EUROPEAN COMMISSION

Brussels, 20.11.2012
C(2012) 8223 final

Subject: State aid SA.33671 (2012/N) – United Kingdom
National Broadband scheme for the UK - Broadband Delivery UK

Sir,

I. PROCEDURE

(1) Following pre-notification discussions, by letter dated 05 January 2012 pursuant to Article 108 (3) of the TFEU, the United Kingdom ("UK") notified to the Commission a National Broadband Scheme for the UK supporting the local and community roll-out of superfast broadband networks.

(2) Following several meetings between the Commission services and the UK and following requests to extend the deadline to answer, the UK provided answers to the Commission's request of information of 29 February 2012 by letters registered on 01 June 2012, 05 October 2012.

II. CONTEXT

II.1. Broadband availability in the UK: the current situation

(3) There is widespread consensus on the crucial impact on, and benefits to, economies and societies of ubiquitous broadband connectivity: it supports business efficiencies and growth, preserves and ensures that economies can remain competitive, and enables citizens to enhance their skills and learning. It also allows citizens to access online services and offerings, including key public services.

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The UK is already in a strong position as regards broadband penetration, speeds and coverage. The UK fixed and mobile broadband penetration rates are amongst the highest in the EU and kept growing in 2011, especially for mobile broadband\(^1\).

In terms of penetration, 74% of UK households subscribe to a broadband service, ahead of the EU average of 56%.\(^2\) 68% of premises across the UK as a whole have a fixed broadband connection, with an average fixed broadband speed of approximately 9 Mbps\(^3\). 68% of households in the UK are able to access superfast broadband (albeit, as at the end of 2010, only 8% of the UK households had taken up superfast broadband).\(^4\)

In terms of coverage, however, there are still around 2 million households, particularly in rural and remote areas with low population densities, which do not have a good level of basic broadband access: some 14% of the connections are currently not achieving broadband services of 2Mbps or more.\(^5\) This means that those households do not have reliable Internet connections and/or are not able to access the same range of broadband applications and services as the majority of households in the UK because of the area in which they are located.

The UK defines "superfast broadband as speeds greater than those available on current generation network infrastructure\(^6\), and which is delivered over next generation networks capable of providing at least 30 Mbps download speeds. The private sector investment plans for superfast broadband will not reach many of those rural and remote areas (often referred to as 'the final third'). The business case for superfast broadband deployment in those areas is generally weaker or non-existent, meaning there is a risk in those areas that broadband may not be rolled out either in the near future or at all.

It is estimated, for example, that the cost of deploying superfast broadband to the last 10% of households is up to three times higher than the first two-thirds of the population\(^7\). Moreover, the achievable revenue base is more limited due to low population density in these areas. However, an effective, reliable and secure broadband infrastructure network is deemed essential to underpinning the future growth and sustainable development of rural communities. Broadband availability in all rural areas is therefore a vital part of the UK's Rural Economy Growth Review and forms a key part of the Government's overall Growth Strategy.

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\(^1\) Digital Agenda of Europe: Country Scoreboard. United Kingdom, 2011, Telecommunication Market and Regulatory Developments.


\(^3\) Ofcom UK fixed-line broadband performance, May 2012 - The performance of fixed-line broadband delivered to UK residential consumers.

\(^4\) Ibid.

\(^5\) Ofcom Communications Infrastructure Report 2011.

\(^6\) In most cases, the top of the current generation network infrastructure is ADSL2+, which can provide a maximum of 24Mbps.

\(^7\) Ibid.
II.2. Strategic frameworks for broadband development

(9) **The Digital Agenda for Europe**: Broadband connectivity is of strategic importance for European growth and innovation in all sectors of the economy and to social and territorial cohesion. The Europe 2020 Strategy ("EU2020") underlines the importance of broadband deployment as part of the EU's growth strategy for the coming decade and sets ambitious targets for broadband development. One of its flagship initiatives, the Digital Agenda for Europe ('DAE')\(^8\) acknowledges the socio-economic benefits of broadband, highlighting its importance for competitiveness, social inclusion and employment. The achievement of Europe 2020 objective of a smart, sustainable and inclusive growth depend also on the provision of widespread and affordable access to high speed internet infrastructure and services. Meeting the challenge of financing a good quality and affordable broadband infrastructure is a crucial factor for Europe to increase its competitiveness and innovation, provide job opportunities for young people, prevent de-location of economic activity and attract inward investments. Therefore the DAE restates the objective of the EU 2020 Strategy that sets the following targets for broadband development in Europe: to (i) bring basic broadband to all Europeans by 2013 and by 2020, (ii) all Europeans have access to much higher internet speeds of above 30 Mbps and (iii) 50% or more of European households subscribe to internet connections equally and above 100 Mbps.

(10) **The National Broadband Strategy of the UK**: On 6 December 2010, the Government launched a new broadband strategy entitled “Britain’s Superfast Broadband Future”\(^9\). This strategy does not include specific targets for the superfast broadband in terms of speeds but it aims instead to make sure the UK has the “best broadband network in Europe by 2015”. In order to determine what constitutes the best network in Europe the UK Government will adopt a scorecard, which will focus on four headline indicators: speed, coverage, price and choice. According to the national strategy, the UK wants to minimise this 'digital divide' between rural and urban areas as much as possible.

(11) **Role of public funds**: As acknowledged in the UK strategy as well as in the DAE, carefully targeted public sector interventions, where the market is not delivering or not delivering effectively, is needed to stimulate investment in the UK's broadband infrastructure and so to bring these projects to market. Therefore the UK designed a nationwide framework scheme that aims to channel public funding in order to achieve the objectives of the national broadband strategy.

III. DESCRIPTION OF THE MEASURE

III.1. General overview of the Broadband Delivery UK scheme (‘BDUK’)

(12) **Objective**: The primary objectives of the scheme are (1) to provide access to NGA infrastructure capable of delivering superfast broadband speeds to as many homes and businesses as possible in each local authority area in the UK; and (2) to ensure that

\(^8\) Communication from the Commission to the European Parliament, the Council, the Social Committee and the Committee of the Regions, COM (2010) 245 final A Digital Agenda for Europe.

everyone in the remaining areas in the UK has access to minimum broadband speeds of at least 2 Mbps (the universal service commitment). These objectives reflect the first two objectives set out in the DAE. As a secondary objective, where an area is unlikely to receive more than the minimum broadband speed of at least 2 Mbps, the scheme aims to enable communities within those areas to secure NGA infrastructure or NGA infrastructure upgrades capable of delivering superfast broadband speeds.

(13) **Legal basis:** Funding for local broadband projects will be provided as a capital grant to the recipient local body under the Local Government Act 2003 in England and the relevant devolved legislation for Wales, Scotland and Northern Ireland. Due to the other anticipated sources of public or EU funding, the granting of aid under this scheme will also need to comply with other rules as appropriate. Insofar as a project is co-financed by the Rural Development Programme for England ('RDPE') European Agricultural Fund for Rural Development ('EAFRD') or the European Regional Development Fund ('ERDF'), the measure should also comply with, as appropriate: (1) Council Regulation (EC) No 1698/2005 on support for rural development by the European Agricultural Fund for Rural Development; (2) Commission Regulation (EC) No 1974/2006 laying down detailed rules for the application of Council Regulation (EC) No 1698/2005 on support for rural development by the European Agricultural Fund for Rural Development; (3) Regulation (EC) No 1080/2006 of the European Parliament and of the Council on the European Regional Development Fund and repealing Regulation (EC) No 1783/1999; (4) Council Regulation (EC) No 1083/2006 laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion fund and repealing Regulation (EC) No 1260/1999; (5) Commission Regulation (EC) No 1975/2006 laying down detailed rules for the implementation of Council Regulation (EC) No 1698/2005, as regards the implementation of control procedures as well as cross-compliance in respect of rural development support measures.

(14) **Rationale for implementing an 'umbrella scheme':** The UK wish to put in place a country-wide state aid scheme to cover a number of forthcoming broadband projects in the UK. The broadband projects are due to be rolled out at a local and a community level. Broadband projects are proposed at two levels: local (regional) broadband projects (approximately 40 in number); and community broadband projects (current expectations are that these projects will be of a much smaller scale and about 100 in number). Given the overall anticipated number of local and community broadband projects, the UK considers a UK-wide state aid scheme to cover all of these broadband projects under one umbrella, in particular to ease administrative burden on smaller granting authorities and to accelerate broadband investments in the "final third" areas, is appropriate.

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10 The difference in terminology between these two types of projects is to distinguish the source of their funding - local broadband projects will be funded from the Department for Culture, Media and Sport's BDUK programme fund, whereas community broadband projects will be funded by the Rural Community Broadband Fund (a fund led by the Defra) and which comprises part UK and part EU funds.
(15) **Role of BDUK as the 'competence centre':** The UK-wide state aid scheme will be set up, operated and monitored by BDUK, which will act in this context as the national competence centre. The competence centre's responsibilities can be summarised therefore as follows: (1) the central coordination of the Broadband Delivery Programme; (2) the development and management of the overall approach to the delivery of broadband projects; (3) primary liaison and coordination with industry stakeholders; (4) acting as a conduit for, and assurance of the use of, central Programme funds; (5) any national approaches to sourcing; and (6) providing support, guidance, information sharing and toolkits for local bodies.

(16) Whilst superfast broadband projects will be planned, procured and deployed on a local area-by-area basis, many local bodies are likely to have similar requirements and want to minimise their procurement costs. Consequently the UK Government is seeking to standardise the approach as far as possible. In this regard, it has developed a national strategy and structure to facilitate, standardise and accelerate local procurement and deployment of broadband, including standard processes, document templates, best practice exemplars and other supporting tools for all key phases and centrally coordinated activities such as baseline mapping data and coverage analysis, understanding local demand and aggregation, the advertising and tendering process and the state aid notification and approval process.

(17) According to the UK, BDUK as a competence centre is taking significant effort to ensure that under the 'umbrella scheme', local granting authority will be at the disposal of all information necessary to design and implement a state aid broadband measure in line with the current decision and that of the State aid Broadband Guidelines. A central webpage would be created, where all information related to the measure, the preparation of detailed explanatory guidance documents, the discussions with the stakeholders not only ensure transparency of the broadband development plans, but also provide all tools necessary for the local authorities to successfully design and implement their own project under the umbrella of the scheme.

(18) **Different intervention models under the scheme:** The UK-wide broadband scheme will establish certain minimum sets of criteria as detailed in Section III.2 of the current decision. Although local state aid broadband projects could differ from each other, if they fully comply with the minimum sets of criteria as defined in the current Commission decision in accordance with the Broadband Guidelines, local authorities will be allowed – under the supervision of the BDUK as competence centre - to design and carry out their own broadband projects.

(19) As regards the design of the individual measures, under the umbrella of the scheme project with different designs can be carried out without a need for individual state aid notification: for instance, state aid granting authorities might choose BDUK's preferred 'investment gap

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funding' model\textsuperscript{13}, or could decide to finance only part of the infrastructure such as by creating open access backhaul access points\textsuperscript{14} close to the consumer premises or support only passive infrastructure elements\textsuperscript{15}. Local granting authorities can also retain their freedom to decide on the type of support to achieve the scheme's objective: for instance, they may wish to provide direct grants for operators, provide a support 'in kind'\textsuperscript{16} or wish to own/operate part of their infrastructure with a publicly owned undertaking\textsuperscript{17}. The granting authorities will also have their freedom to conduct their own tender procedures or rely on the standard procedures developed by BDUK. In any case, the minimum set of criteria as detailed in Section III.2 of the current decision will always have to be respected by the granting authorities – and in all cases verified by BDUK as the national competence centre - to avoid individual state aid notifications.

\textbf{(20) Target areas:} The funding provided under the current scheme may be used to deliver local (or community) basic broadband projects in "basic broadband white areas" and NGA projects in "white NGA areas". For the purposes of this aid scheme, "basic broadband white areas" are areas where basic broadband services at a minimum download speed of 2 Mbps are not available at affordable prices\textsuperscript{18} and there are no private sector plans to deliver such services in the next three years.\textsuperscript{19} For the purposes of this aid scheme, "white NGA areas" are areas where NGA broadband services at an access (download) speed of more than 30 Mbps\textsuperscript{20} are not available at affordable prices\textsuperscript{21} and there are no private sector plans to deliver such services in the next three years. The targeted "white NGA areas" shall be considered as "white" or "grey" areas from basic broadband point of view, as there are no two competing broadband infrastructures (such as cable and xdsl) in place\textsuperscript{22}.

\textsuperscript{13} The state aid granting authority awards direct monetary grants to broadband investors to build, manage and commercially exploit a broadband network
\textsuperscript{14} Also coined as 'open access fibre-optic hubs': access points to relatively short distance from the consumer premises allowing third party operators to connect to the infrastructure on an equal, non-discriminatory basis lowering the entry barriers to all operators. The "last mile" access is left to the market to provide the most adequate solution in accordance with the consumers' needs. For instance consumers with low bandwidth needs can subscribe to mobile or wireless solution, while small entrepreneurs can choose to contract with a fibre to the home provider. Similar state aid projects are currently funded inter alia in Finland, Estonia, Latvia, Lithuania, Slovakia. See also House of Lords' Communication committee: Broadband for all - an alternative vision. 31 July 2012.
\textsuperscript{15} Typically ducts, poles, manholes and/or unlit (dark) fibre. The provision of such passive infrastructure elements – if adequately designed, sized and dimensioned – could provide equal footing for all operators to serve consumers by using such infrastructure, therefore such intervention is in general perceived adequate to support infrastructure based competition. Typical state aid intervention for instance, in Germany and Sweden.
\textsuperscript{16} This support can take many forms, with the most recurring being Member States providing broadband passive infrastructure by carrying out civil engineering work (for instance by digging up a road) or by placing ducts or dark fibre. Such form of support creates an advantage for the broadband investors who save the respective investment costs.
\textsuperscript{17} See for instance, Commission decision in case N 497/2010 SHEFA – 2 Interconnect, United Kingdom. JOCE C/92/2011
\textsuperscript{18} Access to basic broadband infrastructure is not affordable if the installation cost is £100+ and/or the rental price is £25+.
\textsuperscript{19} The three year period should run from the first day of the public consultation, provided that public consultation is run in accordance with the relevant guidance contained in this document.
\textsuperscript{20} As explained in paragraph 67 of the State aid Broadband Guidelines, ADSL2+ networks shall be considered as advanced basic broadband networks and not NGA type of networks when considering fixed networks.
\textsuperscript{21} BDUK is working at present on the basis that access to NGA broadband infrastructure is not affordable if the installation cost is £200+ and/or the monthly rental price is £30 - £50+.
\textsuperscript{22} Since these areas are typically not urban and suburban areas, there is no cable infrastructure present. BDUK as the competence centre will be checking that cable footprint is excluded from any white NGA areas.
Accordingly, as regards the geographical coverage of the scheme, this Commission decision covers projects in the so-called "final third" areas of the whole area of the United Kingdom (including the areas of Wales, Scotland or Northern Ireland). Any urban broadband development projects are subject to a separate state aid notification and not covered under the current Commission decision.

Budget and funding instruments: The UK has allocated £530m within the lifetime of the current Parliament (i.e. until 2015) to achieve the two primary objectives of the measure. A further £300m has been identified, but not yet committed, for the period up to 2017. Of the £530m, £10m will be used to match fund £10m of RDPE EAFRD funding to establish a confirmed £20m Rural Community Broadband Fund ('RCBF'). The RCBF is intended to complement the mainstream broadband roll out being delivered by BDUK, its aim being to target the final hard to reach 10% areas and to facilitate roll out of superfast broadband in those areas. In the case of local bodies applying for BDUK funding, local bodies are encouraged to provide match funding from their own public sector budgets, as well as other public sector sources available to them. Other sources could include European Structural Funds, such as funding from the ERDF or the EAFRD. According to the preliminary estimation of the UK, the total value of the aid to be covered by this scheme will be approximately GBP 1.5 billion (i.e. EUR 1.8 billion).

Form of support: The BDUK programme funding will be provided for the most part on the basis of 'investment gap funding', in which case the state aid granting authority awards direct monetary grants to broadband investors to build, manage and commercially exploit a broadband network. Other forms of public interventions are also possible under the current framework scheme as explained in paragraph (18).

Subject of the aid: Under the 'investment gap funding' model, the funding will be provided to the successful tenderers to use for the design, build, implementation and operation of new broadband infrastructure and/or upgrades of existing broadband infrastructure. This is likely to include a mixture of network elements, including 'middle mile' upgrades, access network upgrades, systems upgrades, connectivity of retail internet service providers, spectrum lease costs, supply of customer premises equipment and potentially demand stimulation. The funding may not be used by local bodies for certain activities related to the running of a tender process or call off process to identify a supplier to deliver a local broadband project (for instance, mapping of the areas in which the new/upgraded broadband is to be delivered, general business support and the running of the procurement process itself).

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25 For illustrative purposes, an exchange rate of 1.2 EUR/GBP is used in this decision.
(25) **Aid intensity:** The aid intensity will depend on the outcome of the open tender processes and thus will vary from project to project. BDUK estimates that aid intensities for local broadband projects may vary from 53% to 89%, with an average of 71% across the country. In the specific case of community broadband projects, the Department for Environment, Food and Rural Affairs ('Defra') will provide up to a maximum of 50% of the eligible costs. In case of very rural areas with difficult topology (for instance, Wales and the Highlands and Islands of Scotland), the UK expects that aid intensities could even go higher than 89%. Generally, BDUK aims to achieve one third BDUK programme funding, one third local body/other public sector or EU funding and one third private sector investment.

(26) **Duration:** The UK-wide scheme will start with the approval of the notified scheme by the European Commission and will be valid until 30 June 2015.

(27) **Process to obtain support under the scheme:** Before receiving any funding under the main BDUK funding programme, a local body must make its case to BDUK. BDUK has published guidance as to what is required of local bodies in this regard.²⁶ The key requirement is for a local body to prepare its local broadband plan.²⁷ That plan must set out the local body's broadband strategy, its delivery plans for new infrastructure and/or infrastructure upgrades and its outline business case for the overall desired investment. The local broadband plan must also set out how improvements to broadband infrastructure will support the needs of the community and will be aligned with other local/regional plans and strategies. For small local authorities to prepare such funding application, the UK has provided general support and guidance to meet the compliance with the relevant legal basis of the Commission, the Broadband Guidelines²⁸.

(28) **Role of Ofcom:** Ofcom is the regulator and competition authority for the UK communications industries, responsible for the regulation of TV and radio sectors, fixed line telecoms and mobiles, plus the airwaves over which wireless devices operate. The regulation of broadband is therefore within Ofcom's remit. Due to Ofcom’s knowledge of the broadband sector it has agreed to provide technical advice to BDUK. In particular Ofcom provides support for the BDUK in establishing the National Broadband Scheme and associated BDUK framework agreement, addressing on-going programme wide issues, advising on issues arising in the context of individual broadband projects relying on the National Broadband Scheme and Ofcom's specific statutory role that will interact with this aid scheme.

(29) Thus the support of Ofcom will include *inter alia* (1) the review of and comment on BDUK approach to producing its central baseline map; (2) technical advice on wholesale access arrangements benchmarking pricing exercise; (3) advising on published guidance on wholesale access and benchmarking principles for local authorities²⁹, (4) advising BDUK

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²⁷ BDUK has published a template local broadband plan that local bodies must complete when applying for BDUK programme funding: [http://www.culture.gov.uk/images/publications/BDUK_Local_Broadband_Template_Spring.pdf](http://www.culture.gov.uk/images/publications/BDUK_Local_Broadband_Template_Spring.pdf).

²⁸ For reference, see footnote 11.

on whether a supplier's proposal for wholesale access is consistent with the UK's notification and guidance; (5) advising BDUK on the appropriateness of the wholesale benchmark pricing points and pricing policy proposed by suppliers and advising BDUK when it is required to resolve disputes between the local body and suppliers. Ofcom will provide (6) a dispute resolution between access seeker and the subsidized operator: if the third party operator is dissatisfied with the outcome of that process and/or cannot reach agreement with the network operator then the third party operator could approach Ofcom at that point and will investigate the claims accordingly.

(30) **Application of the regulatory framework in relation to state funded networks.** BDUK has consulted with Ofcom on the subject of ensuring smooth transition from state aid (access) obligations to SMP\(^30\) (access) obligations. Ofcom has confirmed that local broadband projects subsidised under this scheme will be captured in its periodic market reviews. Specifically, as part of its competitive assessment of the relevant markets Ofcom will consider whether, and in what form, any ex ante regulation is required in order to ensure wholesale access products are offered without disruption. This will include consideration of any contract under which a project has been delivered and which is due to expire in the forward looking market review period (i.e. before the next market review). In any event this process will be brought to the attention of suppliers delivering the subsidised infrastructure such that they are also motivated to ensure continued supply of the wholesale products to customers. If in the course of the (at least) 7-year period the supplier and/or infrastructure is sold, the wholesale access obligation imposed as a consequence of the aid granted will transfer to the new owner / new infrastructure owner. In terms of ownership of the subsidised network at the end of the 7-year period, this is expected to remain with the supplier in the case of local broadband projects. In the case of community broadband projects, this may vary depending on the level of involvement a community intends to have.

(31) **Beneficiaries:** Direct beneficiaries of the aid will be electronic communications operators offering broadband services.

(32) In the case of community broadband projects, direct beneficiaries could also include community interest companies or local authorities, on behalf of communities, where they decide to own the subsidised infrastructure. If the broadband network will not only be owned, but also operated (at wholesale level) by a public authority (or in-house company) the UK undertook that (1) the publicly owned network operators will limit their activities within the pre-defined target areas and will not expand to other commercially attractive regions; (2) the public authority shall limit its activity to maintain the passive infrastructure and to grant access to it, but shall not engage in competition on the retail levels with commercial operators and (3) shall have an accounting separation between the funds used for the operation of the networks and the other funds at the disposal of the public authority\(^31\).

(33) Indirect beneficiaries will be electronic communication operators utilising the new network for offering retail services to end users.

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\(^{30}\) Operators designated with Significant Market Power under the applicable regulatory framework.

\(^{31}\) In line with Commission decision in case N330/2010 Programme national Très Haut Débit, France.
(34) **Transparency:** in order to ensure a high level of transparency for the use of public funds in the scheme, the UK set up a central website 32, where all information related to the BDUK scheme will be published.

(35) The information that will be available will include *inter alia:* (1) information on the state aid notification and the Commission approval decision, as well as the relevant legal background. (2) Guidance on compliance with all aspects of the state aid notification as relevant to local bodies seeking clearance under the BDUK aid scheme. This will include guidance on: public consultations; requirements in relation to an open and technology neutral tender process; wholesale access requirements (prepared in conjunction with Ofcom); benchmarking (prepared in conjunction with Ofcom); claw back; monitoring and reporting requirements. (3) Template documents for local bodies seeking to rely on the BDUK aid scheme. This will include a template application form for approval under the scheme, as well as template documents for preparatory work prior to the submission of that application, including template open market review and public consultation documents. (4) Information for suppliers who may bid to provide broadband projects subsidised under this scheme. (5) Information for suppliers wishing to access the new subsidised broadband infrastructure: this will include information on the location of the new infrastructure, the supplier footprint and the wholesale access products offered over it. (6) Information on local broadband projects, including public consultations and the results of tender processes. (7) A state aid specific BDUK email address to which any questions or comments can be addressed. This information will appear on the BDUK website (including any updates to this information) until the expiry of the aid scheme.

(36) Successful suppliers of local and community broadband projects will be required to provide information on the new subsidised infrastructure to BDUK. This information will include appropriate information on the new infrastructure (at a high level of detail), the wholesale products on offer and the pricing of those products. 33 Links to this information will be published and maintained on the BDUK central webpage. The central webpage will also contain data on the selected bidder, aid amount received, aid intensity and technology used for each project implemented under the BDUK scheme.

(37) **Benchmarking mechanism to verify the investment costs:** BDUK will aim to validate the investments costs of the bidders and the resulting "investment gap funding" need via benchmarking to avoid bidders to inflate their costs and thus to request higher aid amounts than the minimum necessary 34. As well as making individual project comparisons, BDUK will commission an independent review as to whether the supplier projects commissioned under the Broadband Delivery Framework are offering value for money, which – although the terms of reference have not yet been finalised – will seek to compare ‘bid price’ with available invoice information and international benchmarks.

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33 For example, see the information supplied as part of the Superfast Cornwall [http://www.superfastcornwall.org/where-and-when.html](http://www.superfastcornwall.org/where-and-when.html)

34 For instance, BDUK will aim to compare the cost data with all other projects. Such comparison would allow direct comparison not only the overall costs, but also different cost categories (for instance FTTC civil works) based on the rest of BDUK’s data-set.
Evaluation of the scheme: The UK has committed itself to submit an evaluation of the scheme to the Commission. The evaluation will be undertaken by an independent body and will be completed and submitted to the Commission no later than 31 March 2015. The evaluation will assess a number of key issues: (1) the overall effectiveness of the state aid measure in light of the UK Government’s objectives (including comparison of different intervention models); (2) the impact of BDUK’s NGA state aid intervention on competition (including the assessment of the wholesale access conditions). The results and the recommendation of that evaluation report will be taken into account in case of a new state aid notification following the expiry of the current BDUK scheme on 30 June 2015.

III.2. Specific conditions for granting aid under the BDUK scheme

Detailed mapping and coverage analysis: Each local or community body which intends to rely on public intervention to deliver its broadband project will have to identify the geographic areas subject to public intervention; justify why intervention in the target areas is required; and run a public consultation in order to allow all interested stakeholders an opportunity to comment on the planned aid measure. In order to assist all local and community bodies, BDUK has already conducted a mapping exercise to identify all 'white NGA areas' and 'basic broadband white areas' in the UK. This map has been made available to all local bodies and is intended to be used as a baseline for estimating their target areas prior to consultation with the market. This map has been prepared and is being maintained by BDUK as national competence centre and will be continuously updated in line with the market developments.

Public consultation: Having undertaken a detailed mapping process as set out above, local bodies will then be required to hold a public consultation in order to validate that mapping. The main purpose of the public consultation is to understand if there are any credible investment plans for similar or comparable projects. The public consultation document shall contain: a description of the proposed aid measure; a description of the targeted areas; any opinions already lodged by stakeholders. The document should seek feedback from all interested stakeholders. It will also be a requirement to publish a link to the consultation document on the central BDUK website which will act as a focal point for the sign-posting of all such public consultation documents. In terms of timeframes, the public consultation must be open for feedback from all interested stakeholders for at least one month. In addition, to ensure the results of the consultation, which must be used to assist in finalising the detailed mapping of the area, are current, local bodies will also be required to plan for and try to meet a timetable such that in general no more than one month passes between the close of the consultation and the beginning of the implementation of the aid.

35 This UK-wide baseline map is based on information from BT as to the location of its upgraded exchanges and cabinets capable of supporting fibre to the exchange services and commercially sensitive information from Virgin Media on the location of its cable network.
36 Available at: http://www.culture.gov.uk/what_we_do/telecommunications_and_online/7763.aspx.
BDUK as a competence centre has prepared a guidance document on the process of mapping.\(^{38}\)

**Step change:** Public funding granted via the BDUK scheme shall ensure a "step change" in terms of the availability of broadband services at the targeted areas and will be verified by the competence centre. A "step change" can be demonstrated if as the result of the public intervention (1) significant new investments in the broadband network are undertaken by the selected bidder (i.e. investments that must include civil works and installation of new passive elements – merely upgrades in the active equipment would not suffice) and (2) the subsidised infrastructure brings significant new capabilities to the market in terms of broadband service availability and capacity (most importantly download and/or upload speeds need to increase significantly). The presence of "step change" as a result of public funds will always be verified by BDUK as the national competence centre also taking also into account market, regulatory and administrative changes (for instance the roll-out of 4G networks, adoption of the new Broadband Guidelines).

As examples, in case of fixed networks, an upgrade of an ADSL network (capable to provide 2-6 Mbps download speeds) to an FTTC networks with significant speed gains (capable to provide at least 30 Mbps download speeds) and significant investments needs could be considered as a step change. In low population density areas, where for instance existing fixed networks due to the long line length are only able to provide low speeds\(^{39}\) (i.e. speeds typical for basic broadband services), alternative technologies, such as certain fixed wireless networks\(^{40}\) could also ensure a step change in terms of broadband availability. Such alternative technology could also be eligible for state aid provided that i) the average speeds are at least doubled compared to the existing speeds; ii) it is able to provide reliably at least 30 Mbps speeds in the target areas and iii) there is a commitment to upgrade to fibre components when economically viable. On the contrary, marginal upgrade for instance from ADSL to ADSL2, for instance, cannot be regarded as a step change as only marginal investments related to the active equipment would be required for such upgrades. In similar vein, applying copper enhancing techniques only on existing networks (such as vectoring on existing FTTC networks) would also likely not to represent a step change due to limited investment requirements - hence not eligible for state aid.\(^{41}\)

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\(^{37}\) The implementation of the aid measure will begin with the start of the tender process to identify a supplier to deliver the broadband project. In the case of local bodies relying on the Broadband Delivery Framework this will be the start of the call-off competition. In all other cases this will be the despatch of the OJEU notice (for local bodies running their own stand alone procurement process) or the start of the call-off competition (if relying on another public body's framework agreement).


\(^{39}\) Due to technological reasons, the available bandwidth via copper network is significantly deteriorating as the distance between the exchange and the end users sites increase.

\(^{40}\) Since the wireless medium is shared between subscribers and is inherently subject to fluctuating environmental conditions, in order to provide reliably the minimum speeds per subscriber that can be expected of an NGA, fixed wireless networks may need to be deployed at a certain degree of density and/or with advanced configurations (such as directed and/or multiple antennas). Next generation wireless access based on tailored mobile broadband technology must also ensure the required quality of service level to users at a fixed location while serving any other nomadic subscribers in the area of interest.

\(^{41}\) Upgrade from FTTC networks to FTTB is not in the scope of the BDUK measure.
The UK has also confirmed that it will verify if an investment concerned would be undertaken within the same timeframe without any state aid (this may, for instance, apply to mobile LTE operators if, under their licence conditions, they are obliged to roll out their mobile network in a certain geographic areas), then such investments shall not be eligible for state aid since public funding is unlikely to have an incentive effect and would likely result in a windfall profit for the operators concerned.

**Tender process:** Aid will be allocated on the basis of an open public tender in line with the principles of public procurement Directive 2004/18/EC.

There are two main aspects to BDUK's procurement role. Firstly, BDUK is establishing a standardised procurement route for local bodies in the form of a framework agreement. The intention is to establish a framework agreement of suitably qualified suppliers capable of delivering at least one local broadband project (the smallest single project likely to be valued at approximately £10 million) based on an investment 'gap funding' model. As successful suppliers must be capable of delivering a complete local broadband project (design, build and operation), it is anticipated that successful suppliers will be prime contractors with a supply chain with a range of relevant qualifications or groups of contractors (such as consortia or joint ventures). Suppliers of this scale are required in order to take the integration risk away from the local bodies.

The UK conducted the procurement of the Broadband Delivery Framework in accordance with the applicable EU procurement directives and the UK legislation implementing them. It published its outline commercial approach as part of its ‘Programme Delivery Model’ in May 2011. Following market warming discussions with a representative selection of suppliers, it published a Prior Information Notice on 27 May 2011 to announce its intention to procure the framework and invited interested parties to an Industry Day on 8 June 2011 at which it presented the proposed scope and scale of the framework and requested feedback (the presentation was published online following the event). The UK subsequently published an OJEU notice for the framework on 29 June 2011 and following a pre-qualification of suppliers expressing an interest in the procurement, invited suppliers to participate in a competitive dialogue procedure on 12 September 2011. Following evaluation of the final tenders based on the pre-specified award criteria and the mandatory standstill period the UK appointed BT and Fujitsu to the framework on 29 June 2012.

The framework agreement has a duration of two years with the possibility of up to two further one year extensions. It will not run for more than four years, in accordance with the public procurement rules. The scheme will be re-notified by the UK by no later than 30 June 2015 based on the results of an evaluation in accordance with paragraph (38). In terms of the operation of the potential one year extensions, it is intended that prior to the end of the two year period there will be a review of the market to determine whether there have

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been any material new entrants, any likely change in interest of potential bidders which did not apply or qualify for BDUK and/or any changes in technology. The tender process to set up the Broadband Delivery Framework was conducted under the competitive dialogue procedure, and as explained in the paragraph above, prime contractors BT and Fujitsu were selected as potential bidders. Thus if state aid granting authorities decide to rely on BDUK's standardized framework agreement, these two prime contractors will be eligible for bidding.

(48) In addition, BDUK is supporting local bodies who decide not to rely on the above explained framework agreement. This could include local bodies with more tailored requirements than those provided for under the framework agreement or local bodies may go down this alternative route principally if their local broadband project uses a different commercial model to the BDUK 'investment gap funding' model. Those other local bodies could instead decide to run their own public tender process or might identify another framework agreement more suited to their needs. Community broadband projects may also be delivered outside of the BDUK framework agreement. In such cases the local authorities shall comply with the conditions of openness, transparency and non-discrimination when conducting the tender procedure in line with the principles of the national and EU public procurement rules. BDUK has no preference for either tender approach and will not discriminate between requests for funding under or outside the framework agreement.

(49) The award criterion will be the most economically advantageous offer. In all cases, the selection criteria will be defined in advance. Conscious of the need to minimise the level of public subsidy to be put towards local broadband projects, local bodies will need to ensure they obtain the most superfast and basic broadband coverage for the aid that is available. For each local broadband project local bodies will be called on to evaluate how much of its objectives and requirements can be delivered for the possible level of subsidy available. In all tender procedures, the following two criteria shall be part of the selection criteria: (1) the amount of state aid requested by the bidders in order to reduce the aid amount to the minimum necessary and (2) any additional minimum and/or recommended wholesale access products (see paragraph (53)) offered by the bidders for third party operators shall receive additional points in the selection procedure in order to stimulate competition on the subsidized networks.

(50) Technological neutrality: The UK recognises that a mix of technologies will be needed to deliver superfast broadband throughout the UK. A wide range of technology solutions are possible to achieve the UK Government's objective, including fixed, fixed-wireless, mobile and satellite. One technology choice will not be suitable for all circumstances and so, the UK's approach to delivery remains technology neutral. The UK's view is that the market is best placed to determine the appropriate mix of technological solutions for a particular project, whether a local broadband project or a community level one. For instance, where the costs of deploying fibre technology makes the business case weaker or non existent, the UK accepts that the selected service provider offers basic or advanced basic broadband

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45 Originally, nine consortia of operators declared interest to participate in the tender process. However, seven of them withdrawn during the selection process due their financial difficulties, change in strategy, preference for different intervention model than investment gap funding, etc.
services via satellite, wireless and ADSL2+ broadband technology platforms. That concerns areas typically where existing broadband infrastructures do not exist or cannot provide minimum download speeds of 2 Mbps at affordable prices (i.e. basic broadband "white areas").

(51) **Use of existing infrastructure:** Local and community bodies seeking to rely on the national broadband scheme for the UK will be encouraged to offer suppliers competing to deliver their broadband project the use of existing infrastructure where possible and economically advantageous. Existing infrastructure will include (where possible): use of suppliers' own infrastructure; use of BT Openreach infrastructure in line with the applicable regulatory framework; use of other existing utilities infrastructure (including, for example, water and sewerage pipes, relevant electricity infrastructure); reutilisation of radio masts; ease of access rights; public infrastructure such as public buildings (such as schools); coordination of civil works.

(52) **Wholesale access:** A further requirement on local and community bodies seeking to rely on the national broadband scheme for the UK will be an obligation to allow effective wholesale access to all parts of the subsidised broadband infrastructure. Wholesale access obligations will apply to the direct beneficiary of the aid[46]. Where the supplier operates in the downstream markets it is also required to supply the upstream wholesale inputs on an equality of access basis to its own downstream retail divisions and to competing communications providers[47]. This requirement therefore ensures that there is no discrimination in the supply of key wholesale access therefore offering the greatest opportunity to ensure consumers get the greatest possible choice of superfast products at the most affordable prices.

(53) The below table summarizes BDUK's minimum and recommended requirements as regards wholesale access form the direct beneficiaries of the aid.

<table>
<thead>
<tr>
<th>Technology</th>
<th>Minimum acceptable access</th>
<th>Recommended additional / alternative access</th>
</tr>
</thead>
</table>
| Fibre to the home (FTTH) or building (FTTB) | • One point of physical access: i.e. either duct access or dark fibre on new subsidised infrastructure  
• One point of active access:  
  • In case of deployment of a point to point network infrastructure full | • Multiple points of physical access, e.g. both duct access and dark fibre  
• Splitter access  
• White label |

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46 For example, if both backhaul and access networks are built with the help of public funds, wholesale access shall be granted to third party operators for both network segments.

47 Equality of access is the conceptual approach that is embedded in BT’s Undertakings that were given to Ofcom in lieu of Ofcom making a reference to the Competition Commission under the UK’s Enterprise Act 2002. This approach involves the combination of equivalence in the provision of wholesale inputs at the product level (equivalence of inputs), and organisational change within BT (functional separation). In particular, equality of inputs ensures that the wholesale products provided by the upstream access division (in BT’s case through the functionally separated access division, BT Openreach) must be supplied to both the downstream retail divisions and other competing communications providers on same terms and prices and using the same processes.
<table>
<thead>
<tr>
<th>Service Type</th>
<th>Description</th>
<th>Physical Access Options</th>
<th>Other Access Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical unbundling.</strong></td>
<td>- In case of deployment of a point to multipoint infrastructure <a href="#">VULA equivalent</a></td>
<td>- One point of physical access: i.e. either duct access or dark fibre on new subsidised infrastructure</td>
<td>- Multiple points of physical access, e.g. both duct access and dark fibre</td>
</tr>
<tr>
<td></td>
<td>- Other wholesale access if mandated by Ofcom as a regulatory remedy</td>
<td>- One point of active access: i.e. VULA equivalent</td>
<td>- Cabinet space and power</td>
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<td></td>
<td>- Other wholesale access if mandated by Ofcom as a regulatory remedy</td>
<td>- White label</td>
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<tr>
<td></td>
<td></td>
<td>- SLU if sub loop deployed as part of subsidised project</td>
<td></td>
</tr>
<tr>
<td>Fibre to the cabinet/node (FTTC/N)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>- Multiple points of physical access, e.g. both duct access and dark fibre</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>- Cabinet space and power</td>
<td></td>
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<td></td>
<td></td>
<td>- White label</td>
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<tr>
<td></td>
<td></td>
<td>- SLU if sub loop deployed as part of subsidised project</td>
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<tr>
<td>Powerline</td>
<td>No point of physical access required (physical access already provided by DNO)</td>
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<tr>
<td></td>
<td></td>
<td>- One point of active access: i.e. VULA equivalent</td>
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<td></td>
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<td></td>
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<tr>
<td>Wireless / mobile</td>
<td>Access to the backhaul network <a href="#">49</a></td>
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<tr>
<td></td>
<td></td>
<td>- Mast access</td>
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<td></td>
<td></td>
<td>- Either Bit-stream or White label <a href="#">50</a></td>
<td></td>
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<tr>
<td>Satellite</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Either Bit-stream or White label</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cable (DOCSIS v3.0)</td>
<td>One point of physical access: i.e. either duct access or dark fibre on new subsidised infrastructure</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- One point of active access: i.e. VULA equivalent</td>
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<tr>
<td>New Duct and New Poles <a href="#">51</a> (or other passive network elements)</td>
<td>Wholesale open access: New ducts and poles shall supply of any type of wholesale local access and backhaul service used to supply residential and business markets and shall be made transparent on the BDUK website.</td>
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48 Until another (active) wholesale product is mandated pursuant to the regulatory framework.

49 In certain cases the provision of such access is not technically or commercially feasible. That would be the case, for instance, when using a microwave hop to link one mast to another, and would sometimes require significant network investment to replicate segregated and assured commercial leased line products over such a link.

50 A 'white label' offering (or 'reseller model') is where a retail service provider takes a base wholesale telecommunications product and then adds its own brand and customer service features to 'productise' this offering to the market. As an example, [...]*. In the mobile market, the equivalent model would be the mobile virtual network operator (MVNO) reselling a managed wholesale product delivered using mobile network operator's own network.

* [...]*: the information in brackets is covered by the obligation of professional secrecy.

51 "New duct" is defined as that subsidised physical infrastructure located underground with an individual length of at least 1.0km and have deployment costs of £50,000 or greater. "New poles" are defined as that subsidised physical infrastructure located overhead where the poles will be deployed over a distance of 1.0km and have deployment costs of £50,000 or greater. Both new ducts and poles include that physical infrastructure deployed for the purposes of providing both access and backhaul.
• Offered on an equality of access basis to all communications providers seeking to use that infrastructure;
• Dimensioned in such a way as to offer effective shared access to at least three other competing infrastructure providers; and
• Designed and dimensioned in a manner that is capable of accommodating and supporting reasonably foreseeable alternative technologies.

The UK has demonstrated that requesting all types of access from the subsidised operators is technologically possible but could raise investment costs substantially in some constellations, without any guarantee of ensuring effective competition. On the other hand, the general requirement of the Broadband Guidelines is that operators benefitting from taxpayers' money (which could be up to 70-80% in the current context), shall provide better and more wholesale access products to ensure effective competition takes place in rural areas as well. For this reason, the UK has introduced a proportionality analyses based on the methodology already enshrined in the regulatory framework and will be undertaken by Ofcom.

(55) **Proportionality analysis** As regards additional wholesale access products, any additional requirement for open access should be identified through an analysis of the benefits and costs of requiring differing levels of wholesale access. The basis of the assessment for introducing additional wholesale access products will be the following: (1) Costs – all reasonable costs of providing the a new wholesale access products should be met by the access seeker(s) excluding the amount of State aid received; (2) Competition – the introduction of the new wholesale access products should deliver sustainable and effective competition in the downstream market(s); and (3) Purpose – the new wholesale access products should clearly address the market problem that leads to the original intervention/obligation. According to the UK, such mechanism will ensure that in line with the long duration of the framework scheme, any changes in the wholesale access market will be reflected in the state aid scheme, and third party operators shall have access to other wholesale access products if they are able to demonstrate reasonable demand for such additional access. The foreseen proportionality analyses allows the provision of additional access products (including unbundled products, dark fibre access, etc.) if the access seeker is able to demonstrate the viability of its business plan based on the mechanism described above.

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52 For example, this includes the possibility of hosting both point-to-point (“P2P”) and point-to-multipoint (“P2M”) topologies and ensures that the drop segment is designed and dimensioned to support them.

53 That would be the case of providing a costly wholesale access product for which there is no market demand in the specific context of low population density areas.

54 Such costs would entail (1) the incremental cost of the new wholesale access product, plus (2) an appropriate allocation of common costs including an allowance for the commercially funded sunk costs associated with the original deployment. Note, for access to subsidised infrastructure (as opposed to access under the SMP framework) only the commercial funding from the supplier would need to be considered, rather than the total cost of deployment. In other words, the public subsidy part would be excluded from the assessment of reasonable costs to be met by the access seeker.
The details of the BDUK 'proportionality analysis' have been published on the central website on 4 September 2012 available for comments. Furthermore, BDUK presented an overview of the proposed wholesale access conditions to the Executive of the UK's Broadband Stakeholder Group ("BSG") which represents a membership of some 700 industry stakeholder on the key strategic issues affecting the broadband value chain (including the development of NGA in the UK). According to the UK, no objections or concerns from the stakeholders were raised on these proposals.

The applicable regulatory framework also foresees a limitation for the use of passive access product ('PIA'): for networks built using PIA are not currently permitted to provide middle mile backhaul, (business) leased line services to businesses or backhaul for mobile and wireless masts; they are restricted to supporting fixed line services in the local access market. On the one hand, such restrictions in case of subsidized networks (in "white NGA" areas) are not justified: in line with the Broadband Guidelines, wholesale access on the subsidized networks shall be 'genuine' and 'unrestricted'. Any product or other limitations on subsidized networks could hamper effective competition from alternative operators and from alternative technology platforms. Furthermore, business (leased lines) revenues might be necessary for smaller players to be able to effectively compete with the subsidized bidder. On the other hand, in the specific context of the UK, where such access is restricted under the regulatory framework, the UK has credibly demonstrated to the Commission that (1) full and unrestricted access would cause significant losses in an adjacent market (business leased lines), (2) could open up arbitrage opportunities for operators with no real intent to supply a ‘mass market’ NGA based broadband offering and thus not addressing the original objective of the measure. (3) In such cases, the desired competitive outcome would not be delivered. Therefore full and unrestricted access to passive infrastructure elements (PIA) shall only be available for retail, "mass market" NGA providers, where a wholesale competitor is seeking to meet demand for superfast broadband services in the intervention area but its business case is only made viable where the NGA deployment takes place in conjunction with business connectivity services (leased lines).

Wholesale price benchmarking: The UK will require all local and community bodies seeking to rely on the national broadband scheme for the UK to include a benchmarking pricing mechanism in their contract with the successful supplier. This mechanism, including the benchmarking criteria, should be set out in the tender documents issued to tenderers. Wholesale access prices (to access the subsidised infrastructure) should then be set with reference to those benchmark prices. The wholesale access prices should be similar to those in other competitive areas of the country/EU. In addition, Ofcom has published a general guidance in relation to overarching benchmarking principles. BDUK

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56 A retail or ‘mass market’ NGA provider is defined in the current context (i) a communication provider which has a credible business plan for NGA investment For example, the NGA business model that the provider employs must be sustained by a material contribution in terms of NGA take up (e.g. approximately 5% homes passed of the targeted customers, at a minimum). (ii) The communications provider recognises that it may be required to offer wholesale bitstream access to further downstream retail competition where such access would promote effective competition in superfast broadband retail markets.

will use these principles as a basis to develop appropriate price controls for the Broadband Delivery Framework and the national aid scheme at large. In future, BDUK anticipates that it may seek technical advice from Ofcom during the life of the framework agreement in terms of the appropriateness of the wholesale benchmark pricing points and pricing policy proposed by suppliers.

(59) **Claw-back mechanism**: The UK will require all local bodies seeking to rely on this national aid scheme to include an appropriate claw back provision in their contracts with suppliers to deliver local broadband projects. This will be to ensure that the successful supplier is not over-compensated in the target areas beyond anticipated levels. The claw back provision and related reporting obligations are likely to vary depending on the commercial model adopted and any requirements stemming from the other funding streams (for instance ERDF) on which a local body will rely. The claw back mechanism which BDUK currently proposes to adopt for the Broadband Delivery Framework is based on the three main factors likely to drive greater than forecast profits for suppliers and therefore likely to contribute to excess subsidy (which needs to be clawed back). These three main factors are: (1) lower actual deployment costs than forecast; (2) higher actual take-up than forecast; and (3) higher actual revenues from 'non-broadband' products than forecast. The UK argues that the exercise of a claw back mechanism could be a disproportionate administrative burden for very small, local project, therefore if the project is low value (maximum £150,000 of aid), no claw back would be necessary. The aggregate of the excess subsidy shall be returned to the local body at the end of the contract. The excess subsidy to be returned shall not exceed the subsidy provided to the supplier. Local bodies can include a reinvestment option as part of the claw back mechanism. The option would involve some or the entire excess subsidy described in above being transferred to a reinvestment fund where money will be reinvested to broadband development in line with the provisions of the BDUK scheme.

(60) **Monitoring**: To facilitate exercise of the claw-back provision, the UK will oblige local bodies to impose on their suppliers a number of reporting obligations. These obligations will require regular reporting on matters such as: actual deployment; actual expenditure; and demand levels. An accounting separation will be imposed on the selected bidders within the Framework Agreement as regards the subsidized projects that will make it easier for the granting authorities to monitor the implementation of the projects as well as any excess subsidy.

(61) All subsidized projects under the BDUK scheme shall comply with the transparency requirements set out in paragraphs (34) to (36) above.

**IV. ASSESSMENT OF THE MEASURE: PRESENCE OF AID**

(62) According to Article 107 (1) TFEU, “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 internal 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 a
selective economic advantage to undertakings, 3) distort or threaten to distort competition and 4) affect intra-EU trade.

IV.1. State resources

(63) The measure will be financed by funds from the national budget and possible by EU funds, which qualify as state resources once they come under the control of a Member State\(^58\). Hence state resources are involved.

IV.2. Economic advantage

(64) Selected operators: Through the tender process, the selected operator will receive financial support which will enable it to enter the market and provide very high speed broadband services on conditions not otherwise available on the market. Therefore the financial support received will enable the successful bidder to conduct this commercial activity on conditions which would not otherwise be available on the market. In view of the above, an economic advantage will be granted to the selected operator.

(65) Third party providers: Third party electronic communication operators will be able to offer their services by using the active and passive wholesale access to the subsidized network on open, non-discriminatory terms. They may therefore also indirectly benefit from the state resources under terms and conditions that would not apply without State intervention, as they will be customers of the selected electronic communication operator\(^59\).

IV.3. Distortion of competition

(66) According to case law of the Court of Justice of the European Union, financial support or support 'in kind' distorts competition in so far as it strengthens the position of an undertaking compared with other undertakings. Due to the state aid granted to a competitor, existing operators might reduce capacity or potential operators might decide not to enter into a new market or a geographic area. The intervention of the state alters the existing market conditions by allowing the provision of improved broadband services by the selected electronic communication operator and, potentially, third party providers. Furthermore, the measure will alter the conditions of competition between end users who are likely to subscribe to the very high speed broadband services in the targeted areas and end users elsewhere in the UK and the EU. Therefore, the fact that an improved broadband service becomes available has the effect of distorting competition.

IV.4. Effect on trade

(67) 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 (wholesale and the retail broadband markets) are open to competition between operators and service providers.

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\(^59\) Providers of existing infrastructure for third party operators shall not be regarded as indirect beneficiaries of the aid measure. Access to such existing infrastructure is carried out in pure market terms in line with principles of the applicable regulatory framework in case of an SMP operator.
IV.5. Conclusion

(68) The Commission therefore concludes that the notified aid measure constitutes state aid within the meaning of Article 107(1) TFEU as moreover confirmed by the notifying Member State during the notification.

V. ASSESSMENT OF THE MEASURE: COMPATIBILITY

(69) Having established that the project involves aid within the meaning of Article 107(1) TFEU, it is necessary to consider whether the measure can be found to be compatible with the internal market.

(70) The Commission has assessed the compatibility of the scheme according to Article 107(3)(c) TFEU and in the light of the Community Guidelines for the application of State aid rules in relation to rapid deployment of broadband networks\(^{60}\) (‘Broadband Guidelines’), which contain a detailed interpretation of Article 107(3)(c) TFEU in this area of state aid law.

V.1. The balancing test and its application to aid for the broadband network deployment

(71) As described in paragraphs 34 and 35 of the Broadband Guidelines, in order to assess whether a measure is compatible under article 107(3)(c), the Commission balances positive and negative effects of the aid according to the criteria set out in these Guidelines. In applying the balancing test, the Commission considers it appropriate here to ask the following questions:

1. 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)?
2. Is the aid well designed to deliver the objective of common interest? In particular:
   a. Is the aid measure an appropriate instrument?
   b. Is there an incentive effect, i.e. does the aid change the behaviour of firms?
   c. Is the aid measure proportional, i.e. could the same change in behaviour be obtained with less aid?
3. Are the distortions of competition and the effect on trade limited, so that the overall balance is positive?

V.2. Objective of the measure

The "colour" of the target area

(72) The measure target basic broadband "white areas" and/or "white NGA areas" where no basic broadband and/or NGA networks currently exist and where they are not likely to be built within three years by private investors on commercial terms. "White NGA areas" shall be deemed "grey areas" from basic broadband point of view, as no two competing infrastructures would be in place (such as cable and xDSL networks).

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The subject of the aid

(73) The Broadband Guidelines define NGA networks as follows "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".

(74) Since the adoption of the Broadband Guidelines in 2009, technology has evolved and some fixed wireless access solutions can have now similar characteristics than wired NGA solutions such as FTTC and are able to deliver comparable services. Notably some fixed wireless access (FWA) networks, which bridge the last 100-200 meters to the homes with high capacity wireless links are often now comparable in speed to FTTC networks, especially if the distance between the FTTC cabinet and the home is relatively long which is often the case in low density areas. Notably, similar to FTTC, FWA networks can inter alia be capable of reliably providing speeds in excess of 30Mbps download, they have characteristics (e.g. latency, jitter) that enable advanced services to be delivered such as video-conferencing and High Definition video streaming. This technological solution is scalable as it would be able to cope with increased take-up and increased demand for capacity and its performance likely to further develop in the coming years.

(75) Therefore the Commission is of the opinion that recent technological and market developments made it possible for certain FWA networks to provide NGA capabilities in low density, rural areas and they can be competing alternatives to FTTC networks. Therefore FWA networks meeting the requirements of paragraph (42) and (74) of the decision can be qualified as NGA for the purpose of establishing the "colour" of the target area under the Broadband Guidelines and eligible for state aid under the scheme.

The aid is in line with the EU policy

(76) As explained in section (7), the scheme is fully in line with both the National Broadband Strategy of the UK and the EU objectives as highlighted in the EU2020 strategy and the DAE, which has the “aim to deliver sustainable economic and social benefits from a Digital Single Market based on fast and ultra-fast internet and interoperable applications, with broadband access for all by 2013, access for all to much higher internet speeds (30 Mbps or above) by 2020, and 50% or more European households subscribing to internet connections above 100 Mbps”. The project will contribute to avoid the digital divide in services which require very high speed broadband connection, between "final third" areas and urban areas that may benefit from competition of at least two competing infrastructure.

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61 FTTC networks' capacities are also often deteriorated by long copper line length at the last mile segment due to the technological characteristics of copper networks.

62 This means that an aid to deploy an FWA network in an area where no NGA network exists nor is likely to be built within three years by private investors on commercial terms should be considered as an aid for the deployment of an NGA network in a white NGA area. Conversely, an aid to deploy an NGA network in an area where such an FWA network already exists or is likely to be built within three years by private investors on commercial terms should be considered as an aid for the deployment of an NGA network in a grey NGA area.
By extending high speed broadband coverage of minimum 30 Mbps download speeds to rural areas of the country, the UK measure will contribute greatly to achieve the first two objectives of the Digital Agenda targets.

Aid is the appropriate instrument

Alternative instruments, such as demand side measures could include grants or tax incentives to end users. However, in the situation currently under assessment, the efforts from alternative instruments (including ex ante regulation) do not solve the problems related to the lack of supply (non-existence of appropriate infrastructure) in the targeted areas. In line with paragraphs 47 and 48 of the Broadband Guidelines, the UK see no alternative but to grant public aid to the construction of a high speed broadband network in the targeted areas of the country.

The aid provides the right incentives to operators

Regarding the incentive effect of the measure, the Broadband Guidelines set out in paragraph 50 that it needs to be examined whether the broadband network investment concerned would not have been undertaken within the same timeframe without any state aid. The market analysis and the public consultation described in paragraphs (39) and (40) will ensure that in the targeted areas no comparable investment would take place without public funding in the near future of three years, hence the aid produces a change in the investment decisions of the operators. Moreover, as explained in paragraph (44), the recipient of the aid will be selected by an open tender.

As explained in paragraph (43), the UK will also ensure that if an investment concerned would be undertaken within the same timeframe without any state aid (for instance due to licence or territorial obligations), then such investments may not be eligible for state aid.

Therefore, the aid should provide a direct and appropriate investment incentive for the selected operators

V.3. Design of the measure and the need to limit distortions of competition

In order to minimise the state aid involved and the potential distortions of competition, the notified measure has to meet a number of necessary conditions.

(a) Market research and consultation: As set out in detail in paragraphs (39) and (40), the UK undertakes a detailed analysis of the existing broadband infrastructure. The consultation with existing operators in an open, transparent way ensures that any potential investments plans of commercial operators are sufficiently taken into account, and public funds are used only in areas where similar commercial investments do not exist and they are not planned in the near future. For the BDUK case, the Commission wished to highlight several positive elements of the process undertaken by the UK. Most importantly, all stakeholders can rely on a (1) central database on existing infrastructure to identify the target areas; (2) the precise areas will be validated through a public consultation allowing all third party operators to comment; (3) all information will be available on a central webpage thereby increasing the transparency; (4) the information will be available at least 1 month that shall give adequate time for any stakeholders to raise comments; (5) the project shall start within a relatively short timeframe (1 month) after the close of the public consultation, to ensure that the results of the mapping will
not become obsolete and hence on-going market or technology development\(^{63}\) would not lead to undue distortion of competition. Publishing all relevant information related to the broadband scheme and to the individual projects will ensure a high level of transparency on the use of public funds and also provides additional evidence for the Commission on the reliability of the market research and consultation undertaken by the UK. In summary, the Commission concludes that the detailed market research and "mapping" together with the public consultation as described by the UK will limit any potential distortion of competition *vis-à-vis* existing operators and reduce the amount of state aid required for the measure.

\(b\) *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 in compliance with national and EU public procurement principles. The UK undertook an open tender process to select potential bidders for the Framework Agreement, and the two consortia were pre-qualified for the Framework Agreement as explained in paragraphs (45) to (47). As proved by the UK, the selection procedure for the Framework Agreement was undertaken in an open, non-discriminatory way in line with the principles of the EU public procurement rules, and the Commission did not identify any requirements of Framework Agreement that could have unduly excluded any operators from bidding. In case local authorities wish not to use the Framework Agreement of the BDUK, the UK confirmed that the tender process will meet the criteria of openness, transparency and non-discrimination as specified in paragraph (45). Should granting authorities choose BDUK's Framework Agreement or conduct their own tender process, aid for each project will always be allocated on the basis of an open tender process; hence the Commission deems the open tender requirement of the Guidelines to be fulfilled. The Commission notes that publishing all on-going tender procedures on a central webpage supports the competitive outcome of tender processes as all potential bidders would be aware on the on-going projects— as opposed to tender invitations only available on webpages of local authorities.

\(c\) *Most economically advantageous offer*: Within the context of an open tender, the UK will select the most economically advantageous offer among those presented by the operators. In line with footnote 55 of the Broadband Guidelines, for the purposes of determining the most economically advantageous offer, the awarding authority will specify in advance the relative weighting which it gave to each of the (qualitative) criteria chosen as described in paragraph (49). As explained in paragraph (52), in all local tender procedures – being conducted under the Framework Agreement or outside of it – the amount of aid required for the project and the offered wholesale access conditions will be part of the selection criteria. Thus under the terms of the competitive tender process, the bidder with the lowest amount of aid requested will receive more priority points within the overall assessment of the bid.

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\(^{63}\) The electronic communication industry is a fast moving industry, hence mapping information could become obsolete even within 1-2 years: commercial operators could have new investment plans, alternative technologies could improve providing better services rendering the original "market failure" argument obsolete or spectrum availability would pave the way for commercial investments that do not require state funding to enhance coverage areas.
(d) **Technological neutrality**: the measure does not favour any technology or network platform leaving it to commercial operators to propose the most appropriate technological solutions to provide the required broadband services to end users. As explained by the UK, the objectives of the measures can in general be achieved by relying on a mix of technologies (including fixed, wireless, mobile and satellite solutions) to ensure all consumers in a given target area benefit from enhanced broadband service availability as a result of the use of public funds.

(e) **Use of existing infrastructures**: To avoid unnecessary and wasteful duplication of resources, the UK encourages the use of existing infrastructure. As explained in paragraph (51), the UK will encourage suppliers competing to deliver their broadband project to offer the use of existing infrastructure where possible and economically advantageous. That would also include the use of the existing infrastructure of the incumbent operator, BT in line with the applicable regulatory framework, which has almost [...]% coverage, hence existing infrastructure in the UK.

(f) **Wholesale access**: third parties' effective wholesale access to a subsidised broadband infrastructure is mandated under the scheme. The selected operator will have to offer a wide range of wholesale services and access to the subsidised network (independently of any change in ownership or any other conditions). The selected operator will have to offer other operators access to a network element or to the capacity of the network in an open, transparent and non-discriminatory manner. The 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. The Commission values favourably in this respect that Ofcom's guidance document published on BDUK webpage will help local granting authority to design adequate wholesale access products in line with the requirements of the BDUK scheme and that of the State aid Broadband Guidelines.

(g) **Price benchmarking**: In order to ensure effective wholesale access and to minimise potential distortion of competition, the prices of access wholesale prices will be based on the average published (regulated) wholesale prices that prevail in other comparable, more competitive areas of the country and the EU. Wholesale prices on the subsidized network will be monitored and approved by the granting authority together with NRA with the objective to keep these at a reasonable and non-discriminatory level. As explained in paragraph (58), the regulatory authority has published a guidance document to help local granting authorities in setting wholesale prices on the subsidized infrastructures.

(h) **Monitoring and claw-back mechanism to avoid over-compensation**: The project will be examined on a regular basis in a monitoring exercise. An accounting separation will be imposed on the selected bidders under the Framework Agreement as regards the subsidized projects that will make it easier for the granting authorities to monitor the implementation of the projects as well as any extra profit generated. A benchmarking mechanism will be implemented to avoid any bidders inflating their investment costs and thereby avoiding possible overcompensation to those undertaking. In case any extra profit is generated by the selected bidder (for instance by lower investments costs, higher
broadband or non-broadband revenues then anticipated at the bidding phase), as explained in paragraph (59), some or all of extra profit will have to be paid back to the BDUK under the claw-back mechanism according to pre-defined formulas. Such extra profits will be reinvested in broadband development in line with the provisions of the current scheme. These mechanisms will ensure that the recipient of the aid will not benefit from overcompensation and will minimise \textit{ex post} and retroactively the amount of aid deemed initially to have been necessary.

(83) Concerning the conditions laid down in paragraph (79) of the Broadband Guidelines, the UK proved that the following conditions will be met:

\textit{(a)} In exchange for receiving state support, the direct beneficiaries of the BDUK scheme will provide third parties with effective wholesale access for at least seven years. In particular, the access obligation imposed also includes 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. An ‘open access’ obligation is all the more crucial in order to deal with the temporary substitution between the services offered by existing network operators and those offered by future NGA network operators. An open access obligation will ensure that existing access seekers 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,

\textit{(b)} As explained in paragraph (28) to (29), the national regulatory authority, Ofcom will have a pivotal role in the implementation of the scheme. Such role does not only include support for the design of the BDUK umbrella scheme and advising the BDUK competence centre, but also helping granting authorities in setting the wholesale access conditions and pricing. In addition, as explained in paragraph (29), Ofcom’s role will also include dispute resolution that will allow that any wholesale access issues between the subsidized operator and the access seekers will be treated by an independent and knowledgeable body with a view of ensuring fair competition. Therefore the NRA will 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 EU rules, the UK will ensure that, if not uniform, at least very similar access conditions will apply throughout all broadband markets identified by the NRA concerned. The Commission values favourably the involvement of the NRA in the state aid scheme as it could help to improve the design of the aid projects (in particular regarding wholesale access prices and conditions), will help the measure (for instance when assessing access requests under the proportionality analysis) to ensure effective competition, and will help solving access disputes ex post for which a knowledgeable an independent body is necessary such as the NRA. Finally, the NRA will also ensure a smooth transition of the wholesale access provisions after the expiry of the access obligations deriving from the state aid rules, if the operator is
found to have SMP under the applicable regulatory framework as explained in paragraph (29).

(c) The Commission agrees with the evidence provided by the UK that - within the specific UK context related to the applicable regulatory framework - providing all types of wholesale access products technologically possible on the subsidised network could disproportionately increase the investments costs for low density, rural areas and the initial provision of certain wholesale access products might not in all circumstances bring the anticipated competition benefits. Therefore the Commission agrees that request for certain access products could be subject to a proportionality analysis, supervised by the NRA and access seekers shall prove credible market demand for that access product as described in paragraph (55): if third party operators are able to pay the 'economic costs' of such access as defined in paragraph (55), it is reasonable to assume that they have a credible business plan to serve consumers. The Commission also considers that it is not justified to impose any limitations on the subsidised infrastructure's wholesale access provisions – not even for business services, even if they are considered to be on a different market under the regulatory regime: a genuine 'open access' requirement of the subsidised infrastructure is pivotal to ensure effective competition and allow third party operators to compete with the subsidised operator. Business revenues can have crucial importance for access seekers to be able to build up their commercial business case, and to be able to effectively compete with the subsidised operator on the retail market segment as well. Effective competition (that can be supported with better access to business revenues) is also pivotal to incentivize operators for additional investments in the target areas thereby encouraging the market as much as possible to undertake the future network investments on commercial terms – without relying on public funds. In general, competition limited only to the highest level of the 'ladder' (i.e. limited to bitstream level only) would not likely to result in additional investments in infrastructures thereby making the target areas prone to subsequent state aid recipients in the future. On the other hand, the UK has provided detailed evidence and calculations that full and unrestricted access to the business leased line services would

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64 That would most likely result in lower broadband coverage or lower quality infrastructure – or significantly higher amount of state aid requirements.

65 As also highlighted by Ofcom, due to the economics of broadband networks, in low density, rural areas, it is not realistic to assume the competition of several infrastructure platform. Similarly, the use of certain wholesale access products by third party operators that might be economical in higher density areas, but could be economically unfeasible in low density areas. Therefore, it could likely be the case that requiring certain access products in rural areas would only increase the investment costs for the subsidised operator (thereby requiring more taxpayers' money), but the access product would not be used by any third party operators thereby not achieving any competition benefits.


67 The current regulatory framework of the UK does not allow third party operators to use access to BT's passive infrastructure ('PIA') to provide business leased line services, as they consider such access shall be used for retail NGA deployment, but the access shall not unduly distort adjacent market, such as the business leased line services (considered to be "market 6") where Ofcom's market analysis have not identified any market failure.

68 In case of limitations on the access for business or other services, retail NGA operator might not be able to have a business plan to invest in that area and competition would most likely take place only at the highest level of the infrastructure (i.e. at bitstream level) resulting in the lowest level of competition on the concept of ladder of investment. See for instance, BEREC's report on Next Generation Access – Implementation Issues and Wholesale Products of March 2010 or WIK report on the Study on the Implementation of the existing Broadband Guidelines. COMP/2011/006.
open up regulatory arbitrage opportunities for third party operators that might not lead to real competitive benefits – contrary to the objective of the measure\(^6\). Therefore the Commission agrees with the UK that passive access (PIA) to the business leased line service shall be available to third party operators under the conditions specified in (57)\(^7\). Finally, as recognized by the Commission decision on the UK regulatory framework\(^8\), VULA has been accepted in that context as functionally equivalent to the local loop unbundling at this stage of market, technological and regulatory development\(^9\). In summary, the Commission considers that the conditions specified above will ensure to meet the requirement of paragraph 79 (c) of the Broadband Guidelines, i.e. whatever the type of the NGA network architecture that will benefit from state aid, it will 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).

V.4. The distortions of competition and the effect on trade are limited, so that the overall impact of the measure is positive

(84) The Commission considers the "step change" approach applied in the BDUK scheme will ensure further limit any distortion of competition. The "step change" approach as described in paragraph (41) to (42) ensures that the public intervention does not crowd out comparable private investments, as the new subsidized network shall provide significantly better broadband quality and availability than existing operators are able to provide or will be able to provide in the near future of three years. The "step change" approach also ensures that operators will not receive "windfall profit" from a state aid scheme for projects that only require limited investments and, hence, most likely will be undertaken on commercial terms (and i.e. in the absence of public funds as well). Finally, the "step change" approach also ensures that – in line with the on-going commercial and market developments in this field – the NGA capabilities of more technologies (such as fixed wireless networks as explained in paragraph (41)) could be recognized in the specific context of very low density, rural areas thereby increasing competition for the available public funds and expand the technology choice available for consumers in the target areas.

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\(^6\) That would be the case, for instance, if third party operators would only target business users with business services without exerting any competitive pressure on the subsidized operator on the retail market.

\(^7\) This is without prejudice to the Commission's position with regards to future market reviews pursuant to the Article 7 procedure.


\(^9\) The Commission stated that VULA "has many features which indicate that, in terms of functions, it is equivalent to local loop unbundling. Moreover, the level of control of the access connection and of the end-user connection provided by the VULA service appears significantly different from the level of control offered by other virtual access products. In particular, VULA should be made available at a location close to the end customers’ premises, similar to LLU. Furthermore, it should allow product differentiation and innovation similar to LLU and thus give access-seekers a sufficient degree of control, including the quality of service, over the local connection to the end-user, even if it does not give the alternative operator the same freedom to offer retail products as those he could offer through a fully unbundled fibre line. All these features distinguish VULA from bitstream access products, whether regional or national. The Commission consequently does not contest, in the present case, that the local, service agnostic and un-contended nature of this particular service and the level of control granted by such a product could justify its inclusion in Market 4".
(85) On balance, the Commission concludes that the overall effect of the measure is deemed to be positive. The measure is in line with the objectives of Article 107(3)(c) TFEU as it supports the achievement of the DAE objectives. The intervention is designed in a way that does not distort competition or adversely affect trading conditions to an extent contrary to the common interest.

V.5. Conclusion

(86) The Commission concludes that the compatibility criteria set out in the Broadband Guidelines are met, hence the aid involved in the notified measure is compatible with Article 107(3)(c) TFEU.

VI. DECISION

(87) On the basis of the foregoing assessment, the Commission has accordingly decided that the aid measure "National Broadband scheme for the UK - Broadband Delivery UK" is compatible with Article 107(3)(c) TFEU.

(88) The UK is reminded that, pursuant to Article 108(3) TFEU, they are obliged to inform the Commission of any plan to extend or amend the measure. In view of the duration of the scheme, the Commission would like to draw the UK's attention to future revisions of the Broadband Guidelines, which might require appropriate measures to the scheme necessary. The UK has committed itself to submit an evaluation of the scheme to the Commission before 31 March 2015 and the re-notification of the scheme shall be subject to the results of that evaluation.

(89) If this letter contains confidential information which should not be disclosed to third parties, please inform the Commission within fifteen working days of the date of receipt. If the Commission does not receive a reasoned request by that deadline, you will be deemed to agree to the disclosure to third parties and to the publication of the full text of the letter in the authentic language on the internet site: http://ec.europa.eu/competition/elojade/isef/index.cfm.

(90) Your request should be sent by encrypted e-mail to stateaidgreffe@ec.europa.eu or, alternatively, by registered letter or fax to:

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Yours faithfully,
For the Commission

Joaquín ALMUNIA
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