

Methodology for Geographic Overlap Analysis

11 May 2022

In the response to the remedies working paper, CRA carried out a local overlap analysis (“**Geographic Overlap Analysis**”) to identify the Cellnex sites that geographically overlap with the CK Hutchison Sites (“**Overlap Sites**”). This Annex summarises the methodology used to identify these sites below. Once the location of the Streetworks sites that are expected to be built within the catchment areas referred to below and for which a location was not yet identified as at 4 February 2022 (“**Unidentified Streetworks Sites**”) is determined, CRA will apply the same methodology that was applied for the purposes of the Geographic Overlap Analysis to identify any additional Cellnex sites that geographically overlap with the Unidentified Streetworks Sites (“**Unidentified Streetworks Overlap Sites**”).

To conduct the Geographic Overlap Analysis and identify the Overlap Sites, CRA obtained a list of the locations of all [REDACTED] Cellnex sites and considered this against a list of the locations of the CK Hutchison Sites comprising the full list of [REDACTED] MBNL Sites, the [REDACTED], and the [REDACTED] Unilateral Sites (comprised of [REDACTED] UKB Sites and [REDACTED] Streetworks Sites, which were either already developed or where the location for the development had been identified by 4 February 2022), for a total of [REDACTED] sites. Using data on population density from the ONS 2011 census,¹ the Cellnex sites were assigned into one of the following categories based on the postcode closest to their location: Urban, Suburban, and Rural.²

The catchment distances applied for the purposes of the Geographic Overlap Analysis were based on information from 3UK on the catchments that 3UK uses internally to determine whether an existing site can be used as an alternative for another existing site. In the normal course of their business, [REDACTED].³ CRA considered this gave potential search distances of [REDACTED] in urban areas, [REDACTED] in suburban areas and on average [REDACTED] in rural areas, and therefore ran the Geographic Overlap Analysis on the basis of these distances for catchments. Excluding Unidentified Streetworks Sites, CRA's Geographic Overlap Analysis identified [REDACTED] Overlap Sites.

Once the location of the Unidentified Streetworks Sites is determined, the Unidentified Streetworks Overlap Sites will be identified using the location of the Unidentified Streetworks Sites and the methodology that was applied for the purposes of the Geographic Overlap Analysis (as set out above).

1 See <https://geoportal.statistics.gov.uk/datasets/ons::ons-postcode-directory-august-2021/about>.

2 For **England and Wales**, the ONS area classifications were grouped as follows: Urban consists of *RUC2011* codes "A1" and "B1"; Suburban consists of "C1" and "C2"; Rural consists of "D1", "E1" and "D2", "F1", "E2" and "F2".

For **Scotland**, which has different ONS area classifications, the groupings were as follows: Urban consists of *8-fold Urban Rural Classification* code "1"; Suburban consists of "2"; Rural consists of "3", "4", "5", "6", "7" and "8".

For more details on the ONS classifications, see

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/239478/RUC11user_guide_28_Aug.pdf (England and Wales) and

<https://www.webarchive.org.uk/wayback/archive/20150218121113/http://www.gov.scot/Topics/Statistics/About/Methodology/UrbanRuralClassification> (Scotland).

For **Northern Ireland**, there is no ONS urban/rural classification. However, to be conservative, these sites are treated as rural i.e., we assume that they have wider catchments than sites in urban and suburban areas although some sites in Northern Ireland may be in more urban locations.

3 [REDACTED].