a UMTS network from which services are provided. The radio network comprises all antenna sites, transmitting and receiving installations and other required equipment and facilities at these sites. The Radio Network Controller (RNC), the equipment used to control the radio network and the fixed connections for signal transmission between the various parts of the radio network and the links to the core network, are all considered part of this. The costs of the radio network form a significant part of the total costs for constructing a UMTS network.
18. In establishing a UMTS network, collaboration can take place in various areas. The following types of collaboration can be distinguished:
 - a) *Layout of the antenna sites*
A mast to which one or more aerials can be attached is situated at an antenna site, as well as housing for the required equipment and so on. For setting up such a site, additional civil works - such as installing a power supply - must be carried out. From a technical point of view it is not difficult to jointly acquire and equip an antenna site.
 - b) *Uniform layout of networks (base grid sharing)*
Where the use of antenna sites is shared to a significant extent, this logically leads to shared radio planning: joint decision-making regarding the location of the sites (base grid). By selecting a corresponding radio network layout wherever possible, the opportunities for shared use of antenna sites are optimised, meaning that fewer antenna sites in the Netherlands are required.
 - c) *Shared use of base stations (Node Bs) and antennas*
The base station (Node B) provides radio coverage in a specified area of one or more cells. The Node B contains radio transmitting and receiving equipment. If two or more licence holders co-ordinate part of their radio planning, they can, if desired, also share antennas and base stations. See figure 1 in the appendix for a schematic overview of a shared Node B with its antenna.
 - d) *Shared use of network control (RNCs)*
The RNC is a device that controls a number of base stations and is linked to the core network. The RNC controls the signal quality of the radio network from a user's perspective. For example, the RNC is an important link in maintaining the connection when a subscriber moves around, moving from the coverage area of one base station to that of another (handover). The RNC also controls traffic capacity in such a way that overloading is prevented and the quality of the service is guaranteed. See figure 2 in the appendix for an overview of the aspects an RNC determines with the handover. From a technical point of view it is possible to share the use of RNCs.
 - e) *Shared construction and management of the radio network*

¹⁰ See the web site of the Directorate-General Information Society of the European Commission: http://europa.eu.int/information_society.

This type of collaboration refers to joint construction and management of the radio network. All components, up to and including the RNC, form part of the radio network. Various types of joint management are possible. For instance, a third party could construct and manage (a part of) the radio network. It is also possible for a number of operators to form a joint venture that controls their joint construction and management.

f) *Shared use of core networks*

The core network is the nerve system of a UMTS network. It contains the databases and other items that are required for the provision of services, call routing, subscriber administration, invoicing and so on. Connections with other networks (the interconnection) are also made through the core network, as also are the connections for other elements of the service such as internet portals. Shared use of the core network by two or more operators, in addition to shared radio network construction and management, means that in actual fact both operators offer their services via the same network.

g) *Shared use of frequencies*

Shared use of frequencies means that a licence holder (A) deploys one or more frequencies that were, at the time of licensing, allocated to another licence holder (B), for its own subscribers, at an antenna site that it manages and which is under its own control. In this situation the connections to licence holder A's mobile subscribers are maintained using frequencies belonging to licence holder B. The remainder of the connections are made via licence holder A's network. In this instance, in principle it is licence holder A who decides where and how licence holder B's frequencies are used as if they were its own. In addition, this type of collaboration could involve two or more licence holders who share the frequencies allocated to them (pooling).

h) *Use of each other's networks (roaming)*

Roaming is a situation whereby a subscriber (X) of a licence holder (A) establishes and/or maintains a connection that is run either entirely or partially via the network of another licence holder (B). This implies that subscriber X's connection runs at any rate via the radio network of licence holder B, and possibly also via the core network of licence holder B. From there, a further connection to other subscribers or other networks is made. The basis of this type of collaboration is that licence holder B manages the network and therefore determines where there is coverage, how it is operated, the quality provided etc., with which the services are provided to the subscribers of the licence holder A.

TELECOMMUNICATIONS ACT: AUCTION AND LICENCE CONDITIONS

19. In this chapter we assess which types of collaboration are and are not possible under telecommunications regulations. This does not affect assessment under the terms of the Competition Act, which is described in the next chapter.
20. The UMTS auction was organised in such a manner as to create five independent licence holders, each of whom must individually establish its own network. This will specifically manifest itself in line with the obligation for each individual licence holder to establish its own network with a specified degree of coverage by no later than 1 January 2007. This choice was made, on the one hand, to give as many undertakings as possible the opportunity to obtain a licence and, on the other hand, to have as many competitors as possible in the market.
21. The auction principles determined that a licence holder must retain full control over the frequencies it has acquired. Shared use of frequencies with other licence holders conflicts with Article 3.3 of the Telecommunications Act and is therefore not permitted. A licence holder is permitted, however, to allow other undertakings, be they licence holders or not, to share in the use of its frequencies (roaming).
22. In order to transfer a licence, approval from the Minister of Transport, Public Works and Water Management is required. The auction principles¹¹ determined that in principle no permission can be granted for the transfer of a licence to another licence holder. In the case of transfer of a licence to an undertaking that is affiliated to another licence holder, the control structure between the participants involved will be one of the determining factors in whether or not permission for the transfer will be granted.

¹¹ One licence could be obtained for each applicant. See Article 7, paragraph 2 of the Regulations for the application of a licence for IMT-2000 and Articles 13 and 21, paragraph 1, of the Regulations for the auction of user rights to radio frequencies for IMT-2000.

23. The outcome of the auction is based on the conditions for obtaining and using the licence and the possibilities for the transfer of the licence that were valid at the time of the auction. If the licence and auction conditions had been different, the outcome of the auction might also have been different. A retrospective change to these conditions is therefore undesirable.
24. The licence conditions stipulate that each licence holder must establish its own network.
"For its IMT-2000 network, the licence holder must realise coverage of at least the built-up area of all municipalities of more than 25,000 inhabitants, of all main traffic arteries (car, rail and water) between these municipalities, along the through motorways to Germany and Belgium and at or around Amsterdam Schiphol Airport, Maastricht Aachen Airport and Rotterdam Airport, and achieve a minimum service level outdoors of 144 kbit/s, before 1 January 2007. The above level must be achieved at any time in at least 95% of all cases".
 In short: based on the UMTS licence, every licence holder must establish its own network, which must have independently achieved a specified degree of coverage by 1 January 2007.
25. The UMTS application document, also in the context of the question and answer procedure that preceded the UMTS auction, states that the sharing of a number of items, such as antenna sites, is permitted.
"The conclusion that it is permitted for all network components to be shared with other participants, with the exception of all frequencies, is incorrect. In the summary of elements that may be shared as included in the application document, only the radio network elements are listed. In addition, collocation is mentioned as a possibility. This shows that the core network must be established by the individual licence holder. If licence holders go further in the sharing of infrastructures, it must be assessed, on a case-by-case basis, to what extent their own infrastructures still exist. Generally speaking, the shared use of antenna sites, base stations, power supply and leased lines should not present any problems. Where switches, software and frequencies are shared, the licence holder will need to demonstrate that its own infrastructure still exists".¹²
26. With regard to shared use of frequencies the above-mentioned documents state the following:
"Under the terms of Article 3.3 of the Telecommunications Act, the use of frequency space requires a licence. This means that the frequencies pertaining to the licence must be used by the individual licence holder. It is, however, possible that providers of public telecommunications services provide these services via the telecommunications network of the licence holder. In addition, a third party may provide services by order of the licence holder that utilise the frequency space allocated to the licence holder. If the above situations do not apply, a transfer of a licence applies and requires approval from the State Secretary of Transport, Public Works and Water Management. If the required approval is not applied for, it is possible the licence may be revoked under Article 3.7 of the Telecommunications Act".¹³
27. It may be concluded from the set parameters that a licence holder, irrespective of the extent to which it collaborates with other licence holders in the use of the radio network, must maintain independent control over all matters that determine the quality of its network and service provision.
28. A further clarification of what is to be understood by 'its own network' is important in this context. It concerns a clarification of a policy that has already been explained at the time of licence allocation. Now, however, at the current stage of preparation for collaboration in the construction and use of networks by operators and other undertakings, further clarification has proved desirable.
29. Within the framework outlined above, the possibilities for jointly constructing and using parts of the network while these remain the licence holders' own networks will be assessed.

Layout of antenna sites

30. There is no objection to licence holders jointly acquiring and establishing antenna sites. This has already been stated in the question and answer procedure of the licence allocation procedure. The efforts of the Ministry of Transport, Public Works and Water Management with regard to the national antenna policy confirm this.

Uniform layout of networks (base grid sharing)

¹² DGTP/V/00/00006, pp. 3-4.

¹³ DGTP/V/00/00039, p. 8.

31. By using similar network layouts, the possibilities for joint use of antenna sites are optimised which means that fewer sites are required. This facilitates the rollout of parts of the UMTS network and reduces planning and environmental impact. There is no objection as such under the terms of the Telecommunications Act to the joint design of the base grid.

Shared use of base stations (Node Bs) and antennas

32. It has already been indicated during the question and answer procedure within the framework of the UMTS auction that, generally speaking, the joint use of base stations will not present any problems (see paragraph number 25).
33. With this type of collaboration, in determining whether the networks remain the licence holders' own, it is important that the licence holder maintains control over the individual settings of the transmitting and receiving installations. This means that the individual licence holder must have access to its own logical connections or channels to the RNC. The licence holder must maintain full control at all times of the base station settings that are fundamental for the quality of its service provision, or that it can use to differentiate itself from the other licence holders. In other words: it must be guaranteed that each licence holder can individually determine the material elements that provide the difference between the licence holders. This implies that, logically speaking, the communication between the base station and the RNC is under the control of the licence holder. The fact that this communication takes place via the same physical cables and between the same physical equipment does not change this. It is essential that the licence holders can set up their network according to their own wishes, in order to be able to provide the services they want to provide.
34. In addition it is important that each operator uses its own frequencies. All facilities required to make this possible must be installed in the Node B. See figure 3 in the appendix for a schematic overview.

Shared use of network direction (RNCs)

35. The above statements with regard to the shared use of base stations also apply to the shared use of RNCs. For this type of collaboration too, an essential condition is that the equipment used remains operationally separate. If licence holders start physically sharing RNCs, it is important that the functional independence of the RNCs is guaranteed. In other words: collaboration must be organised in such a way that each licence holder determines its own settings, so that, from a functional point of view, a situation exists that is identical to that of fully separated networks. See figure 4 in the appendix for a schematic overview.

Shared construction and management of the radio network

36. During the question and answer period within the framework of the UMTS auction, the following was stated:
*"The licence holder determines itself how it wants to achieve this degree of coverage. In determining which coverage a licence holder has achieved, such issues as financial structures will not be taken into account. In the context of the establishment of their own network, licence holders are free to lease, hire or buy equipment or part of the infrastructure. For instance, there is no objection at all to the use of leased lines, collocation, site sharing or the shared use of antennas. However, if two or more licence holders jointly build a complete network and share the frequencies they have acquired to provide services to their customers, this can no longer be regarded as an individual licence holder's own infrastructure."*¹⁴
And further:
*"In determining whether a licence holder has its own infrastructure, the actual situation is assessed. In this context it is relevant who manages and uses the network for the provision of services and whether this infrastructure is shared with other licence holders. It is not relevant who has the legal ownership of the network or parts thereof."*¹⁵
37. In answering the question as to whether the licence holder has its own infrastructure it is important that the licence holder can determine the use and management of its own network, with regard to the use of its own frequencies, fully independently and as it sees fit. If the shared management and use of the network does not extend beyond the radio network (including for instance the base stations and the RNCs), and the participating licence holders can each independently determine the settings of the

¹⁴ UMTS application document, p. 13.

¹⁵ DGTP/V/00/00029, pp. 7-8.

network with regard to the use of their own frequencies (functional independence), this is still an independent network under the terms of the licence conditions.

Shared use of core networks

38. The joint use of the core network means that there is no longer an own infrastructure. Insofar as this is the case, the rollout obligations that apply as from 1 January 2007 will no longer be met. This has already been clearly explained in the question and answer procedure that preceded the UMTS auction (see paragraph number 25). The reason for this is that the essential difference between the service provision of the individual licence holders lies in the core network. There must be competition in this area. The NMa will, for the period before 2007, also examine whether joint use of the core network is in conflict with the Competition Act (see paragraph number 57).

Shared use of frequencies

39. Frequencies may not be shared. Under the terms of Article 3.3 of the Telecommunications Act, a licence is required for the use of frequency space (see paragraph number 24). This condition would not be met if a frequency were to be used by another licence holder. It also follows from the UMTS licence conditions that the licence holders must build their own networks with the specific frequencies allocated to them, with which they must have achieved a specified degree of coverage by 1 January 2007.

Use of each other's networks (roaming)

40. In the question and answer procedure during the preparation for the UMTS auction it has already been indicated that there is no objection to roaming between licence holders under the terms of the Telecommunications Act. This applies both to roaming on second-generation networks (GSM/DCS 1800) and roaming on third-generation networks (UMTS).

*"The same requirement for a specified degree of coverage applies to every licence holder as per 1 January 2007. Each licence holder must realise this individually. In addition, there is no objection to individual licence holders coming to agreements with other licence holders regarding national roaming. However, if licence holders together decide to each cover a section of the Netherlands and to cover the whole country via national roaming, this would not be considered as coverage with its own infrastructure."*¹⁶

41. Use of roaming cannot fulfil the coverage obligation as determined in the licence. After all, coverage that is realised by means of roaming is not obtained via its own network but by using the network of another licence holder. By using roaming, users will initially be able to use the services that are provided using the new technology much more quickly and over a greater area of the Netherlands. In the areas where, on the basis of the licence, there is no coverage obligation after 1 January 2007, roaming may also be used after this date.

Monitoring

42. Under the terms of the Telecommunications Act, OPTA is the authorised body with regard to monitoring adherence to the regulations and limitations of the UMTS licences. In short, these regulations and limitations provide for a certain degree of rollout as of 1 January 2007. This rollout obligation must be regarded as a minimum requirement aimed at the licence holders. Licence holders must have started with the rollout of their UMTS network before 1 January 2007, to enable them to meet their obligations in time. OPTA will closely monitor the rollout in order to ensure that compliance with this obligation can be enforced straight away on 1 January 2007. The measures OPTA could take include enforcement actions under administrative law and, as a last resort, revoking the licence.¹⁷

COMPETITION ACT

43. Apart from the Telecommunications Act, the Competition Act is an important framework within which a collaborative agreement must be assessed. The previous chapter indicated which types of collaboration

¹⁶ DGTP/V/00/00006, p. 4.

¹⁷ Licence revocation is the prerogative of the Minister of Transport, Public Works and Water Management.

are allowed based on the auction and licence conditions. In this chapter we will further clarify how these types of collaboration relate to the Competition Act.¹⁸

44. Generally speaking, collaboration between operators will be horizontal in character. This means that there is collaboration between undertakings that directly compete with each other at the same market level. The starting point for the assessment is the European Commission's policy towards horizontal agreements and the guidelines recently published in this context.¹⁹ The effect of these guidelines in the application of Articles 6 and 17 of the Competition Act has been explicitly laid down in the NMa's Guidelines for the Collaboration of Undertakings.²⁰
45. Under the terms of Article 6 of the Competition Act, agreements between undertakings, decisions taken by associations of undertakings and concerted practices by undertakings are prohibited if they have as their object or effect the prevention, restriction or distortion of competition in the Dutch market or a part thereof. Price agreements, sharing of markets or agreements between competitors in establishing production quotas serve to restrict competition. These agreements are presumed to have negative market effects, and it is therefore not necessary to examine their actual effects on competition and the market in order to establish that they fall under the prohibition of Article 6 of the Competition Act.²¹
46. The prevention, restriction or distortion of competition would not theoretically appear to be the object of collaboration in the construction and use of UMTS networks. However, such collaboration between competing mobile operators quickly leads to (appreciable) competition-restricting effects, both in the area of UMTS networks and the area of UMTS services. For this reason, the effects of collaboration between the licence holders on competition in the market will have to be analysed. In its assessment of the effects of a collaborative agreement submitted, the NMa will take into account the market structure (e.g. high entry barriers as a result of limited frequency space), the market position of the participants involved in the agreement, and the nature of the product and the service. For instance, a collaborative agreement between participants with a large market share will generally have a greater effect on the market than a collaborative agreement between participants with a smaller market share. If the participants appeal that there is no appreciable effect on competition, these participants will have to substantiate their arguments.²²
47. If the collaborative agreement results in a appreciable restriction of competition, under the terms of Article 17 of the Competition Act the Director-General of the NMa may grant an exemption to the prohibition of Article 6 upon request. The conditions for exemption imply that the agreement must contribute to improving production or distribution, or must promote technical or economic progress, while allowing consumers a fair share of the resulting benefits, without competition being further restricted more than is strictly necessary and while sufficient competition continues to exist in the market. In assessing an exemption, factors such as the duration of such collaboration, the number of parties involved in the collaboration, the cost savings that can be realised through such collaboration in relation to the total costs of constructing the network and the degree to which the parties can still set their own competitive parameters independently (such as the quality of their services and the scope of the cover) all play a role. It is also important for collaboration to be structured in such a way that competition is restricted as little as possible, and that participants can realise a separation wherever necessary.
48. In order to qualify for an exemption, the conditions of Article 17 of the Competition Act as stated above must be met. It should be noted in this respect that the burden of proof lies with the applicants for the exemption.²³
49. Within the framework outlined above, possibilities for joint construction or use of the network will be assessed.

¹⁸ For the sake of clarity, it should be noted that competition-restricting agreements with inter-state effects must also be reported to the European Commission.

¹⁹ Guidelines on the applicability of Article 81 of the EC Treaty to horizontal co-operation agreements, OJ C/3 of 6 January 2001, p.2.

²⁰ Guidelines for the Co-operation of Undertakings of 29 May 2001. See www.nma-org.nl.

²¹ See also the NMa decisions KNMvD (case no. 379) of 27 August 1998, the decision to the objection of 15 October 1999, as well as the verdict of the Rotterdam Court of 16 May 2001; NVZP and LTO 1 (case no. 613) of 29 July 1999 and NVZP and LTO 2 (case no. 642) of 9 July 1999; Central Organisation for Meat Wholesalers (case no. 234) of 30 July 1999.

²² See the NMa decision on the Roodveldt objection (case no. 199) of 22 August 2000.

²³ See, for example, the decision of the Rotterdam Court of 16 May 2001 in the case KNMvD (case no. 379).

Layout of antenna sites

50. The joint acquisition and construction of antenna sites is not regarded as a restriction of competition, with the result that this type of collaboration does not fall under Article 6 of the Competition Act.

Uniform layout of networks (base grid sharing)

51. The more antenna sites are shared by operators, the more the base grids of the networks of these operators will start to resemble each other. This means radio planning can be co-ordinated to a large extent. If two or more licence holders wish to proceed with this, it is important from the viewpoint of competition law that each operator has the freedom to act with regard to his own radio planning and that sufficient competition continues to exist between networks wherever possible.
52. Freedom to act with regard to radio planning means that each licence holder has the opportunity to decline to participate in the joint construction of an antenna site in any location, or to establish additional sites elsewhere itself. Collaboration must be free of obligation. Provided each licence holder remains responsible itself for its own complete planning and retains full control over the elements that are of material relevance to the quality of service provision, these agreements do not constitute competition-restricting agreements under Article 6 of the Competition Act.

Shared use of base stations (Node Bs) and antennas

53. The shared use of base stations and antennas may lead to a restriction of competition and, as such, falls under Article 6 of the Competition Act. After all, base stations and antennas provide radio coverage in a specific area. Shared use may mean operators lose their ability to differentiate with regard to the quality and range of their coverage. To qualify for an exemption it is essential that the antennas and the licence operators' Node Bs be functionally separated, for this functional separation of the antennas and Node Bs enables operators to continue to distinguish themselves from another operator using the same Node Bs. The functional separation must be demonstrated and will be checked once the network is operational. Exchange of information must furthermore be limited to the details that are technically required.

Shared use of network control (RNCs)

54. The shared use of RNCs leads to a more uniform quality of service provision and therefore has a anti competitive effect. This type of collaboration only then qualifies for exemption if the operators are not materially restricted in the way they set up their RNCs and provided sufficient competition continues to exist. It is very important that each operator continues to determine the quality of its network independently. This means that separate settings for all parameters relevant to quality must be possible, such as handover parameters and capacity allocation to users. The above-mentioned functional separation must be demonstrated and will be checked once the network is operational.

Joint construction and management of the radio network

55. Due to the wide range of potential types and combinations of collaboration in the joint establishment and management of the radio network, it is not really possible to anticipate the competition aspects of every conceivable configuration. Based on the above it is clear that the joint construction and use of a radio network (up to and including the RNC at most) can quickly lead to restriction of competition. In order to qualify for an exemption, the NMa will assess, among other things, the precise extent of the collaboration, which parties want to participate in the collaboration and what their joint market share is. If parties have a relatively small joint market share, the anti competitive effect is less likely than if they had a larger joint market share. The Commission Guidelines offer criteria for the assessment of the various types of collaborative ventures.²⁴
56. If the collaboration is set up in such a way that it constitutes a concentrative joint venture, before proceeding with actual implementation this concentration must be reported to the NMa or, depending on, *inter alia*, the size of the joint turnover of the undertakings involved, the European Commission. A joint company is understood to mean in the context of the merger control provisions an entity in which the participating undertakings exercise joint control. Joint control is said to exist if the shareholders have to

²⁴ See the guidelines mentioned earlier regarding horizontal collaborative agreements.

reach agreement on important decisions about the undertaking in which they participate.²⁵ Important decisions include the appointment and dismissal of directors, drawing up the budget, business plans and substantial investment. In assessing a concentrative joint venture, it will be checked whether the joint venture creates or strengthens a dominant position in UMTS networks or parts thereof. Among other things, the number of participants and the sizes of the participating undertakings are relevant.

Shared use of core networks

57. In view of the essential competitive parameters that are managed from the core network, it would appear that joint use of the core network would have negative effects on competition in the market. In principle, participants jointly using core networks have an insight into important competition data (such as the calling behaviour of subscribers) and can no longer differentiate between the quality of the service provided through the joint core network. It would therefore appear not possible to grant an exemption for this type of collaboration.

Shared use of frequencies

58. This type of collaboration is not allowed under the terms of the Telecommunications Act and therefore need not be discussed in the context of the Competition Act.

Use of each other's networks (roaming)

59. By reaching agreements about the rollout of networks combined with agreements about the use of each other's networks (roaming), every participating operator can offer its subscribers greater coverage faster, thereby offering the operator better sales opportunities. However, agreements about roaming can have anti competitive effects. If this is the case, the agreements must be reported to the NMa with a request for exemption. Particularly in the start-up phase of the UMTS rollout there appear to be reasons for exemption for (temporary) types of roaming. It is possible that certain operators could enter into roaming agreements for areas where there is no coverage obligation, or in areas where there is not (yet) intensive use of UMTS. It is important that, wherever possible, those types of roaming are selected that allow individual operators to maintain as much independence as possible and to continue to present an individual profile to their customers, so that competition is restricted as little as possible. International agreements on roaming must also be reported to the European Commission in view of their cross-border nature.

Definitive assessment

60. The assessment of an application for exemption submitted under the terms of the Competition Act is always made based on a clearly-defined collaborative venture. In this assessment, all relevant aspects of the collaboration submitted will be considered in the context of the Competition Act. Briefly, the following elements are important in the assessment: a choice must be made for the type of collaboration that goes only as far as strictly necessary for achieving the intended objective, any necessary separation must be possible without involving substantial costs and time planning, and participants in the agreement must retain as much freedom as possible in setting up their own competitive parameters.

IN CONCLUSION

61. With this memorandum, the NMa, OPTA and V&W have stated as clearly as possible which conditions must be taken into account by market parties when determining the type of collaboration in the construction and use of parts of UMTS networks. This document will be used by the NMa, OPTA and V&W as a guideline in assessing specific collaboration plans that have already been defined and developed. Further elaboration will be required in individual cases.

Appendices: schematic summaries

²⁵ See also the Communication from the European Commission regarding the distinction between joint companies with the character of a concentration or a joint venture (OJ C 385/01) of 31 December 1994, and concerning the concept of concentration, OJ C 66/5 of 2 March 1998.

Signed at The Hague, 26 September 2001,

The State Secretary of Transport, Public Works and Water Management

Drs. J.M. de Vries

The Director-General of the
Netherlands competition authority

Mr. A.W. Kist

The Chairman of the Commission of the
Independent Post and Telecommunications Authority

Prof. J.C. Arnbak