

Communication from the Commission**Community Guidelines for the application of State aid rules in relation to rapid deployment of broadband networks****(Text with EEA relevance)**

(2009/C 235/04)

1. INTRODUCTION

1. Broadband connectivity is a key component for the development, adoption and use of information and communication technologies (ICT) in the economy and in society. Broadband is of strategic importance because of its ability to accelerate the contribution of these technologies to growth and innovation in all sectors of the economy and to social and territorial cohesion. The Commission actively supports the widespread availability of broadband services for all European citizens as laid down in the Lisbon strategy and subsequent Communications ⁽¹⁾.

2. On 26 November 2008, the Commission adopted a European Economic Recovery Plan (the 'Recovery Plan') ⁽²⁾ as a means to drive Europe's recovery from the financial and economic crisis. The broadband strategy is an important part of the Recovery Plan ⁽³⁾. In particular, the aim of the plan is to boost EU investment in defined strategic sectors, such as broadband, that can help support the economy in the short run and over the longer term create essential infrastructures for sustainable economic growth.

3. As part of the Recovery Plan and with the aim of achieving 100 % high speed Internet coverage for all citizens by 2010, the Commission decided to inject EUR 1,02 billion into the European Agricultural Fund for Rural Development (EAFRD). Part of this amount will be used for deploying broadband infrastructures in rural areas to help rural areas get online, create new jobs and help business grow further ⁽⁴⁾. In addition, a number of Member States have already announced plans to support investment not only in high-speed broadband infrastructure for rural and underserved areas, but also to accelerate the deployment of very high speed, next-generation access ('NGA') ⁽⁵⁾ networks in large areas of their territories, including urban areas or areas already served by basic broadband infrastructures.

4. It should be recalled that in the 'State aid Action Plan — Less and better targeted State aid: a roadmap for State aid reform 2005-2009' ⁽⁶⁾, the Commission noted that State aid measures can, under certain conditions, be effective tools for achieving objectives of common interest. In particular State aid can correct market failures, thereby improving the efficient functioning of markets and enhancing competitiveness. Further, where markets provide efficient outcomes but these are deemed unsatisfactory from a cohesion policy point of view, State aid may be used to obtain a more desirable, equitable market outcome. In particular, a well targeted State intervention in the broadband field can contribute to reducing the 'digital divide' ⁽⁷⁾ that sets apart areas or regions within a country where affordable and competitive broadband services are on offer and areas where such services are not.

⁽¹⁾ See for instance 'i2010 — A European Information Society for growth and employment', COM(2005) 229 final, 1 June 2005, 'eEurope 2005: An information society for all', COM(2002) 263 final, 'Bridging the broadband gap', COM(2006) 129.

⁽²⁾ Communication from the Commission to the European Council, COM(2008) 800.

⁽³⁾ Brussels European Council, 19 and 20 March 2009 Presidency Conclusions.

⁽⁴⁾ See Regulation (EC) No 473/2009 of 25 May 2009 amending Regulation (EC) No 1698/2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and Regulation (EC) No 1290/2005 on the financing of the common agricultural policy (OJ L 144, 9.6.2009, p. 3).

⁽⁵⁾ For the purpose of this document NGA networks are wired access networks which consist wholly or in part of optical elements and which are capable of delivering broadband access services with enhanced characteristics (such as higher throughput) as compared to those provided over existing copper networks (see also below footnote 60).

⁽⁶⁾ COM(2005) 107 final.

⁽⁷⁾ During the past decade, Information and Communications Technologies (ICTs) have become accessible and affordable for the general public. The term 'digital divide' is most commonly used to define the gap between those individuals and communities that have access to the information technologies and those that do not. Although there are several reasons for this 'digital divide', the most important is the lack of an adequate broadband infrastructure. Looking at the regional dimension, the degree of urbanisation is an important factor for access to and use of ICTs. Internet penetration remains thus much lower in thinly populated areas throughout the European Union.

5. At the same time, it must be ensured that State aid does not crowd out market initiative in the broadband sector. If State aid for broadband were to be used in areas where market operators would normally choose to invest or have already invested, this could affect investments already made by broadband operators on market terms and might significantly undermine the incentives of market operators to invest in broadband in the first place. In such cases, State aid to broadband might become counterproductive to the objective pursued. The primary objective of State aid control in the field of broadband is to ensure that State aid measures will result in a higher level of broadband coverage and penetration, or at a faster rate, than would occur without the aid, and to ensure that the positive effects of aid outweigh its negative effects in terms of distortion of competition.
6. It should be recalled that the regulatory framework for electronic communications also deals with issues related to broadband access⁽⁸⁾. Thus wholesale broadband markets are to date subject to ex ante regulation in all Member States. In this regard, the Commission⁽⁹⁾ and the national authorities⁽¹⁰⁾ have already taken a number of initiatives that aim to address the new challenges that NGA networks raise from a regulatory point of view, in particular regarding access issues.
7. The present Guidelines summarise the Commission's policy in applying the State aid rules of the Treaty to measures that support the deployment of traditional broadband networks (Section 2) and also address a number of issues relating to the assessment of measures aiming to encourage and support the rapid roll-out of NGA networks (Section 3).
8. The Commission will apply the Guidelines set out in this Communication in the assessment of State aid to broadband, thereby increasing legal certainty and the transparency of its decision-making practice.

2. THE COMMISSION POLICY ON STATE AID FOR BROADBAND PROJECTS

2.1. The application of the State aid rules

9. The Commission has taken an overwhelmingly favourable view towards State measures for broadband deployment for rural and underserved areas, whilst being more critical for aid measures in areas where a broadband infrastructure already exists and competition takes place. Where State intervention to support broadband deployment satisfied the conditions of State aid within the meaning of Article 87(1), its compatibility has been assessed so far by the Commission mainly under Article 87(3). The Commission State aid policy towards State measures to support broadband network deployments can be summarised in Sections 2.2 and 2.3 below.

2.2. Article 87.1: Presence of aid

10. According to Article 87(1) of the Treaty establishing the European Community, 'any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the common market'. It follows that in order for a measure to qualify as State aid, the following cumulative conditions have to be met:

- (a) the measure has to be granted out of State resources;
- (b) it has to confer an economic advantage to undertakings;

⁽⁸⁾ See Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) (OJ L 108, 24.4.2002, p. 33), Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services, (Authorisation Directive) (OJ L 108, 24.4.2002, p. 21) and Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and inter-connection of, electronic communications networks and associated facilities (Access Directive) (OJ L 108, 24.4.2002, p. 7).

⁽⁹⁾ See Commission draft Recommendation 'on regulated access to Next Generation Access Networks (NGA)', at http://ec.europa.eu/information_society/policy/ecomms/doc/library/public_consult/nga/dr_recomm_nga.pdf

⁽¹⁰⁾ See for instance, European Regulators Group Statement on the development of NGA Access, ERG (08) 68, at http://www.erg.eu.int/doc/publications/erg_08_68_statement_on_nga_development_081211.pdf Ofcom, 'Delivering super fast broadband in the UK. Promoting investment and competition' Statement, 3 March 2009. See also the recent legislation adopted in France on 15 January 2009 to promote the deployment of fibre-based networks: *Journal Officiel de la république française*, 16 janvier 2009.

- (c) the advantage has to be selective and distort or threaten to distort competition;
- (d) the measure has to affect intra-Community trade.
11. As the Commission's State aid decision-making practice in the broadband field shows, public support for broadband projects often involves the presence of State aid within the meaning of Article 87(1) of the Treaty ⁽¹¹⁾.
12. First, the measures typically involve State resources (for instance, where the State supports broadband projects through subsidies, tax rebates or other types of preferential financing conditions) ⁽¹²⁾.
13. Second, as regards support granted for an economic activity, State measures supporting broadband deployment projects usually address the exercise of an economic activity (such as building, operating, and enabling access to broadband infrastructure including backhaul facilities and ground equipment, such as fixed, terrestrial wireless, satellite-based, or a combination thereof). However, in exceptional cases where the network thus financed is not used for commercial purposes (e.g. the network only provides broadband access to non-commercial websites, services and information) ⁽¹³⁾, such state intervention would not involve the granting of an economic advantage on undertakings, and consequently would not constitute State aid within the meaning of Article 87(1) of the Treaty.
14. Third, as regards the granting of an advantage, the aid is usually granted directly to investors ⁽¹⁴⁾ of the network, which in most cases are chosen by means of an open tender ⁽¹⁵⁾. While the use of a tender ensures that any aid is limited to the minimum amount necessary for the particular project, the financial support might enable the successful bidder to conduct a commercial activity on conditions which would not otherwise be available on the market. Indirect beneficiaries might include third party operators that obtain wholesale access to the infrastructure thus built, and also business users who get broadband connectivity under terms and conditions that would not apply without State intervention ⁽¹⁶⁾.
15. Fourth, as regards the selectivity criterion, State measures supporting the deployment of broadband networks are selective in nature in that they target undertakings which are active only in certain regions or in certain segments of the overall electronic communications services market. Moreover, concerning the distortion of competition, the intervention of the State tends to alter existing market conditions, in that a number of firms would now choose to subscribe to the services provided by the selected suppliers instead of existing, possibly more expensive alternative market-based solutions ⁽¹⁷⁾. Therefore, the fact that a broadband service becomes available, either at all or at a lower price than otherwise would have been the case, has the effect of distorting competition. Moreover, State support to broadband might reduce profitability and crowd out investment by market players that would otherwise be willing to invest in the targeted area or parts of it.
16. Finally, insofar as the State intervention is liable to affect service providers from other Member States, it also has an effect on trade since the markets for electronic communications services (including the wholesale and the retail broadband markets) are open to competition between operators and service providers ⁽¹⁸⁾.

⁽¹¹⁾ For a list of all Commission decisions taken under the State aid rules in the broadband field, see http://ec.europa.eu/competition/sectors/telecommunications/broadband_decisions.pdf

⁽¹²⁾ See also Section 2.2.2 on the application of the market economy investor principle.

⁽¹³⁾ See Commission Decision of 30 May 2007 in Case NN 24/07 — Czech Republic, *Prague Municipal Wireless Network*.

⁽¹⁴⁾ The term 'investors' denotes undertakings or electronic communications network operators that invest in the construction and deployment of broadband infrastructure.

⁽¹⁵⁾ The Commission has only approved one case of a measure that did not involve an open tender but which involved a tax credit scheme to support the roll-out of broadband in underserved areas of Hungary, see Decision N 398/05 — Hungary 'Development of Tax Benefit for Broadband'.

⁽¹⁶⁾ See for instance, Commission Decision N 570/07 — Germany, *Broadband in rural areas of Baden-Württemberg*; Decision N 157/06 — United Kingdom, *South Yorkshire Digital Region Broadband Project*; Decision N 262/06 — Italy, *Broadband for rural Tuscany*; Decision N 201/06 — Greece, *Broadband access development in underserved territories*; and Decision N 131/05 — United Kingdom, *FibreSpeed Broadband Project Wales*. Residential users, although also beneficiaries of such measures, are not however subject to the State aid rules since they are neither undertakings nor economic operators within the meaning of Article 87(1).

⁽¹⁷⁾ See Commission Decision N 266/08 — Germany, *Broadband in rural areas of Bayern*.

⁽¹⁸⁾ See Commission Decision N 237/08 — Germany, *Broadband support in Niedersachsen*.

2.2.1. *Absence of aid: the application of the market economy investor principle*

17. Where the State supports the roll-out of broadband by way of an equity participation or capital injection into a company that is to carry out the project, it becomes necessary to assess whether this investment involves State aid. Article 295 of the Treaty provides that '[t]his Treaty shall in no way prejudice the rules in Member States governing the system of property ownership'. According to the case-law of the Court of Justice of the European Communities ('the Court'), it follows from the principle of equal treatment that capital placed by the State, directly or indirectly, at the disposal of an undertaking in circumstances which correspond to normal market conditions cannot be regarded as State aid.
18. When equity participation or capital injections by a public investor do not present sufficient prospects of profitability, even in the long term, such intervention must be regarded as aid within the meaning of Article 87 of the Treaty, and its compatibility with the common market must be assessed on the basis solely of the criteria laid down in that provision⁽¹⁹⁾.
19. The Commission has examined the application of the principle of the market economy private investor in the broadband field in its Amsterdam decision⁽²⁰⁾. As underlined in this decision, the conformity of a public investment with market terms has to be demonstrated thoroughly and comprehensively, either by means of a significant participation of private investors or the existence of a sound business plan showing an adequate return on investment. Where private investors take part in the project, it is a *sine qua non* condition that they would have to assume the commercial risk linked to the investment under the same terms and conditions as the public investor.

2.2.2. *Absence of aid: Public service compensation and the Altmark criteria*

20. In some instances, Member States may consider that the provision of a broadband network should be regarded as a service of a general economic interest ('SGEI') within the meaning of Article 86(2) of the Treaty⁽²¹⁾.
21. According to the case-law of the Court, provided that four main conditions (commonly referred to as the *Altmark* criteria) are met, State funding for the provision of an SGEI may fall outside the scope of Article 87(1) of the Treaty⁽²²⁾. The four conditions are: (a) the beneficiary of a State funding mechanism for an SGEI must be formally entrusted with the provision and discharge of an SGEI, the obligations of which must be clearly defined; (b) the parameters for calculating the compensation must be established beforehand in an objective and transparent manner, to avoid it conferring an economic advantage which may favour the recipient undertaking over competing undertakings; (c) the compensation cannot exceed what is necessary to cover all or part of the costs incurred in the discharge of the SGEI, taking into account the relevant receipts and a reasonable profit for discharging those obligations; and (d) where the beneficiary is not chosen pursuant to a public procurement procedure, the level of compensation granted must be determined on the basis of an analysis of the costs which a typical undertaking, well run, would have incurred in discharging those obligations, taking into account the relevant receipts and a reasonable profit.

⁽¹⁹⁾ Case C-303/88, *Italy v Commission*, [1991] ECR I-1433, at paragraphs 20-22.

⁽²⁰⁾ Commission Decision of 11 December 2007 in Case C 53/2006 *Citynet Amsterdam — investment by the city of Amsterdam in a fibre-to-the home (FTTH) network*, OJ L 247, 16.9.2008, p. 27. The case concerned the construction of a 'Fibre-to-the-Home' (FTTH) broadband access network connecting 37 000 households in Amsterdam, which were already served by several competing broadband networks. The Amsterdam municipality had decided to invest in the passive layer of the network together with two private investors and five housing corporations. The passive infrastructure was owned and managed by a separate entity of which the Amsterdam municipality owned one third of its shares, two other private investors ('ING Real Estate' and 'Reggefiber') another third, while housing corporations owned the remaining third.

⁽²¹⁾ According to the case-law, undertakings entrusted with the operation of services of general economic interest must have been assigned that task by an act of a public authority. In this respect, a service of general economic interest may be entrusted to an operator through the grant of a public service concession; see Joined Cases T-204/97 and T-270/97 *EPAC v Commission* [2000] ECR II-2267, paragraph 126 and Case T-17/02 *Fred Olsen v Commission* [2005] ECR II-2031, paragraphs 186, 188-189.

⁽²²⁾ See Case C-280/00, *Altmark Trans GmbH and Regierungspräsidium Magdeburg v Nahverkehrsgesellschaft Altmark GmbH* [2003] ECR I-7747 ('Altmark judgment').

22. In two decisions ⁽²³⁾ concerning measures taken by regional authorities to award a (subsidised) public service concession ⁽²⁴⁾ to private operators for the deployment of basic broadband networks in under-served regions, the Commission came to the conclusion that the notified support schemes were in line with the four criteria laid down in *Altmark*, and did not therefore fall under Article 87(1) ⁽²⁵⁾. In particular, in both cases, the successful bidder was chosen on the basis of the lowest amount of aid requested and the amount of compensation granted was established on the basis of pre-determined and transparent criteria. Moreover, the Commission found no evidence or risk of overcompensation.
23. Conversely, the Commission has ruled that the notion of an SGEI and the subsequent reliance on the *Altmark* case-law could not be accepted where the provider had neither a clear mandate nor was he under any obligation to provide broadband access to and connect all citizens and businesses in under-served areas but was more oriented towards connecting businesses ⁽²⁶⁾.
24. Moreover, according to the case-law, although Member States have wide discretion to define what they regard as services of general economic interest, the definition of such services or tasks by a Member State can be questioned by the Commission in the event of a manifest error ⁽²⁷⁾. In other words, although the determination of the nature and scope of an SGEI mission falls within the competence and discretionary powers of Member States, such competence is neither unlimited nor can it be exercised arbitrarily ⁽²⁸⁾. In particular, for an activity to be considered as an SGEI, it should exhibit special characteristics as compared with ordinary economic activities ⁽²⁹⁾. In this respect, the Commission will consider that in areas where private investors have already invested in a broadband network infrastructure (or are in the process of expanding further their network infrastructure) and are already providing competitive broadband services with an adequate broadband coverage, setting up a parallel competitive and publicly-funded broadband infrastructure should not be considered as an SGEI within the meaning of Article 86 of the Treaty ⁽³⁰⁾. Where however it can be demonstrated that private

⁽²³⁾ See Commission Decision N 381/04 — France, *Projet de réseau de télécommunications haut débit des Pyrénées-Atlantiques*, and Commission Decision 382/04 — France, *Mise en place d'une infrastructure haut débit sur le territoire de la région Limousin (DORSAL)*.

⁽²⁴⁾ Although reference is made in these guidelines to a public service 'concession', the form of the contractual instrument chosen for the award of a public service mission or SGEI may vary from one Member State to another. However, the instrument should specify at least the precise nature, scope and duration of the public service obligations imposed and the identity of undertakings concerned, and the costs to be borne by the undertaking concerned.

⁽²⁵⁾ In particular, given that Member States enjoy a wide discretion in defining the scope of an SGEI, the Commission recognised in the above two decisions that to the extent that the provision of a ubiquitous broadband infrastructure would be open to all other network providers and would remedy a market failure and would provide connectivity to all users in the regions concerned, the Member State concerned had not committed a manifest error in considering that the provision of such a service fell within the notion of an SGEI.

⁽²⁶⁾ See Commission Decision N 284/05 — Ireland, *Regional Broadband Programme: Metropolitan Area Networks (MANs), phases II and III*, at paragraphs 23, 37-40. In that case the Commission considered that the support given for the roll-out and operation of Metropolitan Area Networks (MANs) in a number of towns in Ireland was not a compensation for an SGEI on the ground that notified measure resembled more a 'private-public-partnership' than an entrustment and implementation of an SGEI. See also Decision N 890/06 — France, *Aide du Sicoval pour un réseau de très haut débit*. In that case, the Commission pointed out that the notified measure concerned support for the provision of broadband connectivity only for business parks and public sector organisations in a part of Toulouse, excluding the residential sector. Moreover, the project was covering only a part of the region. Accordingly, the Commission found that this was not an SGEI on the grounds that the notified measure did not aim to serve the citizens' interests, but those of the business sector.

⁽²⁷⁾ See Case T-289/03, *Bupa and others v Commission*, [2008] ECR II-000, at paragraph 165, and Case T-106/95 *FFSA and Others v Commission* [1997] ECR II-229, paragraph 99. See also paragraph 14 of the Commission Communication on services of general interest in Europe (OJ C 17, 19.1.2001, p. 4).

⁽²⁸⁾ See Case T-442/03, *SIC v Commission* [2008] ECR II-000, paragraph 195, Case T-289/03, *op.cit.*, at paragraph 166, and Case T-17/02, *op.cit.*, at paragraph 216. According to paragraph 22 of the Commission Communication on services of general interest in Europe, 'Member States' freedom to define [services of general economic interest] means that Member States are primarily responsible for defining what they regard as [such] services ... on the basis of the specific features of the activities. This definition can only be subject to control for manifest error'.

⁽²⁹⁾ This implies that the general interest objective pursued by the public authorities cannot simply be that of development of certain economic activities or economic areas as foreseen in Article 87(3)(c). See decision N 381/04 — France, *Projet de réseau de télécommunications haut débit des Pyrénées-Atlantiques*, paragraph 53, and Commission Decision N 382/04 — France, *Mise en place d'une infrastructure haut débit sur le territoire de la région Limousin (DORSAL)*.

⁽³⁰⁾ In this respect, the networks to be taken into consideration for assessing the need for an SGEI should be always of comparable architecture, namely either basic broadband or NGA networks.

investors may not be in a position to provide in the near future ⁽³¹⁾ adequate broadband coverage to all citizens or users leaving thus a significant part of the population unconnected, a public service compensation may be granted to an undertaking entrusted with the operation of an SGEI provided that the conditions set out in paragraphs 25 to 29 are met. As a preliminary point, it should be stressed that the considerations set out in those paragraphs are based on the specificities of the broadband sector and reflect the experience gained so far by the Commission in this area. Thus, the conditions set out in those paragraphs although they are not exhaustive, are however indicative of the Commission's approach in assessing on a case-by-case basis whether the activities in question can be defined as an SGEI, and whether the public financing granted in this regard complies with the State aid rules of the Treaty.

25. With regard to the definition of the scope of an SGEI mission for the purposes of ensuring widespread deployment of a broadband infrastructure Member States are required to describe the reasons why they consider that the service in question, because of its specific nature, deserves to be characterised as an SGEI and to be distinguished from other economic activities ⁽³²⁾. They should further ensure that the SGEI mission satisfies certain minimum criteria common to every SGEI mission and demonstrate that those criteria are indeed satisfied in the particular case.
26. These criteria include, at least, (a) the presence of an act of the public authority entrusting the operators in question with an SGEI mission and (b) the universal and compulsory nature of that mission ⁽³³⁾. Thus in assessing whether the definition of an SGEI for broadband deployment does not give rise to a manifest error of appreciation, Member States should ensure that the broadband infrastructure to be deployed should provide universal connectivity to all users in a given area, residential and business users alike. Moreover, the compulsory nature of the SGEI mission implies that the provider of the network to be deployed will not be able to refuse access to the infrastructure on a discretionary and/or discriminatory basis (because for instance, it may not be commercially profitable to provide access services to a given area).
27. Given the state of competition that has been achieved since the liberalisation of the electronic communications sector in the Community, and in particular the competition that exists today on the retail broadband market, a publicly-funded network set up within the context of an SGEI should be available for all interested operators. Accordingly, the recognition of an SGEI mission for broadband deployment should be based on the provision of a passive, neutral ⁽³⁴⁾ and open access infrastructure. Such a network should provide access seekers with all possible forms of network access and allow effective competition at the retail level, ensuring the provision of competitive and affordable services to end-users ⁽³⁵⁾. Therefore, the SGEI mission should only cover the deployment of a broadband network providing universal connectivity and the provision of the related wholesale access services, without
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- ⁽³¹⁾ The term in the 'near future' should be understood as referring to a period of three years. In this regard, investment efforts planned by private investors should be such as to guarantee that at least significant progress in terms of coverage will be made within the three-year time period, with completion of the planned investment foreseen within a reasonable time frame thereafter (depending on the specificities of each area and of each project).
- ⁽³²⁾ In the absence of such reasons, even a marginal review by the Commission on the basis of both the first *Altmark* condition and Article 86(2) EC with respect to the existence of a manifest error by the Member State in the context of its discretion would not be possible, Case T-289/03, *BUPA and Others v Commission* [2008] ECR II-0000, paragraph 172.
- ⁽³³⁾ It follows from the case-law on Article 86(2) that a Member State must indicate the reasons why it considers that the service in question, because of its specific nature, deserves to be characterised as an SGEI and to be distinguished from other economic activities. In the absence of such reasons, even a marginal review by the Commission on the basis of both the first *Altmark* condition and Article 86(2) EC with respect to the existence of a manifest error by the Member State in the context of its discretion would not be possible, Case T-289/03, *BUPA and Others v Commission* [2008] ECR II-0000, paragraph 172.
- ⁽³⁴⁾ A network should be technologically neutral and thus enable access seekers to use any of the available technologies to provide services to end users. Although such a requirement may be of limited application in relation to the deployment of an ADSL network infrastructure, this may not be the case in relation to a NGA, fibre-based network where operators may use different fibre technologies to provide services to end-users (i.e., point-to-point or G-PON).
- ⁽³⁵⁾ For example, an ADSL network should provide bitstream and full unbundling, whereas a NGA fibre-based network should provide at least access to dark fibre, bitstream, and if a FTTC network is being deployed, access to sub loop unbundling.

including retail communication services⁽³⁶⁾. Where the provider of the SGEI mission is also a vertically integrated broadband operator, adequate safeguards should be put in place to avoid any conflict of interest, undue discrimination and any other hidden indirect advantages⁽³⁷⁾.

28. Given that the market for electronic communications is fully liberalised, it follows that an SGEI for broadband deployment cannot be based on the award of an exclusive or special right to the provider of the SGEI within the meaning of Article 86(1).
29. In complying with its universal coverage mission, an SGEI provider may need to deploy a network infrastructure not only in areas which are unprofitable but also in profitable areas, that is areas in which other operators may have already deployed their own network infrastructure or may plan to do so in the near future. However, given the specificities of the broadband sector, in this case any compensation granted should only cover the costs of rolling out an infrastructure to the non-profitable areas⁽³⁸⁾. Where an SGEI for the deployment of a broadband network is not based on the deployment of a publicly-owned infrastructure adequate review and claw back mechanisms should be put in place in order to avoid that the SGEI provider obtains an undue advantage by retaining ownership of the network that was financed with public funds after the end of the SGEI concession. Finally, the SGEI compensation should in principle be granted through an open, transparent, non-discriminatory tender requiring all candidate operators to define in a transparent manner the profitable and non-profitable areas, estimate the expected revenues and request the corresponding amount of compensation that they consider strictly necessary, avoiding any risk of overcompensation. A tender organised under such conditions should guarantee that the fourth condition set out in *Altmark* is fulfilled (see paragraph 21).
30. Where the four criteria set out in *Altmark* are not met, and if the general criteria for the applicability of Article 87(1) of the Treaty are fulfilled, public service compensation for the deployment of a broadband infrastructure will constitute State aid and will be subject to Articles 73, 86, 87 and 88 of the Treaty. In this case, State aid in the form of public service compensation granted to certain undertakings entrusted with the operation of services of general economic interest (see paragraphs 25-29 above) could be regarded as compatible with the common market and exempt from the requirement of notification laid down in Article 88(3) of the Treaty if the requirements set out in the Commission Decision of 28 November 2005 'on the application of Article 86(2) of the EC Treaty to State aid in the form of public service compensation granted to certain undertakings entrusted with the operation of services of general economic interest' are met⁽³⁹⁾.

2.3. The compatibility assessment under Article 87(3)

31. Where a notified measure has been found by the Commission to constitute aid within the meaning of Article 87(1) of the Treaty, the compatibility assessment has so far been based directly on Article 87(3)(c)⁽⁴⁰⁾.

⁽³⁶⁾ This limitation is justified by the fact that, once a broadband network providing universal connectivity has been deployed, the market forces are normally sufficient to provide communication services to all users at a competitive price.

⁽³⁷⁾ Such safeguards may include, in particular, an obligation of accounting separation, and may also include the setting up of a structurally and legally separate entity from the vertically integrated operator. Such entity should have sole responsibility for complying with and delivering the SGEI mission assigned to it.

⁽³⁸⁾ It is for Member States to devise given the particularities of each case the most appropriate methodology to ensure that the compensation granted will only cover the costs of serving the SGEI mission in the non-profitable areas. For instance, the compensation granted could be based on a comparison between revenues accruing from the commercial exploitation of the infrastructure in the profitable areas and the revenues accruing from the commercial exploitation in the non-profitable areas. Any excess profits, that is profits beyond the average industry return on capital for deploying a given broadband infrastructure, could be assigned to the financing of the SGEI in the non-profitable areas with the remainder being the subject of the financial compensation granted.

⁽³⁹⁾ OJ L 312, 29.11.2005, p. 67. See also, 'Community framework for State aid in the form of public service compensation', OJ C 297, 29.11.2005, p. 4.

⁽⁴⁰⁾ It should be recalled that according to Article 87(3)(a) of the Treaty, 'aid to promote the economic development of areas where the standard of living is abnormally low or where there is serious underemployment' may also be considered to be compatible with the common market.

32. The areas covered by a broadband State aid project may also be assisted areas within the meaning of Article 87(3)(a) and (c), and the Regional Aid Guidelines⁽⁴¹⁾. In this case, aid to broadband may also qualify as aid for initial investment within the meaning of Regional Aid Guidelines. However, in many of the cases examined so far by the Commission there were also other areas targeted by the notified measures which were not 'assisted', and as a result the Commission's assessment could not be carried out under the Regional Aid Guidelines⁽⁴²⁾.

33. Where a measure falls within the scope of the Regional Aid Guidelines ('RAG'), and where it is envisaged to grant individual ad hoc aid to a single firm, or aid confined to one area of activity, it is the responsibility of the Member State to demonstrate that the conditions of the RAG are fulfilled. This includes in particular that the project in question contributes towards a coherent regional development strategy and that, having regard to the nature and size of the project, it will not result in unacceptable distortions of competition.

2.3.1. *The balancing test and its application to aid for broadband network deployment*

34. In assessing whether an aid measure can be deemed compatible with the common market, the Commission balances the positive impact of the aid measure in reaching an objective of common interest against its potential negative side effects, such as distortions of trade and competition.

35. In applying this balancing test, the Commission will assess the following questions:

(a) is the aid measure aimed at a well-defined objective of common interest, i.e. does the proposed aid address a market failure or other objective⁽⁴³⁾?

(b) is the aid well designed to deliver the objective of common interest? In particular:

(i) is State aid an appropriate policy instrument, i.e. are there other, better-placed instruments?

(ii) is there an incentive effect, i.e. does the aid change the behaviour of undertakings?

(iii) is the aid measure proportional, i.e. could the same change in behaviour be obtained with less aid?

(c) are the distortions of competition and the effect on trade limited, so that the overall balance is positive?

36. The individual steps of the balancing test in the field of broadband are set out in further detail in Sections 2.3.2 and 2.3.3.

2.3.2. *Objective of the measure*

37. As indicated in the introduction, widespread and affordable access to broadband is of great importance because of its ability to accelerate the contribution of these technologies to growth and innovation in all sectors of the economy and to social and territorial cohesion.

38. The economics of broadband provision are such that the market will not always find it profitable to invest in it. Due to economics of density, broadband networks are generally more profitable to roll-out where potential demand is higher and concentrated, i.e. in densely populated areas. Because of high fixed costs of investment, unit costs increase strongly as population densities drop. As a result, broadband networks tend to profitably cover only part of the population. Likewise, in certain areas, it may only be profitable for a single provider to set up a network, not for two or more.

⁽⁴¹⁾ Guidelines on national regional aid for 2007-2013, OJ C 54, 4.3.2006, pp. 13-45.

⁽⁴²⁾ Moreover, although the aid granted was in some cases confined to 'assisted areas' and it could also have been qualified as aid for initial investment within the meaning of the above-mentioned Guidelines, often the aid intensity could exceed the ceiling allowed for regional aid in such areas.

⁽⁴³⁾ See for instance, Commission Decision N 508/08 — United Kingdom, *Provision of remote Broadband services in Northern Ireland*, Decision N 201/06 — Greece, *Broadband access development in underserved areas*, and Decision N 118/06 — Latvia, *Development of broadband communications networks in rural areas*.

39. Where the market does not provide sufficient broadband coverage or the access conditions are not adequate, State aid may play a useful role. Specifically, State aid in the broadband sector may remedy a market failure, i.e. situations where individual market investors do not invest, even though this would be efficient from a wider economic perspective, e.g. due to the positive spill-over effects. Alternatively, State aid for broadband may also be viewed as a tool to achieve equity objectives, i.e. as a way to improve access to an essential means of communication and participation in society as well as freedom of expression to all actors in society, thereby improving social and territorial cohesion.
40. From the outset it is useful to introduce a fundamental distinction between the types of areas that may be targeted, depending on the level of broadband connectivity that is already available. The Commission has consistently made a distinction between areas where no broadband infrastructure exists or is unlikely to be developed in the near term (white areas), areas where only one broadband network operator is present (grey areas) and areas where at least two or more broadband network providers are present (black areas) ⁽⁴⁴⁾.

2.3.2.1. 'White areas': promoting territorial cohesion and economic development objectives

41. As a matter of policy, the Commission has always considered support for broadband network deployment in rural and underserved white areas to be in line with existing Community policies, since it promotes territorial social and economic cohesion and addresses market failures. In almost all of its decisions in this field, the Commission has underlined that broadband networks tend to profitably cover only part of the population, so that State support is needed to achieve ubiquitous coverage.
42. The Commission accepts that by providing financial support for the provision of broadband services in areas where broadband is currently not available and where there are no plans by private investors to roll out such an infrastructure in the near future, Member States pursue genuine cohesion and economic development objectives and thus, their intervention is likely to be in line with the common interest ⁽⁴⁵⁾. The term in the 'near future' should be understood as referring to a period of three years. In this regard, investment efforts planned by private investors should be such as to guarantee that at least significant progress in terms of coverage will be made within the three-year period, with completion of the planned investment foreseen within a reasonable time frame thereafter (depending on the specificities of each project and of each area). Public authorities may require the submission of a business plan, together with a detailed calendar deployment plan as well as proof of adequate financing or any other type of evidence that would demonstrate the credible and plausible character of the planned investment by private network operators.

2.3.2.2. 'Black areas': no need for State intervention

43. When in a given geographical zone at least two broadband network providers are present and broadband services are provided under competitive conditions (facilities-based competition), there is no market failure. Accordingly, there is very little scope for State intervention to bring further benefits. On the contrary, State support for the funding of the construction of an additional broadband network will, in principle, lead to an unacceptable distortion of competition, and the crowding out of private investors. Accordingly, in the absence of a clearly demonstrated market failure, the Commission will view negatively measures funding the roll-out of an additional broadband infrastructure in a 'black zone' ⁽⁴⁶⁾.

⁽⁴⁴⁾ See for instance Commission Decision N 201/06 — Greece, *Broadband access development in underserved areas*.

⁽⁴⁵⁾ See for instance, Decision N 118/06 — Latvia, *Development of broadband communication networks in rural areas*.

⁽⁴⁶⁾ See Commission Decision of 19 July 2006 on the measure No C 35/05 (ex N 59/05) which the Netherlands are planning to implement concerning a broadband infrastructure in Appingedam, OJ L 86, 27.3.2007, p. 1. The case involved the deployment of a passive network (i.e. ducts and fibre) that would be owned by the municipality, while the active layer (i.e. the management and operation of the network) would be tendered to a private-sector wholesale operator that would have to offer wholesale access services to other service providers. In its decision, the Commission noted that the Dutch broadband market was a fast-moving market in which providers of electronic communications services, including cable operators and Internet Service Providers, were in the process of introducing very high capacity broadband services without any State support. The situation in Appingedam was no different from the rest of the Dutch broadband market. Both the fixed-line incumbent and a cable operator were already offering 'triple play services' in Appingedam (telephony, broadband and digital/analogue TV) and both operators had the technical capabilities to further increase the bandwidth capacity of their networks.

2.3.2.3. 'Grey areas': need for a more detailed assessment

44. The existence of a network operator in a given area does not necessarily imply that no market failure or cohesion problem exists. Monopoly provision may affect the quality of service or the price at which services are offered to the citizens. On the other hand, in areas where only one broadband network operator is present, by definition, subsidies for the construction of an alternative network can distort market dynamics. Therefore State support for the deployment of broadband networks in 'grey' areas calls for a more detailed analysis and careful compatibility assessment.
45. Although a network operator may be present in the zone targeted by the State intervention, certain categories of users may still not be adequately served in the sense that either some broadband services requested by the users were not available to them or, in the absence of regulated wholesale access tariffs, retail prices were not affordable compared to the same services offered in other more competitive areas or regions of the country⁽⁴⁷⁾. If, in addition, there are only limited prospects that third parties would build an alternative infrastructure, the funding of an alternative infrastructure could be an appropriate measure. This would remedy the absence of infrastructure competition and thus reduce the problems arising from the *de facto* monopoly position of the incumbent operator⁽⁴⁸⁾. However, the granting of aid under these circumstances is subject to a number of conditions that would have to be met by the Member State concerned.
46. Accordingly, the Commission may declare compatible, under certain conditions, State aid measures that target areas where the provision of a broadband infrastructure is still a *de facto* monopoly provided that (i) no affordable or adequate services are offered to satisfy the needs of citizens or business users and that (ii) there are no less distortive measures available (including ex ante regulation) to reach the same goals. For the purpose of establishing the above, the Commission will assess in particular whether:
- (a) the overall market conditions are not adequate, by looking, inter alia, into the level of current broadband prices, the type of services offered to end-users (residential and business users) and the conditions attached thereto;
 - (b) in the absence of ex ante regulation imposed by a national regulatory authority ('NRA'), effective network access is not offered to third parties or access conditions are not conducive to effective competition;
 - (c) overall entry barriers preclude potential entry of other electronic communication operators; and
 - (d) any measures taken or remedies imposed by the competent national regulatory or competition authority with regard to the existing network provider have not been able to overcome such problems.

2.3.3. Design of the measure and the need to limit distortions of competition

47. When broadband coverage is considered insufficient, State intervention may be necessary. A first question to be asked is whether State aid is an appropriate policy instrument to address the problem or whether there are other, better-placed instruments.

⁽⁴⁷⁾ As mentioned in paragraph 6, it should be recalled that broadband access is to date regulated ex ante in all EU countries.

⁽⁴⁸⁾ In its Decision N 131/05 — United Kingdom, *FibreSpeed Broadband Project Wales*, the Commission had to assess whether the financial support given by the Welsh authorities for the construction of an open, carrier-neutral, fibre-optic network linking 14 business parks could still be declared compatible even if the target locations were already served by the incumbent network operator, who provided price regulated leased lines. The Commission found that the leased lines offer by the incumbent operator was very expensive, almost unaffordable for SMEs. The targeted business parks could not either get symmetrical ADSL services beyond 2 Mbps because of their distance from the incumbent's telephone exchanges. Moreover, the incumbent was not making available its ducts and dark fibre to third parties. Therefore, the presence of the incumbent in the targeted areas could not guarantee affordable high speed Internet services to SMEs. There was no prospect that third parties would build an alternative infrastructure to provide high speed services to the business parks in question. See also Commission Decision N 890/06 — France, *Aide du Sicoval pour un réseau de très haut débit* and Commission Decision N 284/05 — Ireland, *Regional Broadband Programme: Metropolitan Area Networks ('MANs'), phases II and III*.

48. In this respect, the Commission has noted in previous decisions that whilst *ex ante* regulation has in many cases facilitated broadband deployment in urban and more densely populated areas, it may not be a sufficient instrument to enable the supply of broadband service, especially in underserved areas where the inherent profitability of investment is low ⁽⁴⁹⁾.
49. Likewise, demand-side measures in favour of broadband (such as vouchers for end users) although they can contribute positively to broadband penetration and should be encouraged as an alternative or a complement to other public measures, they cannot always solve the lack of broadband provision ⁽⁵⁰⁾. Hence, in such situations there may be no alternative to granting public funding to overcome the lack of broadband connectivity.
50. Regarding the incentive effect of the measure, it needs to be examined whether the broadband network investment concerned would not have been undertaken within the same timeframe without any State aid.
51. In assessing the proportional character of the notified measures in 'white' or 'grey' areas, through its decision-making practice, the Commission has highlighted a number of necessary conditions to minimise the State aid involved and the potential distortions of competition. The lack of any of the following conditions in (a) to (h) would require an in-depth assessment ⁽⁵¹⁾ and most likely it would lead to a negative conclusion on the compatibility of the aid with the common market.
- (a) *Detailed mapping and coverage analysis*: Member States should clearly identify which geographic areas will be covered by the support measure in question. By conducting in parallel an analysis of the competitive conditions and structure prevailing in the given area and consulting with all stakeholders affected by the relevant measure, Member States minimise distortions of competition with existing providers and with those who already have investment plans for the near future and enable these investors to plan their activities ⁽⁵²⁾. A detailed mapping exercise and a thorough consultation exercise ensure accordingly not only a high degree of transparency but serve also as an essential tool for defining the existence of 'white', 'grey' and 'black' zones ⁽⁵³⁾.
- (b) *Open tender process*: The open tender approach ensures that there is transparency for all investors wishing to bid for the realisation of the subsidised project. Equal and non-discriminatory treatment of all bidders is an indispensable condition for an open tender. An open tender is a method to minimise the potential State aid advantage involved and at the same time reduces the selective nature of the measure in so far as the choice of the beneficiary is not known in advance ⁽⁵⁴⁾.
- (c) *Most economically advantageous offer*: Within the context of an open tender procedure, in order to reduce the amount of aid to be granted, at similar if not identical quality conditions, the bidder with the lowest amount of aid requested should in principle receive more priority points within the overall assessment of its bid ⁽⁵⁵⁾. In this way the Member State can shift the burden of how much aid is really necessary to the market and reduce thus the information asymmetry that most of the times benefits private investors.

⁽⁴⁹⁾ See for instance, Commission Decision N 473/07 — Italy, *Broadband connection for Alto Adige*, Decision N 570/07 — Germany, *Broadband in rural areas of Baden-Württemberg*, Decision N 131/05 — United Kingdom, *FibreSpeed Broadband Project Wales*, Decision N 284/05 — Ireland, *Regional Broadband Programme: Metropolitan Area Networks ('MANs'), phases II and III*, Decision N 118/06 — Latvia, *Development of broadband communication networks in rural areas*, and Decision N 157/06 — United Kingdom, *South Yorkshire Digital Region Broadband Project*.

⁽⁵⁰⁾ See for instance Commission Decision N 222/06 — Italy, *Aid to bridge the digital divide in Sardinia*, Decision N 398/05 — Hungary, *Development Tax Benefit for Broadband*, and Decision N 264/06 — Italy, *Broadband for rural Tuscany*.

⁽⁵¹⁾ Normally within the framework of an Article 88(2) procedure.

⁽⁵²⁾ In case where it can be demonstrated that existing operators did not provide any meaningful information to a public authority for the purposes of the required mapping exercise, such authorities would have to rely only on whatever information has been made available to them.

⁽⁵³⁾ See for instance, Decision No 201/06 — Greece, *Broadband access development in underserved areas*, Decision No 264/06 — Italy, *Broadband for rural Tuscany*, Decision No 475/07 — Ireland, *National Broadband Scheme ('NBS')*, and Decision No 115/08 — Germany, *Broadband in rural areas of Germany*.

⁽⁵⁴⁾ See for instance, Commission Decision N 508/08 — United Kingdom, *Provision of Remote Broadband Services in Northern Ireland*, Decision N 475/07 — Ireland, *National Broadband Scheme (NBS)*, Decision N 157/06 — United Kingdom, *South Yorkshire Digital region Broadband Project*.

⁽⁵⁵⁾ For the purposes of determining the most economically advantageous offer, the awarding authority should specify in advance the relative weighting which it will give to each of the (qualitative) criteria chosen.

- (d) *Technological neutrality*: Given that broadband services can be delivered on a host of network infrastructures based on wireline (xDSL, cable), wireless (Wi-Fi, WiMAX), satellite and mobile technologies, Member States should not favour any particular technology or network platform unless they can show that there is an objective justification for this⁽⁵⁶⁾. Bidders should be entitled to propose the provision of the required broadband services using or combining whatever technology they deem most suitable.
- (e) *Use of existing infrastructure*: Where possible, Member States should encourage bidders to have recourse to any available existing infrastructure so as to avoid unnecessary and wasteful duplication of resources. In order to try and limit the economic impact on existing network operators, the latter should be given the possibility to contribute their infrastructure to a notified project. At the same time, this condition should not end up favouring existing incumbents especially in case where third parties may not have access to this infrastructure or inputs that are necessary to compete with an incumbent. Likewise, in case of 'grey areas', where it is shown that dependence on the incumbent operator is part of the problem, it may be necessary to allow for more facilities-based competition.
- (f) *Wholesale access*: Mandating third parties effective wholesale access to a subsidised broadband infrastructure is a necessary component of any State measure funding the construction of a new broadband infrastructure. In particular, wholesale access enables third party operators to compete with the selected bidder (when the latter is also present at the retail level), thereby strengthening choice and competition in the areas concerned by the measure while at the same time avoiding the creation of regional service monopolies. Effective wholesale access to the subsidised infrastructure should be offered for at least a period of 7 years. This condition is not contingent on any prior market analysis within the meaning of Article 7 of the Framework directive⁽⁵⁷⁾. However, if at the end of the 7 years period the operator of the infrastructure in question is designated by the NRA under the applicable regulatory framework as having significant market power (SMP) in the specific market concerned⁽⁵⁸⁾, the access obligation should be extended accordingly.
- (g) *Benchmarking pricing exercise*: In order to ensure effective wholesale access and to minimise potential distortion of competition, it is crucial to avoid excessive wholesale prices or, by contrast, predatory pricing or price squeezes by the selected bidder. Access wholesale prices should be based on the average published (regulated) wholesale prices that prevail in other comparable, more competitive areas of the country or the Community or, in the absence of such published prices, on prices already set or approved by the NRA for the markets and services concerned. Thus, where ex ante regulation is already in place (i.e., in a grey area) wholesale prices for access to a subsidised infrastructure should not be lower than the access price set by the NRA for the same area. Benchmarking is an important safeguard since it enables Member States to avoid having to set in advance detailed retail or wholesale access prices, as well as to ensure that the aid granted will serve to replicate market conditions like those prevailing in other competitive broadband markets. The benchmarking criteria should be clearly indicated in the tender documents.

⁽⁵⁶⁾ Only in one case has the Commission so far accepted the justified use of a specific technological solution: see Commission Decision N 222/06 — Italy, *Aid to bridge the digital divide in Sardinia*. In that case the Commission took the view that given the specific circumstances namely 'the topography of the region, the absence of cable networks and the need to maximise the benefits of the aid, the use of ADSL technology appears to be the appropriate technology delivering the objectives of the project', at paragraph 45.

⁽⁵⁷⁾ Moreover, whenever Member States opt for a management model whereby the subsidised broadband infrastructure offers only wholesale access services to third parties, not retail services, the likely distortions of competition are further reduced as such a network management model helps to avoid potentially complex issues of predatory pricing and hidden forms of access discrimination.

⁽⁵⁸⁾ In this regard, the NRA should take into consideration the possible persistence of the specific conditions that justified in the first place the granting of an aid to the operator of the infrastructure in question.

- (h) *Claw-back mechanism to avoid over-compensation*: To ensure that the selected bidder is not over-compensated if demand for broadband in the target area grows beyond anticipated levels, Member States should include a reverse payment mechanism into the contract with the successful bidder⁽⁵⁹⁾. The provision of such a mechanism can minimise *ex post* and retroactively the amount of aid deemed initially to have been necessary.

3. STATE AID FOR NGA NETWORKS

3.1. Supporting the rapid deployment of NGA networks

52. To date, a number of Member States are turning their attention towards support for broadband networks that can deliver services at very high speeds and support a multitude of advanced digital converged services. These NGA networks are mainly fibre-based or advanced upgraded cable networks that are intended to replace in whole or to a large extent the existing copper-based broadband networks or current cable networks.
53. NGA networks are wired access networks which consist wholly or in part of optical elements and which are capable of delivering broadband access services with enhanced characteristics (such as higher throughput) as compared to those provided over existing copper networks⁽⁶⁰⁾.
54. In essence, NGA networks will have the speed and capacity to deliver in the future high definition content, support on-demand bandwidth hungry applications as well as bring to business affordable symmetrical broadband connections generally available today only to large businesses. Overall, NGA networks have the potential to facilitate the improvement of all aspects of broadband technology and broadband services.
55. The Commission has already dealt with some State aid notifications that involved support for the roll-out of fibre-based networks. These cases involved either the construction of a regional 'core' NGA network⁽⁶¹⁾ or the provision of fibre connectivity for a limited number of business users only⁽⁶²⁾.
56. As with the so-called 'first generation' roll-out of basic broadband networks, State, municipal and regional authorities justify their support for a rapid roll-out of fibre networks on the grounds of a market failure or cohesion objective. If for the roll-out of basic broadband infrastructure, examples of state intervention have mainly related to rural communities/areas (low density, high capital cost) or areas which are economically underdeveloped (low ability to pay for services), this time the economics of NGA networks model is said to discourage deployment of NGA networks not only in sparsely populated areas, but also in certain urban zones. In particular, the main issue affecting the rapid and wide deployment of NGA networks, appears to be costs and to a lesser extent density of population⁽⁶³⁾.

⁽⁵⁹⁾ In exceptional circumstances duly demonstrated by the notifying Member State, setting up such mechanism for very low aid amounts or small scale, 'one-off' projects based on simple procurement principles may impose a disproportionate burden on the granting authorities and will not therefore be required by the Commission.

⁽⁶⁰⁾ At this stage of technological and market development, neither satellite nor mobile network technologies appear to be capable of providing very high speed symmetrical broadband services although in the future the situation may change especially with regard to mobile services (the next major step in mobile radio communications, 'Long Term Evolution' may theoretically reach, if and when adopted, increased peak data rates of 100 Mbps downlink and 50 Mbps uplink).

⁽⁶¹⁾ See Decision N 157/06 — United Kingdom, *South Yorkshire Digital region Broadband Project* and Decision N 284/05 — Ireland, *Regional Broadband Programme: Metropolitan Area Networks ('MANs'), phases II and III*.

⁽⁶²⁾ Only in two cases so far (*Appingedam* and *Amsterdam*) was State support granted for the roll-out of an 'access' next generation network that would bring fibre connectivity to the residential segment of the market.

⁽⁶³⁾ Broadband network operators have argued that rolling out of a fibre-based network is still a very expensive and risky investment, save in areas of dense population/business where operators have already a substantial base of broadband customers that can be migrated to higher speeds. In certain cases, the cost of deploying NGAs and fibre networks are said to be too high relative to the revenue that can be expected so that either no or too few private sector providers would enter the market.

57. For public authorities, direct intervention may thus be warranted in order to ensure that areas which are deemed by network operators as being unprofitable will still benefit from the substantial spill-over effects that NGA networks may bring to the economy and will not suffer a new digital, 'NGA divide'. Thus, Member States may wish to foster NGA network developments in areas where investments by existing broadband network operators in such networks would take several years to arrive because they are financially less attractive than certain major urban zones. In certain cases, Member States may decide to invest themselves or provide financial support to private operators in order to obtain NGA network connectivity, or to obtain connectivity earlier than anticipated, in order to ensure that employment and other economic opportunities are leveraged as quickly as possible.
58. Any public intervention seeking to support the provision or acceleration of NGA network deployment must ensure that it is compatible with the State aid rules.

3.2. Types of public intervention

59. Member States may choose different degrees of market intervention in order to foster or accelerate deployment of NGA networks. In this respect, the considerations set out above in Section 2.2.1 and 2.2.2 (application of the market economy investor principle, public service compensation and the Altmark criteria) apply *mutatis mutandis* with regard to State interventions in the field of NGA network deployment. Depending on the nature and effects of the intervention chosen a different analytical approach may be warranted under the State aid rules.
60. In areas where private investors are expected to roll out in the future NGA networks, Member States may decide to adopt a set of measures to accelerate the investment cycle and thus encourage investors to bring forward their investment plans. These measures do not necessarily need to involve State aid within the meaning of Article 87(1). Given that a large part of the cost of deploying fibre networks is in civil work (for instance digging, laying down cables, in-house wirings, etc.), Member States may decide in accordance with the Community regulatory framework for e-communications, for instance, to ease the acquisition process of rights of ways, require that network operators coordinate their civil works and/or share part of their infrastructure⁽⁶⁴⁾. In the same vein, Member States may decree that for any new constructions (including new water, energy, transport or sewage networks) and/or buildings a fibre connection should be in place.
61. Likewise, public authorities may decide to undertake some civil works (such as digging of the public domain, construction of ducts) in order to enable and accelerate the deployment by the operators concerned of their own network elements. However, such civil works should not be 'industry or sector specific', but should in principle be open to all potential users and not just electronic communications operators (i.e. electricity gas, water utilities etc.). Provided that such public interventions aim to create the necessary pre-conditions for the deployment by utility operators of own infrastructure without discriminating in favour of a given sector or a company (by lowering in particular the capital costs of the latter), they fall outside the scope of Article 87(1).
62. Similar measures may also be adopted by the NRAs in order to provide for equal and non-discriminatory access to poles or sharing of ducts owned by utilities or existing network operators.

⁽⁶⁴⁾ Such measures should not target specifically electronic communications operators but should apply without distinction to all operators across all sectors concerned (including for instance other utility operators such as gas, electricity and/or water undertakings). Measures that would apply to electronic communications operators only could constitute a sectoral aid and thus fall within the prohibition of Article 87(1) of the Treaty.

63. As the Commission's decision-making practice in the area of basic broadband illustrates, in most cases, State aid for broadband networks is granted by local or regional authorities that aim to either remedy the region's lack of broadband connectivity or to increase the region's competitiveness by improving further the existing broadband coverage and network connectivity. To achieve these two objectives public authorities have so far either tendered out the construction and management of a publicly-owned broadband infrastructure or have financially supported the construction of a privately-owned broadband network ⁽⁶⁵⁾.
64. If public interventions constitute State aid pursuant to Article 87(1) EC, they have to be notified to the Commission, which will assess their compatibility with the common market in line with the principles set out in Sections 3.3 and 3.4s ⁽⁶⁶⁾.

3.3. The distinction between white, grey and black areas for NGA networks

65. As recalled in paragraph 40, the Commission has assessed the compatibility of State aid for the development of traditional broadband by reference to the distinction between 'white', 'grey' and 'black' areas. The Commission considers that this distinction is still relevant for assessing whether State aid for NGA networks is compatible under Article 87(3)(c), but requires a more refined definition to take account of the specificities of the NGA networks.
66. In this respect, one should bear in mind that in the longer term NGA networks are expected to supersede existing basic broadband networks. To the extent that NGA networks imply a different network architecture, offering significantly better quality broadband services than today as well as the provision of services that could not be supported by today's broadband networks, it is likely that in the future there will be marked differences emerging between areas that will be covered and areas that will not be covered by NGA networks ⁽⁶⁷⁾.
67. At present, some advanced basic broadband networks (for instance ADSL 2+ ⁽⁶⁸⁾) can, up to a certain point, also support some of the types of broadband services that in the near future are likely to be offered over NGA networks (such as basic triple play services). However, and without prejudice to the imposition of ex-ante regulation, it should be noted that novel products or services which are not substitutable from both demand and supply side perspectives may emerge and will require broadband speeds in excess of the upper physical limits of basic broadband infrastructure.
68. Accordingly, for the purposes of assessing State aid for NGA networks, an area where such networks do not at present exist and where they are not likely to be built and be fully operational in the near future by private investors should be considered to be a 'white NGA' area ⁽⁶⁹⁾. In that regard, the term 'in the near future' should correspond to a period of three years ⁽⁷⁰⁾. Public authorities should be entitled to

⁽⁶⁵⁾ See for instance, Commission Decision N 157/06 — United Kingdom, *South Yorkshire Digital Region Broadband Project*, Decision N 201/06 — Greece, *Broadband access development in underserved territories*, and Decision N 131/05 — United Kingdom, *FibreSpeed Broadband Project Wales*, Decision N 284/05 — Ireland, *Regional Broadband Programme: Metropolitan Area Networks ('MANs'), phases II and III*, Decision N 381/04 — France, *Projet de réseau de télécommunications haut débit des Pyrénées-Atlantiques*, Decision N 382/05 — France, *Mise en place d'une infrastructure haut débit sur le territoire de la région Limousin (DORSAL)*, N 57/05 — United Kingdom, *Regional Innovative Broadband Support in Wales*, and Decision N 14/08 — United Kingdom, *Broadband in Scotland — Extending Broadband Reach*.

⁽⁶⁶⁾ This is without prejudice to the possible application of the Regional Aid Guidelines as referred to above in paragraph 33.

⁽⁶⁷⁾ If today the differences between an area where only narrowband Internet is available (dial-up) and an area where broadband exists means that the former is a 'white' area, likewise an area that lacks a next generation broadband infrastructure, but may still have one basic broadband infrastructure in place should also be considered a 'white' area.

⁽⁶⁸⁾ ADSL 2+ extends the capability of basic ADSL network up to a maximum bandwidth of 24 Mbps.

⁽⁶⁹⁾ A white NGA area may consist in an area where there is no basic broadband infrastructure in place (traditional white areas), as well as in an area where only one basic broadband provider is present (i.e. a traditional grey area) or there are several basic broadband providers (i.e. a traditional black area). As indicated in Section 3.4, different conditions are required for the compatibility of State aid for broadband development in these different circumstances.

⁽⁷⁰⁾ This period appears to correspond to an average period needed for the deployment of a next generation access network covering a town or a city. In this regard, an operator should be able to demonstrate that within a coming period of 3 years it would have carried out the necessary infrastructure investments in order to have covered by then a substantial part of the territory and of the population concerned thereby.

intervene, under certain conditions, in order to address social cohesion issues, regional development or a market failure when it can be demonstrated that private investors have no intention to deploy NGA networks in the coming 3 years. The investments efforts planned by private investors should be such as to guarantee that at least significant progress in terms of coverage will be made within the three-year period, with completion of the planned investment foreseen within a reasonable time frame thereafter (depending on the specificities of each area and of each project). It would not be appropriate to take a longer time horizon as this may risk damaging the interests of underserved regions relative to other parts of a country that are adequately served by such advanced broadband networks. Public authorities may require the submission of a business plan, together with a detailed calendar deployment plan as well as proof of adequate financing or any other type of evidence that would demonstrate the credible and plausible character of the planned investment by private network operators.

69. In the same vein, an area should be considered to be 'NGA grey' where only one NGA network is in place or is being deployed in the coming three years and there are no plans by any operator to deploy a NGA network in the coming three years ⁽⁷¹⁾. In assessing whether other network investors could deploy additional NGA networks in a given area, account should be taken of any existing regulatory or legislative measures that may have lowered barriers for such network deployments (access to ducts, sharing of infrastructure etc.).
70. If more than one NGA network exists in a given area or will be deployed in the coming three years, such an area should, in principle, be considered to be 'NGA black' ⁽⁷²⁾.

3.4. The compatibility assessment

71. As mentioned in paragraphs 66 and 67, although NGA networks are qualitatively far more advanced than existing traditional copper-based broadband networks, in assessing the compatibility of State aid for the deployment of a NGA network with the State aid rules, the Commission will also look into the effects of such aid on existing broadband networks given the degree of substitution that at present appears to exist with regard to broadband services offered over broadband and NGA networks alike. Moreover, in assessing the compatibility of State aid to NGA networks, the Commission will also apply the balancing test (see paragraph 35). In particular, in assessing the proportional character of a notified measure the Commission will look into whether the conditions set out in paragraph 51 are fulfilled (detailed mapping exercise and coverage analysis, open tender process, best economic offer, technological neutrality, use of existing infrastructure, mandated wholesale open access, benchmarking exercise and claw-back mechanism). The following points, however, are specifically relevant in the context of the assessment of NGA networks.

3.4.1. White NGA areas: support for NGA network deployment in underserved areas

72. As with basic broadband services, subject to a set of conditions that should be met by Member States (see paragraphs 51 and 71), the Commission will consider as being compatible with the State aid rules of the Treaty measures that support the deployment of NGA networks in areas where no broadband infrastructure currently exists or for areas where existing broadband operators consider it unprofitable to deploy NGA networks.
73. In white NGA areas where one basic broadband network already exist (traditional grey area), the grant of aid for NGA networks is subject to the demonstration by the Member State concerned (i) that the broadband services provided over the said networks are not sufficient to satisfy the needs of citizens and business users in the area in question (also taking into account a possible future upgrade); and that (ii) there are no less distortive means (including ex ante regulation) to reach the stated goals.

⁽⁷¹⁾ A grey NGA area may consist in an area where (a) there is no other basic broadband infrastructure beside the NGA; (b) as well as in an area where one or more basic broadband providers are also present (which can be considered as a traditional grey or black area). As indicated in Section 3.4, different conditions are required for the compatibility of State aid for broadband development in these different circumstances.

⁽⁷²⁾ A black NGA area may also consist of an area with one broadband provider (traditional grey area) or more (traditional black area) present. As indicated below, different conditions are required for the compatibility of State aid for broadband development in these different circumstances.

3.4.2. Grey NGA areas: need for a more detailed analysis

74. In areas where one private investor has already deployed a NGA network or may be in the process of deploying it in the next three years (see also paragraph 68) and there are no plans by any private investor to deploy a second NGA network in the coming three years, the Commission will need to carry out a more detailed analysis in order to verify whether State intervention in such areas can be considered compatible with the State aid rules. In fact, State intervention in such areas risks crowding out existing investors and distorting competition.
75. For the Commission to make a finding of compatibility, Member States should be able to demonstrate firstly, that the existing or planned NGA network is not or would not be sufficient to satisfy the needs of citizens and business users in the areas in question and, secondly, that there are no less distortive means (including ex ante regulation) to reach the stated goals. In the context of its detailed assessment the Commission will in particular assess whether:
- (a) the overall market conditions are not adequate, by looking, inter alia, into the level of current NGA broadband prices, the type of services offered to residential and business users and the conditions attached thereto and whether there exists, or is likely to appear, demand for new services that cannot be met by the existing NGA network;
 - (b) in the absence of ex ante regulation imposed by a NRA, effective network access is not offered to third parties or access conditions are not conducive to effective competition;
 - (c) overall entry barriers preclude potential entry by other NGA network investors;
 - (d) the NGA network already in place was built on the basis of a privileged use/access to ducts not accessible by or not shared with other network operators;
 - (e) any measures taken or remedies imposed by the competent national regulatory or competition authority with regard to the existing network provider have not been able to overcome the problems.

3.4.3. Black NGA areas: no need for State intervention

76. In areas where there already exists more than one NGA network or private investors may be in the process of deploying competing NGA networks, the Commission will consider that state support for an additional publicly-funded, competing NGA network is likely to seriously distort competition and is incompatible with the State aid rules.

3.4.4. The specific case of existing (basic broadband) black areas: some further safeguards

77. The Commission considers that traditional black areas, that is areas where current broadband services are being delivered by competing broadband infrastructures (xDSL and cable networks), are areas in which existing network operators should have the incentives to upgrade their current traditional broadband networks to very fast NGA networks to which they could migrate their existing customers. In such areas no further State intervention should in principle be necessary.
78. However a Member State can rebut such an argument by showing that existing basic broadband operators do not plan to invest in NGA networks in the coming three years by demonstrating for instance that the historical pattern of the investments made by the existing network investors over the last years in upgrading their broadband infrastructures to provide higher speeds in response to users' demands was not satisfactory. In such cases, state support for the deployment of NGA networks would be subject to the detailed analysis paragraph 75 and to the fulfilment of the set of conditions discussed in more detail in Section 3.4.5.

3.4.5. Design of the measure and the need to limit distortions of competition

79. As with the policy followed with respect to basic broadband deployment, State aid in favour of NGA network deployment may constitute an appropriate and justified instrument, provided that a number of fundamental conditions are complied with. With the exception of white NGA areas which are also white areas with regards to basic broadband (where no additional requirements are needed), the Commission considers that, in addition to the safeguards set out in Section 2.3.3 and in particular in paragraph 51 (*detailed mapping exercise and coverage analysis, open tender process, best economic offer, technological neutrality, use of existing infrastructure, mandated wholesale open access, benchmarking exercise and claw-back mechanism*), the following conditions need also to be met:

- in exchange for receiving state support, the beneficiary should be required to provide third parties with effective wholesale access for at least seven years. In particular, the access obligation imposed should also include the right to use ducts or street cabinets in order to allow third parties to have access to passive and not only active infrastructure. This is without prejudice to any similar regulatory obligations that may be imposed by the NRA in the specific market concerned in order to foster effective competition or measures adopted after the expiry of that period⁽⁷³⁾. An 'open access' obligation is all the more crucial in order to deal with the temporary substitution between the services offered by existing ADSL operators and those offered by future NGA network operators. An open access obligation will ensure that ADSL operators can migrate their customers to a NGA network as soon as a subsidised network is in place and thus start planning their own future investments without suffering any real competitive handicap,
- moreover, in setting the conditions for wholesale network access, Member States should consult the relevant NRA. NRAs are expected in the future to continue either to regulate ex ante or to monitor very closely the competitive conditions of the overall broadband market and impose where appropriate the necessary remedies provided by the applicable regulatory framework. Thus, by requiring that access conditions should be approved or set by the NRA under the applicable Community rules, Member States will ensure that, if not uniform, at least very similar access conditions will apply throughout all broadband markets identified by the NRA concerned,
- in addition, whatever the type of the NGA network architecture that will benefit from State aid, it should support effective and full unbundling and satisfy all different types of network access that operators may seek (including but not limited to access to ducts, fibre and bitstream). In this respect it should be noted that 'multiple fibre' architecture allows full independence between access seekers to provide high-speed broadband offers and is therefore conducive to long-term sustainable competition. In addition, the deployment of NGA networks based on multiple fibre lines supports both 'point-to-point' and 'point-to-multipoint' topologies and is therefore technology neutral.

4. TRANSITIONAL PROVISIONS

80. These Guidelines will be applied from the first day following its publication in the *Official Journal of the European Union*.

81. The Commission will apply these Guidelines to all notified aid measures in respect of which it is called upon to take a decision after the Guidelines are published in the *Official Journal*, even where the projects were notified prior to that date.

⁽⁷³⁾ In this regard, the possible persistence of the specific market conditions that justified in the first place the granting of an aid for the infrastructure in question should be taken into consideration.

82. In accordance with the Commission notice on the determination of the applicable rules for the assessment of unlawful State aid ⁽⁷⁴⁾, the Commission will apply these Guidelines in the case of non-notified aid granted after its publication.

5. FINAL PROVISIONS

83. No later than 3 years from the publication of these Guidelines the Commission will review the present Guidelines on the basis of future important market, technological and regulatory developments.
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⁽⁷⁴⁾ OJ C 119, 22.5.2002, p. 22.