Digital Scotland – Reaching 100% Programme

Public Consultation

Scottish Government
Riaghaltas na h-Alba
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PUBLIC CONSULTATION

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New procurement(s) to further extend coverage of Next Generation Access (NGA) Broadband as far as possible as part of the Scottish Government's commitment to deliver superfast broadband access to 100% of premises in Scotland.

1.   **INTRODUCTION AND BACKGROUND**

The Reaching 100% Programme ("**R100**") is striving to extend the availability of NGA broadband infrastructure to meet the Scottish Government's commitment to deliver superfast broadband access to 100% of premises in Scotland by 2021.

To achieve this, Scottish Government intends to procure further coverage of NGA broadband infrastructure (capable of delivering download speeds of at least 30 Mbps) in areas where such broadband is currently unavailable. Geographically, R100 covers the whole of Scotland.

Scottish Government conducted an Open Market Review ("**OMR**") in 2012. The OMR indicated that planned commercial coverage for NGA broadband would reach approximately 66% of premises within the following three years, and would therefore leave the remaining 34% of premises without access to NGA broadband. Following open procurements (one a standalone procurement and one a call-off from the BDUK framework), two contracts for the Digital Scotland Superfast Broadband Programme were awarded by Highlands and Islands Enterprise ("**HIE**") and Scottish Government to BT Group plc in relation to the Highlands and Islands area of Scotland and the Rest of Scotland respectively. These contracts have a total value of approximately £400m between them.

The UK Government subsequently announced a further allocation of funding under Phase 2 of the Broadband Delivery UK (**BDUK**) Superfast Programme, with the aim of increasing NGA coverage across the UK to at least 95% by the end of 2017. Scottish Government was allocated £20.99 m from this funding round, which it committed to matching. Scottish Government has, however, decided to go far beyond this UK coverage target, and commit to extending superfast access to 100% of premises across Scotland by 2021.

As a first phase of this new programme of activity, the Scottish Government now intends to conduct a further open procurement in respect of the remaining areas without NGA broadband infrastructure (known as "**white NGA**"), which comprises around 282,801 premises.

BDUK received approval on 26 May 2016 from the European Commission on its new National Broadband Scheme for the United Kingdom (the '**2016 NBS**'). Scottish Government intends to conduct these further procurements under the 2016 NBS.

2. MARKET ENGAGEMENT AND ANALYSIS OF EXISTING COVERAGE

In preparation for these procurements, Scottish Government conducted an new OMR between 30 November 2016 and 31 January 2017 to establish existing and planned (within the next 3 years) coverage of broadband infrastructure across Scotland. This included both commercial coverage by existing and prospective NGA broadband infrastructure providers and coverage procured under the Scottish Government and HIE's existing contracts with BT Group plc.

Scottish Government contacted all known broadband infrastructure operators within Scotland and other providers known to have (or potentially having) plans to deploy new networks across the UK with a formal request for information. The OMR was also publicised through the Scottish Government website. Operators were requested to provide information on their existing and planned NGA broadband infrastructure (capable of delivering download speeds of at least 30 Mbps), and to provide detail of their coverage at a premise level so as to enable greater granularity of mapping.

This information, together with Scottish Government's own data sources, has been used to define the proposed intervention area for the forthcoming procurements.

This public consultation sets out that proposed intervention area, so as to enable all interested stakeholders (including the public, businesses, internet service providers and broadband infrastructure operators) to comment on the proposals. In particular, this provides an opportunity for broadband infrastructure operators to review Scottish Government's mapping to ensure that it correctly represents the information provided by them in the course of the OMR.

All responses to the public consultation will be carefully considered and where necessary will be incorporated into the final map of the intervention area. The final intervention area maps and a summary report confirming details of the changes made to the proposed intervention area will be published on the Scottish Government website shortly after the close of the consultation period. Where responses to the consultation are received, Scottish Government will respond to these and provide an explanation of how the information submitted has been treated. The finalised intervention area will then be submitted to BDUK's National Competence Centre ("**NCC**") for approval against the State aid Framework.

3. STATE AID FRAMEWORK AND RULES

This section provides a brief introduction to the State aid Framework for the purpose of informing responses to the public consultation. Respondents may

wish to obtain their own professional/legal advice on the application of the State aid Framework and rules that relate to this proposal.

The European Commission has published '*EU Guidelines for the application of State aid rules in relation to the rapid deployment of broadband networks*' (2013/C 25/01'.[1]These guidelines summarise the principles of the Commission's policy in applying the State aid rules of the Treaty to measures that support the deployment of broadband networks, and seek to ensure that State aid schemes for broadband are well-designed so that they target market failures and minimise negative effects on competition.

The guidelines require public interventions to be targeted so as to limit the risk of crowding out private investments, of altering commercial investment incentives and ultimately of distorting competition.

Planned public interventions can seek State aid approval directly from the Commission, or (as is the case with this proposal) seek clearance under a national scheme which has been pre-approved by the Commission.

Projects under the 2016 NBS will need to demonstrate their State aid compliance (in accordance with the terms of the scheme) in order to receive clearance from BDUK's National Competence Centre.

The Commission's guidelines distinguish between two types of broadband networks, namely basic broadband and NGA networks.

Basic broadband networks are generally those based on currently widely-deployed technologies such as fixed wired telephony networks (using ADSL/ADSL2+ technologies), non-enhanced cable TV networks (eg DOCSIS 2.0), mobile networks (2G/3G (UMTS)), some fixed wireless access (FWA) networks, and satellite networks.

NGA networks rely wholly or partly on optical elements (optical fibre) and are capable of delivering an enhanced broadband capability compared to existing basic broadband networks. Current qualifying NGA technologies are fibre-based networks (FTTx), advanced upgraded cable networks (DOCSIS 3.0) and certain advanced wireless access networks capable of delivering reliable high speeds.

Guidance on the characteristics of qualifying NGA technologies is available from BDUK.[2]

The Commission's guidelines also require that public intervention should be able to ensure a 'step change' in broadband availability. This is demonstrated by:

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[1] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2013:025:0001:0026.EN.PDF
[2] https://www.gov.uk/government/publications/2016-nbs-tech-guidelines

- Significant new investments in the broadband network;
- The new infrastructure brings significant new capabilities to the market in terms of broadband service availability and capacity, speeds and competition[3];

The 'step change' in broadband availability shall be compared to that of existing as well as concretely planned networks.

The Commission's guidelines also distinguish between geographic areas on the basis of their existing or planned broadband infrastructure:

- 'White' areas are those in which there is no qualifying broadband infrastructure and none is likely to be developed within 3 years;

- 'Grey' areas are those where only one network is present or is to be deployed within the coming 3 years; and

- 'Black' areas are those where at least two networks of different operators exist or will be deployed in the coming 3 years.

This geographic mapping of White/Grey/Black areas is carried out separately in relation to basic broadband and NGA networks. NGA networks are mapped on the basis that, amongst other things, they have substantially higher upload speeds (compared to basic broadband networks)[4] and are able to deliver broadband services at an access (download) speed of more than 30Mbps.

Public intervention can only take place in white NGA areas under the 2016 NBS. White NGA areas are those in which there are no NGA networks and none is likely to be developed within the next 3 years.

4. PROPOSED INTERVENTION

In the absence of premise level data from broadband infrastructure operators Scottish Government has mapped areas as white, grey or black at a postcode level, using the following criteria:

For basic broadband,

- A postcode is turned grey if there is only one broadband infrastructure operator providing basic broadband services (with speeds greater than 2 Mbps) to that postcode.

- A postcode is turned black if there are at least two broadband infrastructure operators providing basic broadband services (with speeds greater than 2Mbps) to that postcode.

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[3] See Footnote 66 of the Commission's Guidelines - this sets out that the subsidised network should be pro-competitive (i.e. allow for effective access at different levels of the infrastructure).
[4] Substantially higher upload speeds means at least a doubling of the maximum upload speed available on current generation access network(s) for given 'up to' packages available on basic broadband networks in the relevant intervention area.

● All other postcodes remain white.

For NGA,

● A postcode is turned grey if there is only one broadband infrastructure operator providing NGA services (with speeds greater than 30Mbps) to that entire postcode.

● A postcode is turned black if there are at least two broadband infrastructure operators providing NGA services (with speeds greater than 30Mbps) to that entire postcode.

● All other postcodes remain white.

In addition, the proposed intervention area includes a number of "under review" areas (coloured blue on the map). These areas have previously been indicated to have planned commercial coverage for NGA broadband (i.e. mapped as grey or black NGA), but those plans have been reported through the OMR as being 'at risk' (or have otherwise been deemed by Scottish Government as being 'at risk') of not being completed. These areas will be subject to continued monitoring and verification of supplier plans within the 3 year period by Scottish Government and in the event that these commercial plans fall away these premises will be mapped as white NGA and form part of the proposed intervention area and eligible for intervention via this aid measure.[5]

The mapping analysis of existing and concretely planned coverage (within the next 3 years) has identified significant remaining 'white NGA' areas. The outcome of the OMR is summarised in terms of NGA White, Grey, Black and 'Under Review' premises below.

	Number of Postcodes	Number of Black Premises	Number of Grey Premises	Number of White Premises	Number of Under Review Premises
White	34988	0	172884	282801	94693
Grey	68770	67741	1241025	0	0
Black	25065	514552	0	0	0
'Under Review'[6]	23327	0	213276	0	247330

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[5] See paragraph 65 of the Commission's guidelines.

[6] The white premises in these postcodes will be subject to monitoring and review as explained above.

Scottish Government intends to procure coverage to target the remaining 'white NGA' areas by conducting a new procurement under the 2016 NBS (and in accordance with the Public Contracts (Scotland) Regulations 2015);

As noted above, if commercial plans fall away in the 'under review' areas then these will be considered as eligible for intervention and considered as 'white NGA' areas.

If it is possible, Scottish Government intends to make coverage information available at a premises level within the identified white postcode areas to bidders to ensure that bids can target those premises without NGA broadband coverage efficiently. This will include information at a premises level received in response to this consultation.

It should be noted that whilst this consultation includes mapping of basic broadband coverage, the procurement will not deploy basic broadband technologies. The intention is to provide bidders with details of all the areas where there is basic broadband coverage so as to ensure, so far as possible, that these areas are only overbuilt by NGA broadband infrastructure where the premises will receive over 30Mbps or at least a doubling of speeds, in accordance with the requirements of the 2016 NBS. Where doubling is not possible, the supplier will be obliged to demonstrate that the design is optimised to limit the overbuild of existing basic broadband networks with speeds that are below 30Mbps.

4.1. New Procurement

Scottish Government commenced extensive market engagement and warming between September 2016 and June 2017 and has issued its outline requirements to enable feedback from potential bidders to be taken into account in the design of the scheme and to understand the capacity and capability of the market.

Scottish Government has also considered the ability of the private sector to deliver the project, available resources, and its own capacity and capability to develop its approach to intervention. It has decided that the project will use an investment gap funding approach to procure an infrastructure provider.

The procurement will be carried out in accordance with the Public Contracts (Scotland) Regulations 2015 and EU Public Procurement Directives. The tender is most likely to utilise the Competitive Procedure with Negotiation and will be conducted in a transparent and non-discriminatory manner, as required by the 2016 NBS.

The procurement will be designed to meet the specific requirements of the 2016 NBS, which recognises the need to optimise the number and quality of bidders, in particular by reducing the hurdles to participation in procurements by smaller suppliers and encouraging collaboration

between larger and smaller operators so that a range of appropriate solutions can be brought forward. This was also a key objective of the market engagement exercise. When the procurement is launched, the white areas are likely to be sub-divided into a number of lots or areas to promote this. However, Scottish Government does not discount the possibility that some or all of these lots may be aggregated if this represents the most economically advantageous approach to meeting the requirements set out in its Invitation to Tender.

Scottish Government's priority will be to ensure that the available public funding is used most effectively by ensuring coverage of premises currently getting relatively slow broadband speeds. However, areas with higher speeds may be targeted, subject to the need to provide a 'step change' in broadband capability (as outlined above). In addition, through Citydeal funding, Scottish Government is seeking to target certain NGA white areas to provide ultra-fast broadband capability with speeds well above 100Mbps and it should be noted that the areas to be targeted with ultra-fast broadband are most likely to be areas with a higher concentration of SMEs and businesses.

A range of public funding sources will be utilised in support of R100 procurement activity – the Scottish Government, UK Government, local authorities (including through City Regional Deals) and the European Union. We anticipate that, in total, £400-600 million may be available for investment via the forthcoming procurement(s).

5. Timescales

This consultation will be open until 05 August 2017.

Once the consultation is closed and Scottish Government has finalised the intervention areas, an OJEU notice will be published via Public Contracts Scotland – Tenders ("**PCS-Tender"**) and the Official Journal of the European Union to allow suppliers to apply for the opportunity to bid to deliver extended NGA broadband coverage during Autumn 2017. The intention is to award a contract during 2018. The related extended deployment plans for broadband infrastructure should begin by 2019.

6. State Aid Public Consultation

The EU Guidelines (at paragraph 78) and the 2016 NBS set out the requirements to hold a public consultation in order to validate the intervention area mapping by allowing all interested stakeholders an opportunity to comment on the planned aid measure.

The purpose of this document is to fulfil those requirements by publishing a description of the proposed aid measure, and seeking feedback from all interested stakeholders. The mapping for basic and NGA broadband are shown in the attached maps.

The attached map of the NGA broadband Intervention Areas relies on the definitions of white, grey and black areas, as set out in the EU Guidelines (and as summarised above). Scottish Government and CBS will only target the areas identified as White on the map. However, if the areas of commercial coverage currently identified as 'Under Review' fall away then these areas could potentially be added to the contract intervention area.

This State aid public consultation and the proposed NGA broadband Intervention Area maps are available to all stakeholders on the Scottish Government website and will also be available via BDUK's website at BDUK Table of local broadband projects.

7. Responding to this State Aid Public Consultation

Scottish Government is requesting information and supporting evidence in relation to basic and NGA broadband infrastructure within the project area and wish to hear from all relevant stakeholders (including residents, businesses as well as broadband infrastructure operators), particularly in relation to areas to be targeted as part of the NGA intervention area at Annex A.

For the avoidance of doubt, there is no need to respond to this public consultation if you have no comment to make.

For residents and businesses, where this relates to the ability to receive an NGA service, any information provided in response to this State Aid public consultation should as a minimum include (but need not be limited to) the address of the property or area that the submission relates to and the nature of the concern.

If the response is from an infrastructure provider and comments on the white, grey and/or black or under review classifications within the attached maps or data, or on the wholesale products to be offered via the subsidised network, then the submission should also include the specific information set out in Section 8.

For all submissions, Scottish Government would be grateful if you would contact Scottish Government to register your intention to submit a response and could confirm in your submission the following:

- Your organisation's name (if applicable)
- Your organisation's address (if applicable)
- Your name
- Position
- Contact telephone number
- Email Address

Scottish Government will then arrange access to the Response Template (or subset thereof if you are reporting on a specific area).

Scottish Government also requests confirmation from an authorised signatory that the information provided is suitably accurate and up to date.

Please send your responses no later than 05 August 2017 to R100@gov.scot

Please note that the data you provide in your response will be treated as commercially confidential to your organisation. However, it may be necessary to share/some all of your response data with our professional advisers and/or DCMS/BDUK, Ofcom, the National Competence Centre and the European Commission in the course of seeking State aid approval.

It should also be noted that it is a State aid requirement to use this information to produce State aid maps to define white, grey and black areas for basic and NGA broadband. However, the published maps will show the aggregated White/Grey/Black NGA and Basic Broadband areas, not the data provided on a per-operator basis. The final maps that will be used for procurement purposes will be published shortly after the conclusion of this State aid public consultation and once approved by the National Competence Centre.

If you have any questions about any of the above, please contact the Scottish Government by email as above.

8. Information Requested

This section specifies the information you are requested to provide in response to this State aid public consultation in relation to the presence of broadband infrastructure.

Scottish Government is requesting information on, and supporting evidence for, any current or planned (within the next 3 years) investment in broadband infrastructure in Scotland, where this may not be already included within the proposed NGA and Basic broadband intervention area maps attached.

For any current or planned coverage not included within the proposed State aid intervention areas shown on the attached map, Scottish Government is requesting information at premise level, using the template issued by Scottish upon request to show existing or planned coverage by your broadband infrastructure investment. By 'covered' (or 'passed') Scottish Government means that fixed network infrastructure is or will be available to the premises, potentially subject to a final drop connection, or that the premises are able to receive a suitable quality radio signal over the air interface, potentially subject to the installation of a suitable antenna.

Any information provided in response to this State aid public consultation should include, but need not be limited to:

- Detailed maps for NGA broadband showing existing and planned coverage, for at least the next 3 years.
- Details of premises covered or passed that fixed network infrastructure is or will be available to the premises within the next 3 years, potentially subject to a final drop connection, or that the premises are able to receive a suitable quality radio signal over the air interface, potentially subject to the installation of a suitable antenna.
- A detailed description of the technology solution(s) deployed (or to be deployed) in your broadband infrastructure, demonstrating how they meet the minimum standards as set out in the BDUK NGA Technology Guidelines.
- A description of the services/products currently offered, and separately those services/products to be offered within the next 3 years.
- Installation, annual/monthly subscription, and additional volume or per-service tariffs for those services/products (identifying whether such tariffs are inclusive or exclusive of VAT).
- Upload and download speeds typically experienced by end-users, and how these may vary by factors such as distance, increased take-up or demand, contention, etc.
- Appropriate indicators of the quality of services (e.g. contention ratios, bandwidth allocation per user, etc), including any characteristics (e.g. latency, jitter) that are required to support advanced services such as video conferencing or HD video streaming.
- Evidence to substantiate actual or planned coverage claims, including business cases and evidence of available funding to enable plans to be fulfilled.
- Details and planned timing of roll-out of any future investments, including further investments required to cope with future increases in take-up or demand.

Please supplement the required information above with any supporting evidence as you consider appropriate (e.g. links to public websites).

Scottish Government would also be interested to hear from operators their views as to the types of wholesale access products they would like to see offered on any newly created subsidised NGA network infrastructure. This information may inform the intervention design. Please note that we are not obliged to include these products in the invitation to tender (unless already required under any State aid Decision)[7].

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[7] Operators will still be able to request new forms of access products on the subsidised NGA network infrastructure through the formal general access provisions under the terms of a future State aid Decision.
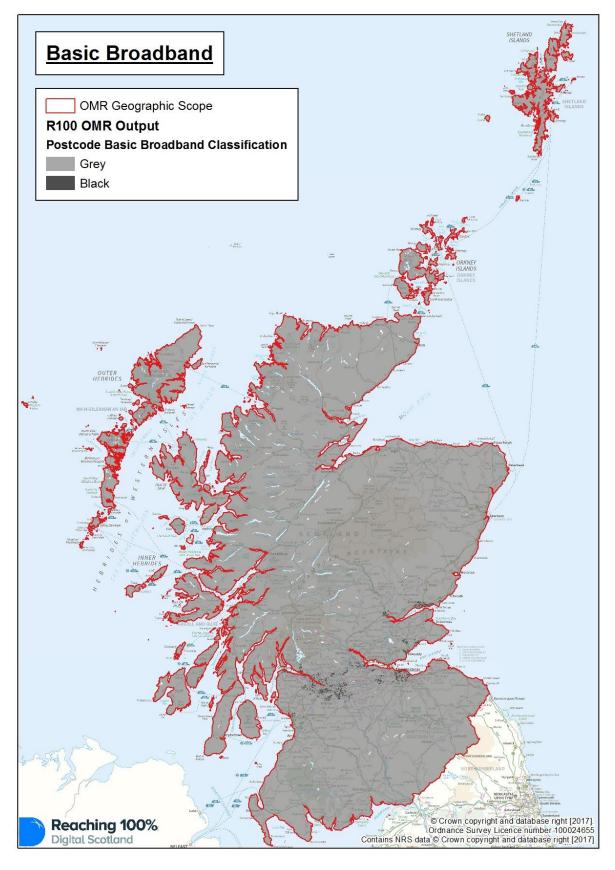
9. Next Steps

Following any responses received to this State Aid public consultation by the closing date of 05 August 2017, Scottish Government plans to publish the final Intervention Area maps shortly after the close of the consultation period.
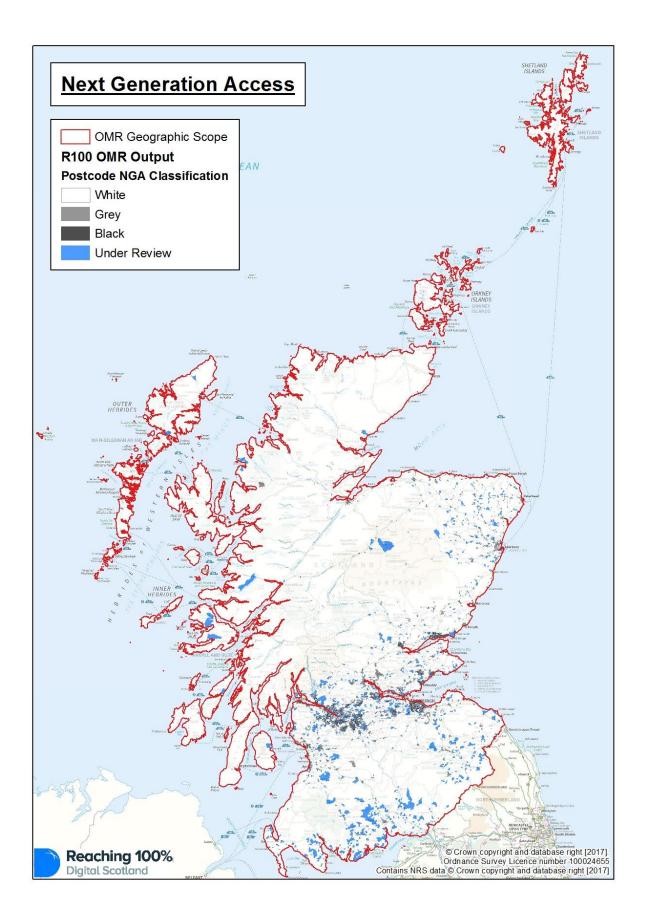
This will be followed by the publication of the OJEU on PCS-Tender to Suppliers to bid for the opportunity to fulfil a new contract to deliver the extended coverage.

Information about the R100 Programme can be found in 'A digital strategy for Scotland (2017)' at http://www.gov.scot/Publications/2017/03/7843 .

Annex A

NGA and Basic Broadband Maps

Next Generation Access

Legend:

OMR Geographic Scope

R100 OMR Output

Postcode NGA Classification

White

Grey

Black

Under Review

SHETLAND ISLANDS

ORKNEY ISLANDS

OUTER HEBRIDES

NA H-EILEANAN AN IAR

INNER HEBRIDES

SCOTLAND

GRAMPIAN MOUNTAINS

NORTHUMBERLAND

Reaching 100%
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