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**A survey of the gigabit deployers**

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### Disclaimer

The opinions offered herein are purely those of the authors. They do not necessarily represent the views of all members of Communications Chambers.

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# 1 Executive Summary

This paper makes use of latest available accounts of gigabit builders (Openreach, Virgin and altnets) to paint a picture of the UK market.

The altnet sector is seeing rapid expansion. To deploy fibre, operators need 'Code Powers' from Ofcom. In the decade to 2018, an average of 6 companies per year received such powers. From 2019 onwards it has been 30 or more annually.

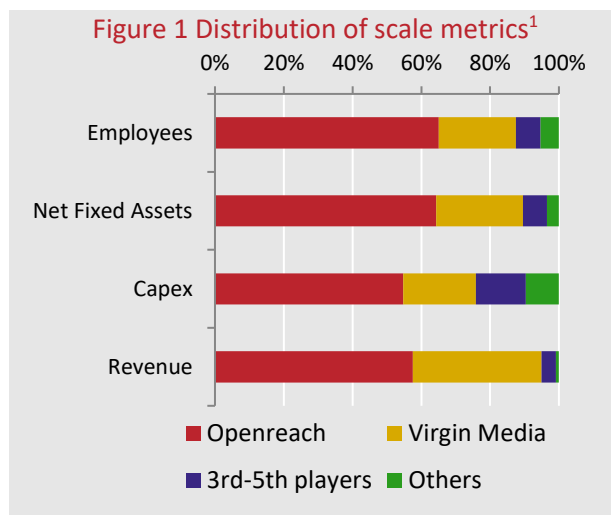
As a result, many altnets are too small or new to have filed substantive accounts. That said, the market appears to be very concentrated (Figure 1). Between them, Openreach and Virgin Media<sup>2</sup> represent almost 90% of employees and fixed assets in the sector. Capex is somewhat more evenly distributed, with these two players responsible for only 76% of spend – a figure likely to fall further as altnet deployment accelerates.

There is no lack of ambition on the part of altnets – they have announced deployments totalling 36m premises (compared to Openreach's 25m and Virgin Media's 14m). In combination this gives overall deployments of 75m – or roughly 2.5 deployments for every premise in the UK.

As might be expected, there is also considerable variation amongst altnets. For example, City Fibre has announced £3bn of funds raised, and each of G.Network, Upp and Gigaclear have raised approximately £1bn. However, there are 63 altnets that have not announced any funding, or have raised £10m or less. In part this reflects different ambitions – some players are tightly focused on a certain local neighbourhood, for instance.

The market is becoming more competitive, more complex, and more heterogeneous. Thus it is also becoming less predictable.

That said, the window of opportunity for further new entrants is surely closing, given intense competition for funding, staff, deployment capacity, attractive market opportunities and customers.



<sup>1</sup> Based on latest available accounts – on average, for the year to December 2020

<sup>2</sup> Virgin Media figures will include its retail operations, unlike Openreach which is purely wholesale

## 2 Introduction

In this paper we consider the ambition and capacity of approximately 100 companies that are building gigabit networks in the UK. We have built a database of these companies' financial scale, based on latest available annual reports filed at Companies House (gathered between January and March 2022).

Such data is 'rear view mirror', depending on the timeliness of filings by the companies. While we have used the latest available accounts, the 'average' year-end is December 2020, and so figures may not be representative of the companies' present situations (particularly since the sector is seeing new entry and rapid growth).

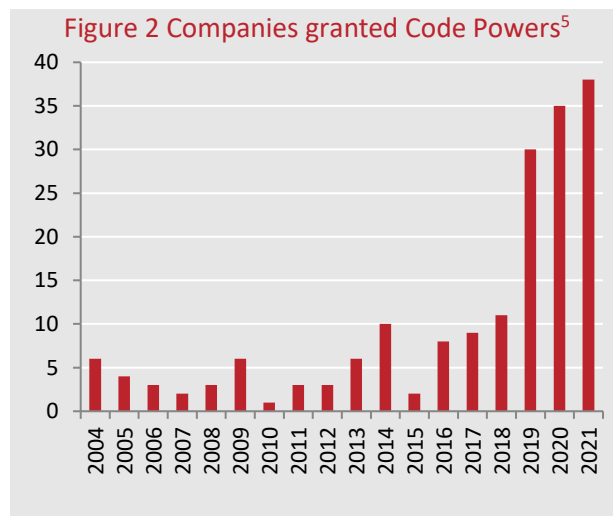
Further, over two-thirds of these companies were classified as 'small' or 'micro', generally meaning they had revenues of less than £10.2m.<sup>3</sup> Such entities have more limited filing requirements – in particular they needn't file a profit and loss statement. This very high share of small and micro entities highlights the significant number of start-ups in the sector, though some are longstanding but focused entities, such as B4RN.<sup>4</sup>

Further evidence of the importance of new entrants comes from 'Code Powers' grants. To deploy fibre networks, a company generally needs to secure a grant of such powers from Ofcom. Figure 2 shows the sharp increase in such grants from 2019 onwards.

Thus there is significant diversity of scale, with many small companies at one end, and multi-billion pound entities such as Openreach and Virgin Media at the other.

The companies are also diverse in their mix of business models (for instance, retail vs wholesale) and their related businesses. Thus there is some risk of apples-to-oranges comparisons. Openreach's wholesale-only model is very different from Virgin's fully integrated business, for example.

Despite these caveats, the data paints a striking picture of the market.



<sup>3</sup> To be classified as 'small', a company must meet two of the three following tests: a turnover of £10.2 million or less; £5.1 million or less on its balance sheet; or 50 employees or less

<sup>4</sup> A volunteer-supported rural broadband provider

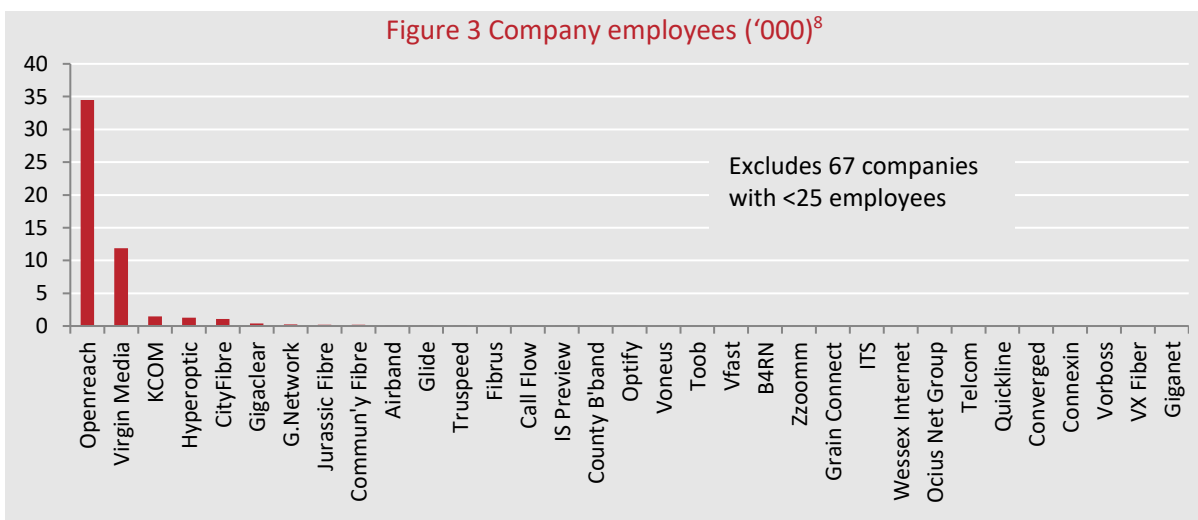
<sup>5</sup> Analysis of Ofcom Code Power grants

## 3 Scale of gigabit builders

### 3.1 Employees

We begin by looking at staff numbers, a first – albeit crude – measure of organisational capacity. The figures in annual reports are for direct employees. Many alt-nets<sup>6</sup> are making heavy use of contractors, and this workforce is not included in these figures.

That said, staff numbers show the significantly greater scale of Openreach and Virgin Media compared to other players. (Note that – unlike Openreach – the Virgin Media figures include staff to support retail operations.<sup>7</sup> BT Group has 105,000 employees).



Below these two largest players is a second tier comprising KCOM, Hyperoptic and City Fibre, each with a little over 1,000 employees. Thereafter there is a long tail of smaller players, that in aggregate represent just 5% of the total employees in our data set.

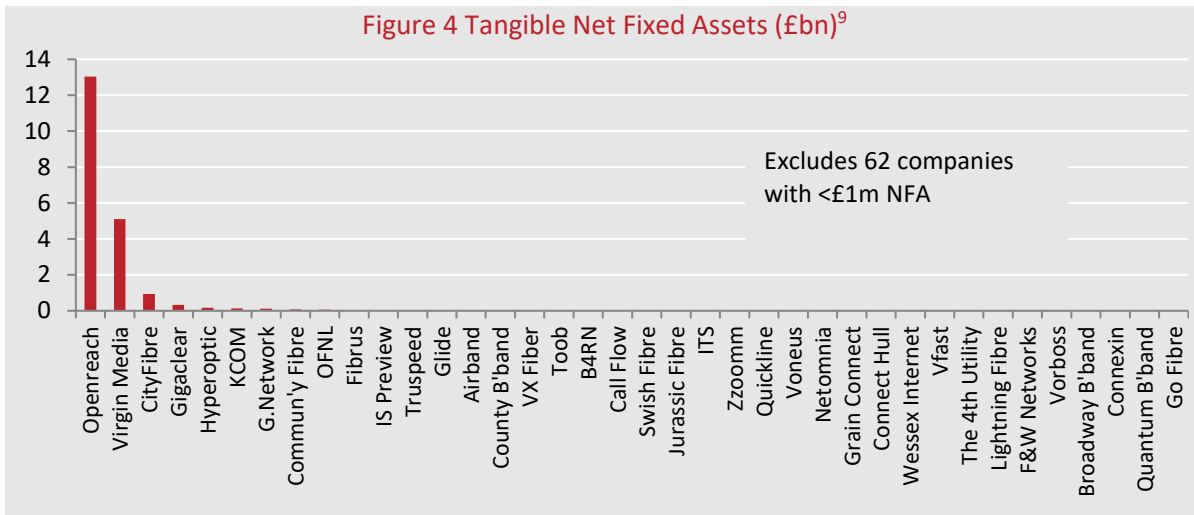
### 3.2 Tangible Fixed Assets

The picture of net tangible fixed assets – a crude proxy for the scale of the existing network – is broadly similar, albeit with a slight shuffling of the second tier. Amongst the alt-nets, the impact of City Fibre's early start, aggressive roll-out and acquisitions is clear – its asset base (£929m) is almost triple that of the next largest player, Gigaclear (£320m).

<sup>6</sup> Independent broadband deployers, as distinct from Openreach and Virgin Media

<sup>7</sup> However, the accounts predate the merger with O2 and so do not include staff to support this business

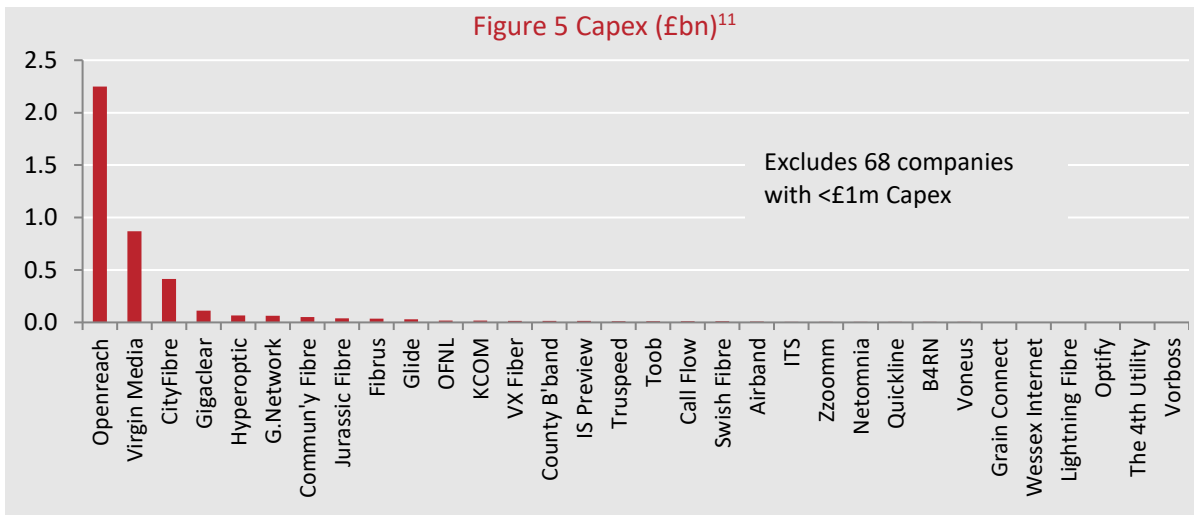
<sup>8</sup> Company accounts



The players outside the top 5 represent just 3% of total tangible net fixed assets (NFA), an even lower percentage than of employees. This is perhaps to be expected – employees ‘lead’ NFA, in that you need to recruit before you can build.

### 3.3 Capex

While Openreach and Virgin Media also lead in capex, the lead is appreciably narrower. CityFibre<sup>10</sup> spent £415m in 2020 (primarily on FTTP), compared to Virgin’s £869m across its entire business.



The long tail beyond the top 5 is also much more significant for capex – in aggregate they are responsible for 10% of capital expenditure. This shows the appreciable diversification of parties investing in the

<sup>9</sup> Company accounts

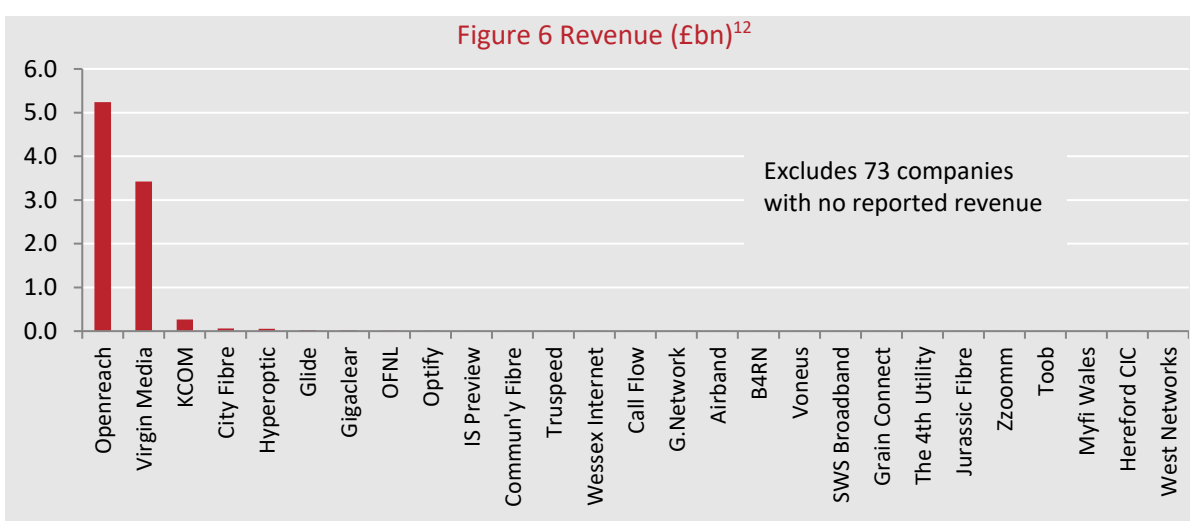
<sup>10</sup> The relevant legal entity for CityFibre is Connect Infrastructure Topco Ltd

<sup>11</sup> Company accounts

UK's access network. That said, Openreach by itself is providing 55% of total spend.

### 3.4 Revenue

However, even those new entrants that have invested significantly are yet to see substantial revenue. There is a lag between the start of deployment and a network being ready for service, and then a further lag before customers migrate over to the new network and revenue begins to flow. Thus even CityFibre had revenues of just £63m in 2020, compared to Openreach's £5.2bn for 2020/21. Only eight companies had revenues of more than £10m:



Beyond the top 5 companies, the long tail generates less than 1% of total revenues. Thus – at least as of 2020 – while the new entrants were already having significant impact on policy, investment incentives for the incumbents and so on, they were so far having only modest direct impact on customers overall. (That is not to minimise their impact on the particular customers they did serve).

### 3.5 Operating cash flow

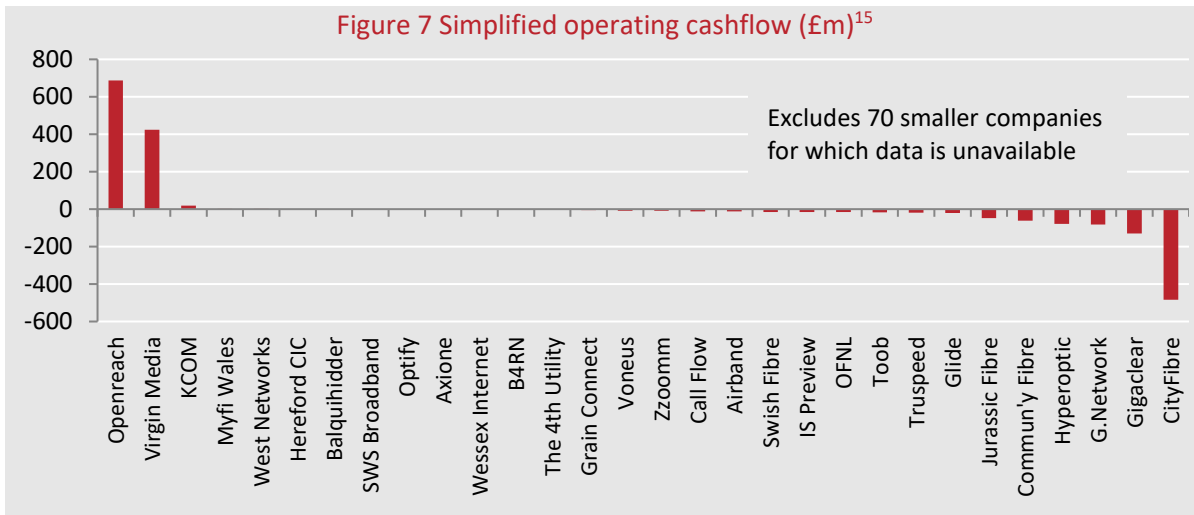
We now turn to simplified operating cashflow, calculated as EBITDA less capex.<sup>13</sup> Here the difference between the incumbents and the new entrants is even starker. While Openreach is investing substantially, it is able to do so entirely from its own cashflow – its £2.2bn capex is more than covered by its £2.9bn EBITDA.<sup>14</sup>

<sup>12</sup> Company accounts

<sup>13</sup> Earnings before interest, tax, depreciation and amortisation less capital expenditure. We set aside movements in operating working capital, which are likely to be immaterial.

<sup>14</sup> Some of the difference will be needed to cover tax. BT reports 'Normalised Free Cashflow' (after tax) of £486m for Openreach. BT, [Annual Report 2021](#), 12 May 2021





By contrast, the larger altnets need substantial external funding to support the deployment of their networks. Cityfibre’s *negative* operating cashflow in 2020 was £482m, for example. Supportive deep-pocketed backers are essential in such circumstances. CityFibre raised £1.4bn from a variety of investors in the six months to March 2022, as its roll-out has accelerated.<sup>16</sup>

Incumbents aside, the total negative cashflow for the 30 companies for which we have data was £1.0bn (for the respective latest available financial years). The current run rate is likely higher.

### 3.6 The importance of scale

Across all these metrics, there is a long tail of (currently) small providers. Being small is not necessarily a problem. Fixed telecoms is primarily a game of scale within a company’s operating footprint. It matters little to BT’s economics that it is much smaller than Deutsche Telekom or China Telecom, since those companies have minimal presence in the UK. Equally, it matters little to KCOM that it is much smaller than BT, because BT has minimal presence in Hull.

Thus if a small FTTP provider achieves critical mass in its own territory, then it may be sustainable – as B4RN has shown.

However, UK scale is important in some circumstances – in particular, those pursuing a wholesale model will need to support the IT systems to integrate with the broadband retailers, and be large enough that it’s worthwhile for those retailers to engage with them. For such providers, growth out of the long tail (possibly through consolidation) may be essential. Alternatively, they may be able to

<sup>15</sup> Company accounts

<sup>16</sup> CityFibre, [Mubadala commits further £300m in equity to CityFibre](#), 21 March 2022

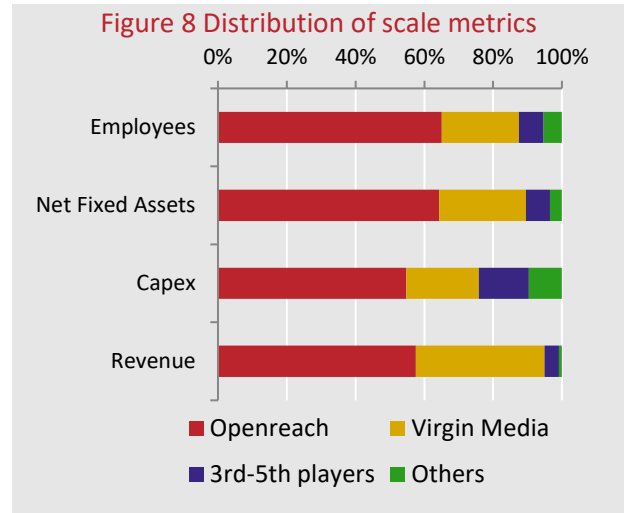
make use of an aggregator that combines the offers of multiple alt-nets. For example, the Common Wholesale Platform intends to bring together wholesale providers under a single interface for retailers.

### 3.7 Summary

Figure 8 summarises the mix across these various metrics. Clearly Openreach and Virgin Media in combination are significantly larger than the other players. That said, the stronger showing in capex by alt-nets (which is also accelerating) is a leading indicator of how the mix of other metrics such as net fixed assets and revenue are likely to shift over time.

It is also important to reiterate that these figures are necessarily based on companies for which published accounts are available. This excludes some potentially significant players.

For example, Upp is not included in our figures, but has raised £300m in equity and has planned to raise a further £700m in debt.<sup>17</sup> As of the end December 2021 it had 100 employees.<sup>18</sup> Similarly, Axione UK, which received £300m in equity in 2021 and plans to pass 4m UK premises, has only a trivial impact on our figures since its accounts pre-date this investment.<sup>19</sup>



<sup>17</sup> FT, [LetterOne backs £1bn UK broadband plan to compete with BT](#), 2 June 2021

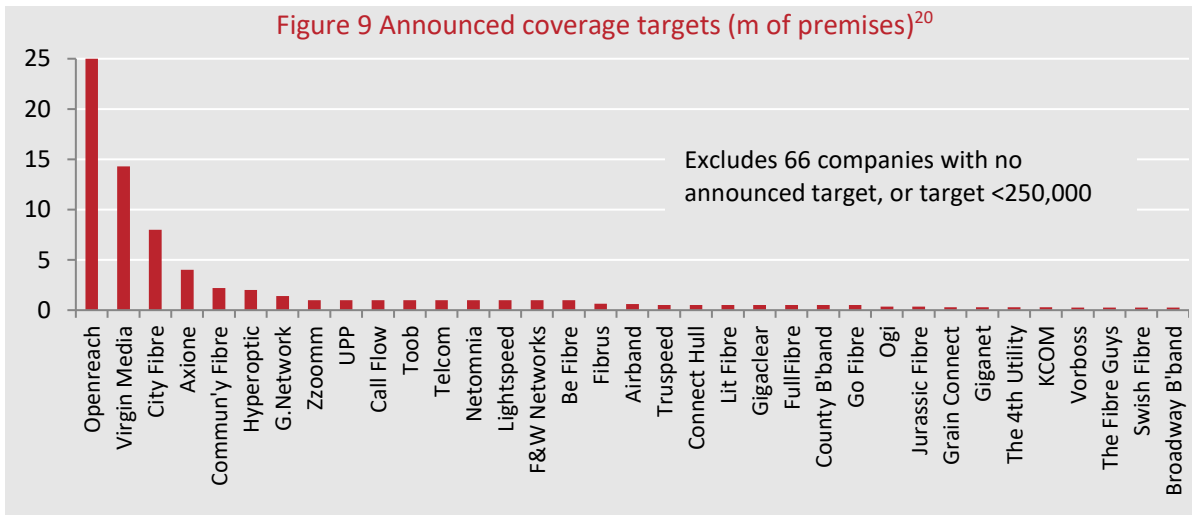
<sup>18</sup> Upp, [Hello, we're Upp](#) [accessed 7 April 2022]

<sup>19</sup> Axione, [Axione targets 4 million full fibre connections in sub-urban and rural areas contributing to the UK digital transformation](#), 31 August 2021

## 4 Gigabit ambitions

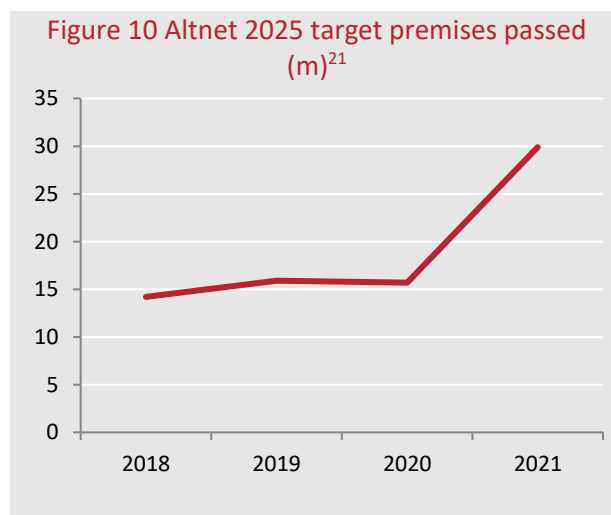
### 4.1 Coverage

We now turn to the ambitions of the Gigabit builders, looking first at coverage targets. While Openreach and Virgin Media still lead, it is a much narrower lead than we saw for historic metrics. The announced coverage targets of the alt-nets represent almost half of the total.



The announced deployments total 74.8m premises, or 2.5x the approximately 30m premises in the UK. If all these plans came to pass, it would imply that on average UK homes would have a choice of 2.5 broadband providers (albeit with variation around this mean). In practice, it seems likely that not all of these plans *will* be realised.

Coverage plans have become significantly more aggressive. Figure 10 shows how altnets' aggregate ambitions for 2025 coverage have changed over time - there was clearly a sharp increase in 2021. A number of factors are likely at work here, including the impact of new entrants, existing players becoming more confident in their ability to deploy at an economic cost over a wider area, new funding coming into the sector, and a growing sense of urgency as the various gigabit deployers participate in a 'land grab'. (BT and Virgin have also increased their coverage ambitions).

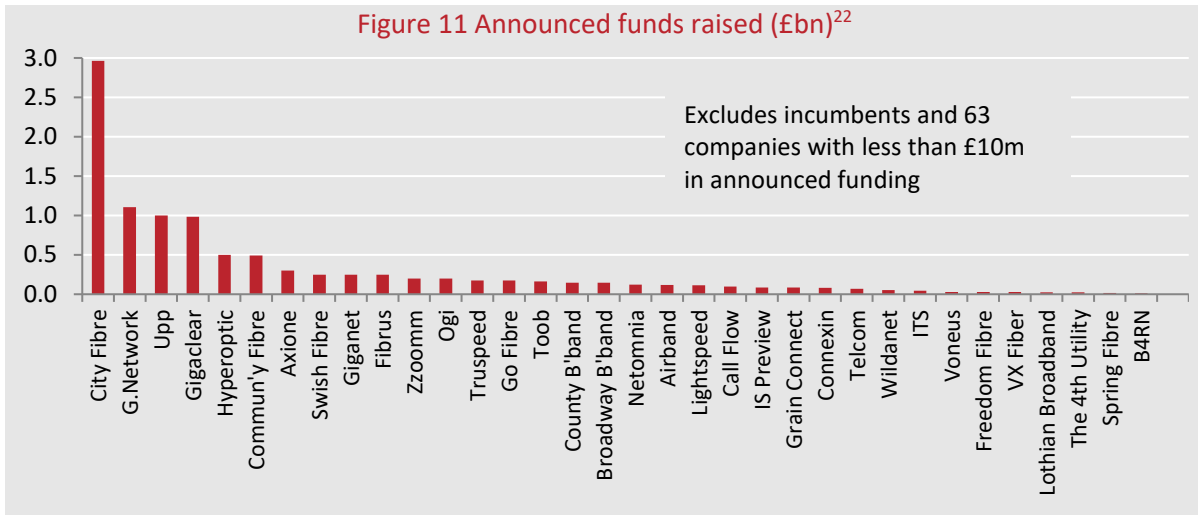


<sup>20</sup> ISP Review, [Summary of UK FTTP Broadband Build Progress by ISPs Update 108](#), 4 April 2022

<sup>21</sup> Point Topic [for INCA], [Metrics for the UK independent network sector](#), May 2021

## 4.2 Funds to deploy

As we have noted, for all but the incumbents, these large scale deployments require substantial backing from investors. CityFibre has raised £3bn, and each of G.Network, Upp and Gigaclear £1bn. In aggregate, 20 companies have raised £100m or more.

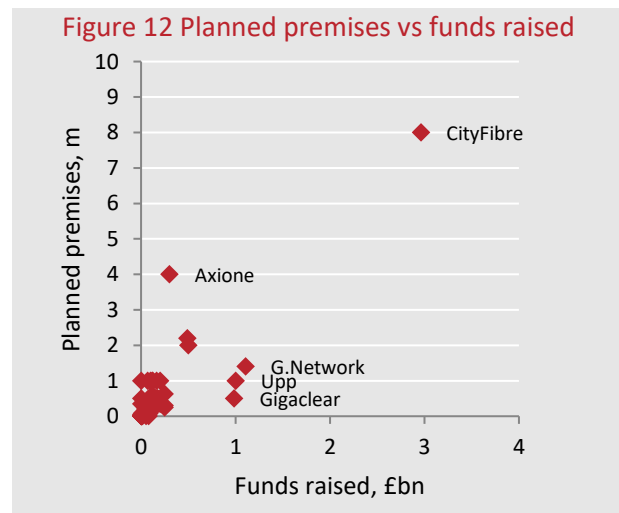


Total announced funding for the altnets is £10.4bn so far. This is clearly a substantial sum. While this will not all be converted to fixed assets (some will be used to cover operating losses), it is not far off the £13bn value of all Openreach's fixed assets.<sup>23</sup>

## 4.3 Ambition and capacity

We now turn to the ambition of Gigabit builders' announced plans vs their capacity to deploy such networks. There is of course a temptation to proclaim aggressive plans – this may help raise greater funds, scare off rival deployers and so on.

Figure 12 shows a plot of announced premises targets vs funds raised. (Since BT and Virgin Media have not raised external funds, they do not appear). CityFibre is a clear stand-out on both dimensions. Axione's premise ambition looks high relative to the funds it has raised so far. Conversely, those of G.Network and Upp look modest. (The premises figure for Gigaclear is also low, but it is a relatively near



<sup>22</sup> Includes committed funds and drawdown facilities. Various sources, including ISP Review, [Summary of UK FTTP Broadband Build Progress by ISPs Update 108](#), 4 April 2022

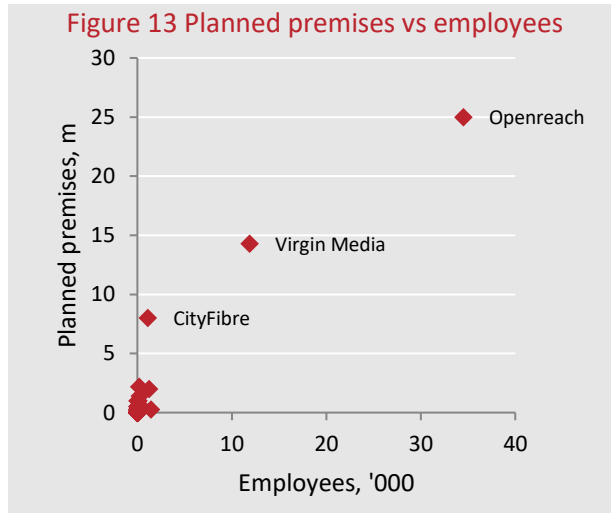
<sup>23</sup> The Openreach figure is net of depreciation

term target – 2023 – at it presumably expects to continue deployment beyond then).

Ten different companies have chosen a round 1m as their premises target, but their announced funds raised range from Upp’s £1bn to £0.

Figure 13 offers another perspective, planned premises versus current employees. Openreach and Virgin Media are of course stand-outs on this chart, given the scale of their ambitions. Indeed, their employee base may appear disproportionately large compared to their ambitions, but the figure for Openreach includes staff supporting the existing copper network, and that for Virgin includes its substantial retail operations.

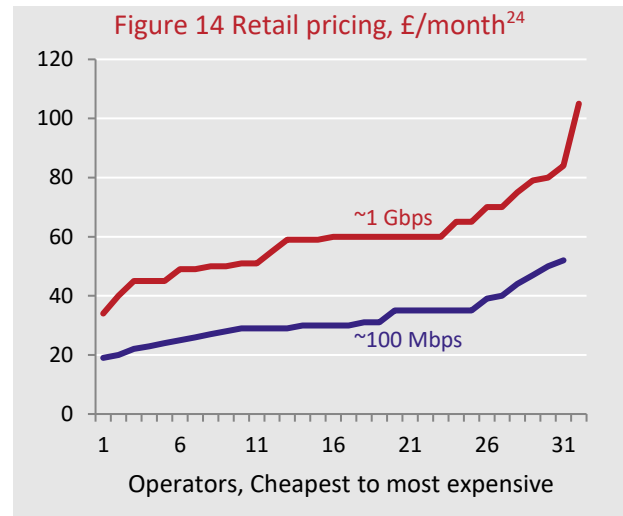
CityFibre has plans to deploy 8m lines – roughly a quarter of Openreach’s lines of all types today – but currently employs just over 1000 staff, compared to Openreach’s 34,000. Thus suggests substantial recruitment to come (even allowing for the greater operating efficiency of fibre). That said, it may be making greater use of outsourcing than Openreach.



## 5 Gigabit pricing

Most of the operators we have analysed do not publish their pricing, since they have a wholesale business model. That said, approximately 30% do offer retail packages.

Figure 14 shows pricing for connections of approximately 100 Mbps and 1 Gbps ('approximately' since a number of operators offer 900 Mbps rather than 1 Gbps, for example). The median prices are £30 and £60 respectively, but there is considerable variation around this. For example, YouFibre (the retail arm of Netomnia) offers 1 Gbps for £34 per month with an 18 month contract.



All operators are competing with national pricing from the leading broadband retailers, which in turn is based on broadly national pricing from Openreach.

However, the circumstances of the individual alt-nets – and hence their pricing - vary materially. Some may operate in lower cost areas, for example. (That said, Hyperoptic – which primarily serves apartment blocks and might be expected to have a low cost per premise passed – actually has slightly above average pricing).

Some operators will be unfamiliar to customers, and may have to price aggressively to win business. Others will operate in more competitive markets. An altnet gigabit offer may need to be priced more keenly if high speeds are already available from Virgin (or Openreach), but can be priced more highly if the only alternative is ADSL, say.

The result is that consumers in different parts of the country are likely to have increasingly divergent broadband prices available to them.

<sup>24</sup> Operator websites. Note each line is based on the ranking for that particular product – the prices shown for Operator 1 will be the lowest price for each 100 Mbps and 1 Gbps, but these prices might be from two different operators

## 6 Conclusion

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The data set out above paints a picture of a sector in rapid transition. The historic large players remain extremely important, but a plethora of new entrants are – in aggregate – likely to grow to be of similar scale.

There is also great diversity within the new entrants. Some are already very substantial, putting to work £1bn sums. Many others are little past the business plan stage, with approximately three-quarters yet to report any revenue at all. That said, substantial new money has been provided to some of these small entities in the last 12 months.

Nor has the rush of new entrants ebbed – a further 7 were granted Code Powers in the first three months of 2022, roughly the same pace as in 2021.

The market is becoming more competitive, more complex, and more heterogeneous. For all these reasons it is also becoming less predictable.

That said, the window of opportunity for further new entrants is now surely closing, given the intense competition for funding, staff, deployment capacity, attractive market opportunities and customers.

