

Community Guidelines for the application of State aid rules in relation to rapid deployment of broadband networks

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 regional cohesion. The Commission actively supports the widespread availability of broadband services for all the European citizens as laid down in the Lisbon strategy and subsequent Communications¹.

(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 latter 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 above-mentioned Recovery Plan and with an aim to achieve 100% high speed internet coverage for all citizens by 2010, the Commission decided to earmark €1 billion 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 or super fast, next generation access networks ("NGA")⁵ 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 societal 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.

(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 therefore to ensure that State aid measures will result in a higher level of broadband coverage and penetration, or in a more timely manner, 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 In this regard, the Commission⁹ and the national authorities¹⁰ 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 State measures that support the deployment of traditional broadband networks (Section 2) and also addresses a number of issues that pertain to the assessment of State measures aiming in particular to encourage and support the rapid and timely 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 as follows.

2.2. Article 87.1: Presence of aid

(10) According to Article 87 (1) of the EC Treaty, “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: 1) the measure has to be granted out of State resources, 2) it has to confer an economic advantage to undertakings, 3) the advantage has to be selective and distort or threaten to distort competition, 4) 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.

(12) First, the measures typically involve State resources, e.g. where the State supports broadband projects through subsidies, tax rebates or other types of preferential financing conditions¹².

(13) Second, State measures supporting broadband deployment projects usually address the exercise of an economic activity (i.e., building, operating and/or managing a broadband infrastructure). 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, the measure 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, the aid is usually granted directly to investors¹⁴ 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 enables the successful bidder to conduct a commercial activity on conditions which would not otherwise be available on the market. Indirect beneficiaries 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 are more favourable than what would have been the situation absent State intervention. ¹⁶

(15) Fourth, 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, 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 (for instance, leased lines services). 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.

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 jurisprudence of 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) The main principle is that 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 decision²⁰. 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 and services should be regarded as a public service or a service of a general economic interest within the meaning of Article 86(2) of the Treaty.

(21) According to the jurisprudence of the Court of Justice, provided that four main conditions (commonly referred to as the *Altmark* criteria) are met, State funding for the provision of a public service may fall outside the scope of Article 87(1) of the Treaty.²² In particular (i) the beneficiary of a State funding mechanism for a SGEI must be formally entrusted with the provision and discharge of a SGEI, the obligations of which must be clearly defined, (ii) 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 undertaking; (iii) 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 (iv) 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.

(22) In two decisions²³ concerning measures taken by regional authorities to award a (subsidised) public service concession to private operators for the deployment of basic broadband networks in underserved 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).²⁴ 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 a 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 underserved areas but was more oriented towards connecting business.²⁵

(24) Moreover, according to the jurisprudence, although Member States have wide discretion to define what they regard as services of general economic interest or a public service task²⁶, 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 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 could not be considered as a public service within the meaning of the *Altmark* case-law or as a SGEI within the meaning of Article 86 of the Treaty.

2.3. The compatibility assessment under Article 87(3).

(25) 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 been based directly on Article 87(3)(c).²⁸

(26) It may be the case that the areas covered by a broadband state aid project are also assisted areas within the meaning of Article 87(3) (a) and (c), and the Regional Aid Guidelines²⁹. 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 Guidelines³⁰.

(27) 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

(28) 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, i.e. distortions of trade and competition.

(29) 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? ³¹

- (b) Is the aid well designed to deliver the objective of common interest? In particular:
- Is State aid an appropriate policy instrument, i.e. are there other, betterplaced instruments?
 - Is there an incentive effect, i.e. does the aid change the behaviour of undertakings?
 - 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?
- (30) The individual steps of the balancing test in the field of broadband are set out in further detail below.

2.3.2. Objective of the measure

(31) 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 regional cohesion.

(32) 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.

(33) 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 to all actors in society, thereby improving social and regional cohesion.

(34) 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).³²

2.3.2.1. "White areas": promoting regional cohesion and economic development objectives

(35) 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 regional 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.

(36) Thus, 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 for 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.³³

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

(37) 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".³⁴

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

(38) 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 and/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.

(39) 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 their prices were not affordable compared to the same services offered in other more competitive areas or regions of the country. If in addition, there are only little 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.³⁵ 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.

(40) 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:

- 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 there to;
- effective network access is not offered to third parties or access conditions (regulated and unregulated access) are not conducive to effective competition;
- overall entry barriers preclude potential entry of other electronic communication operators, and
- any measures taken and/or remedies imposed by the competent national regulatory or competition authority with regard to the existing network provider are not able to overcome such problems.

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

(41) 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.

(42) 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.³⁶

(43) Likewise, demand-side measures in favour of broadband (such as vouchers for end users) cannot always solve the lack of broadband provision, and in most cases are likely to favour the

incumbent operator.³⁷ Hence, in such situations there may be no alternative to granting public funding to overcome the lack of broadband connectivity.

(44) Regarding the incentive effect of the measure, it needs to be verified whether the broadband network investment concerned would not have been undertaken within the same timeframe without any State aid.

(45) 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 would require an in-depth assessment³⁸ 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 – market analysis*: Member States should clearly identify which geographic areas will be covered by the support measure in question. By conducting in parallel a market analysis 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. 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.³⁹

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 mean 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.⁴⁰

c) *Best economic offer*: Within the context of an open tender procedure in order to reduce the amount of aid to be granted, at similar 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. The evaluation of the open tender procedure will be done, through the preventive publication of qualitative parameters. 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.

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 this⁴¹. Bidders should be entitled to propose the provision of the required broadband services using and/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. 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 wholesale access to a subsidised broadband active and passive assets, 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. Wholesale access to the subsidised infrastructure should be offered for at least a period of [7] years and at a lower price than a comparable not financed asset.

This condition is not contingent on any prior market analysis within the meaning of Article 7 of the Framework directive.⁴²

g) *Benchmarking pricing exercise*: In order to ensure effective wholesale access and to minimise potential distortion of competition, it is crucial to use math models, 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 more competitive areas of the country or in other more competitive areas of the EU or, in the absence of such published prices, on prices set or approved by the national regulatory authority. 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.

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 bidder⁴³. 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

(46) 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.

(47) NGA networks are 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.

(48) For the purpose of the present Guidelines and without prejudice to any market definition carried out under the rules of the current regulatory framework for electronic communications, in applying the State aid rules a NGA network is further defined as involving: (i) laying fibre to existing street cabinets offering the prospects of downstream bandwidths of a minimum of 40 Mbps and 15 Mbps upstream (compared with today's downstream speeds of a maximum of 8 and 24 Mbps for ADSL and ADSL2+ access technologies, respectively); (ii) upgrading current cable networks to deliver speeds up to and beyond 50 Mbps against the previous maximum speed of 20 Mbps, using the new 'DOCSIS 3.0' cable modem standard, or (iii) connecting newly built homes and offices with fibre connections offering services up to 100 Mbps and beyond. (Wind suggests to insert a clause that forecasts effective solution for sharing access)

(49) In essence, NGA networks will have the speed and capacity to deliver in the future high definition content (video or television), 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.

(50) 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 network⁴⁵ or the provision of fibre connectivity for a limited number of business users only.⁴⁶

(51) 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 rollout 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.⁴⁷

(52) 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 by themselves or provide financial support to private operators in order to obtain NGA network connectivity, or earlier than anticipated, in order to ensure that employment and other economic opportunities are leveraged as quickly as possible.

(53) 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

(54) 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 (application of the market economy investor principle) 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.

(55) 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 incentivise 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 EU's 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.⁴⁸ 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.

(56) 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 streamline the deployment by the operators concerned of own network elements. However, such civil works should not be "industry or sector specific" but should 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 (by lowering in particular the capital costs of the latter), they fall outside the scope of Article 87(1).

(57) Similar measures may also be adopted by the National Regulatory Authorities in order to provide for equal and non discriminatory access to poles or sharing of ducts owned by utilities or existing network operators.

(58) 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.⁴⁹

(59) 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 line principles set out below.

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

(60) As recalled above, 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.

(61) 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 wholly 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.⁵⁰

(62) At present, some advanced basic broadband networks (for instance ADSL 2+51) 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 (i.e., 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.

(63) 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. ⁵² In that regard, the term 'in the near future' should correspond to a period of [5] years.⁵³ Public authorities should be entitled to 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 [5] years. 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.

(64) 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 five years and there are no plans by any operator to deploy a NGA network in the coming [5] years. ⁵⁴ In assessing whether other network investors could deploy additional NGA network 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).

(65) If more than one NGA networks exist in a given area or are being deployed in the coming [5] years, such an area should be considered to be 'NGA black'.⁵⁵

3.4. The compatibility assessment

(66) As mentioned above in paragraph (61) and (62), although NGA networks are qualitative far more advanced than existing traditional copper-based broadband networks, in assessing the compatibility of a 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 as set out in Section 2 above [see paragraph (29)]. In particular, in assessing the proportional character of a notified measure the Commission will look into whether the conditions set out in paragraph (45) above are fulfilled (*detailed mapping exercise and coverage/market 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

(67) As with basic broadband services, subject to a set of conditions that should be met by Member States [see above paragraph (66) and paragraph (45)], 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.

(68) 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 their eventually planned upgrade), and that (ii) there are no less distortive means (including ex ante regulation) to reach the stated goals.

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

(69) In areas where one private investor has already deployed a NGA network or may be in the process of deploying it in the next [5] years and there are no plans by any private investor to deploy a second NGA network in the coming [5] 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.

(70) For the Commission to make a finding of compatibility, Member States should be able to demonstrate that (i) 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 that (ii) 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:

- 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;
- effective network access is not offered to third parties or access conditions (regulated and unregulated access) are not conducive to effective competition;
- overall entry barriers preclude potential entry by other NGA network investors;
- the NGA network already in place was built on the basis of a privileged use/access to ducts not accessible by or shared with other network operators,
- any measures taken and/or remedies imposed by the competent national regulatory or competition authority with regard to the existing network provider are not able to overcome such problems;

3.4.3. Black NGA areas: no need for State intervention

(71) In areas where there already exists more than one NGA network or private investors may be in the process of deploying competing NGA network, 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

(72) 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. Wind is agree with Commission's proposal to give, to existing network operators in black areas, incentives to upgrade current traditional broadband networks to very fast NGA networks, but considers necessary to protect investments done previously from operators, in order to avoid any stranded cost.

(73) 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 [5] years by demonstrating also 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 case, State support for the deployment of NGA networks would be subject to the above mentioned detailed analysis (see paragraph (70)) and to the fulfilment of the set of conditions discussed in more detail below.

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

(74) 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 (45) above (*detailed mapping exercise and coverage/market 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:

a) In exchange for receiving state support, the beneficiary should be required to provide third parties with wholesale access for at least [15] years. In particular, the access obligation imposed should also include the right to use ducts and/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 likely similar regulatory obligations that may be imposed by the NRA in parallel or after the expiry of that period. An "open access" obligation is all the more crucial in order to also deal with the above mentioned temporal 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. Incumbents must agree to terms of Network Migration with OLO, and they should provide equality of access to third parties compared to internal commercial division.

It is necessary, as well, to define a pricing model to access to NGN network that must considerer all direct and indirect costs.

b) 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.

c) In addition, as far as deployment of fibre-based networks is concerned, the network benefitting from State aid should support to the extent that this is feasible a point-to-point, "multiple fibre" architecture or an architecture that can be unbundled. Such architecture can support all different types of network access that operators may seek, and offer end-users the whole range of services that a fibre network can support. "Multiple fibre" architecture allows full independence between access seekers to provide high-speed broadband offers and is therefore conducive to long-term sustainable competition.

d) For existing (basic broadband) black areas, where existing operators already provide advanced basic broadband networks (such as ADSL2+) the aid should not cover the last mile access segment, that is the segment connecting the end user's or business premises to the Main Distribution Frame. This may also enable existing broadband operators to benefit from such infrastructure to maximize their investments. Moreover, if the infrastructure to be built is publicly owned, wholesale access should not be limited in time. If the infrastructure to be built is privately owned, wholesale access should be granted for a longer period of time (i.e. 10 years or half the amortisation period of the infrastructure to be built). This is without prejudice to access obligations that may also be imposed by a NRA under the current Regulatory Framework (Article 7 of the FWD).

4. FINAL PROVISIONS

(75) 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.