Which?

RESEARCH REPORT JUNE 2021

Using a ‘Gigabit-Ready Mark’ to help consumers identify gigabit-capable broadband packages

Executive Summary

By 2025 85% of households should have access to gigabit-capable broadband. However, supply is just one half of the market. To ensure that consumers are enabled to adopt gigabit-capable broadband the Gigabit Take-up Advisory Group (GigaTAG) was convened in August 2020. The GigaTAG, comprised of Which?, the Confederation of British Industry (CBI) and the Federation of Small Businesses (FSB), has identified barriers to consumer adoption and recommended solutions to these. These include ways to increase awareness of gigabit-capable broadband, communicate the benefits and mitigate practical barriers to adoption. The final GigaTAG report, which this research fed into, sets out to government the GigaTAGs' recommendations to maximise the take-up of gigabit-capable broadband.[1]

This research tested the effectiveness of a 'Gigabit-ready Mark', which aims to increase consumers' ability to identify gigabit-capable packages. The icon would be displayed on products which meet certain criteria or standards in an accreditation process.

The proposed gigabit-ready mark would be technology-neutral and consistent with the government's framing of 'gigabit-capable broadband', focusing on the performance of the connection. Unlike current framing practices, it does not require consumers and businesses to have detailed knowledge or understanding of the underpinning technology.

Which? conducted quantitative research to test the impact of a 'Gigabit-ready Mark' (an icon) on consumers' ability to correctly identify broadband packages on a gigabit network. Using an experimental design we split our sample into four different conditions:

- **Control condition** (n= 476): no icon and no information on the technology delivering the broadband (ie.FTTC or full-fibre) was present on any of the adverts. This is closest to the current reality.
- **Icon condition** (n= 474): for packages which were on a gigabit-capable network a 'gigabit network' icon was placed on the advert. No information on the technology delivering the broadband (ie.FTTC or full-fibre) was present on any adverts.
- **Information condition** (n=480): information on the technology delivering the broadband (ie.FTTC or full-fibre) was given in each advert. No icon was present.
- **Icon plus information condition** (n= 472): for packages which were on a gigabit network a 'gigabit network' icon was placed on the advert. Information on the technology delivering the broadband (ie.FTTC or full-fibre) was present on each advert.

1 GigaTAG Final Report (June 2021)

Table one: summary of conditions

Condition	Presence of icon	Presence of information (Full-Fibre or FTTC)
Control	✗	✗
Icon	✓	✗
Information	✗	✓
Icon plus information	✓	✓

Participants in each condition saw six broadband adverts. These included a range of speeds and types of broadband (standard, superfast, ultrafast and gigabit); three were on a gigabit-capable network (full-fibre) and three were fibre-to-the-cabinet (FTTC). Participants were asked to identify which packages were on a gigabit-capable network and which weren’t.

Our results support the gigabit-ready mark as a helpful intervention. Specifically we found that for packages which are not at the extreme ends of speed (gigabit and standard):

- participants were more likely to accurately identify packages on a gigabit network when they were shown with a ‘gigabit network’ icon than when no there was no information on the technology delivering the broadband (ie that packages were full fibre);
- participants were more likely to accurately identify packages on a gigabit network when there was an icon, compared to when the advert included information on the technology providing the broadband (ie. that the packages were full fibre). This was even though participants had previously been told that gigabit networks were mostly delivered via full-fibre;
- in the absence of an icon, participants frequently relied on the heuristic of speed. This is not always an accurate heuristic, and will be even less so in the future when gigabit networks can be used for any speed.

These findings show that a gigabit-ready mark could help consumers to more easily identify and adopt a gigabit-capable connection.

The mark is not intended to be a solution to low motivation to adopt, and additional solutions are needed to persuade consumers of the benefits of gigabit-capable broadband. Therefore, the GigaTAG believes that its recommended interventions on clear and consistent terminology, use cases and information about the benefits of gigabit-capable broadband will need to be developed ahead of a labelling scheme. As such, Ofcom must consider and assess the role of a label as part of its project on consumer information and terminology, which is already underway, as well as considering the appropriate timing for implementation based on gigabit-capable availability.

1. Introduction

1.1. Background to the research

The UK government has set out its ambition that at least 85% of the UK should have access to gigabit-capable broadband by 2025. It is seeking to accelerate the rollout further to get as close to 100% as possible. However, while supply is a necessary factor in driving gigabit broadband adoption, it is not sufficient. Demand is also required to realise the benefits of investment in these networks. Given this, the government asked Which? (the UK's consumer champion), the Confederation of British Industry (CBI) and the Federation of Small Businesses (FSB) to convene the Gigabit Take-up Advisory Group (GigaTAG) in August 2020.

As part of their work, the GigaTAG has identified the barriers to consumers adopting gigabit-capable broadband (see table two) and has developed recommendations to improve awareness and understanding of gigabit-capable broadband (see table three). These were identified through a review of existing consumer research, original primary research and submissions from broadband providers, infrastructure providers and consumer groups via a call for evidence and discussions with stakeholders including roundtables and GigaTAG meetings.

Table two: Barriers to consumer adoption of gigabit-capable broadband

Category	Barrier
Lack of awareness	The majority of people are not aware of gigabit-capable broadband
Little benefit/perceived benefit	There is currently no 'pull' to adopt, either in the form of a 'killer' application or perceived importance of faster speeds
	Customers are unclear how it differs to other connections (on the market and their own)
	Cost (low willingness to pay and worry about paying more than expected)
Practical barriers to adoption	Restricted opportunities to switch
	'Hassle' related to the switch
	Affordability (for specific groups)
	Capability to engage (for vulnerable groups)

Table three: Summary of the GigaTAG's recommendations on how to improve awareness and understanding of gigabit-capable broadband

Recommendation	Responsibility	Timing
Clear and consistent use cases, information about the benefits and terminology	Ofcom with collaboration from industry and consumer groups	Now: Project underway
Develop a 'gigabit toolkit' for use by local authorities and support information campaigns	DCMS with support from industry, Ofcom, consumer and business groups and local government	Now: shared as gigabit broadband becomes available in an area
Explore the possibility of funding a local digital champion within local authorities to support localised information campaigns	Government	Now
A gigabit-ready mark should be developed. The mark should focus on whether a service is gigabit-capable, should be adopted on a voluntary basis and used at point of sale	Ofcom with collaboration from industry	Now: Interventions on an information campaign, use cases and broadband terminology will need to be developed ahead of the implementation of a labelling scheme.
National campaign	Government	>85% coverage

One barrier identified was the hassle related to the switch, including consumers finding it difficult to identify the best package for their household. This difficulty is partly due to the terminology and inconsistent language used by broadband providers. Nearly four in 10 (37%) decision-makers say they're not confident understanding the language and terminology used by broadband providers, and four in 10 (38%) who don't have gigabit-capable broadband say that they're put off adopting gigabit-capable broadband as the terminology used to describe packages make it difficult to differentiate between them.[2] A gigabit-ready mark, in the form of an icon, has been suggested as a way of providing simple, clear and consistent information to enable identification of gigabit-capable packages.

This paper reports on the impact a gigabit-ready mark may have in increasing the capability of consumers to adopt gigabit-capable broadband, by making it easier for them to identify the packages once they have made the decision to adopt.

This paper is part of a series reporting the consumer research which informed the identification of barriers to adoption and solutions. Other papers are:

- **Which? (2021) Consumer barriers to gigabit-capable broadband adoption:** a quantitative general population survey which provided insights into consumer likelihood to adopt gigabit-capable broadband and barriers to adoption.
- **Which? (2021) Gigabit-capable broadband communications testing:** quantitative research using Maximum Difference Scaling (Max Diff) and TURF (Total Unreplicated Reach and Frequency) analysis to explore which messages on the benefits of gigabit-capable broadband resonate most with consumers.

2 Which? (2021) Consumer barriers to gigabit-capable broadband.

1.2. Aims of the research and hypotheses

The aim of the research was to test whether a gigabit ready mark in the form of a 'Gigabit network' icon would enable participants to more accurately identify whether a broadband package is on a gigabit-capable network or not. There may be secondary benefits resulting from such a mark, such as helping to increase awareness of gigabit-capable broadband, however these have not been explored in this research.

Our hypotheses were:

1. **An icon enables participants to more accurately identify gigabit-capable packages**, compared to participants who did not see an icon and did not see information on whether the package is FTTC or full-fibre (the control condition).

2. **An icon enables participants to more accurately identify non-gigabit-capable packages**, compared to participants who did not see an icon and did not see information on whether the package is FTTC or full-fibre (the control condition).

3. **An icon is associated with more accurate identification of gigabit-capable packages than providing information** in an advert that the package is full-fibre.

4. **An icon is associated with more accurate identification of non-gigabit-capable packages than providing information** in an advert that the package is FTTC.

2. Methodology

Yonder, on behalf of Which?, surveyed 2,079 UK adults online between 16 and 18 April 2021. Data was weighted to be representative of the UK population by age, gender, region, social grade, housing tenure and work status. Of this sample 1,902 were solely or jointly responsible for decisions about their household broadband and completed the survey.

To identify the effect of a 'gigabit network' icon the sample was randomly divided into four equal groups and shown six broadband adverts. These adverts were the same in each condition apart from: 1) in the information conditions the advert included text on the technology delivering the package, i.e. whether the package was full-fibre or fibre-to-the-cabinet (FTTC) and 2) in the icon conditions adverts which were on a gigabit-capable network (ie full-fibre) had a 'Gigabit network' icon, as shown in Image one, placed on the advert.

The four conditions were:

1. **Control condition** (n= 476): no icon and no information on the technology delivering the broadband (ie.FTTC or full-fibre) was present on any of the adverts. This is closest to the current reality.
2. **Icon condition** (n= 474): for packages which were on a gigabit-capable network a 'gigabit network' icon was placed on the advert. No information on the technology delivering the broadband (ie.FTTC or full-fibre) was present in any adverts.
3. **Information condition** (n=480): information on the technology delivering the broadband (ie.FTTC or full-fibre) was given in each advert. No icon was present.
4. **Icon plus information condition** (n= 472): for packages which were on a gigabit network a 'gigabit network' icon was placed on the advert. Information on the technology delivering the broadband (ie.FTTC or full-fibre) was present in each advert.

Table four: Summary of conditions

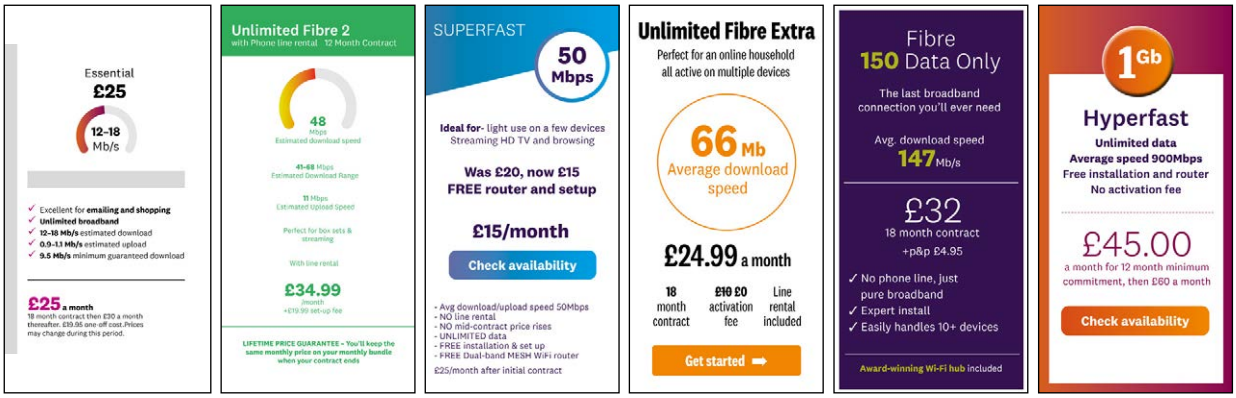
Condition	Presence of icon	Presence of information (Full-Fibre or FTTC)
Control	✗	✗
Icon	✓	✗
Information	✗	✓
Icon plus information	✓	✓

Image one: 'Gigabit network' icon

The six broadband adverts were based on adverts in the market (April 2021) with slight amendments to the design so as to make them anonymous (information on provider was not included in the advert). They included a range of speeds and types of broadband (standard, superfast, ultrafast and gigabit); three were on a gigabit network (full-fibre) and three were fibre-to-the-cabinet (FTTC).

Table five: adverts used

Advert (control version shown; adverts in other conditions are provided in the appendix.**)**



Standard	Superfast	Superfast	Superfast	Ultrafast	Gigabit
12–18 mbps	48 mbps	50 mbps	66 mbps	147 mbps	1GB mbps
Not gigabit-capable network	Not gigabit-capable network	Gigabit-capable network	Not gigabit-capable network	Gigabit-capable network	Gigabit-capable network

Before seeing the adverts participants were shown a page with the following information:[3]

> *'Gigabit-capable broadband connections will be available to the majority of the UK by 2025. If you are on a gigabit network you are able to take out a broadband package which gives you speeds of up to 1Gbps (1000mbps). You can still choose to take out a package that has lower speeds than this if you want to though.*
>
> *Broadband on a gigabit network is usually delivered to a property via full fibre technology. This is when fibre cables are used all the way from the exchange to your house. This is different to fibre-to-the-cabinet (FTTC) which uses a fibre optic cable from the exchange to the cabinet on the street and then a copper cable to your house.'*

We decided to give information about the technology underlying gigabit-capable broadband (ie. full-fibre) as we wanted to test whether there was any additional benefit of an icon, over simply adding information into an advert on how the broadband is delivered (FTTC or full-fibre). We note that Virgin's network is classed as gigabit-capable but is not entirely full-fibre. However, as this research was to test the impact of an icon, we did not think that it was relevant to inform participants of this complexity. In addition Virgin's own communications to consumers refer to it's gigabit network as 'fibre broadband'.[4]

3 A timer was set on this page to deter participants from not reading the information.
4 'Gig1Fibre Broadband' https://www.virginmedia.com/shop/broadband/gig1-gigabit-broadband

After participants were shown the above information they were asked to indicate for each broadband advert whether they thought it was on a gigabit network or not. There was also an option for them to say ‘don’t know’. Adverts were organised vertically on the page with answer options under each advert; participants scrolled down the page to see all the adverts and could scroll back up and amend any answers if they wished to.

Following their selections, participants were asked to self-report how confident they were that they had correctly identified which broadband packages were on a gigabit-capable network (and which weren’t) and how easy or difficult they found it to identify them.

3. Results

Our key findings are:

- on packages which are not at the extreme ends of speed (gigabit and standard), an icon is associated with a significant increase in participants correctly identifying packages as either on a gigabit network or not;
- an icon is more effective at enabling participants to identify packages on a gigabit network than providing information that the package is full-fibre. However, there is not an additional benefit of the absence of an icon on non-gigabit packages over information that the package is FTTC;
- in the absence of an icon participants frequently rely on speed as a heuristic. However this is not an accurate heuristic;
- consumers consider an icon to be useful and it is associated with people feeling more confident in their ability to correctly identify packages on a gigabit network and belief that it is easy to do so;
- there is widespread consumer support for an icon.

We report on these findings in more detail below.

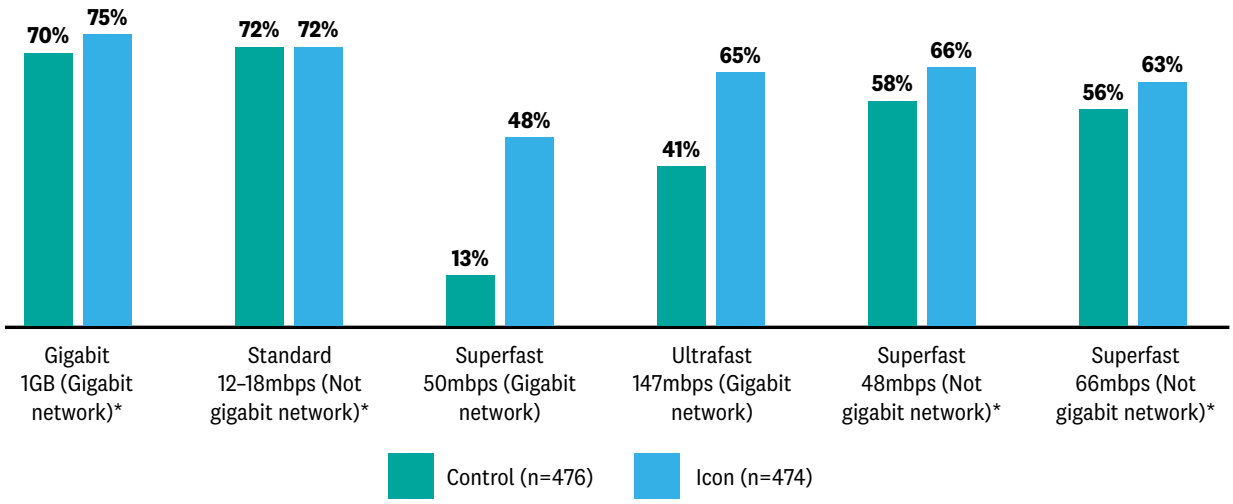
3.1. For packages which are not at the extreme ends of speed (gigabit and standard), when there is an icon present participants are more likely to correctly identify packages as either on a gigabit-capable network or not, compared to the control group.

For packages which were at the extreme ends of speed (1GB and 12-18mbps) the majority of participants were able to accurately identify them without any information on technology or an icon and we did not see a statistically significant increase when either of these were provided.

For packages which were superfast (n=3) and ultrafast (n=1) participants were significantly more likely to accurately identify them as either on a gigabit-capable network or not when there was an icon, compared to the control (no icon and no information on the technology delivering them, i.e. whether they are FTTC or full-fibre).

The largest increase in accuracy was for the superfast package delivered via a gigabit-capable network, as shown in Chart one. Participants were over 3.5 times more likely to accurately identify this as on a gigabit-capable network when there was an icon present, compared to when there was no icon and no information in the advert that it was delivered via full-fibre. There was also a dramatic increase in the likelihood of participants correctly identifying the ultrafast package as being on a gigabit-capable network when there was an icon present. In the remaining superfast cases there was still a statistically significant difference but it was less profound.

Chart one: Percentage of participants correctly identifying whether the package is on a gigabit-capable network or not: control v icon.

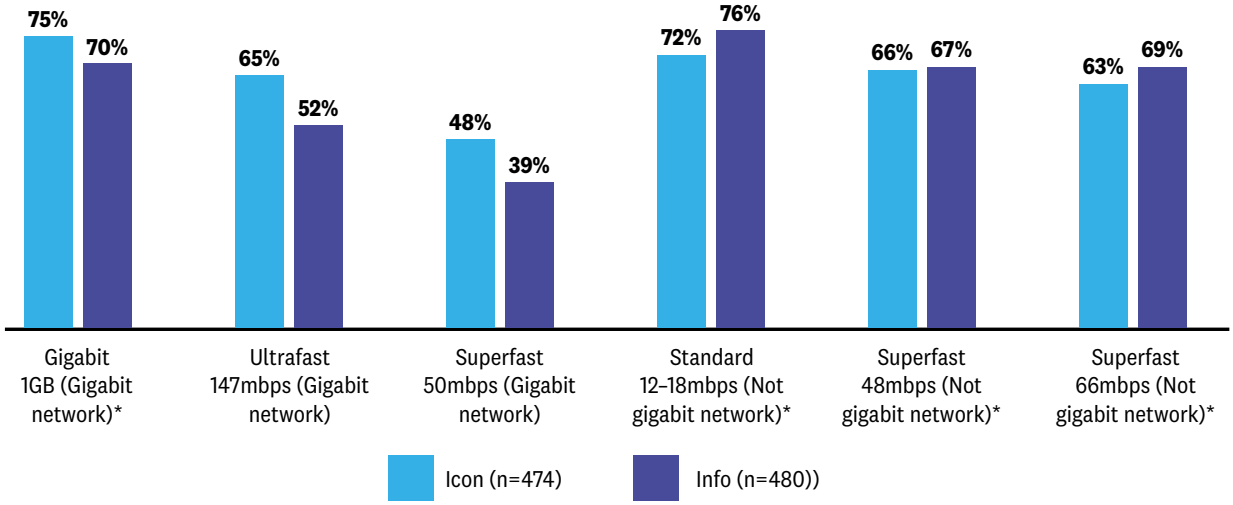


* Not significantly different between Control and Icon conditions.

3.2. When packages are not at the extreme ends of speeds, participants are more likely to identify packages on a gigabit-capable network when an icon is shown, than when information is given that the package is full-fibre.

For the ultrafast package and superfast package on a gigabit-capable network participants who saw the icon were significantly more likely to accurately identify them (as on a gigabit-capable network), than those who were told that they were delivered by full-fibre. This was despite participants being informed that gigabit-capable packages are delivered via full-fibre. Participants were just as likely to correctly identify the superfast packages that aren't on a gigabit-capable network when an icon is present, as when information is given that the package is FTTC, as shown in Chart two.

Chart two: Percentage of participants correctly identifying whether a package is on a gigabit-capable network or not: icon v information.

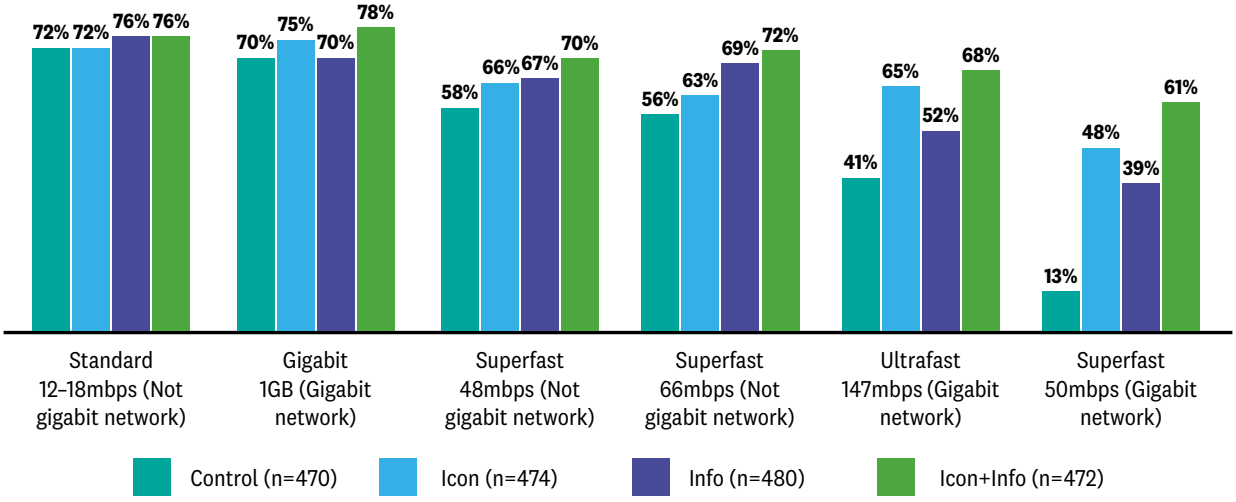


* Not significantly different between Icon and Information conditions.

This study didn't have a clear finding on whether there would be a benefit to providing both an icon and information. In two superfast packages (50mbps on a gigabit-capable network and 66mbps not on a gigabit-capable network) providing both was associated with a significant

increase in participants accurately identifying the package compared to only having an icon or only information. However, there was no additional effect of icon plus information for the ultrafast package (147mbps) or the remaining superfast package (48mbps). See Chart three for full results.

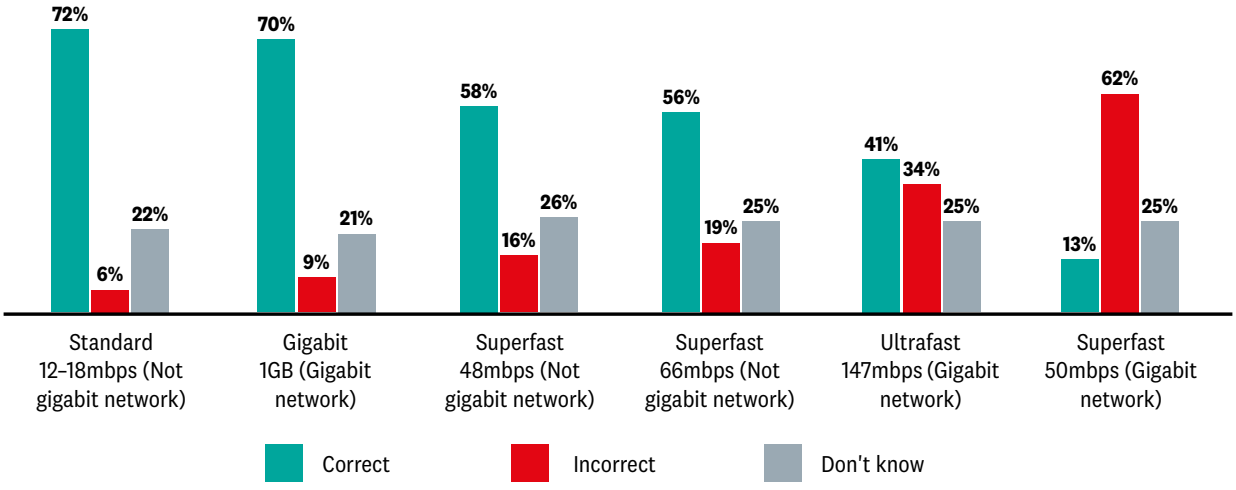
Chart three: Percentage of participants correctly identifying whether a package is on a gigabit-capable network or not.



3.1. In the absence of an icon participants frequently rely on speed as a heuristic. However, this is not accurate.

When not given any information on the technology providing the broadband (FTTC or full-fibre) and when not shown an icon on relevant adverts, the majority of participants (78%) relied on the heuristic of speed to identify whether a package was on a gigabit network or not. This heuristic effectively enabled participants to identify packages at the extreme ends of the speed distribution, however for superfast and ultrafast packages significantly fewer participants were able to accurately identify the packages (see Chart four) .

Chart four: Percentage of participants who identified packages correctly and incorrectly, when no icon or information on technology (FTTC or full-fibre) was given.

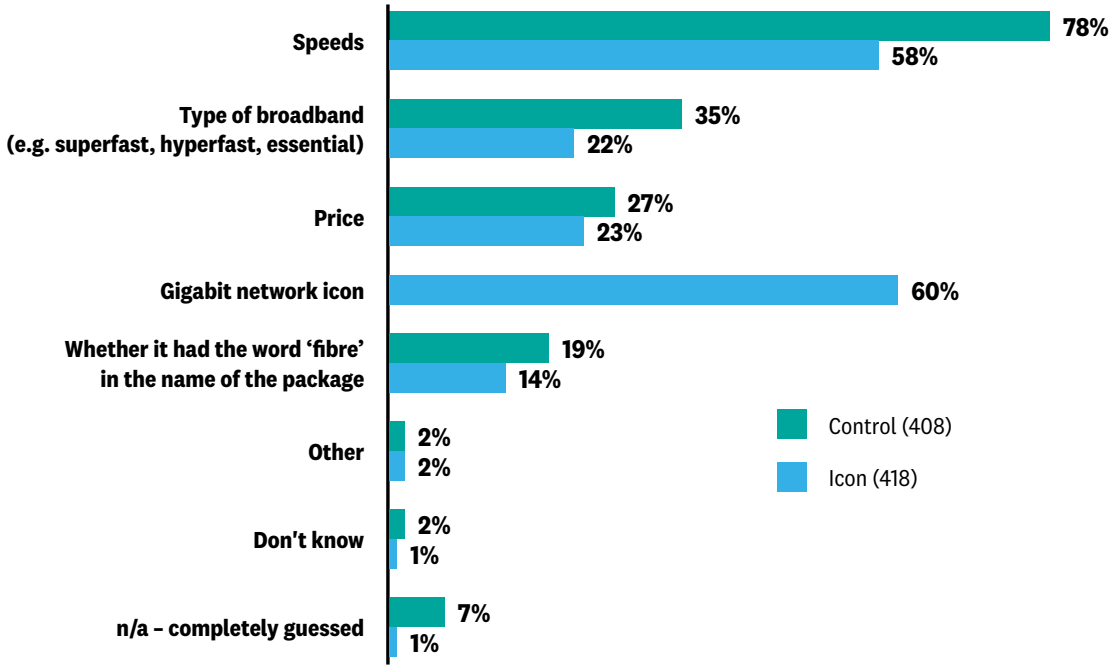


Sample: control condition n= 470

In the future, a reliance on speed as a heuristic will be even more unreliable, as gigabit-capable networks will deliver all speeds, not just gigabit. In our experiment, a superfast package delivered on a gigabit-capable network was incorrectly identified by the majority (62%) of participants as not being on a gigabit-capable network when there was no icon or information on the technology in the advert. Assuming that a package is not on a gigabit-capable network (a false negative) could lead to detriment if consumers chose a package delivering the same speed on a non-gigabit network as they may get poorer reliability of service and won't be future-proofed.

When an icon was available participants were less likely to use speed to identify packages (58% v 78% of participants in the control). Chart five illustrates differences in information participants used in different conditions. Participants who saw the icon cited it as most helpful in identifying which packages were on a gigabit-capable network and which ones weren't (59%), more frequently than speed (48%).[5] An icon may be particularly helpful for those who reported that they are not confident differentiating between packages which are FTTC and full-fibre: 7 in 10 (70%) of this group cited the icon as most helpful in identifying packages.

Chart five: Information used by participants to identify packages.



3.4. Consumers find an icon useful, and it is associated with people feeling more confident in their ability to correctly identify packages on a gigabit-capable network and believing that it is easy to do so.

Three quarters (76%) of participants in the icon condition said that it was useful in identifying whether a package was on a gigabit-capable network or not. In addition, an icon was associated with participants being significantly more likely to say that they were confident they had correctly identified which broadband packages were on a gigabit-capable network and which ones weren't, compared to when there was no icon and no information (ie. the control condition) (52% v 34%) and that it was easy to identify them (50% v 30%).

3.5. There is widespread consumer support for an icon.

7 in 10 (71%) broadband decision-makers say they are in support of an icon being used by broadband providers to indicate which packages are on a gigabit-capable network, with 40% of decision-makers saying that they strongly support it. There was no significant difference in likelihood to support depending on the type of broadband participants said they had, age or social grade (ABC1 v C2DE).

There is, however, an indication that those who may benefit most are less likely to be actively interested in the icon. Decision-makers who said that they were not confident differentiating between packages which are full-fibre and FTTC were less likely to actively support an icon being implemented (66%) compared to those who said they were confident (76%). The majority do, however, still support it and they are no more likely to oppose it (1% v 2% who say they are confident); instead it's that they have no feelings either way (26% v 20% who say they are confident). The reduced likelihood to support an icon being implemented among this group may reflect a feeling that it is less relevant to them, as they may be less likely to be thinking of upgrading. This reinforces that the icon is not a solution to motivational barriers to gigabit adoption, such as lack of perceived need, and that other solutions are needed in conjunction with the icon to persuade consumers of the benefits of gigabit-capable broadband.

4. Conclusion and recommendations

Our research provides support for a gigabit-ready mark, in the form of an icon, for gigabit-capable packages. It enabled people to more accurately identify whether packages are on a gigabit-capable network or not when unable to rely on the heuristic of speed, ie. for packages which are not at the extreme ends of speed (ie gigabit or standard).

We believe it would be more useful than providing information on whether packages are FTTC or full-fibre, as it enables better accuracy for identifying packages on a gigabit-capable network (than information on the package being full-fibre) and is just as good at helping people to identify packages which aren't on a gigabit-capable network (as providing information that those packages are FTTC). In addition an icon doesn't need any supplementary information (ie. 'delivered via full-fibre') within an advert to communicate it's a gigabit-capable network. In contrast, when providing information, in order for it to be helpful the consumer is required to know that 'full fibre' means a gigabit-capable network, which not everyone will know. A gigabit-ready mark may also have secondary benefits, for example it may help to improve awareness of gigabit-capable broadband as it would be seen in media and communications to consumers.

The GigaTAG believes that the evidence suggests that a label, as a way to identify different types of broadband connection, could be an effective intervention to help support consumers and businesses identify those connections which are being delivered over gigabit-capable networks.

Through the GigaTAG's work and its wider industry engagement, it believes that a gigabit-ready 'seal of approval' style approach to labelling warrants further investigation. Ofcom should undertake further analysis and evidence gathering to assess such a label, and the role that it could play in helping consumers navigate the broadband market, as part of its wider project on consumer information and terminology. It must assess whether a label would help consumers and business engagement on top of the other measures proposed in this report.

However, there are key aspects which would need to be assessed to ensure that the label promotes consumer understanding and informed choice. The GigaTAG recommends that Ofcom specifically considers how the label is defined and its underlying criteria, for example whether it should encompass speed and/or other measures of user experience. It must also consider the appropriate timing for implementation.

Consideration must also be given to how a label should be implemented, be it regulatory or voluntary, and where and when it can be used (for example at the point of sale and/or in wider advertising). The GigaTAG also believes that a label is likely to need to be introduced alongside information to support consumer understanding, both of the label and gigabit-capable connections more broadly.

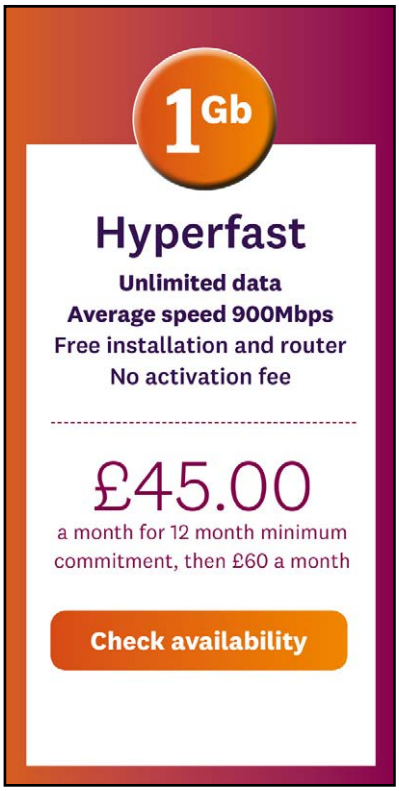
The GigaTAG believes that its recommendations on consumer information about the benefits, use cases and terminology will need to be developed ahead of the implementation of a labelling scheme. As such, Ofcom should consider and assess the role of a label as part of its wider project on consumer information and terminology. As part of this and as mentioned before, it must also consider the appropriate timing for implementation, given rollout of gigabit-capable connections.

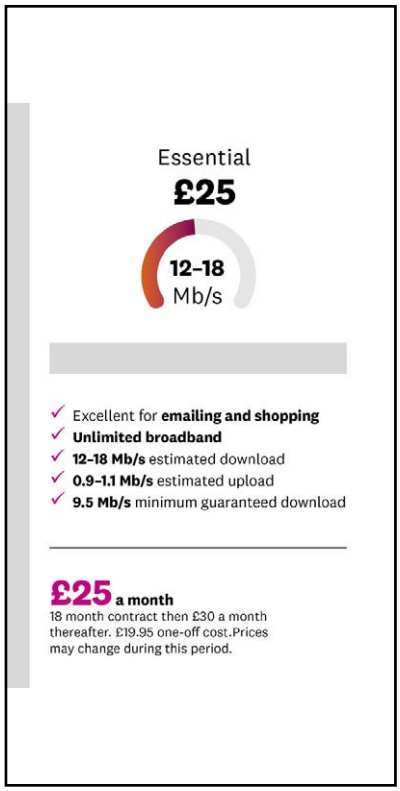
The final design and criteria of any labelling scheme must be evidence based and should draw on research undertaken on consumer behaviour, as well as subsequent consumer testing.
Ofcom should update the GigaTAG on its progress to assess such a scheme in six months.

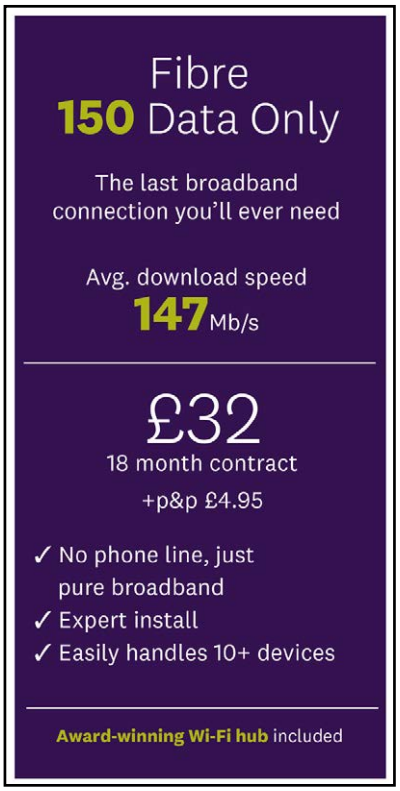
5. Appendix

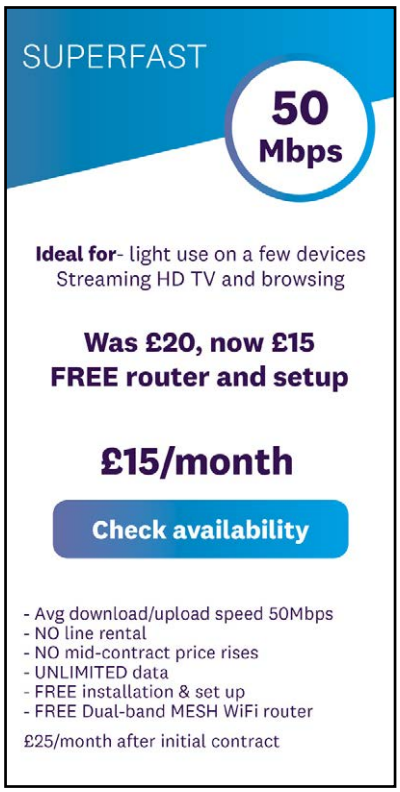
The adverts show in each condition are as follows:

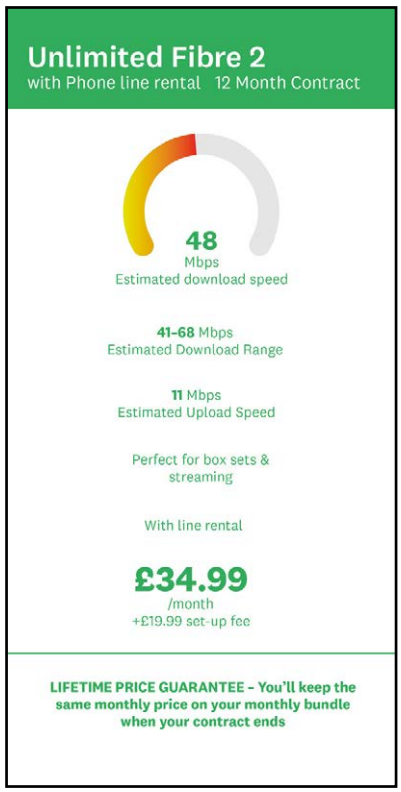
Control condition

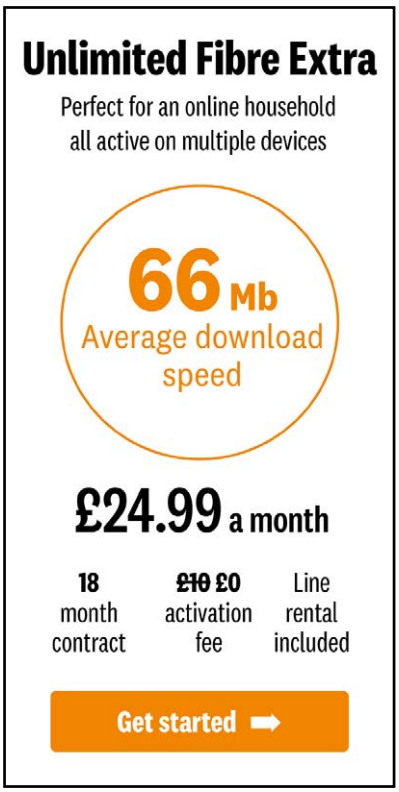




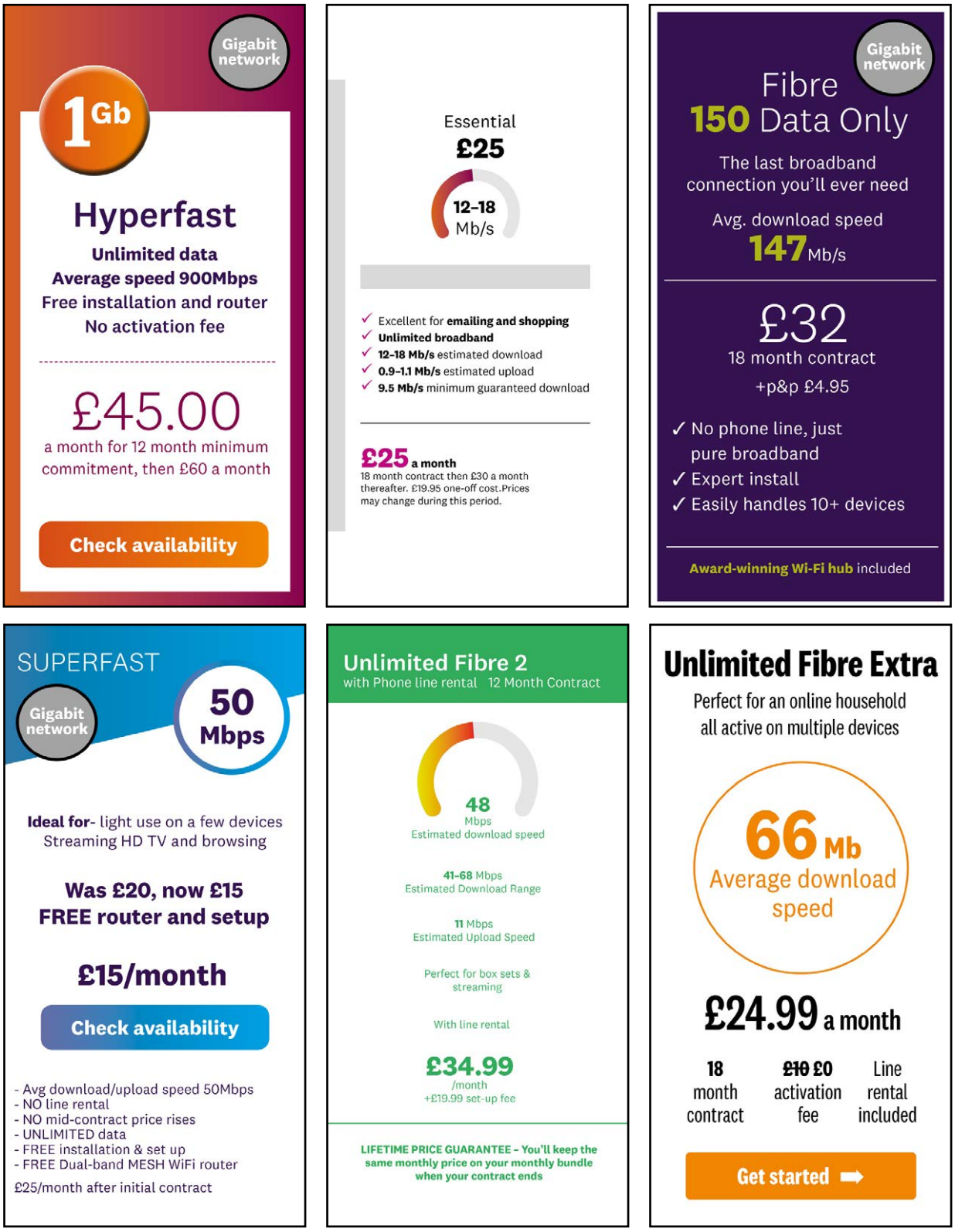




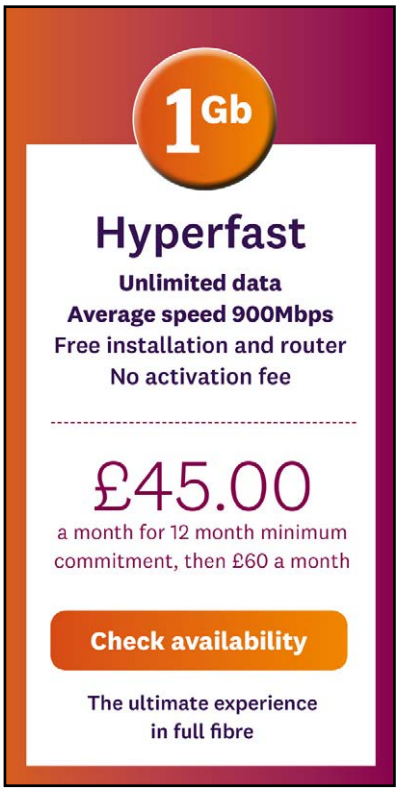


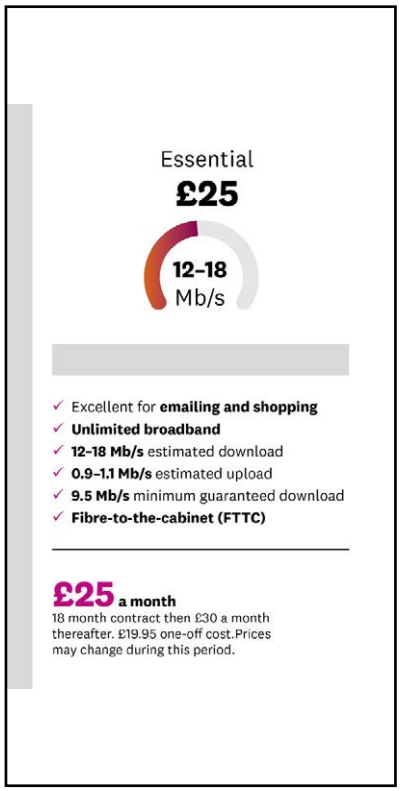


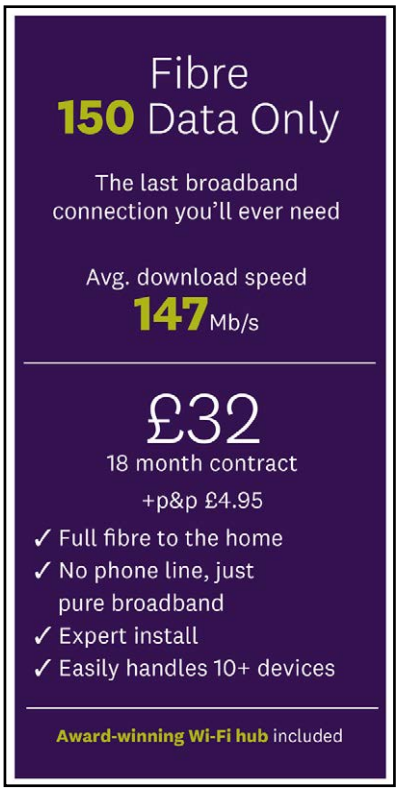
Icon condition

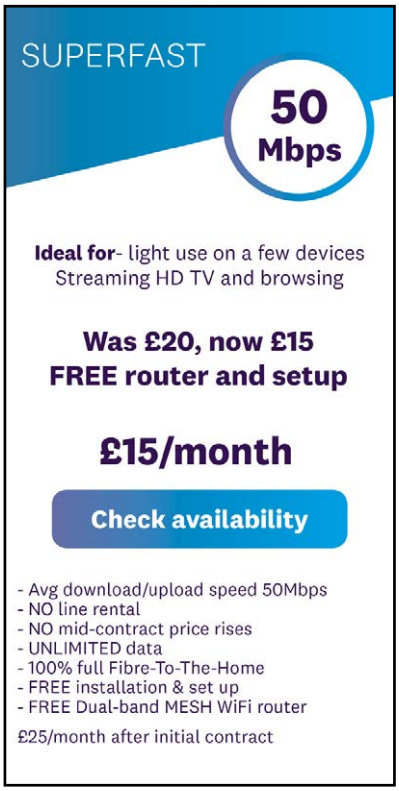


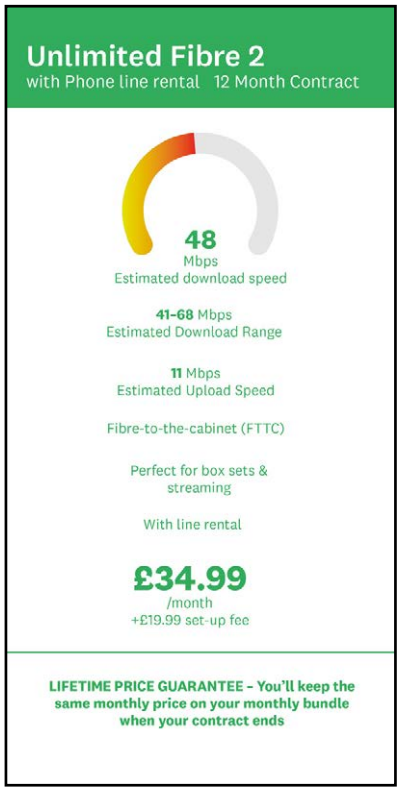
Information condition

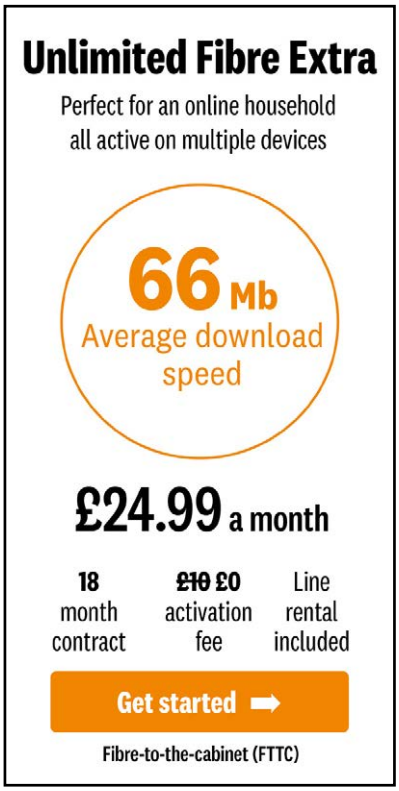




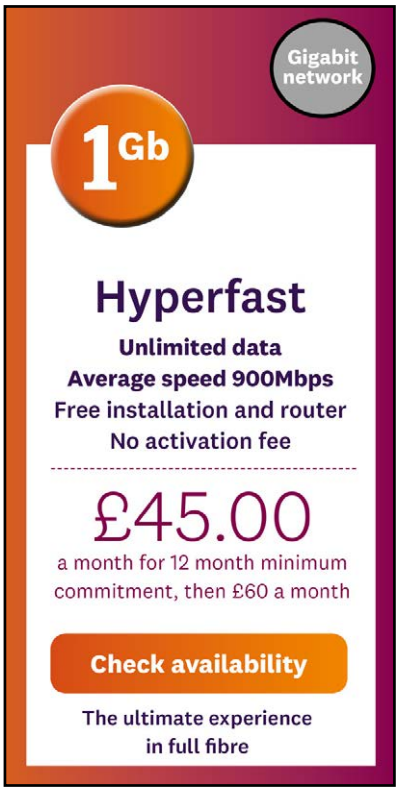


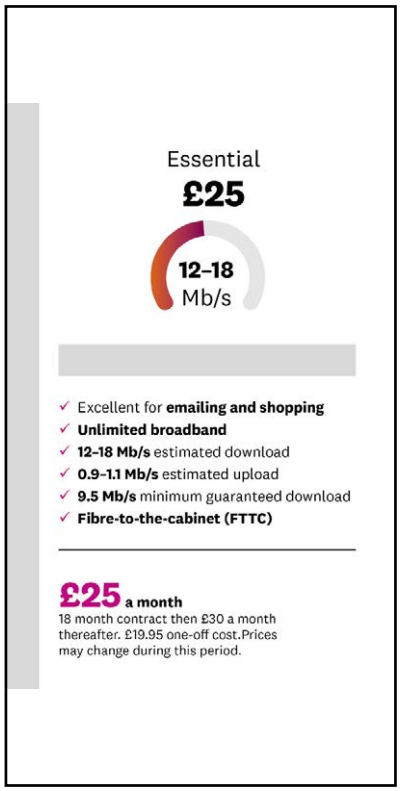


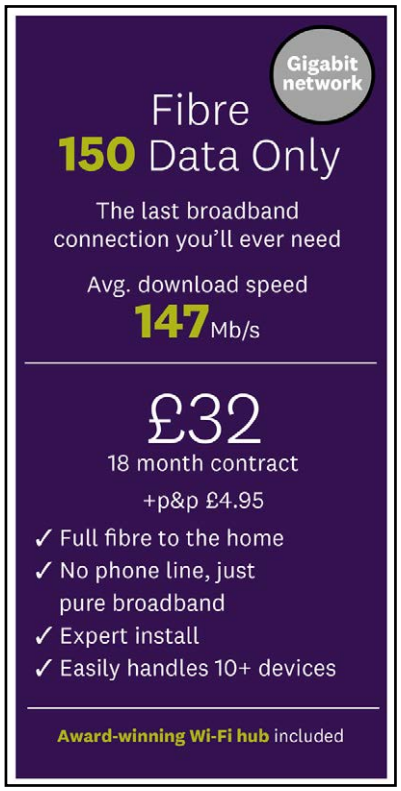


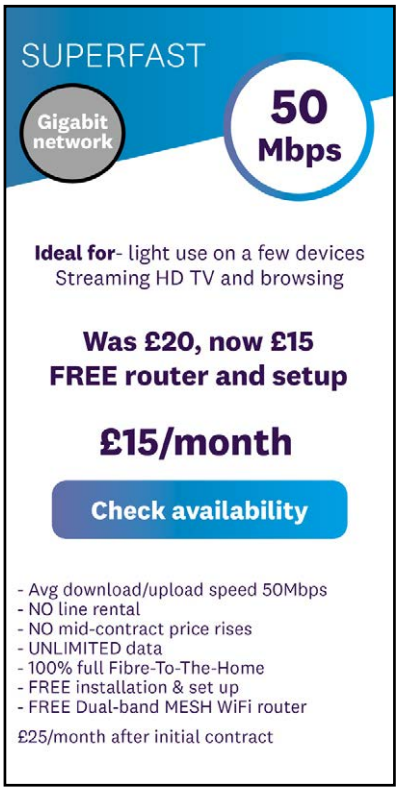


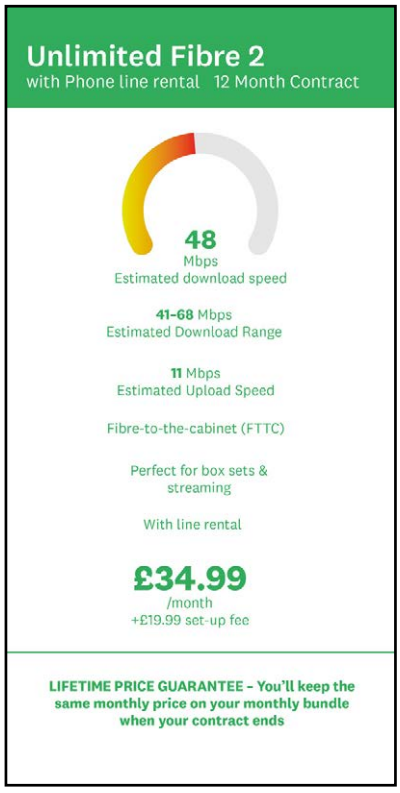
Icon and information condition

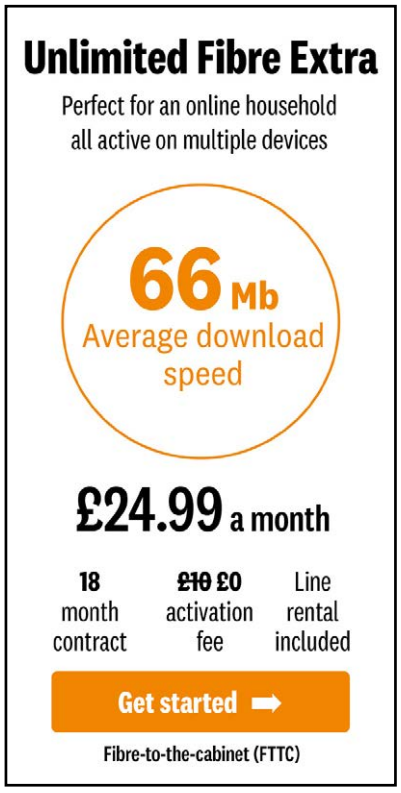












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