

Appendix A: Terms of reference and conduct of the inquiry

Terms of reference

1. In exercise of its duty under section 33(1) of the Enterprise Act 2002 (the **Act**) the Competition and Markets Authority (**CMA**) believes that it is or may be the case that:

(a) arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation, in that:

- (i) enterprises carried on by Cellnex UK Limited, a subsidiary of Cellnex Telecom S.A., will cease to be distinct from the following enterprises comprising certain passive infrastructure assets in the UK (the **Transaction Sites**) which CK Hutchison Holdings Limited and its subsidiaries (the **CK Hutchison group**) holds or has an interest in:

1. the approximately [X] passive infrastructure sites and related assets in the UK, including 2,600 sites to host Hutchison 3G UK Limited (**3UK**) active wireless telecommunications equipment that are under construction, held by CK Hutchison Networks (UK) Limited;
2. the approximately 7,500 passive infrastructure sites used by 3UK that sit within the Mobile Broadband Network Limited Joint Venture (**MBNL JV**); and
3. the passive infrastructure sites (subject to a minimum of 3,000 and a maximum of approximately 3,750) and related assets that 3UK will receive upon dissolution of the MBNL JV.

(ii) the condition specified in section 23(1)(b) of the Act is satisfied; and

- (b) the creation of that situation may be expected to result in a substantial lessening of competition within a market or markets in the United Kingdom for goods or services, including in the supply of access to developed macro sites and ancillary services to wireless communication providers in the UK.

2. Therefore, in exercise of its duty under section 33(1) of the Act, the CMA hereby makes a reference to its chair for the constitution of a group under Schedule 4 to the Enterprise and Regulatory Reform Act 2013 in order that the group may investigate and report, within a period ending on 10 January 2022, on the following questions in accordance with section 36(1) of the Act:
- (a) whether arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation; and
 - (b) if so, whether the creation of that situation may be expected to result in a substantial lessening of competition within any market or markets in the United Kingdom for goods or services.

Mike Walker
Chief Economic Adviser
Competition and Markets Authority
27 July 2021

Conduct of the inquiry

1. On 27 July 2021, the CMA [referred](#) the anticipated acquisition by Cellnex UK Limited of the passive infrastructure assets of CK Hutchison Networks Europe Investments S.À R.L (the Parties) for an in-depth Phase 2 inquiry.
2. We published the biographies of the members of the group conducting the inquiry on the inquiry [webpage](#) on 27 July 2021 and the relevant administrative timetable was published on the inquiry [webpage](#) on 19 August 2021.
3. We invited interested parties to comment on the anticipated acquisition. We sent detailed requests for information to the Parties' competitors (including MNOs and WIPs) and customers, and a number of these also provided us with further information by video conference calls as well as by responding to supplementary written questions. Evidence submitted to the CMA during Phase 1 was also considered in Phase 2.
4. We received written evidence from the Parties in the form of submissions and responses to information requests. The Parties' initial submission was published on the inquiry [webpage](#) on 17 September 2021.
5. On 19 August 2021, the CMA published an [Issues Statement](#) on the inquiry webpage setting out the areas on which the Phase 2 inquiry would focus. A non-confidential version of the Parties' response, along with BT's response, were published on the inquiry [webpage](#) on 17 and 22 September 2021.
6. On 8 and 17 September 2021 members of the inquiry group, accompanied by CMA staff, attended virtual 'site visits' with the Parties and their advisers held via video conference. These arrangements were made because of the COVID-19 pandemic and the CMA's associated guidelines.
7. During our inquiry, we sent the Parties a number of working papers for comment. We also provided the Parties and third parties with extracts from our working papers for comments on accuracy and confidentiality. The Parties were also sent an annotated issues statement, which outlined our emerging thinking to date prior to their respective main party hearings, which were held separately with each Party on 21 October 2021.
8. A non-confidential version of our provisional findings report has been published on the inquiry [webpage](#). Interested parties are invited to comment on this document. As we have provisionally concluded that the Merger may be

expected to result in an SLC, a notice of possible remedies has also been published on the inquiry [webpage](#). Interested parties are invited to comment on both of these documents.

9. On the same date of the announcement of the provisional findings report, we have extended the statutory timetable for 8 weeks. The deadline for the CMA's final decision following this extension is 7 March 2022.
10. We would like to thank all those who have assisted in our inquiry so far.

Appendix B: Cost of developed macro sites

1. This appendix sets out evidence from Cellnex on the cost of upgrading an existing site on which the customer is already present for additional equipment, the cost of coming onto an existing Cellnex site on which the customer is not present, versus the cost of customer self-supply, versus the cost of a build-to-suit site from a WIP.
2. Cellnex's costs show self-supply as cheaper than using a WIP by [X] over the 20-year timeframe, using a discount rate of [X]¹. [X].
3. Cellnex's costs show upgrading a site as cheaper than self-supply of a new site by [X] over the ten-year timeframe, using a discount rate of [X]. This is due to substantially [X].
 - (a) The 20-year timeframe shows upgrading as more expensive than self-supply by [X] (and slightly more expensive than using WIP BTS). [X].
4. For a comparison of Cellnex's costs of upgrading a site versus re-building an existing site (as opposed to building a new site in a new location), Cellnex estimates that the cost to upgrade to host additional tenants, based on recent experience in the upgrading of sites [X], would be between [X] and the cost to replace an existing site with an upgraded structure would be between [X].

¹ This [X]% discount rate has been used by Cellnex. We have conducted sensitivity analysis of this in Appendix D

Appendix C: Relevant Merger Situation

Rights Cellnex is acquiring in relation to the MBNL Sites

1. CK Hutchison and Cellnex have agreed several short form agreements (setting out the key terms of the prospective agreements) that will be drafted in full and signed on completion of the Merger. The following agreements are relevant to the assessment of material influence:
 - (a) The short form [REDACTED];
 - (b) The short form [REDACTED]; and
 - (c) The [REDACTED].

The [REDACTED]

2. The [REDACTED] is an agreement between 3UK and Cellnex.¹ Under the [REDACTED], from completion of the Merger until the dissolution of MBNL, 3UK will pass the economic benefit of the interests to which it is entitled in respect of the passive infrastructure on the MBNL Sites and related assets to Cellnex. Cellnex will bear the costs related to these interests.²
3. The [REDACTED] identifies the MBNL Sites, on which the economic benefit to which Cellnex is entitled is based, as:
 - (a) Consisting of (i) the [REDACTED] sites (or such other number agreed in writing) that either 3UK or BT/EE own solely or jointly pursuant to MBNL, or sites that 3UK is granted the right to use, and (ii) [REDACTED];³ and
 - (b) Excluding, amongst other things, (i) the [REDACTED] sites supplied to MBNL by third parties (ii) sites acquired or built by 3UK and/or BT/EE after the [REDACTED] comes into effect, and (iii) any MBNL active infrastructure (the Excluded Activities).⁴
4. The [REDACTED] also sets out the mechanism, following the dissolution of MBNL, for the transfer of legal title to the Transfer Sites from 3UK to Cellnex subject to a minimum of 3,000 sites and a maximum of half of the MBNL Sites.⁵ In relation to the Transfer Sites:

¹ The agreement is with Cellnex's subsidiary, OnTower, referred to as Cellnex in this document.

² [REDACTED], Schedule 1, paragraph 1. Paragraph 6 defines the related assets as including, for example, [REDACTED].

³ [REDACTED], Schedule 1, paragraph 5 and 8.

⁴ [REDACTED], Schedule 1, paragraph 5. In addition, the following are excluded from the MBNL Sites: [REDACTED].

⁵ [REDACTED], Schedule 1, paragraphs 35, 38 40 and 41.

- (a) When 3UK is selecting which 3UK sites are to be Transfer Sites following dissolution of MBNL, 3UK is required to (i) [REDACTED] to as closely as reasonably possible represent half of the MBNL Sites, (ii) [REDACTED], and (iii) [REDACTED];⁶ and
- (b) [REDACTED].⁷ The Parties submitted that the purpose of this provision is to ensure that 3UK's access to the Transfer Sites is maintained on terms that are acceptable to 3UK following dissolution of MBNL.
5. The [REDACTED] identifies the consideration payable by Cellnex on completion of the Merger in respect of both the economic benefit over the MBNL Sites and payment for the Transfer Sites as approximately [REDACTED].⁸ The [REDACTED] also sets out the payment mechanisms for Cellnex to pay 3UK the costs related to the MBNL Sites during the period between completion of the Merger and transfer of legal title over the Transfer Sites.⁹
6. The [REDACTED] is supported by the short form [REDACTED] that establishes the mechanism for 3UK's continued access to the MBNL Sites in return for a payment of a [REDACTED] service fee to Cellnex [REDACTED].¹⁰
7. The Parties submitted that the [REDACTED] and [REDACTED] have been designed to replicate the income Cellnex would have received and the costs it would have borne had Cellnex owned (and provided 3UK with access to) the MBNL Sites from completion of the Merger.

The [REDACTED]

8. The [REDACTED] is an agreement between Hutchison 3G UK Holdings Limited (3UK Holdings) and Cellnex. The [REDACTED] sets out the protections for Cellnex, and obligations on 3UK Holdings, in relation to the economic benefit Cellnex will acquire further to the EEBA.
9. The [REDACTED] provides that 3UK Holdings will [REDACTED]:
- (a) [REDACTED].¹¹
- (b) [REDACTED].

⁶ [REDACTED], Schedule 1, paragraph 42.

⁷ [REDACTED], Schedule 1, paragraphs 35.

⁸ [REDACTED], Schedule 1, paragraph 4.

⁹ [REDACTED], Schedule 1, paragraphs 11 to 27.

¹⁰ [REDACTED], Schedule 1, paragraph 1, 4 and 6. The [REDACTED] provides for Cellnex to supply 3UK with access to the MBNL Sites [REDACTED].

¹¹ [REDACTED], Schedule 1, paragraph 6.

- (i) [REDACTED].
 - (ii) [REDACTED].¹²
 - (c) [REDACTED].¹³
 - (d) [REDACTED].¹⁴
10. The [REDACTED] also provides for the establishment of a Governance Board between Cellnex and 3UK Holdings.¹⁵ The Governance Board will meet [REDACTED].
11. The Governance Board will:
- (a) Prepare and present an annual budget for the MBNL Sites. [REDACTED].
 - (b) Consider matters that relate to [REDACTED].¹⁶
12. In relation to the dissolution of MBNL, the [REDACTED] provides that [REDACTED]:
- (a) [REDACTED].¹⁷
 - (b) [REDACTED].
13. The [REDACTED] places the following limitations on Cellnex's rights:
- (a) [REDACTED];¹⁸ and
 - (b) [REDACTED],¹⁹ [REDACTED].²⁰

The [REDACTED]

14. The [REDACTED] is an agreement between 3UK and Cellnex for the supply to 3UK of the Unilateral Sites in return for a fee.²¹ [REDACTED].²² The [REDACTED] term of the [REDACTED] is [REDACTED] and, [REDACTED].²³ [REDACTED].

¹² [REDACTED], Schedule 1, paragraph 10.

¹³ [REDACTED], Schedule 1, paragraph 9.

¹⁴ [REDACTED], Schedule 1, paragraph 7.

¹⁵ [REDACTED], Schedule 1, paragraph 10.

¹⁶ [REDACTED], Schedule 1, paragraph 10. The budget will have the following metrics: [REDACTED].

¹⁷ [REDACTED], Schedule 1, paragraph 13.

¹⁸ [REDACTED], Schedule 1, paragraph 1.

¹⁹ Cellnex's rights do not relate to the MBNL JV as a whole. The following are excluded: (i) the sites that are provided to the MBNL JV by third parties (including by Cellnex); new sites acquired or built after the agreements come into effect; active infrastructure (e.g. for the provision of 3G connectivity); and backhaul (each an "Excluded Activity"). [REDACTED], Schedule 1, paragraph 1.

²⁰ [REDACTED], Schedule 1, paragraph 8.

²¹ [REDACTED], Schedule 4, paragraphs 1.1, 1.2, 1.3, 1.5 and 1.6. 3UK will pay Cellnex a [REDACTED] fee of [REDACTED].

²² [REDACTED], Clause 3.4, 3.5 and Schedule 6.

²³ [REDACTED], Clause 17.

MBNL structure and decision-making

15. The MBNL Sites are a subset of assets that are held by MBNL. Decisions in relation to the MBNL Sites are governed by the MBNL JV decision-making arrangements.
16. MBNL is a JV between 3UK and BT/EE that was established in 2007 with each shareholder holding an equal (50%) interest in the JV.²⁴ MBNL's original purpose was to build, run and enhance a shared 3G network for its shareholders.
17. MBNL's day-to-day operational management is determined by [REDACTED].²⁵ Each shareholder is entitled to appoint [REDACTED] and MBNL board decisions are taken by [REDACTED] resolution.²⁶ Therefore, 3UK and BT/EE [REDACTED].
18. [REDACTED].²⁷
19. [REDACTED].
20. [REDACTED].²⁸ [REDACTED].²⁹
21. [REDACTED]:
 - (a) [REDACTED].
 - (b) [REDACTED]
 - (c) [REDACTED]
22. [REDACTED]

²⁴ [REDACTED], clauses 2.2.

²⁵ [REDACTED], Schedule 7, clause 6.1.

²⁶ [REDACTED], Schedule 7, clause 8.1.

²⁷ [REDACTED], clause 5.17 and Schedule 2.

²⁸ [REDACTED], Schedule 6, part 1.

²⁹ [REDACTED], Schedule 6, part 2.

Appendix D: Overview of the transaction process

Table 1: Timeline of the transaction

Date	Event
March 2019	[REDACTED]
1 August 2019	CK Hutchison announces internal reorganisation
September/October 2019	[REDACTED]
January 2020	[REDACTED]
March 2020	[REDACTED]
March 2020	[REDACTED]
24 April 2020	[REDACTED]
April/May 2020	[REDACTED]
7 May 2020	[REDACTED]
May 2020	[REDACTED]
July 2020	[REDACTED]
13 July 2020	[REDACTED]
July 2020	[REDACTED]
July/August 2020	[REDACTED]
22 August 2020	[REDACTED]
September 2020	[REDACTED]
9 October 2020	
16 October 2020	[REDACTED]
	[REDACTED]
12 November 2020	CK Hutchison and Cellnex sign agreement and announce Merger

Sources: CK Hutchison [REDACTED] and [REDACTED]

Appendix E: Shares of supply and bidding analysis

Introduction

1. In this appendix we explain the methodology we have used and the resulting estimates of shares of supply and our analysis of business opportunities competed for in recent years.

Shares of supply

2. The following section sets out our approach to calculating:
 - (a) the shares of supply by stock for the supply of access to developed macro sites in the UK;
 - (b) the shares of supply by flow (ie wins in recent competitive interactions); and
 - (c) the forward-looking shares of supply.
3. We first set out the data we used for our analysis, then discuss the methodology and assumptions we have made, and finally list the results tables.

Data and methodology

4. We collected data on annual revenue,¹ number of sites,² number of tenancies (**PoPs**) from Cellnex and the WIPs active in the UK for each of 2017, 2018, 2019 and 2020. We used this data to calculate historical shares of supply by stock (on the basis of the number of sites, tenancies and revenue suppliers currently have) for all WIPs in the UK active between 2017 and 2020.
5. We also gathered data from Cellnex and the WIPs active in the UK for each of 2017, 2018, 2019 and 2020 on the number of PoPs:³
 - (a) won for developed macro sites (whether through competitive tenders or individual negotiations);
 - (b) won for developed macro sites, excluding renewals;⁴ and

¹ [REDACTED].

² We have included marketing rights only to the extent they are revenues generating for the WIP that holds them.

³ Since CTIL commercialised in January 2021, we have excluded CTIL from historical shares of supply.

⁴ [REDACTED].

- (c) wins for BTS, if applicable (whether through competitive tenders or individual negotiations).
- 6. We used this data to assess the shares of supply by flow (based on each supplier's wins in recent competitive interactions) for the same time period as the shares of supply by stock. We calculated shares of supply by flow, both excluding and including instances where customers come to the end of their contract and decide to renew with their current provider. We also calculated shares of supply by flow, split by existing and BTS sites.
- 7. Finally, we also received estimates of the number of sites WIPs expect to own from Cellnex and other WIPs in the next few years. We used this data to compute the forward-looking shares of supply which show the number of sites which all WIPs, including CTIL, expect to own in 2031. These have been calculated adding the expansion plans to the most current figures for macro sites in their historical data submission for macro sites.⁵

Results

- 8. The following section sets out the results tables for the share of supply analysis:
 - (a) Table 1 shows the shares of supply by stock for the supply for access to developed macro sites in the UK in 2020. These exclude CTIL which was not commercialised at the time.
 - (b) Figure 1 shows the historical trend in WIPs' shares of supply by revenue for each year between 2017 and 2020. The revenues attributed to Cellnex also include Arqiva's revenues.
 - (c) Table 2 sets out the WIPs' shares of supply by flow (ie number of PoPs won in recent competitive interactions), both including and excluding renewals, for the period between 2017 and 2020.
 - (d) Table 3 and Table 4 show the shares of supply by flow for BTS, both including and excluding renewals, over time; and
 - (e) Table 5 sets out the forward-looking shares of supply by number of sites in 2031, including CTIL.

⁵ Third parties' plans are discussed in Appendix F.

Table 1: Shares of supply by stock for the supply of access to developed macro sites in the UK (2020)

Competitor	Number of sites	Share	Annual Revenues (£m)	Share	PoPs	Share
Cellnex	[REDACTED]	[80-90]%	[REDACTED]	[90-100]%	[REDACTED]	[80-90]%
WIG	[REDACTED]	[5-10]%	[REDACTED]	[5-10]%	[REDACTED]	[10-20]%
Shared Access	[REDACTED]	[0-5]%	[REDACTED]	[0-5]%	[REDACTED]	[0-5]%
FreshWave	[REDACTED]	[0-5]%	[REDACTED]	[0-5]%	[REDACTED]	[0-5]%
Britannia Towers	[REDACTED]	[0-5]%	[REDACTED]	[0-5]%	[REDACTED]	[0-5]%
WHP Telecoms	[REDACTED]	[0-5]%	[REDACTED]	[0-5]%	[REDACTED]	[0-5]%
AP Wireless	[REDACTED]	[0-5]%	[REDACTED]	[0-5]%	[REDACTED]	[0-5]%
Total	[REDACTED]	100%		100%		100%

Source: CMA analysis of Cellnex and third parties' data.

Figure 1: Shares of supply by revenue (2017-2020)

[REDACTED]

Source: CMA analysis of Cellnex and third parties' data.

Table 2: Shares of supply by flow by number of PoPs (2017-2020)

[REDACTED]

Source: CMA analysis of Cellnex and third parties' data.

Table 3: Shares of supply by flow for BTS by number of PoPs, including renewals (2017-2020)

Competitor	Incl. renewals Volume	Volume	BTS Share
Cellnex	[REDACTED]	[REDACTED]	[0-5]%
WIG	[REDACTED]	[REDACTED]	[20-30]%
Shared Access	[REDACTED]	[REDACTED]	[0-5]%
WHP Telecoms	[REDACTED]	[REDACTED]	[0-5]%
AP Wireless	[REDACTED]	[REDACTED]	[0-5]%
Britannia Towers	[REDACTED]	[REDACTED]	[30-40]%
FreshWave	[REDACTED]	[REDACTED]	[0-5]%
Total			[0-5]%

Note: We considered BTS deployed between 2017 and 2020

Source: CMA analysis of Cellnex and third parties' data

Table 4: Shares of supply by flow for BTS by number of PoPs, excluding renewals (2017-2020)

<i>Competitor</i>	<i>Excl. renewals Volume</i>	<i>BTS Volume</i>	<i>Share</i>
Cellnex	[REDACTED]	[REDACTED]	[5-10]%
Shared Access	[REDACTED]	[REDACTED]	[0-5]%
WIG	[REDACTED]	[REDACTED]	[30-40]%
WHP Telecoms	[REDACTED]	[REDACTED]	[0-5]%
Britannia Towers	[REDACTED]	[REDACTED]	[30-40]%
AP Wireless	[REDACTED]	[REDACTED]	[0-5]%
FreshWave	[REDACTED]	[REDACTED]	[0-5]%
Total			[5-10]%

Note: We considered BTS deployed between 2017 and 2020

Source: CMA analysis of Cellnex and third parties' data

Table 5: Forward-looking shares of supply by number of sites in (2031)

<i>Competitor</i>	<i>Number of sites</i>	<i>Share</i>
Cellnex	[REDACTED]	[20-30]%
CKH Sites:	[REDACTED]	
a. Unilateral sites	[REDACTED]	[5-10]%
b. Transfer sites	[REDACTED]	[10-20]%
CK Hutchison Assets	[REDACTED]	[10-20]%
<i>Merged Entity</i>	[REDACTED]	[40-50]%
CTIL	[REDACTED]	[40-50]%
FreshWave	[REDACTED]	[0-5]%
WIG	[REDACTED]	[0-5]%
Shared Access	[REDACTED]	[0-5]%
Britannia Towers	[REDACTED]	[0-5]%
WHP Telecoms	[REDACTED]	[0-5]%
AP Wireless	[REDACTED]	[0-5]%
Total		100%

Source: CMA analysis of Cellnex and third parties' data

Bidding analysis

9. We collected data on business opportunities, whether formal tenders or individual negotiations, in which Cellnex took part ('bid') from January 2017 to date. This section first sets out the data we used for our analysis, then discusses our methodology, and finally lists the result tables.

Data received

10. Cellnex provided us with data covering opportunities it (and Arqiva prior to its acquisition by Cellnex) recorded from January 2017 to date.⁶ The data includes the following information, to the extent it was available/recorded by Cellnex and Arqiva:

(a) the name of the customer;

⁶ [REDACTED].

- (b) the customer type (eg MNO, non-MNO, etc.);
- (c) whether it was an existing Cellnex's customer or not;
- (d) the date of the tender;
- (e) the number of sites involved;
- (f) whether the contract was part of SRN or not;
- (g) total contract value;
- (h) contract duration;
- (i) whether Cellnex bid;
- (j) whether Cellnex bid with existing sites or BTS sites;
- (k) whether Cellnex won;
- (l) the winner, if known; and
- (m) whether the tender was for a new customer/contract or a renewal.

Methodology

11. Cellnex told us that [REDACTED]:
 - (a) [REDACTED];
 - (b) [REDACTED].
12. To carry out our analysis, we have categorised the data into the following six groups:
 - (i) [REDACTED];
 - (ii) [REDACTED];⁷
 - (iii) [REDACTED]
 - (iv) [REDACTED];
 - (v) [REDACTED]

⁷ [REDACTED].

(vi) [REDACTED].

(b) [REDACTED].⁸

(c) [REDACTED].⁹

(d) [REDACTED].

13. Table 3, Table 4 and Table 10 show different data on [REDACTED].

Results

14. The following section sets out the result tables for the analysis of Cellnex's bidding data:

(a) Table 6 sets out the outcome of the [REDACTED] opportunities that Cellnex bid for from 2017 to date.

(b) Table 7 shows the outcome of all the [REDACTED] opportunities Cellnex considered across the period (ie including the ones Cellnex did not bid for), also providing the value of these tenders, and the number that were considered with BTS bids by Cellnex

(c) Table 8 sets out the value and the number of opportunities that Cellnex bid for broken down by contract types (ie whether the opportunity was a new contract, a renewal or other);

(d) Table 9 sets out the value and the number of opportunities that Cellnex has considered (ie including the ones Cellnex did not bid for) broken down by type of contract and type of customer (ie MNOs and non-MNO customers); and

(e) Table 10 shows the proportion of opportunities that Cellnex competed for with BTS, both in terms of the number and value, over all the [REDACTED] opportunities Cellnex considered across the period (ie including the ones Cellnex did not bid for).

Table 6: Cellnex bids from January 2017 to date

<i>Outcome for Cellnex</i>	<i>Total tender</i>
Win	[REDACTED]
Loss	[REDACTED]
Abandoned	[REDACTED]
Ongoing	[REDACTED]
Total	[REDACTED]

⁸ [REDACTED].

⁹ [REDACTED].

Source: CMA Analysis of Cellnex's bidding data

Table 7: Value of all Cellnex opportunities since January 2017

<i>Outcome</i>	<i>Tender</i>	<i>Value (£m)</i>	<i>Bids with BTS</i>
Win	[REDACTED]	[REDACTED]	[REDACTED]
Loss	[REDACTED]	[REDACTED]	[REDACTED]
Abandoned	[REDACTED]	[REDACTED]	[REDACTED]
Ongoing	[REDACTED]	[REDACTED]	[REDACTED]
Other	[REDACTED]	[REDACTED]	[REDACTED]
Did not compete	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	[REDACTED]	[REDACTED]

Source: CMA Analysis of Cellnex's bidding data

Table 8: Breakdown by contract type of the opportunities Cellnex bid for

<i>Contract type</i>	<i>Total tender</i>	<i>Value (£m)</i>
Renewal	[REDACTED]	[REDACTED]
New	[REDACTED]	[REDACTED]
Other	[REDACTED]	[REDACTED]
Total	[REDACTED]	[REDACTED]

Source: CMA Analysis of Cellnex's bidding data

Table 9: Breakdown of tenders Cellnex has considered since January 2017 by customer type (MNO vs non-MNO)

<i>Outcome</i>	<i>MNOs</i>		<i>Non-MNO customers</i>	
	<i>Volume</i>	<i>Value (£m)</i>	<i>Volume</i>	<i>Value (£m)</i>
Win	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Loss	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Abandoned	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Ongoing	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Did not complete	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Other	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: CMA Analysis of Cellnex's bidding data

Table 10: Proportion of all Cellnex BTS opportunities from 2017

<i>Outcome</i>	<i>Volume</i>			<i>Value (£m)</i>		
	<i>All</i>	<i>BTS</i>	<i>Share</i>	<i>All</i>	<i>BTS</i>	<i>Share</i>
Win	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Loss	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Abandoned	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Ongoing	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Other	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Did not compete	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: CMA Analysis of Cellnex's bidding data

Appendix F: Third party evidence

1. This appendix sets out a range of evidence from third parties on matters covered in Chapter 7 and Chapter 8.

Our approach

2. We received responses in Phase 1 and Phase 2 of the inquiry from six independent WIPs. We contacted all of the third parties that the Parties have identified as competitors and we engaged with the six suppliers that are currently active in the UK, namely WIG, Shared Access, Britannia Towers, FreshWave, AP Wireless (Radius) and WHP.
3. We received responses from 14 customers, including all of the MNOs and CTIL and ten non-MNO customers. We received responses from four non-MNO customers (Western Power, Network Rail, Aquila, Airwave) during our Phase 1 inquiry and six responses from non-MNO customers (Siae Microelettronica, Bauer Media, DCN Communications, Electricity North West, DRW NX, MLL Telecom) during our Phase 2 inquiry. One other customer explained that it is not a customer of Cellnex but it hosts developed macro sites that are owned by MNOs and Cellnex and another is a supplier to upgrade macro sites and it would be employed by Cellnex or MBNL.
4. These customers together account for more than [REDACTED] of Cellnex's revenues from macro sites.¹
5. In addition, we have been provided with some internal documents from MNOs and WIPs regarding their expansion plans.²
6. In this evidence, third parties provided views on the following topics:
 - (a) parameters of competition;
 - (b) the CK Hutchison Assets if operated independently;
 - (c) capacity expansion on monopole sites;
 - (d) BTS;
 - (e) customer's self-build; and

¹ [REDACTED].

² We received internal documents from [REDACTED].

(f) rival's expansion opportunities and plans.

7. We present the evidence on each of these below.

Parameters of competition

Factors influencing customers' choices

8. We asked Cellnex's customers about the most important factors that influence their choice of supplier of access to developed macro sites. We present the responses below.

MNOs' and MNO JVs' views

9. An MNO told us that the key considerations when choosing a supplier of a macro site may differ on a case by case basis or depending upon other factors such as the number of sites, they are seeking a supplier for. The MNO indicated that, the factors of high importance are (i) asset availability in a specific location, (ii) structure suitability, (iii) price, (iv) delivery and operational access track record, (v) required term length and ability to churn from the site, (vi) the terms of occupation (ie rights to upgrade and share / use equipment) and (vi) if an existing supplier, the size of their geographic estate that they could have access to and the degree of their existing reliance on them as a supplier.
10. Another MNO told us that, in a mature market, one of the most important decisions when deciding whether to use an existing site is the location of that site. The MNO also explained that when it comes to delivering new sites, the main factors it looks for in a supplier are (i) the ability to offer a site 'in the "right" location on time', and (ii) a competitive price point.
11. Another MNO said that [REDACTED]. The MNO added that [REDACTED].

Non-MNOs' views

12. A non-MNO customer, told us that the factors that it considers when choosing a supplier of access to developed macro sites include [REDACTED].
13. Aquila, Western Power, DCN Communications, Bauer Media, [REDACTED] and DRW NX submitted that the factors they consider when choosing a supplier are location, price and accessibility, reliability of the site and the services.

Pricing

14. We asked Cellnex's competitors how they set prices and whether there are any advantages and/or disadvantages in national pricing compared to local pricing. We present the responses below.

Independent WIPs' views

15. A WIP explained that for customers with more than one site and in particular for the largest MNO customers, pricing is typically structured around a national framework. [X] also explained that national pricing means that pricing will not necessarily reflect how busy/attractive a particular location is, how hard/expensive a tower may be to build/ operate or what height/ aperture is being used by the customer. According to [X], the reason to set prices at national level is because this model is preferred by MNOs and reflects their preference to deal with larger portfolios. [X].
16. Another WIP explained that it has national pricing applied on each site so that the MNOs can budget simply using one price, anywhere in UK.
17. Another WIP told us that [X]. [X] further explains that [X]. However, [X]. They also specified that [X].
18. Another WIP said that it is a small WIP so it tends to price by site and customer requirements rather than set prices on a national basis. [X] further explained that its pricing takes into account the local importance of a site, so a high site commands the greatest fee, then suburban and least the rural sites and that it tends to offer lower fees to customers that are committing to a bulk of sites at the same time.
19. Another WIP told us that [X].
20. Another WIP told us that [X].
21. Vodafone told us that, in the UK, providers like CTIL have national rate cards for particular services. Vodafone added that national pricing makes transactions easier without having to enter into negotiations for each individual site.

Importance of suppliers' existing sites and their geographic footprint

22. We asked Cellnex's competitors and customers about the importance of a supplier's existing sites and its geographic footprint to compete. We also asked Cellnex's competitors what are, if any, the benefits of the economies of scale. We present the responses below.

Independent WIPs' views

23. A WIP told us that the number of existing sites in suppliers' portfolios can make a meaningful difference to their ability to capture new business. In particular, the WIP explained that a larger WIP will have the ability to satisfy a significant portion of new demands of the MNO with one strategic engagement and it emphasised that MNOs have a preference for dealing with large suppliers. [X].
24. Another WIP told us that, when customers look to deploy a new site, they first look to existing infrastructure, as given space availability, an existing site is the fastest route to deploying new sites. The WIP added that network operators defer to WIPs with the larger number of existing sites first when choosing a supplier. It also said Cellnex with the 'monopoly' of acquired sites in UK is in a preferred position compared to other WIPs, even if the other WIPs happen to have a better site match for the network real needs.
25. Another WIP said that a WIP with more sites has a significant advantage when it comes to securing large contracts with the MNOs due to their ability to match demand from a pre-existing portfolio. The WIP also added that large WIPs, when negotiating with an MNO, are able to leverage rental re-negotiations to secure these additional sites and lock out competitors. In relation to customer preferences over existing sites, the WIP explained that, in descending order of advantage, customer prefer: (i) an existing site with useable infrastructure; (ii) a site with planning permission but no infrastructure; (iii) a site without planning permission; and (iv) a site to be acquired through negotiation or use of code powers. Thus, a WIP with a substantial portfolio of developed macro sites with a broad geographic reach therefore has a significant advantage over WIPs with access to undeveloped sites.
26. A WIP said that having a large number of existing sites is fundamental and specified that, for existing sites, an extensive site list is essential to get 'in the door' and their sites evaluated or considered for co-location. For new sites, they said that the larger site portfolio directly links to the reliance/leverage the WIP has over the customer.
27. Another WIP told us that multi-site agreements can be negotiated more successfully and customers' demand can be deployed more quickly when WIPs have a large volume of sites.
28. A WIP said that there are significant disadvantages for WIPs without a large network of sites as they are less attractive to MNOs. The WIP also explained that WIPs with less extensive site networks have to offer shorter contract

lengths, much lower prices to customers in order to have any chance of winning a contract and small WIPs are not able to secure “all or nothing” provision. Finally, the WIP said that, as different sites have different construction costs and real estate costs, it is much harder for a WIP with a smaller footprint to offer standard pricing and spread the different construction and real estate costs among a smaller number of sites. Larger WIPs on the other hand, can offer pricing that is not reflective of costs, by averaging prices across its network.

Economies of scale

29. A WIP told us that benefits of economies of scale are most evident in the ability to win a higher proportion of new business with key customers (both new sites and share of major upgrade programmes). This is driven by both the ability of larger portfolios to satisfy more of a customer needs under a single contract with the wider range of commercial levers a larger portfolio has available to structure a deal ([X]). A further area that the WIP highlighted where scale is important is the fact that large WIPs can absorb the bid costs and project risks involved in one-time projects with atypical risk burdens. The WIP considered that economies of scale are driven by building and estate costs and specified that ‘building and estate costs are more efficient with scale as central costs are leveraged over a greater number of sites. The network construction supply chain can often focus on the largest operators in busy times leading to inefficiencies for smaller WIPs’. [X].
30. Another WIP told us that economies of scale are highly significant to developing new site build costs, maintenance and support costs. The WIP explained that a WIP that owns a significant number of existing sites is able to offer sites on shortened deployment timelines compared to the extended acquisition planning and build process of new site development. The WIP also explained that having existing sites on scale also enables more efficient site access and maintenance continuity and programming, thus lower per site maintenance and site access costs.
31. Another WIP said that there are direct purchasing benefits relating to site construction that can be achieved through the ability to negotiate volume deals with suppliers. They also said that favourable rates can be negotiated with suppliers for operational maintenance, health and safety checks. The WIP added that economies of scale are also achievable in portfolio estate management for example: (i) administration, office, IT costs, (ii) rents for all sites collected on the same day each year annually in advance, (iii) standardised rent review cycles allowing speedy agreement, (iv) indexed rent reviews and not open market allows speedy agreement, (v) MNO engineer

and agent access management, (vi) programmed passive infrastructure maintenance work, (vii) programmed passive infrastructure inspections, (viii) insurance and (ix) rate collection and recharging. The WIP also explained that high MNO occupancy will significantly reduce estate management costs per site which could be reflected in rate cards offered to MNO's, lowering the MNO cost of occupancy and making the large WIPs portfolio more attractive than a smaller competitor.

32. A WIP said that although WIP business is generally not labour intensive, there is a minimum team or staff resource required. As towers/sites are added to a portfolio, there is not a proportional increase in the need for staffing resource. The WIP also explained that economies of scale are also driven by the building and maintenance costs falling with scale. More generally, the WIP highlighted that economies of scale are significant, but the biggest ramification of significant scale as a WIP is that it is much easier for a customer, like an MNO, to deal with a large site provider. According to the WIP, the burden for a customer of dealing with lots of small site providers is enormous compared to a customer being able to cut a large deal with a very large WIP and the WIP can also, given the large deal, offer enormous 'bulk' discounts making it even more appealing for the customer.
33. Another WIP said that WIPs with a large number of developed macro sites will enjoy economies of scale, but these are not essential to the successful operation and management of a portfolio of assets. The WIP explained that economies of scale are most likely applicable to site identification, site acquisition (individual or portfolio), site build, estates management, operations and maintenance and marketing of sites. According to the WIP, estates management, operations and maintenance would be the key areas as most WIPs acquire portfolios of sites rather than develop them site by site.
34. A WIP told us that economies of scale are generated by both construction and operation costs, and access to finance including the cost of and terms related to borrowing. The WIP further explained that economies of scale are of vital importance to any WIP, and particularly in this market where there are four main MNO customers – each of whom either already has a preferred supplier or is contracted to exclusively use one supplier. [REDACTED].

MNOs' and MNO JVs' views

35. An MNO told us that scale of WIPs is one of several determining factors when choosing a supplier of access to developed macro sites. However, the MNO said that having the site in the right location and available in the right timeframe are more important factors than the total number of assets. The MNO expressed some concerns about being too reliant on a single provider

and, for example, large scale WIPs are often handing multiple projects on behalf of many operators which can bring about prioritisation and speed of deployment challenges. However, the MNO added that the wider the geographic footprint a supplier has, the more likely it would have a suitable site, which could provide a 'cumulative advantage over competitors'.

36. Another MNO said that, in a mature market, the size of the supplier is less important and that the key factor is whether the supplier is able to offer a site in the location where the MNO needs it at a cost point that represents value over building a new site, quality/security of access and reliable delivery – not things which are limited to larger players. The MNO added that a supplier could have a large portfolio of sites, but there are many factors on the usability of each of the sites that need to be taken into account. However, the MNO told us that having one party whose job is to manage the delivery of its of sites on its behalf provides a degree of certainty [X].
37. Another MNO told us that if it were to choose a supplier of developed macro sites [X], it would consider [X].
38. CTIL said that having access to an existing network of sites covering an extensive area of the UK means that a WIP can offer customers options in many parts of the country, subject to customers' demand, and generate economies of scale. However, CTIL added that that in a mature mobile market with tower network sharing deals, MNOs' priority is generally whether a WIP is able to offer a site in the particular location, and, thus, whether that site is provided by a larger or smaller WIP is of less relevance to the MNOs.

Competition for existing vs new customers and competition for large vs small contracts

39. We gathered information from Cellnex's competitors and customers about (i) the preference for existing sites vis-à-vis new sites and (ii) whether and how contracts for large number of sites are different from contracts for small number of sites. We present the responses below.

Independent WIPs' views

40. WIG told us that competing for a smaller package of work is different than for a large multi-site programme. WIG further explained that, whilst for key customers smaller packages are likely to be connected to a wider programme (ie the basis of agreement takes this into account), for new and smaller customers, terms tend to be very bespoke and driven the customer's needs.

41. Shared Access told us that contract renegotiation with existing location / customer is a commercial and technical discussion, which, in practice, would require joint agreement to rent and various operator costs for a further period (eg five or ten years).
42. FreshWave said that a large geographic footprint and a large number of sites are key parameters of competition and sources of leverage for large contracts, both large BTS programmes and renegotiations of large volumes of existing sites. Small contracts, such as NTQs, are normally secured by having a site available in a specific location that meets a particular need.
43. Britannia Towers told us that competition to retain existing customers is generally not too difficult as switching is very costly for an MNO, less so but still significant for a non-MNO customer. In relation to competition to win existing new customers Britannia Towers explained that competition is about 'marketing the sites and leveraging relationships with the key potential customers, particularly the MNO's'. Britannia Towers further explained that competition to win a small contract (ie getting a customer on one or a few towers) is very much about those particular tower sites and the requirement of the customer for those site locations. Whereas competition to win a big contract is about the weight of your existing operations/portfolio and your relationship with the operator.
44. WHP said that, once established, it is relatively straightforward to retain an MNO customer, subject to regular review and renewal of the terms of occupation, as they want to achieve stability in terms of network coverage and performance. WHP pointed out that non-MNO customers are more agile, especially where lower levels of equipment are deployed but, as the MNO customers, once a presence is established it is unlikely that a customer would move.
45. AP Wireless told us that competition to retain existing customers is very different from competition to win new customers (ie winning new business from existing MNOs). To retain existing customers there is little competition, in particular the MNOs, tend to give business to their JVs and Cellnex, with whom they have existing relationships [X]. In relation to large and small contracts AP Wireless explained that large contracts are likely to be won by large WIPs because of their proven track records and their ability to exploit the benefits of network effects. It also said that small contracts because of the relatively low return on investment are less attractive to large WIPs, but this also means that independent, less established WIPs may struggle to cover the large capex costs that even these smaller contracts require, such that it would not make economic sense to remain in the market just for these smaller commercial opportunities.

MNOs' and MNO JVs' views

46. An MNO told us that, when replacing a site, it will first look for a suitable existing site from the same supplier or another supplier. If no suitable existing site is available, the MNO said that it will then approach landlords to self-build a new site, and finally, if self-building was not possible, the MNO will have to consider a micro site and small cells. The MNO further explained that in rural areas it also has the option to request a BTS from a WIP. However, the MNO said that they prefer to self-build rather than requesting a BTS from a WIP. In relation to the cost of upgrading an existing site vis-à-vis the cost of building a new site, it told us that it is generally much easier to upgrade a new site than to build a new structure. For instance, upgrading a monopole to a lattice tower is still cheaper than building a new lattice tower, because the former will already have an existing set of foundations, access to power and a relationship with the landlord.
47. Another MNO said that the ability to build a new site in locations where an alternative existing site is present is limited by planning rules and regulations. The MNO explained that the National Planning Policy Framework (NPPF), which sets out that prior to building a new mast or base station, the applicant should confirm that evidence that the applicant has explored the possibility of erecting antennas on an existing building, mast or other structure. The MNO added that existing site owners have the opportunity to object to new planning applications and can therefore undermine the self-build process. In relation to cost of upgrading an existing site vis-à-vis the cost of building a new site, the MNO said that, generally, moving to a site with some upgrade costs would be cheaper than having a completely new site built, due to the costs of the build, including the cost of the power and transmission that are required.
48. Another MNO told us that, generally, [REDACTED]. In relation to the cost of upgrading an existing site vis-à-vis the cost of building a new site, the MNO explained that it is generally cheaper to upgrade an existing site than to move to a new site. However, there may be circumstances in which the scale of the work required to accommodate the new equipment is more expensive than build a new site.

Ease of switching

49. We asked Cellnex's competitors and customers about how easy or difficult it is to switch wireless infrastructure provider. We present the responses below.

Independent WIPs' views

50. A WIP [REDACTED].

MNOs' and MNO JVs' views

51. An MNO told us that it is difficult to switch provider because of contractual obligations that limit churn rights, timing, cost and coverage risk, as well as difficulty in recreating the existing coverage footprint and protecting customer experience.
52. Another MNO said that switching from one site to another is very rarely driven by an MNO. The MNO explained that switching is normally driven by the site provider giving 'notice to quit' (NTQ) because the landlord needs to sell land or because the lease expires and there is no agreement on new terms. The MNO added that it switches around [REDACTED] sites per year across approximately [REDACTED] sites. The MNO also moved away from sites during the consolidation exercise to implement its sharing agreements with [REDACTED]. Otherwise it only tends to move sites where they were older and no longer appropriate. Further, the MNO explained that, as switching is unusual, to avoid being too reliant on a supplier which could expose it to higher prices, [REDACTED].
53. Another MNO told us that [REDACTED].

Non-MNOs' views

54. MLL Telecom told us that its networks, once installed, 'don't 'switch sites'', as the 'costs of doing so are prohibitive on short to medium term contracts'.

Effectiveness of CK Hutchison Assets in the counterfactual

55. We asked Cellnex's competitors and customers about the competitive strength and the attractiveness of CK Hutchinson Assets, were they to start operating as an independent tower operator. We present the responses below.

Independent WIPs' views

56. A WIP told us that [REDACTED].
57. A WIP told us that CK Hutchinson Assets would, assuming they have not sold their infrastructure to Cellnex, have a significant portfolio of locations to offer for co-location by other operators.
58. Another WIP said that [REDACTED].
59. Another WIP said that if CK Hutchinson Assets were to start operating as an independent WIP it would be a significant player. The WIP added that as CK Hutchinson Assets is a substantial portfolio of sites, it would be a strong player.

60. A WIP told us that the competitive strength and attractiveness of CK Hutchison Assets would be the UK wide geographical footprint (which is stronger in urban and suburban areas than in rural areas but still significant) and the volume of sites.
61. Another WIP said that, in the counterfactual, CK Hutchison Assets would be a very strong competitor in the UK. The WIP added that, if CK Hutchison assets were to operate independently on the market it would be very strong given the scale and geographic reach of its network of sites, and its knowledge of the industry.

MNOs' and MNO JVs' views

62. An MNO told us that it would potentially consider CK Hutchison Assets as an alternative to Cellnex if their sites happened to be located in a required area and met its criteria. However, the MNO added that as of today it has no knowledge of CK Hutchison Assets ability to perform as a tower operator and that would form a critical consideration in deciding on whether or not to deploy with them.
63. Another MNO told us that if CK Hutchison Assets operated towers and a suitable one was available to the MNO, this would represent an alternative option for [X]. The MNO added that, if another operator took over 3UK's MBNL sites, it would not make a lot of difference to them unless it happened to have the particular site locations that the MNO wanted.
64. Another MNO said that if CK Hutchison Assets were to operate as an independent tower operator, it could be a potential supplier to the MNO, if they were offering a commercially attractive rate.
65. CTIL said that it would consider CK Hutchison Assets as a moderate alternative in the counterfactual because as an independent WIP, one would expect them to target new tenancies, but CK Hutchison Assets would not initially have the experience or track record of WIG or Cellnex.

Non-MNOs' views

66. A non-MNO customer told us that, if CK Hutchison Assets were to start operating as independent tower operator, it would consider it an alternative to Cellnex, given that the UK Government's planning policy and new Telecommunications Code encourages the sharing of mast sites between the operators where possible

67. Another non-MNO customer said that, if CK Hutchison Assets were in an area useful to them and they were cost effective and easy to deal with, they would consider them as an alternative to Cellnex.
68. Another non-MNO customer said that it probably would not consider CK Hutchison Assets as an alternative to Cellnex, were they to operate as an independent WIP, 'due to the coverage requirement and robustness of service capability to ensure the security requirements are met to maintain UK capability'.
69. A non-MNO customer told us that it would not consider CK Hutchison Assets as an alternative to Cellnex. CK Hutchison Assets would need to be integrated with the others, in order to compete with Cellnex and Vantage/CTIL. The non-MNO customer explained that 'Vantage has an experienced organization with CTIL, Cellnex from Arqiva has too, and de facto they will be monopolist'.
70. Another non-MNO customer told us that, if it met its requirements (ie either Cellnex were too expensive or unable to offer as good a solution as an alternate building / mast in the required area), it would consider CK Hutchison Assets as an alternative to Cellnex.
71. Another non-MNO customer submitted that CK Hutchison Assets would not be an alternative to Cellnex as [REDACTED].
72. A non-MNO customer said that it would consider CK Hutchison Assets as alternative to Cellnex, if it were to start operating as an independent operator of macro site as CK Hutchison Assets has a strong portfolio with a wide geographic spread which would make its portfolio attractive.
73. A non-MNO customer told us that, when CK Hutchison Assets sites would be an option, from a technical perspective it would consider it as alternative to Cellnex, if it were to start operating as an independent operator of macro site.

Capacity expansion on monopole sites

74. We asked Cellnex's competitors whether monopoles could accommodate more than one tenant and what proportion of the monopoles included in their portfolio host multiple tenants. We present the responses below.
75. Table 1 summaries the WIPs' responses on the proportion of their monopoles that host multiple tenants.

Table 1: Proportion of WIPs' monopoles which host multiple tenants

<i>Provider</i>	<i>Proportion of monopoles which host multiple tenants</i>
[X]	[X].
Shared Access	There are [X] monopoles within Shared Access portfolio. [X] of its monopole structures host one Joint Venture (either CTIL or MBNL) whereas [X] of its monopole structures host both Joint Ventures (CTIL and MBNL).
FreshWave	There are [X] monopoles in FreshWave portfolio and [X] host multiple tenants.
Britannia Towers	[X].
AP Wireless	AP Wireless has no monopole site in its macro site portfolio.

Source: CMA analysis of third party responses

76. A WIP told us that monopoles can be deployed in various forms and some have more capacity than others. The WIP explained that even a basic monopole has the capacity (in some cases subject to further investment) to support at least two customers and some monopoles can go significantly further than this. However, the WIP added that, it is also accurate to say that (all other things being equal) a portfolio comprising basic monopoles will contain on average less capacity and opportunity than a portfolio of lattice structures.
77. Another WIP told us that monopoles can and do technically deliver 4G and 5G equipment solutions, however, it depends on the equipment content per MNO, and the cell coverage area and number of cells required. The WIP explained that a couple of years ago it was asked by [X] to access about [X] of its existing macro sites, mainly monopoles, 'which currently host [X], and we complete GDCs (General Design Checks) including foundation analysis and the greater majority (if not all) passed – in other words, the monopoles were able to add Three UKs kit'.
78. A WIP said that monopoles do not have the structural capacity dictated by the monopole manufacturer, they are a design to suit product. It is therefore the WIP's option to design in the structural capacity for future multi-tenant occupation. In relation to planning permissions, the WIP explained that Planning Authorities are not supportive of designing in structural capacity speculatively as this will result in a monopole having a greater visual impact than necessary for the current demand. Instead, Planning Authorities prefer to support monopoles designed to suit the known requirement and consider future redevelopment at the point additional demand arises.

79. Another WIP said that monopoles are technically able to host more than one tenant with 4G or 5G equipment. However, the WIP highlighted that it depends on the size and structural capability of the monopole. If the monopole is designed to hold multiple operators and 4/5G equipment, they can of course take the equipment. The WIP explained that often cages are installed towards the top of monopoles to accommodate even more equipment on monopoles and that even if they are not designed to hold a large amount of equipment, structural upgrade works can be completed to allow more equipment rather than the requirement for a new structure.
80. Another WIP told us that the monopole sites which previously held single PoPs, being either 3UK or EE, were merged into a single network of sites in 2011 as part of the MBNL Project Godiva. This project would have been unachievable or extremely difficult to operate if it had been impossible to host both networks on a large proportion of existing monopole sites. The WIP explained that, in theory, MBNL monopoles could also host other operators. If the monopole is strong enough then there is no reason why it cannot hold more than one operator or operator JV. The other limiting factor is whether there is sufficient height on the monopole to achieve the necessary coverage without 'hitting' trees or buildings.

Competitive position and relative strength of site providers

81. We gathered information from Cellnex's competitors and customers about the main suppliers of access to developed macro sites in the UK and their relative competitive strength. We present the responses below.

Independent WIPs' views

82. A WIP told us that scale of a supplier's portfolio is an important determinant for MNOs. Asset quality, delivery quality (ie track record of efficient delivery) and ability to finance the asset base are, according to it, other key factors and the MNOs will require a WIP to have. [X].
83. Another WIP told us that key differentiating factors between WIPs include expertise, reputation, financing, commitment to expansion. The WIP identified as key players offering site access to developed Cellnex, WIG, Shared Access, and the MNOs.
84. Another WIP said that the most significant factor that differentiate WIPs from each other are: (i) the geographic scope (ie pre-existing portfolio), (ii) state of development of site portfolio (ie number of already developed sites), (iii) expertise and delivery capability and (iv) relationship with customers. In terms of main suppliers, the WIP explained that Cellnex dominates the market and

there are a number of smaller WIPs, whose comparative strengths is provided in Figure 1.

Figure 1: [REDACTED]

Source: [REDACTED]

85. A WIP identified Cellnex, CTIL, MBNL and WIG as main suppliers of access to developed macro sites in the UK.
86. Another WIP said that key areas that drive MNO or non MNO demand in relation to WIP assets are (i) customer requirements (ie whether this site provide the coverage/capacity required), (ii) speed to market (how quickly can the site be operational) and (iii) commercial terms and these largely translate into the differentiators between WIPs. The WIP identified Arqiva, CTIL, EE, 3UK, WIG and Home Office.
87. Another WIP said that independent WIPs are predominantly differentiated by their scale, reputation, historical relationships with customers, and 'ability to provide a "cradle to grave" service (from acquisition, design, build, through to maintenance and upgrades through to decommissioning)'. The WIP identified three major players in the UK market: Cellnex, CTIL and MBNL, where Cellnex is the only major independent WIP.

MNOs' and MNO JVs' views

88. An MNO identified CTIL, WIG, FreshWave and Atlas as weak or very weak alternatives to Cellnex. In particular, the MNO added:
 - (a) CTIL - [REDACTED] not fully equivalent to an operator/provider relationship. However, due to the size and geographic scale of CTIL's portfolio, these assets will always be likely to be of potential interest to [REDACTED];
 - (b) WIG - WIG is 'a less credible as an alternative to Cellnex in relation to macro sites;
 - (c) Shared Access – 'the credibility of Shared Access for macro sites is limited at present in part as they do not provide the same breadth of service as Cellnex'. However, according to [REDACTED] in future Shared Access appears to be improving its commercial offering (e.g. new rate card) and process (e.g. more helpful around surveys, etc), so [REDACTED] expects their credibility to improve in future for all types of sites.

- (d) FreshWave – according to [REDACTED], FreshWave has a limited macro site offering. FreshWave may increase its credibility in future due to expansion of service offering.
- (e) Atlas – Atlas is ‘a new entrant and despite their keenness to build new sites [REDACTED], we have little knowledge of their credibility. [...] Atlas Towers are building a competitive offering on macro sites but they do not have a site footprint at present’.
89. Another MNO identified CTIL as a very strong alternative to Cellnex, [REDACTED].
90. Another MNO listed WIG, MBNL, BT, FreshWave, Shared Access, Pinnacle Towers and Britannia Towers as alternative providers to Cellnex. However, the MNO did not rank providers by importance or attractiveness because it would consider specific factors in the round that, if not achieved, would result in not selecting that particular provider.
91. CTIL identified Cellnex as the main supplier of access to developed macro sites in the UK, followed by CTIL and WIG with strong and moderate competitive strength. CTIL also identified MBNL, BT and Atlas Towers as weak competitors.

Non-MNOs’ views

92. A non-MNO customer identified [REDACTED] as [REDACTED] alternative to Cellnex because of their extensive portfolios of sites. The non-MNO customer also identified [REDACTED] alternative to [REDACTED] as a [REDACTED] alternative because of its [REDACTED].
93. A non-MNO customer identified BT and WIG as a weak alternative to Cellnex. Another non-MNO customer told us that it has not considered alternatives to Cellnex and another non-MNO customer said that it has no alternatives ‘known for this project’.
94. A non-MNO customer told us that most of its transmission sites are with Cellnex and only to a small extent it uses a combination of Councils, Colleges, Water Towers.
95. Another non-MNO customer identified WIG as a very strong alternative to Cellnex and Airwave as a very weak alternative to Cellnex.
96. Another non-MNO customer told us that ‘allowing Cellnex to takeover Arqiva, Shere and BT sites has created a monopoly on [REDACTED] with over 90% of these being under the ownership of Cellnex. It is this monopoly started by Arqiva is what should have been considered. [REDACTED].

97. Another non-MNO identified WIG as a very strong alternative to Cellnex, followed by MBNL, CTIL (Vantage Tower) as strong alternatives and Britannia Towers as a very weak alternative to Cellnex.

BTS

98. We gathered information from Cellnex's competitors and customers on the strength of BTS as a constraint to existing sites. We present the responses below.

Independent WIPs' views

99. A WIP told us that there are a wide range of up-front costs to build new macro sites. However, these costs vary depending on a site. On average, the WIP submitted that to complete a new site would take around 12 to 18 months, whereas it would only take between 3 and 6 months to add capacity onto an existing site.

Competition for large BTS framework contracts

100. A WIP told us that scale is the critical factor that impacts upon a WIP's ability to win new BTS. The WIP explained that it is important for a WIP to have scale in existing sites that can be utilised for new network roll out and these sites can help subsidise any new BTS required. The WIP added that a scale portfolio will have several levers such as existing sites, options over new sites, economies of scale and the ability to inject momentum quickly into a MNO roll-out [X].
101. Another WIP told us that, assuming the BTS is for new greenfield macro site locations, having a portfolio of existing populated macro sites has limited / no impact on new greenfield coverage areas. However, the WIP added that having an established track record and capabilities that demonstrates the ability to deliver new greenfield macro sites is essential to win large BTS contracts.
102. Another WIP said that the number of existing macro sites, alongside new BTS sites a WIP can offer is a critical factor in winning contracts as this gives rise to significant economies of scale. According to the WIP, economies of scale allow a WIP to provide more attractive offerings to MNO's, the resulting ability to offer more competitive terms will improve the likelihood of winning contracts of large numbers of BTS sites. Furthermore, the WIP explained that delivering infrastructure to MNO specification, is a complex and highly specialised process, consequently technical capabilities and past track record are absolutely key to winning contracts for a large number of BTS sites.

103. A WIP said that the number of existing macro sites a WIP can provide access to, alongside the BTS sites has an 'enormous impact' on the WIPs' ability to win contracts for a large number of BTS. The WIP also said that technical capabilities and past track records in delivering similar projects are 'very important' to win contracts for a large number of BTS.
104. Another WIP told us that both the number of existing macro sites a WIP can provide access to, alongside the BTS sites and the technical capabilities and past track records have a 'material impact' on a WIP's ability to win contracts for a large number of BTS sites. In particular, the WIP explained that:
- (a) Having a large number of existing macro sites means that a customer requiring a large number of BTS sites may be able to be accommodated on existing structures within the WIP's portfolio. In providing access to existing structure, the cost to the end customer is likely to be less since there will a requirement for a lesser number of new sites. The use of existing sites is also a much quicker way of achieving coverage;
 - (b) WIP's with a large number of existing sites have much stronger relationships with parties who deliver the projects such as planners and engineers. Having a large number of existing sites also means that the WIP is more likely to be aware of the needs of the customer MNO and will have built up a relationship with the MNO, something which is very difficult for a new entrant to compete with.

MNOs' and MNO JVs' views

105. An MNO told us that it generally prefers the self-supply of passive infrastructure assets for new coverage as opposed to outsourcing to other providers on a BTS basis, due to the lower running costs, and increased flexibility, of self-supply. Specifically in relation to WIPs' BTS, [REDACTED]. This is partly because the process of building, planning and connecting to the power is taking a long time. The MNO added that WIPs' BTS are attractive when they already have access to pre-agreed planning projects and/or agreement with councils to access street furniture, that is, when they have already started the process whereas the MNO would need to start from scratch.
106. The MNO said that, when assessing providers to build large number of BTS, (i) it is more convenient to procure these sites from an existing provider as the contract and the procurement process would have been already agreed; (ii) it is important for WIPs to demonstrate a strong track record and (iii) where a WIP has existing sites to offer alongside a BTS proposal this would be more attractive assuming the existing sites are suitable for our network.

107. In relation to network redesign, the MNO told us that it is considering redesigning its network with both self-build and rival WIPs. The MNO added that, although the MNO is considering redesigning its network, it recognises that moving many sites from an incumbent WIP whilst continuing to provide a service is very disruptive for its customers and costly during transition where a greater number of sites must be operated in total and paid for over a period of time, depending on the contractual terms.
108. Another MNO said that the mature state of the UK market means that MNOs are unlikely to build a large number of sites with one (or even more than one) operator(s). However, the MNO said that the factors that MNOs would consider relevant if re-negotiating any of the framework agreements might include a variety of factors including the following: (i) location of sites, (ii) provider's proven track record in providing sites on time and to the correct specification; (iii) the rate card, (iv) the provider's processes, (v) the MNO's experience of dealing with the provider and (vi) the number of sites managed by that provider (ie it may not be worth negotiating a framework agreement with a small scale provider).
109. In relation to network redesign, the MNO said that the benefit obtained from redesigning one part of its network to increase competitive pressure on an existing provider would need to be very large in order to make it attractive when balanced against the very significant costs of redesign. The MNO highlighted that as the cost of redesign are very high, it is very difficult to see network redesign being an attractive commercial proposition.
110. Another MNO told us that, if the MNO would need to grow its grid, the first factor taken into account would be the location of the sites as per the MNO requirements and the capacity of the provider to match such requirements. The MNO added that the scale of a WIP's operations is just one of the many factors it would consider.

Customer self-build

111. We gathered information from Cellnex's competitors and customers on the strength of customer self-build as a constraint in the market for the supply of access to developed macro sites. We present the responses below.

Independent WIPs' views

112. A WIP told us that [REDACTED].

MNOs' and MNO JVs' views

113. An MNO said that pooling and self-supply of passive infrastructure assets are in general preferable to outsourcing to WIPs BTS because they have lower running costs. The MNO added that pooling means that the CAPEX can be shared for construction and improvement. The MNO also explained that most of the new sites are built in areas of new coverage, where there is no existing passive infrastructure. In these new build areas the MNO prefers to self-supply as, other than providing a low capex solution, there is generally no benefit in introducing a WIP. The MNO added that, in areas of existing coverage, one advantage of using a WIP is they can provide greater certainty, particularly in terms of timings where they have an existing asset in the required location.
114. Another MNO told us that where it has to have demand for a particular site or a need to upgrade a site, cost is an important factor in determining the delivery solution it will opt for. The MNO explained that the maturity of the market means that the majority of demand looking ahead will involve upgrades to existing sites. However, the MNO highlighted that, in the shorter term, there is ongoing demand for new sites and that CTIL would be Vodafone's preferred supplier to manage the delivery of these sites [X].
115. Another MNO told us that self-build can provide an MNO with the greatest amount of control (eg ability to directly select the location and design of the passive infrastructure). However, according to the MNO, this approach requires a significant amount of upfront capital expenditure and an overhead in the management of the construction and on-going operational processes. The added that outsourcing to WIPs provides ready access to an existing collection of macro sites can be very beneficial with regard to speed and ease of deployment with limited capital investment. Finally, the MNO explained that usually WIPs are used when a quick solution is required and a self-build option is either not commercially viable or not possible in the geographic region.

Non-MNOs' views

116. Western Power told us that, in the last 5 years, 70% of the of new / switched to sites have been existing developed macro sites. Aquila also told us that all of the new / switched to sites in the last 5 years have been on existing developed macro sites. Network Rail said that it engages with suppliers that build the masts to its specifications and it retains the ownership of the masts.
117. Bauer Media told us that it doesn't build sites itself, it tends to look for existing sites. Bauer Media explained that the vast majority of its transmission sites

are owned by Cellnex, or, Cellnex provides a solution where it has negotiated space on sites that are not theirs.

118. DCN Communication explained that it is 'a supplier of design and build services so we only build ourselves (on behalf of others)'.
119. Electricity North West told us that as the electricity network is static in terms of locations, where there is no existing infrastructure, it will build itself, otherwise it uses 'third party sites generally hill top'.
120. DRW NX said that 75% of the additional macro sites that it selected in the past are self-build sites whilst the remaining 25% are existing developed macro sites from a WIP.
121. MLL Telecom told us that it always tries to build its own site where possible/feasible and in conformance with statutory planning rules. MLL Telecom explained that, of the additional macro sites that it selected in the past, 75% are self-build/direct with third party site provider, 20% Cellnex and 5% Mobile Operator/Other.

Third parties' expansion opportunities and future plans

122. We asked Cellnex's competitors and customers and we have been provided we few internal documents about their future plans. We present the evidence below.

Independent WIPs' plans

123. A WIP told us that [REDACTED].

(a) [REDACTED].
124. Another WIP told us that their plans include the financial and resource capability to deliver BTS across 2000 sites in next 5 years. However, explained that the main issues to expand is that network sales by operators to Cellnex and WIG, each buy out includes a lock in BTS programme for Cellnex and WIG, meaning will not have the opportunity to tender deals for these sites.
125. Another WIP had initially submitted in Phase 1 that it aspired to increase their site volumes to [REDACTED]. However, [REDACTED] revised its plan and provided during the Phase 2 investigation an updated figure of [REDACTED] for the following reasons:

(a) MNOs are not conducting any major new network builds;

- (b) [REDACTED];
- (c) MNOs are focussed on upgrades to existing sites for the deployment of 5G rather than new site requirements; and
- (d) [REDACTED].
126. [REDACTED] latest board meeting presentation (September 2021) is consistent with [REDACTED] Phase 2 submissions. In particular, this presentation shows that [REDACTED] has plans to increase [REDACTED] as (i) [REDACTED]; (ii) [REDACTED] 5 year plans shows that [REDACTED] is aiming to [REDACTED].
127. Britannia Towers told us that it would really like to increase their portfolio of sites over the next number of years, either by acquisition of existing sites, or building new sites (ideally as part of a BTS program), but this is very challenging.
128. Another WIP submitted that [REDACTED].
129. Another WIP said that it [REDACTED]. However, [REDACTED] it intends to compete aggressively to build as many new sites as it can based on tenant demand in the next 10 years. [REDACTED] explained that it has taken the following steps to facilitate its expansion:
- (a) [REDACTED];
- (b) [REDACTED]; and
- (c) [REDACTED].
130. [REDACTED] provided internal documents, several email chains and [REDACTED], discussing the [REDACTED]. Other email chains document [REDACTED] BTS opportunities that [REDACTED] is currently pursuing, [REDACTED]. Finally, one of the email chains discusses [REDACTED].

MNOs and MNO JVs' plans

BT/EE's plan

131. BT/EE explained that it has no plans to grow its portfolio of passive infrastructure with the following exceptions:
- (a) shared rural network total not spot sites, ie [REDACTED];
- (b) additional coverage sites for [REDACTED]; and
- (c) additional coverage for [REDACTED].

132. In relation to the 5G roll-out, BT/EE explained that it is not ‘considering building more towers for 5G but will upgrade its existing towers. This is what it has done so far. Upgrade requires a significant change to sites. Historically, due to power limits, only one MNO’s equipment could be put on a lamppost, therefore this is a unilateral operation and, overall, deployment is likely to be unilateral’.

133. [REDACTED].

134. [REDACTED].

(a) [REDACTED].

Figure 2: [REDACTED]

Source: [REDACTED].

(b) [REDACTED].

Figure 3: [REDACTED]

Source: [REDACTED].

(c) [REDACTED].

(d) [REDACTED].

(e) [REDACTED]:

(i) [REDACTED].

(ii) [REDACTED].

(iii) [REDACTED].

(f) [REDACTED]

Figure 4: [REDACTED]

Source: [REDACTED].

135. [REDACTED].

Vodafone’s plan

136. In relation to its 5G roll-out, Vodafone told us that its strategy is to use its available 4G sites first. [REDACTED]. Vodafone added that as sites are upgraded or changes need to be made (for example where they prove impossible to

upgrade or landlords wish to remove the site due to other plans) Vodafone will assess all options available including unilateral self-supply, supply via CTIL and supply via WIPs. [REDACTED]. However, this does not remove the ability or incentive to choose another supplier if CTIL not deliver, or failed to deliver, Vodafone's requirements.

O2's plan

137. O2 told us that [REDACTED].

138. [REDACTED].

139. [REDACTED]:

(a) [REDACTED];

(b) [REDACTED];

(c) [REDACTED];

(d) [REDACTED].

140. [REDACTED].

Commercialisation of CTIL

141. CTIL explained that prior to 1 January 2021, CTIL owned and managed sites on behalf of Vodafone and O2 and re-charged the costs of these activities to its shareholders, who reimbursed CTIL for these costs. Following commercialisation, CTIL now charges Vodafone and O2 an agreed amount per tenancy and uses that money to pay bills and manage the costs according to its own design. CTIL is now responsible for generating a margin, which is the main difference from the previous model. In addition, CTIL has independent and symmetrical agreements with Vodafone and O2 for the duration of up to 32 years (ie 4 terms of 8 years), whereby CTIL will now charge Vodafone and O2 a fixed annual fee per site. Under this agreement:

(a) [REDACTED];and

(b) [REDACTED].

142. CTIL said that 'commercialisation means that Cornerstone [CTIL] is incentivised to grow revenues and margins by its shareholders. This does mean a more active pursuit of additional revenue earning opportunities, including provision of additional services to existing and new customers'.

However, CTIL explained that ‘CTIL plans for revenue growth from its ‘anchor customers’ – O2 and Vodafone’. [REDACTED]. In particular, CTIL told us that:

- (a) Most of its new revenue will come from existing site upgrades from its anchor customers;
- (b) Some opportunities will come from in-fill to help its stakeholders densify their network, particularly in urban areas.
- (c) The SRN programme will also lead to some new towers and new tenants on existing towers.
- (d) The other MNOs (ie BT/EE and 3UK) may be seeking new sites as a result of getting NTQs so they may seek a CTIL site.
- (e) Non-MNOs are also a source of potential growth. Some customers will want custom-built 5G networks – eg. for a factory. The internet of things, using much smaller antennae, is also a source of future growth.

143. More generally, CTIL ‘aims to increase its tenancy ratio over a longer time period (such as ten years) but it is difficult to do so in the UK as networks are fully built-out so they do not expect the ratio to increase quickly’.

144. According to our assessment CTIL, Vodafone and O2’s internal documents consistently indicate that revenue and PoPs growth from third party co-location on CTIL sites is likely to be moderate over the next ten years (although numbers vary slightly across documents):

(a) CTIL’s 10-year plan forecasts:

(i) [REDACTED]

(ii) [REDACTED].

(iii) [REDACTED].

(b) [REDACTED].

(c) [REDACTED].

(d) [REDACTED].

145. However, [REDACTED].

146. Finally, following its commercialisation, CTIL has been reorganised as of 1 January 2021 and split between that part of the business that builds and runs its own towers for the purpose of hosting Vodafone and O2 and/or other

tenants, and that part which manages relationships with the other WIPs on behalf of Vodafone and O2 (the 'Clean Team'). Therefore, the decision as to whether to place demand with Cornerstone or with a WIP rest entirely with Vodafone UK and VMO2.

Impact of the Merger

147. We asked Cellnex's competitors and customers views about the Merger and its impact on their business and, more broadly, competition. We present the responses below.

Independent WIPs views

148. A WIP submitted that, on the one hand, any transaction that moves site assets from an MNO to an independent operator is likely to lead to a more efficient use of the infrastructure resulting in better connectivity outcomes for society in general. On the other hand, the WIP told us that scale is increasingly important in the sector and that there are a small number of routes for a smaller or new WIP to obtain scale. [REDACTED].
149. Another WIP submitted that as the deal includes BTS (ie Streetworks Sites), the complete market is prevented for 3-5 years from competing to acquire, design, build sites for 3UK.
150. Another WIP submitted that it is important that having WIP alternatives enables the MNO to ensure that it is constantly able to benchmark both total cost of ownership and time to deploy against the self-supply alternative. The WIP added that a wide geographic scope and a large number of developed sites is critical in competing to retain existing customers and to win new customers. However, the WIP and other WIPs have small portfolios compared to Cellnex, and the scope for organic growth is extremely limited. [REDACTED].
151. A WIP submitted that:
- (a) The Merger would lead to a significant concentration in marketable macro sites in the UK;
 - (b) The Merger would remove a key driver of competitive pricing amongst WIPs when negotiating future tenders for long-term supply contracts. Self-supply by MNOs or by joint ventures of MNOs, works as a competitive constraint on Cellnex; a large share of self-supply would be lost as a result of the proposed transaction and with it the corresponding competitive constraint on Cellnex; and

(c) The Merger would reduce competition and therefore potentially lead to rent increases, reduce quality of service and access to sites.

152. Another WIP submitted that the Merger would harm competition in a number of ways a loss of competitive constraint, and loss of potential competition, in the supply of access to macro sites.

MNOs and MNO JVs views

153. BT/EE initially told us that '[if] completed in its notified form, the Merger would represent a significant development in the UK wireless telecommunications sector, raising serious competition concerns that will adversely affect the supply of access to developed macro wireless telecommunications sites and ancillary services to BT/EE and other UK wireless communication providers.'
154. BT/EE subsequently told us that it had engaged in '[REDACTED]
155. Vodafone told us that 'Vodafone would not expect a significant impact on competition or on its own business [as result of the Merger] given the other suppliers in the market (especially CTIL and MBNL but also some of the independent providers such as WIG)'.
156. O2 told us that, '[REDACTED]
157. CTIL said that it could not comment on whether the Merger would have an impact on competition or its business but commented that 'although the transaction will increase Cellnex's market share, the market will remain competitive with a number of other providers of passive infrastructure able to service the needs of the four MNOs in a market characterised by high coverage. This includes Cornerstone [CTIL] going forward, pursuant to its new MSAs with Vodafone UK and Telefonica UK and the sale of Vodafone UK's stake to Vantage Towers'.

Non-MNOs views

158. A non-MNO customer told us that it does not have any particular view on this proposed Merger, but at the present time does not expect any negative effect on them. [REDACTED]
159. Another non-MNO customer said that the Merger would have an impact on its business as it would drive 'down the price we can achieve for [its] macro sites'. The non-MNO customer also said that the Merger will have an impact on competition and added that the 'Telecommunications code has effectively taken away competition'.

160. Another non-MNO customer told us that the Merger will have an impact on competition and added that a 'competitive marketplace would be of benefit if we adopt a buy or build mast strategy'. The non-MNO customer also told us that the Merger won't have an impact on its business as the [REDACTED].
161. Another non-MNO customer said that the Merger will have an impact on competition and explained that it 'is important for Aquila to demonstrate fair trading and best value to its customer and budget holders'. The non-MNO customer also said that the Merger will have an impact on its business and added that the 'importance of business continuation is paramount for [REDACTED].
162. A non-MNO customer told us that the Merger will have an impact on its business. The non-MNO customer explained that 'removing power to MBNL and transferring it to Cellnex, Cellnex and Vantage might contract us, instead of MBNL or even MNOs. MBNL will be more and more depleted of the scope of operating, this will be the second strong round after the acquisition by BT of EE, and de facto each MNO 3UK and BT are doing much less of synergy of infrastructure sharing, each operator are now doing unilateral projects instead'. The non-MNO customer also added that would say that 'this acquisition by Cellnex of CKH [CK Hutchison Assets], Cellnex would have approx. 2000K sites, Vantage 14000 sites and together will lead-control the market, against the minor providers (BT, WIG, Freshwave etc)'.
163. Another non-MNO customer said that the Merger will not directly the impact its business, 'unless any sites Arqiva use of Cellnex go up in price disproportionately as a result of the merger and that cost is passed onto us'.
164. Another non-MNO customer said that the Merger can potentially impact 'access to sites'. The non-MNO customer explained that since the Cellnex acquisition of Arqiva sites, [REDACTED]. Therefore, the non-MNO customer added that 'if Cellnex have the access to 7500 more sites to administer', it is 'not certain how they will cope without significant investment or process changes'.
165. A non-MNO customer told us that costs [REDACTED] are high when investing in building infrastructure, the monopoly already exists with Cellnex we have no other place to go. You really need to address the monopoly on [REDACTED].
166. Another non-MNO customer said that 'Cellnex already hold a very strong majority position on the tower sharing market in the UK. In addition to their own large portfolio they also manage large portfolio's such as BT's tower portfolio and are actively purchasing sites from independent 3rd parties to increase their ever expanding portfolio. Cellnex charge a rent several times that of MBNL/CTIL/Britannia Towers. Cellnex also operate very expensive restrictive policies, for example installation and decommissioning can only be

performed via themselves operating at grossly inflated costs. Planning policy dictates that wherever possible an operator like ourselves should seek to share existing infrastructure. This results in an inability to secure planning consent for our own structure close to a Cellnex structure thereby forcing us into uncompetitive commercial agreements with Cellnex'.

167. Another non-MNO customer said that they had no view on the impact that the the Merger will have on its business.

Appendix G: MBNL contract renegotiation

Introduction

1. This appendix sets out the evidence on the renegotiation of the MBNL contract with Arqiva (now owned by Cellnex) and presents the Parties' and third parties' views as discussed in their internal documents.

Timeline and process of the MBNL negotiation

2. [REDACTED].

3. [REDACTED].

Figure 1: [REDACTED]

Source: [REDACTED]

4. Table 1 summarises the evolution of Arqiva's pricing and other contract provisions through the stages of the contract renegotiation with MBNL.

Table 1: [REDACTED]

5. In the sections below, we discuss each of the [REDACTED] the MBNL renegotiation process and present the evidence available for each.

Preliminary negotiation

6. An Arqiva internal document explains that [REDACTED].
7. Another Arqiva internal document [REDACTED] explains [REDACTED]. Finally, it is clear from this document that [REDACTED].
8. [REDACTED] (see Figure 2).

Figure 2: [REDACTED].

Source: [REDACTED].

9. [REDACTED] (see also Figure 3).

Figure 3: [REDACTED]

Source: [REDACTED]

10. At this stage of the negotiations, [REDACTED]. In addition, [REDACTED]

(a) [REDACTED].

(b) [REDACTED].

(c) [REDACTED] However, [REDACTED] (see Figure 4).

Figure 4: [REDACTED]

Source: [REDACTED].

11. [REDACTED]:

a) [REDACTED].

b) [REDACTED].

MBNL request for proposal

12. [REDACTED].

(a) [REDACTED]:

(i) [REDACTED];

(ii) [REDACTED];

(iii) [REDACTED].

13. The internal documents [REDACTED]:

a) [REDACTED].

b) [REDACTED].

c) [REDACTED].

d) [REDACTED].

Arqiva's initial approach to the MBNL request for proposal

14. [REDACTED] an Arqiva internal document [REDACTED] (see Figure 6).

Figure 5: [REDACTED]

Source: [REDACTED].

15. A more recent version of the same document, [REDACTED].

16. [REDACTED] (see Figure 7).

Figure 6: [REDACTED]

Source: [REDACTED]

17. [REDACTED].

Figure 7: [REDACTED]

Source: [REDACTED].

18. Figure 8 above shows that [REDACTED]

19. The internal document also presents [REDACTED].

20. As shown in Figure 9, [REDACTED].

Figure 8: [REDACTED]

Source: [REDACTED].

21. [REDACTED], as set out in Figure 10.

Figure 9: [REDACTED]

Source: [REDACTED].

Stage 2b

21. According to Arqiva's internal document [REDACTED]

22. The same document sets out [REDACTED] (see Figure 11).

Figure 10: [REDACTED]

Source: [REDACTED].

23. In the same internal document, [REDACTED]

a) [REDACTED];

b) [REDACTED].

24. [REDACTED].

Stage 3a

25. [REDACTED].

Figure 11: [REDACTED]

Source: [REDACTED].

26. [REDACTED] (Figure 13). [REDACTED]'.

Figure 12: [REDACTED]

Source: [REDACTED].

27. [REDACTED] (see Figure 14).

Figure 13: [REDACTED]

Source: [REDACTED]

28. [REDACTED].

Figure 14: [REDACTED]

Source: [REDACTED].

29. [REDACTED].

30. This was confirmed by 3UK [REDACTED].

31. [REDACTED].

32. [REDACTED] (While 3UK told us that [REDACTED])

Stage 3b

33. [REDACTED] (see Figure 16).

Figure 16: [REDACTED]

Source: [REDACTED]

34. As Figure 16 indicates, [REDACTED]

Stage 4

35. [REDACTED] (see Figure 17), [REDACTED] (see Figure 18).

Figure 17: [REDACTED]

Source: [REDACTED].

Figure 18: [REDACTED]

Source: [REDACTED].

36. However, [REDACTED] (see Figure 19).

Figure 19: [REDACTED]

Source: [REDACTED].

37. Consistent with Arqiva's internal documents, the MBNL internal document [REDACTED].

Figure 20: [REDACTED]

Source [REDACTED].

38. Finally, Arqiva's internal document [REDACTED]

a) [REDACTED].

b) [REDACTED] (see details in Figure 20).

Figure 21: [REDACTED]

Source: [REDACTED].

Outcome of the MBNL tender

38. [REDACTED]

39. 3UK said that it was planning to '[REDACTED]

40. BT/EE and 3UK's internal document indicated that [REDACTED] The same document explains that [REDACTED] This is consistent with [REDACTED]

Glossary of terms

3UK	Hutchison 3G UK Ltd. CK Hutchison's mobile network operator in the UK, retailed to customers as Three.
4G	Fourth generation of mobile systems. Designed to provide faster data download and upload speeds on mobile networks.
5G	Fifth generation of mobile systems. Brings greater speed, capacity and functionality to mobile services.
Active infrastructure	Electronic and other equipment that is attached by an MNO or other user to passive infrastructure for mobile communications use
Backhaul	Backhaul is the carriage of traffic from an exchange to a central point: transmission links used to connect local exchanges to each other and/or the core network. In the context of mobile networks, we use the term backhaul to denote the network connectivity between an MNO's radio base stations (which make up the RAN) and its core network. Mobile backhaul usually includes a connection from the base station site to a local exchange and additional connectivity from a local exchange to the MNO's core network.
Bandwidth	In digital telecommunications systems, the rate measured in bits per second (bit/s), at which information can be transferred.
BT	British Telecommunications plc. Includes BT's core business units.
BT/EE	BT's mobile network operator, EE Limited.
CK Hutchison	CK Hutchison Holdings Limited and its subsidiaries
Cellnex	Cellnex UK Limited.
CMA	Competition and Markets Authority.
CTIL	Cornerstone Telecommunications Infrastructure Limited. A joint venture between Vodafone and O2 .

Developed macro sites	A type of passive infrastructure which is ready to host active equipment which will give the customer broad coverage.
ECC	Electronics Communications Code (ECC) set out in Schedule 3A of the Communications Act 2003. The ECC facilitates the installation and maintenance of electronic communications networks by streamlining planning permission for providers and users of passive infrastructure.
MBNL	Mobile Broadband Network Limited. A network sharing joint venture between BT/EE and 3UK .
MBNL Sites	The sites, managed by MBNL, to which Cellnex would gain economic benefit when the Merger completes
Merged Entity	The post-Merger business of Cellnex and TowerCo
Merger	The anticipated acquisition of the passive infrastructure assets of CKHUK in the UK by Cellnex .
MNO	Mobile Network Operator. A provider of mobile communications services to retail customers.
Monopole	A form of radio antenna and type of macro site consisting of a single pole
MVNO	Mobile Virtual Network Operator. A provider of mobile communications services which does not own a national network itself, but instead provides all or part of its mobile phone services over network infrastructure owned by an MNO .
NTQ	Notice to quit. Term used within the market to describe when a site landlord asks a tenant to leave the site. This may be because the site (eg. a building rooftop) is being redeveloped so can no longer host the site.
O2	O2 Holdings Ltd, an MNO owned by Virgin Media O2.
Ofcom	Office of Communications, the communications sector regulator.
Passive infrastructure	the non-electronic elements of a telecommunications site such as the tower structure. Active equipment is attached to it

Points of presence (PoP)	PoPs are points on a network where active equipment is hosted on a passive infrastructure asset
RAN	Radio Access Network.
SLC	Substantial Lessening of Competition.
SRN	Shared Rural Network: an agreement between the four MNOs and UK government to bring 4G to rural areas.
Streetworks sites	Communications infrastructure sites which are generally in urban areas, such as those being built by 3UK for its network
TCO	Total cost of ownership.
The Act	The Enterprise Act 2002.
Parties	Cellnex and CK Hutchison and their subsidiaries.
Transaction Sites	The Unilateral Sites, MBNL Sites and Transfer Sites
Transfer Sites	once the MBNL joint venture (whose term runs to the end of 2031) is dissolved and 3UK receives its share of sites and assets from the JV, 3UK will transfer up to half of the MBNL Sites (subject to a minimum of 3,000 and a maximum of approximately 3,750) to the Merged Entity.
UK	United Kingdom.
UKB Sites	developed macro sites that were previously owned and operated by UK Broadband Limited, a subsidiary of 3UK
Unilateral Sites	The UKB Sites and the monopoles which host 3UK equipment; and those which 3UK is building but are not completed
WIP	Wireless infrastructure provider. Term used to describe companies which focus on the supply of passive infrastructure to communications companies