EUROPEAN COMMISSION



Brussels, 26.5.2016 C(2016) 3208 final

In the published version of this decision, some information has been omitted, pursuant to articles 30 and 31 of Council Regulation (EU) 2015/1589 of 13 July 2015 laying down detailed rules for the application of Article 108 of the Treaty on the Functioning of the European Union, concerning non-disclosure of information covered by professional secrecy. The omissions are shown thus [...]

PUBLIC VERSION

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Subject: SA. 40720 (2016/N) – National Broadband Scheme for the UK for 2016-2020

Sir,

I am pleased to inform you that the Commission has assessed the measure "National Broadband Scheme for the UK 2016-2020 (2016 BDUK) and decided not to raise objections insofar as the measure will be implemented via open access tenders, as presented in this decision. On that basis, the measure is compatible with the internal market, pursuant to Article 107(3)(c) of the Treaty on the Functioning of the European Union (TFEU).

However, at this stage, the Commission cannot take a position concerning reduced access tenders under cascading procurements, since in the absence of a review of the leased lines exception including a cost-benefit analysis, as described in this decision, the notification remains incomplete. Once the leased lines review is finalised, and a final report is notified to the Commission, the Commission will take a position in relation to implementation of the measure via reduced access tenders.

The Rt Hon Philip HAMMOND Secretary of State for Foreign and Commonwealth Affairs King Charles Street London SW1A 2AH UNITED KINGDOM

1. PROCEDURE

(1) Following extensive pre-notification contacts in the course of 2015-2016, by letter of 21 April 2016, the United Kingdom notified the *National Broadband Scheme for the UK 2016-2020 (2016 BDUK)* ("the 2016 scheme") to the Commission pursuant to Article 108(3) TFEU.

2. CONTEXT

- (2) The Europe 2020 Strategy (EU2020)¹ and the Digital Agenda for Europe (DAE) have underlined the importance of broadband deployment to promote competitiveness, social inclusion and employment in the EU and defined the aim to bring basic broadband access to all Europeans by 2013 and to ensure that, by 2020, (i) all Europeans have access to much higher internet speeds of above 30 Mbps and (ii) 50% or more of European households subscribe to internet connections above 100 Mbps.
- (3) The UK has a general policy objective to provide 95% of UK premises with speeds of over 24 Mbps by 2017 and aims to extend coverage beyond that as far as possible across the remaining 5% of premises. Projects requiring State aid within the context of the notified scheme will procure infrastructure capable of delivering speeds above 30Mbps. The delivery programme tasked with meeting those objectives is led by the UK Department for Culture, Media and Sport (DCMS).
- (4) The previous National Broadband Scheme for the UK Broadband Delivery UK ("the 2012 scheme") was approved by the Commission on 20 November 2012; it expired on 30 June 2015. The 2012 scheme was designed to support local and community rollout of broadband networks capable of delivering 90% NGA broadband in each local authority area, and to ensure that premises within the remaining 10% were able to receive a minimum standard of at least 2 Mbps. The UK confirmed that no new aid has been awarded since the expiry of the 2012 scheme on 30 June 2015.
- (5) Under a first phase of the implementation of the 2012 scheme, central and local bodies jointly committed around GBP 1.2 billion of public funds through 44 contracts for broadband infrastructure coverage in 2012 and 2013. As a result of that public investment, some 4 million homes and businesses had increased broadband speeds available to them by March 2015 where this would not otherwise have been available. By early 2016 the UK expects to have ensured that 90% of all UK premises have access to NGA broadband and the number of homes and businesses passed is expected to rise to 5.3 million by the end of December 2017 as part of the roll out of the 2012

¹ EUROPE 2020 – A strategy for smart, sustainable and inclusive growth, COM(2010) 2020.

² SA. 33671 (2012/N). The objectives of the 2012 scheme were to: (1) provide access to NGA infrastructure to as many homes and businesses as possible in each local authority area in the UK; and (2) to ensure that everyone in the remaining areas in the UK has access to minimum broadband speeds of at least 2 Mbps (the universal service commitment).

scheme.³ Under a second phase of the 2012 scheme, a further GBP 327.2 million of central Government funding was allocated before the expiry of the scheme. The second phase of the programme is expected to extend coverage to 95% of UK premises by the end of 2017.

- (6) The 2016 scheme is a new scheme to support the UK's objective of extending the coverage of NGA infrastructure as far as possible. The (maximum) expected budget is GBP 500 million. Currently, the funding includes GBP 97.7 million of central government funding, which is expected to be matched by local body funding. The UK anticipates additional funding also becoming available over the life of the current decision.
- (7) The 2016 scheme follows a new approach, incorporating lessons learned since the approval of the 2012 scheme, and reflects the publication of the 2013 Broadband Guidelines.⁴
- (8) Recognising that the 2016 scheme would include several novel elements, the UK authorities conducted a market engagement from 26 January to 23 February 2016 (indepth discussions with various stakeholders concerning the design of the current scheme). Granting authorities, potential suppliers, infrastructure operators and access seekers were all invited to comment on the key aspects of the scheme, including the access conditions. The UK authorities received 37 responses, and their feedback has been incorporated into the current notification. According to the UK authorities, the general view was that the 2016 scheme would support the deployment of NGA infrastructure in a way that is pro-competitive.
- (9) The UK recognises that there are various regulatory and policy approaches that can be taken to encourage investment. The following outlines the other steps taken by the UK so far.
- (10) In terms of demand stimulation through marketing, an integral part of the UK's strategy is to encourage the take up of high speed/high grade broadband by households and businesses⁵, recognising that the supply of high speed/high grade broadband has two aspects. Firstly, if residential and business consumers are better informed about the benefits of high speed/high grade broadband, this is likely to increase the level of demand, which in turn acts as a signal to the market and stimulates infrastructure investment. Secondly, where awareness levels of high speed/high grade broadband availability increase and the benefits of high speed/high grade broadband are better understood this helps drive the take-up on State sponsored deployments, which serves to reduce the deployment costs. The UK's strategy impacts on each of those aspects.
- (11) Demand stimulation has taken the form of connection vouchers in urban areas (under the *de minimis* rule) in conjunction with marketing activities to drive take-up, often amongst specific target groups (e.g. SMEs). Vouchers are directed at supporting endusers and their effect on incremental deployments is incidental to those choices.

The programme was reviewed by the National Audit Office in 2014/15 and their report on the programme, published in January 2015, is available at http://www.nao.org.uk/report/superfast-rural-broadband-programme-update/.

EU Guidelines for the application of state aid rules in relation to the rapid deployment of broadband networks, OJ C25, 26.01.2013, p.1.

See for example, https://www.gov.uk/gosuperfast?gclid=CK7H3aacqMMCFZLLtAodbgcAFg

However, the use of vouchers generally favours "urban" applications where the incremental costs are relatively low and there are more likely to be a range of competing infrastructure suppliers able to offer NGA services.

- (12) The UK authorities have also implemented supply-side measures, including via regulatory provisions that enable the re-use of BT's existing infrastructure⁶, measures aimed at reducing the cost of civil engineering in the deployment of broadband⁷ (e.g. by reducing administrative burden, streamlining street works and micro-trenching⁸, facilitating the coordination of works among different utilities⁹, measures regarding wayleaves¹⁰, measures regarding new-build domestic dwellings¹¹, measures concerning business rates which are another cost component in the roll-out of broadband, etc.). Also in terms of encouraging development of 4G mobile services, the UK promotes the development of high speed mobile broadband services as those services stand to offer as many benefits in due course as fixed broadband (e.g. remote health services). Various steps support that development (e.g. in August 2013 planning changes¹² were made to help streamline mobile infrastructure deployment).
- (13) However, without further public intervention, reducing the "digital divide" between the remaining NGA white areas and the rest of the UK does not seem possible. In line with paragraphs 47 and 48 of the Broadband Guidelines, the UK authorities see no alternative but to grant public aid to the construction of NGA networks in the targeted areas of the country. Due to the economics of broadband networks, the difficulties resulting from the lack of supply of broadband networks cannot be satisfactorily addressed by such measures involving demand stimulation or regulatory interventions. Demand-side measures in favour of broadband (such as vouchers, tax breaks, awareness-raising measures or demand aggregation) could be an instrument of public

⁶ British Telecom (BT) is under regulatory access obligations due to its Significant Market Power.

Member States must comply with Directive 2014/61/EU of the European Parliament and of the Council of 15 May 2014 on measures to reduce the cost of deploying high-speed electronic communications networks, ,OJ L 155, 23.5.2014, p.1, by 1 January 2016 and apply those measures from 1 July 2016. The Directive aims at facilitating and incentivising the roll-out of high-speed electronic communications networks by reducing its cost. It includes measures such as the sharing and re-use of existing physical infrastructure, which are expected to create conditions for a more cost efficient network deployment. The UK authorities consider that the broadband cost reduction directive will enhance transparency and encourage further coordination, in particular requiring reasonable coordination of works that use public funds. Furthermore, the UK authorities note that the directive requires enhanced information about existing physical infrastructures across a range of sectors and requires that infrastructure operators provide access on fair and reasonable terms to support broadband roll-out. This will ensure that reasonable access requests are met and create an incentive to overcome any barriers to infrastructure sharing.

Microtrenching and Street Works: An advice note for Local Authorities and Communications Providers, November 2011, at: http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/77427/Microtrenching_guidance_N OV2011.pdf.

Traffic Management Act 2004 (part 3 -permit schemes): Additional advice note - for developing and operating future Permit Schemes, January 2013, at: http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/49797/permit-schemes-additional-advice-note.pdf.

See: https://www.gov.uk/government/publications/law-commission-the-electronic-communications-code.

PAS 2016: 2010, Next generation access for new build homes – Guide, 8 December 2010, at: http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/78511/10-1339-pas-2016-next-generation-access-new-build-guide.pdf.

See: http://www.legislation.gov.uk/uksi/2013/1868/pdfs/uksi_20131868_en.pdf.

intervention. However, such measures would be insufficient to solve the systemic problems illustrated on the supply side in UK rural areas. Despite the crucial role that regulation plays in ensuring competition and supply in the market for electronic communications, the regulatory measures imposed by Ofcom (obligations on access and use of specific network elements, transparency, non-discrimination and price-control) did not solve the problems related to the lack of broadband infrastructure and services in the targeted areas.

3. DESCRIPTION OF THE MEASURE

3.1. Objectives

- In line with the EU2020 strategy for more growth, the DAE and the UK broadband strategy, the objective of the 2016 scheme is to provide access to NGA infrastructure capable of delivering speeds of at least 30Mbps to as many homes and businesses as possible at a UK-wide, regional, and/or local level. The 2016 scheme aims to minimise the "digital divide" in the UK (which exists predominantly in rural and remote areas); and accelerate the roll-out of NGA broadband, in line with UK and EU priorities, and help drive further economic, regional and UK-wide growth, producing further economic and social benefits.
- (15) For the purposes of the notified measure, the UK intends to limit the State's intervention to broadband deployment in "white" NGA areas, where NGA networks do not at present exist and where they are not likely to be built within 3 years. The UK is committed to use of the definition of 30Mbps for NGA procurements (and will at all times ensure that the subsidised network can deliver speeds above 30Mbps), but will prioritise investments aimed at premises with current access to speeds below 24 Mbps.
- (16) The UK's view is that public sector intervention is justified. In much of the areas concerned, NGA broadband is not being delivered by commercial suppliers. The cost of deploying NGA broadband to those households is significantly higher than the cost of reaching the other 95% of households (on a per premises basis). Moreover, the achievable revenue base is more limited due to low population density in those areas. However, an effective, reliable and secure broadband infrastructure network is deemed essential to 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. 14

3.2. Rationale for an "umbrella scheme"

(17) The UK proposes the use of the 2016 scheme to bring the significant number of local and community broadband projects expected in the UK under one umbrella, in particular with the aim of easing the administrative burden on smaller granting

In some limited instances, certain areas may present opportunities for commercial investment. All concrete plans for commercial investment provided in response to public consultations will be taken into account in the final maps (see also Section 3.13).

See: https://www.gov.uk/government/publications/towards-a-one-nation-economy-a-10-point-plan-for-boosting-rural-productivity.

authorities. This will in turn accelerate broadband investment in the remaining white areas.

3.3. Duration

(18) The new scheme will only take effect with the approval of the measure under examination by the Commission and will be valid until 31 December 2020. In the first instance, the scheme will only be implemented via open access tenders.

3.4. Budget, funding instruments and legal basis

- (19) The overall estimated (maximum) budget of the measure is GBP 500 million (approximately EUR 635 million) for the duration of the scheme.
- (20) There will not be specific legislation for the 2016 scheme. The legal basis of the scheme rests on this decision and on the powers enabling expenditure by the UK Government, devolved administrations in the UK, local authorities in the UK and various other funding instruments.
- (21) As the scheme is intended to cover all funding for eligible projects and as local and community bodies seeking central Government programme funding are required to provide match funding, there will be more than one source of public/EU funding in almost all cases. For that reason, the scheme is based on a number of relevant legal instruments.
- (22) UK Government 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. Funding that the UK Government provides directly to broadband projects will be made available to it under the Industrial Development Act 1982, the Supply and Appropriation Acts and a new provision enabling the funding of broadband infrastructure by Government contained in the Enterprise Bill, which is currently going through the UK Parliamentary process. The UK anticipates that local funding, the European Regional Development Fund (ERDF)¹⁶ and the European Agricultural Fund for Rural Development (EAFRD)¹⁷ are also likely to be used for the granting of

England (Local bodies): Section 31 of the Local Government Act 2003; Wales: Section 60 of the Government of Wales Act 2006, together with sections 1(2), 1(3)(d) and 1(7)(f) of the Welsh Development Agency Act 1975 and Section 31 of the Local Government Act 2003; Northern Ireland: Section 149 of the Communications Act 2003. Scotland: Section 26(1) of the Enterprise and New Towns (Scotland) Act 1990, together with section 8 of that Act. Housing Grants, Construction and Regeneration Act 1996; and the Educational Development, Research and Services (Scotland) Grant Regulations 1999.

Regulation (EU) No 1301/2013 of the European Parliament and of the Council of 17 December 2013 on the European Regional Development Fund and on specific provisions concerning the Investment for growth and jobs goal and repealing Regulation (EC) No 1080/2006, OJ L 347, 20.12.2013, p. 289–302.

Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006, OJ L 347, 20.12.2013, p. 320–469. The "Common Provisions" Regulation provides for a shared set of basic rules applying to all European Structural and Investments Funds (ESIFs), including the EAFRD.

Regulation (EU) No 1305/2013 of the European Parliament and of the Council of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing

- aid under this scheme. The UK recognises that where those funding sources are used that the UK will need to comply with other rules as appropriate.
- (23) The requirements of Directive 2014/24/EU on public procurement, as implemented in England, Wales and Northern Ireland by the Public Contracts Regulations 2015 and in Scotland by the Public Contracts (Scotland) Regulations 2015, will apply to all implementing bodies when procuring broadband contracts.

3.5. Aid intensity

(24) The aid intensity will depend on the outcome of the open tender processes and thus will vary from project to project. While the majority of projects will require an aid intensity of less than 100%, the UK expects that there will be cases that will require 100% aid funding, given the challenges posed by legacy network deployment decisions, extreme topography, network re-configuration and very low population densities. The UK proposes to apply a common eligibility requirement to all projects.

3.6. Beneficiaries

- (25) Direct beneficiaries of the aid will be electronic communications operators offering broadband services at wholesale level, retail level or both.
- (26) Direct beneficiaries could also include public authorities where they decide to own the subsidised infrastructure.
- (27) If the broadband network is owned and operated (at wholesale level) by a public authority (or in-house company) then: the publicly owned network operator (1) must limit its activities to within the pre-defined target area(s) and must not expand to other commercially attractive locations; (2) will limit its activity to maintaining and granting access to the passive infrastructure, but shall not engage in competition at the retail level with commercial operators; and (3) will have accounting separation between the funds used for the operation of the network and the other funds at the disposal of the public authority.
- (28) Indirect beneficiaries will be communications providers obtaining wholesale access to the State subsidised network in order to offer retail services to end users and last mile

Council Regulation (EC) No 1698/2005, OJ L 347, 20.12.2013, p. 487–548 This is the basic act that sets out the specific rules relating to the EAFRD for rural development programming.

Regulation (EU) No 1306/2013 of the European Parliament and of the Council of 17 December 2013 on the financing, management and monitoring of the common agricultural policy and repealing Council Regulations (EEC) No 352/78, (EC) No 165/94, (EC) No 2799/98, (EC) No 814/2000, (EC) No 1290/2005 and (EC) No 485/2008, OJ L 347, 20.12.2013, p. 549–607. The so-called "Horizontal" Regulation provides the financial management rules for the two CAP funds, the European Agricultural Guarantee Fund (EAGF) which finances market measures and direct payments, and the EAFRD which finances support to rural development. It brings together the rules on cross compliance, farm advisory systems and monitoring and evaluation of the CAP.

Regulation (EU) No 1310/2013 of the European Parliament and of the Council of 17 December 2013 laying down certain transitional provisions on support for rural development by the European Agricultural Fund for Rural Development (EAFRD), amending Regulation (EU) No 1305/2013 of the European Parliament and of the Council as regards resources and their distribution in respect of the year 2014 and amending Council Regulation (EC) No 73/2009 and Regulations (EU) No 1307/2013, (EU) No 1306/2013 and (EU) No 1308/2013of the European Parliament and of the Council as regards their application in the year 2014, OJ L 347, 20.12.2013, p. 865–883This Regulation defines transitional rules in order to bridge the gap between two multi-annual programming periods.

providers connecting to the infrastructure as well as residential and business users. Whereas residential users are not subject to State aid rules, businesses in the targeted areas will therefore ultimately benefit from the improved broadband services and coverage in comparison with what would be provided on a purely commercial basis.

3.7. Implementing bodies

- (29) Funding for the 2016 scheme will be made available to local and community bodies, and in some cases to Broadband Delivery UK (BDUK), a unit within the DCMS in charge of ensuring the delivery of the scheme at national level.
- (30) Given the particular challenges as the UK seeks to address the hardest to reach premises, the UK is of the view that it is appropriate to ensure that the 2016 scheme recognises BDUK's explicit funding role. Funding may in the future be allocated to BDUK, which will operate as an implementing body and centrally procure solutions.
- (31) Where BDUK itself directs resources for qualifying projects, it will ensure that the national competence centre (NCC) (see Section 3.8 below) operates in a functionally separate capacity within BDUK in making its State aid assessments (BDUK will operate the NCC as a separate team from those responsible for running the procurements).
- (32) For simplicity, in this decision, "implementing bodies" refers to devolved administrations, local authorities and community bodies 18, as well as BDUK acting on its own behalf.

3.8. Role of BDUK as the "national competence centre"

- (33) The 2016 scheme is to be operated and monitored by BDUK, which acts in this context as the NCC. The NCC's responsibilities include: (i) the central coordination of the 2016 scheme; (ii) the development and management of the overall approach to the delivery of broadband projects; (iii) primary liaison and coordination with industry stakeholders; (iv) acting as a conduit for, and assurance of the use of, central Programme funds; (v) any national approaches to sourcing; and (vi) providing support, guidance, information sharing and toolkits for implementing bodies.
- (34) The UK considers that it is both efficient and effective to ensure that the NCC will support the umbrella scheme, which will help to support project assurance, including State aid compliance. Local and community bodies will implement the 2016 scheme under the guidance of the BDUK body acting as the NCC.

3.9. Role of Ofcom

(35) Ofcom is the independent regulator and competition authority for the UK communications industries. Given its expertise and regulatory role Ofcom provides technical advice to the UK authorities in relation to the 2016 scheme, including in respect of: the design of the scheme, addressing programme-wide issues, advising on

[&]quot;Community bodies" is a generic term used by the UK to describe an organisation that can demonstrate that it is acting on behalf of an identified community or communities. Whilst not prescriptive, a Community body could take the form of a social and community enterprise, community interest company, community trusts, cooperative, charity or other formally constituted group.

issues arising in the context of individual broadband projects under the 2016 scheme and advising on how Ofcom's regulatory decisions will interact with the 2016 scheme.

- (36) As required by the Broadband Guidelines, in order to ensure that the design of the measure limits distortions to competition BDUK will seek advice/support from Ofcom on, amongst other things, the following: (1) BDUK's approach to producing its central baseline map; (2) the wholesale access conditions applicable under the 2016 scheme, including whether a supplier's proposal for wholesale access is consistent with this decision, the Broadband Guidelines and BDUK guidance¹⁹; (3) wholesale access pricing principles and practice, including the appropriateness of chosen benchmark(s) and arrangements relating to benchmarking exercises (e.g. pricing points and pricing policy proposed by suppliers) and advising BDUK when it is required to resolve disputes in relation to those proposals between the implementing body and suppliers); and (4) input into relevant BDUK published guidance²⁰ (including those relating to wholesale access and benchmarking principles).
- (37) Ofcom will also provide dispute resolution in respect of a communications provider seeking wholesale access to the State subsidised network. If the third party provider is dissatisfied with the outcome of that process and/or cannot reach agreement with the network operator it can ask Ofcom to investigate.²¹

3.10. Intervention models

- (38) Flexibility in scheme design is an important feature of the 2016 scheme. It therefore provides the implementing bodies with the flexibility to consider those solutions most likely to encourage effective competition and to deliver efficient and sustainable broadband investments in their intervention areas for the benefit of residential and business consumers.
- (39) Before commencing their procurement, implementing bodies will be required to undertake a market assessment to determine the most appropriate intervention model and intervention size for their region (see also Section 3.15.2).²² Implementing bodies will need to demonstrate that their procurement has been designed in a way that promotes open access procurements and optimises the number and quality of bidders. To that end, implementing bodies must demonstrate that they have appropriately assessed and identified (i) the delivery/funding model, (ii) intervention area(s) and their scale; and (iii) the approach to lotting or aggregation (see Section 3.16.4 below).
- (40) The UK authorities consider the following models as possible delivery or funding models:

BDUK will provide updated guidance concerning access conditions within three months of the adoption of this decision, to be published on BDUK's website at: https://www.gov.uk/government/policies/broadband-investment.

BDUK will provide updated guidance within three months of the adoption of this decision, to be published on BDUK's website.

Ofcom will manage the dispute in a manner consistent with the approach that it takes in addressing regulatory disputes. See, *Dispute Resolution Guidelines: Ofcom's guidelines for the handling of regulatory disputes*, 7 June 2011, at: http://stakeholders.ofcom.org.uk/binaries/consultations/dispute-resolution-guidelines.pdf

Implementing bodies will also need to have justified the use of a gap funding model over alternative intervention or funding models.

- **Investment gap funding**: the implementing body or bodies procures broadband infrastructure services from a supplier (a single supplier or a consortium) through a services contract.
- **Public private partnership**: the implementing body or bodies forms a joint venture ("JV") or special purpose vehicle ("SPV") with a supplier or suppliers. The JV or SPV would invest in, and provide, broadband infrastructure services to end customers (including service providers/retailers wishing to use the infrastructure network) through service contracts, with the public body and supplier sharing the profits or liabilities.
- Concession to Build-Operate-Transfer: an implementing body offers a concession contract to build, operate and sell wholesale broadband services from a network, which returns to public hands at the end of the contract.
- **Public sector owned supplier**: an arms-length company, owned by one or more implementing body(s), invests in, and provides, broadband infrastructure services to end customers through service contracts.
- (41) The NCC will require implementing bodies to have determined their delivery/funding model based on evidential analysis. Such analysis should demonstrate, among others, whether an implementing body has the financial and resource capacity to undertake a public ownership model, as well as whether the market has the capability to deliver a solution in that area. This takes into consideration that different funding models may present different opportunities and risks to implementing bodies.
- (42) The NCC will provide guidance to the implementing bodies on how to design and implement the various intervention models within 3 months of the adoption of this decision.²³

3.11. Target Areas

- (43) In relation to the classification as white, grey or black areas set out in the Broadband Guidelines, the UK authorities indicated that the 2016 scheme will only be used to deliver NGA projects in "white NGA areas", within the meaning of the definition of the Broadband Guidelines.
- (44) For the purposes of the 2016 scheme, a "white" NGA area is an area where no NGA infrastructure (capable of delivering reliable download speeds of or above 30 Mbps) exists and where it is not likely that such infrastructure will be built within 3 years by private investors.
- (45) In order to establish that an area is a white NGA area, in line with the Broadband Guidelines, implementing bodies will map and classify areas in terms of existing and planned broadband infrastructure, on the basis of a detailed mapping and public consultation exercise in line with Sections 3.12 and 3.13 below). BDUK, acting as the NCC, will check that any NGA-grade cable footprint (Docsis 3.0 and above) is excluded from an area designated as white NGA. If the cable footprint cannot be excluded from the area, the area will be considered non eligible for state aid. Non-enhanced cable (e.g. DOCSIS 2.0) will be treated as basic broadband.

To be published on BDUK's website.

Detailed mapping and coverage analysis 3.12.

- (46)In line with the Broadband Guidelines the UK will map basic areas using a speed threshold of 30 Mbps. NGA networks are mapped on the basis that, amongst other elements, they have substantially higher upload speeds (compared to basic broadband networks)²⁴ and are able to deliver broadband services at a reliable access (download) speed of more than 30 Mbps.
- (47) If mapping confirms that there are no NGA networks (including NGA networks planned within the next three years, in accordance with the Broadband Guidelines), that fact will form the basis for a targeted white NGA intervention.²⁵
- Implementing bodies intending to support a broadband project under the 2016 scheme (48)will have to identify the geographic area subject to public intervention and justify why the intervention in the target area is required. This requires evidence of the current position and future developments, especially over the next three years. The NCC will provide updated guidance to assist in mapping areas within 3 months of the adoption date of this decision.²⁶
- Implementing bodies already hold mapping data on their geographic areas based on (49)responses to previous Public Consultations and contracted implementation plans, which generally represent the most recent and accurate data regarding coverage, in particular of smaller suppliers.²⁷ These previous consultations are based on information collected under the 2012 Decision, which included baseline mapping of NGA and basic infrastructure. Links to all of these maps can be found on the BDUK Information on mapping is publicly available on the website: https://www.google.com/maps/d/u/0/viewer?msa=0&mid=zwLLqmDnfnjA.khRmsBv 2kR70. However, the UK recognises the need for implementing bodies to update and revise these maps under the 2016 scheme. Through its mapping exercise an implementing body will be expected to identify the level of broadband coverage in those areas. Furthermore, as part of its mapping exercise an implementing body (or BDUK on its behalf as the NCC) will also approach existing broadband network providers in the target area and neighbouring areas to clarify those providers' current and future investment plans for the area. Correspondence from the broadband network providers in the relevant areas will assist in confirming the classification of the areas.
- (50)To develop and update basic broadband and NGA maps for public consultation, the NCC strongly encourages implementing bodies to undertake an Open Market Review ("OMR") which involves a formal engagement with all known network operators to research existing network provision within the area of the implementing body. That market research involves a process by which maps are developed. The OMR is

A dynamic mapping data is held on the BDUK secure extranet site, which identifies, at a postcode level, all white NGA and basic white areas within the UK.

For the average upload speed on UK fixed-line broadband networks see, Ofcom (2014) UK fixed-line broadband performance, May 2014: The performance of fixed-line broadband delivered to UK residential consumers, 3 available October 2014, http://stakeholders.ofcom.org.uk/binaries/research/broadbandresearch/may2014/Fixed_bb_speeds_May_2014.pdf.

These NGA interventions can be implemented irrespective of the mapping status of the area from a basic broadband perspective e.g. white, grey or black, under step change requirements – See Section 3.14.

To be published on BDUK's website.

intended as a precursor to a formal public consultation document, considering that early market engagement at an early stage is a matter of best practice.

(51) Under previous state aid mapping exercises, BDUK required that information submitted to the OMR and the Public Consultation be at the full 7-digit postcode level. In the UK, there are approximately 10 to 15 premises per 7-digit postcode. According to the UK authorities this ensures an appropriate level of granularity, balancing the requirement to limit overlaps, while at the same time not placing an undue administrative burden on network operators to reply to the consultations. The UK thus seeks to encourage as many alternative operators to respond as possible, in particular smaller companies. The UK has committed to encourage premises level mapping where possible, without creating undue administrative burden and cost.

3.13. Public consultation

- (52) The UK applies a best practice process that promotes the use of both an OMR and a Public Consultation, the latter being conducted in a manner consistent with the requirements of the Broadband Guidelines. All Public Consultations will be published on the implementing bodies' websites.
- (53) Having undertaken the detailed mapping process set out above, all implementing bodies are then required to hold a public consultation to validate that mapping. As such, each implementing body will publish a summary of the planned aid measure, a description of the targeted areas (based on the above described mapping exercise) including classification of the areas (i.e. as white NGA, and basic white/grey/black), as well as any opinions already lodged by stakeholders. The public consultation will seek feedback from all interested stakeholders (including, but not limited to, existing or potential broadband network providers; internet providers; businesses; and residents) and will inquire about current or planned investments in similar broadband infrastructure in the target area in the next three years from the first day of the public consultation. All public consultations will be required to be published on the implementing bodies' websites as well as on BDUK's website.
- (54) In addition, the UK will further strengthen the approach to public consultation by:
 - taking account of premises-level information from suppliers on their existing footprints and future commercial investment plans, to the extent they respond to OMRs and public consultations with this data.
 - seeking to define intervention areas down to the level of individual premises to be targeted where information is available from operators.
 - providing information at the premises/infrastructure level, where operators provide that level of detail.
 - requiring implementing bodies to respond formally to information received in response to OMRs and public consultations and outline treatment in the amalgamated mapping (through letters to individual suppliers and by publishing a redacted summary report on a public website). 29

The summary report needs to be published in such a way that commercial confidentiality is not compromised.

See paragraph 78(b) of the Broadband Guidelines.

- including a question to operators as to what wholesale access products they would like to see offered on any newly created subsidised NGA network infrastructure resulting from any public intervention in the future. BDUK believes that this could be a useful market research exercise and the information may inform the procuring authority's intervention design. However, BDUK would not oblige the procuring authority to include these products in the invitation to tender, unless the access product is already required under the 2016 scheme. Including this question in the public consultation would not negate the need to allow the access seeker to request new forms of access product through the formal general access provisions.
- (55) A public consultation must last for at least one month. The procurement ideally would start within 1 month of the public consultation being finished but no later than 6 months. Results of a public consultation are valid for 3 years after which if changes or additions to existing intervention areas are proposed, mapping and public consultations must be redone.
- If any meaningful comments are made by stakeholders in response to the public (56)consultation, they must be investigated by the implementing body. If an operator currently operates a similar infrastructure or has plans to invest in similar broadband infrastructure in the target area in the near future, the areas concerned by private investment will be carved out of the target areas. However, that will only be the case if the investment plan is credible and the investment itself will lead to significant improvements in terms of coverage within a three-year period, with completion of the planned investment foreseen within a reasonable time frame thereafter. The implementing body will seek evidence from providers to support their statements that investment will take place within a three-year period. Evidence could include a business plan, a detailed calendar deployment plan, proof of adequate financing or any other type of evidence that would demonstrate the credible and plausible character of the planned investment by private sector network providers. If such evidence is not forthcoming, an implementing body may reasonably conclude that such investment plans are unlikely to take place. In the event of any disagreement with a network provider, the implementing body will inform the NCC who will seek to resolve the matter as part of its role as scheme administrator. Implementing bodies are not required to take into account any investment plans announced by network providers following the conclusions of the public consultation, save where the implementing body wishes to do so. BDUK will provide updated guidance regarding mapping and public consultations within three months of the adoption of this decision.³⁰ The NCC will ensure that this guidance is adequately publicised to ensure transparency of the guidance generally, and this rule in particular, for network providers.
- (57) There exists the risk that a mere "expression of interest" by a private investor could delay delivery of broadband services in the target area if subsequently such investment does not take place while at the same time public intervention has been prevented. The aid granting authority may therefore require certain commitments from the private investor before ruling out public intervention. Those commitments should ensure that significant progress in terms of coverage will be made within the three-year period or for the longer period foreseen for the supported investment. It may request the operator to enter into a contract which outlines the deployment commitments. That contract could foresee a number of "milestones" which would have to be achieved

To be published on BDUK's website.

during the three-year period and reporting on the progress made. If a milestone is not achieved, the granting authority may then go ahead with its public intervention plans.³¹

(58)The UK authorities noted that, while the measure will address the "digital divide" present in the remaining NGA white areas of the UK, the UK will continue to see commercial investment in NGA broadband and, in some limited instances, remaining premises may present opportunities for commercial investment. For instance, Virgin Media announced its network expansion plans (Project Lightning) in February 2015 and is seeking to expand its network coverage from 12.6 million homes to 17 million homes (or around two thirds of the UK) over the next four to five years. However, the UK authorities expect those additional homes to be predominantly in close proximity to the boundary of Virgin Media's existing network footprint and in areas with higher subscriber density with greater consumer and business demand. Whilst this may have some impact upon reducing the number of UK premises that are the target of this scheme, BDUK expects that the vast majority of the expansion will be in areas where BT already has network coverage and so the overall impact on the scheme's objective will be small. All concrete plans for commercial investment provided in response to public consultations will be taken into account in the final maps.

3.14. Step change requirements

- (59) In meeting the speed requirements, all projects must meet the step change requirements of the Broadband Guidelines.
- (60) The UK will make State aid available to support a "step change" in broadband capability. The 2016 scheme requires that download speeds have to be at least doubled by the intervention and substantially higher upload speeds need to be provided. 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) and (2) the subsidised infrastructure brings significant new capabilities to the market in terms of broadband service availability, capacity, speeds and/or competition. The 2016 scheme does not foresee the grant of aid for marginal investments related merely to the upgrade of active components of the network (e.g. vectoring alone), which, as indicated in paragraph 51 and footnote 64 of the Broadband Guidelines, do not normally ensure a "step change" and are therefore not eligible for State aid. However, a step change may be achieved for example by combining the deployment of fibre-to-the-cabinet ("FTTC") with vectoring.
- (61) The step change shall be compared to that of existing as well as concretely planned network roll-outs. Step change as a result of the public intervention will always be verified by BDUK as the NCC, also taking into account market, regulatory and administrative changes.
- (62) "Step change" could include public interventions in respect of premises that have previously only been provided with basic broadband capability (whether through commercial deployment or through the 2012 scheme or other State aid interventions).

See paragraphs 63 to 65 of the Broadband Guidelines, as well as footnote 80.

3.15. Open tender process

(63) In order to minimise the amount of aid involved, aid under the scheme will be awarded by way of open tender processes in line with EU principles of public procurement, including the broader transparency obligations in relation to the process. As an alternative, the UK authorities also proposed to use a mechanism of "cascading procurements", whereby as a first step only open access bids would be considered, and as a second step, and only if the first step should fail, bids offering reduced forms of access may be considered, as described further below. Classic open tender processes as well as the open access bids under the "cascading procurements" would be run according to the same principles.

3.15.1. Rationale and Objectives

- (64) In areas where there is insufficient demand for creating competing infrastructures, particularly in rural areas, competition can only take place on the state funded network. To allow such competition to develop, the Broadband Guidelines impose open access requirements on the network operator. According to the Broadband Guidelines, full (passive) access to any subsidised infrastructure should be granted with the exception of certain instances concerning remote, low population density intervention areas, where, if several conditions are complied with, access can be limited to being provided only on "reasonable demand". 33
- (65) However, the UK regulatory environment presents a number of characteristics in terms of wholesale access requirements, in particular concerning the business connectivity market i.e. the leased lines market (see Section 3.15.5 below). The UK authorities argue that a requirement for full open access on the subsidised network may have implications for three main telecoms markets in the UK that Ofcom has identified: (i) the Broadband markets (comprising the wholesale local access market and the wholesale central access market, which are up-/downstream of each other and which both serve the retail broadband market, together referred to as the Broadband markets), consisting of contended connectivity services, typically sold to residential consumers and SMEs; (ii) the Narrowband market, consisting predominantly of traditional telephony services provided over copper lines (and typically sold to residential consumers and SMEs); and (iii) the Business connectivity market, in the UK currently consisting of leased line services sold to larger businesses and enterprises.
- (66) Ofcom reviews those markets on a regular basis and imposes access remedies on suppliers found to have Significant Market Power. The UK authorities have indicated that full open access under the subsidised scheme would require the introduction of forms of access additional to those currently required by *ex ante* Significant Market Power (SMP) regulation, with various potential impacts for each market.
- (67) As concerns the Broadband markets: Ofcom already imposes a duct and pole remedy in the wholesale local access market, intended to encourage the construction of new broadband networks, and expressed an intention in the February 2016 Digital Communications Review to further facilitate access to duct and pole to support fibre-to-the-home investment. The UK's view is that full open access requirements under

Broadband Guidelines, paragraphs 78 (g), 80 (a), 84 (b).

Broadband Guidelines, paragraph 80 (a).

State aid rules for the Broadband markets may present the opportunity to unlock further investment into NGA infrastructure. However, the UK authorities and Ofcom's view is that it is likely that there will be low take up of open access products in the target intervention areas, because the State aid interventions will only be in areas where there was no commercial case for deploying an NGA network to begin with, meaning that the business case for investing to compete against another network for a share of the available market is even more limited (even when re-using that network's assets).

- (68) As concerns the Narrowband Market: Although the requirements for full open access under State aid rules would create the potential for operators to deploy new narrowband networks, the view of the UK authorities is that this would not happen, and full open access would not result in additional service provision to telephony consumers. The market for narrowband only services is very small and shrinking, as most customers now take a broadband service. Further, the revenues associated with narrowband services are low. The business case for investing in narrowband network, to compete with the existing narrowband network(s) is therefore considered to be extremely unattractive.
- (69)As concerns the Business Connectivity Market: the UK authorities consider that full open access as required under State aid rules may have an impact on this market because there is very often availability of leased line products in the intervention areas already. In the UK regulatory context³⁴, if a successful bidder for a State aid project already had existing leased line infrastructure in the intervention area, open access may provide the opportunity for lucrative business customers to be targeted by third party operators, who do not have any intention of serving the wider retail broadband market, which is the objective of the BDUK State aid scheme. Leased line suppliers generally offer uniform pricing in the UK, averaged across their networks, such that the prices to customers do not exactly reflect the underlying costs for providing the specific products. This may create incentives for access seekers to cherry-pick the customers where the difference between the underlying cost for the line and the (averaged) price is greatest. The UK has argued that the potential result of such cherry-picking could increase the costs of offering open access. Operators may no longer be able to recoup the cost of operating their network through leased line revenues (either as a result of losing customers or having to lower prices). As a result, bidders may reduce their commercial contribution to State aid projects, or they may choose to raise prices for residential broadband, or in less competitive business areas. The UK authorities consider that for intervention models incorporating private sector contributions (e.g. gap funding models or joint ventures), a requirement for open access may therefore increase bid prices.

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See recital 71. Also considering that on the wholesale local access market, available access products for passive infrastructure are limited to ducts and poles access, which can only be used to provide retail broadband and voice services on the residential market, but cannot be used to provide high capacity leased line services for business users.

- (70)The UK conducted an analysis using BT data (as the main supplier of leased lines in the intervention areas) on the scope of the impact of cherry-picking on (i) consumer prices; (ii) network availability; and (iii) service innovation. This analysis estimated that [...](*)% of the supplier's leased line customers within the intervention area would be lost to other access providers, on the basis that they would receive lower prices. According to the UK, as well as covering the supplier's direct costs of providing the products, the lost revenues make a contribution towards the common costs of operating the network, which would need to be recovered elsewhere. This could be an issue for consumer access to broadband at affordable prices, particularly in less competitive areas, because the network operator could decide to recover contributions to common costs by increasing consumer prices. Therefore the UK authorities consider the net impact to consumer prices resulting from open access would be zero or negative. The UK authorities consider that lower prices in one area may be off-set by higher prices in other areas. Second, the UK authorities consider that the network operator may seek to recover the contributions to its common costs by requiring greater levels of public subsidy. Given that the UK authorities envisage a fixed budget for the NGA rollout under the 2016 scheme, this may result in a reduction of the NGA coverage that can be achieved. The UK's analysis is that the increase in public subsidy would reduce coverage by approximately [...]% nationwide. Therefore, the UK authorities consider the net impact of open access to be negative: while some business consumers already receiving services may see lower prices, a significant number of residents and businesses will be missing out on the economic benefits of an NGA uplift.
- As concerns impact on service innovation, the UK authorities consider that some (71)innovation benefits are likely to come about as a result of further open access in the Business Connectivity Market (which has so far been subject to restrictive access conditions under regulatory rules). In its Business Connectivity Market Review Final Statement Ofcom imposed a dark fibre access requirement.³⁵ Ofcom's rationale for imposing a dark fibre access requirement included a statement to the effect that that "...passive remedy will stimulate competition based on innovation and differentiation, by allowing CPs [communications providers] to develop new products and services independently of BT, because passive remedies would allow them to choose and manage all the electronic equipment at the ends of the fibre". 36 In the BCMR Final Statement, Ofcom also noted that "We think that at this stage in leased lines markets, it is appropriate to impose dark fibre and not duct access. We think that at present most of the benefits of passive remedies for customers of leased lines will lie in exposing the active layer to competition, and that, for the purpose of this market review, dark fibre will deliver those benefits. The benefits specific to duct access are likely to be greatest where there is little or no fibre, particularly in the mass market, whereas most customers of fibre leased lines are larger businesses, and BT currently offers to provide them with leased lines throughout the UK, using its extensive fibre network."³⁷ That requirement came into force on 1 May 2016. Those changes, as well as any future change of the regulatory regime towards further market opening will also be applied to State funded broadband projects (see Section 3.20).

See (Ofcom)'s Final Statement available here: http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr-2015/statement/bcmr-final-statement-volume-one.pdf.

³⁶ See section 1.35.1 of the Business Connectivity Market Review Final Statement).

³⁷ See sections 7.57 - 7.58 of the Business Connectivity Market Review Final Statement.

^{*}Confidential information

- (72) On that basis, while the UK does not envisage significant benefit to consumers in the Broadband markets from open access in the near-term, the UK acknowledges that open access provisions may result in long-term benefits that cannot be foreseen today. Therefore, the UK proposes that the application of open access to the Broadband markets will be a requirement in all bids under the 2016 scheme. Similarly, given the limited negative competition impacts, the UK proposes that an open access requirement will also apply to the Narrowband market.
- (73) Where the 2016 scheme is implemented through an open access tender, the open access requirements (as described in this Decision) will also apply to the Business Connectivity market.
- (74) However, the UK authorities consider that there is a risk of negative impacts from requiring full open access to apply to the Business Connectivity market. According to the UK, the costs of procuring such access could be disproportionate. The UK authorities note that although there is the potential for innovation benefits from offering access to passive infrastructure, Ofcom captures those through the new requirement that BT offer dark fibre for leased lines. Those obligations will also apply to all State aid intervention areas.
- (75) The UK also notified the possibility to implement the 2016 scheme via reduced access tenders, subject to a cascading procurement mechanism (see recital 76 below). According to the UK authorities, while there are a number of alternative suppliers who have confirmed that they are willing to bid on an open access basis, given their limited capacity, there may be some areas where an existing leased line operator is the only bidder. The UK authorities therefore proposed a derogation from the open access requirements of the Broadband Guidelines, in the form of a "leased lines exception". Under that exception, access seekers to the subsidised network would be prohibited from providing leased line services unless and only insofar as that would serve their business case to provide retail broadband. Implementation of that exception would be via what is referred to in this decision as "reduced access tenders".
- (76) To maximise the number of tenders using the open access requirement and to limit the use of tenders that might be based on a leased line exception, the UK proposes a "cascading" procurement approach. As a first step only open access bids would be considered on the basis of open access to the aided infrastructure in line with paragraph 80(a) of the Broadband Guidelines see also Section 3.18 below. As a second step, and only if there were no open access bids, or the open access bids did not meet the baseline evaluation criteria, the implementing body will then consider whether bids that offer reduced forms of access meet the baseline evaluation criteria. Reduced access bids would be based on a leased lines exception see also Section 3.18 below. The reduced access bids would be evaluated on the basis of the same baseline evaluation criteria. Open access bids would never be compared directly with reduced access bids. Under both open access and reduced access, the wholesale access obligations exceed the regulatory requirements by requiring additional products.

The limitation of the existing marketplace was confirmed by BDUK's analysis of a survey conducted by the Independent Networks Cooperative Association (INCA) of their members in July 2015. BDUK concluded that these suppliers do not currently have the capacity to cover the remaining NGA white areas, which include the most challenging geographies. For example, respondents to INCA's survey expressed very little interest in bidding for rural broadband projects in Scotland.

- (77) The leased lines exception proposed as part of a reduced access tender represents a derogation from the Broadband Guidelines. The cascading procurement proposed by the UK authorities is a novel approach to the specificities of the leased lines market in the UK. The impact of full open access requirements for leased lines in the UK market remains uncertain at this point. For all of those reasons, the Commission has communicated to the UK its position that the notification insofar as it relates to the implementation of the scheme via reduced access tenders is not complete. In that context, the UK authorities have committed to perform an in-depth cost-benefits analysis of the leased lines exception, and to forward the results of that analysis to the Commission in order to complete the notification insofar as it relates to reduced access tenders. The review will be performed by an Independent Expert, selected in line with public procurement rules and remunerated by the UK. The mandate of the review will include the following points:
 - The objective of the review is an in-depth cost-benefit analysis of the proposed leased lines exception. The review should assess whether evidence exists to support the leased lines exception. In that context the cost-benefit analysis should look at impacts on competition, including the distribution of costs and benefits among various market actors.
 - The review should provide a detailed, factual description of the areas where subsidies are expected to be granted under the 2016 scheme as well as the leased lines market in those areas. The review should also summarise and critically review existing literature and studies that directly or indirectly relate to the costs and benefits of imposing full open access obligations (whether under regulatory or State aid rules) on broadband NGA infrastructure, and in particular as concerns leased lines. The review should also provide, to the best extent possible, a comparative analysis of how other Member States have dealt with similar issues pertaining to leased lines (under regulatory or State aid rules).
 - The core of the review will be an analysis of the costs and benefits of introducing the leased lines exception in the 2016 scheme. The analysis should be quantitative where possible and appropriate. The following costs and benefits should be considered as minimum: implementation costs, wholesale net revenues, retail net revenues, prices, bid costs, private sector investment, changes to service provision at various levels of the value chain, economic and social welfare. Costs and benefits should be attributed to the various market actors, should consider short and long terms impacts, and should differentiate between impacts attributable to providing additional access on existing infrastructure or to providing access to new infrastructure deployed under the scheme.
 - The review should consider the importance of the following factors in the assessment (including sensitivity analysis where possible and appropriate): to what degree alternative operators have in the past made use and may in the future make use of open access provisions and what type of retail services (and at what prices) they provided/may provide; did such operators also in turn sell (or would they be expected to sell) any wholesale access (if possible depending on type of access purchased); and whether the types of areas in which population density requires State aid to support network upgrade to NGA would be able to satisfy the economics of density for unbundling.

3.15.2. Project Design & Market Consultation

(78) As presented in Section 3.10 above, before starting a procurement, implementing bodies need to demonstrate that they have appropriately assessed and identified (i) the delivery/funding model, (ii) intervention area(s) and their scale; and (iii) the approach to lotting or aggregation. The UK authorities anticipate that outcomes will vary between localities, reflecting different geographies, markets and resources.

3.15.3. Consideration of different delivery and funding models

(79) Implementing bodies will be able to choose among various delivery and funding models including Investment Gap Funding, Public private partnership, Concession to Build-Operate-Transfer, Public sector owned supplier, as described in Section 3.10 above. The UK will publish guidance to implementing bodies regarding the range of delivery models and funding models, within 3 months of the adoption of this decision.³⁹ Before implementing bodies can issue their public consultation document, they would be required to demonstrate to the NCC that they have reached a decision as to the appropriate delivery and funding model based on an evidential analysis.

3.15.4. Scale of procurement intervention

- (80) The UK authorities anticipate that future projects under the 2016 scheme will involve smaller size procurements than was generally the case under Phase 1 and 2 of the 2012 scheme, based on developments in the broadband market in recent years. However, the UK authorities noted that in a recent market engagement exercise in January February 2016 (enabling a wide consultation of various stakeholders on the design of the 2016 scheme), some non-incumbent suppliers have cautioned against interventions that do not allow for sufficient scale. Having to submit multiple bids, even where the bids are identical, represents a significant administrative burden, and some smaller suppliers said that it would deter them from participating in tenders. Implementing bodies and suppliers also have argued that smaller interventions allow for "cherry-picking" of comparatively more economically prosperous areas, leaving poorer areas without any bidders.
- (81) Based on the market engagement exercise, the UK authorities consider that optimal division of intervention areas will differ between implementing bodies and their geographies. There are a number of factors that may influence the optimal intervention scale, including (but not limited to) the geographic dispersion or clustering of the premises that need to be addressed, suitable technologies, topography, service offering of suppliers, available funding and associated conditions, the capacity of the procuring authority, and the overall transaction cost (both to the implementing body and to prospective bidders). Furthermore, if the available budget only enables a fraction of those premises to be covered, the actual contracts awarded may cover a much smaller area than that initially identified for intervention, but will still need to be of sufficient scale for the networks to be economically viable for an operator.
- (82) BDUK will encourage implementing bodies to prefer smaller areas, but final responsibility will lie with the implementing body based on market feedback on the nature of their proposed procurement. The UK authorities expect that such feedback

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- will be based on Prior Information Notices, supplier days, surveys, and/or other outreach activities into the supplier community.
- (83)One of the ways in which implementing bodies will be able to make a project attractive to as many bidders as possible is to split an intervention area and procure through smaller lots but to allow aggregation of those lots. Implementing bodies will need to demonstrate when choosing between the three strategies identified below, that the proposed approach has been assessed and based on market feedback:
 - Single procurement: an implementing body conducts a one-off procurement for a single lot.
 - Individual lots capable of aggregation: Where a bidder wins multiple lots under a single procurement, it has the option to aggregate those lots into a single contract, with lower project management costs. This possibility would be set out clearly in the procurement documents. The bid would need to identify at the outset how the parties expect to realise the benefits of economies of scale.
 - <u>Individual lots combined with a "super-lot"</u>: an implementing body may operate a procurement including multiple lots for individual smaller procurement areas, but also a "super-lot". When evaluating the bids, the implementing body scores each of the individual lots and then the amalgamated super-lot, should a bidder(s) decide to submit such proposal. To determine the contract award, the implementing body would compare the highest super-lot score against a combined score of all of the highest individual bids (the "super-lot" would only be considered where it achieves a minimum quality threshold). The evaluation methodology, criteria, and procurement process will be clearly set out in the procurement documentation.

3.15.5. Technical Approach and Wholesale Access Requirements:

- (84)Suppliers will need to meet certain technical requirements and provide certain forms of wholesale access to the network. Reduced access only applies where implementing bodies use a cascading procurement approach.
- All bids must commit to offer access to the subsidised network under fair and non-(85)discriminatory conditions to all operators who request it, and to provide the possibility of effective and full unbundling (see Section 3.18). Provision of wholesale inputs must be on the basis of fair and reasonable pricing (See also Section 3.19).
- Open access, whether as part of a classic open access tender or as stage 1 of a (86)cascading procurement, means that access products can be used for any electronic communications purpose (including leased lines). The key difference at Stage 2 ("reduced access") of the cascading procurement is that reduced access does not require access products to be offered for services in the leased lines market, except where a wholesale competitor is seeking to meet demand for broadband services in the intervention area but its business case is only made viable where the broadband deployment⁴⁰ takes place in conjunction with business connectivity services – leased lines (see Section 3.18). That said, new ducts and poles⁴¹ as well as new and existing

This includes basic broadband products and/or NGA products.

[&]quot;New duct" is defined as subsidised physical infrastructure located underground with an individual length of at least 1.0km and deployment costs of GBP 50,000 or greater. "New poles" are defined as subsidised physical infrastructure located overhead where the poles will be deployed over a distance of 1.0km and have deployment

dark fibre (further to the recent BCMR – see recital 71) can be used for any purpose. As described in Section 3.16 below, when alternative operators who do not own or control the existing infrastructure to which that operator intends to seek access in order to deploy the subsidised network, the use of regulated access products (i.e. buying access under regulatory terms to that existing infrastructure) will be on the terms and under the conditions provided for pursuant to the regulatory rules (see, in particular, recital 114).

(87) All bids will have to comply with all the requirements of the Commission's decision concerning the 2016 scheme, in particular the requirements concerning Wholesale access, Wholesale access pricing, Reuse of existing infrastructure (including the requirements regarding the Code of Conduct) and Technological neutrality.

3.15.6. Commercial Approach and Requirements

- (88) Implementing bodies will observe key commercial principles and mechanisms as part of their strategies to ensure value for money from their contracts with suppliers. The NCC will support implementing bodies in designing their projects and will perform appropriate commercial assurance in relation to the use of public funding.
- (89) Extensions to contracts will be possible only in compliance with EU public procurement rules. For instance, an implementing body would be able to extend a contract, without going beyond the intervention area identified in the tender and without extending funding beyond 10% of the budget identified in the original contract. Thus, assuming that the expected coverage identified in the contract is smaller than the whole intervention area identified in the tender, an extension of the contract would be possible to include further coverage within the scope of that intervention area. In that case, implementing bodies will ensure that the new area to be covered via such an extension is NGA white, and will therefore run a new mapping and public consultation exercise for the area concerned (if more than three years have lapsed since the public consultation for the whole intervention area identified in the tender).
- (90) By contrast, if an implementing body wished to extend coverage to an area not initially included in the intervention area identified in the tender, that would be considered as a new project under the scheme, subject to a new individual grant of aid under the scheme, which would require all conditions of the scheme to be complied with (new mapping and public consultation exercise, new procurement, etc.).

(a) Potential bid-pricing mechanisms

- (91) Implementing bodies' contracts will include pricing mechanisms that operate on a cost-reimbursable basis, whereby payment is made to a supplier based on the qualifying expenditure (i.e. actually-incurred, directly attributable and genuinely incremental costs) of performing the contract, disclosed through open book accounting.
- (92) Implementing bodies will be able to pick one of the following pricing mechanisms: (i) Capped milestone approach, whereby the supplier is liable for all of its qualifying expenditure up to the cap, but any cost overruns are wholly transferred to the supplier;

costs of GBP 50,000 or greater. Both new ducts and poles comprise the physical infrastructure deployed for the purposes of providing both access and backhaul.

- or (ii) Target price approach, whereby if actual costs deviate from the target price forecast in the bid, the benefit or cost of any underspend or overspend are shared between the contractor and the purchaser according to a pre-agreed formula and within pre-agreed limits.
- (93) Implementing bodies will select the most appropriate pricing mechanism to fit their preferred risk allocation approach. The UK expects that most implementing bodies will use a capped milestone approach. However, the UK expects that implementing bodies may also consider other "risk-reward" approaches. In particular, in the most difficult-to-reach areas suppliers' delivery risks will increase, driving higher levels of contingency in bid models. A target price arrangement could incentivise a supplier to control costs during delivery in order for them to share in the potential efficiency savings, leading to increased value for money overall.⁴²

(b) Value for Money Controls

- (94) All projects will be subject to the following three Value for Money controls:
- (95) <u>Bid Assessment</u>: Implementing Bodies perform commercial and financial assurance of bids to ensure value for money is achieved for the public purse. These assurance steps include consideration of available information, including previous bids to mitigate the risk of bid price inflation over time. These steps will be followed both for new procurements and before adding a non-substantial (10%) amount of new funding to an existing contract. In cases where only one bid was submitted, implementing bodies will either need to submit the cost calculation to an external auditor, or instead rely on a central assurance function, such as BDUK's Value for Money team, provided that the conclusion is be referred to an external assessor for validation.
- (96) <u>In-life cost controls:</u> The contracts shall contain other value for money controls that operate through deployment and the life of the contract (for example, verification that milestone payments are made only upon receiving evidence that the milestone has been achieved and that payments are made based on sufficient evidence of eligible costs having been incurred by the supplier).
- (97) Claw-back Mechanism: Implementing bodies will implement a mechanism for projects of a value above GBP 150,000. The claw-back mechanism would be in place for at least the duration of the contract. The claw-back mechanism will recover excess profit from two main sources: (i) higher than forecast take-up of broadband products resulting in additional profits and a smaller investment gap; and (ii) higher than forecast revenues from non-broadband products resulting in additional profits and a smaller investment gap (e.g. revenues from new wholesale access products). As the claw-back mechanism forecasts a level of excess profit, and as the supplier's auditor obliges it to recognise such amounts as a contingent liability in its accounts, the supplier would be obliged to repay the forecast claw-back amount to the implementing body immediately. For contracting models where the clawback approach set out above is not suitable (e.g. for some public ownership models) the clawback mechanism in the contract will instead be based on an *ex post*, net present value comparison of the beneficiary's actual returns from the project accounts at the end of the contract against

Target price mechanisms are common in infrastructure delivery (e.g. NEC contracts for construction) and are promoted by UK Government as part of its guidance on improving infrastructure delivery https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/361180/Procurement_Module_30_September.pdf

the beneficiary's forecast returns from the project model included in the contract. In all cases, these funds would be returned to the implementing body's general budget. Any re-investment of clawed-back amounts to fund new projects under the scheme will therefore comply with the terms of this decision.

3.15.7. Procurement Strategy

(98) A key principle of the scheme is that implementing bodies are able to determine the procurement approach that is right for them: there are various procurement models that implementing bodies could choose, as well as the operation of the cascading procurement model.

(a) BDUK's role in local procurements:

- (99) For all projects under the 2016 scheme, the NCC will perform a State aid support and assurance role, to ensure appropriate governance has been undertaken prior to committing public funds. These assurance "gates" at key points from start to finish within the local procurement cycle shall ensure the projects are operating on a commercially, technically, and legally sound basis. Any risks or issues will be brought to the attention of BDUK's Assurance Board for consideration and appropriate actions to be taken.
- (100) There may be a scenario where BDUK manages a procurement as the procuring authority. BDUK would generally create a separate team to run a procurement exercise from the team that would assure the project, with separate reporting lines into BDUK CEO.

(b) Types of procurement models

- (101) With the implementation of Directive 2014/24/EU⁴³ on public procurement, implementing bodies now have a wider choice of OJEU procurement routes. In consideration of the differing geographies, value/type of funding available to implementing bodies and range of NGA technology solutions, implementing bodies are able to choose the Open procedure or a procedure with a pre-qualification step such as the Restricted, Competitive Dialogue or Competition with Negotiation. The implementing body must conduct its procurement in an open, transparent and non-discriminatory manner. All procurements will be performed in compliance with one of the procedures laid down in the EU public procurement rules, as well as with this decision and the Broadband Guidelines.
- (102) The UK considers that implementing body projects will fall under either Services or Works categories when selecting a procurement procedure and as such, implementing bodies will be cognisant of the appropriate thresholds and transparency principles in place at the time of issuing an OJEU Contract Notice, making the procurement open to suppliers across Europe. BDUK assures implementing bodies' procurement documents before they are issued to the marketplace, giving bidders confidence that they meet the State aid requirements.

Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC (OJ L 94, 28.3.2014, p. 65–242). Directive 2014/24/EU is implemented in England, Wales and Northern Ireland by the Public Contracts Regulations 2015, and in Scotland by the Public Contracts (Scotland) Regulations 2015 – as further described in recital 108 and associated footnotes.

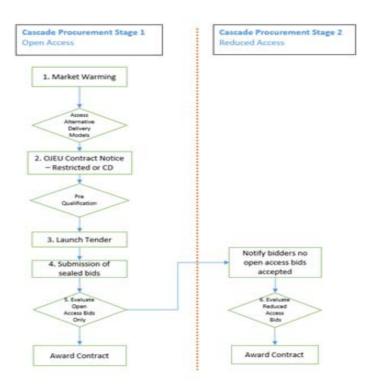
(103) Implementing bodies which are in a position to be able to fully specify their requirements (e.g. the requirement in the geographic area is straightforward), and which are comfortable with the need only to clarify after receipt of tenders, could select an Open or Restricted Procedure. Conversely, an implementing body may be able to select Competitive Dialogue or Competition with Negotiation. These procurement routes are available for more complex contracts where the implementing body has an understanding of the outline requirements but needs to interface with suppliers in order to develop and finalise solutions (technically, legally or financially).

(c) <u>Bidder Code of Conduct during procurements (use of existing infrastructure)</u>

(104) The UK will require that all bidders sign up to a Code of Conduct relating to the use of existing infrastructure, as described in Section 3.16. Where bidders do not meet the terms of the Code of Conduct, they will be excluded from all bidding processes, until such time as they comply with the requirements.

(d) Procurement steps

(105) An implementing body will follow a classic procurement process that only considers open access bids, or alternatively a "cascading procurement" process that would allow consideration of reduced access bids. Where a local body is relying on a cascading procurement process, it would be incorporated within a single OJEU process, but with the effect of running two sequential procurement tracks, illustrated by the flowchart below.



- (106) A procurement will include the following steps:
 - Market Engagement and Market Warming: Before commencing procurement, implementing bodies must undertake a number of market research steps to ensure that the intervention is appropriately designed. (See also Section 3.15.2).

- Issue OJEU Contract Notice/Pre-qualification: Depending on the procurement procedure used, suppliers may be required to complete a pre-qualification questionnaire (see also Section 3.15.8.a). Bidders need not disclose to the procuring authorities at this point whether they intend to bid on an open, a reduced access basis or both. Suppliers will also be asked to confirm they have signed up to the Code of Conduct (as outlined in Section 3.16).
- Launch tender/Dialogue with Suppliers: All suppliers shall be provided with equal treatment (e.g. authority clarifications, dialogue time) in accordance with the principles of openness, transparency and non-discrimination. During this period, bidders shall have sufficient time to request information about access products made available by other bidders in the procurement process in order to design their solution.
- Submission of Sealed Bids: Bidders shall submit sealed bids to the implementing body. This shall include their proposed technical solution, speeds and coverage outputs, implementation plans and cost model. If a cascading procurement is used, bidders will also identify whether they would be willing to provide either: (i) open access and/or (ii) reduced access.
- Bids will be evaluated against the evaluation criteria (set out in Section 3.15.8) in order to select the winning bid. If the Implementing Body has chosen a cascading procurement route, then only step 1 open access bids are opened and the bids will be evaluated on the same criteria (set out in Section 3.15.8).
- (Only for cascading procurements) If Step 1 fails, bids offered on reduced access are opened. Those bids are also evaluated against the same scored evaluation criteria.

3.15.8. Selection and Evaluation Strategy

(107) The stages of a procurement depend upon objective evaluation criteria for their operation. ⁴⁵ The setting of these evaluation criteria must be compliant with EU public procurement rules, clearly set out under what circumstances open access bids will be selected or rejected, and determine which bid is ultimately selected.

(a) Pre Qualification Questions Selection Criteria

(108) Any implementing body having selected a procurement procedure with a prequalification step, will need to adhere to the requirements set out in regulations 57⁴⁶ and 58⁴⁷ of the Public Contracts Regulations 2015 and adhere to requirements set out

Products offered by bidders must be offered to all other bidders on an equivalent basis. The vast majority of the infrastructure in the intervention areas can be accessed using existing products (i.e. BT products required under Significant Market Power regulations) or as a result of new legislation (i.e. Directive 2014/61/EU on measures to reduce the cost of deploying high-speed electronic communications networks).

⁴⁵ Regulation 67(7) – Award criteria - http://www.legislation.gov.uk/uksi/2015/102/regulation/67/made

Regulation 57 deals with mandatory and discretionary criteria for excluding a supplier from any further consideration in the procurement procedure chosen - http://www.legislation.gov.uk/uksi/2015/102/regulation/57/made

Regulation 58 covers selection criteria (i) Suitability to pursue a professional activity, (ii) Economic and financial standing, (iii) Technical and professional ability - http://www.legislation.gov.uk/uksi/2015/102/regulation/58/made

by UK's Crown Commercial Service⁴⁸, both in their current form and as modified to align with the European Single Procurement Document. In Scotland, any implementing body will need to adhere to the requirements set out in regulations 58⁴⁹, 59⁵⁰ and 60⁵¹ of the Public Contracts (Scotland) Regulations 2015 and adhere to requirements set out by the Scottish Procurement & Commercial Directorate within Scottish Government.

- (109) There will be a baseline set of pre-qualification questions that implementing bodies can incorporate within their evaluation, which could be augmented with their implementing evaluation requirements⁵² as necessary or fine-tuned to incorporate areas such as economic and financial standing.
- (110) The List of Pre-qualification questions selection criteria includes: (i) pass/fail test (mandatory grounds for exclusion⁵³, discretionary grounds for exclusion⁵⁴, confirmed adherence to Code of Conduct); (ii) satisfactory/unsatisfactory test (economic and financial standing including minimum turnover⁵⁵, other appropriate financial ratios based on submission of, but not limited to, annual accounts, other evidence of ability to access capital, insurances if required at pre-qualification stage); (iii) scored: answers should be for experience/case studies completed within the last 3 years (technical and professional capability/capacity including relevant experience case study for delivering NGA networks to rural area(s), delivering access speeds (NGA) in rural areas, network operations); (iv) not evaluated further evidence requested should supplier be successful at contract award (self-certification, e.g. Health & Safety, Environmental Management, Compliance with equality legislation).

(b) Evaluation Scoring Principles and Entitlement to Exclude Bids

- (111) In order to determine the most economically advantageous tender, implementing bodies will adhere to the price-quality evaluation criteria below and set weightings within pre-set ranges. BDUK provided an opportunity for the market to comment on the scheme evaluation criteria through its market engagement exercise
- (112) The objective, transparent and consistent approach to evaluating the relative position of the bids and for triggering an exclusion of a bid will be determined by the following approach:

See: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/417963/4279-15_GN_PQQ_Lord_Young_Guidance.pdf

Regulation 58 deals with mandatory and discretionary criteria for excluding a supplier from any further consideration in the procurement procedure chosen.

Regulation 59 covers selection criteria (i) Suitability to pursue a professional activity, (ii) Economic and financial standing, (iii) Technical and professional ability.

Regulation 60 covers use, content and form of the European Single Procurement Document (ESPD).

All procurements will be in line with the relevant EU procurement rules.

Mandatory exclusion criteria listed in paragraph 57(1) of the Public Contract Regulations 2015. For Scotland, mandatory exclusion criteria is set out in regulation 58 of the Public Contracts (Scotland) Regulations 2015.

Discretionary exclusion criteria listed in paragraph 57(8) of the Public Contract Regulations 2015. For Scotland discretionary exclusion criteria is set out in regulation 58 of the Public Contracts (Scotland) Regulations 2015.

Turnover will be assessed as set out in Regulation 58(8). For Scotland turnover will be assessed as set out in regulation 59 of the Public Contracts (Scotland) Regulations 2015.

- An evaluation criterion may represent a mandatory requirement (An example is criteria 1.1 below), whereby a bid that fails to meet the requirement would be excluded; or otherwise
- An evaluation criterion may have a score of between 0 to 10 (e.g. 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10), such that: (i) a bid receives a score of 0 for a criteria where no response is provided or insufficient evidence is submitted to evaluate a criteria, whereby the bid would be excluded; and (ii) a bid receives a score of under [5] if it failed to meet a described baseline capability for the criteria, whereby a bid receiving overall weighted score across all price-quality criteria of under [50%] would be excluded.

Award & Evaluation Criteria - Description	Scoring approach	Weighting ranges (%)
1. Price		[30-70]%
Price - Commercial compliance		
1.1 Contract acceptance Bidders will be assessed on whether they have confirmed their agreement to the key commercial principles/non-negotiable terms of the draft contract in their bid response. This applies to all procurement procedures.	Pass / Fail	n/a
1.2 Contract markup and risk transfer (Competitive Dialogue/ Competition with Negotiation only) Bidders will be assessed on the extent that their changes to the draft Contract have a negative impact on the Implementing Body and other stakeholders contract requirement.	Bids will be scored between 0 and [10].	[0-10]%
1.3 Funding availability Bidders will be assessed on whether: i) the overall subsidy requirement in the bid is within the Implementing Body's budget; and ii) they have provided sufficient evidence (i.e. through a funding model) of their ability to fund the project (i.e. from private funding sources)	Pass / Fail	n/a
Price - Commercial Robustness		
1.4 Financial Model [Baseline Capability] The Bidder has ensured that the cost assumptions in its Financial Model are realistic and consistent	Bids will be scored between 0 and [10].	[10-30]%
with the design assumptions in their Solution and the milestone payments in the Implementation Plan. The Bidder must have completed the Financial Model fully so that putputs are clearly identifiable.	A score of 0 will be awarded if a Bidder has not provided a compliant Financial Model.	
[Maximum Capability] In addition to the baseline capability, the Bidder has evidenced a very high level of transparency and quality in its Financial Model and accompanying memoranda to show the key assumptions and underlying economic drivers for the Bidder's solution. The Bidder has included justification as to how its assumptions deviate from national baselines and have been customised to reflect the particular circumstances of a project. The Bidder's Financial	A score of [5] will be awarded if a Bidder has provided a Financial Model achieving the baseline capability.	
	A score of [10] will be awarded if a Bidder has provided a Financial Model achieving maximum capability.	

Model annides a class of house the C. I.				
Model provides a clear understanding of where contingency has been included and of how actual costs are expected to reduce if the Bidder were to win and aggregate other contracts.				
1.5 Commercial sustainability and viability [Baseline Capability] Analysis of the Bidder's Financial Model demonstrates how the network (and downstream retail providers) are able to operate on a stand-alone and sustainable basis for the contract term under reasonable conservative baseline assumptions considering a sensitivity analysis of adverse scenarios (including higher debt servicing costs or lower revenue per customer or lower take-up than forecast). [Maximum Capability] In addition to the baseline capability, analysis of the Bidder's Financial Model demonstrates how the business remains economically viable under a range of adverse scenarios across the value chain to allow ongoing take up and use of retail and end user services. The Bidder has also demonstrated how its subcontractor arrangements mitigate risks to the on-going service provision.	Bids will be scored between 0 and [10]. [A score of 0 will be awarded if a Bidder's Financial Model does not demonstrate a sustainable network]. A score of 5 will be awarded if a Bidder has provided a solution design that achieves the baseline capability. A score of 10 will be awarded if a Bidder provides a solution design that achieves maximum capability.	[10-40]%		
Price - funding and coverage: <u>BDUK Note:</u> (i) if an Implementing Body's requirement is to maximise coverage exhausting the available budget, then it may apply zero weighting to 1.6 (given that bidders would be unlikely to differentiate themselves on the overall funding requirement anyway) and allocate more weighting to criteria 1.7 instead. (ii) if an Implementing Body's requirement is to optimise the project and the trade-off between increasing coverage and the increasing additional cost per premise, then it may allocate weighting to both criteria 1.6 and 1.7 to incentivise bidders to propose the optimum efficient coverage for their solution design rather than the maximum possible coverage.				
1.6 Funding levels Bidders will be assessed on the overall cost to the public sector of the project (either in absolute terms, on a perpremise basis, or relative to the overall private sector contribution.)	Scores will be awarded on a relative basis (e.g. the bid with lowest subsidy receives full marks, and a bid 10% more expensive receives a 10% reduction in score). An implementing body would set a score of 0 where it did not want to assess the funding levels.	[0-40]%		
1.7 Solution coverage at NGA speeds Bidders will be assessed on whether their coverage forecast is consistent with their Solution Design and Implementation Plans, as well as providing the required step change. Implementing Bodies may also choose to set priority areas to be covered (e.g. a business park). Bidders will be assessed on the extent of NGA coverage to target premises in the intervention area at 30Mbps and higher speeds.	A score of 0 will be awarded if a Bidder has not provided a compliant Speed & Coverage Template or has failed to commit to the minimum required coverage. Scores will be awarded in accordance with the evaluated response to the SCT. The Local Body will configure the SCT such that it weights the overall score as a function of: (i) number of premises covered overall (ii) number of premises covered in priority areas (iii) overall speed of coverage provided	[20-80]%		

	step change).			
2. Quality		[30-70]%		
Quality - solution quality and viability				
2.1 Solution design compliance Bidders will be assessed on whether the Solution is NGA Technology compliant.	Pass / Fail	n/a		
2.2 Solution design quality [Baseline Capability] The Bidder adequately describes its Solution, including the service management processes for the support of the Solution and has adequate design principles including considering reuse of infrastructure, mitigating environmental impacts and minimising single points of failure). Each of the underlying infrastructures in the Bidder's solution also meets baseline standards for jitter, latency, committed information rate, and service levels for installation and fix (as set out in tender documents). [Maximum Capability] In addition to the baseline capability, each of the underlying infrastructures in the Bidder's Solution significantly exceed baseline standards for jitter, latency, committed information rate, and service levels for installation and fix. The Bidder provides evidence and reasonable confidence that an upgrade path is achievable in the future (e.g. to ultrafast speeds or higher), and is designed to facilitate access and extension to the network to reduce the barriers to incremental coverage (up to 100% coverage of speeds of at least 30 Mbps) in the area (either from the selected supplier or from other access seekers).	Bids will be scored between 0 and [10]. A score of [5] will be awarded if a Bidder has provided a solution design that achieves the baseline capability. A score of [10] will be awarded if a Bidder provides a solution design that achieves maximum capability.	[20-40]%		
Quality - customer choice/acceptance and solution value add				
2.3 Wholesale network design/Wholesale and retail pricing [Baseline Capability] The Bidder has documented its wholesale products and services and provided a high degree of confidence that at least one ISP (which may be the Bidder	Bids will be scored between 0 and [10]. [A score of 0 will be awarded if a Bidder has not documented its wholesale products and services, or	[20-40]%		
itself) will be ready to provide broadband services over the NGA infrastructure to all premises in the intervention area, and have adequately documented how their wholesale pricing is compliant with the benchmarking principles. [Maximum Capability] In addition to the baseline capability, the Bidder's wholesale offering meets a wide range of retail and end user requirements, and has optimised its approach to attract and bring on-board ISPs to use wholesale products. The Bidder provides a high degree of confidence that it is able to attract a large number of ISPs (including major ISPs) who offer a wide breadth of services using the network.	they are not compliant with the benchmarking principles]. A score of [5] will be awarded if a Bidder has provided a wholesale design that achieves the baseline capability. A score of [10] will be awarded if a Bidder provides a wholesale design that achieves maximum capability.			
2.4 Economic Value Add Bidders will be assessed on the extent to which they have provided credible evidence of their ability to create/safeguard jobs within the Bidder's organisation or supply chain, to create apprenticeships and/or to create opportunities for the	Bids will be scored between 0 and [10], dependent on the level of jobs created/safeguarded and opportunities provided.	[0-10]%		

long-term unemployed.				
Quality – Deliverability				
2.5 Implementation Plan [Baseline Capability] The Bidder has provided a compliant Implementation Plan, which meets specified delivery dates for completion of network deployment (if any), and is consistent with the speeds and coverage outputs and the Financial Model. The Bidder has documented an acceptable approach to deployment. [Maximum Capability] In addition to the baseline capability, the Bidder has in its proposal allowed for appropriate resources and has provided confidence to the Implementing Body in describing its approach to planning, deployment, testing and overall project management. The Bidder in its proposal provides confidence in its approach to including sufficient contingency in its Implementation Plan and has aligned it with the Implementing Body's priorities in the coverage area, including sequencing and pace of delivery.	Bids will be scored between 0 and [10]. A score of 0 will be awarded if a Bidder has not provided a compliant Implementation Plan or it shows deployment extending beyond the specified date for delivery. A score of [5] will be awarded if a Bidder has provided an Implementation Plan and overall deployment approach that achieves the baseline capability. A score of [10] will be awarded if a Bidder has provided an Implementation Plan and overall deployment approach that achieves maximum capability.	[10-40]%		
2.6 Contract and stakeholder management [Baseline Capability] The Bidder has provided an adequate description of how it will comply with the contract management requirements for Reporting and Financial transparency, including how it will meet the obligations set out under the Milestone Claims process and how it will interface with BDUK at the programme level. The Bidder has also included sufficient costs for contract and stakeholder management in its Financial Model. [Maximum Capability] In addition to the baseline capability, the Bidder in its proposal has included appropriate resources and has provided confidence to the Implementing Body in describing its approach to engage with the Implementing Body and other stakeholders through the operation of the contract. This would include commitments to strong governance arrangements, to sharing data on its deployment plans to different audiences, to joint-working with Implementing Body project team, to community engagement (in particular priority areas), to demand stimulation to maximise coverage opportunities, and to managing subcontractors (in particular SMEs).	Bids will be scored between 0 and [10] A score of [0] will be awarded if the Bidder does not submit a response that is compliant with the requirements for Report and Financial transparency, or does not include costs for contract and stakeholder management. A score of [5] will be awarded if a Bidder's contract and stakeholder management approach achieves the baseline capability. A score of [10] will be awarded if a Bidder's contract and stakeholder management approach achieves the baseline capability.	[10-40]%		

3.16. Use of existing infrastructure

- (113) Existing infrastructure is identified through the mapping, OMR and public consultation processes (See Sections 3.12-3.13). Implementing bodies will include all information on available existing infrastructure in their procurement documents (in particular in "invitations to tender").
- (114) Implementing bodies will encourage bidders to use existing infrastructure and facilities where possible, which may include: use of suppliers' own infrastructure; use of other suppliers' infrastructure (including regulated products); use of other existing

utilities infrastructure (including, for example, water and sewerage pipes and relevant electricity infrastructure); reutilisation of radio masts; ease of access rights; public infrastructure such as public buildings (e.g. schools) or network assets, if any; and coordination of civil works. When the existing infrastructure is accessed using a product that is available as a result of obligations imposed by Ofcom pursuant to the regulatory rules, the bidder will be subject to the limitations that the use of that regulated access product entails (for example a prohibition on using that access to provide leased lines to business users). ⁵⁶ The UK has explained that the possibility of relying on the existing infrastructure of larger suppliers – albeit subject to the conditions attached to regulatory access – will encourage smaller alternative suppliers to participate in bids. Under the 2016 scheme, it will not be open to the owner of that existing infrastructure to include a regulated access product as part of its bid. Only bidders who do not own or control that regulated existing infrastructure may decide to use a regulated access product (such as PIA) in their bid.

- (115) In line with the requirements of paragraph 78(f) of the Broadband Guidelines that any interested bidder must provide all information to other bidders regarding infrastructure it operates in an intervention area, BDUK will require all bidders to sign up to a Code of Conduct. The Code of Conduct will include standards for: (1) the level of detail of information that should be provided; (2) the timeframes in which the information is to be provided; (3) the acceptable terms of a non-disclosure agreement; and (4) the obligations to make available the infrastructure for use in other bids. It is anticipated that the vast majority of the infrastructure in the intervention areas can be accessed using existing products (i.e. BT products required under Significant Market Power regulations) or as a result of forthcoming legislation.⁵⁷
- (116) Where a bidder does not meet the terms of the Code of Conduct, it will be excluded from the procurement. The bid process will be conducted in accordance with a timetable that allows sufficient time for bidders to compile bids on the basis of information provided by other suppliers, and allows for any non-compliance issues to be resolved efficiently.
- (117) The Broadband Guidelines also require that Member States should set up a national database on the availability of existing infrastructure that could be reused for broadband rollout (this includes both commercial infrastructure assets and those owned by public bodies etc.). The UK authorities will make accessible a map, showing where owner/operators have previously identified themselves as having infrastructure, and the type of infrastructure available.⁵⁸

3.17. Technological Neutrality

(118) Different technical solutions could be used to meet the objectives of the measure. BDUK will ensure that a tender process conducted under the 2016 scheme will not

According to the national regulatory rules, the regulated access product Physical Infrastructure Access (PIA) does not allow the ducts to be used to provide leased line services.

I.e. legislation to implement Directive 2014/61/EU of the European Parliament and of the Council on measures to reduce the cost of deploying high-speed electronic communications networks (OJ L 155, 23.5.2014, p. 1–14).

Furthermore, the UK will ensure access to information on existing and planned physical infrastructure through implementation of Directive 2014/61/EU, in particular the requirement under Articles 4 and 6 to ensure access to certain minimum information.

favour a particular technology or network platform (or mix of these) and that bids will be assessed on the basis of objectively defined criteria.

- (119) Similarly, wholesale access products will be offered on open and non-discriminatory terms in line with the principle of technological neutrality. The measure will enable the interconnection to the subsidised network of any possible technology which operators at the retail level may consider the most appropriate solution.
- (120) Consistent with the Broadband Guidelines, Fixed Wireless Access may be eligible for State aid provided that the technology is capable of delivering reliable high speeds per subscriber. As any other NGA technology, Fixed Wireless solutions would have to comply with the conditions in Section 3.14 requiring demonstration of a step change.
- (121) The implementing bodies will verify that the technological solution proposed by the bidder is an NGA-qualifying technology. Within three months of the adoption of this decision, BDUK will update its guidance on "The role of Next Generation Access technologies in addressing superfast broadband market failure under the UK's State aid scheme". 59

3.18. Wholesale access

- (122) All bids must commit to offer access to the subsidised network under fair and non-discriminatory conditions to all operators who request it, and to provide the possibility of effective and full unbundling. In the case that technology does not allow physical unbundling, a Virtual Unbundled Local Access (VULA) product which is functionally equivalent to physical access must be provided. The UK authorities propose that vectoring technology could be eligible for State aid where it is integral to a new infrastructure deployment such as FTTC; a vectoring upgrade alone would not be eligible for state-aid subsidy. Where vectoring is used in combination with FTTC deployment, a VULA solution must be offered that is functionally equivalent to physical access. The UK authorities submit that the UK VULA solution was recognised in the Commission decision concerning case UK/2010/1064: Wholesale local access market and Commission decision concerning case UK/2010/1065: Wholesale broadband access market.⁶⁰
- (123) The relevant wholesale access products must be offered for at least 7 years, or indefinitely in the case of new passive infrastructure. If in the course of that period the supplier and/or infrastructure is sold, the wholesale access obligation must be transferred to the new owner of the supplier and/or of the infrastructure.
- (124) In case the network operator also provides retail services, a reference offer for wholesale services must be made available to competitors at least 6 months before starting the provision of retail services. In addition, the network operator must undertake accounting separation.

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To be published on BDUK's website.

Commission Decision C(2010)3615/F1 (DG Communications Networks, Content and Technology) of 1 June 2010, available online in the Register of Commission Documents under number C(2010)3615: http://ec.europa.eu/transparency/regdoc/?fuseaction=list&n=10&adv=0&coteId=3&year=2010&number=3615&version=F&dateFrom=&dateTo=&serviceId=&documentType=&title=&titleLanguage=&titleSearch=EXACT&sortBy=NUMBER&sortOrder=DESC

- (125) <u>Specific forms of network access</u>: The following access products must be made available at the point of network deployment, and insofar as relevant to the specific technologies involved: ducts, poles, fibre, cabinets, copper loop unbundling, masts, antennas, active access.
- (126) Those products must fulfil the following specifications (and capacity requirements):
 - <u>Ducts</u>: where new duct infrastructure needs to be built, it must be configured to support at least three competing infrastructure providers and designed to support alternative technologies. Access must be provided to junction nodes including splitter nodes, aggregation nodes, and footway boxes. The supplier will not be obliged to provide for new ducts where the same is not necessary for their network build. For example, in FTTP/C networks, the laying of direct buried fibre in soft verges or uncultivated land will be acceptable provided that the wholesale access requirement is met by the dark fibre for three competing infrastructure providers. The UK authorities have noted that they expect that the Highway Authority will require sub-ducting under a public highway.
 - <u>Poles</u>: new pole infrastructure must be configured to support at least three competing infrastructure providers with duct or dark fibre. Where active equipment is installed on poles the point referring to masts below applies.
 - <u>Fibre</u>: access shall be made available at appropriate Points of Flexibility in the network: at the telephone exchange or Point of Presence's Optical Distribution Frame or equivalent at cabinets or similar local distribution points. Access shall be provided for at least three competing infrastructure providers via: dark fibre⁶¹, space for active and optical equipment (of a type similar to the supplier's equipment), existing power supplies. Fibre access products must be available from appropriate Points of Flexibility in the network, namely: at the Point of Presence or telephone exchange's Optical Distribution Frame or equivalent (VULA equivalent), at cabinets or similar local distribution points, at aggregation nodes, splitter nodes or other similar Points of Flexibility.
 - <u>Cabinets</u>: Access to cabinet space and existing power supplies shall be provided for at least three competing infrastructure providers upon request. This does not mean that extra-large bespoke cabinets need to be deployed from the outset. However designs must allow new cabinets or upgrades to be deployed if and when access is reasonably requested.
 - <u>Copper loop unbundling</u>: Copper loop access product must be available from an appropriate Point of Flexibility in the network: at the Point of Presence or telephone exchange's Main Distribution Frame or equivalent e.g. for Local Loop Unbundling (LLU); at cabinets or similar local distribution points e.g. for Sub-loop Unbundling (SLU).

Dark fibre access is required to all network elements, excepting only the final drops from the Points of Flexibility nearest to end user premises on the condition that individual access to those premises is provided via Optical Distribution Frame, VULA or equivalent. Furthermore, in any cases where final drops or the distances to the last Points of Flexibility are unreasonably long, considering geography and premise density, then dark fibre access for three competing infrastructure providers would also be required for those final drops together with reasonable access to additional Points of Flexibility nearer to the premises. Points of Flexibility include exchanges, Points of Presence, cabinets, local distribution points, aggregation nodes, splitter nodes, and similar.

- Masts: Access to mast space, antenna apertures or for other active equipment and existing power supplies shall be provided for at least three competing infrastructure providers upon request subject to this being legally and technically possible. Operators are expected to demonstrate that their network design anticipates having to respond to these requests. This does not mean that extra-large masts need to be deployed from the outset. However, designs must allow mast extensions or upgrades to be made possible if requested.
- Antennas: Access to shared antenna systems (where multiple operators feed radio signals to the same antennas) will be provided or supported where technically feasible, and in particular where planning rules could impede other forms of mast capacity expansion. Access to shared active network elements (where multiple operators feed digital data signals to the same equipment) will be supported where technically feasible (e.g. Multiple Operator Core Network or Multiple Operator Radio Access Network mobile network technologies), and in particular where planning rules could impede other forms of mast capacity expansion.
- Active access: Bit-stream access for broadband access networks and associated backhaul networks shall be provided by infrastructure providers at appropriate Points of Interconnection such as telephone exchanges or Points of Presence e.g. for VULA. New subsidised network infrastructure shall either be dimensioned to meet the likely capacity requirements of competing providers, or be capable of being expanded to meet it upon demand. Existing infrastructure shall support the capacity requirements of competing providers where technically feasible. Bit-stream access shall be provided over standardised or fully defined technical interfaces. Accommodation for access seekers' necessary interconnection equipment shall be provided including access to suitable power supplies.
- All existing infrastructure: Infrastructure access requirements as set out above apply equally to all existing infrastructure that is used in the deployment of the subsidised network. Existing assets should support access where technically feasible (e.g. given reasonable loading factors and existing capacity) and legally feasible (e.g. given wayleave agreements, or as a result of conditions placed on regulatory access to existing infrastructure).
- (127) General forms of network access: In addition to offering specific forms of access, a bidder must in all cases offer new forms of network access, to both existing and new network infrastructure used in the intervention area, where requested by any communications operator demonstrating "reasonable demand" for a product that is not already available. Reasonable demand is demonstrated when the following cumulative conditions are met:
 - For open access procurement (including Stage 1 of cascading procurement): (i) the access seeker provides a coherent business plan (based on a product price that is consistent with the pricing principles set out in Section 3.19) which justifies the development of the product on the subsidised network; (ii) no comparable access product is already offered in the same geographic area by another operator at equivalent prices to those of more densely populated areas; and (iii) the introduction of the new wholesale access products should deliver sustainable and effective competition in the downstream market(s).

See section 3.16, recital 114.

- For reduced access procurement (Stage 2 of cascading procurement): the first three conditions are the same as for open access bids. However, for reduced access bids there is a fourth condition – consisting of the "leased lines exception": (iv) the new wholesale access products should clearly address the provision of broadband services (basic and/or NGA broadband), i.e. the market problem that led to the original intervention/obligation; the limitation to the new product's use for business connectivity services must be consistent with the leased line exception. As explained above, the leased lines exception is defined as follows: "Under the leased lines exception, access seekers to the subsidised network can provide leased line services only insofar as that would serve their business case to provide basic/NGA broadband services; however, leased line services could not be provided on a standalone basis". That will apply to both the specific access products in the contract (e.g. ducts) as well as new products to be developed on request. The reduced access provisions would apply to all new and existing infrastructure in the intervention area, with the exception of new ducts and poles infrastructure and new and existing dark fibre, which could be used for any purpose in reduced access bids – therefore including the provision of leased lines services. Ofcom will act as arbiter.
- (128) The UK authorities designed the wholesale access requirements following detailed discussions with a cross-section of broadband operators, and have been subject of a formal market engagement exercise in January February 2016. According to the UK, based on that exercise, the consensus view was that there is currently very little evidence of market demand for access to physical infrastructure assets in the target area, and that designing a network with excess capacity (to allow for at least 3 alternative operators) is likely to have limited competition benefits. The requirement for additional infrastructure capacity would also increase costs and deliverability constraints considerably. For example, [...] said that an "open access" cabinet would cost ~ GBP [...] more than existing cabinets and [...] and [...] stated that the additional size would increase deployment costs by [...] and would mean that the necessary planning permissions would be rejected in more cases. These factors would combine to reduce overall coverage within the available budget, and make smaller operators (less able to rely on their own existing infrastructure) less competitive in procurements.
- (129) Nevertheless, the UK authorities recognise that it may not be possible to forecast future uses of the infrastructure and that public funds should promote future competition where possible. The UK therefore proposed that suppliers are allowed to build efficient networks that, while they may not initially provide capacity (for up to 3 operations), are extensible, wherever technically and legally feasible, such that the provision of extra capacity is deferred until a need is identified by an access seeker in the future. The incremental cost of providing the additional capacity would not be directly charged to the access seeker. In line with the long duration of the 2016 scheme, any changes in the wholesale access market should be reflected in the State aid scheme, and third party operators should have access to other wholesale access products if they are able to demonstrate "reasonable demand" for such additional access.
- (130) The UK considers that it is necessary to restrict access by way of a "reasonable demand" test, given that the scheme targets typically harder to reach and lower density NGA white areas (which excludes high density urban areas). In those areas, requiring all types of access products may disproportionately increase investment costs without delivering significant benefits in terms of increased competition.

- (131) The UK designed the Reduced Access approach under Step 2 of the Cascading Procurement in light of the specific difficulties concerning leased lines in the UK (see also Section 3.15.1 above). Recognising the potential that business connectivity services offer to the business case for broadband deployment, the UK would require under the State aid scheme the provision of an extended services wholesale product which makes available the use of passive inputs for a dual purpose in those instances where the primary purpose of infrastructure deployment over the common State funded network is the delivery of broadband services.
- (132) Where access seekers become indirect beneficiaries to the scheme by obtaining access at the wholesale level, they also must give bit-stream access. That obligation to provide bit-stream access would also be subject to the "reasonable demand" test, specifically, that no comparable access product is already offered in the same geographic area by another operator at equivalent prices to those of more densely populated areas.

3.19. Wholesale access Price Benchmarking

- (133) All wholesale access products will in all cases be provided on the basis of fair and reasonable pricing.
- (134) As the access products required for the 2016 scheme are not required under UK regulation, the pricing of open access products shall be proposed by bidders as part of the procurement process. Thus, bidders will propose pricing for all relevant access products. In doing so, bidders must observe the benchmarking rules set by the UK authorities. Thus, pricing will be benchmarked following pricing principles set out by Ofcom and based upon: UK or European benchmarks of competitive offerings; and/or non-discriminatory allocation of costs among State aid recipients and any access seekers.
- (135) BDUK will seek technical advice from Ofcom as to the appropriateness of the wholesale benchmark pricing points and pricing policy proposed by suppliers. Where a new product is required, BDUK recognises that the supplier will potentially incur additional costs in three categories: initial deployment and maintenance costs; new access product development and associated re-engineering costs; and any costs associated with stranded assets that may have been created as a result of any new access product or change of asset use. The access seeker will always be required to pay for the deployment and maintenance costs. However, if the access seeker is not required to meet the product development or stranded asset costs, then they would need to be met by either (i) the supplier or (ii) the public sector. In the former, the additional risk transferred to the supplier may translate into higher bid costs from the supplier. In the latter, this may create an unknown and potentially unbounded financial liability for the implementing bodies for the life of the contract.
- (136) The UK authorities published guidance to implementing bodies and other stakeholders on the application of price controls in State funded broadband projects. ⁶³ The guidance explains how implementing bodies should establish a benchmark process and monitor compliance for the life of the contracts. It describes Ofcom's role in providing technical advice on the appropriateness of the wholesale benchmark pricing points and

any pricing policies proposed. The guidance also provides implementing bodies with a recommended approach to identifying appropriate benchmarks (e.g. establishing whether a telephone line rental price should be added to the broadband rental price) and provides examples of why some limited variation from the benchmark could be permissible if well justified (e.g. for a time-limited variation to attract customers).

- (137) Thus, implementing bodies must ensure that they include a benchmark pricing mechanism in their contract with the successful supplier. Benchmark prices and a corresponding mechanism (including benchmarking criteria) must be set out clearly in the first instance in the tender documents. The mechanism must set out the framework applicable to Basic broadband and NGA broadband. It must also establish the mechanism applicable to non-broadband products. Non-broadband products could include voice services, packaged voice/broadband services and any other services. Every product sold on the subsidised network will be under benchmark controls.
- There will be a presumption that all products shall have a floor price equal to that of benchmark products. There will be a presumption that all products shall have a ceiling price equal to [X%] above that of the benchmark products (to be determined in the course of the tender process), unless the supplier can demonstrate that such prices are necessary for a sustainable business model and that this will not lead to the customer being overcharged. In the case of non-broadband products (i.e. secondary to the market that is being targeted), there are not expected to be any circumstances that would justify variation below benchmarks. In the case of broadband products, there may be limited variation below and above benchmark if well justified. Such justification would need to incorporate: support for the need for the variation in price, e.g. low population density, scattered villages, difficult clustering and associated failure to attract ISPs; or demonstration that alternative commercial mechanisms have been considered first. The variation in price is limited in time, e.g. until establishment of first major ISP, until [X] years into the contract (to be determined in the course of the tender process), or until there is any significant change in the bidder's ability to attract users on to the network. Where there is clear divergence against the benchmark, BDUK will instruct the supplier to adjust its prices accordingly in order for the project to remain compatible with this decision.

3.20. Application of the regulatory framework in relation to state funded networks

- (139) Consistent with the principles of State aid, the UK considers it important to ensure that the access conditions required by the 2016 scheme do not require less than those which are required under regulation. Therefore, the access conditions are supported by a built-in regulatory ratchet that ensures all relevant changes to wholesale access conditions that build on conditions outlined in this decision (see Sections 3.18 and 3.19) are automatically transposed into the State aid contracts.
- (140) BDUK consulted with Ofcom on ensuring consistency between State aid (access) obligations and SMP⁶⁴ (access) obligations.⁶⁵ Ofcom will continue to examine as part

Undertakings (communications providers) designated with Significant Market Power (SMP) under the applicable regulatory rules.

See Fixed market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30: Statement on the markets, market power determinations and remedies, Volumes 1 and 2, Statement, 26 June 2014, at: http://stakeholders.ofcom.org.uk/telecoms/ga-scheme/specific-conditions-entitlement/market-power/fixed-access-market-reviews-2014/statement/

of its market reviews the same for future broadband projects covered under the terms of the new scheme. 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 for delivery of a project which is due to expire in the period 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 the supplier and/or infrastructure is sold, the wholesale access obligation imposed as a consequence of the State aid granted will transfer to the new owner / new infrastructure owner.

3.21. Monitoring and claw-back mechanism

- (141) In line with the provisions of paragraph 78(i) of the Broadband Guidelines, the UK will implement a claw-back mechanism designed to avoid over-compensation. BDUK will not require a claw-back mechanism for projects with low State aid values (maximum GBP 150,000 of aid), which is consistent with the notion of minimum thresholds applying to small schemes. The claw-back mechanism will remain in place for the duration of the contract (see recital 97).
- (142) The UK authorities (BDUK) will regularly monitor and review the performance of the contractual obligations by the operators, including wholesale access conditions and pricing. Monitoring will remain in place throughout the life of the contracts concluded. The contracts between the public authorities (whether central or local) and the network operators will include the details of the monitoring mechanism, in line with the legal framework and best practices applying to such contracts. Ofcom will support the UK authorities with its technical, economic and legal expertise in order to prepare coherent, objective and non-discriminatory reasoning needed when (i) reviewing performance of the contractual obligations by the network operators, as far as the wholesale access conditions and prices are concerned and (ii) addressing disputes arising between the network operators and the access seekers in connection with such obligations.
- (143) In addition, the notification in relation to reduced access tenders includes a commitment to ensure real-time monitoring of the first three cascading procurements. After the first three projects, the appropriate level of monitoring of future projects would be reviewed.

3.22. Transparency

(144) In line with the requirements of paragraph 78(j) of the Broadband Guidelines, the UK authorities will ensure sound administrative management of the scheme which involves maintaining records of the granting authorities' decisions for at least a 10-year period. In order to ensure a high level of transparency for the use of public funds in the scheme, the UK set up a central web page 66, where information related to the 2012 scheme has been published for interested stakeholders. That page will continue to be the central repository for all relevant material relating to the 2016 scheme. The information available will include, amongst other things:

See: http://www.culture.gov.uk/what_we_do/telecommunications_and_online/7763.aspx.

- Information on the State aid decision (including the Procurement & Evaluation Guidance). 67
- Guidance on how to comply with all aspects of the 2016 scheme for implementing bodies seeking clearance under the BDUK aid scheme as well as for suppliers bidding for or delivering a network as part of an approved project. This will include guidance on: mapping; carrying out public consultations; requirements in relation to an open and technology neutral tender process; wholesale access requirements (prepared in conjunction with Ofcom); wholesale price benchmarking (prepared in conjunction with Ofcom); claw-back; and monitoring and reporting requirements.
- Template documents for implementing 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.
- Signposting to implementing bodies' websites so that suppliers can gain information on the progress of projects, should they wish to bid for broadband projects subsidised under the scheme.
- Links to information on local broadband projects, including public consultations and the outcome of the tender processes and coverage mapping of implementing bodies.
- Information about the selected bidder for each Implementing Body, the aid amount received, aid intensity and technology used for each project implemented under the 2016 scheme.
- Information for suppliers wishing to access the new subsidised broadband infrastructure. BDUK will include links to the successful suppliers' websites to provide details on the available access products on the new infrastructure and pricing of these. Additionally, BDUK will provide information on how suppliers can be provided with details of the location of the new infrastructure and its components in the event that they wish to seek wholesale access to the new infrastructure. This will be via links to relevant pages of the successful suppliers' website.
- A State aid specific BDUK email address to which any questions or comments can be addressed. This information will appear on the BDUK web pages (including any updates to this information) until the expiry of the aid scheme.
- Projects have to publish on the BDUK website a summary of the infrastructure built and capable of serving customers, as well as the access conditions that apply. This is to be reported on a quarterly basis. Thus, comprehensive and non-discriminatory access to information on infrastructure deployed under the measure will be ensured.

To be published on BDUK's website.

To be published on BDUK's website.

- (145) Each implementing body will be required to publish relevant information about its project. This will include details of its State aid mapping, public consultation, tender process and outcome, progress updates and general information on how to access NGA broadband.⁶⁹
- (146) Implementing bodies will also be required to publish coverage information, readily accessible to the public and also other interested stakeholders⁷⁰, in the form of maps or other data that shows the location and type of broadband coverage already implemented and planned (e.g. NGA broadband) under an approved project including information that shows the timing of any phases of an approved project. This should identify the location of the implemented and planned coverage roll-out at a postcode level or equivalent (provided any such equivalent also allows identification of the locations at a postcode level).
- (147) BDUK will publish links to each implementing body's coverage mapping via its central web pages. Successful suppliers will be obliged to provide information to implementing bodies to enable the mapping to be produced.

3.23. Reporting

(148) The UK authorities have undertaken to submit reports to the Commission on the implementation of the scheme (including the date when the network was put into use, the wholesale access products offered, the number of access seekers and service providers on the network, the number of houses passed and take-up rates) every 2 years since the date the network was put in use and during the whole duration of the contracts concluded with the network operators. This also includes the collection of information to meet monitoring obligations and ex-post evaluation requirements.

3.24. Evaluation of the scheme

The Broadband Guidelines (paragraph 53) state that certain aid schemes may require (149)an evaluation in order to verify (i) whether the assumptions and conditions which led to the compatibility decision have been realised; (ii) the effectiveness of the aid measure in light of its predefined objectives; (iii) its impact on markets and competition and that no undue distortive effects arise under the duration of the aid scheme that is contrary to the interests of the Union. Given its objectives and in order not to put disproportionate burden on Member States and on smaller aid projects, this only applies for national aid schemes and aid schemes with large aid budgets, containing novel characteristics or when significant market, technology or regulatory changes are foreseen. The evaluation shall be carried out by an expert independent from the State aid granting authority on the basis of a common methodology and shall be made public. The evaluation shall be submitted to the Commission in due time to allow for the assessment of the possible prolongation of the aid measure and in any case upon expiry of the scheme. The precise scope and modalities of the evaluation shall be defined in the approval decision of the aid measure. Any subsequent aid measure with a similar objective shall take into account the results of that evaluation.

⁶⁹ See for instance Superfast Warwickshire http://www.cswbroadband.org.uk/

See for instance Superfast Dorset, which provides a best practice example of a coverage map https://www.dorsetforyou.com/broadband/map

- (150) The present scheme fulfils the criteria of being a national aid scheme with a large budget and novel elements; therefore it will be subject to an evaluation. The UK, in light of this provision, and taking into account the best practices recalled in the Commission Staff Working Document on Common methodology for State aid evaluation 71, has submitted an evaluation plan for the measure. The main elements of the evaluation plan are described below.
- (151) The evaluation questions address the outputs and the effectiveness of the measure in target areas, the incentive effect of the aid as well as the effects on competition. Furthermore, the evaluation questions address the appropriateness and the proportionality of the measure as well as a selection of indirect impacts.
- (152) The questions addressing outputs and the effectiveness of the measure in target areas will investigate how many premises are passed by a NGA network, receive qualifying broadband services and over what time period have these been made available. In order to answer those questions, a selection of result indicators will be used such as NGA coverage, by number of premises passed by a NGA network, take-up rate and broadband quality (speed). This will be compared with a counterfactual based on, respectively, the number of premises passed, take-up rate and broadband quality (speed) in non-intervention NGA white areas (based on various data sources such as beneficiaries and Ofcom).
- (153) The incentive effect of the aid will be examined observing whether the aid has changed the behaviour of the aid beneficiaries and their investment patterns in the target areas. For that purpose, the financial model outputs⁷² will be compared for a sample of white intervention areas and comparable commercial areas. Should this approach be not feasible, the commercial roll-out in white non-intervention areas will be tested by comparing NGA premises passed in white intervention and non-intervention areas.
- (154) In order to examine the effects of the measure on competition, the evaluation will look at the market share of aid beneficiaries, based on number of premises taking a connection on NGA network. This will be compared with a counterfactual established on the basis of the number of premises passed by NGA network in non-intervention NGA white areas. The evaluation plan suggests investigating if any changes in the nature of competition in both the wholesale and the retail markets have occurred in the target areas. In particular some questions will deepen the analysis of changes in wholesale market shares by exploring related factors such as technology type, number of competitors and retail providers.⁷³
- (155) The appropriateness of the measure will be evaluated by looking at the gap funding model and alternative intervention models. In particular the evaluation plan suggests investigating the cost of deployment to cover premises with NGA services under the

Commission Staff Working Document on Common methodology for State aid evaluation, Brussels, 28.5.2014, SWD(2014) 179 final.

In particular the evaluation plan suggests looking at the NPVs (net present values) for a sample of white intervention primary connection points (PCPs) and commercial PCPs. These will be compared against a threshold to investigate if the PCP is commercially viable.

To answer these questions the number of premises taking up a NGA connection split by wholesale/retail supplier, technology type, basis of service (for example infrastructure based or facility based) and wholesale access products used will be assessed.

gap funding model compared to the costs of different aid schemes in the UK and/or interventions in other EU Member States.

- (156) The proportionality and commercial sustainability of the networks will be examined by comparing modelled and actual take-up rates, revenue per user (ARPU) and operating costs as well as the number of beneficiaries withdrawing from a project.
- (157) As concerns indirect impacts, it is widely acknowledged that NGA can have an impact on the social and economic system as a whole. These effects will be evaluated by looking at a range of outcomes and impacts, such as productivity growth (through for example business productivity and increased ICT skills and educational attainment), environmental impact, employment rate, "digital divide", stimulation of the broadband market, consumer savings, access to public services and efficiency in delivering public services.
- (158) The evaluation will seek to establish the causal impact (differences between the outcome with the aid and the outcome in the absence of aid) of the scheme. The evaluation will be undertaken in line with the Commission's "Common methodology for State aid Evaluation". To inform the assessment, the UK expects to use appropriate counterfactuals and "control groups" to assess the impact of the aid In order to develop adequate control groups, minimising the risk of selection bias, the UK has proposed a number of control variables such as the distance to exchange infrastructure, rurality, premise density, deprivation decile, average available broadband speed (preintervention). These control variables are for the most part already collected and used by the UK.
- (159) To further develop the methods to be used in the evaluation, and following consultations with the Commission, the UK has commissioned a scoping study from independent experts. The body undertaking the scoping study is notably required to review the methodologies for developing counterfactuals in line with those outlined in the Commission's Staff Working Document on "Common methodology for State aid evaluation", such as Difference in Difference, Instrumental Variables and Regression Discontinuity Design approaches. Following the review of methodologies, the scoping study is required to recommend a methodology. The Commission will be informed of the results of the scoping study, to be available by June 2016.
- (160) The evaluation will be based on quantitative analysis of data collected directly from beneficiaries through their contracts⁷⁴; from Ofcom; and from OMRs and public consultations conducted at the beginning of each procurement. Such data may be supplemented by data from sample areas collected by BD UK. To compare average cost of delivery across different aid schemes, BDUK will require data from other UK Government departments. Data from other Member States may be required, subject to their agreement.
- (161) The evaluation may also involve additional and targeted data collection, including new surveys.
- (162) The evaluation will form part of the wider BDUK Evaluation Framework. The external independent evaluator will be selected by way of an open, competitive and

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These reporting obligations will require the beneficiaries to report standard metrics including: premises passed, individual cost items by eligible structure, wholesale access products offered and take-up rates. These metrics will be reported to a specific time schedule as a matter of contract.

- non-discriminatory tender procedure. Specific skills and experience on evaluation will be required during the tendering. The final evaluation in 2020 will be undertaken by an independent body.
- (163) The UK authorities commit that, should significant modifications to the evaluation plan become necessary (notably as a result of the scoping study to be conducted), the UK will notify to the Commission an updated evaluation plan. The UK also commits to inform the Commission of any element that may affect the implementation of the evaluation plan in line with the present decision.
- (164) A final evaluation report based on the present evaluation plan will be submitted to the Commission by December 2020 at the latest.
- (165) The evaluation plan and the evaluation reports will be published (not later than within 3 months from their approval) on the UK Government website.⁷⁵ The UK will provide a dedicated webpage to its State aid evaluation activities.
- (166) The UK will use the evaluation results to inform the scheme design of any future broadband interventions.

4. ASSESSMENT OF THE MEASURE: PRESENCE OF AID

(167) 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 is granted out of State resources and is imputable to the State, 2) the measure confers a selective economic advantage to undertakings, 3) the measure distorts or threatens to distort competition and affects trade between Member States.

4.1. State resources

(168) As described above, the measure is financed using resources of the UK authorities and EU funds, which are allocated under the control of the authorities to the beneficiaries as a result of the exercise of an element of discretion. Hence, there is a use of State resources which is imputable to the State.

4.2. Selective economic advantage

(169) *Selectivity:* The measure supporting the deployment of a backhaul network is selective in nature in that it targets undertakings that are active only in certain regions or in certain segments of the overall electronic communications services market (provision of broadband services), to the exclusion of other electronic communications services and other economic activities.

⁷⁵ See: https://www.gov.uk/

- (170) *Direct beneficiaries: Selected network operators*: the selected network operators will receive financial support which will enable them to enter the market and provide broadband services on conditions not otherwise available on the market. Although a competitive tender procedure tends to reduce the amount of financial support required, the allocation will allow the operator to offer end-to-end services prima facie at lower prices than if it had to bear all costs itself.
- (171) To the extent the UK may make use of public-driven initiatives: in line with the functional character of the notion of "economic activity" in Article 107(1) TFEU, it is irrelevant whether the recipient of the funds is an entity with a separate legal status or an integrated part of the State administration. The public operation of a broadband network, even if limited to a mere passive network infrastructure, is an economic activity in the meaning of Article 107(1) TFEU.
- (172) *Indirect beneficiaries: Third party operators*: Third party providers of broadband services will be able to access the subsidised network on non-discriminatory terms, and will thus be able to build and operate their own network infrastructure and provide (wholesale and retail) broadband services by utilising the subsidised infrastructure. Those operators will thereby receive an indirect economic advantage by having access to wholesale services or benefit from the presence of public owned infrastructure at conditions that would not be available under normal market conditions without State support.
- (173) *Indirect beneficiaries: End users*: the measure aims at providing broadband services to residential and business users. While there would be no aid to residential users (absent an economic activity), businesses (running an economic activity) in the targeted areas will ultimately benefit from the improved service.

4.3. Distortion of competition and effect on trade

- (174) The markets for electronic communications services (including the wholesale markets and the retail broadband markets) are open to competition between operators and service providers, which generally engage in activities that are subject to trade between Member States. By favouring certain operators and service providers, the notified measure is therefore liable to distort competition and affect trade between Member States.
- (175) Moreover, the intervention of the State can alter existing market conditions also in that some undertakings could now choose to subscribe to the services provided by the selected suppliers instead of possible alternative market-based solutions. It will provide a selective advantage to the bidders prevailing in the tender procedures and will moreover benefit all third party providers who use the improved infrastructure to compete with other third party providers.
- (176) Insofar as the intervention may affect network operators and providers of electronic communications services from other Member States, the measure has an effect on trade.

Case C 118/85, judgment of 16 June 1987, Commission of the European Communities v Italian Republic, European Court Reports 1987 -02599, paragraph 13 (ECLI identifier: ECLI:EU:C:1987:283); and Joined Cases T-443/08, T-455/08, judgment of 24 March 2011, Mitteldeutsche Flughafen and Flughafen Leipzig/Halle v Commission, not yet published, paragraphs 88 and 89 (ECLI identifier: ECLI:EU:T:2011:117).

(177) Therefore, the fact that an improved broadband service and additional (wholesale) capacity becomes available can distort competition and affect trade between Member States.

Conclusion

(178) In consideration of the above, the Commission concludes that the notified measure constitutes State aid within the meaning of Article 107(1) TFEU as moreover confirmed by the notifying Member State. It is necessary to consider whether the 2016 scheme can be found to be compatible with the internal market.

5. ASSESSMENT OF THE MEASURE: COMPATIBILITY

- (179) The Commission has assessed the compatibility of the 2016 scheme insofar as it is implemented via open access tenders according to Article 107(3)(c) TFEU and in the light of the Broadband Guidelines, which contain a detailed interpretation of Article 107(3)(c) TFEU as it applies to that area of State aid law.
- (180) As explained in paragraph 33 of the Broadband Guidelines, to be considered compatible with the internal market every aid measure must comply with the following cumulative conditions:
 - 1. The aid must contribute to the achievement of objectives of common interest
 - 2. Absence of market delivery due to market failures or important inequalities
 - 3. The aid must be appropriate as a policy instrument
 - 4. The aid must have an incentive effect
 - 5. The aid is limited to the minimum necessary
 - 6. Negative effects must be limited
 - 7. The aid measure must be transparent
- (181) If those conditions are fulfilled, the Commission balances the positive effects of the aid measure in reaching the objective of common interest against the potential negative effects.

5.1. The aid contributes to the achievement of objectives of common interest

(182) EU2020 and within it the DAE 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 of European households subscribing to internet connections above 100 Mbps." In pursuing this aim, "at EU level, the Commission will work /.../ to facilitate the use of the EU's structural funds in pursuit of this agenda", and "at national level, Member States will need /.../ to draw up operational high speed internet strategies, and target public funding, including structural funds, on areas not fully served by private investments." Key Action 8 of the DAE calls upon Member States "to use public financing in line with EU competition and State aid rules" in order to meet the coverage, speed and take-up targets.

- (183) In particular, a well-targeted State intervention in the broadband field can facilitate the reduction of the "digital divide" that sets apart areas or regions within a country where affordable and competitive broadband services are on offer from areas where such services are not available.
- As presented in Section 3.1, the scheme is in line with both the UK National Broadband Strategy and the EU objectives as highlighted in the EU2020 and the DAE. By the notified project, the UK authorities intend to allow the use of the subsidised network to bridge the traditional "digital divide" (i.e. as regards NGA broadband) wherever necessary. This concerns specifically NGA "white areas" where no equivalent NGA broadband infrastructure currently exist and where they are not likely to be built within three years by private investors on commercial terms. By extending high speed broadband coverage of minimum 30 Mbps download speeds to rural areas of the country where private operators have no commercial interest to invest in the near future, the UK authorities pursue genuine cohesion and economic development objectives, in line with the DAE. In addition, it has been recognised by the Commission⁷⁷ that broadband investments can be considered as "smart investments" that are able to provide short term (employment) benefits and long term (economic) advantages. Hence, by supporting NGA broadband deployment, the current measure is in line with the EU interest to support a fast recovery of the EU economy. Thus, the measure under examination will make a significant contribution to the achievement of the objectives of the DAE and is therefore in line with the common interest.

5.2. Absence of market delivery due to market failures or important inequalities

(185) As indicated in the Section 3.11, the measure under examination addresses a market failure as it targets only white NGA areas, where NGA speeds are currently not available and where there are no plans by private investors to roll out infrastructure to support them in the near future. Furthermore, target areas will be verified on the basis of further mapping and public consultation exercises (as described in Section 3.12-3.13) to verify that there are no private investment plans in the near future and thereby ensure that crowding-out of private investment is avoided. Those elements demonstrate the absence of market delivery due to market failures and/or important inequalities in the target areas.

5.3. Appropriateness of State aid as a policy instrument

(186) In the situation currently under assessment, despite efforts undertaken by the UK authorities through alternative instruments (including *ex ante* regulation)⁷⁸, private investments have not taken place in the targeted areas. The various regulatory and policy approaches being pursued by the UK to encourage investment include demand-side measures, various supply-side measures, administrative measures (see Section 3.1). However, without further public intervention, reducing the "digital divide" between the remaining NGA white areas and the rest of the UK does not seem possible and the difficulties resulting from the lack of supply of broadband networks cannot be satisfactorily addressed by measures involving demand stimulation or

Further detail on the various steps the Government is taking to help lower the cost of broadband deployment can be found in the document Britain's Superfast Digital Broadband Future, December 2010, Chapter 5 (see footnote 11 above for a link to this document). Certain steps are also highlighted in the National Infrastructure Plan 2011 (see footnote 2 above).

⁷⁷ Brussels European Council, 19/20 March 2009 Presidency Conclusions.

regulatory interventions. Upgrading broadband in "NGA white" areas requires significant upfront investments that are amortised over a long period of time. Alternative instruments alone, such as described above, do not provide the critical mass needed to remedy the lack of supply (namely non-existence of the infrastructure). *Ex ante* regulation is serving the effectiveness of the scheme but is in itself not sufficient to trigger large scale network deployment in the target areas.

(187) Consequently, the Commission can agree that without further public intervention, reducing the "digital divide" between different areas of the country does not appear to be possible, which could lead to the economic exclusion of local undertakings. Hence, State aid is an appropriate instrument to achieve the desired objectives.

5.4. The aid has an incentive effect

- (188) As set out in paragraph 45 of the Broadband Guidelines, regarding the incentive effect of the measure, it needs to be examined whether the broadband network investment concerned would not have been undertaken without any State aid.
- (189) The 2016 scheme ensures that aid can only be provided if it is established that in the target areas no comparable investment would take place without public funding within three years (see Sections 3.11-3.13). This is confirmed according to the results of the mapping exercises, market engagement and studies carried out by the UK authorities. The market analysis and the public consultation described in Sections 3.12 3.13 will ensure that in the target areas no comparable investment would take place without public funding in the near future of three years. It follows from this that the investment would not be made within the same timeframe without the aid, which produces a change in the investment decisions of operators and therefore has an incentive effect. Moreover, by granting access to the public network to third party operators, the measure facilitates and encourages investments in last mile networks.
- (190) Therefore, the aid shall provide a direct and appropriate investment incentive for the selected operator and for third party beneficiaries.

5.5. Proportionality - Aid limited to the minimum necessary

- (191) In State aid broadband cases, aid amounts and aid intensities are usually known only *ex post*, i.e. after the tender process ("gap funding"): the aid will be granted through an open tender procedure, which aims to ensure that it will be the minimum necessary. Hence, it is not crucial to quantify the aid amount in advance.
- (192) The UK designed the 2016 scheme to minimise the State aid involved and the potential distortions of competition arising from the measure. In that respect, the Commission notes the following elements, which are considered as necessary to the design of a measure that is in line with the Broadband Guidelines (paragraph 78):

5.5.1. Detailed mapping and coverage analysis and Public consultations

(193) As described in Sections 3.11 – 3.13, the 2016 scheme provides for new State aid for broadband projects to reach those regions where there does not exist a business case for a private operator to invest. In those cases, for example, the topography and the low density of premises present unique problems for delivery. The notified measure also recognises that, because the local broadband projects are seeking to provide NGA

services in the hardest to reach locations, it is expected that the average levels of aid intensity will be high, in extreme cases requiring 100% funding.

- The granting authorities will organise various mapping and market consultation exercises, including public consultations in line with the Broadband Guidelines, to better delineate the target areas and the kind and size of public intervention needed (see Sections 3.12-3.13). Operators will be invited to communicate, within the framework of the consultations, existing broadband infrastructures and investment plans for the coming three years. Operators will also be systematically required to produce information about existing infrastructure prior to any call for tenders under the Code of Conduct (see Section 3.16).
- (195) The UK authorities have undertaken an analysis of the existing broadband infrastructure in order to identify the areas where State intervention is necessary. The UK applies a best practice process that promotes the use of both an Open Market Review (OMR) and the use of a public consultation. The public consultations (as described in Section 3.13) will be in line with the requirements of the Broadband Guidelines⁷⁹ and will also serve to ensure that only those areas where no interest for commercial NGA deployment is present are developed. This will reduce to a minimum the necessary aid amount and will serve to avoid risks of crowding-out private investments and distorting competition vis-à-vis existing operators.

5.5.2. Competitive selection process

- (196) As presented in Section 3.15, in order to minimise the amount of aid involved, aid under the scheme will be awarded by way of open tender processes in line with EU principles of public procurement, including the broader transparency obligations in relation to the process.⁸⁰ In running the procurement, implementing bodies shall comply with the conditions of openness, transparency and non-discrimination in line with the principles of the national and EU public procurement rules. Where there is only one bidder, BDUK has also committed to have an external auditor review the bid's cost calculations, as suggested at footnote 100 of the Broadband Guidelines.
- The proposed procurement process is designed to optimise the number and quality of bidders, in particular reducing the hurdles to participation by smaller suppliers; and to align supplier incentives to maintain competitive tension as far as possible. As presented in Section 3.15, the scheme will encourage various means of rendering projects attractive to as many bidders as possible, for instance by splitting intervention areas and procure through smaller lots at the same time allowing aggregation of these lots to ensure viability of projects. Implementing bodies will be able to choose among various delivery and funding models including Investment Gap Funding, public private partnership, Concession to Build-Operate-Transfer, Public sector owned supplier, which may be interesting to a variety of operators, as compared to just relying on an investment gap funding model which by definition typically favours operators with significant existing infrastructure – therefore essentially incumbent operators. The procurement approach includes various steps that involve interested

See paragraph 78(b) of the Broadband Guidelines

In those instances where OJEU thresholds are not met, the relevant authority must still ensure that an open tender process has been undertaken and demonstrate to the NCC the existence of a competitive selection process that has been run in a transparent manner.

- suppliers in consultations aimed to improve the design of the interventions (e.g. through market engagement, market warming, dialogues with suppliers).
- (198) Within three months of the adoption of this decision, BDUK will provide detailed guidance as necessary to implementing bodies regarding the procurement process and wholesale access conditions.⁸¹
- (199) The UK authorities committed to ensure that all procurement processes will comply with one of the procedures laid down in the EU public procurement rules, as well as with the current decision and the Broadband Guidelines.

5.5.3. Most economically advantageous offer:

(200) The UK authorities designed the selection procedure so as to choose the most economically advantageous offer among those presented by the operators. The UK authorities specified the relative weighting to be given to the key criteria chosen for the selection procedure, as presented in detail in Section 3.15. The NCC will ensure that each relevant implementing body will establish qualitative award criteria for the assessment of bids, consistent with the objectives of the measure and the specific compatibility conditions, and with the requirements of the Broadband Guidelines. 82

5.5.4. Technological neutrality

(201) The UK authorities confirmed that no technology will be excluded a priori. Consequently, the services provided on the wholesale market will be such as to enable the interconnection to the subsidised network of any possible technology operators wish to use for their access infrastructure. The UK acknowledges that different technical solutions exist that could be used to meet the objectives of the measure. The UK will ensure that tenders do not favour a particular technology or network platform (or mix of those) and that bids are assessed on the basis of objectively defined criteria. The tender documents must be technology and provider neutral, leaving it to commercial operators to propose the technological solutions they find most effective and efficient to achieve the desired objectives (see Section 3.17).

5.5.5. Use of existing infrastructures

- (202) Under the 2016 scheme the use of existing infrastructure will be encouraged wherever it is possible. In that way, unnecessary and wasteful duplication of existing networks can be avoided and the overall costs of the project minimised. As explained in Section 3.16, the tenders will invite bidders to have recourse to existing infrastructure.
- (203) Existing infrastructure may have limitations due to its age (e.g. capacity constraints) or as a result of the regulatory environment. Those limitations may have an effect on the type of wholesale access that might be offered. In the specific context of regulated access products, the UK authorities have explained that the use of existing infrastructure, albeit subject to the regulatory restrictions imposed by Ofcom at any particular moment in time, may in fact benefit competition at the level of the tender process. They argue on that basis that allowing certain bidders to use existing

To be published on BDUK's website.

See paragraph 78(d) of the Broadband Guidelines.

infrastructure to the extent legally possible under regulatory rules must be considered to be in line with the Broadband Guidelines.

- In the UK, a significant part of the existing infrastructure in the intervention areas belongs to BT. BT is subject to a number of obligations under regulatory rules due to its SMP position. Operators without SMP are not subject to regulatory obligations. While it is true that the implementation of the Directive 2014/61/EU on measures to reduce the cost of deploying high-speed electronic communications networks will provide another means to exploit existing infrastructure, the fact nonetheless remains that for smaller operators who do not own an extensive existing infrastructure, the main means of using existing infrastructure is through the purchase of regulated access products from operators in with SMP. The UK authorities have therefore proposed to ensure that bidders who do not own or control the regulated existing infrastructure concerned may choose to include regulated access products in their bids. The UK authorities have argued that based on their market engagement process, they expect that the possibility to rely on the existing infrastructure of larger suppliers would encourage smaller alternative suppliers to participate in bids. It is true that the use of such infrastructure would be subject to the conditions attached to regulatory access, in particular restrictions limiting the use of the existing infrastructure concerned for certain purposes (i.e. not to be used to provide any leased lines services).
- Smaller operators face a significant disadvantage when competing with wellestablished operators for projects, due to the economies of scale which arise from the cost structure of deploying broadband infrastructure, particularly in rural areas such as those targeted by the scheme. If the regulatory restrictions and the effect they have on the type of wholesale access that can be provided on the parts of the network that are covered by those restrictions were to be read as preventing, in essence, such smaller operators from using existing infrastructure, those operators would be required to build new infrastructure, including in parallel to already existing infrastructure. That duplication of infrastructure would result in significantly higher costs when compared to the bid of an operator who already owns existing infrastructure. All other things being equal, the economically most advantageous offer would prevail - in other words, the operator with existing infrastructure access to which is sold via a regulated access product would be de facto free to choose whether it wanted to bid and win the project or whether, in that particular area, it preferred to retain the protection afforded by the regulatory obligations. The use of existing infrastructure is central to encouraging competition for the market.
- (206) The Commission notes that only those bidders who do not own or control the regulated existing infrastructure would be free to submit a bid using a regulated access product, in spite of the effects on wholesale access that would flow from that choice. In other words, in an open access bid, an operator who owns or controls the existing infrastructure concerned would not be able to indirectly reintroduce the regulatory restrictions pertaining to leased lines by choosing to use a regulated access product. The effects on wholesale access generated as a result of the use of such products will be confined to only those limited cases where a smaller operator wishing to participate in a tender may propose a solution based on the use of existing infrastructure owned by an SMP operator. The extent of the resulting negative effects on wholesale access to the subsidised scheme (and therefore competition on the market) is therefore also limited.

- (207) The Commission has carefully considered the potential positive and negative effects of the situation described by the UK, essentially between encouraging more competition in tenders at the expense of accepting in some instances the application of regulatory restrictions in State aid projects, versus ensuring better open access outcomes but in a situation that would tend to favour larger operators in the tender process.
- (208) Overall, accepting that certain bidders may make use of existing infrastructure is expected to have a positive effect by encouraging competition. Rejecting the use of that infrastructure on the grounds that it would limit the types of wholesale access available on parts of the subsidised network would essentially consolidate the position of the owner of that infrastructure. It is therefore acceptable, for instance, that bidders include the regulated Physical Infrastructure Access (PIA) product in their bids, even though the PIA product does not allow the ducts to be used to provide leased line services. Using the PIA product, bidders would still be able to sell standard broadband products to business customers. The Commission therefore concludes that the use of existing infrastructure described in the notification is in line with the Broadband Guidelines.
- (209) The Broadband Guidelines also recommend that Member States should set up a national database on the availability of existing infrastructure that could be reused for broadband rollout (this includes both commercial infrastructure assets and those owned by public bodies etc.). The mapping, OMR and Public Consultation processes that must be completed before commencement of a procurement process reveal information about which communications providers have a deployment footprint (both basic broadband networks and NGA networks) in the relevant areas. Furthermore, all suppliers participating in tenders under the 2016 scheme will be required to comply with the Code of Conduct and thus meet disclosure obligations regarding their existing infrastructure. The Code of Conduct requires participants to publish information on their infrastructure, which will then be potentially used by any other bidder for the project. Furthermore, the UK authorities will make accessible a map, showing where owner/operators have previously identified themselves as having infrastructure, and the type of infrastructure available. Contact information for requesting information about accessing those operators' infrastructure will also be made available.
- (210) Furthermore, the UK will ensure access to information on existing and planned physical infrastructure through implementation of Directive 2014/61/EU, in particular the requirement under Articles 4 and 6 to ensure access to certain minimum information. This will provide a swift and effective mechanism for communications providers to obtain information about another communications provider's network (as well as a range of other infrastructure networks) for the purposes of sharing existing infrastructure or coordinating new civil works.

5.5.6. Wholesale access

(211) As described above, the selected operators will offer wholesale services and access to the subsidised networks to other operators in an open, transparent and non-discriminatory manner. The access obligations will be monitored by Ofcom. Under the 2016 scheme, access must be ensured for at least 7 years and full access, without limitation in time, will be ensured to any new passive infrastructure elements, such as ducts, poles, dark fibre, cabinets.

- (212) Under open access tenders, wholesale access will be ensured in line with paragraphs 78(g) and 80(a) of the Broadband Guidelines. Thus, under open access tenders, the selected operator must ensure full and effective unbundling and provide full open access to the subsidised network (including access to ducts, dark fibre, street cabinets, and bit-stream and unbundled access to fibre as described in Section 3.18) on fair and non-discriminatory terms. Where physical unbundled access is not feasible, it can be substituted by an equivalent virtual access product.
- (213) Vectoring technology could be eligible under the scheme where it is integral to a significant improvement in infrastructure, for instance FTTC deployment. A vectoring upgrade alone would not be eligible for state aid because it does not qualify as a step change. A VULA solution must be offered that is functionally equivalent to physical access ⁸³ (see Section 3.18). The UK VULA solution was recognised in the Commission decision concerning case UK/2010/1064: Wholesale local access market and Commission decision concerning case UK/2010/1065: Wholesale broadband access market. Therefore the UK may rely on this solution to use vectoring on subsidised infrastructure where this is integral to a significant improvement of new infrastructure.
- (214) Access must be granted as early as possible and in any event not less than 6 months before the launch of the services concerned (see paragraph 78(g) and footnote 108 of the Broadband Guidelines).
- (215) The Commission therefore considers that the wholesale access requirements that will be part of all open access tenders are in line with paragraphs 78(g) and 80(a) of the Broadband Guidelines.
- (216) For the reasons explained in recitals 69-71 and 74 above, the UK authorities argue that in the specific UK regulatory context, if a successful bidder already has existing leased line infrastructure in the intervention area, full open access may provide the opportunity for lucrative business customers to be targeted by third party operators, who may not have any intention of serving the wider retail broadband market. The UK therefore argues that open access may in some instances disproportionately increase the costs of NGA deployment in certain white NGA areas where there is existing leased line infrastructure. For these reasons, the UK authorities proposed that some projects may choose to use a "cascading" procurement approach, whereby, as a first step only open access bids would be considered, and as a second step, and only if that first step should fail, bids that offer reduced forms of access based on the leased lines exception would be considered (see Section 3.15.1). 84
- (217) The Commission recalls that the notification of the 2016 scheme insofar as it is implemented via reduced access tenders remains incomplete as concerns the leased lines exception, in particular in the absence of the review of the leased lines exception described in recital 77 above. Therefore, the Commission cannot take a position

In this sense, see also Commission decision in case SA.38348 – Germany NGA Germany, available online on the Commission's website at: http://ec.europa.eu/competition/elojade/isef/index.cfm?fuseaction=dsp_result, under State aid number SA 38348 (publication 04.09.2015, JOCE C/292/2015).

The key difference between "open access bids" and "reduced access bids" is that, under open access bids, access products can be used for any public telecommunications purpose (including leased lines). By contrast, under reduced access bids it is not required to offer access products for services in the leased lines market, except where a wholesale competitor retail broadband business case is only made viable in conjunction with business connectivity services (i.e. leased lines).

concerning the leased lines exception at this stage. Once the leased lines review described in recital 77 is finalised, and a final report is notified to the Commission, the Commission will take a position on that matter.

5.5.7. Wholesale access pricing

(218) The price benchmarking mechanism will be incorporated in the tender documents. As described above in Section 3.19 and in line with the provisions of the Broadband Guidelines, the price for wholesale access will be based on the prices set or approved by Ofcom for similar regulated services or in the absence of such regulated wholesale prices, benchmarked against average wholesale prices of comparable access services in other, more competitive, parts of the country. In case of disputes between the network operator and access seekers or where the price is not regulated, Ofcom will be consulted with the objective to keep prices at a reasonable and non-discriminatory level (see Section 3.19).

5.5.8. Monitoring, reporting and claw-back mechanism

- (219) As explained in Section 3.21, the NCC will ensure regular monitoring and supervise State aid compliance. All projects under the scheme will be examined on a regular basis and the monitoring mechanisms implemented will ensure that if the beneficiary fails to comply with the rules, the granting authorities will be in the position to recover the aid granted. By establishing a claw-back mechanism (see also recital 97), the UK authorities will ensure that the recipients of the aid will not benefit from overcompensation and will minimise *ex post* and retroactively the amount of aid initially deemed to have been necessary. As explained in recital 97, any re-investment of clawed-back amounts to fund new projects under the scheme will therefore comply with the terms of this decision (therefore including new mapping and public consultation exercise, new procurement, etc.).
- (220) In line with the Broadband Guidelines, the UK will meet its reporting obligations that include the collection of information relevant sufficient to deliver on both its potential monitoring obligations, as well as to meet the *ex post* evaluation requirements (see Section 3.23). As provided for in paragraph 78(k) of the Broadband Guidelines, key information will be reported to the European Commission every two years.

5.5.9. Transparency

(221) As explained in Section 3.22, the aid will be awarded in a transparent manner, through open tendering, and it will be ensured that the public authorities, economic operators, the interested public and the Commission have easy access to all relevant acts and pertinent information about the aid. In line with paragraph 78(j) of the Broadband Guidelines, all relevant information regarding the 2016 scheme and any aid granted will be published on a central online website. Furthermore, the UK authorities will ensure sound administrative management of the scheme which involves maintaining records of the granting authorities' decisions for a period of at least 10 years.

5.6. Limited negative effects

(222) The significance of the distortion of competition has been assessed below in terms of potential effects on competitors.

- (223) Given the design of the measure and its compliance with the conditions of paragraph 78 of the Broadband Guidelines (see Section 5.5 above), it is unlikely to have a crowding out effect on private investments.
- (224) Indeed, only projects that are confined to "NGA white areas", where no operator is willing to invest in NGA infrastructure without State aid in the next three years, are eligible to receive aid pursuant to the measure under examination. What is more, where a broadband network already exists, the measure requires that a "step change" be achieved; the public intervention must result in significantly better broadband capacity and thus service availability and the selected bidder must carry out significant new investments in the existing broadband networks. Thus, in line with paragraph 51 of Broadband Guidelines, such an open infrastructure brings significant new capabilities to the market as it provides further multiplication of distribution nodes, shortens "the last mile" to end-users and allows for competition between operators which will provide access to final customers. According to the UK authorities, the project will lead to a significant increase in the penetration rate of broadband services in the target areas. Consequently, such investment ensures a "step change" in terms of broadband availability for the target areas, in line with the requirements of the Broadband Guidelines. In this way, the measure under examination ensures that the public intervention does not crowd out comparable private investments.
- (225) Furthermore, the beneficiaries are to be selected via competitive selection procedures, as described in Section 3.15. Under open access tenders, full open access is to be granted to the subsidised infrastructure and various mechanisms are in place to prevent wholesale access prices from being excessive (see Section 3.19). Therefore, negative effects of the measure under open access tenders, if any, are expected to be limited.
- (226) The Commission recalls that the potential negative effects of the measure insofar as it is implemented through reduced access tenders are to be further verified, as indicated above in Section 5.5.6.

5.7. Transparency

(227) As explained in Section 5.5.9, the 2016 scheme ensures that the interested public and the Commission have easy access to all relevant acts and information about the aid. Recital 221 records the compliance of the measure with the requirements set out at paragraph 78 of the Broadband Guidelines in that respect. As a result, the Commission is satisfied that the aid will be awarded in a transparent manner.

5.8. Compatibility Assessment of the Evaluation Plan

(228) As stipulated by paragraph 53 of the Broadband Guidelines, a scheme such as the current one (a national framework scheme with a large budget) is subject to *ex post* evaluation. Therefore, by the end of the 2016 scheme (i.e. by 31 December 2020), an *ex post* evaluation will be carried out that includes verifying if the set objectives were achieved and if initial assumptions were realised, and assessing the overall effectiveness of the 2016 scheme in light of its general and specific objectives and the measure's impact on competition. The timeline of the evaluation, the evaluation questions, methodology and the data gathering requirements are set out upfront, in an evaluation plan prepared according to the Commission Guidance as described in Section 3.24.

- (229) The Commission considers that, as described in Section 3.24 of this decision, the notified evaluation plan contains the necessary elements: the objectives of the aid scheme to be evaluated, the evaluation questions, the result indicators, the envisaged methodology to conduct the evaluation, the data collection requirements, the proposed timing of the evaluation including the date of submission of the final evaluation report, the description of the independent body conducting the evaluation or the criteria that will be used for its selection and the modalities for ensuring the publicity of the evaluation.
- (230) The Commission notes that the scope of the evaluation is defined in an appropriate way. It comprises a list of evaluation questions with matched indicators for each and methodologies to address the questions. Data sources are individually defined for each question.
- (231) The Commission also acknowledges the commitments made by the UK authorities to conduct the evaluation according to the evaluation plan described in the present decision by an independent evaluation body and to inform the Commission. The procedures envisaged for selecting such evaluation body are appropriate in terms of independence and skills. Moreover, the proposed modalities for the publication of the evaluation results are adequate to ensure transparency.
- (232) The Commission takes note that the UK authorities committed to notify an updated evaluation plan if significant modifications to the evaluation plan become necessary (notably as a result of the scoping study to be conducted) and to inform the Commission of any element that may affect the implementation of the evaluation plan in line with the present decision.
- (233) Finally, the Commission notes the commitment made by the UK authorities to submit the final evaluation report at the latest in December 2020.

5.9. Overall balancing: positive effects expected to outweigh potential negative effects

- (234) As mentioned above, the objective of the measure is to bridge the "digital divide" and provide access to broadband services where they are currently unavailable by making possible a significant new investment in sparsely populated areas where private operators are not planning any investments in the near future.
- (235) The UK authorities have designed the measure under examination in such a way as to minimise the State aid involved and potential distortion of competition arising from the measure. As set out above, the project will only target localities that are classified as "white" NGA areas. The Commission acknowledges therefore that by providing financial support for the provision of broadband services in areas where broadband is currently not available, the UK pursues genuine cohesion and economic development objectives and thus, its intervention is likely to be in line with the common interest, provided the conditions set out in paragraph 78 of the Broadband Guidelines are respected.
- (236) The Commission therefore considers that the notified measure will offset a geographical and commercial handicap and is objectively justified to address the lack of availability of high speed broadband services in the targeted areas.
- (237) Insofar open access tenders are concerned, in view of the characteristics of the project and of the safeguards applied, the overall impact on competition is deemed to be

positive. The provision of NGA services by creating a high quality, high capacity infrastructure has a pro-competitive impact, as it allows several network operators to use the subsidised infrastructure and compete on services to the end-user. The increase in network capacity is expected to stimulate market entry by service providers and the provision of a greater variety of services. Access of competing operators is ensured by requiring open access to the subsidised network on equal and non-discriminatory terms. The risk of crowding out private investments and the negative effects of the measure are expected to be limited. There does not appear to be any significant negative spill-over for other Member States. Accordingly, the measure is designed in a way that does not distort competition or adversely affect trading conditions to an extent contrary to the common interest measure and is in line with the objectives of Article 107(3)(c) TFEU.

(238) As regards reduced access tenders under cascading procurements, the Commission recalls that the notification is currently incomplete in respect of the leased lines exception.

CONCLUSION

- (239) The Commission concludes that, insofar open access tenders are concerned, the notified measure meet the compatibility criteria set out in the Broadband Guidelines, hence the aid involved in the notified measure is compatible with Article 107(3)(c) TFEU.
- (240) The Commission cannot take at this stage a position concerning the measure if implemented via reduced access tenders under cascading procurements, since the notification is currently incomplete in that respect (see recital 217 above). Once the leased lines review described in recital 77 is finalised, and a final report is notified to the Commission, the Commission will take a position in relation to the implementation of the notified measure via reduced access tenders.

6. DECISION

On the basis of the foregoing assessment, the Commission has accordingly decided to:

• consider the measure "National Broadband Scheme for the UK 2016-2020 (2016 BDUK)" compatible with Article 107(3)(c) TFEU insofar as implemented via open access tenders.

The Commission reminds the UK authorities of the requirement to submit annual reports on the application of the aid measure and to inform the Commission pursuant to Article 108(3) TFEU of all plans to amend/extend this measure or the evaluation plan. The Commission also reminds the UK authorities that the evaluation report must be submitted by December 2020 at the latest.

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.

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

European Commission Directorate-General for Competition For the attention of the State Aid Registry 1049 Bruxelles/Brussel BELGIQUE/BELGIË Fax No: +32 2 29 61242

Yours faithfully, For the Commission

Margrethe VESTAGER
Member of the Commission

CERTIFIED COPY For the Secretary-General,

Jordi AYET PUIGARNAU
Director of the Registry
EUROPEAN COMMISSION