Planned Network Deployments 2024 – Methodology Annex

This annex explains our approach to obtaining and analysing information from Communications Providers (CPs) for the purposes of our reporting on planned network deployments supporting very high speed broadband services in the UK.

Fixed Networks

Data collection

- For the purposes of preparing this report we requested information on the planned network deployments to support very high speed broadband services from CPs from whom we collect information on existing fixed network coverage as part of our Connected Nations reporting.[1]

- Specifically, we requested CPs to provide information, as of May 2024, on all properties which they plan to cover with a new Very High Capacity Network (VHCN) (as defined under section 4(12A) of the 2003 Act) in the next three years.

- The report only focuses on CPs' deployment plans. We are aware that public authorities such as devolved administrations may have their own aspirations and plans to support network build which we are not required to cover and are therefore not included in this report. We expect that where such public authorities' aspirations or plans result in network deployment plans by CPs going forward, these will be captured in future reports.

- Although the plans provided to us are all based on the deployment of full-fibre technology, our report relates to the provision of VHCNs, so we include, where relevant, the existing gigabit-capable networks that use alternative technologies (for example, cable broadband networks).

- There are some other aspects to be noted concerning the data covered by this report on planned network deployments of VHCNs in the UK:
    - In total, we received data for over 26 million properties in the UK.
    - In some cases, particularly for areas of new housing developments, individual property information was not available, so wider postcode-level information has been provided on which we have based this report.
    - In other cases, individual properties may be targeted for coverage by more than one CP, but over different timescales or with different levels of certainty (confidence).

[1] We collect planned network deployment information of CPs from whom we collect current network coverage information as part of our Connected Nations reporting. Other CPs may have plans to deploy networks but have not been included in our information gathering exercise.

- Some CPs also provided us with their plans beyond our requested 3-year timeframe. To avoid inconsistencies with data from CPs who did not provide such additional information, our reported findings do not take account of any of the responses going beyond our requested 3-year timeframe.

Planned coverage reporting

- To determine the anticipated full-fibre and gigabit-capable coverage over the next three years, we combine the stated deployment plans with the existing full-fibre and gigabit-capable coverage data collected for our Connected Nations Spring 2024 update.[2] This data had a reference date of 1 January 2024.

- Therefore, there may be properties that have been covered by gigabit-capable networks in the intervening period between our Spring Update and the collection date of planned deployments (i.e. between January and May 2024).

- We asked CPs to confirm both the financial and planning status of their planned network deployments. Specifically, we asked whether the plans had reached a design stage of 'Low Level Design complete' and whether funding had been committed for the plans.[3]

- We consider plans to be of 'High Confidence' if they have reached the Low Level Design stage and funding has been committed. We report on anticipated coverage over the next three years for both: (i) across all plans (including plans at all planning stages and funding stages) and (ii) for High Confidence plans only.

- All planned and existing coverage is reported against the 'premise base' described below. We determined our 'premise base', i.e., the properties that form the basis for our analysis, in the same way as for our Connected Nations reports on existing coverage.

- The total number of properties in scope is 32.1 million, of which 30.1 million are residential. Of the latter, 25.8 million are classified as urban and 4.3 million as rural.

Calculating the 'premise base'

- We use the Ordnance Survey AddressBase® Premium and Islands products[4] to determine the base dataset used to assess broadband coverage for residential and commercial premises.

- For each Connected Nations update we re-calculate the premise base, using the release closest to the reference date of the collected information. This report uses Epoch 109, which was released in April 2024.[5]

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[2] Connected Nations update: Spring 2024

[3] These criteria were chosen to align with the classifications and criteria set out in the BDUK's National Rolling Open Market Review (NROMR) National Rolling Open Market Review September 2023 Request For Information - GOV.UK (www.gov.uk).

[4] https://www.ordnancesurvey.co.uk/products/addressbase-premium and https://www.ordnancesurvey.co.uk/products/addressbase-islands

[5] https://www.ordnancesurvey.co.uk/products/addressbase-epoch-dates

- The OS AddressBase® data is combined with additional geographical classifications from the ONS National Statistics Postcode Lookup table for February 2024[6] and Urban and Rural categories derived from the Locale classification.[7]

- Locale is a third-party data source where each census output area is assigned to one of seven Locale Groups. We assign each premise to a census output area based on its postcode and then assign the Locale classification to either Urban or Rural based on the following:
    - Urban: Codes A to E, where codes A to C relate to settlements with populations over 10,000 and codes D and E relate to settlements with populations over 2,000.
    - Rural: Codes F and G, which relate to settlements with populations under 2,000.
- For further details on our approach to identifying the 'premise base' and our approach to address matching, please see the Methodology Annex to our Connected Nations 2023 report.[8]

Fixed Wireless Access

- Fixed Wireless Access services (FWA) can be provided on a mobile network by Mobile Network Operators (MNOs) or on a dedicated wireless network by Wireless Internet Service Providers (WISPs).

- Where FWA services are available on mobile networks, the capacity is shared with mobile users.

- Our analysis of FWA coverage uses planned deployment data from three MNOs and two WISPs.

- From both types of FWA operators, we collected the build plans over the next three years (as of May 2024) to extend or upgrade any part of their network, so as to provide a download speed of at least 100 Mbit/s.

- For wireless transmission and operation, it can be very difficult to know whether a service will achieve 100 Mbit/s to a particular property. Early discussions revealed that no operators were planning to deploy services which would guarantee such a service. Consequently, we collected information on future planned masts that would be supported by 1 Gbit/s or greater backhaul service (either fibre or radio). We deemed these masts to be VHCN-Ready in that only the final antenna supporting any 100 Mbit/s service would be needed to attain that level of service.

- We asked for the site identity and location of each new planned mast supporting such a high level of backhaul along with the anticipated timescales for deployment.

[6] https://www.ons.gov.uk/methodology/geography/geographicalproducts/postcodeproducts
[7] https://www.bluewavegeographics.com/images/LOCALE_Classification.pdf
[8] https://www.ofcom.org.uk/phones-and-broadband/coverage-and-speeds/connected-nations-2023/

- For the reasons above, individual property address matching was not undertaken, and we report solely on the location of the relevant masts for the purposes of future FWA network deployment.