

Identifying European Best Practice in Fibre Advertising

for FTTH Council Europe

by
WIK-Consult GmbH
Rhöndorfer Str. 68
53604 Bad Honnef
Germany

26 June 2020

Contents

0 Executive summary	4
1 Context	6
2 Why is accurate advertising important, and what measures are in place to support it?	7
2.1 Rationale for accurate advertising	7
2.2 EU provisions affecting broadband advertising	8
2.2.1 General measures concerning consumer protection and fair competition	8
2.2.2 Measures specific to the electronic communications sector	9
3 Current practice	11
3.1 Approaches to advertising standards in the countries studied	11
3.2 Advertising practices, past and present	16
4 What is the impact of misleading advertising, and which approaches have proved to be most effective in addressing it?	25
5 Policy recommendations	31
ANNEX: COUNTRY REPORTS	33
6 Denmark	34
6.1 Summary	34
6.2 Main players and technologies used	34
6.3 Advertising standards	35
6.4 Advertising practice (past and present)	36
6.5 Outcomes	37
7 France	39
8 Germany	46
9 Ireland	54
9.1 Summary	54
9.2 Main players and technologies used	54
9.3 Advertising standards	54
9.4 Advertising practice (past and present)	56
9.5 Outcomes	59
10 Italy	60
10.1 Summary	60

10.2 Main players and technologies used	60
10.3 Advertising standards	63
10.3.1 Traffic-light system for broadband products	63
10.3.2 Disputes and fines	64
10.3.3 Broadband-ready label for buildings	65
10.4 Advertising practice (past and present)	66
10.4.1 Advertising in the experimental phase of the resolution	66
10.4.2 Advertising today	67
10.5 Outcomes	71
11 Netherlands	73
11.1 Summary	73
11.2 Main players and technologies used	73
11.3 Advertising standards	74
11.4 Advertising practice (past and present)	77
11.4.1 Ziggo	77
11.4.2 KPN	79
11.5 Outcomes	80
12 Poland	82
12.1 Summary	82
12.2 Main players and technologies used	82
12.3 Advertising standards	85
12.4 Advertising practice (past and present)	87
12.4.1 Advertising practice and disputes in the past	87
12.4.2 Advertising today	89
12.5 UPC Polska, Vectra, Multimedia	89
12.6 Orange Polska	91
12.7 Outcomes	95
13 UK	96
13.1 Summary	96
13.2 Main players and technologies used	96
13.3 Advertising standards	97

13.4 Advertising practice (past and present)	99
13.5 Outcomes	101

0 Executive summary

Actions have been taken in a number of countries – including France, Italy, Ireland and the Netherlands - to address “misleading advertising” in relation to fibre. These actions, which include legislation, regulations, guidelines and court decisions, have been justified on the grounds that misleading advertising prevents consumers from making an informed choice and affects competition in the market, by depriving investors in fibre of the ability to clearly differentiate their offers from other services which do not provide the same degree of quality and reliability.

A number of surveys confirm that European consumers are confused about the terms used to market broadband, and find it difficult to identify which services provide the best performance. Consumers’ focus (and the focus of advertising in several countries) continues to rest with download speeds in many cases and these may be referenced as “average” speeds which do not provide an accurate view of the reliability of the connection. However, future applications and services are increasingly also likely to rely on other characteristics that include reliability as well as low latency and upload speeds, which are best encapsulated with reference to the technology used. Different technologies also differ in their performance regarding energy efficiency, which is important in meeting environmental goals.

The inclusion of a new objective in the EU Electronic Communications Code, for the European Commission, BEREC and NRAs to foster the availability of and access to very high capacity broadband networks, strengthens the case for transparency in broadband marketing as fostering Very High Capacity Network (VHCN) uptake requires consumers to be properly informed about which products meet the desired criteria and what benefits these products confer. However, telecom regulatory authorities often have limited scope to address issues of awareness and advertising. Meanwhile, Advertising Standards Authorities (ASA), which do have competence over advertising may have limited understanding of the wider implications of different technological solutions for broadband, and no mandate to promote the objective of fostering investment in, and take-up of, VHCN.

A review of the schemes that have been introduced around Europe, clearly demonstrate that the strongest and most effective forward-looking interventions in the market have been driven by the National Regulatory Authority or Digital/Telecom Ministry of the country in question rather than the ASA. In contrast, while their impact can be significant, few competition authorities have intervened in this area, and their decisions concern specific cases.

Our review suggests that the clearest and most user-friendly approach could be the introduction of a labelling scheme, similar to the traffic light scheme introduced in Italy by AGCOM in 2018, whereby technologies with differing characteristics would be colour coded. This would enable customers to clearly compare broadband services in terms of

their performance and, potentially, environmental characteristics. A coding system which distinguishes between FTTH, FTTB and cable-based services, FTTC/NGA FWA and ADSL would best meet the need to distinguish the different technologies that have been deployed across the EU.

Such a scheme could be applied in a similar manner to current labelling applied for energy efficiency.

The approach taken in France where only ISPs delivering fibre into the home or premises are permitted to use the term 'fibre' in advertising materials is another model that has merit in its simplicity.

Guidelines could be considered at EU level to foster the involvement of NRAs and/or Ministries across Europe and better align policy approaches to advertising broadband with the objectives established under the Code. Legislative action could also be considered, such as the introduction of a mandatory labelling scheme for broadband covering performance and potentially environment characteristics.

In order to avoid problems seen in Italy concerning advertising of products which are not widely available, in addition to specifying the design of the label and associated criteria, guidelines should also be provided which ensure that customers are informed when certain products are not widely available, and what the alternative options are.

We recommend further analysis based on consumer research to confirm the design and validate the effectiveness of the chosen scheme that could be promoted through guidelines and/or legislation.

1 Context

Many of the countries which have achieved limited success with FTTH thus far are characterized by significant FTTC and/or cable coverage.

One of the factors that may have been hampering FTTH take-up and the business case for deployment in these countries may be a lack of awareness by consumers of the difference between the capabilities of FTTC vs FTTH infrastructure. This may have been exacerbated in some countries by a lack of advertising standards which require the differences between products to be clearly explained.

Advertising authorities have been prompted to investigate this issue in a number of countries but these authorities are bound by different objectives than those which govern electronic communications regulation, and thus may not have a mandate to make decisions which facilitate the transition to very high capacity networks. .

The impact of misleading advertising could be increased as there is evidence to suggest fibre may be an experience good (that customers appreciate more over time, which is possible only once they have experienced it), and as VHC broadband is understood to have wider economic, social and environmental benefits.”.

In this study, we provide a synopsis of the measures taken in selected European member states to combat misleading advertising and identify the most effective solutions. We also discuss the drivers of the decision taken in different countries, the timing of the action, and discuss the effects on FTTH deployment and take-up of misleading advertising.

2 Why is accurate advertising important, and what measures are in place to support it?

In this chapter, we discuss the rationale for ensuring accurate advertising, and summarise the provisions in place at EU level that aim to ensure that misleading advertising is addressed and that appropriate labels are used.

2.1 Rationale for accurate advertising

Action against misleading advertising has been justified at EU level as well as on a national level on the basis that it directly harms consumers' economic interests and thereby indirectly harms the economic interests of legitimate competitors.¹ Effects on competitors could for example include restricting market demand, thereby undermining the business case of operators seeking to invest.

Measures to combat misleading advertising are especially relevant in the context of broadband, as the primary mechanism that has been used to support consumer welfare in this market is competition,² and in the absence of clear and accurate comparative information, consumers are unable to make an informed choice.

Moreover, following the transposition of the EECC, NRAs will be given a new objective "to promote connectivity and access to, and take-up of, very high capacity networks, including fixed, mobile and wireless networks (VHCN), by all citizens and businesses of the Union".³ This objective was added, on the basis of evidence from literature and econometric analysis that suggests that take-up of higher speed broadband supports economic growth, as well as supporting jobs and services in more remote regions. The relevance of fibre in the context of the definition of VHC networks concerns not only its ability to offer higher bandwidths, but also lower fault rates and lower latency, which are critical to the delivery of next generation services including those offered via 5G networks. Thus, the misuse of the term 'fibre' in advertising may not only affect outcomes regarding broadband speed but also limit consumers' potential to benefit from an infrastructure which has a range of characteristics that may be central to future services delivery. Moreover, fibre-based broadband was found to be more energy-efficient and therefore environmentally sustainable than legacy copper and cable-based solutions.⁴

Supporting deployment and take-up of very high capacity networks in an environment where there are multiple services available at differing quality levels, will of necessity

1 Recital 6 UCPD

2 Article 3.2(d) of the EECC notes that a core objective of the legislation is to promote the interests of the citizens of the Union, by ensuring connectivity and the widespread availability and take-up of very high capacity networks, including fixed, mobile and wireless networks, and of electronic communications services, by enabling maximum benefits in terms of choice, price and quality *on the basis of effective competition*

3 Article 3.2(a) EECC

4 See WIK, Ecorys, VVA (2016) for the EC Support for the preparation of the impact assessment accompanying the review of the regulatory framework for e-communications
<https://op.europa.eu/en/publication-detail/-/publication/2984b37b-9aa6-11e6-868c-01aa75ed71a1>

require knowledge by citizens and businesses about which networks are “very high capacity”, and what benefits this confers.

2.2 EU provisions affecting broadband advertising

2.2.1 General measures concerning consumer protection and fair competition

Misleading advertising has been subject to EU-wide law on consumer protection since the adoption in 2005, of the Unfair Commercial Practices Directive (UCPD).

The Directive seeks to address “unfair, misleading and aggressive commercial practices which are capable of distorting consumers’ economic behaviour. It is further clarified that: ‘to materially distort the economic behaviour of consumers’ means using a commercial practice to appreciably impair the consumer’s ability to make an informed decision, thereby causing the consumer *to take a transactional decision that he would not have taken otherwise*.

The Directive also notes that misleading advertising may involve any marketing of a product, which creates confusion with any products, trade marks... or other distinguishing markets of a competitor.⁵

When applying the provisions of the Directive, authorities are advised to assess the *likely* effect of an advertisement on the behaviour of an “an average consumer”. For example, in its Guidelines accompanying the UCPD,⁶ the Commission notes that a commercial practice may be considered unfair not only if it is likely to cause the average consumer to purchase or not to purchase a product, but also if it is likely to cause the consumer to, for example... decide not to switch to another service provider or product.

In addition, the 2006 Directive concerning misleading and comparative advertising,⁷ focuses on addressing marketing behaviours that could lead to distortion of competition within the internal market. The preamble to the Directive notes that advertising affects the economic welfare of consumers and traders. It observes that, as advertising is a very important means of creating genuine outlets for all goods and services throughout the Community, the basic provisions governing the form and content of comparative advertising should be uniform and the conditions of the use of comparative advertising in the Member States should be harmonized. “If these conditions are met, this will help demonstrate objectively the merits of the various comparable products. Comparative advertising can also stimulate competition between suppliers of goods and services to the consumer's advantage.”⁸

⁵ Article 6(2) UCPD

⁶ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52016SC0163>

⁷ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32006L0114>

⁸ Recital 6 Directive 2006/114/EC of the European Parliament and of the Council of 12 December 2006 concerning misleading and comparative advertising

Article 4 of the Directive on misleading and comparative advertising permits comparative advertising providing it (inter alia) does not discredit or denigrate the trade names, other distinguishing marks, goods, services etc of a competitor and does not take unfair advantage of the reputation of a trade mark, trade name or other distinguishing marks of a competitor... and does not create confusion among traders, between the advertiser and a competitor or between the advertiser's trade marks, trade names, other distinguishing marks, goods or services and those of a competitor. Member states are required to ensure that adequate and effective means exist to combat misleading advertising and enforce compliance with provisions on comparative advertising in the interests of traders and competitors.

2.2.2 Measures specific to the electronic communications sector

National Regulatory Authorities have not traditionally engaged in measures to guide or govern advertising of telecom services. However, there are provisions in the EU electronic communications Code which require service providers to take steps to ensure that consumer contracts for Internet Access Services (and telecommunications services more widely) are complete and accurate, and NRAs are often involved in enforcing these provisions.

For example article 102 of the Code requires service providers to include a concise and easily readable contract summary which includes inter alia information about the main characteristics of each service provided. The Commission has published a contract summary template for this purpose.⁹

In line with the provisions of the 2015 TSM Regulation,¹⁰ which sought to provide greater transparency on the quality and actual performance of broadband offers (in the context of supporting open Internet access and “net neutrality”), the template requires service providers to provide information about “Speed of the internet access service and remedies in case of problems”. Specifically, it notes that:

Where the service includes internet access, a summary of the information required pursuant to points (d) and (e) of Article 4 of Regulation (EU) 2015/2120 shall be included. For fixed internet access service the normally available download speed and for mobile internet access service the maximum download speed shall be included. Where justifiable, a range of speed can be given. Remedies available to the consumer in accordance with national law in the event of continuous or regularly recurring discrepancy between the actual performance of the internet access service and the performance indicated in the contract shall be described.

⁹ https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2018-4821885_en

¹⁰ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32015R2120>

The 2014 Broadband Cost Reduction Directive¹¹ also contains a provision¹² that member states may (voluntarily) provide a “broadband-ready label” for buildings which have been equipped with high-speed-ready in-building physical infrastructure.

In the context of the BB CRD, ‘High-speed-ready in-building physical infrastructure’ means in-building physical infrastructure intended to host elements or enable delivery of high-speed¹³ electronic communications networks.

A general theme in telecom legislation and guidelines has been to promote actions which serve to foster the deployment of and access to broadband at increasing bandwidths over time. However, there are only a limited range of mechanisms at EU level which serve to promote awareness of the different characteristics of products.

At the same time, assessments by advertising authorities which may be called upon to address claims about misleading advertising under general advertising rules may not sufficiently reflect more subtle differences between products and services, which may be central to the bandwidth and quality objectives established in electronic communications policy at a given time.

¹¹ <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=celex%3A32014L0061>

¹² Article 8 BB CRD

¹³ The 2014 BB CRD sets the definition of high speed electronic communications networks as networks capable of delivering broadband access services at speeds of only above 30Mbit/s. The objectives of the BB CRD align with the Digital Agenda for Europe, which was relevant at that time. These objectives have in practical terms, been superseded by the focus on VHC connectivity, introduced in the Code in 2018..

3 Current practice

Although there is a common body of EU law addressing misleading advertising, different policies have been adopted concerning broadband, which may reflect differing degrees of awareness amongst authorities concerning telecom policy. For this study, we have prepared case studies of broadband advertising standards practices across 8 current and former EU member states – namely Italy, France, the UK, Ireland, Germany, Denmark, Poland and the Netherlands.

The countries were selected on the basis that full fibre technologies coexist alongside part fibre technologies and thus there was the potential for misleading advertising of fibre. Moreover, we were aware that steps had been taken to address misleading advertising and/or standardize advertising in some, but not all of the countries.

3.1 Approaches to advertising standards in the countries studied

The table below summarises applicable guidelines and rulings on “fibre” in broadband advertising.

Country	Advertising/labelling development	Relevant authority
Italy	2018 Traffic-light system from NRA requiring advertisers to distinguish between full (FTTH/B) vs part fibre vs copper via “labels”.	AGCOM/NRA
	2018 fines from competition authority on TI, Fastweb, Vodafone and Wind	Competition and Market Authority AGCM
France	2016 Decree requires service providers to specify (when referring to fibre) whether connection into the home has been realised with fibre i.e. distinguish FTTH vs FTTB. If download speed is reported, upload speed must also be reported	Legal Decree adopted by French Govt
	2018 legal decision under French Commercial Code requiring ISPs to cease using fibre where the service does not involve termination via fibre, and to offer SFR clients which were missold a fibre connection the option to unsubscribe. SFR was also required to pay damages to Iliad	Tribunal
UK	ASA concluded that references to “fibre” by ISPs offering part fibre solutions were not misleading. Cityfibre application for judicial review rejected Apr 2019	Advertising Standards Authority
Ireland	In August 2019, the ASAI introduced non-binding Guidelines which require references to FTTC etc to specify that the network is based on “part fibre”, and clearly highlight cases where the service advertised is limited in availability	Advertising Standards Authority for Ireland (ASAI)
Germany	No specific provisions on references to fibre in broadband advertising. From 2017 onwards the NRA obliged ISP’s to provide a ‘product fact sheet’ on their website displaying in addition to the max advertised speed the normally available speed and the minimum available speed.	

Country	Advertising/labelling development	Relevant authority
Denmark	Industry-led labelling scheme developed in 2008 by Dansk Energi "Dansk Fibernet", requiring offer of fast and symmetric speeds, upgradable up to 1Gbits based on FTTH	Dansk Energi (industry trade association)
Poland	No Guidelines or Decisions concerning misleading advertising, but Orange Polska has publicly claimed that cable operators are engaged in misleading advertising in relation to fibre	
Netherlands	No specific Guidelines governing "fibre" advertising. However, in 2014 the Appeal Board of the Advertising Code Committee advised the cable operator to cease using the term "own fibre optic cable network" following complaints raised by Reggefiber	Board of Appeal of the Advertising Code Committee (non-binding)

Only two of the eight countries covered by the research have adopted binding rules or legislation governing the use of the term "fibre". In France, a Decree adopted in 2016 requires service providers making reference to fibre to specify whether the connection into the home is fibre (i.e. to distinguish FTTH from FTTB), and to specify the upload speed, whenever the download speed is specified. Meanwhile, in 2018 the Italian regulator AGCOM adopted a mandatory "traffic light" system, whereby the word "fibra" and green labelling is reserved for FTTH/B, while yellow refers to part fibre (e.g. FTTC) and red to copper (ADSL) services.

The labels are shown in the figure below. However, a fibre optic offering (with a green label) may be advertised as such, even if it is not available nationwide.

Figure 1: AGCOM sticker



Source: AGCOM (2018).¹⁴

Another important feature of the AGCOM ruling is that the implicit association of several technological architectures under the same commercial brand in one-to-many communication is not allowed.

In both Italy and France, adoption of the legal rulings on fibre labelling were triggered by cases in which operators were fined for advertisements deemed to be misleading.

Specifically, in 2018 the Italian Competition and Market Authority¹⁵ imposed fines on Telecom Italia (4.8 million €)¹⁶, Fastweb (4.4 million €)¹⁷ and Vodafone (4.6 million euros)¹⁸ for misleading advertising of fibre optics and Wind Tre¹⁹ (4.25 million €)²⁰ for misleading and omissive advertising of fibre optics.

The AGCM noted that the fibre optic connection advertising campaigns used wording that suggested the exclusive use of fibre and/or the achievement of maximum performance in terms of speed and reliability of the connection, without adequately informing consumers of the actual characteristics and limitations of the service offered. This meant in particular geographical limits on the coverage of the various network solutions, the differences in the services available and different performance depending on the infrastructure used for the fibre connection.²¹

As a result of that conduct, according to AGCM, the use of the generic term 'fibre' means that the consumer is not able to identify the special characteristics of the products.²²

In August 2019, the Antitrust Authority also accepted complaints of the National Consumer Union, and imposed fines totalling €875,000 on TIM, Fastweb, Wind Tre and Vodafone for misleading offers on fibre.²³

¹⁴ Allegato C alla delibera n. 292/18/CONS

¹⁵ L'Autorità Garante della Concorrenza e del Mercato - AGCM

¹⁶ <https://en.agcm.it/en/media/press-releases/2018/3/alias-2458>, Rome, 16 March, 2018

¹⁷ <https://en.agcm.it/en/media/press-releases/2018/4/alias-2459>, Rome, 23 April, 2018

¹⁸ <https://en.agcm.it/en/media/press-releases/2018/4/alias-2456>, Rome, 27 April, 2018

¹⁹ The fine of 4,25 million for Wind Tre related to both mobile Internet services and Internet connectivity services using fibre optic technology.

²⁰ <https://en.agcm.it/en/media/press-releases/2018/4/alias-2457>, Rome, 11 April, 2018

²¹ <https://en.agcm.it/en/media/press-releases/2018/3/alias-2458>, Rome, 16 March, 2018;

<https://en.agcm.it/en/media/press-releases/2018/4/alias-2459>, Rome, 23 April, 2018;

<https://en.agcm.it/en/media/press-releases/2018/4/alias-2456>, Rome, 27 April, 2018;

<https://en.agcm.it/en/media/press-releases/2018/4/alias-2457>, Rome, 11 April, 2018

²² <https://en.agcm.it/en/media/press-releases/2018/3/alias-2458>, Rome, 16 March, 2018,

<https://en.agcm.it/en/media/press-releases/2018/4/alias-2459>, Rome, 23 April, 2018,

<https://en.agcm.it/en/media/press-releases/2018/4/alias-2456>, Rome, 27 April, 2018;

<https://en.agcm.it/en/media/press-releases/2018/4/alias-2457>, Rome, 11 April, 2018

²³ <https://www.consumatori.it/comunicati-stampa/antitrust-vittoria-unc-compagnie-telefoniche-fibra/>;
<https://www.telecomtv.com/content/fttx/consumer-group-claims-victory-as-italy-takes-hard-line-on-fibre-advertising-35956/>; <https://www.agcm.it/dotcmsdoc/bollettini/2019/31-19.pdf>

Meanwhile in France, the Decree referring to fibre was influenced by a legal challenge mounted by Iliad in 2015 against the use of the word “fibre” by SFR, following SFR’s acquisition of cable operator Numericable, which resulted in the company using a combination of full fibre, FTTB (with in-building cable) and cable technology to deliver its services.²⁴ Iliad’s legal challenge, was based on alleged infringement of the French Commercial Code.²⁵ In its January 2018 conclusions, the tribunal found in favour of Iliad, and required SFR to:

- Cease using the term fibre in cases where the service does not involve termination via fibre optics in the premises of the subscriber
- Not to use, for “very high speed” offers, the term “fibre” without specifying where this technology ends within its network
- Cease all national advertising which presents their network as being based on an infrastructure which is technologically homogeneous
- Specify in commercial communications, the precise characteristics of infrastructure used in the relevant zone
- Communicate to each client which subscribed to an offer mentioning the word “fibre” with SFR or Numericable (except for FTTH offers), information concerning the nature of the connection including the distance to the fibre optic cable, the number of households sharing the cable, and the average speeds in peak and non-peak hours
- Inform clients which subscribed to a “fibre” offer which was not FTTH, that they could benefit from the option to cease their connection with immediate effect, as a result of the inaccurate information provided concerning its characteristics; and
- Publish in each journal in which the misleading advertisements were published a judicial statement, noting that it had engaged in misleading advertising in representing in offers carrying the term “fibre” services offered via cable, which cannot offer the same quality of connectivity as offers using fibre up to the building, and that this could undermine the investments made by operators deploying fibre.
- Pay damages of €51.87m to Iliad

One other country from those reviewed – Ireland – has issued non-binding Guidelines around the use of the word “fibre”. In August 2019, the ASAI released Part 1 of a Guidance note on “marketing communications for mobile phone and broadband services”. The note states that the ASAI consider that “where the descriptor ‘fibre’ is used and where the service is not provided on a full fibre network, advertising must contain a prominent qualification that the network is ‘part fibre’”. The Guidelines also state that “if a product is described by a narrative, such as ‘high speed’, ‘superfast’ or similar,

²⁴ https://lexpansion.lexpress.fr/high-tech/fibre-optique-free-attaque-en-justice-numericable-sfr_1732021.html

²⁵ Article L 480-8 Code du Commerce

advertisers must ensure that the use of language does not mislead, bearing in mind the existing comparator products available, e.g. superfast must not be used for products which are significantly slower than the maximum generally available product on the market.”

On the subject of “availability”, the Guidelines note that “advertisers offering mobile phone and broadband services must take care in the design and presentation of their marketing communications so as not to exaggerate the availability of their products, particularly when new products/technology are launched. Where the provider offers limited geographical coverage, advertising in national media must include a prominent and transparent reference to this fact.”

Contrary to the decision reached in Ireland, in 2017 conclusions published by the UK’s Advertising Standards Authority (ASA), they found that there were no grounds to establish guidance in relation to use of the term “fibre”. These conclusions were based on their interpretation of the results of consumer research that they had commissioned from Define. The ASA highlighted the summary of the research conclusions, which stated that:

- The term ‘fibre’ was not one of the priorities identified by participants when choosing a broadband package; it was not a key differentiator.
- The word ‘fibre’ was not spontaneously identified within ads – it was not noticed by participants and did not act as a trigger for taking further action. It was seen as one of many buzzwords to describe modern, fast broadband.
- Once educated about the meaning of fibre, participants did not believe they would change their previous purchasing decisions; they did not think that the word ‘fibre’ should be changed in part-fibre ads.

No guidelines on the use of “fibre” in advertising have been considered or adopted in Poland, Germany, the Netherlands or Denmark.

However, in 2008 the association representing Danish fibre utilities established a voluntary certification scheme under which operators offering services meeting certain characteristics (including full fibre with symmetric bandwidths upgradable to 1Gbit/s) could use a standard label “Dansk Fibernet”.

A number of complaints have been raised on the subject in the Netherlands, and in 2014 the Appeal Board of the Advertising Code Committee (a non-statutory body) advised the cable operator to cease using the term “own fibre network” in advertisements which it had issued in response to Regefiber’s deployment of FTTH.

More generally, it can be said that the clearest and strongest actions (and all binding measures) that have been taken to address misleading advertising, have typically been taken by bodies other than the advertising authorities – such as the national regulatory authority for telecoms and competition authority, in the case of Italy, and the competition

authority and Government, in the case of France. This may reflect the greater awareness of competition and telecom regulatory authorities of the importance and effects of these cases. However, most telecom regulatory authorities do not have the powers to act in this area, and the standards required for a competition law case are relatively high, with the French and Italian competition authorities being relatively unique in their willingness and ability to process such cases efficiently.

3.2 Advertising practices, past and present

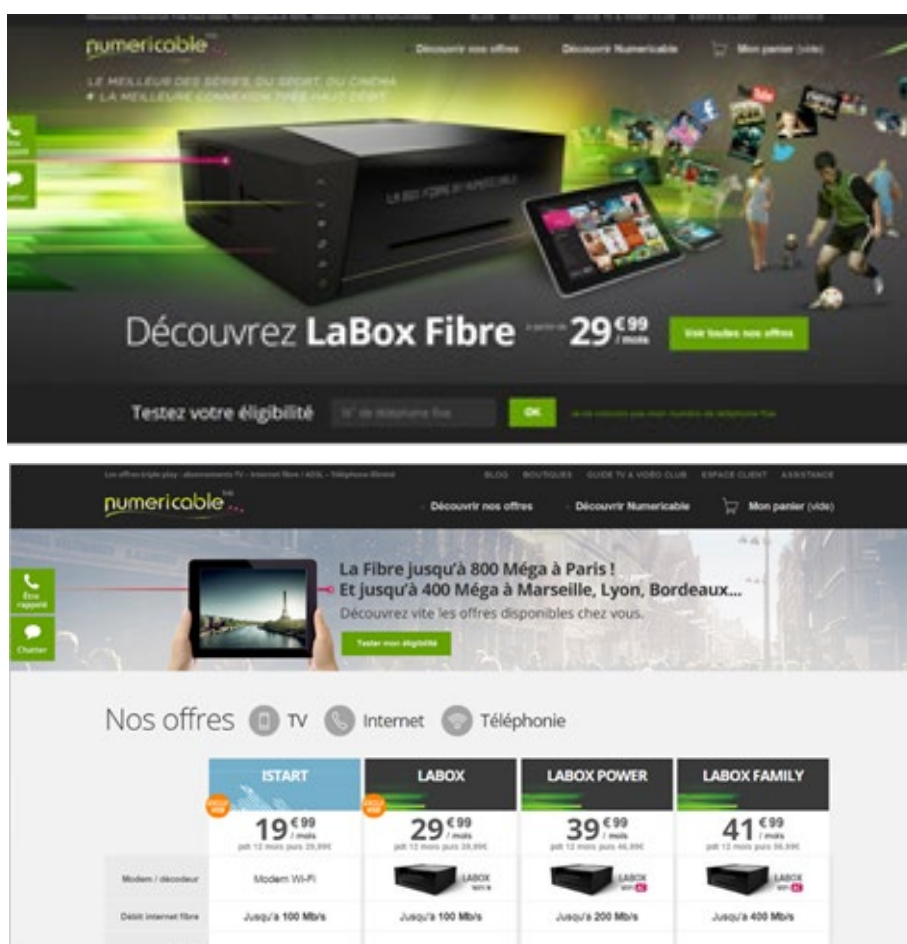
Approaches to advertising, including where relevant, changes in approaches to advertising resulting from Guidelines or decisions, are summarised in the following table.

Country	Date of Decision concerning "fibre"	Advertising practice before	Current advertising practice
France	2016 Govt Decree 2018 Court judgement	FTTB/cable advertised as "fibre"	Technologies are referenced in advertising "Fibre" commonly used, but only for FTTH, otherwise ADSL, cable
Italy	2018 AGCOM Decision (traffic lights) and court judgement Restrictions on associating different architectures with same commercial brand	FTTC, wireless advertised as "fibre"	Technologies are referenced in advertising Labelling system is applied. "Fibre" used only for FTTH/B, but is widely promoted despite limited availability.
Ireland	2019 ASAI Guidelines	FTTC, wireless, advertised as "fibre"	Most operators now focus on headline speed and/or super/ultrafast although eir advertises FTTH as "fibre"
Netherlands	2014 Decision of the Appeal Board Advertising Code Committee	Cable advertised as if fibre	Cable advertising refers to "Gigabit speed" on "Giganet" KPN distinguishes standard broadband from "fibre optic"
UK	2017 ASA concluded that references to "fibre" were not misleading	Cable, FTTC widely advertised as fibre	Cable, FTTC widely advertised as fibre Distinctions only between superfast, ultrafast
Poland	None		Cable operator refers to "fibre" for architectures which include coax at least in the final segment (incl FTTB) Pure FTTH operators also refer to "fibre"
Germany	None		Technologies are referenced in advertising Most operators distinguish between ADSL, cable and fibre optic
Denmark	None		Only fibre utilities refer to "fibre"

			Other operators focus on headline speeds, Gigaspeed etc
--	--	--	---

The decisions in Italy and France regarding “fibre” advertising were taken in response to conduct by major service providers which was deemed to be misleading. In Italy, the term “fibre” had been used for services based only on partial fibre deployment (FTTC). Meanwhile, following its merger with the FTTH/copper-based operator SFR, Numericable had been advertising services as “fibre” without reference to the actual (cable) technology used (see below). For example, Numericable offered “fibre” up to 800Mbit/s in Paris and up to 400Mbit/s in Marseille, Lyon, Bordeaux, revealing the differing technological capabilities of the network, and constraints resulting from use of cable infrastructure.

Figure 2: Numericable web advertisements prior to the Decree.....



Source: Numericable website

Following the introduction of legislation, misleading references to fibre in France and Italy ceased, but some issues remain – especially in Italy.

Italian operators are making, apparently correct, use of the labelling scheme to distinguish between fibre and other products. However, it is notable that our review of offers advertised on websites, fibre offers have been made central to the marketing campaigns, despite the limited availability of fibre infrastructure.

In France, full fibre operators including Orange and Iliad now typically distinguish between “fibre” offers and “ADSL” offers. SFR (the operator subject to the court decision) similarly distinguishes between offers based on “fibre” and “ADSL”, and is promoting its new “box 8”, which relies on these technologies. However, for its cable network, SFR also offers (but does not actively promote to the same extent), a “4K THD” (Very high speed) box, which is no longer labelled as “fibre”.

Figure 3: SFR/Numericable web advertising after the Decree

Service	Price / Mois	Engagement	Matériel	Chaînes TV	Internet	Appels	Stockage Cloud
SFR FIBRE	19€	12 mois puis 38€	Box + Décodeur	160 chaînes	400 Mb/s	Fixes en France	10 Go
SFR FIBRE POWER	29€	12 mois puis 45€	Box + Décodeur 4K	200 chaînes	1 Gb/s	Fixes et mobiles en France	100 Go
SFR FIBRE PREMIUM	39€	12 mois puis 53€	Box + Décodeur 4K	200 chaînes	1 Gb/s	Fixes et mobiles en Europe	1000 Go
BOX 4G+	35€	Sans engagement	Box 4G+	0	220 Mb/s	Fixes et mobiles en France	10 Go



CARACTÉRISTIQUES

Modem

- Chipset Broadcom 3384
- CPU 600MHz (1,6k DMIPS) pour la partie accès DOCSIS
- CPU 1GHz (2k DMIPS) pour la partie applicative
- 1 Mo Flash NOR
- 256 Mo NAND Flash
- 512 Mo DDR3 RAM
- Compatible norme réseau câblé DOCSIS 3.0
- Débit descendant de 1Gbps (selon éligibilité réseau)
- Connexion Ethernet de type gigabit

Décodeur

- Chipset Broadcom 7252s
- Dual coeur 1,5Ghz (12k DMIPS)
- GPU 2,7 Gpixels/s, OpenGL ES 3.1
- 4 Mo Flash NOR
- 4 Go eMMC NAND Flash
- 2 Go DDR3 RAM
- Disque dur jusqu'à 500Go
- 8 Tuners DVB-C
- Compatibilité Vidéo : SD / HD / UHD / 3D, MPEG-2, MPEG-4
- AVC / h.264 et HEVC / h.265
- Fonction Télécommande universelle intelligente avec

Source: SFR website January 2020

Approaches towards broadband advertising have also changed in the Netherlands and Ireland, following the adoption of non-binding Guidelines or arbitration decisions.

In the Netherlands, cable operator Ziggo no longer refers to fibre in advertising, but instead focuses on “Gigabit speeds”. On Ziggo's current website,²⁶ the company's own network is not generally referred to as a “fibre optic network”. Rather, it is highlighted that 97% of the network is made up of fibre and the last piece is “super fast coaxial cable”.

In Ireland, prior to the release of the Guidelines by the ASAI, major operators were using “fibre” to advertise FTTC and HFC-based services as shown in the screenshots below.

Figure 4: Sky Ireland sample advertisement

Sky TV & Sky Fibre

Supercharge Sky TV with superfast Sky Fibre Broadband and bring your home to life.



up to
100Mb

**unlimited superfast
eir fibre broadband**

Superfast Fibre Broadband you'll love from Ireland's trusted provider.

€42.95 / per month

Fibre Home

VIEW PLAN

Superfast Unlimited Broadband

100Mbps Download speeds / 20Mbps Upload speeds / QoS

Original, Sky Q and Fibre

Great entertainment with award-winning shows and superfast fibre

Why Pure Telecom?

- **Super Fast** 100Mb Fibre broadband available to over 1,000,000 homes nationwide

Source: Sky Ireland website Jan 2020

However, following the introduction of the Guidelines, operators have changed or restricted their references to fibre. For example, Sky has focused on distinguishing

²⁶ <https://www.ziggo.nl/internet/glasvezel/>,

speeds, with reference to the labels “essential”, “superfast” and “ultrafast”, with ultrafast broadband promising speeds only achievable via Sky’s fibre-based offering. Vodafone seems to have pursued a similar strategy, but with a focus on first obtaining customers’ location to present relevant offers. Virgin Media (based on cable), has also chosen to focus on the headline download speed (see below).

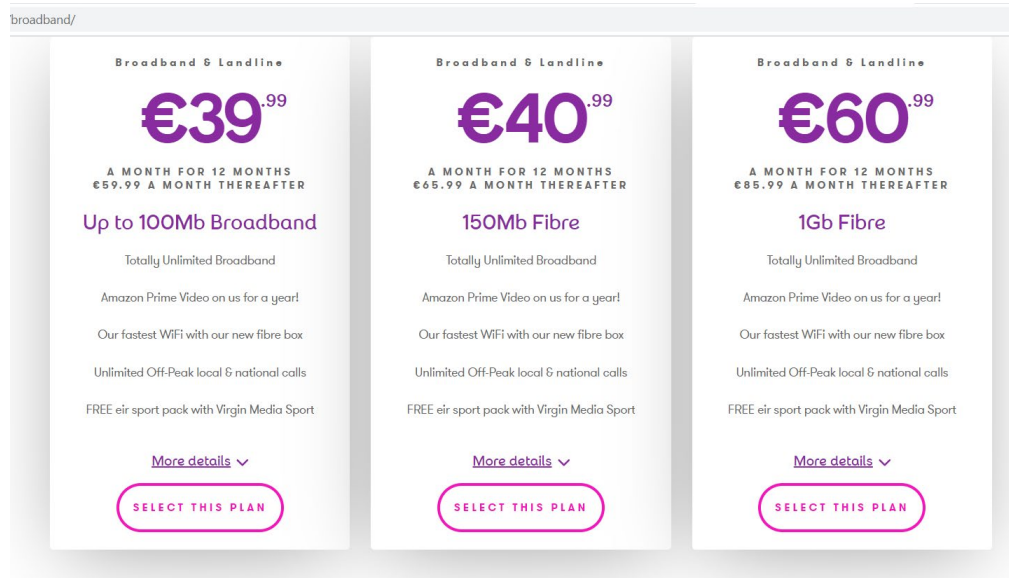
Figure 5: Virgin Media Ireland advertisements

500Mb Broadband	360Mb Broadband	250Mb Broadband
Save €30 extra over 6 months when you buy online	Save €30 extra over 6 months when you buy online	Save €30 extra over 6 months when you buy online
€45 a month	€40 a month	€35 a month
€69 a month after 6 months.	€64 a month after 6 months.	€59 a month after 6 months.
Select	Select	Select
Tell me more	Tell me more	Tell me more
• 500Mb Broadband • Now with Smart WiFi • 12 month contract • Free Virgin Media TV Anywhere Sports pass	• 360Mb Broadband • Now with Smart WiFi • 12 month contract • Free Virgin Media TV Anywhere Sports Pass	• 250Mb Broadband • Now with Smart WiFi • 12 month contract • Free Virgin Media TV Anywhere Sports Pass

Source: Virgin Media website Jan 2020

Eir has on the other hand chosen to explicitly advertise services based on fibre (150Mbit/s and above) as such, while focusing for part-fibre services only on the headline speeds.

Figure 6: eir advertisements

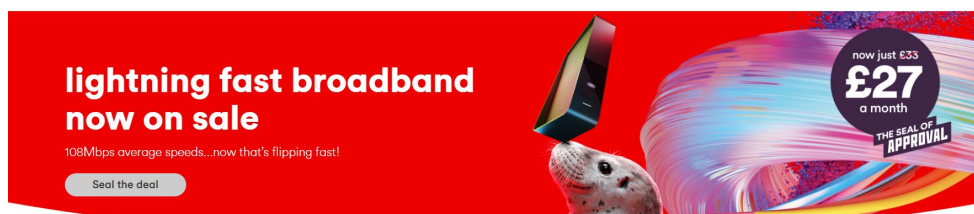


Source: eir website Jan 2020

The change in approach that can be seen in Ireland, contrasts with the continued indiscriminate references to “fibre” in the UK, where the ASA concluded that such references were not misleading to consumers.

For example, in contrast to their advertising in Ireland, Virgin Media in the UK, is advertising “lightning fast broadband” with an image showing fibre optics, and references to “fibre broadband” in relation to a 200Mbit/s product that is likely in most cases to be delivered via cable.

Figure 7: Virgin Media UK advertisements



 Broadband**M200 Fibre Broadband**

- Average download speeds of 213Mbps
- Built for households that do and watch more
- Intelligent WiFi helps to deliver our most reliable signal

Source: Virgin Media UK website Jan 2020

BT, which provides broadband services predominantly via FTTC/VDSL, with a small, but expanding FTTH footprint, refers to “fibre” across their full portfolio. For example broadband services with speeds of just 36Mbit/s (likely based on VDSL) are being advertised as “superfast fibre essential”. True FTTH-based products at speeds of up to 300Mbit/s are meanwhile being advertised as Ultrafast fibre. Thus, with references to “fibre” predominating – the only distinguishing feature for broadband products is between “superfast” and “ultrafast”, and it may not in all cases clear to consumers, what these labels mean.

“Fibre » is also referenced in advertising by the Polish cable operator UPC for services which appear to rely on the coax network, at least in the terminating segment. The advertisements specify that the services are based on FTTB technology. This has led to complaints in the media from the incumbent Orange Polska, that customers cannot readily distinguish the quality available from UPC from their own FTTH-based network, which is also marketed as “fibre”.

Figure 8: Extract from Website UPC Polska



up to 500 Mb / s

upload up to 30 Mb / s

Super fast fiber optic Internet

- ✓ state-of-the-art Connect Box modem
- ✓ super-fast Wi-Fi everywhere in your home
- ✓ reliable speed and stable connection, also via Wi-Fi

[Details of offer](#) Connect Box Wi-Free



- ✓ download speed: up to 500 Mb / s (512,000 kb / s)
- ✓ upload speed: up to 30 Mb / s (30,720 kb / s)
- ✓ number of public IP addresses: 1
- ✓ data download limit: none
- ✓ number of e-mail accounts: 3
- ✓ capacity of each e-mail account: 5 GB
- ✓ account on the web server: 1x300 MB
- ✓ FTTB technology

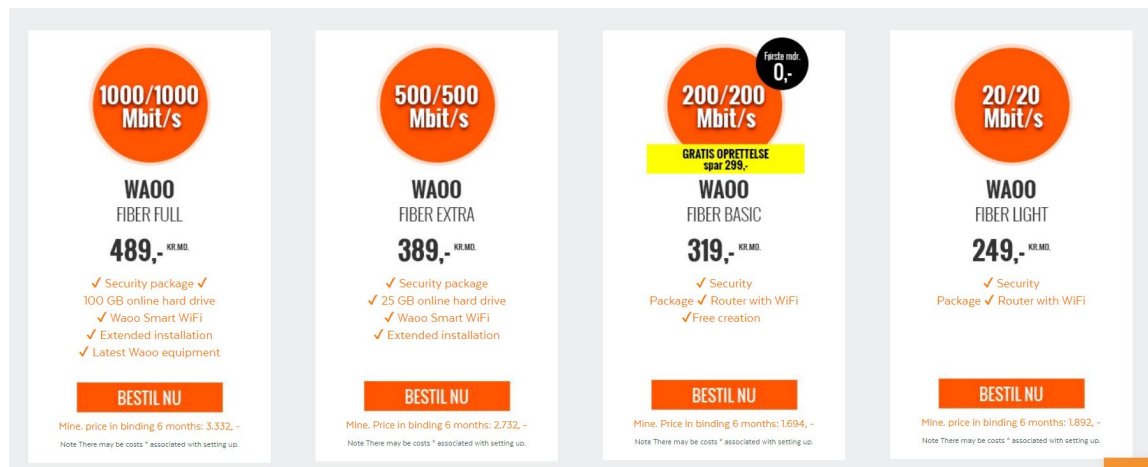
Source: <https://www.upc.pl/internet/kup-internet/internetowi-start-500-24mc/>.²⁷

Notwithstanding the absence of formal guidelines, in Germany, technologies are distinguished in advertising and fibre is typically been referenced in the context of FTTH/B deployment. For example, Deutsche Telekom distinguishes on its website between products offering "Internet and DSL" and "fibre optics". However, the DT xDSL and fibre-optic tariffs are both marketed under the MagentaHome brand, which would not have been permitted under the Italian regime. Meanwhile, Vodafone offers "Kabel-Internet" (cable Internet), "DSL" and "Glasfaser" (optical fibre), and markets its cable, DSL and fibre optic tariffs under different brands ("Red Internet & Phone Cable" "Red Internet & Phone DSL", "Red Internet & Phone Glasfaser"). However, Vodafone does make mention of "fibre optic Internet" in the context of cable.

Meanwhile in Denmark, only the fibre utilities (with deployments based on FTTH) make use of the word "fibre" in advertising. Other operators, whose services are often based on a mix of FTTC, cable and FTTH technologies refer instead to headline speeds with a tagline of "Gigaspeed" or "maxspeed" for the highest speed bands available.

²⁷ translated from Polish into English via Google Chrome

Figure 9: Waoow (fibre utility) advertising



Overall, the case studies suggest that measures to limit misleading references to “fibre” in advertising have been effective in changing conduct in France and (partially) Italy, as well as in Ireland and the Netherlands, while challenges remain with advertising practices in the UK, and (to a lesser extent) Poland and Germany.

It has become standard practice in most of the countries examined to refer to broadband with reference to the technology used and to use “fibre” as a marketing tool to distinguish very high grade broadband services from others. Exceptions are the UK and Ireland, where the indiscriminate use of the word “fibre” has meant that the main distinguishing feature has been references to “superfast” and “ultrafast” speeds, which may however themselves be subject to interpretation.

4 What is the impact of misleading advertising, and which approaches have proved to be most effective in addressing it?

As discussed in section 2.1, measures against misleading advertising have been justified at EU and national level on the basis that it undermines the ability of customers to make an informed choice between products which have different characteristics, and as a consequence undermines the business case for operators to invest in superior technology, as those that do face the potential of unfair competition from products which falsely claim to have the same properties as their own.

The case to promote clear labelling in broadband is further supported by the fact that different technologies have been found to offer different capabilities in terms of speed and quality²⁸ and higher bandwidths have been associated with economic, social and (in the case of fibre) environmental benefits.²⁹ To realise these benefits, the European Commission, BEREC and NRAs have been given a new objective in the Code to foster availability of and access to very high capacity networks.³⁰ Future and complementary wireless networks such as 5G and its successors will also depend to a large extent on the widespread availability of fibre. That widespread availability of fibre has been described as a necessary (but not sufficient) condition of 5G deployment and by implication, of all the services and industrial processes that will depend on these networks. Furthermore, knowledge about the differences between technologies and the advantages offered by fibre compared with legacy technologies will be important in enabling the eventual switch-off of the copper network, which is envisaged through provisions in the Code covering “migration”, which itself will drive significant environmental savings.

With this in mind, it is concerning that, especially in cases where broadband advertising is unclear and no action has been taken to inform customers around the capabilities of different technologies or to limit misleading references to “fibre”, there is evidence that consumers are not aware of the importance of attributes other than broadband “download speed”, are confused by the broadband options presented to them, and may not have an accurate understanding of the services they actually receive.

For example, in a study conducted by Opinion Leader,³¹ CityFibre explored consumers’ understanding and potential effects of the use of terminology around “fibre” in Internet Access Services (IAS) advertising in the UK. Their study used a qualitative approach covering focus groups and individual interviews with consumers and small businesses in

²⁸ These are outlined in the WIK, IDATE, Deloitte (2016) study for the EC “Regulatory, in particular access, regimes for network investment in Europe”. A further updated analysis is contained in the WIK (2019) for the DEA “Telecommunications Markets in 2020”

²⁹ See WIK, Ecorys, VVA (2016) for the EC “Support for the Impact Assessment accompanying the Review of the EU Framework for electronic communications” and well as WIK (2018) for Ofcom “The benefits of ultrafast broadband”, and WIK (2019) for the DEA “Telecommunications Markets in 2020”

³⁰ Article 3 EEC

³¹ Opinion Leader. 2017. Understanding Broadband Customer Responses to Use of 'Fibre' in Advertising

order to explore: (1) Customers' understanding of the word "fibre" across different media, (2) whether inaccurate use of "fibre" can materially mislead customers, (3) the specific arguments used to justify not changing rules around the use of the word "fibre" in IAS commercial communication, and (4) alternative terminology or iconography. The study found that customers currently have generally low levels of trust towards claims of broadband providers generally. In particular, their doubts revolved around claims of the speed and level of service quality (to be) delivered. Many participants felt that they had been promised better technological and service performance prior to their recent purchases and provider switches than they had ultimately received. Participants in the CityFibre study were also confused by the often pseudo-technical language used in broadband advertising. Even after an explanation of the technological differences between part- and full-fibre, participants were unable to distinguish broadband offers based on the advertisements. This indicates a consistent lack of clear language in commercial communication around IAS offers.

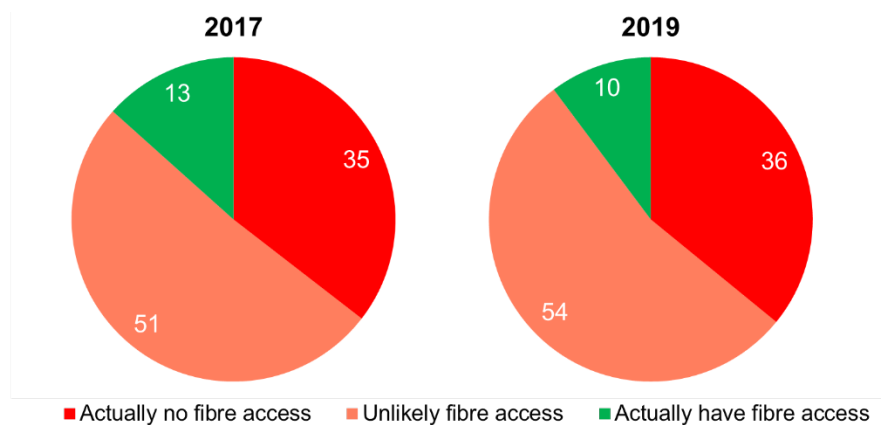
Similar findings were made in a study conducted for the UK Advertising Standard Authority (ASA)³² which explored the impact of terminology around "fibre" on consumers' broadband choices in the UK using qualitative research methods. In total, they conducted 30 in-depth interviews with broadband users covering general aspects of the broadband customer journey and an additional set of 79 in-depth individual interviews focusing on broadband advertisements and the impact of the word "fibre". They found that consumers' interest and engagement with broadband services purchases is generally low. Purchasing was perceived as boring and as requiring significant effort. While consumers cared about value for money and bundle aspects of typical IAS offers, hardly any interviewee mentioned the delivery technology (e.g. fibre) without prompting. As regards "fibre", participants in the ASA study did not see terminology around the word as a differentiator of IAS offers mainly because they assumed fibre simply to be a kind of shorthand for modern, high quality broadband. The clear majority thought that all ISPs were offering it in any event. Even with additional information, participants were not able to distinguish which ads were for full-fibre and which for part-fibre. Similar findings were made in research conducted by Kantar Milward Brown in August 2018 for SIRO in the Irish market. Based on a nationally representative sample of 1,000 adults, the researchers found that over half of respondents were confused by the different uses of the term 'fibre' (e.g. 'fibre-powered', 'fibre broadband', '100% fibre' etc.) in marketing campaigns.³³ Moreover, 68% of responding households had changed broadband providers in the past two years, with speed being ranked as the top consideration when selecting a provider. However, more than half of the surveyed consumers in Ireland (54%) did not know what type of broadband provides the fastest speeds.

³² Define research & insight. 2017. ASA - Broadband Fibre Qualitative Research - Final Report, Advertising Standards Authority, London

³³ <https://siro.ie/news-and-insights/siro-welcomes-new-asai-guidelines-relating-to-broadband-advertising/>

Representative online surveys conducted by WIK-Consult in the German market in 2017 and 2019 further underline the confusion experienced by consumers about what is meant by “fibre”, and whether they are currently benefiting from it. In both years, only around one in ten consumers who stated that they had a full fibre connection at home actually did given the cross-check for their ISP and the region they live in, while the fibre status for a further proportion of respondents was uncertain (see foillowing figure).

Figure 10: Consumers in Germany thinking they are on a full fibre IAS (2017 and 2019)



N(2017) = 274 out of a total 4160; N(2019) = 214 out of a total 2750. This translates into a stated fibre penetration of 6.4% and 7.7% respectively when the actual penetration according to VATM was 2.4% and 4.3% respectively.

Source: WIK-Consult survey data

This confusion means that consumers may not be aware of the benefits that could be obtained by switching to a full fibre solution, and therefore may decide not to switch. However, there is ample evidence that customers using full fibre do experience benefits from using this modern technology. For example, *according to the survey conducted on behalf of Cityfibre, participants, who already had full fibre connections at their homes, reported a higher level of satisfaction due to higher upload and download speeds as well as a generally more reliable service than with (their previous) part fibre connections.* This positive experience of consumers actually using FTTH connections is also reflected in research conducted by WIK-Consult for the FTTH Council, which compared the experience of consumers using different technological solutions in Sweden and Germany.³⁴ An earlier survey conducted by Diffraction³⁵ arrives at similar conclusions. They found that consumers in Sweden who subscribe to FTTH/B are on average more satisfied with their broadband service and keener to try new types of advanced services.

³⁴ Arnold R, Kroon P, Taş S, Tenbrock S. 2018. The socio-economic impact of FTTH, WIK-Consult, Bad Honnef

³⁵ Felten, Benoit 2015. FTTH/B makes a real difference – Usage survey (Sweden). Diffraction Analysis.

That study also observed the strongest driver of take-up measured using regression analysis is time, which suggests strongly that fibre is an experience good. Another finding was that over time, consumers were willing to pay more for their fibre connectivity, the more they experienced the product the more they valued it, reinforcing the conclusion that fibre is an experience good.

This is an especially important observation which points to one of the most serious effects of misleading advertising. Since fibre demand is driven in large part by experience, a significant cohort of users who believe they are using fibre but are not, and are therefore not experiencing fibre connectivity, risks reducing demand for fibre in the short, medium and long terms with the attendant effects on roll-out and copper switch off.

Despite this, the UK ASA's ultimately concluded that consumers had not been misled as a result of references to "fibre" in advertising. They cited in support of this decision that research suggested that consumers were generally satisfied with their current offer, and did not see "fibre" as a differentiating factor. However, this perception may have been perpetuated by the widespread (mis)use of the term "fibre" in the British market, and lack of experience by those currently on part fibre packages of the advantages of full fibre (as elaborated above). Indeed, these conclusions are supported by the Cityfibre survey, which found that the overwhelming feeling among participants was that using "fibre" in the commercial communication for part fibre broadband was misleading. They also disagreed with ASA's reasons to permit this practice as they thought this would reinforce the status quo of consumers with little technological knowledge not being able to choose the right connection for their needs. The different mandate that ASA holds compared to that of Ofcom may have influenced this conclusion, noting in particular that the ASA has no mandate to promote the deployment of VHCN or to facilitating the switch-off of copper networks and migration to VHCN.

Consumers participating in the study for Cityfibre noted that they wanted a clear and easy-to-comprehend way to distinguish between various types of access technology. Likewise, 73% of consumers involved in the Kantar research for SIRO also stated that they would like a "quality broadband mark" that guarantees the types of service they would receive.³⁶ The potential for education to drive more informed consumer choices is also highlighted in a study conducted at PRICE Lab,³⁷ which used quantitative methods to assess the impact of advertising claims on consumers' broadband choices, and to test the impact of information campaigns.³⁸ Although the research did not specifically consider "fibre", the researchers did find that one in five consumers chose a provider advertising "*lightning fast*" broadband over another offering the same speed at a cheaper price, suggesting that some consumers are influenced by terminology that implies

³⁶ <https://siro.ie/news-and-insights/siro-welcomes-new-asai-guidelines-relating-to-broadband-advertising/>

³⁷ A research programme funded by the Competition and Consumer Protection Commission, the Commission for the Regulation of Utilities and the Commission for Communications Regulation.

³⁸ Timmons S, McElvaney TJ, Lunn P. 2019. An experiment for regulatory policy on broadband speed advertising - ESRI Working Paper No. 641, The Economic and Social Research Institute, Dublin

superior quality, even when it may not be associated with a superior offer. The research also found that providing information to the customers (i) decreased the proportion of suboptimal decisions, (ii) increased the likelihood that consumers switched package, and (iii) improved understanding of speed descriptions.

Information campaigns and tools have thus far focused mainly around “download speeds”, and studies suggest that the download speed was and is still considered the “primary measure of economic value that end users receive from broadband infrastructure providers.”³⁹ This is reflected in the prominence of discussions around the use of “up to” speed claims in commercial communication around IAS offers.⁴⁰ However, in light of the development of applications which require low latency including services based on AR and VR, and the trend towards applications running on the cloud (which require more symmetric bandwidth), a focus on download speed alone may prove to be misguided, and may limit the degree to which consumers are able to benefit from new services going forwards. Thus information or labelling campaigns could usefully focus around the wider benefits of specific technologies, which extend beyond “download speed”. This would be consistent with the increased focus on fibre (or substantially fibre-based) VHC technologies in the context of the Code, as well as supporting wider environmental objectives.

Effective information about the broadband technology when purchasing or switching one’s IAS is important since subscribing to an IAS is a long-term decision. Contracts last typically at least 12 months, and commonly run to 24 months. Few consumers switch their IAS providers regularly resulting in “loyalty penalty”.⁴¹ Usually, this loyalty penalty is thought of in monetary terms, but perhaps even more importantly, there is a penalty in terms of broadband speed and other quality of service criteria and ultimately quality of experience as broadband technology progresses and fibre becomes available to more and more households. By not considering / not purchasing the latest technologies, consumers likely forego a substantial positive impact on their well-being, wealth etc. as the FTTH Council study by WIK-Consult shows.⁴²

In principle, addressing misleading advertising and providing clear information to consumers about the relative performance of different products, should in turn result in a boost in take-up for more performant technologies. In Italy and France, there are indeed some signals of a ramp-up in take-up of FTTH in the period following the rulings in

³⁹ Rajabiun R, Middleton CA. 2015. Lemons on the edge of the internet: The importance of transparency for broadband network quality. *Communications & Strategies*: 119-36. (p. 121f referring to Bauer S, Clark DD, Lehr W. 2010. Understanding broadband speed measurements. Presented at TPRC, Washington, D.C.)

⁴⁰ As discussed in the case studies, all countries examined have introduced measures to ensure the accuracy of speed reporting in the context of broadband contracts, and often in advertising. However, measures focused around the technologies used and other features such as symmetry, which may have longer term relevance for the capabilities of the network have been more limited

⁴¹ Merola R, Greenhalgh L. 2017. Exploring the loyalty penalty in the broadband market, Citizens Advice, London

⁴² Arnold R, Kroon P, Taş S, Tenbrock S. 2018. The socio-economic impact of FTTH, WIK-Consult, Bad Honnef

comparison with technologies which were previously “mis-sold” (primarily FTTC in Italy, and FTTB/cable in France). In Italy, for example, take-up of FTTH lines grew by 46% between 2017-2018 and by 49% between 2018-2019 compared with a growth rate of 34% in the previous year (before the introduction of the decree). Meanwhile in France, a small decline in FTTB (cable termination) connections can be seen between Q4 2015 and Q1 2016, around the time of the Decree. The January 2018 court order permitting Numericable/SFR customers to unilaterally renounce their connection, may also have contributed to the ongoing decline in FTTB (cable termination) connections, which continues to this day. However, many other factors may have contributed to these effects, including the pace of deployment, and service level challenges following the SFR/Numericable merger (the overall take-up of FTTH in Italy also remains low), and thus, while advertising standards may have contributed to the outcomes seen in the market, it is not possible to conclude definitively to what extent advertising played a role relative to other factors.

5 Policy recommendations

Actions have been taken in a number of countries – including France, Italy, Ireland and the Netherlands - to address “misleading advertising” in relation to fibre. These actions have been justified on the grounds that misleading advertising prevents consumers from making an informed choice and affects competition in the market.

From a telecom perspective, the case for action has, if anything, been strengthened by the inclusion of an objective for the European Commission, BEREC and NRAs to foster the availability of and access to very high capacity broadband networks, as fostering uptake requires consumers to be properly informed about which products meet the desired criteria and what benefits these products confer. However, in practice this change would not have any impact on the conclusions that may be reached by Advertising Standards Authorities across Europe, as they have no mandate to promote this policy objective.

A review of the schemes that have been introduced around Europe, clearly demonstrate that the strongest and most effective forward-looking interventions in the market have been driven by the National Regulatory Authority or Digital/Telecom Ministry of the country in question rather than the ASA. In contrast, while their impact can be significant, few competition authorities have intervened in this area, and their decisions concern specific cases.

Our review suggests that the clearest and most user-friendly approach could be the introduction of a labelling scheme, similar to the traffic lights introduced in Italy, whereby technologies with differing characteristics would be colour coded. This would enable customers to clearly compare broadband services in terms of their performance and, potentially, environmental characteristics. A coding system which distinguishes between FTTH, FTTB and cable-based services, FTTC/NGA FWA and ADSL would best meet the need to distinguish the different technologies that have been deployed across the EU.

Such a scheme could be applied in a similar manner to current labelling applied for energy efficiency.

The approach taken in France where only ISPs delivering fibre into the home or premises are permitted to use the term ‘fibre’ in advertising materials is another model that has merit in its simplicity.

Guidelines could be considered at EU level to foster the involvement of NRAs and/or Ministries across Europe and better align policy approaches to advertising broadband with the objectives established under the Code. Legislative action to introduce a mandatory labelling scheme for broadband covering performance and potentially environment characteristics, could also be considered.

In order to avoid problems seen in Italy concerning advertising of products which are not widely available, in addition to specifying the design of the label and associated criteria, guidelines should also be provided which ensure that customers are informed when certain products are not widely available, and what the alternative options are.

We recommend further analysis based on consumer research to confirm the design and validate the effectiveness of the chosen scheme that could be promoted through guidelines and/or legislation.

ANNEX: COUNTRY REPORTS

6 Denmark

6.1 Summary

Broadband is provided by the incumbent in Denmark by a mix of cable, FTTC and to a lesser extent FTTH. Meanwhile, FTTH has thus far primarily been deployed by regional fibre utilities.

The trade association representing Danish fibre utilities developed a certification for fibre networks in 2008 called Dansk Fibernet. Companies participating in the scheme committed to offering full fibre (FTTH) connections, with symmetric bandwidths and guaranteed speeds. The infrastructure was certified as “upgradable to 1Gbit/s”.

Although advertising guidelines covering marketing of “speeds” were adopted in 2013, there are no guidelines covering the use of the word “fibre”. Service providers marketing FTTH specifically such as Waoow tend to refer to fibre in their marketing, while operators using a mix of technologies refer to “Gigaspeed” and “Maxspeed” to refer to cable and FTTH connections.

6.2 Main players and technologies used

FTTH deployment in Denmark has mainly been carried out by regional fibre utility companies, representing around 60% household coverage. Norlys, the company created by the merger between SE and Eniig, offers services over both Coax and FTTH. The incumbent TDC provides broadband primarily over cable infrastructure, and has deployed FTTC/VDSL to increase the broadband capabilities of its networks in areas where cable is not available. TDC also provides broadband via FTTH in part of the Copenhagen area (10% coverage of households), mainly over a network that it acquired from the energy utility Dong,⁴³ although expansion has been announced.⁴⁴

Broadband service providers such as Telia and Telenor primarily offer broadband services using wholesale access provided by TDC. However, the energy utilities are in the process of opening their networks to competition, and some amongst them have signed wholesale agreements enabling TDC, Telia and Telenor to offer fibre-based access.⁴⁵

⁴³ <https://www.commsupdate.com/articles/2009/11/18/tdc-acquires-fibre-optic-network-for-dkk425m/>

⁴⁴ See <https://www.macquarie.com/kr/about/newsroom/2018/approach-to-tdc-as-to-discuss-a-possible-voluntary-takeover-offer/>.

⁴⁵ In October 2014, TREFOR (now EWII) left the Waoow cooperation to enter a strategic cooperation with TDC (YouSee) as a service provider. In the first half of 2019, Telia, Telenor and Altibox have announced that they reached agreements with Eniig (OpenNet).

6.3 Advertising standards

Complaints over advertising standards in Denmark are handled by the Danish consumer ombudsman. During the period when the energy utilities were beginning fibre deployments (2005-2007), Dansk Energi, representing the fibre utilities, highlighted concerns with the ombudsman about misleading claims on how speeds on copper networks were advertised (specifically claims about speeds being “up to” a given bandwidth). Dansk Energi observed that these claims undermined the messaging provided by its members that fibre provided a future-proof technology delivering guaranteed speeds, with the potential for symmetrical bandwidth.

In the absence of a statutory or Government-sponsored labelling scheme, in 2008 Dansk Energi developed its own certification scheme for fibre networks, called “Dansk Fibernet”. The certification required participating companies to offer:

- An all-in one cable for Internet, TV, telephony, video on demand and other digital services
- Fast and symmetric speeds and the capability to receive HDTV
- Guaranteed speeds – requiring fibre companies to make available additional capacity to avoid reductions in the speed due to data loss or the transmission of video
- Fibre network to be upgradable to a capacity of 1Gbit/s or more
- Signals and services to be provided on fibre networks all the way into the customer home (FTTH). In housing associations the internal cabling must be based on fibre networks or PDS cabling minimum category 5G, supporting Gigabit speeds

As of Feb 2008, Dansk Energi reported that 14 fibre utility operators were participating in the scheme.

In 2012, following working groups involving the industry, the Consumer Ombudsman published Guidelines for the marketing of broadband connections, which came into force in March 2013. The Guidelines require broadband providers to give speed indications which reflect the actual obtainable speed that a consumer could expect between 7am-1am and exclude any required capacity not provided to consumers from the marketed speed, and reflect shared capacity. The Guidelines also expressly require operators to indicate how concurrent use of services such as TV might impact speeds, and to ensure that when using the term “up to” – most customers (80%) targeted by the marketing should be able to obtain the indicated speed. Moreover, the Guidelines state that if the product is targeting a limited or small group of people, this must be highlighted in the marketing.

However, there is no discussion in the Guidelines about appropriate use of references to “fibre”.

The Guidelines are non-binding, but indicate how the ombudsman would enforce marketing legislation.

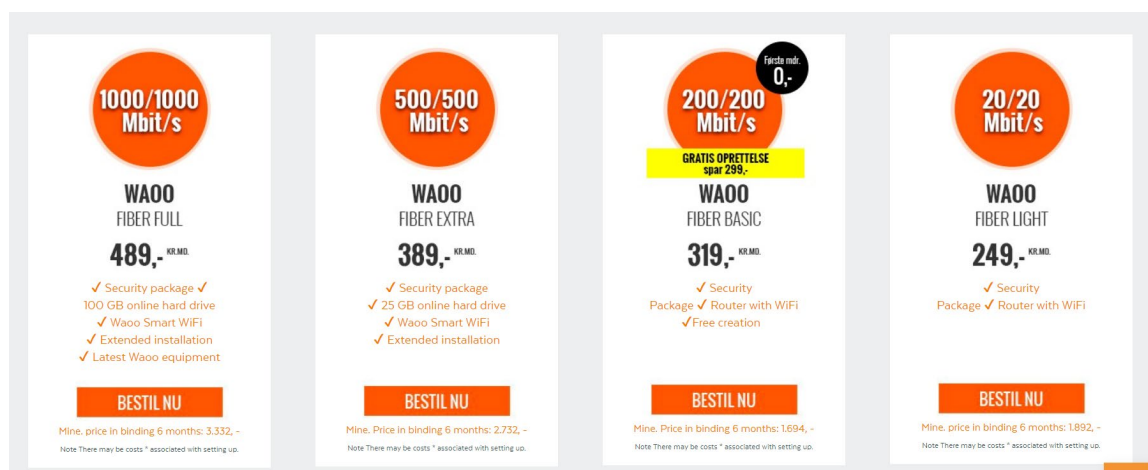
Advertising is not considered to be within the remit of the regulatory authority. However, the authority is responsible for the implementation of regulations concerning net neutrality, which include provisions to ensure that accurate information is provided about the capabilities of broadband products in the contracts signed by consumers.

6.4 Advertising practice (past and present)

The adoption of the Guidelines in 2013 led to more detailed and accurate descriptions concerning the bandwidths achievable via ADSL connections, thereby enabling consumers to identify the difference with “fibre”.

Wao, a common marketing platform used by a number of the fibre utilities to sell retail services, markets its services with reference to “fibre”, using the terms “light”, “basic”, “extra” and “full”.

Figure 11: Wao (fibre utility) advertising



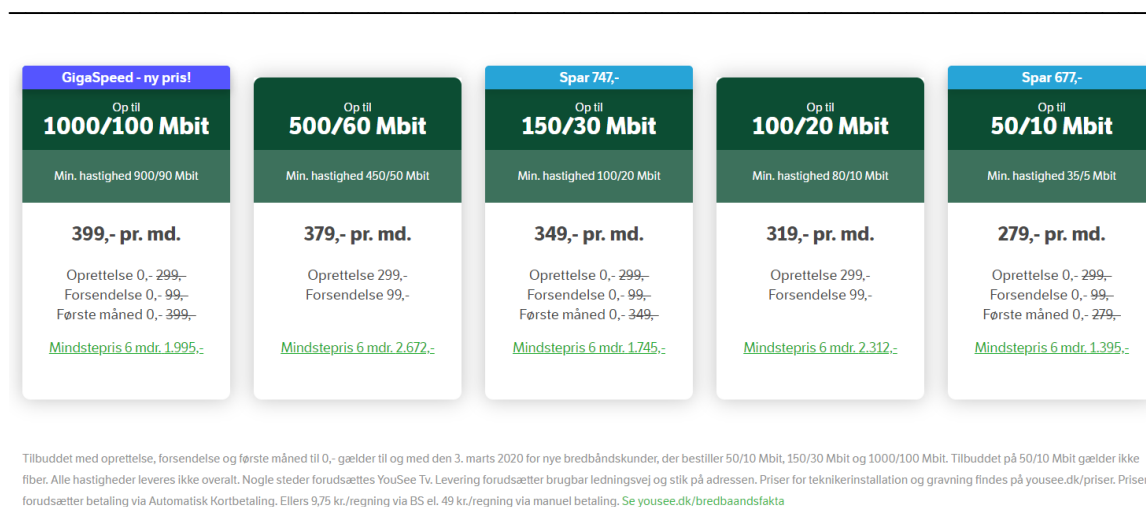
Source: Wao website Jan 2020

Noryls notes that when customers on the Wao platform (used by Eniig) are transferred from Eniig to Norlys in April 2020, their service will remain unchanged. However, it is not clear what differences might emerge in Norly’s advertising strategy for cable-based broadband. Stofa (the pre-merger cable brand) focuses on advertising speeds available

at given addresses and explains the differences between services offered over the cable and fibre networks.⁴⁶

TDC/Yousee, which primarily uses its cable network to offer broadband, coupled with FTTC/VDSL and FTTH in specific locations advertises broadband primarily based on bandwidth and markets its 1000/100Mbit/s offer as “Gigaspeed”. It is notable that, unlike offers from many of the fibre utilities, the bandwidths offered are asymmetric, thereby enabling the same “Gigaspeed” marketing to be used for both cable and fibre.

Figure 12: TDC/Yousee advertising



Source: TDC./Yousee website Jan 2020

Telenor markets its highest level 1Gbit/s broadband (mainly provided via wholesale cable, but also now encompassing offers made via fibre access) as offering as “Maxspeed”.

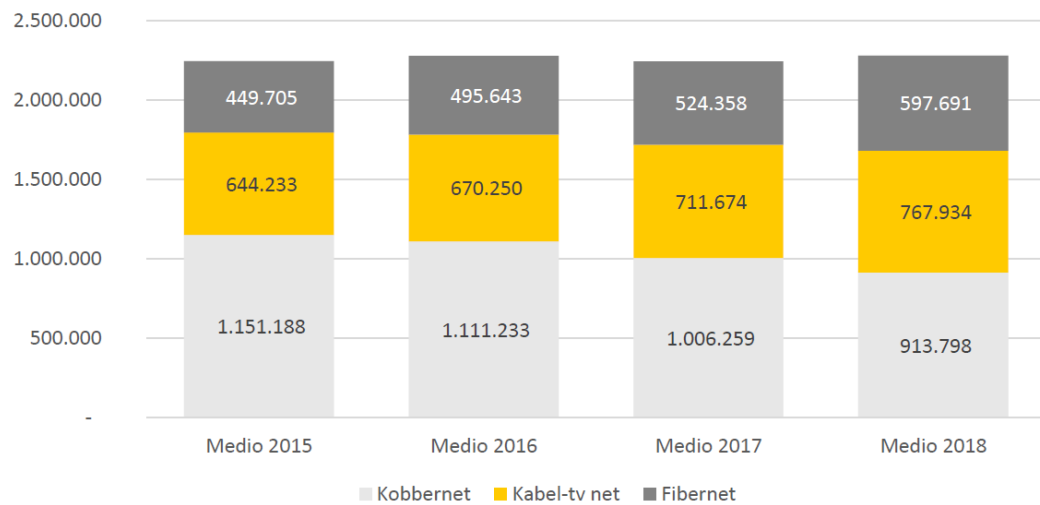
It thus appears that while there is no legislation or guidelines cautioning against the use of the term “fibre” to refer to cable and VDSL technologies, the main operators in the market have not made such references.

6.5 Outcomes

Data provided by the DBA shows a migration from copper to both cable and fibre technologies in the years from 2015-2018. Each of the technologies gained by roughly the same proportion.

⁴⁶ <https://stofa.dk/bredbaand#/address>

Figure 13: Trends in take-up of copper, fibre and cable technologies



Source: DBA

DBA also notes that fibre-based broadband on the networks of the energy utilities are increasing, and amounted to 25% of the total broadband market in 2018. Meanwhile, TDC's retail market share fell from 71% in 2016 to 66% in 2018, as customers migrated towards energy utilities and competitors.

It is not clear to which extent the use of the term "fibre" by fibre utilities for example in the context of the Wao platform, contributed to their improved market position, compared with operators offering services via cable, marketed as "Gigaspeed or Maxspeed".

7 France

7.1 Summary

France is a notable case in that the Government intervened through a Decree in 2016 to restrict the circumstances in which “fibre” can be used in advertising to FTTH cases only, and required reporting of upload speeds alongside download speeds.

The Decree followed legal proceedings, which had been pursued by Iliad against SFR/Numericable on the basis that the merged company had advertised services terminating on cable infrastructure as “fibre”.

Operators in the French market now clearly distinguish between “fibre” offer and “ADSL” offers. Cable-based offers are not actively marketed on a nationwide basis, but are now sold as “very high bandwidth”, without reference to fibre.

7.2 Main players and technologies used

FTTH has been deployed to 17.1m French households. Incumbent Orange has deployed the most FTTH lines, while other players including Iliad, SFR and “public initiative” specialist operators such as Covage, Altitude etc have deployed FTTH in regional areas.

The largest broadband consumer retail providers Orange, Iliad, SFR and Bouygues have reached long-term access arrangements with each other (and in some cases with the “public initiative” operators), to enable them to offer fibre-based broadband over their respective networks.

In areas where FTTH has not been deployed, the main consumer providers offer copper-based ADSL services. FTTC/VDSL is not widespread.

In addition to its FTTH-based network, SFR also operates a DOCSIS cable network, which it acquired from Numericable, and which is present in a limited area in France covering 9.2m households. Bouygues has a wholesaling agreement with SFR, which enables it to offer services via SFR’s cable network.

Thus, Orange and Iliad provide services via FTTH and ADSL, while SFR and Bouygues provide services via cable, FTTH and ADSL, depending on network availability in different areas of the country.

7.3 Advertising standards

Advertising standards for broadband in France are governed by legal Decrees adopted in 2013 (implementing the EU TSM Regulation) and amended in 2016.

Following amendments made in 2016, the Decree⁴⁷ provides that if an advertising message or commercial document contains the terms “fibre” or “fibre optic”, but where the final connection to the customer into their home has not been realised with fibre, the advertisement must qualify the reference to fibre with the words “except for the connection to the home”. This should be stated after each use of the term “fibre” and with the same font size, colour, and for audiovisual commercials, at the same volume as the reference to fibre. Advertisements should also specify the physical mention of the final connection, stating that “the connection to the home is not fibre optic but....”.

Another amendment made in 2016 included a requirement to refer to upload speeds whenever download speeds are referenced.

The Decree also includes provisions, aimed at standardising the method for calculating the estimated speed, and provides wording that should be used in relation to references to speed in advertising (although these relate to copper-based products). Another provision of the Decree is that references to “speed” should refer to the “usable” speed for the consumer, and thereby taking into account bandwidth that may be used for the transmission of IPTV.

The Decree was modified to include provisions relating to “fibre” after Iliad mounted a legal challenge in 2015 against the use of the word “fibre” by SFR, following SFR’s acquisition of cable operator Numericable, which resulted in the company using a combination of full fibre, FTTB (with in-building cable) and cable technology to deliver its services.⁴⁸ Iliad’s legal challenge, was based on alleged infringement of the French Commercial Code.⁴⁹ In its January 2018 conclusions, the tribunal found in favour of Iliad, and required SFR to:

- Cease using the term fibre in cases where the service does not involve termination via fibre optics in the premises of the subscriber
- Not to use, for “very high speed” offers, the term “fibre” without specifying where this technology ends within its network
- Cease all national advertising which presents their network as being based on an infrastructure which is technologically homogeneous
- Specify in commercial communications, the precise characteristics of infrastructure used in the relevant zone
- Communicate to each client which subscribed to an offer mentioning the word “fibre” with SFR or Numericable (except for FTTH offers), information concerning the nature of the connection including the distance to the fibre optic cable, the

⁴⁷ <https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000028320204>

⁴⁸ https://lexpansion.lexpress.fr/high-tech/fibre-optique-free-attaque-en-justice-numericable-sfr_1732021.html

⁴⁹ Article L 480-8 Code du Commerce

number of households sharing the cable, and the average speeds in peak and non-peak hours

- Inform clients which subscribed to a “fibre” offer which was not FTTH, that they could benefit from the option to cease their connection with immediate effect, as a result of the inaccurate information provided concerning its characteristics; and
- Publish in each journal in which the misleading advertisements were published a judicial statement, noting that it had engaged in misleading advertising in representing in offers carrying the term “fibre” services offered via cable, which cannot offer the same quality of connectivity as offers using fibre up to the building, and that this could undermine the investments made by operators deploying fibre.
- Pay damages of €51.87m to Iliad

There is no independent authority dealing with advertising standards in France. Rather, these issues are addressed by a branch of the ministry in charge of consumer affairs. ARCEP is not considered to have authority over advertising matters, but it provided input to the development of the Decree and welcomed its adoption,⁵⁰ noting that “The decree will provide consumers with better information on the offers available on the market and their characteristics, before and after subscription. The Authority notes with satisfaction that the draft decree has been modified compared to the version submitted to it, in particular to take into account the comments it had made in its opinion on the need to strengthen information on upload speeds, given the growing importance of symmetrical uses. The Authority welcomes the Government's desire to clarify the choice of users, and thus contribute to establishing the confidence and transparency that are essential to support the investment cycle in very high speed networks”.

7.4 Advertising practice (past and present)

Prior to the 2016 Decree, Numericable had been advertising services as “fibre” without reference to the actual technology used (see below). For example, Numericable offered “fibre” up to 800Mbit/s in Paris and up to 400Mbit/s in Marseille, Lyon, Bordeaux, revealing the differing technological capabilities of the network, and constraints resulting from use of cable infrastructure.

⁵⁰ <https://www.arcep.fr/actualites/les-communiques-de-presse/detail/n/larcep-se-felicite-de-ladoption-de-larrete-fibre-et-de-la-prise-en-compte-par-le-gouvernement.html>

Figure 14: Numericable offers prior to the Decree

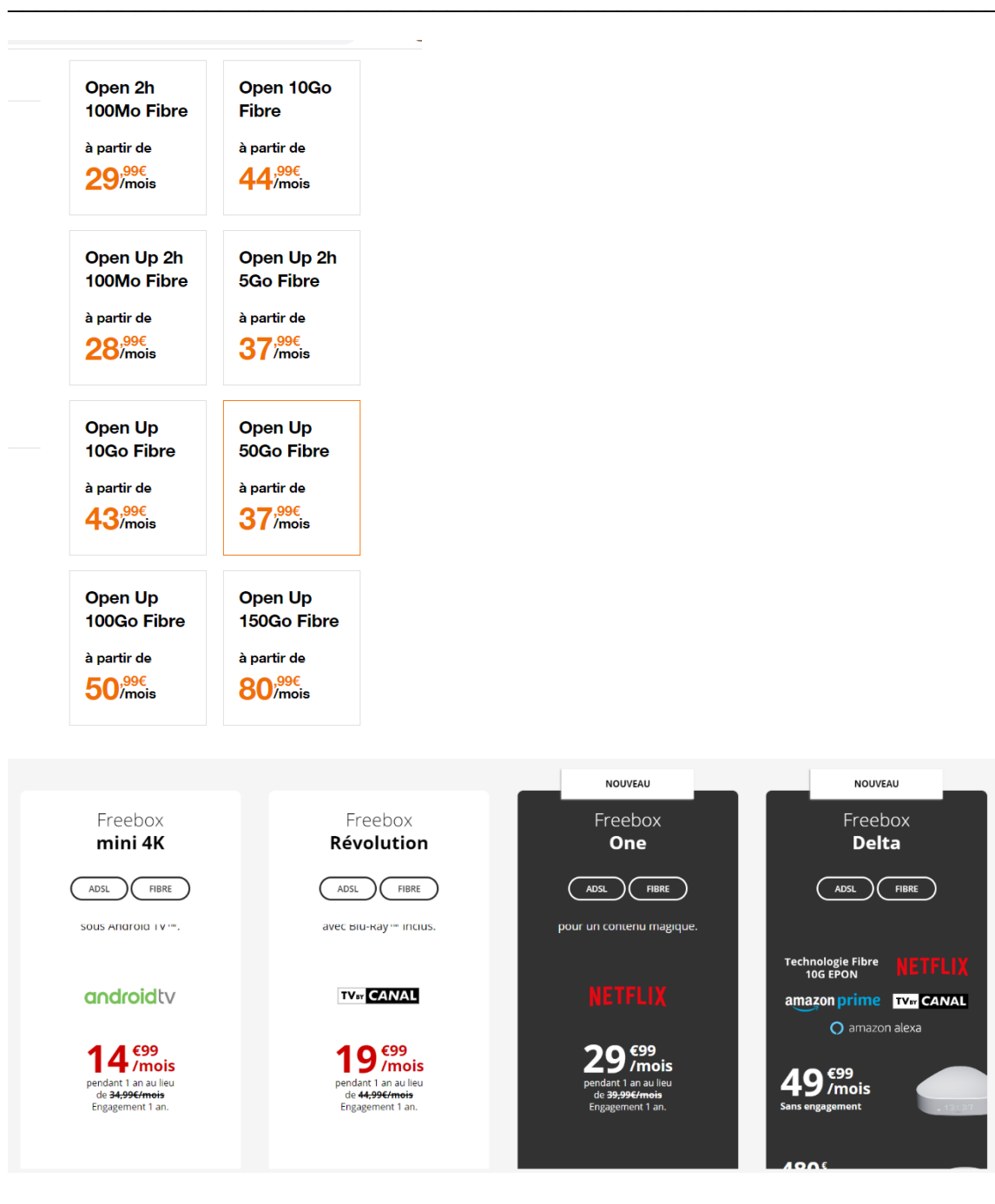
The figure consists of two screenshots of the Numericable website. The top screenshot shows a promotional banner for 'LaBox Fibre' with a price of 29€99. The banner includes the text 'LE MEILLEUR DES MONDES, DU SPORT, DU CINÉMA' and 'LA MEILLEURE CONNEXION TRÈS HAUT DÉBIT'. Below the banner is a 'Testez votre éligibilité' button. The bottom screenshot shows a list of offers under the heading 'Nos offres'. The offers are categorized by TV, Internet, and Téléphonie. The table below summarizes the offers shown in the bottom screenshot.

	ISTART	LABOX	LABOX POWER	LABOX FAMILY
Modem / décodeur	Modem V4-Pi	LABOX serie	LABOX serie	LABOX serie
Debit Internet fibre	Jusqu'à 100 Mb/s	Jusqu'à 100 Mb/s	Jusqu'à 200 Mb/s	Jusqu'à 400 Mb/s
Price	19€99 / mois prix 12 mois plus 25,99€	29€99 / mois prix 12 mois plus 25,99€	39€99 / mois prix 12 mois plus 44,99€	41€99 / mois prix 12 mois plus 55,99€

Source: Numericable website

There has been widespread compliance with the Decree, and “fibre” is no longer used in reference to cable-based offers. Operators have generally chosen to advertise their FTTH-based services with reference to “fibre”, and invite customers to check whether they are eligible for “fibre” or “ADSL”-based services.

Figure 15: Iliad fibre offers



Source: Iliad/Free website Jan 2020

SFR similarly distinguishes between offers based on “fibre” and “ADSL”, and is promoting its new “box 8”, which relies on these technologies. SFR also offers (but does not actively promote to the same extent), a “4K THD” (Very high speed) box, which is compatible with its cable network.

Figure 16: SFR/Numericable current offers

-50%	-30%	-25%	
SFR FIBRE 19€ /MOIS 12 mois puis 38€ Engagement 12 mois Tester mon éligibilité	SFR FIBRE POWER 29€ /MOIS 12 mois puis 45€ Engagement 12 mois Tester mon éligibilité	SFR FIBRE PREMIUM 39€ /MOIS 12 mois puis 53€ Engagement 12 mois Tester mon éligibilité	BOX 4G+ 35€ /MOIS Location box incluse Sans engagement Tester mon éligibilité
MATERIEL Box + Décodeur	MATERIEL Box + Décodeur 4K	MATERIEL Box + Décodeur 4K	MATERIEL Box 4G+
CHAINES TV 160 chaînes	CHAINES TV 200 chaînes	CHAINES TV 200 chaînes	CHAINES TV 0
INTERNET FIBRE JUSQU'À 400 Mb/s / 400 Mb/s	INTERNET FIBRE JUSQU'À 1 Gb/s / 400 Mb/s	INTERNET FIBRE JUSQU'À 1 Gb/s / 400 Mb/s	INTERNET 4G+ JUSQU'À 220 Mb/s / 50 Mb/s Dans la limite de 200Go/mois
APPELS ILLIMITÉS VERS Fixes en France	APPELS ILLIMITÉS VERS Fixes et mobiles en France	APPELS ILLIMITÉS VERS Fixes et mobiles en Europe	APPELS ILLIMITÉS VERS Fixes et mobiles en France
STOCKAGE CLOUD 10 Go	STOCKAGE CLOUD 100 Go	STOCKAGE CLOUD 1000 Go	STOCKAGE CLOUD 10 Go



CARACTÉRISTIQUES

Modem

- Chipset Broadcom 3384
- CPU 600MHz (1,6k DMIPS) pour la partie accès DOCSIS
- CPU 1GHz (2k DMIPS) pour la partie applicative
- 1 Mo Flash NOR
- 256 Mo NAND Flash
- 512 Mo DDR3 RAM
- Compatible norme réseau câblé DOCSIS 3.0
- Débit descendant de 1Gbps (selon éligibilité réseau)
- Connexion Ethernet de type gigabit

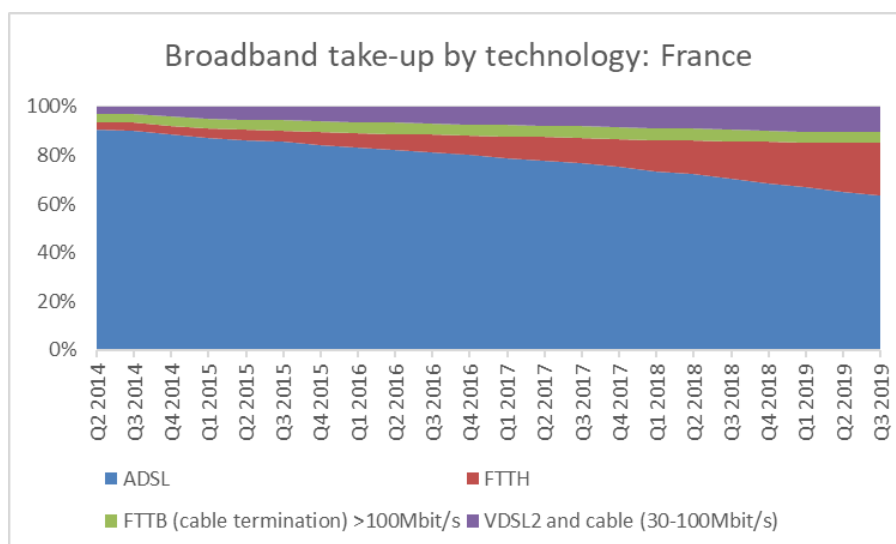
Décodeur

- Chipset Broadcom 7252s
- Dual coeur 1,5Ghz (12k DMIPS)
- GPU 2,7 Gpixels/s, OpenGL ES 3.1
- 4 Mo Flash NOR
- 4 Go eMMC NAND Flash
- 2 Go DDR3 RAM
- Disque dur jusqu'à 500Go
- 8 Tuners DVB-C
- Compatibilité Vidéo : SD / HD / UHD / 3D, MPEG-2, MPEG-4
- AVC / h.264 et HEVC / h.265
- Fonction Télécommande universelle intelligente avec

7.5 Outcomes

Data from ARCEP shows that, the share of end-to-end FTTH connections increased relative to cable between 2014 (prior to the Iliad Numericable case) and 2019. There may have been some effect from the legislative and court action, but it is not possible to demonstrate causality due to the many other factors affecting relative take-up, including the expanding FTTH footprint. A small decline in FTTB (cable termination) connections can be seen between Q4 2015 and Q1 2016 (around the time of the Decree), but the number of high bandwidth cable connections continued to increase subsequently. The number of cable terminated connections peaked at 1.345m in Q3 2017 and has been in gradual decline subsequently, reaching 1.198m in Q3 2019. The January 2018 court order permitting Numericable/SFR customers to unilaterally renounce their connection, may have contributed to this decline, but the process predates this decision.

Figure 17: Broadband take-up by technology: France



Source: ARCEP observatory

8 Germany

8.1 Summary

There are no specific provisions or Decisions governing “fibre” advertising or broadband-ready labels in Germany. However, since 2017 the NRA has required ISPs to provide a product fact sheet on their website. In addition to the maximum advertised speed, the normally and minimum available speeds must be shown.

Notwithstanding the absence of specific rules in this area, operators have tended to refer only to “fibre optics” in the context of full fibre products.

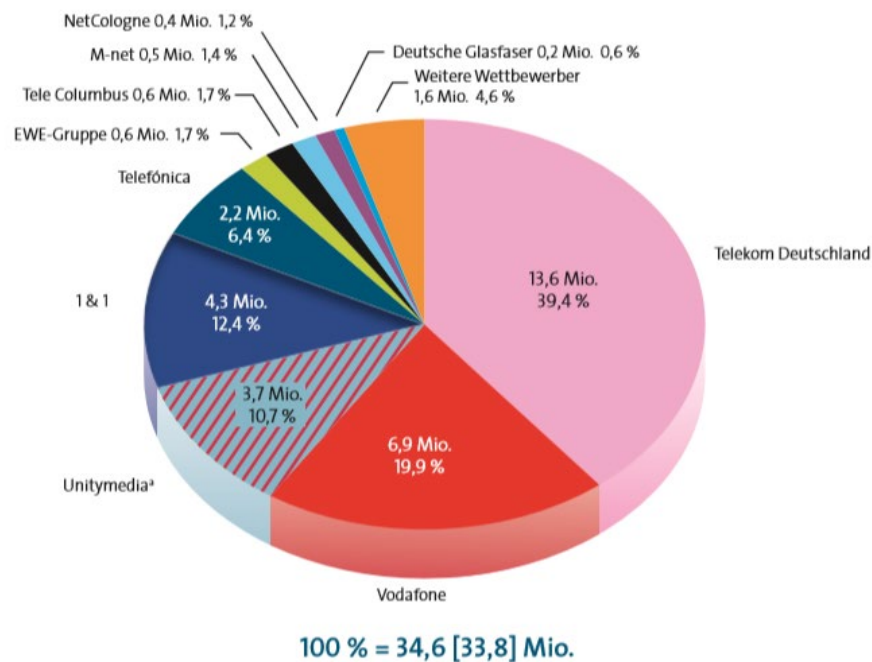
More generally, Germany lags behind in FTTB/H-availability and the willingness-to-pay of consumers is low. Against this background, the public debate has revolved around fibre deployment rather than fibre advertising. In addition, a significant share of the deployment of fibre-optic networks is taking place in rural areas with limited overlapping with FTTC and cable infrastructures. Often, the roll-out is driven by companies with a strong local anchoring and pre-marketing activities. Their campaigns inform customers very precisely on the expansion and advantages of “real” glass fibre. However, with further expansion of fibre into urban areas, clear wording in relation to “fibre optic” will become increasingly important.

8.2 Main players and technologies used

Deutsche Telekom is the market leader in the broadband market with a share of 39.4% of broadband subscribers. In August 2019, the cable company Vodafone took over the cable network operator Unitymedia. The two companies have a combined market share of 30,8% followed by 1&1 (12,4%), Telefónica (6,4%), EWE (1,7), Tele Columbus (1,7%), M-net (1,4%), NetCologne (1,2%), Deutsche Glasfaser 0,6% and other competitors (4,6%).⁵¹

⁵¹ DIALOG CONSULT/VATM (2019): 21. TK-Marktanalyse Deutschland 2019, Slide 13, [file:///C:/Users/mb.WIKGMBH/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/VATM_TK-Marktstudie_2019_091019%20\(1\).pdf](file:///C:/Users/mb.WIKGMBH/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/VATM_TK-Marktstudie_2019_091019%20(1).pdf)

Figure 18: Broadband subscribers by company



Source: DIALOG CONSULT/VATM (2019).

The Incumbent mainly focuses on the upgrade of its network with FTTC/VDSL vectoring, although is deploying FTTB/H in some areas in the context of state aid. The commercial FTTB/H roll-out in Germany is mainly driven by alternative regional operators such as EWE, NetCologne, M-net, Deutsche Glasfaser, and numerous small providers. Vodafone is expanding FTTB/H in Germany in the context of some state-aid projects and in new development areas. 1&1 and Telefónica mainly rely on wholesale products of Deutsche Telekom. However, in 2019 Telefónica Deutschland and Vodafone agreed that Telefónica Deutschland could have access to the cable network of Vodafone and Unitymedia in Germany.⁵²

8.3 Advertising standards

Consumer protection in the telecommunications sector falls within the competence of the national regulatory authority, the Bundesnetzagentur (BNetzA). The NRA enforces contracts and documentation.

⁵² <https://www.telefonica.de/news/corporate/2019/05/highspeed-internet-per-kabel-telefonica-deutschland-und-vodafone-kooperieren-bei-schnellen-kabelanschlussen.html>

Since September 2015 the NRA publishes the results of broadband speed measurements on its website. Speed data are collected and published on an annual basis to improve transparency.

The underlying basis are the transparency clauses in the Telecommunications Law which require that end customers should be able to compare telecom services with regard to their price and quality.

In this context from 2017 onwards the NRA obliged ISPs to provide a product fact sheet on their website displaying the normally and the minimum available speed in addition to the maximum advertised speed.

Commercial advertising is governed by the German legal regime, which sets framework conditions for fair competition and prohibits misleading advertising statements.⁵³

In addition, the German Advertising Council (Deutscher Werberat) develops voluntary codes of conduct for advertising and provides a mechanism for conflict resolution between the public and commercial advertisers.⁵⁴

There are no specific provisions governing “fibre” advertising except for general rules contained in the law against unfair competition.⁵⁵ There has been no significant public debate about the misleading use of “fibre” in advertising and there are no formal complaints or decisions on this subject.

In Germany, the introduction of a broadband-ready label as part of its transposition of the Directive via the DigiNetz law was discussed by a working group involving a number of industry associations. The preliminary version of the proposed "broadband" label includes three levels of certification - "bronze", "silver" and "gold" - with different specifications for residential and commercial buildings.⁵⁶

The label has been introduced as “Gütesiegel Breitband” as a purely private sector quality seal⁵⁷, but not as a state quality seal or one introduced by the federal government or the Federal Ministry of Transport. There is currently no active discussion about the introduction of a Government-backed broadband ready label in Germany. However, this discussion could arise anew in connection with the amendment of the Telecommunications Act.

⁵³ <https://www.werberat.de/content/english-keyfacts>

⁵⁴ <https://www.werberat.de/content/english-keyfacts>

⁵⁵ Gesetz gegen den unlauteren Wettbewerb (UWG)

⁵⁶ Godlovitch, Ilsa; Plueckebaum, Thomas; Kroon, Peter; Wissner, Matthias; Batura, Olga; Hausemer, Pierre; Vincze, Mate; Held, Caroline; Schäfer, Saskja; Juskevicius, Ricardas (2018): Study on Implementation and monitoring of measures under Directive 61/2014 Cost Reduction Directive SMART 2015/0066, study carried out for the European Commission by WIK-Consult and VVA Consulting, page 120 ff., <https://ec.europa.eu/digital-single-market/en/news/study-implementation-and-monitoring-measures-under-broadband-cost-reduction-directive>

⁵⁷ <https://dibkom.net/guetesiegel/>

8.4 Advertising practice

1&1 and Telefónica do not refer to “fibre” when advertising residential products.

Deutsche Telekom's xDSL rates are offered on the company's Internet site via "Fixed Network & Internet" => "Internet & DSL" under the brand name MagentaHome S-XL (16 Mbit/s - 250 Mbit/s for download). The term "fibre optics" is not used here. However, under "Fixed Network & Internet" => "fibre optics" Deutsche Telekom provides information on fibre-based products offered by Deutsche Telekom..⁵⁸

Here the word "Glasfaser" (fibreglass) appears frequently, for example:

- “Your advantages with fibre optics from Telekom”⁵⁹
- “Full speed surfing with up to 1 GBit/s”⁶⁰
- The expansion of the Telekom network knows no limits. Do you already have state-of-the-art fibre optic cable in your street? Then you can surf faster than ever before. Thanks to fiber optics right into your house, you benefit from speeds of up to 1,000 Mbit/s for downloading and up to 500 Mbit/s for uploading.”⁶¹

By clicking on the button "Tariff options" or scrolling to the bottom of the page, you will get to the overview: "Our tariffs for Internet & Fixed Network - Magenta at home". Here the tariffs MagentaHome S-XL are listed, alongsidethe tariffs MagentaHome XXL (max. 500 Mbit/s Download) and tariffs MagentaHome Giga (max. 1000 Mbit/s Download). Like the xDSL tariffs, Deutsche Telekom's fibre-optic tariffs are marketed under the MagentaHome brand.

On Vodafone's homepage under "Internet & fixed network" you can choose between "Kabel-Internet" (cable Internet), "DSL" and "Glasfaser" (optical fibre). Vodafone markets its cable, DSL and fibre optic tariffs under different brands ("Red Internet & Phone Cable" "Red Internet & Phone DSL", "Red Internet & Phone Glasfaser"). Vodafone lists its FTTH projects in Germany under "Internet & Fixed Network" => "Fibre Optic". By clicking on a project you can access the availability check and tariff selection. However, Vodafone does refer in the context of its cable offers to “fibre optic Internet”.

Fibre Operator Deutsche Glasfaser advertises with terms like “Willkommen im Glasfaser Zeitalter” (Welcome to the fibre optic age), “Highspeed Internet” und “Echte FTTH Glasfaser Technologie” (True FTTH fiber optic technology)

⁵⁸ <https://www.telekom.de/zuhause/netz/glasfaser#tarife>, Translated into English.

⁵⁹ <https://www.telekom.de/zuhause/netz/glasfaser#tarife>, Translated into English.

⁶⁰ <https://www.telekom.de/zuhause/netz/glasfaser#tarife>, Translated into English.

⁶¹ <https://www.telekom.de/zuhause/netz/glasfaser#tarife>, Translated into English.

Figure 19: Online advertising Deutsche Glasfaser

The screenshot displays the Deutsche Glasfaser website's homepage. At the top, a navigation bar includes links for 'Tarife', 'Internet', 'Fernsehen', 'Telefon', 'Glasfaser', and 'Service'. A large banner at the top right reads 'Willkommen im Glasfaser Zeitalter' with a subtext about guaranteed bandwidth. Below this, four product cards are shown for different internet speeds: 300, 400, 600, and 1000 Mbit/s. Each card features a 'Bestseller' or 'Leistungssieger' badge, a 'Verfügbarkeit prüfen' button, and pricing information. The bottom section, 'Ihre Vorteile auf einen Blick', highlights five key benefits: free home connection, change guarantee, no double costs, reduced basic fee, and easy setup. A logo for 'ECHTE FTTH GLASFASER TECHNOLOGIE' is also visible.

Source: Deutsche Glasfaser (2020).⁶²

8.5 Outcomes

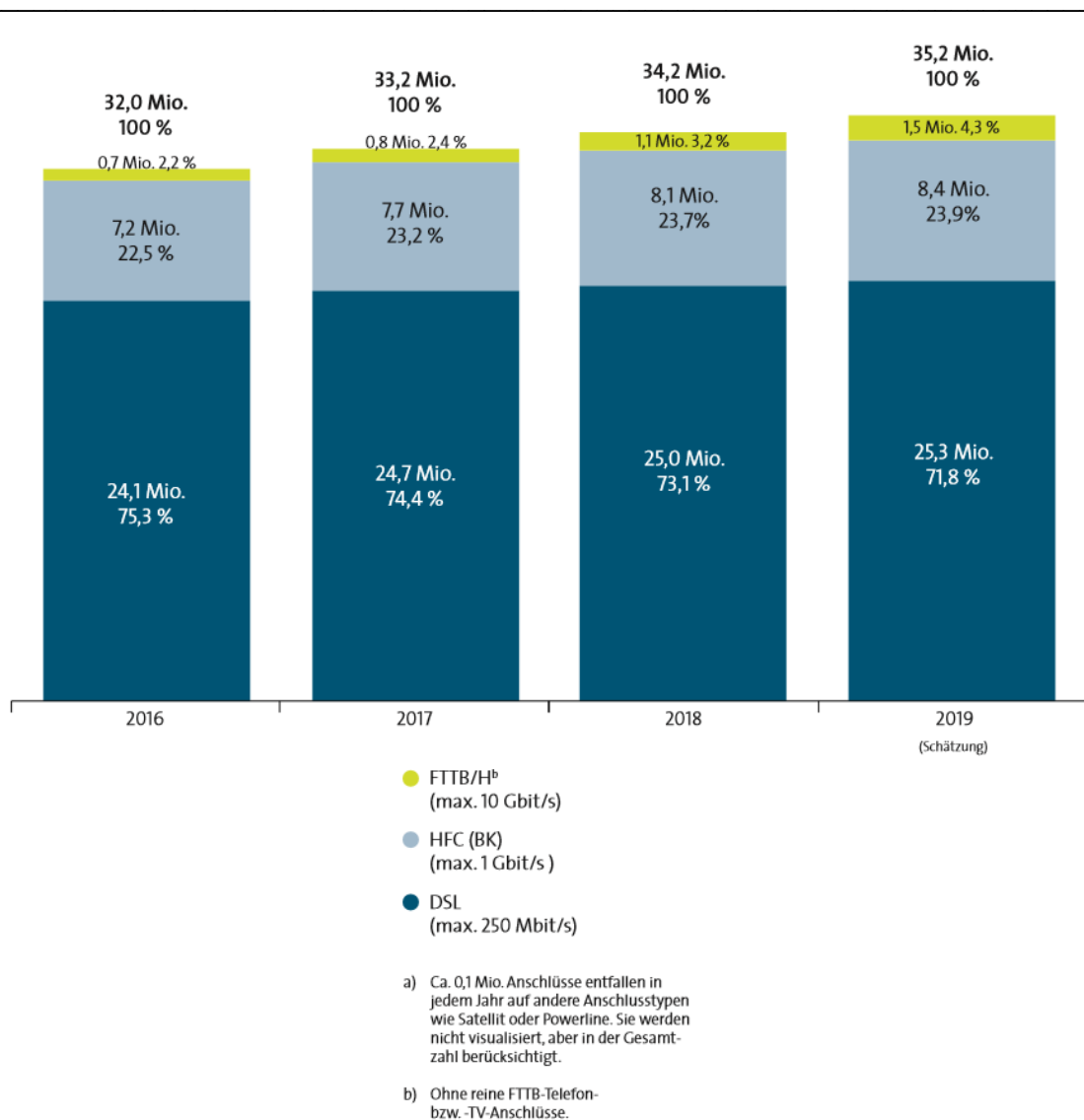
In 2019 71,8% of households with fixed Internet use obtained their Internet via xDSL and 23.9% via cable network operators. Although the share of FTTB/H subscriptions has almost doubled from 2016-2019, it was only 4.3% in 2019.⁶³⁶⁴

⁶² <https://www.deutsche-glasfaser.de/tarife/>, 08.01.2020

⁶³ DIALOG CONSULT/VATM (2019): 21. TK-Marktanalyse Deutschland 2019, Slide 11, [file:///C:/Users/mb.WIKGMBH/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/VATM_TK-Marktstudie_2019_091019%20\(1\).pdf](file:///C:/Users/mb.WIKGMBH/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/VATM_TK-Marktstudie_2019_091019%20(1).pdf)

⁶⁴ Percentages for 2019 are estimates.

Figure 20: Broadband connections by network type



Source: DIALOG CONSULT/VATM (2019).⁶⁵

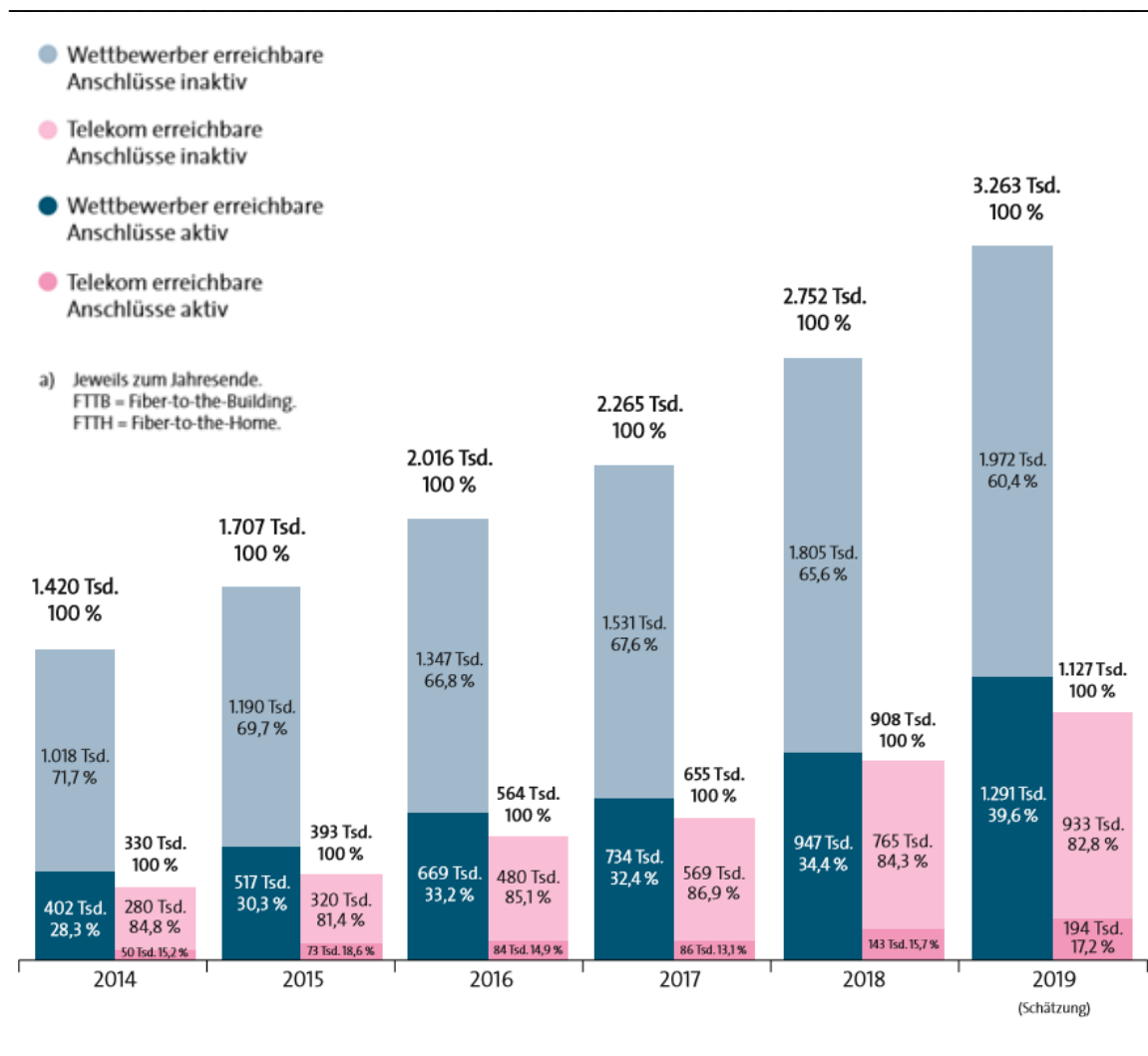
In 2019, 4.39 million, of German households were connectable to FTTB/H (homes passed) and 1.49 mio. were connected.⁶⁶ 74% of the available connections are provided by competitors, only 26% by Deutsche Telekom. The take-up rate for FTTH/B on alternative providers' networks is appreciably higher than the take-up on Deutsche

⁶⁵ DIALOG CONSULT/VATM (2019): 21. TK-Marktanalyse Deutschland 2019, Slide 11, [file:///C:/Users/mb.WIKGMBH/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/VATM_TK-Marktstudie_2019_091019%20\(1\).pdf](file:///C:/Users/mb.WIKGMBH/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/VATM_TK-Marktstudie_2019_091019%20(1).pdf)

⁶⁶ DIALOG CONSULT/VATM (2019): 21. TK-Marktanalyse Deutschland 2019, Slide 14, [file:///C:/Users/mb.WIKGMBH/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/VATM_TK-Marktstudie_2019_091019%20\(1\).pdf](file:///C:/Users/mb.WIKGMBH/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/VATM_TK-Marktstudie_2019_091019%20(1).pdf).

Telekom's network (alternative providers: 39.6%, Telekom: 17.2%).⁶⁷ Although the take-up rate has increased significantly from 2014-2019 (25.8% in 2014, 33.8% in 2019⁶⁸), overall it is relatively low.⁶⁹

Figure 21: Number of real fibre optic connections (FTTB/H) by competitors and Telekom Deutschland⁷⁰



⁶⁷ DIALOG CONSULT/VATM (2019): 21. TK-Marktanalyse Deutschland 2019, Slide 15, [file:///C:/Users/mb.WIKGMBH/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/VATM_TK-Marktstudie_2019_091019%20\(1\).pdf](file:///C:/Users/mb.WIKGMBH/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/VATM_TK-Marktstudie_2019_091019%20(1).pdf)

⁶⁸ DIALOG CONSULT/VATM (2019): 21. TK-Marktanalyse Deutschland 2019, Slide 14, [file:///C:/Users/mb.WIKGMBH/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/VATM_TK-Marktstudie_2019_091019%20\(1\).pdf](file:///C:/Users/mb.WIKGMBH/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/VATM_TK-Marktstudie_2019_091019%20(1).pdf)

⁶⁹ Percentages for 2019 are estimates.

⁷⁰ At the end of each year. FTTB = Fiber-to-the-Building. FTTH = Fiber-to-the-Home.

Source: DIALOG CONSULT/VATM (2019).⁷¹

Thus far there is no evidence of a negative effect of misleading fibre advertising on the take-up of "real" fibre. The public debate in Germany revolves more around fibre optic expansion than fiber advertising, as Germany lags behind in international comparison and the willingness-to-pay of consumers is low.

In addition, fibre-optic expansion in Germany is taking place particularly in rural areas, where is not much competition from FTTC and cable. Furthermore, in these areas some of the expanding companies are very close to the customers and inform them very precisely about the expansion and the advantages of "real" glass fibre, for example within the framework of local information events.

However, this type of advertising is very expensive. Once expansion reaches urban areas, where personal contact with the end customer is less than in rural expansion areas, marketing via the Internet, for example, with clear wording in relation to "fibre optic" will become increasingly important so that customers can distinguish offers with all-glass fibre from other offers.

⁷¹ DIALOG CONSULT/VATM (2019): 21. TK-Marktanalyse Deutschland 2019, Slide 15, [file:///C:/Users/mb.WIKGMBH/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/VATM_TK-Marktstudie_2019_091019%20\(1\).pdf](file:///C:/Users/mb.WIKGMBH/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/VATM_TK-Marktstudie_2019_091019%20(1).pdf)

9 Ireland

9.1 Summary

In August 2019, the ASAI (advertising standards authority), adopted Guidelines which limit references to “fibre”, recommend that information is provided about any limitations on availability, and discourage misleading use of terms such as “superfast”.

Prior to these Guidelines coming into effect, operators in Ireland had referred to fibre in the context of offers provided via FTTC, HFC or even wireless technology. Practices have now changed with more consistent references to “ultrafast” or “fibre” to represent “fibre-based” services. It is however, too soon to say whether this has had an effect on consumer behaviour.

In a 2018 survey conducted for SIRO, more than half stated that they did not know which technologies delivered the fastest speeds, and 73% said that they would like a quality mark which would guarantee the broadband speed they receive in their household.

9.2 Main players and technologies used

The largest infrastructure-based operators present in Ireland are the incumbent eir (which offers broadband based on FTTC, with a smaller footprint based on FTTH), and the cable operator Virgin Media,⁷² a subsidiary of Liberty Global.

Specialist providers such as SIRO (a wholesale only joint venture between the energy company ESB and Vodafone) have additionally deployed FTTH in certain regions.

Retail broadband service providers such as Sky, Digiweb and Vodafone offer services on the basis of (primarily FTTC-based) wholesale access rented from eir or FTTH-based access rented from SIRO.

9.3 Advertising standards

Advertising standards fall within the remit of the statutory Competition and Consumer Protection Commission.⁷³ In addition, the voluntary Advertising Standards Authority for Ireland (ASAI)⁷⁴ can issue non-binding Guidelines in the context of self-regulation of advertising across different sectors. The NRA Comreg is responsible for enforcing consumer protection aspects of the EU electronic communications Code (and its

⁷² <https://www.virginmedia.ie/>

⁷³ <https://www.ccpc.ie/>

⁷⁴ <https://www.asai.ie/>

predecessor) as well as enforcing the contractual transparency provisions contained in the TSM Regulation.

Until recently, there were no guidelines in place concerning advertising standards for broadband. However, in a 2016 report published by the Government-sponsored mobile phone and broadband task force⁷⁵ the Task Force recommended that the Advertising Standards Authority should undertake a review of advertising of telecom services, and individual operators should review their own advertising to ensure they are not creating a false or misleading impression.⁷⁶

In August 2019, the ASAI released Part 1 of a Guidance note on “marketing communications for mobile phone and broadband services”.⁷⁷ The note states that the ASAI consider that “where the descriptor ‘fibre’ is used and where the service is not provided on a full fibre network, advertising must contain a prominent **qualification that the network is ‘part fibre’**”.⁷⁸ The Guidelines also state that “**if a product is described by a narrative, such as ‘high speed’, ‘superfast’ or similar, advertisers must ensure that the use of language does not mislead**, bearing in mind the existing comparator products available, e.g. superfast must not be used for products which are significantly slower than the maximum generally available product on the market.”

On the subject of “availability”, the Guidelines note that “advertisers offering mobile phone and broadband services must take care in the design and presentation of their marketing communications so as not to exaggerate the availability of their products, particularly when new products/technology are launched. Where the provider offers **limited geographical coverage**, advertising in national media must include a prominent and transparent reference to this fact.”

The note also contains guidance on advertising speed claims, including provisions that:

- If an advertised speed claim is unqualified, advertisers must ensure that they hold evidence to demonstrate that all relevant customers, i.e. customers on the advertised plan can achieve the advertised speed. Where the provision of the service is limited, this must be made clear in the body copy of the advertising.
- When operators refer to speeds of “up to” a given bandwidth, this should imply that the speed should be available to 80% of customers on the product as evidenced by monthly tests on a rolling six month basis. The statement must be included in the body copy rather than the small print of any advertisements. Advertisers may also indicate the normally available or minimum speed.

⁷⁵ <https://www.dccae.gov.ie/documents/Taskforce%20Report.pdf>

⁷⁶ See Action 32

⁷⁷ <https://www.asai.ie/wp-content/uploads/ASAI-Guidance-Note-Part-1-Mobile-phone-and-broadband-Final-15.08.19-1.pdf>

⁷⁸ See page 6 of the guidelines.

- If an advertised claim is based on actual user experience, it must be based on the experience of at least 50% of users of the promote plan, and descriptors such as “average” must be used.

Although the note states that it is in force since 1 September 2019, the enforcement date was extended to December 2019.

The ASAI’s Guidelines rely on “name and shame” and industry support for enforcement. For example, TV channels in theory should refuse to accept advertisements which fail to abide by ASAI Guidelines.

9.4 Advertising practice (past and present)

Stakeholders report that, prior to the release of the advertising Guidelines, there were a number of examples where “fibre” was misrepresented, including a case of an operator offering wireless “fibre”, for which fibre was limited to the connection to the wireless base station. Major operators were also using the word “fibre” to advertise FTTC and HFC-based services, as shown in screenshots dating from 2018.

Figure 22: Offers in Ireland from Sky, eir and Pure Telecom 2018

Sky TV & Sky Fibre

Supercharge Sky TV with superfast Sky Fibre Broadband and bring your home to life.

Superfast Fibre Broadband you'll love from Ireland's trusted provider.



up to 100Mb

unlimited superfast eir fibre broadband

€42.95 / per month

Fibre Home

[VIEW PLAN](#)

 Superfast Unlimited Broadband

100Mbps Download speeds / 20Mbps Upload speeds / Off-

Original, Sky Q and Fibre

Great entertainment with award-winning shows and superfast fibre

Why Pure Telecom?

- **Super Fast** 100Mb Fibre broadband available to over 1,000,000 homes nationwide

Source: Operator websites

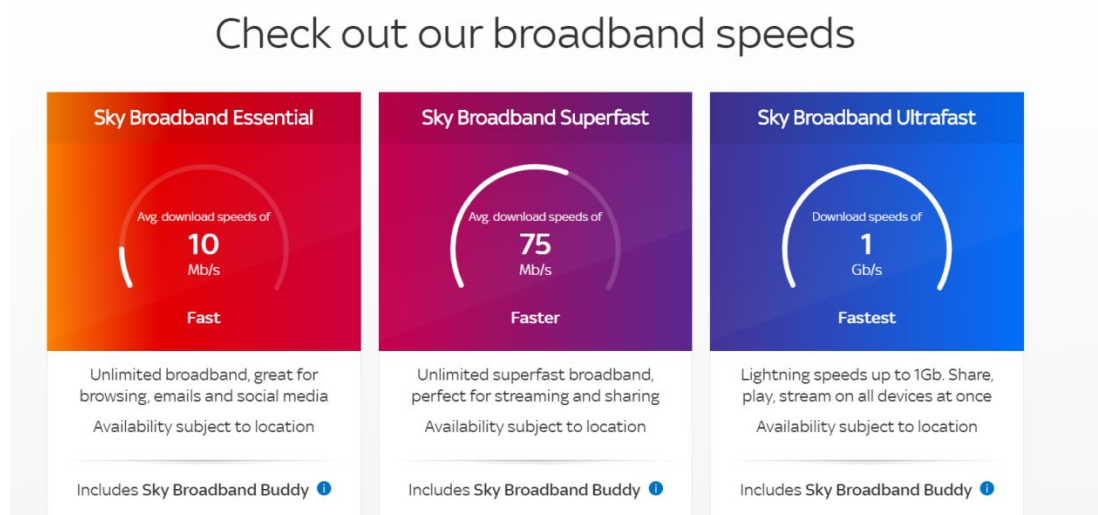
Research commissioned by SIRO from Kantar Milward Brown in August 2018 (nationally representative sample of 1,000 adults) underlined the confusion among the general public about fibre broadband and what constitutes the best service.

The key data points from the research were as follows:

- 7 out of ten members of the public (73%) would like a quality mark which would guarantee the broadband speed they receive in their household
- Over half of consumers (54%) do not know what type of broadband provides the fastest speeds
- 68% of households have changed broadband providers in the past two years, with speed being ranked as the top consideration when selecting a provider

At the present, only one month has passed since the new (non-binding) Guidelines came into force. Operators seem to be complying with the Guidance. Selected offers are shown below.

Figure 23: Current offers Sky Ireland



Source: Sky Ireland website Jan 2020

Figure 24: eir current broadband advertising

broadband/

Broadband & Landline

€39^{.99}

A MONTH FOR 12 MONTHS
€59.99 A MONTH THEREAFTER

Up to 100Mb Broadband

Totally Unlimited Broadband

Amazon Prime Video on us for a year!

Our fastest WiFi with our new fibre box

Unlimited Off-Peak local & national calls

FREE eir sport pack with Virgin Media Sport

[More details](#) ▾

SELECT THIS PLAN

Broadband & Landline

€40^{.99}

A MONTH FOR 12 MONTHS
€65.99 A MONTH THEREAFTER

150Mb Fibre

Totally Unlimited Broadband

Amazon Prime Video on us for a year!

Our fastest WiFi with our new fibre box

Unlimited Off-Peak local & national calls

FREE eir sport pack with Virgin Media Sport

[More details](#) ▾

SELECT THIS PLAN

Broadband & Landline

€60^{.99}

A MONTH FOR 12 MONTHS
€85.99 A MONTH THEREAFTER

1Gb Fibre

Totally Unlimited Broadband

Amazon Prime Video on us for a year!

Our fastest WiFi with our new fibre box

Unlimited Off-Peak local & national calls

FREE eir sport pack with Virgin Media Sport

[More details](#) ▾

SELECT THIS PLAN

Get superfast Home Broadband without TV or a Landline



€25 per month
for the first 6 months
ONLINE EXCLUSIVE

Are you looking for ultra fast broadband without paying for TV or a phone line?

Our **Simply Broadband** package is an unlimited home broadband only offer. It is ideal for families, professionals and anyone in urban or rural areas who wants blazing broadband internet speeds.

We provide best in class download and upload speeds. This deal is therefore great for anyone needing always on surfing and multi-device streaming.

Our super fast network performance is one of the best in Ireland. There are no download limits or usage limits with Simply Broadband.

This package allows you to connect the whole family, and you can count on great value broadband and customer service to match.

- ✓ **Broadband Only** - No TV or Phone bundles
- ✓ **Ultra Fast Speeds** - Up to 1,000 Mbps
- ✓ **Great Value** - Just €25 per month for the first six months when you order online
- ✓ **No Usage or Download Limits** - Access your broadband when you need to without worrying about limits

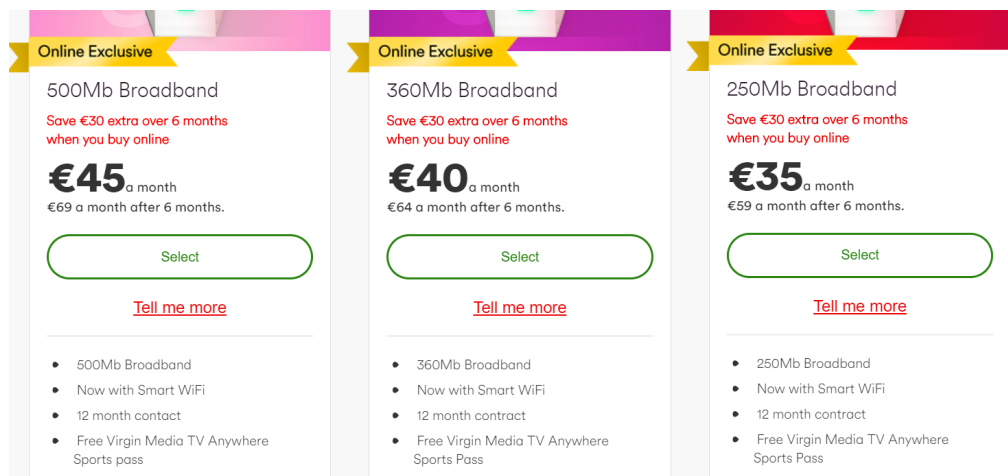
With free installation, choose Vodafone's Simply Broadband today!

Check availability

Source: eir website Jan 2020

Different strategies appear to have been adopted by different companies. For example, Sky has focused on distinguishing speeds, with reference to the labels “essential”, “superfast” and “ultrafast”, with ultrafast broadband promising speeds only achievable via Sky’s fibre-based offering. Vodafone seems to have pursued a similar strategy, but with a focus on first obtaining customers’ location to present relevant offers. Eir has on the other hand chosen to explicitly advertise services based on fibre (150Mbit/s and above) as such. Virgin Media (based on cable), has chosen to focus on the headline download speed (see below).

Figure 25: Virgin Media Ireland current advertising

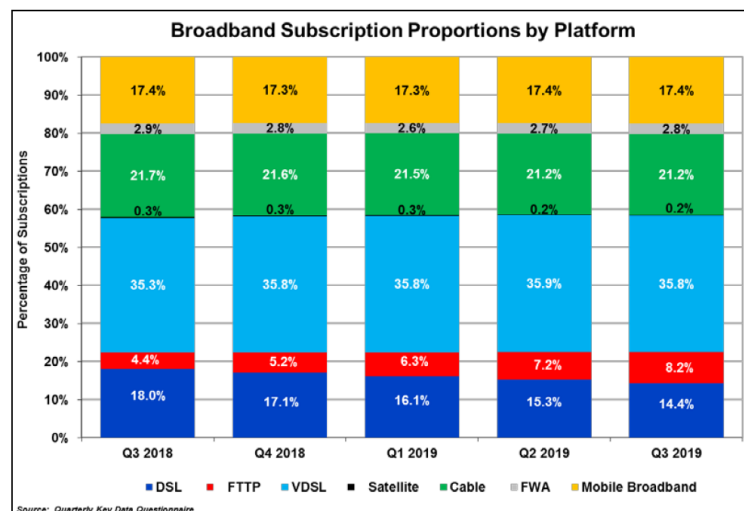


Source: Virgin Media Ireland website Jan 2020

9.5 Outcomes

The proportion of FTTP lines in Ireland has been expanding rapidly, albeit from a low base, and reached 8.2% of broadband subscribers in Q3 2019, compared with 4.4% a year earlier. As the new advertising standards Guidelines only came into force in recent months, it is not yet possible to gauge whether they had a discernable effect on consumer behaviour.

Figure 26: Broadband subscription proportions by platform in Ireland



Source: Comreg

10 Italy

10.1 Summary

Regulator Agcom has set out clear rules regarding how operators must communicate the characteristics of different types of physical infrastructure used in the provision of the service. To this end, Agcom has introduced a mandatory traffic light system consisting of a red, yellow and green sticker that must be used in all types of advertising.

A review of the websites of the major Italian operators did not reveal misleading advertising. However, it is notable that TIM and other operators choose to highlight their best service, namely FTTH, on television, on their website, on billboards, etc., even though the availability of FTTH is extremely limited. This does not violate Agcom's resolution, but in practice can lead to problems.

Italy is one of the few European countries that has introduced a broadband-ready label.

10.2 Main players and technologies used

In the fixed broadband and ultra-broadband market, Telecom Italia (TIM) has the largest market share with 43.5% , followed by Vodafone (16.4%), Fastweb (15.1%), Wind Tre (13.8%), Linkem (3.7%), Eolo (2.6%) and Tiscali (2.6%). Other operators have a combined market share of 2.3%.

Figure 27: Broadband and ultrabroadband fixed lines, market shares by operator

Source: Agcom (2020).⁷⁹

⁷⁹ Agcom (2020): Communication Markets Monitoring System no. 1/2020, slide 5, <https://www.agcom.it/documents/10179/4537573/Allegato+7-5-2020/2b926326-e02e-42e5-8017-d8d359f20303?version=1.0>

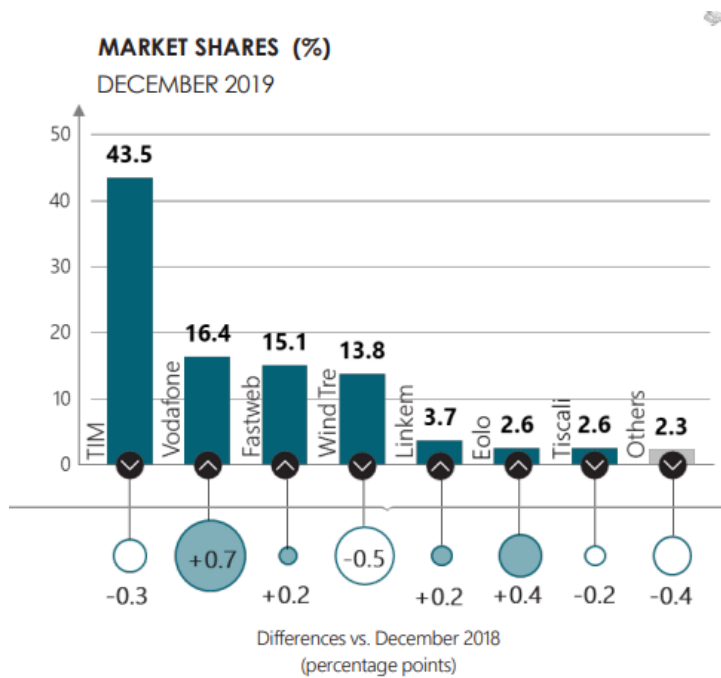
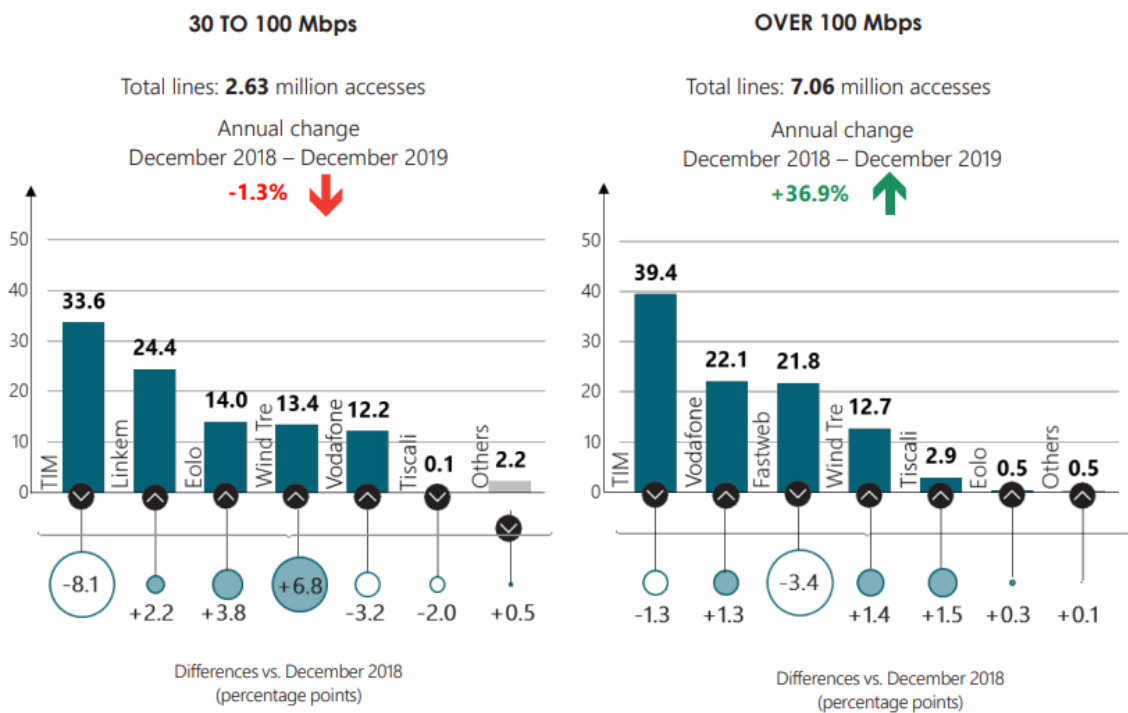


Figure 28: Broadband fixed lines by operator and advertised speed



Source: Agcom (2020).⁸⁰

For broadband lines with a speed $30 \leq \text{Mbit/s} < 100$, TIM has a market share of 33.6%, followed by Linkem (24.4%), Eolo (14%), WIND Tre (13.4%), Vodafone (12.2%), Tiscali (0,1%) and Others (2.2%).

As regards the speed class above 100 Mbit/s TIM is the main operator (39.4%), followed by Vodafone (22.1%), Fastweb 21.8% and WindTre (12,7%)..

The incumbent operator Telecom Italia has only a very limited FTTH network. Like Telekom in Germany, TIM is more focused on FTTC expansion. However, there is no vectoring in Italy. In 2016, Fastweb and TIM entered into a strategic partnership with the aim of connecting 3 million households in 29 cities with FTTH by 2020.⁸¹

There is no cable Internet in Italy. However, infrastructure-based competition is increasing, particularly due to the market entry of the wholesale-only provider Open Fiber.⁸² At the end of 2019, Open Fiber had passed 8 million households in both commercially viable areas and market failure areas, where Open Fiber won all three contracts for the roll-out of fibre networks with public funding.⁸³ Open Fiber's goal is to supply to over 19 million households by 2023.⁸⁴

Fastweb reports that it reaches a total of 22 million households and businesses, 8 million of which use its own infrastructure through Fiber-to-the-Home or Fiber-to-the-Node technology.⁸⁵

Fastweb and Open Fiber have entered into an agreement in 2019 under which Fastweb will use Open Fiber's FTTH connections in regions where Fastweb does not have its own infrastructure.⁸⁶

In 2019, Vodafone, Wind Tre and Tiscali have expanded their wholesale agreements with Open Fiber.⁸⁷

⁸⁰ Agcom (2020): Communication Markets Monitoring System no. 1/2020, slide 8, <https://www.agcom.it/documents/10179/4537573/Allegato+7-5-2020/2b926326-e02e-42e5-8017-d8d359f20303?version=1.0>

⁸¹ EU (2018): 2018 DESI Report– Electronic communications markets overview per Member State (Telecom Chapters) – Italy, page 1, <https://ec.europa.eu/digital-single-market/en/news/desi-report-2018-telecoms-chapters>

⁸² EU (2018): 2018 DESI Report– Electronic communications markets overview per Member State (Telecom Chapters) – Italy, page 2, <https://ec.europa.eu/digital-single-market/en/news/desi-report-2018-telecoms-chapters>

⁸³ Add Open Fiber press release

⁸⁴ EU (2019): 2019 DESI Report– Electronic communications markets overview per Member State (Telecom Chapters) – Netherlands, page 2, <https://ec.europa.eu/digital-single-market/en/news/2019-desi-report-electronic-communications-markets-overview-member-state-telecom-chapters>

⁸⁵ <https://www.fastweb.it/corporate/azienda/la-rete/?lng=EN>

⁸⁶ <https://www.fibre-systems.com/news/italys-fastweb-and-open-fiber-share-ftth-networks>

⁸⁷ <https://www.fibre-systems.com/news/open-fiber-extends-partnership-vodafone-bring-ftth-271-italian-cities>, <https://www.commsupdate.com/articles/2019/07/11/vodafone-italy-and-open-fiber-extend->

10.3 Advertising standards

10.3.1 Traffic-light system for broadband products

Resolution 292/18/CONS (July 2018) defines “the technical characteristics and the corresponding names of the different types of physical infrastructure used for the provision of telephony, television networks and electronic communications services, pursuant to art. 19 quinquiesdecies of the law decree 16 October 2017, n. 148.”⁸⁸

Agcom precisely defined how operators must communicate the characteristics of different types of physical infrastructure used in the provision of the service. To this end, Agcom has introduced a mandatory traffic light system consisting of a red, yellow and green sticker that must be used in all types of advertising.

AGCOM notes that this classification should protect consumers from falling into the traps of misleading advertisements.⁸⁹

Figure 29: AGCOM sticker



[broadband-agreement/](#), <https://www.commsupdate.com/articles/2019/10/04/open-fiber-and-wind-tre-expand-wholesale-agreement/>, <https://openfiber.it/mondo-open-fiber/comunicati-stampa/tiscali-open-fiber-partnership-strategica/>

88

https://www.agcom.it/documentazione/documento?p_p_auth=fLw7zRht&p_p_id=101_INSTANCE_FnOw5lVOIXoE&p_p_lifecycle=0&p_p_col_id=column-1&p_p_col_count=1&_101_INSTANCE_FnOw5lVOIXoE_struts_action=%2Fasset_publisher%2Fview_content&_101_INSTANCE_FnOw5lVOIXoE_assetEntryId=11366304&_101_INSTANCE_FnOw5lVOIXoE_type=document

89

<https://www.consumatori.it/telefonata/bollini-agcom-internet/>

Source: AGCOM (2018).⁹⁰

The green sticker with letter "F" subtitled "Fibra" must only be used for full fiber-optical infrastructure, meaning FTTB and FTTH based services. It is no longer permitted to use the term "fibre" in any advertising for services which are not at least based on FTTB.⁹¹

The yellow dot indicates services based on hybrid architectures i.e. connections based on mixed copper- fiber (FTTN - Fiber To The Node architectures, e.g. FTTC - Fiber to the Cabinet) or mixed-radio fiber.⁹²

For services that are provided over networks with no optical fiber in the access network such as ADSL, it is not permitted to use the word "fibre". For such services the red sticker with the wording "R" and the subtitle "copper" or "radio" must be used.⁹³

AGCOM has also introduced an Internet tool (NE.ME.SYS.) for measuring surfing speed on its website.⁹⁴ With this tool users can obtain a certificate with a legal value, with which they can complain about non-compliance with the terms of the contract.⁹⁵

10.3.2 Disputes and fines

Before the AGCOM Resolution came into force, in 2018 the Italian Competition and Market Authority⁹⁶ imposed fines on Telecom Italia (4.8 million €)⁹⁷, Fastweb (4.4 million €)⁹⁸ and Vodafone (4.6 million euros)⁹⁹ for misleading advertising of fibre optics and Wind Tre¹⁰⁰ (4.25 million €)¹⁰¹ for misleading and omissive advertising of fibre optics.

The fibre optic connection advertising campaigns (website, below-the-line advertising and television advertising) used a wording that suggested the exclusive use of fibre and/or the achievement of maximum performance in terms of speed and reliability of the connection, without adequately informing consumers of the actual characteristics and limitations of the service offered. This meant in particular geographical limits on the

⁹⁰ Allegato C alla delibera n. 292/18/CONS

⁹¹ <https://www.consumatori.it/telefonia/bollini-agcom-internet/>

⁹² <https://www.consumatori.it/telefonia/bollini-agcom-internet/>

⁹³ <https://www.consumatori.it/telefonia/bollini-agcom-internet/>

⁹⁴ <https://www.agcom.it/misura-internet-da-postazione-fissa>

⁹⁵ <https://www.consumatori.it/telefonia/fibra-di-veloce-ce-solo-la-richiesta-di-pagamento/>

⁹⁶ L'Autorità Garante della Concorrenza e del Mercato - AGCM

⁹⁷ <https://en.agcm.it/en/media/press-releases/2018/3/alias-2458>, Rome, 16 March, 2018

⁹⁸ <https://en.agcm.it/en/media/press-releases/2018/4/alias-2459>, Rome, 23 April, 2018

⁹⁹ <https://en.agcm.it/en/media/press-releases/2018/4/alias-2456>, Rome, 27 April, 2018

¹⁰⁰ The fine of 4,25 million for Wind Tre related to both mobile Internet services and Internet connectivity services using fibre optic technology.

¹⁰¹ <https://en.agcm.it/en/media/press-releases/2018/4/alias-2457>, Rome, 11 April, 2018

coverage of the various network solutions, the differences in the services available and different performance depending on the infrastructure used for the fibre connection.¹⁰²

Furthermore, in AGCM's opinion, TIM's various advertising campaigns TIM did not or only insufficiently indicated that an additional charge was payable in order to reach maximum speed.¹⁰³

In the advertising campaigns of Fastweb and Vodafone, according to AGCM, there was no clear indication that maximum connection speeds can only be achieved by activating an additional option which can only be used free of charge for a limited period.¹⁰⁴

As a result of that conduct, according to AGCM, the use of the generic term 'fibre' means that the consumer is not able to identify the special characteristics of the products.¹⁰⁵

In August 2019, the Antitrust Authority accepted the complaints of the National Consumer Union, and imposed fines totalling €875,000 on TIM, Fastweb, Wind Tre and Vodafone for misleading offers on fibre.¹⁰⁶

10.3.3 Broadband-ready label for buildings

In 2017, the Italian Ministry for Economic Development presented at the Smart Building Expo 2017 the voluntary "Broadband ready building" ("Edificio predisposto alla Banda Ultralarga") label in accordance with Art. 135 of the Consolidated Building Act. According to the Unblock Italy regulations and Legislative Decree 33/2016, both new buildings and those undergoing major renovation must be equipped with an optical infrastructure. The label should make it possible to identify "broadband ready" buildings.¹⁰⁷

Figure 30: "Broadband ready building" label Italy

¹⁰² <https://en.agcm.it/en/media/press-releases/2018/3/alias-2458>, Rome, 16 March, 2018;
<https://en.agcm.it/en/media/press-releases/2018/4/alias-2459>, Rome, 23 April, 2018;
<https://en.agcm.it/en/media/press-releases/2018/4/alias-2456>, Rome, 27 April, 2018;
<https://en.agcm.it/en/media/press-releases/2018/4/alias-2457>, Rome, 11 April, 2018

¹⁰³ <https://en.agcm.it/en/media/press-releases/2018/3/alias-2458>, Rome, 16 March, 2018

¹⁰⁴ <https://en.agcm.it/en/media/press-releases/2018/4/alias-2459>, Rome, 23 April, 2018;
<https://en.agcm.it/en/media/press-releases/2018/4/alias-2456>, Rome, 27 April, 2018

¹⁰⁵ <https://en.agcm.it/en/media/press-releases/2018/3/alias-2458>, Rome, 16 March, 2018,
<https://en.agcm.it/en/media/press-releases/2018/4/alias-2459>, Rome, 23 April, 2018,
<https://en.agcm.it/en/media/press-releases/2018/4/alias-2456>, Rome, 27 April, 2018;
<https://en.agcm.it/en/media/press-releases/2018/4/alias-2457>, Rome, 11 April, 2018

¹⁰⁶ <https://www.consumatori.it/comunicati-stampa/antitrust-vittoria-unc-compagnie-telefoniche-fibra/>;
<https://www.telecomtv.com/content/fttx/consumer-group-claims-victory-as-italy-takes-hard-line-on-fibre-advertising-35956/>; <https://www.agcm.it/dotcmsdoc/bollettini/2019/31-19.pdf>

¹⁰⁷ Ministry of Economic Development (2017): News: Look for the sticker for a fiber-proof home <http://bandaultralarga.italia.it/cerca-il-bollino-per-una-casa-a-prova-di-fibra/>



Source: Ministry of Economic Development (2017).¹⁰⁸

Certification can only be carried out by an authorized technician who must confirm that the preparation of the ultra-wide band has been carried out in a workmanlike manner and meets the reference standard (provided for in the CEI 306-2 and CEI 64-100 / 1, 2 and 3 guides).¹⁰⁹

Market players such as Open Fiber have called for the broadband-ready building label concept to be extended to authorise use of the label not only for new buildings, but also for existing buildings where a telecommunications operator has deployed an in-building passive multiservice physical infrastructure that is suitable for fibre. They have also advocated that the current voluntary labelling scheme be made mandatory so that all properties equipped with a passive infrastructure enabling fibre are distinguished by the added value they are able to guarantee in terms of performance.

10.4 Advertising practice (past and present)

10.4.1 Advertising in the experimental phase of the resolution

In the experimental phase of the traffic light system for marking Internet services based on different infrastructure, AGCOM investigated how the main operators applied the three colours to their commercial offers.¹¹⁰

The monitoring has shown that all operators have more or less correctly applied the information provided by the Authority, both in relation to one-to-many and one-to-one communications.¹¹¹

In particular 2 application errors were criticised.

¹⁰⁸ Ministry of Economic Development (2017): News: Look for the sticker for a fiber-proof home <http://bandaultralarga.italia.it/cerca-il-bollino-per-una-casa-a-prova-di-fibra/>

¹⁰⁹ <https://www.prmstudiotecnico.it/predisposizione-degli-edifici-alla-banda-ultralarga/>

¹¹⁰ <https://www.agcom.it/documents/10179/13777942/Allegato+26-2-2019+1551198801242/5ecd6b5f-611b-4431-8745-589076d3751f?version=1.1>

¹¹¹ <https://www.agcom.it/documents/10179/13777942/Allegato+26-2-2019+1551198801242/5ecd6b5f-611b-4431-8745-589076d3751f?version=1.1>

1. The use of 2 stamps on one and the same trademark is not allowed (e. g. red and yellow sticker at TIM).
2. The implicit association of several architectures to the same commercial brand in one-to-many communication (e.g. Vodafone and WindTre) is not allowed. The sticker must be associated with the commercial brand and the corresponding architecture and access speed.

A fibre optic offering (with a green label) may be advertised as such, even if it is not available nationwide. However, if the FTTH service is not available, it is not sufficient to indicate the available alternative technology with the corresponding label (e.g. FTTC with a yellow label). The brand name of the alternative service that the customer can receive as an alternative should also be changed.

Furthermore, no acronyms other than those provided for in the Resolution on network architectures should be used. For example, FTTS should not be used instead of FTTH.

The fact that some providers only advertise the "fibre-only" offer on their homepage is considered a commercial choice which cannot be mandated by the regulatory authority.¹¹²

10.4.2 Advertising today

According to the Resolution TIM offers on its website three distinct products "TIM SUPER FIBRA", "TIM SUPER MEGA" and "TIM SUPER ADSL" for the three different technologies available, each featuring the corresponding sticker. TIM uses the term "fibre" correctly, applying it only to the FTTH offer.

What is remarkable is that TIM only prominently advertises its "TIM SUPER FIBRA" tariff directly on the start page, despite its limited fibre coverage.

¹¹² <https://www.agcom.it/documents/10179/13777942/Allegato+26-2-2019+1551198801242/5ecd6b5f-611b-4431-8745-589076d3751f?version=1.1>

Figure 31: Extract 1 from the TIM's website

The screenshot shows the TIM website homepage. At the top, there is a navigation bar with links for 'Privati', 'Business', and 'Chi siamo', along with a search bar and icons for 'Carrello' and 'Mail'. Below the navigation bar, the main header features the TIM logo and a menu with 'OFFERTE', 'PRODOTTI', 'SMART LIFE', 'ASSISTENZA', and 'MyTIM'. The central banner promotes the 'TIM SUPER FIBRA' offer, highlighting 'Fibra fino a 1 Giga, MODEM TIM e TIMVISION' and '+ Chiamate illimitate verso tutti' for 'SOLO ONLINE' at a price of '29,90€ al mese'. A 'SCOPRI' button is visible. To the right of the banner is an image of a couple sitting on a couch in a living room, watching TV. Below the banner, there are three promotional tiles: 'Supergiga 50GB' (50GB al mese per tablet, modem, smartphone, a 13,99€/mese), 'TIMMUSIC & GIGA PLUS' (La musica che vuoi + 3 GB al mese in un solo abbonamento, a 2,99€/mese), and 'TIM FLEXY' (INTERNET veloce e flessibile per 2, 7 o 30 giorni, a partire da 5,90€/mese). On the far right, there is a 'Ricarica' section with a '25 €' dropdown, a 'RICARICA SUBITO' button, and a 'Verifica la copertura Fibra e ADSL' section with a 'VERIFICA ORA' button.

Source: <https://www.tim.it/>.

Figure 32: Extract 2 from the TIM's website

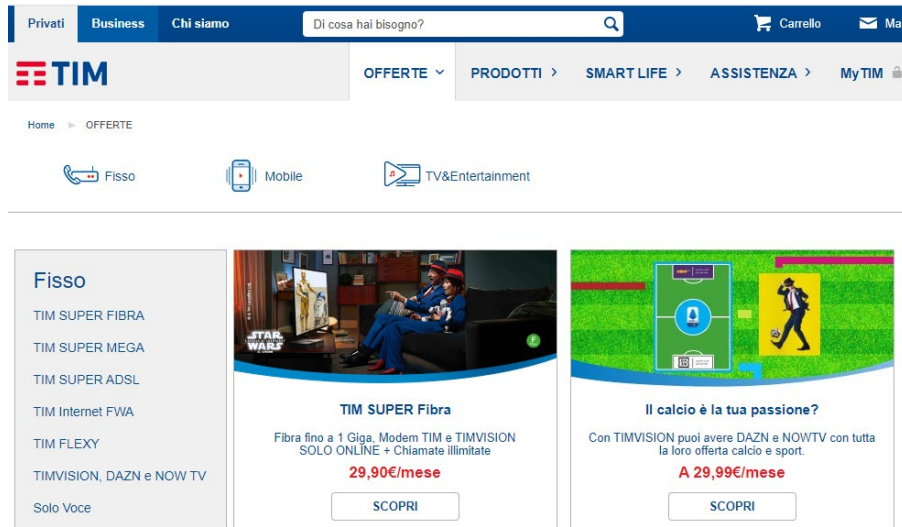
This screenshot shows a detailed view of the 'TIM SUPER FIBRA' offer. The header includes the TIM logo and navigation links for 'TIM SUPER FIBRA', 'OFFERTA', and 'INFORMAZIONI'. The main content area features the offer title 'L'offerta stellare per la casa è TIM SUPER FIBRA' with a green 'e' icon. Below this, it states 'Tutto compreso: FIBRA fino a 1 Giga, MODEM TIM e TIMVISION' and '+ Chiamate Illimitate verso tutti' for 'SOLO ONLINE'. The price '29,90€ al mese' is prominently displayed, followed by 'TUTTO COMPRESO'. There are two buttons: 'VERIFICA E ATTIVA' (red) and 'CHIAMAMI GRATIS' (green). To the right is a large image of a couple sitting on a couch in a living room, watching TV. At the bottom, there is a small disclaimer: 'L'offerta può essere soggetta a limitazioni tecniche di velocità e geografiche. Verifica prima la copertura Fibra fino a casa (FTTH). Se non sei interessato al modem e/o alla domiciliazione clicca qui | Scopri l'architettura di rete TIM | Scopri la velocità di navigazione.'

Source: <https://www.tim.it/tim-super-fibra#/>

If one enters an address where this product is not available, TI directly changes the offer to those available.

The other tariffs can also be reached directly via <https://www.tim.it/offerte> and selection on the left side.

Figure 33: Extract 3 from the TIM's website



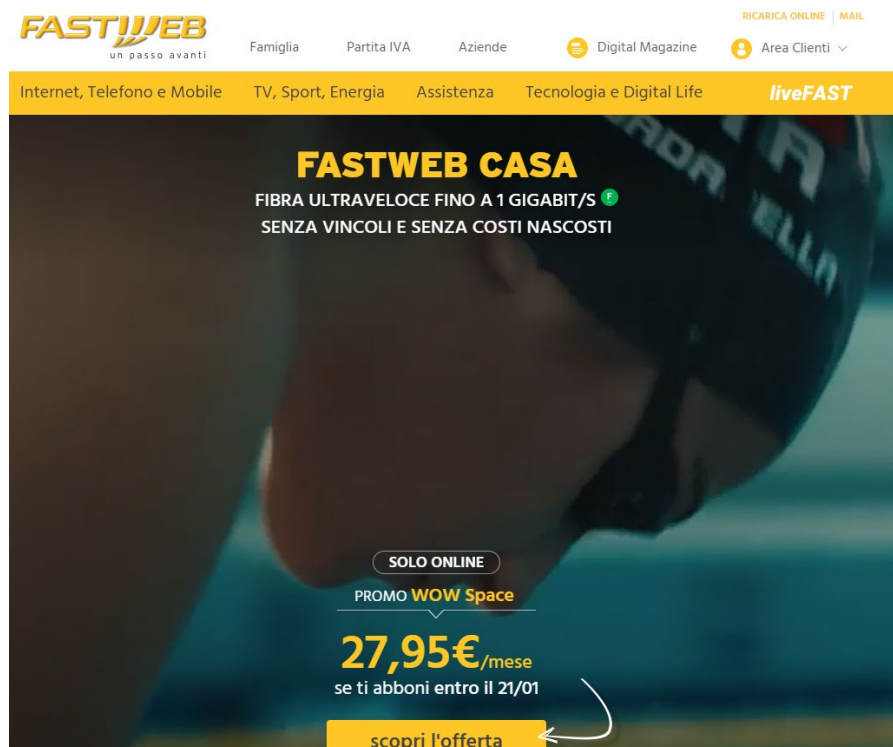
Source: <https://www.tim.it/offerte>

The fact that only the best tariff is advertised directly on the start page applies not only to TIM, but also to other operators, such as for example Fastweb¹¹³ and Vodafone¹¹⁴.

¹¹³ <https://www.fastweb.it/>

¹¹⁴ <https://www.vodafone.it/portal/Privati>

Figure 34: Extract from the Fastweb's homepage



Source: <https://www.fastweb.it/>

Figure 35: Extract from Vodafone's website



Source: <https://www.vodafone.it/portal/Privati>

However, during the evaluation of the experimental phase of the Resolution, AGCOM had clarified the fact that some providers only advertise the "fibre-only" offer on their homepage is considered a commercial choice which cannot be mandated by the regulatory authority.¹¹⁵

10.5 Outcomes

The fact that TIM and other operators offer only or extremely visible only their best service, namely FTTH, on television, on their website, on billboards, etc., does not violate the resolution, but in practice it can lead to problems if the advertised service is only available to a limited extent.

For example, if a consumer wants to conclude a contract in a shop or via a call centre for a service he has seen on TV, he will often find that the service he wants for his address is not available, but only a service via FTTC. Especially when concluding a contract via a call centre, it becomes difficult to guarantee the accuracy of the information for the end consumer.

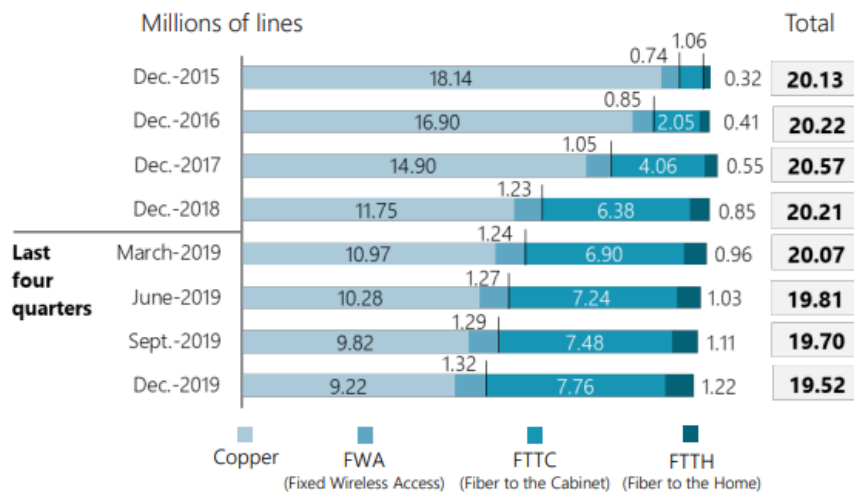
By advertising only the best service, it becomes difficult for the consumer to distinguish clearly between the advertised offer (FTTH) and the actually available offer.

However, it is difficult to say to what extent the misleading fibre advertising in Italy in the past had and today's advertising practice has on the take-up of real fibre.

The following figure shows the development of fixed network: direct access by infrastructure from December 2015 – December 2019.

¹¹⁵ <https://www.agcom.it/documents/10179/13777942/Allegato+26-2-2019+1551198801242/5ecd6b5f-611b-4431-8745-589076d3751f?version=1.1>

Figure 36: Fixed network: direct access by infrastructure



Source: Agcom (2020).¹¹⁶

Access via TIM's copper network decreased significantly by -49% compared to December 2015. The services offered over FTTC increased by 21.6% from December 2018 to December 2019. Over the same period, FTTH access has increased by 43.5%.

¹¹⁶ Agcom (2020): Osservatorio sulle comunicazioni N. 1/2020, slide 4.

11 Netherlands

11.1 Summary

In 2017 Regulator ACM obliged ISP's to publish information on internet speed in contracts and advertisements as of 2018 in accordance with the net neutrality rules.

There are no specific provisions governing "fibre" advertising in the Netherlands. However, following a complaint from the wholesale only fibre company Reggefiber, in 2014, the Board of Appeal of the Advertising Code Committee (self-regulatory organisation) instructed cable operator Ziggo to stop using the term "own fibre network".

A recent investigation of the websites of the major Dutch operators did not reveal misleading advertising. KPN advertises products based on full fibre with reference to fibre optics, distinguishing these products from standard Internet products which may be based on FTTC/VDSL.

11.2 Main players and technologies used

There are two nationwide NGA infrastructures in the Netherlands, the network of incumbent KPN which consists of a combination of copper (FTTC) and fibre (FTTH) and the coax network of VodafoneZiggo. These networks are complemented with smaller regionally acting networks. The FTTP coverage of Dutch households accounts for 35,1 %. The latest FTTP expansion is mainly in rural areas.¹¹⁷

With 2.8 million homes passed on 1 January 2019, KPN has 81% of the fibre optic connections in the Netherlands.¹¹⁸ Nevertheless KPN's investment in FTTH declined in the last years following the acquisition of Reggefiber in 2014.¹¹⁹ Since then KPN's focus has been on the rollout of FTTC for (vectored) VDSL. In January 2019, however, KPN announced that it would increase its FTTH expansion.¹²⁰ In total there are about 50 parties in the Netherlands that build and operate FttH networks. After KPN comes EQT (consisting of CIF, CAIW, Glasvezel Buitenaf and Delta Fiber) with about 300.000 HP. In addition, there are a number of smaller commercial parties that are more regionally active (e.g. COGAS, E-Fiber, Kabelnoord, CAI Harderwijk and REKAM) and more than forty

¹¹⁷ EU (2019): 2019 DESI Report– Electronic communications markets overview per Member State (Telecom Chapters) – Netherlands, page 2, <https://ec.europa.eu/digital-single-market/en/news/2019-desi-report-electronic-communications-markets-overview-member-state-telecom-chapters>

¹¹⁸ ACM (2019): Marktstudie naar de uitrol van glasvezel in Nederland, 18.10.2019, page 11, <https://www.acm.nl/sites/default/files/documents/2019-10/acm-marktstudie-naar-de-uitrol-van-glasvezel.pdf>

¹¹⁹ ACM (2019): Marktstudie naar de uitrol van glasvezel in Nederland, 18.10.2019, page 8, <https://www.acm.nl/sites/default/files/documents/2019-10/acm-marktstudie-naar-de-uitrol-van-glasvezel.pdf>

¹²⁰ EU (2019): 2019 DESI Report– Electronic communications markets overview per Member State (Telecom Chapters) – Netherlands, page 5f., <https://ec.europa.eu/digital-single-market/en/news/2019-desi-report-electronic-communications-markets-overview-member-state-telecom-chapters>

"local" players (e.g. Rendo, SK Veendam, FiberNH/FiberFlevo, Kabeltex, Glasdraad, Delta Rijssen Infratechniek (Digital City), L2Fiber) and many smaller cooperatives or municipalities. ¹²¹

It is notable that some local cable operators (e.g. Cogas, Kabelnoord, Rekam, Kabeltex, SK Veendam, SK Waalre and CAI-Harderwijk) have installed fibre in areas where they operated a coaxial network. However, the national cable operator, VodafoneZiggo, has decided not to replace its HFC network with FTTH, but rather to focus on DOCSIS upgrades. ¹²²

The providers with the largest market shares are KPN, VodafoneZiggo, followed by Tele2. ¹²³ Tele2's services are primarily based on FTTH and FTTC wholesale access products from KPN.

In addition to offering fibre-based services (alongside FTTC) over its own network, KPN has several cooperations with local fibre optic providers, through whose network it offers fibre products. ¹²⁴ However, VodafoneZiggo does not generally offer services on third-party fiber optic lines. ¹²⁵

11.3 Advertising standards

The ACM is both the national regulatory authority and the authority for consumer rights in the Netherlands. In its capacity as an authority for consumer rights, the ACM enforces consumer rights related to various directives, including Directive 2006/114 (Misleading and Comparative Advertising). The ACM is also responsible for the receipt and processing of Administrative complaints. ¹²⁶

The advertising rules applicable in the Netherlands are laid down in the Dutch Advertising Code. This code was created by the Dutch Advertising Code Authority (ACA) and applies to all types of advertising, regardless of the medium used. The code is regulated and enforced by the Dutch Advertising Code Committee (DACC). Complaints about advertising practices can be submitted to the DACC. The committee then investigates whether there has been a violation of the code. If this is the case, the committee can ask the advertising company to stop the relevant advertising. The DACC is a self-regulatory

¹²¹ ACM (2019): Marktstudie naar de uitrol van glasvezel in Nederland, 18.10.2019, page 11, <https://www.acm.nl/sites/default/files/documents/2019-10/acm-marktstudie-naar-de-uitrol-van-glasvezel.pdf>

¹²² ACM (2019): Marktstudie naar de uitrol van glasvezel in Nederland, 18.10.2019, page 9, <https://www.acm.nl/sites/default/files/documents/2019-10/acm-marktstudie-naar-de-uitrol-van-glasvezel.pdf>

¹²⁴ <https://www.kpn.com/internet/glasvezel/lokale-glasvezelaanbieder.htm>

¹²⁴ <https://www.kpn.com/internet/glasvezel/lokale-glasvezelaanbieder.htm>

¹²⁵ ACM (2019): Marktstudie naar de uitrol van glasvezel in Nederland, 18.10.2019, page 13, <https://www.acm.nl/sites/default/files/documents/2019-10/acm-marktstudie-naar-de-uitrol-van-glasvezel.pdf>

¹²⁶ European e-Justice Portal (2017): Enforcement Systems – The Netherlands, https://e-justice.europa.eu/content_enforcement_systems-592-EU-en.do?clang=en

organisation. It has no governmental power, and therefore no authority to impose fines or penalties. However, it can publish violations in press releases.¹²⁷

In 2017 ACM published a policy rule on the provision of information on Internet speeds in contracts and advertisements. For new contracts, this rule entered into force on 1 January 2018 and for existing contracts on 1 March 2018. In accordance with the net neutrality rules, Internet providers must provide in their contract, information on the minimum, normally available and maximum down and upload speeds on fixed networks. It also prohibits fixed and mobile Internet service providers advertising speeds higher than the maximum speed the network can deliver.¹²⁸

In November 2017 ACM sent a letter to providers of fibre-optic services asking them to inform consumers better in advance about what they can expect, e.g. the date of completion of the new fibre network, the conditions under which consumers can terminate their contract, etc.¹²⁹

Beyond this rule, there are no specific provisions or rules in the Netherlands concerning the use of the term "fibre" in advertising. This also applies to "broadband labelling" schemes.

In 2008 UPC filed a complaint with the DACC against the advertising of a residents' initiative group "Dronten Op Glas Fiber". In newsletters the initiative had advertised services of Solcon Internetdienste BV, which were to be provided via the fibre optic network to be installed by Reggefiber. These services were compared with the services provided by UPC via its own cable network. The Commission found several statements in the newsletters to be "misleading" and recommended that the residents' initiative group should no longer advertise in such a way. Other statements were not considered misleading by the Commission. One controversial passage that the Commission, unlike UPC, did not consider "misleading" was the following: "UPC heeft toch ook glas? NEE, dit is niet het geval. In de wijken ligt koperkabel en dit bepaalt de snelheid en kwaliteit van hun netwerk." (translated: UPC also has glass? NO, this is not the case. There is copper cable in the neighborhoods and this determines the speed and quality of their network). The Commission considered that the statement was correct in the context in which it was made. Although 95% of the UPC network was fibre optic, the signals were transmitted via coax near the homes. The Commission also considered it to be factually correct that the UPC network determined which services were possible at what speed and in what quality. The Commission therefore took the view that this statement alone

¹²⁷ <https://platform.globig.co/knowledgebase/NL/netherlands-go-to-market/advertising-regulations-netherlands>; European e-Justice Portal (2017): Enforcement Systems – The Netherlands, https://e-justice.europa.eu/content_enforcement_systems-592-EU-en.do?clang=en.

¹²⁸ <https://www.acm.nl/en/publications/acm-publishes-policy-rule-internet-speed-information> and <https://www.acm.nl/sites/default/files/documents/2017-12/beleidsregel-kenbaarheid-van-internetsnelheden-2017-12-06.pdf>.

¹²⁹ <https://www.acm.nl/en/publications/acm-calling-providers-fiber-optic-services-inform-consumers-better-advance> and <https://www.acm.nl/sites/default/files/documents/2019-11/brief-acm-aan-aanbieders-glasvezeldiensten.pdf>.

could not be considered misleading or harmful to UPC.¹³⁰ In 2011, in a complaint against UPC's advertising, the Commission took the view that the use of the term "fiber power" for UPC's Internet subscription was not incorrect. UPC's network consisted of 97% glass fibres. There was no misrepresentation of things if this property was emphasized by the name 'FiberPower'.¹³¹ In 2013, a further complaint against UPC concerning the advertisement of "Fiber power" was rejected by the chairman with reference to the Commission's decision in 2011.¹³²

In 2011 there was a complaint against the following advertising message of UPC in a brochure in which UPC network provider claims that internet via cable is faster than internet via a fiber optic network. "With ADSL, but also with fiber, for example, all information goes from the internet, TV and telephony together as it were through one funnel. If you then watch TV, part of the room is used for the TV signal. This reduces your internet speed. With cables from UPC the signals are separated and get the space they need. As a result, watching TV is not at the expense of the Internet speed. With UPC cable you can: watch TV and use the internet at the same time without losing speed of the internet."¹³³ The Commission recommended that UPC should no longer advertise in this way.¹³⁴

In 2013/2014 there was a dispute in the Netherlands between Reggefiber, a wholesale-only fibre optic provider, and Ziggo in the area of abusive advertising of fibre optics. Reggefiber filed a number of complaints in relation to a Ziggo campaign in Baarn with the Board of Appeal of the Advertising Code Committee (RCC). Ziggo had described its own network in Baarn¹³⁵, an expansion area of Reggefiber, on a poster and flyer as a "fibre optic network" as part of a counter advertising campaign. In the context of Reggefiber's expansion, Ziggo speaks of building a "second fibre optic network". According to Reggefiber Ziggo, this gave the impression that Ziggo had its own fibre optic network, even though Ziggo's network between the cabinet and the end customer consists of coaxial cables. Reggefiber also highlighted the text used by Ziggo in its advertising: "Unnecessary. You do not need what you already have", because there are substantial differences between the fibre optic network of Reggefiber and the Ziggo cable network.

¹³⁰ <https://www.reclamecode.nl/uitspraken/ziggo/2008-08-0609/-341195/>

¹³¹ <https://www.reclamecode.nl/uitspraken/upc/tele-communicatie-technologie-2011-00635/59315/>

¹³² <https://www.reclamecode.nl/uitspraken/upc/2013-00005/91578/>

¹³³ Translated into English, Original Text: "Met ADSL, maar ook met bijvoorbeeld glasvezel, gaat alle informatie van internet, tv en telefonie samen als het ware door één trechter. Als u dan tv kijkt, wordt een deel van de ruimte gebruikt voor het tv-signaal. Uw internetsnelheid gaat daardoor omlaag. Met kabel van UPC zijn de signalen gescheiden en krijgen zo de ruimte die ze nodig hebben. Hierdoor gaat tv-kijken niet ten koste van de internetsnelheid. Met kabel van UPC kunt u: tegelijkertijd tv-kijken en internetten zonder snelheidsverlies van het internet.", <https://www.reclamecode.nl/uitspraken/upc/tele-communicatie-technologie-2011-00676/60430/>

¹³⁴ <https://www.reclamecode.nl/uitspraken/upc/tele-communicatie-technologie-2011-00676/60430/>

¹³⁵ Ziggo also used the expressions in other places such as Hellendoorn, Nijverdal, Gilze-Rijen and other places where Reggefiber conducts its fibre campaign; see <https://glasvezelgids.com/tegencampagne-van-ziggo-in-baarn-was-misleidend/>

Other complaints concerned Ziggo's false and misleading representation of Internet speeds and the claim that the actual freedom of choice for fibre optic providers is rather disappointing in practice, as many providers are subsidiaries of KPN. According to Ziggo, the designation of its own network as a "fibre optic cable network" was permissible because it is a hybrid fibre optic coax, where the backbone network is made of fibre and the last part of the traffic is carried over coaxial cable. 98 percent of Ziggo's network is fibre optic. Ziggo considered Reggefiber's advertising to be misleading as its view was that the FTTH network was not fundamentally different from Ziggo's network. The Board of Appeal of the Advertising Code Committee instructed Ziggo to stop using the term "own fibre network". Nonetheless, at the time, Ziggo suggested that they would not abide by the ruling, which is not binding. A company spokesperson said after the ruling that Ziggo would continue to use the term "fibre network".¹³⁶

11.4 Advertising practice (past and present)

A review of advertising practices suggests that "fibre" has not been used to market part fibre services.

11.4.1 Ziggo

On its website Ziggo promotes its network with "GigaNet" "Het krachtige netwerk van Vodafone en Ziggo. Slim, stabiel, snel en klaar voor de toekomst. Wat betekent dit voor jou?" (The powerful network of Vodafone and Ziggo smart, stable, fast and ready for the future).

Figure 37: Internet advertising 1 Ziggo

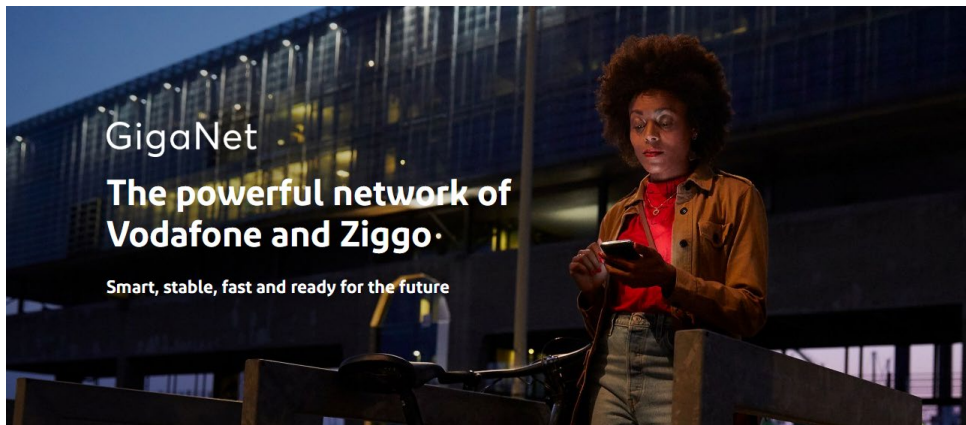


Source: <https://www.ziggo.nl/>¹³⁷

¹³⁶ <https://tweakers.net/nieuws/94155/ziggo-blijft-term-glasvezelkabelnetwerk-gebruiken-ondanks-kritiek.html>, <https://www.reclamecode.nl/uitspraken/ziggo/2013-00955/131185/>, <https://glasvezelgids.com/tegencampagne-van-ziggo-in-baarn-was-misleidend/>, <https://www.reclameboek.nl/artikelen/ldquo-overbodig-campagne-rdquo-ziggo-misleidend>

¹³⁷ Translated from Dutch to English via Google Chrome

Figure 38: Internet advertising 2 Ziggo



Source: https://www.ziggo.nl/giganet/?intcmp=ak2_homepage_noncust¹³⁸

Furthermore, the term "Gigabit speed" is used, e.g.: "Gigabit speed now in Hilversum And soon in almost all of the Netherlands on our GigaNet."¹³⁹

The term "fibre optic cable network" is not used.

On Ziggo's current website <https://www.ziggo.nl/internet/glasvezel/>, the company's own network is not generally referred to as a "fibre optic network". Rather, it is highlighted that 97% of the network is made up of fibre and the last piece is "super fast coaxial cable".

Figure 39: Extract from the Ziggo website¹⁴⁰

On the way to 1 Gbit / s

No less than 97% of our strong signal goes through fiber optics. And the last piece is super fast coaxial cable. With this you can already enjoy super fast internet up to 500 Mbit / s. Up to 1000 Mbit / s in Utrecht and the rest of the Netherlands follows step by step.



Source: <https://www.ziggo.nl/internet/glasvezel/>¹⁴¹

¹³⁸ Translated from Dutch to English via Google Chrome

¹³⁹ <https://www.ziggo.nl/internet/gigabit/>, translated from Dutch to English

¹⁴⁰ The text was translated into English.

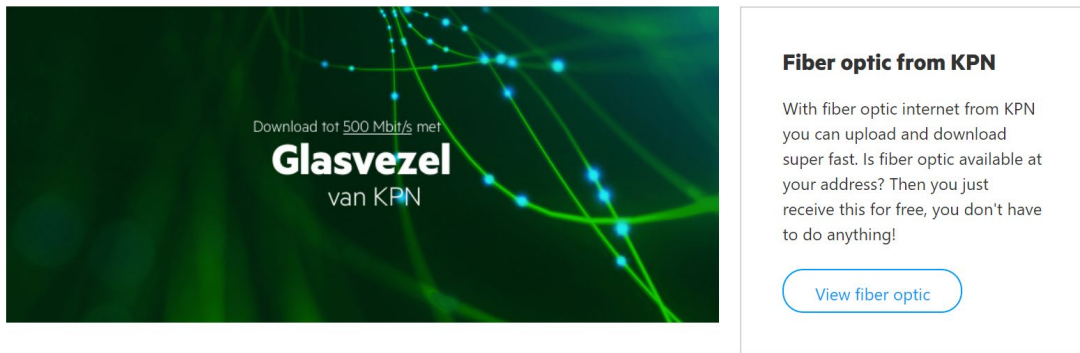
¹⁴¹ Translated from Dutch to English via Google Chrome

The cable network is compared with the fibre optic network in some places on the same website. The message conveyed is that in terms of performance including speed, there is hardly any difference between a fibre optic and cable connection.¹⁴²

11.4.2 KPN

Under <https://www.kpn.com/internet.htm> KPN advertises with the wording "Glasvezel van KPN" (Glasfaser von KPN).

Figure 40: Extract 1 from Website KPN



The image shows a screenshot of a KPN website advertisement for fiber optic internet. On the left, there is a dark green background with glowing blue and green lines representing fiber optic cables. Text on this background includes "Download tot 500 Mbit/s met" in small white font, "Glasvezel" in large white font, and "van KPN" in smaller white font below it. On the right, there is a white rectangular box with a thin grey border. Inside this box, the heading "Fiber optic from KPN" is in bold black font. Below the heading, the text reads: "With fiber optic internet from KPN you can upload and download super fast. Is fiber optic available at your address? Then you just receive this for free, you don't have to do anything!". At the bottom of this box is a blue button with rounded corners and the text "View fiber optic" in white.

Source: <https://www.kpn.com/internet/glasvezel.htm>¹⁴³

Under "View fibre optic" one reaches the availability check and an overview of the bandwidths of different subscriptions divided into standard Internet and fibre optic Internet of KPN.

¹⁴² <https://www.ziggo.nl/internet/glasvezel/>.

¹⁴³ Translated from Dutch to English via Google Chrome

Figure 41: Extract 2 from Website KPN

Compare fiber optics

The internet speed varies per subscription. With fiber optics you get the same upload speed as download speed. Curious about the internet speeds of standard internet and Fiber-optic Internet from KPN? Compare the speeds below.

Tot 200 Mbit/s download en 20 Mbit/s upload Standard Internet • 50 Mbit / s download and 5 Mbit / s upload • 100 Mbit / s download and 10 Mbit / s upload • 200 Mbit / s download and 20 Mbit / s upload	Tot 500 Mbit/s download en 500 Mbit/s upload Fiber optic Internet • 50 Mbit / s download and 50 Mbit / s upload • 100 Mbit / s download and 100 Mbit / s upload • 200 Mbit / s download and 200 Mbit / s upload • 500 Mbit / s download and 500 Mbit / s upload
--	---

Source: <https://www.kpn.com/internet/glasvezel.htm> ¹⁴⁴

11.5 Outcomes

Satisfaction surveys of the the Dutch consumer association Consumentenbond show that consumer experiences with their operator and quality of service are quite good.¹⁴⁵ In the Netherlands, privately owned free comparison tools for communications services have been in place since 1998 and work well.¹⁴⁶ An example is BREEDBANDWINKEL.nl, where you can search for Internet service providers that offer services at your place of residence and filter the offers by, among other things, speed and underlying connection (ADSL, VDSL, fibre, cable).¹⁴⁷ Furthermore the Advertising Code Committee publishes violations against the Dutch Advertising Code which means that consumers can be made aware about misleading advertising of fibre.

The market share of DSL has declined by an average of 3.2% annually from 2014-2018, while the market share of FTTB/H has increased by an average of 12.6%. Compared to 2014, this market share has almost doubled in 2018. Cable's market share has declined

¹⁴⁴ Translated from Dutch to English via Google Chrome

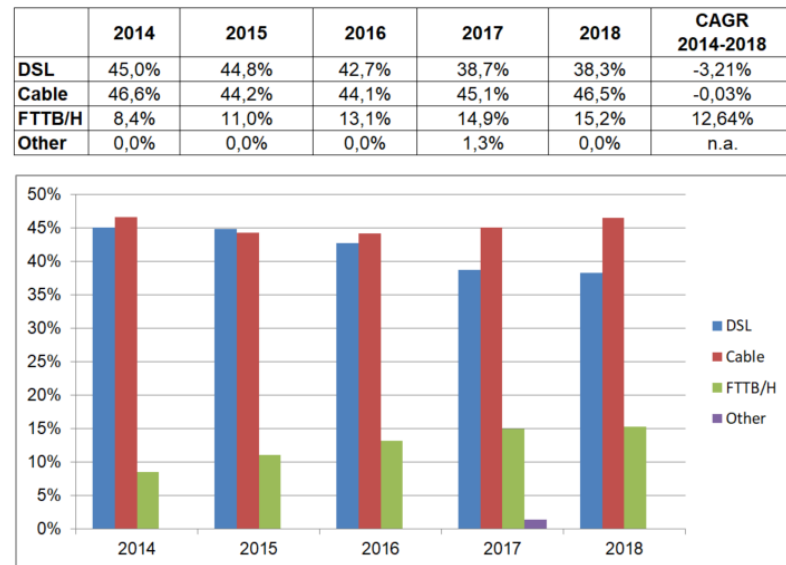
¹⁴⁵ EU (2019): 2019 DESI Report– Electronic communications markets overview per Member State (Telecom Chapters) – Netherlands, page 10, <https://ec.europa.eu/digital-single-market/en/news/2019-desi-report-electronic-communications-markets-overview-member-state-telecom-chapters>

¹⁴⁶ EU (2019): 2019 DESI Report– Electronic communications markets overview per Member State (Telecom Chapters) – Netherlands, page 10, <https://ec.europa.eu/digital-single-market/en/news/2019-desi-report-electronic-communications-markets-overview-member-state-telecom-chapters>

¹⁴⁷ <https://www.breedbandwinkel.nl/vergelijken/internet>.

by an average of 0.03% annually. Compared to 2014 (46.6%) there is hardly any change in 2018 (46.5%).¹⁴⁸

Figure 42: Technology market share Netherlands



Source: WIK based on Data of European Commission 2014-2018¹⁴⁹

¹⁴⁸ European Commission (2014-2018): Broadband Indicators 2014-2018

¹⁴⁹ European Commission (2014-2018): Broadband Indicators 2014-2018

12 Poland

12.1 Summary

In Poland the ISP's are obliged to publish information on internet speed in contracts and advertisements as of 2018 in accordance with the net neutrality rules. In case of non-compliance the President of the UKE imposes by decision a fine of up to 3% of the revenues of the penalized company for the foregoing calendar year.¹⁵⁰

There are no specific provisions governing "fibre" advertising in the Poland.

The recent investigation of the operator websites shows that UPC, the biggest cable operator in Poland, incumbent Orange Polska and its competitor Netia use the wording "fibre" in their advertising.

There is no special 'broadband-ready' label in Poland. However, buildings with a technical infrastructure adapted to high-speed networks are entered in the Register of Land and Buildings.¹⁵¹

12.2 Main players and technologies used

With a market share of 37% in July 2018, the most popular technology for fixed Internet access in Poland was cable followed by xDSL with 32%, FTTB/H with 13% and other technologies with 18%.¹⁵²

In 2018, biggest cable operator in Poland was UPC with a share of 41.9% in the total number of users using the internet access service via cable TV modems, followed by Vectra (20.7%), Multimedia (14.2%), Toya (4%), Inea (3,4%) and Others (15.8).¹⁵³

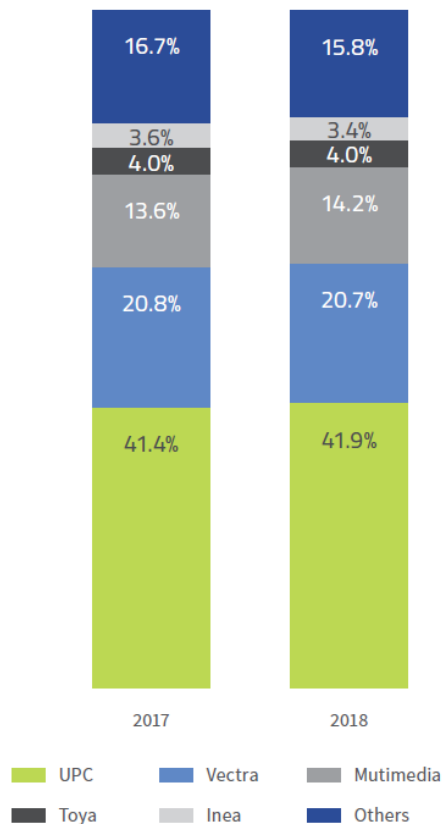
¹⁵⁰ UKE (2019): Report on Monitoring the Implementation of Regulation 2015/2120 in Relation to Open Internet Access in Poland, Warsaw, 26 June 2019, page 21.

¹⁵¹ EU (2018): 2018 DESI Report– Electronic communications markets overview per Member State (Telecom Chapters) – Poland, page 6, <https://ec.europa.eu/digital-single-market/en/news/desi-report-2018-telecoms-chapters>

¹⁵² European Commission (2018): Broadband indicators (2018)

¹⁵³ UKE (2019): Report on the state of the telecommunications market in Poland in 2018, Warsaw, June 2019, page 10.

Figure 43: Operators' shares in the total number of users using the internet access service via cable TV modems



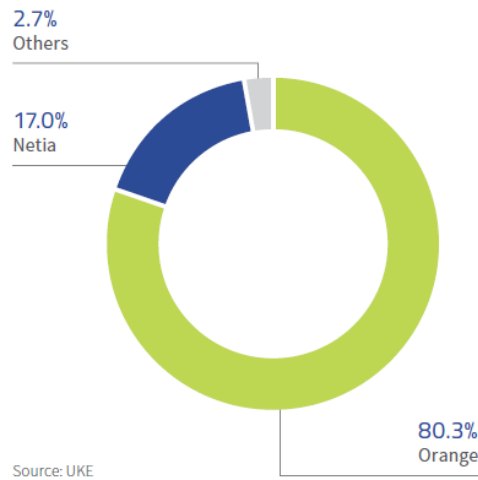
Source: UKE (2019). ¹⁵⁴

The biggest xDSL operator was Orange Polska, whose share in the total number of users using xDSL-based Internet access services amounted to 80,3% in July 2018, followed by Netia in second position with a share of 17%. Others accounted for 2.7%. Compared to the previous year, the number of xDSL users decreased by 11%. ¹⁵⁵

¹⁵⁴ UKE (2019): Report on the state of the telecommunications market in Poland in 2018, Warsaw, June 2019, page 10.

¹⁵⁵ UKE (2019): Report on the state of the telecommunications market in Poland in 2018, Warsaw, June 2019, page 11.

Figure 44: Operators' share in the total number of users using xDSL-based Internet access services



Source: UKE (2019).¹⁵⁶

There is no vectoring in Poland,¹⁵⁷ as tests conducted by Orange Polska showed that the VDSL technique is not feasible due to long copper length.¹⁵⁸ Thus, full fibre is the only way to compete with cable networks.¹⁵⁹ Both incumbent Orange Polska and its competitor Netia are deploying fibre.

Netia and Orange Polska recently released plans for fibre consortia extending fibre BB nationally.¹⁶⁰

The highest shares in the number of users using FTTH-based Internet access services were Orange Polska (26.7%), Inea (7.2%), Netia (5.4%) and Multimedia (3.2%), giving a total share of 43%. The rest of the FTTH market is very fragmented. A share of 57.5% was held by other companies, each with an individual market share of less than 1.5%.

¹⁶¹

¹⁵⁶ UKE (2019): Report on the state of the telecommunications market in Poland in 2018, Warsaw, June 2019, page 11.

¹⁵⁷ EU (2018): 2018 DESI Report– Electronic communications markets overview per Member State (Telecom Chapters) – Poland, page 2f., <https://ec.europa.eu/digital-single-market/en/news/desi-report-2018-telecoms-chapters>

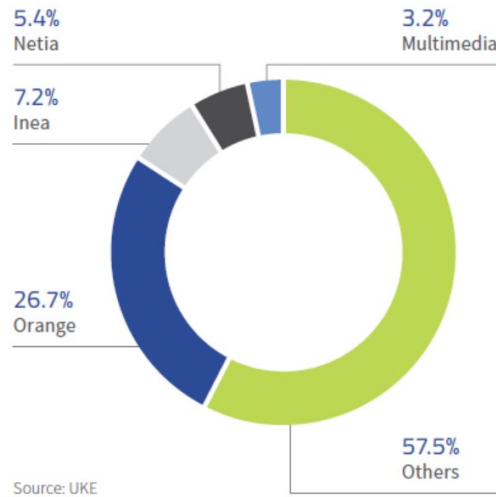
¹⁵⁸ Godlovitch, Ilsa; Kroon, Peter; Strube Martins, Sonia; Eltges, Fabian (2019): Copper switch-off, European experience and practical considerations

¹⁵⁹ Godlovitch, Ilsa; Kroon, Peter; Strube Martins, Sonia; Eltges, Fabian (2019): Copper switch-off, A European benchmark, Case summaries, March 2019, slide 31

¹⁶⁰ Godlovitch, Ilsa; Kroon, Peter; Strube Martins, Sonia; Eltges, Fabian (2019): Copper switch-off, A European benchmark, Case summaries, March 2019, slide 31

¹⁶¹ UKE (2019): Report on the state of the telecommunications market in Poland in 2018, Warsaw, June 2019, page 11.

Figure 45: Operators' share in the total number of users using FTTH-based Internet access services



Source: UKE (2019).¹⁶²

In September 2018 Poland had FTTB/H coverage of 28% with 5% homes connected and therefore a take-up of 18%.¹⁶³ From September 2017 to September 2018 Poland had a growth rate in homes passed of 40.5%.¹⁶⁴ The technology market share of FTTB/H raised from 9% in July 2017 to 13% in July 2018.¹⁶⁵

12.3 Advertising standards

According to Article 209 (1) point 29a of the Polish Telecommunications Act¹⁶⁶, penalties are levied on anyone that does not fulfil the obligations of Article 3, 4 and 5 (2) of the Regulation (EU) 2015/2120 of the European Parliament and of the Council.¹⁶⁷ After

¹⁶² UKE (2019): Report on the state of the telecommunications market in Poland in 2018, Warsaw, June 2019, page 11.

¹⁶³ IDATE (2019): FTTH Council Europe – Panorama, Europe Broadband status, Market at September 2018, FTTH Council Europe Conference – March 12-14th, 2019 –Amsterdam, page 31, <https://www.ftthcouncil.eu/documents/FTTH%20Council%20Europe%20-%20Panorama%20at%20September%202018.pdf>

¹⁶⁴ IDATE (2019): FTTH Council Europe – Panorama, Europe Broadband status, Market at September 2018, FTTH Council Europe Conference – March 12-14th, 2019 –Amsterdam, page 12, <https://www.ftthcouncil.eu/documents/FTTH%20Council%20Europe%20-%20Panorama%20at%20September%202018.pdf>

¹⁶⁵ European Commission (2018): Broadbandindicators, July 2018

¹⁶⁶ Telecommunications Act of 16 July 2004 (consolidated text: Journal of Laws of 2018, item 1954, as amended)

¹⁶⁷ Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open Internet access and amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union; <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R2120&from=EN>

conducting an administrative procedure, the President of the UKE imposes by decision a fine of up to 3% of the revenues of the penalized company for the foregoing calendar year.¹⁶⁸

The Regulation came into effect on 1 January 2017.¹⁶⁹

In September, Skynet was fined 15,000 zł by the President of UKE for failing to comply with the obligation to specify minimum and normal available speeds in its contracts, in breach of Article 4(1d) of Regulation (EU) 2015/2120. As the company complied with the obligation at the beginning of 2019, the penalty was reduced.¹⁷⁰

Since 1 December 2018, UKE offers a free of charge quality control mechanism for Internet end-users provided by the company V-Speed. The mechanism is available at: www.pro.speedtest.pl. With this mechanism certified measurements of services in fixed networks can be carried out. A series of measurements can be used to produce a certified report on the quality of the services used, which can be utilized by the end-user in the event of a dispute with an ISP.¹⁷¹

In addition, advertising for Internet access services may also constitute an infringement of the Act of 16 February 2007 on Competition and Consumer Protection if it is contrary to collective consumer interests. The President of the Office for Competition and Consumer Protection (UoKiK) is responsible for proceedings against practices that violate collective consumer interests.¹⁷² The President may be informed of any suspected use of practices that harm the collective interests of consumers, for example in the event of an infringement of Directive 2006/114 (Misleading and comparative advertising).¹⁷³ UOKiK also warns consumers against anti-consumer behaviour and publishes warning notices on its website. In recent years there were some decisions and fines imposed by the UOKiK in the telecommunications sector, including some in the field of misleading advertising. However, none of these penalties and decisions concerned misleading fibre advertising.¹⁷⁴

Poland also has some self-regulatory enforcement systems, such as the Association of Advertisers. The Council has developed the Code of Ethics for Advertising. The

¹⁶⁸ UKE (2019): Report on Monitoring the Implementation of Regulation 2015/2120 in Relation to Open Internet Access in Poland, Warsaw, 26 June 2019, page 21.

¹⁶⁹ <https://www.uke.gov.pl/akt/prezes-uke-nalozyl-kare-na-skynet-sp-z-o-o-za-brak-okreslenia-w-umowach-predkosci-internetu,240.html#!>

¹⁷⁰ <https://www.uke.gov.pl/akt/prezes-uke-nalozyl-kare-na-skynet-sp-z-o-o-za-brak-okreslenia-w-umowach-predkosci-internetu,240.html#!>

¹⁷¹ UKE (2019): Report on Monitoring the Implementation of Regulation 2015/2120 in Relation to Open Internet Access in Poland, Warsaw, 26 June 2019, page 11, 23; <https://martes-specure.com/2019/07/03/uke-publishes-monitoring-report-on-implementation-of-eu-open-internet-regulation-in-poland/>

¹⁷² UKE (2019): Report on Monitoring the Implementation of Regulation 2015/2120 in Relation to Open Internet Access in Poland, Warsaw, 26 June 2019, page 6

¹⁷³ European e-Justice Portal (2017): Enforcement Systems – Poland, page 1, https://e-justice.europa.eu/content_enforcement_systems-592-EU-en.do?clang=en

¹⁷⁴ Reports on UOKiK activities in 2016-2018.

association deals with complaints about advertising from both consumers and competitors. It can advise advertisers to modify or remove specific advertisements.¹⁷⁵

Thus far however, there are no specific rulings or regulations on fibre advertising in Poland.

Furthermore, there is no special 'broadband-ready' label in Poland. However, buildings with a technical infrastructure adapted to high-speed networks are entered in the Register of Land and Buildings.¹⁷⁶

12.4 Advertising practice (past and present)

12.4.1 Advertising practice and disputes in the past

In Poland the race towards Gigabit speeds began in August 2018. UPC and Orange offered 1 Gb/s Internet speed, Netia 900 Mb / s. For UPC customers this offer was only available in Warsaw and was available only through "pre-order". For Orange customers, who were previously supplied with a speed of 600 Mb / s, this was possible immediately. They were even automatically switched from Orange's offer on the same day.¹⁷⁷

In 2018 there was a media conflict in Poland between incumbent Orange Polska and Poland's largest cable operator UPC over UPC's fibre optic advertising.¹⁷⁸

In August, UPC had introduced the pre-sale of 1 Gb/s Internet access via fibre optic connections. However, at the time, this access was limited to selected areas of Warsaw, and would only in future be extended to the whole of Warsaw and other cities. The marketing campaign included a series of TV spots, online advertising, radio advertising and outdoor advertising.¹⁷⁹

The following illustration shows the advertisement. UPC promises Internet "światłowodowej o prędkości 1gb/s od upc", which translated means "Fibre optic internet with a speed of 1gbps from upc".

¹⁷⁵ <https://kosmetyki-detergenty.pl/en/our-partners/union-of-associations-advertising-council/>, Fiche enforcement.

¹⁷⁶ EU (2018): 2018 DESI Report– Electronic communications markets overview per Member State (Telecom Chapters) – Poland, page 6, <https://ec.europa.eu/digital-single-market/en/news/desi-report-2018-telecoms-chapters>

¹⁷⁷ <https://antyweb.pl/orange-swiatlowod-od-upc-to-fibersztuczki/>

¹⁷⁸ <https://www.wirtualnemedi.pl/artykul/orange-polska-upc-polska-swiatlowod-internet-1-gb-s-co-lepsze>

¹⁷⁹ <https://www.wirtualnemedi.pl/artykul/orange-polska-upc-polska-swiatlowod-internet-1-gb-s-co-lepsze>, <http://media.upc.pl/35832-upc-przenosi-predkosc-polskiego-internetu-na-jeszcze-wyzszy-poziom-i-otwiera-ere-gigabitowa-oferujac-jako-pierwszy-ogolnopolski-operator-internet-o-predkosci-1-gbs>

Figure 46: UPC advertisement of



Source: UPC.¹⁸⁰

Under this advertising image UPC speaks on its newsroom page of "wielomilionowych inwestycji w rozwój światłowodowej technologii DOCSIS 3.1" (multi-million investments in the development of DOCSIS 3.1 fibre optic technology).¹⁸¹

Orange Polska accuses UPC of "fibersztuczki" and „marketingowe ściemnianie”, which can be translated as “artwork/dummy fibre” and “marketing shading”, in 1 Gb / s Internet advertising. Orange Polska accused UPC of advertising on the Internet for a 1 Gb/s FTTH fibre service that it could not even offer.¹⁸²

Orange Polska’s spokesman criticised these advertising activities as misleading for consumers, noting that UPC does not produce Fibre to the Home (FTTH), but only runs fibre to the maximum of the building and then reaches customers with coaxial cables. Therefore, from a technological point of view, the networks in question are DOCSiS and HFC (Hybrid Fibre-Coaxial) networks.

Michał Fura, spokesperson of UPC Polska, pointed out that UPC does not say anywhere that it has FTTH.¹⁸³

UPC further accused Orange of wanting to capture fibre optics exclusively for itself, but that these times are over.¹⁸⁴

¹⁸⁰ <http://media.upc.pl/35832-upc-przenosi-predkosc-polskiego-internetu-na-jeszcze-wyzszy-poziom-i-otwiera-ere-gigabitowa-oferujac-jako-pierwszy-ogolnopolski-operator-internet-o-predkosci-1-gbs>

¹⁸¹ <http://media.upc.pl/35832-upc-przenosi-predkosc-polskiego-internetu-na-jeszcze-wyzszy-poziom-i-otwiera-ere-gigabitowa-oferujac-jako-pierwszy-ogolnopolski-operator-internet-o-predkosci-1-gbs>

¹⁸² <http://media.upc.pl/35832-upc-przenosi-predkosc-polskiego-internetu-na-jeszcze-wyzszy-poziom-i-otwiera-ere-gigabitowa-oferujac-jako-pierwszy-ogolnopolski-operator-internet-o-predkosci-1-gbs>

¹⁸³ <https://www.telko.in/rzecznik-orange-upc-polska-stosuje-fibersztuczki>

¹⁸⁴ <https://www.wirtualnemedi.pl/arttykul/orange-polska-upc-polska-swiatlowod-internet-1-gb-s-co-lepsze>

Witold Woźniak, CTO at Klonex, said that both UPC and other MSOs were building new networks using RFoG technology. This is a variant of FTTH "and in addition to data transmission in the DOCSIS 3.1 standard, this platform offers much wider possibilities than GPON implemented by Orange".¹⁸⁵

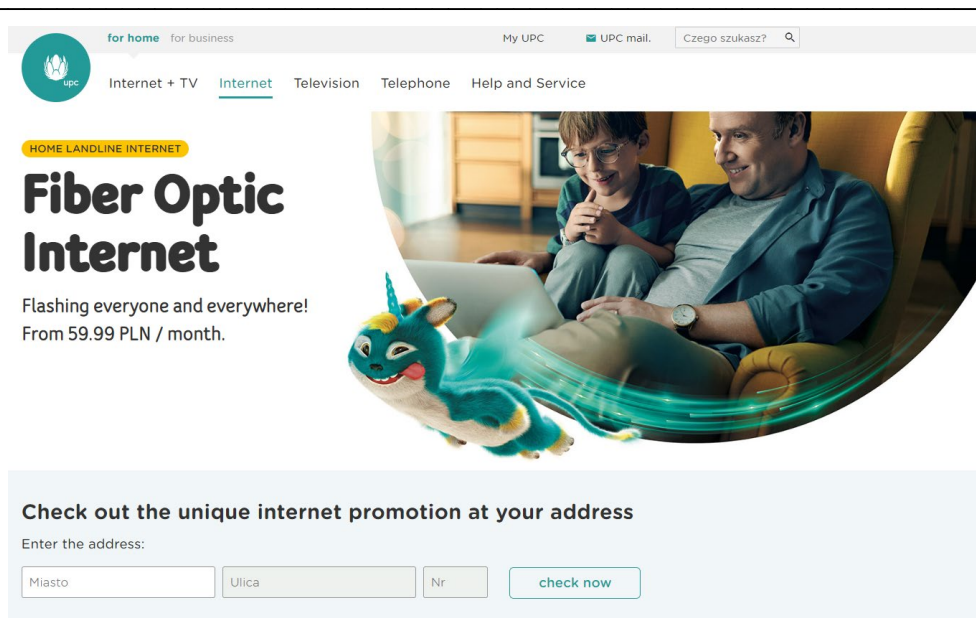
In the Orange company blog, company spokesperson Wojtek Jabczyński explained in March 2019 the difference between "Fibre Internet", which some cable companies offer but will never be in the house or apartment, and "fibre optics" or "real fibre into the apartment", as offered by Orange. He also draws attention to further marketing and technical fibre optic subtleties.¹⁸⁶

12.4.2 Advertising today

12.5 UPC Polska, Vectra, Multimedia

From UPC Polska's homepage one can access the offered Internet tariffs by selecting "Internet".¹⁸⁷ UPC promotes "Internet światłowodowy" (Fiber Optic Internet) on this page.¹⁸⁸

Figure 47: Extract 1 from Website UPC Polska



Source: <https://www.upc.pl/internet/kup-internet/>¹⁸⁹

¹⁸⁵ <https://www.telko.in/rzecznik-orange-upc-polska-stosuje-fibersztuczki>

¹⁸⁶ <https://biuroprasowe.orange.pl/blog/jak-rozroznic-swiatlowod-i-produktu-swiatlowodopodobnego/>

¹⁸⁷ <https://www.upc.pl/internet/kup-internet/>

¹⁸⁸ <https://www.upc.pl/internet/kup-internet/>

¹⁸⁹ translated from Polish into English via Google Chrome

In the tariff selection below, under the heading "Fibre Optic Internet", UPC exclusively offers Fibre Internet between up to 500 Mb/s and 1 Gbps, with TV between up to 300 Mb/s and 1 Gb/s.

Figure 48: Extract 2 from Website UPC Polska

The screenshot displays the 'Fiber Optic Internet' section of the UPC Polska website. It features three distinct tariff cards, each with a 'I choose' button and a 'Find out more >' link. The first card, labeled 'LOWEST PRICE', offers 500 Mb/s for 59.99 PLN/month. The second card, labeled 'NO STRINGS ATTACHED' and marked 'our HIT', offers 500 Mb/s for 69.99 PLN/month. The third card, labeled 'YOU GAIN MORE', offers 1 Gbps for 59.99 PLN/month (first 3 months) and 79.99 PLN/month thereafter. All cards include a list of features: Fiber Internet up to the specified speed, TV for a good start (with a link to view the channel list), a Modem Connect Box with wifi, and a 24-month contract. The 1 Gbps card also mentions 'Modem Giga Connect Box with wifi'. The 500 Mb/s cards mention 'Installation PLN 1 only on upc.pl' and 'Contract without a commitment period'.

Feature	500 Mb / s (59.99 PLN / month)	500 Mb / s (69.99 PLN / month)	1 Gbps (59.99 PLN / month)
Speed	500 Mb / s	500 Mb / s	1 Gbps
Price	59.99 PLN / month	69.99 PLN / month	59.99 PLN / month (first 3 months), then 79.99 PLN / month
TV	TV for a good start. View channel list.	TV for a good start. View channel list.	TV for a good start. View channel list.
Modem	Modem Connect Box with wifi	Modem Connect Box with wifi	Modem Giga Connect Box with wifi
Installation	Installation PLN 1 only on upc.pl	Installation PLN 59.90	Installation PLN 1 only on upc.pl
Contract	24 month contract	Contract without a commitment period	24 month contract

Source: <https://www.upc.pl/internet/kup-internet/>¹⁹⁰

In the details of all Internet tariffs the word "Superszybki Internet światłowodowy" (High-speed fibre optic Internet) is used. In the details of all tariffs the word "technologia FTTB" (FTTB technology) is also used.

Figure 49: Extract 3 from Website UPC Polska



up to 500 Mb / s

upload up to 30 Mb / s

Super fast fiber optic Internet

- ✓ state-of-the-art Connect Box modem
- ✓ super-fast Wi-Fi everywhere in your home
- ✓ reliable speed and stable connection, also via Wi-Fi

[Details of offer](#)

Connect Box Wi-Free




- ✓ download speed: up to 500 Mb / s (512,000 kb / s)
- ✓ upload speed: up to 30 Mb / s (30,720 kb / s)
- ✓ number of public IP addresses: 1
- ✓ data download limit: none
- ✓ number of e-mail accounts: 3
- ✓ capacity of each e-mail account: 5 GB
- ✓ account on the web server: 1x300 MB
- ✓ FTTB technology

Source: <https://www.upc.pl/internet/kup-internet/internetowi-start-500-24mc/>¹⁹¹

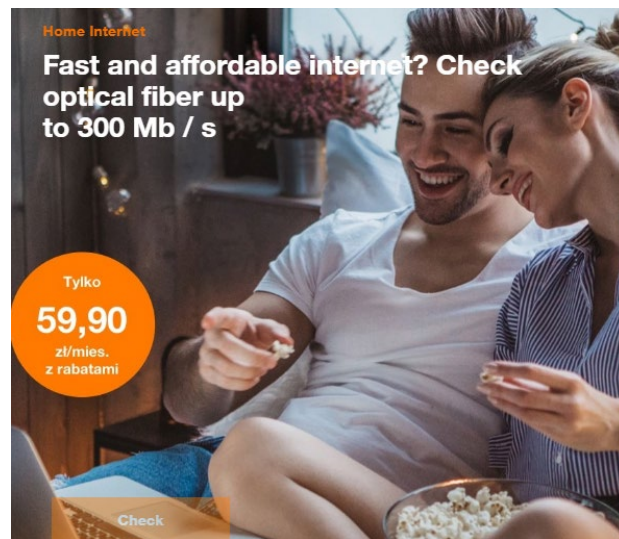
The second and third largest cable operator Vectra and Multimedia don't use the wording "fibre" for the internet services offered on their homepage.

12.6 Orange Polska

Directly on the start page of Orange Polska one is asked to check optical fibre up to 300 Mbit/s.

¹⁹¹ translated from Polish into English via Google Chrome

Figure 50: Extract 1 from Website Orange Polska



Source: <https://www.orange.pl/>¹⁹²

The button "Check" takes one to a new page where the term "fibre" is used a few times and where one can check again with the button "Check" which speed is available at one's own address.

The website <https://www.orange.pl/internet-domowy> provides access to Orange Polskas services via fibre optics.

Figure 51: Extract 2 from Website Orange Polska

Recommended packages:

The price includes discounts for e-invoices and marketing consents (PLN 5.01 each).

69⁹⁸ PLN / month with discounts + PLN 49.99 activation Orange Optical Fiber up to 300 Mb / s Details check availability	79⁹⁸ PLN / month with discounts + PLN 49.99 activation Orange Optical Fiber up to 800 Mb / s Details check availability	89⁹⁸ PLN / month with discounts + PLN 49.99 activation Orange Optical Fiber up to 1 Gb / s Details check availability
--	--	--

¹⁹² translated from Polish into English via Google Chrome

Source: <https://www.orange.pl/internet-domowy>.¹⁹³

Here, under the details for all tariffs, it is indicated that it is "Internet domowy oparty na najnowocześniejszej technologii światłowodowej" (Home Internet based on the latest fibre optic technology) and that "łącze światłowodowe doprowadzone jest bezpośrednio do mieszkania klienta" (the fibre optic link is led directly to the customer's apartment).

Only with the availability check you receive an offer for another technology, if fibre optic technology is not available.

The other services are not advertised separately.

This is also the case with Netia. On the website under "Internet" => "Fixed Internet" only "Fibre Optic Internet up to 1 Gb/s" is advertised.

¹⁹³ translated from Polish into English via Google Chrome

Figure 52: Extract 1 from Website Netia

The screenshot displays the Netia website's promotional page for fiber optic internet. The navigation bar at the top includes links for GIGAWYPRZEDAŻ, INTERNET, TELEVISION, TELEPHONE, SERVICES, HELP, and BLOG. The main header features the text "Fiber Optic Internet up to 1 Gb / s!" and "TIDAL included in the subscription price". A prominent button prompts users to "CHECK AVAILABILITY". Below this, two tabs are visible: "Offer for 24 months" and "The indefinite offer". The main content area is divided into sections for "NEW CUSTOMERS" and "CURRENT CUSTOMERS", with a "Contract duration: 24 months" note. A table compares three internet plans: 300 Mb/s, 500 Mb/s, and 1 Gb/s. Each plan includes a discount of PLN 8 for three months, starting from the 4th month. The table also lists download speeds and additional offers like "Secure internet" and "WIFI router". A footer section contains a link to "SHOW REGULATIONS AND PRICE LISTS" and three "CHECK AVAILABILITY" buttons.

	Internet 300 Mb / s	Internet 500 Mb / s	Internet 1 Gb / s
Price with discounts	PLN 8 for three months 50,00 zł / month. from the 4th month	PLN 8 for three months 60,00 zł / month. from the 4th month	PLN 8 for three months 70,00 zł / month. from the 4th month
Discounts	Prices include a discount of PLN 8 / month for marketing consent and PLN 8 / month for exclusive		
Download Speed	down 300 Mb / s	down 500 Mb / s	down 1 Gbps
Additionally on offer	2 MONTHS IN THE PRICE Secure internet then 8.80 PLN / month - the service is optional SEE THE DESCRIPTION OF IN PRICE WIFI router SEE DESCRIPTION		
The presented offer of Netia 50/10 Gbps (xDSL) applies when concluding a Contract for a definite period of 24 (x) Settlement Periods. The condition of using the Promotion is ordering an Internet Service with an additional paid Safe Internet service & Internet Service based on quality parameters resulting from the maximum technical parameters of a given technology, in which the Internet Service is provided, or resulting from the technical offer settings of the link.			
SHOW REGULATIONS AND PRICE LISTS			
CHECK AVAILABILITY OF CHECK AVAILABILITY OF CHECK AVAILABILITY			

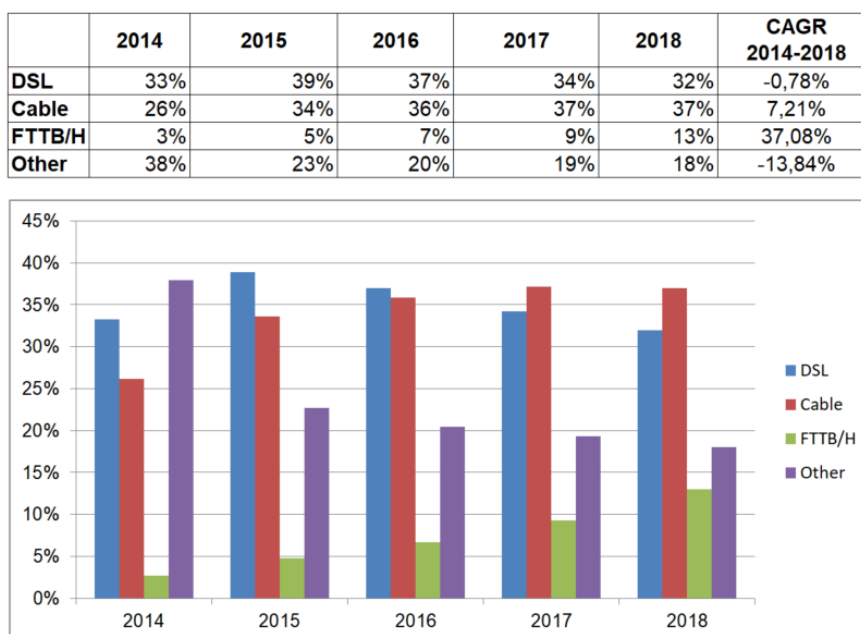
Source: <https://www.netia.pl/pl/internet?stacjonarny=oferta-na-24miesiace>¹⁹⁴

With the availability check one receives a tailored offer for the own address.

12.7 Outcomes

The market share (fixed broadband subscriptions by technology) of DSL has declined by an average of -0.78% annually from 2014-2018, while the market share of FTTB/H has increased by an average of 37.1% per year. Compared to 2014, the market share has more than quadrupled in 2018. Cable's market share has increased by an average of 7.2% annually.¹⁹⁵

Figure 53: Market share by technology in Poland



Source: European Commission (2014-2018)¹⁹⁶

¹⁹⁵ European Commission (2014-2018): Broadband Indicators 2014-2018

¹⁹⁶ European Commission (2014-2018): Broadband Indicators 2014-2018

13 UK

13.1 Summary

The term “fibre” has been used liberally in the UK to advertise services based on cable as well as services based on FTTC/VDSL with speeds as low as 36Mbit/s.

Consumer research commissioned by FTTH providers suggests that consumers are confused by broadband advertising, and would welcome clearer labelling. However, the Advertising Standards Authority has concluded, based on its own research, that notwithstanding any performance differences between full and part-fibre based services, consumers have not been “misled”.

In its September 2019 statement on Strategic Priorities for telecommunications, the UK Government has now instructed the telecom regulatory authority Ofcom to consider whether the information available to consumers about the characteristics of different types of broadband services, and in particular full fibre broadband, is helping consumers make informed choices. Ofcom has included a work item in its proposed 2020/21 work programme to take this forward.

13.2 Main players and technologies used

FTTH deployment in the UK is limited. Much of the existing coverage stems from specialist FTTH providers including Cityfibre, a wholesale only operator, which is present in a number of urban areas across the UK and is targeting coverage of 5m premises by 2025, and Gigaclear, which has focused on rural deployments, in some cases with the support of state aid.¹⁹⁷

The incumbent BT, which operates under model of structural separation, but with common ownership of the infrastructure and retail divisions, has stated its intention to reach 4m premises with fibre by March 2021.

Cable operator Virgin Media is also expanding its footprint through the deployment of fibre, and was reported to have passed 1.8m homes in the first half of 2019.¹⁹⁸

In addition to BT and Virgin Media, two other large retail broadband service providers are present on the market, Sky and Talk Talk. Sky and Talk Talk predominantly rely on LLU and FTTC-based wholesale access over the BT “Openreach” network, although Talk Talk has engaged in its own fibre deployments in limited areas via the initiative Fibrenation.¹⁹⁹ Vodafone, which has a significant presence in the mobile market, has also reached a

¹⁹⁷ <https://www.cityfibre.com/residential/>

¹⁹⁸ https://www.theregister.co.uk/2019/08/08/virgin_adds_another_130k_lightning_premises/

¹⁹⁹ <https://fibrenation.co.uk/what>

partnership deal with Cityfibre to support Cityfibre's deployment and offer services via the Cityfibre network, initially on an exclusive basis.

13.3 Advertising standards

The UK has been the subject of a long-running dispute about misleading references to "fibre" within broadband advertising.

In response to an information request from the UK Advertising Standards Authority (ASA), in June 2017, Cityfibre, alongside regional fibre operators Gigaclear and Hyperoptic submitted consumer research²⁰⁰ that indicated that consumers were confused about how broadband was advertised, and were likely to choose fibre (due to its positive attributes on speed and reliability), in the event that clear standards were adopted on the use of "fibre" in advertising which clearly distinguished between full and part fibre products. Consumers interviewed for the research stated that they wanted to be able to identify different types of products in order to be able to make an informed choice.

In November 2017, the ASA published conclusions²⁰¹ from its review of how they interpreted the Advertising Codes when judging the use of the term "fibre" to describe broadband services. They concluded that there were no grounds to establish guidance in relation to use of the term "fibre" on the basis of consumer research that they had commissioned from Define.²⁰² The ASA highlighted the summary of the research conclusions, which stated that:

- The term 'fibre' was not one of the priorities identified by participants when choosing a broadband package; it was not a key differentiator.
- The word 'fibre' was not spontaneously identified within ads – it was not noticed by participants and did not act as a trigger for taking further action. It was seen as one of many buzzwords to describe modern, fast broadband.
- Once educated about the meaning of fibre, participants did not believe they would change their previous purchasing decisions; they did not think that the word 'fibre' should be changed in part-fibre ads.

At the same time, in light of another piece of consumer research commissioned by ASA on broadband speed claims,²⁰³ the CAP published updated Guidelines on broadband advertising for application from May 2018.²⁰⁴

The Guidance focused on clarifying claims about speeds made in broadband advertising, noting that speed claims should be based on the actual experience of users (as

²⁰⁰ Opinionleader (2017) Understanding broadband customer responses to use of "fibre" in advertising

²⁰¹ <https://www.asa.org.uk/news/asa-concludes-review-of-fibre-broadband.html>

²⁰² <https://www.asa.org.uk/uploads/assets/uploaded/d791272c-805a-495d-8e25650af1740ab7.pdf>

²⁰³ <https://www.asa.org.uk/resource/qualitative-research-for-broadband-speed.html>

²⁰⁴ <https://www.asa.org.uk/resource/broadband-speed-claims-guidance.html>

evidenced by demonstrating that the speed is achievable for at least 50% of the relevant customer subscriber base at peak time (8-10pm). Such speeds available to at least 50% of the customer base should be described as “average”, and if focused on a particular area – should make this clear. Advertisers should also mention factors that could result in customers receiving speeds significantly below the claimed speed. Terms such as “superfast” should be qualified with information e.g. about the proportion of customers that can expect to receive speeds above or within a certain range. The Guidance is primarily focused on download speeds, but it notes that upload speed claims should conform to the guidance where relevant. The Guidance contains further recommendations concerning sampling and statistical methods used to evidence speed claims.

In 2018, Cityfibre launched a judicial review of the ASA’s conclusions concerning references to fibre, claiming that the ASA had misconstrued the findings of the Define research. However, in its April 2019 Judgement, the judge upheld the decision of the ASA. In making the judgment, an interesting point made was that the technical superiority of full fibre over part fibre was not disputed, but was not relevant to the question considered by the ASA i.e. what average consumers (not provided with additional information) understand by fibre claims and whether they had been misled.

In parallel with the judicial procedure, Cityfibre also called on Ofcom to conduct a review on how to enable consumers to more effectively differentiate between broadband services. In its submission to Ofcom, Cityfibre noted, according to Ofcom’s own research,²⁰⁵ broadband presented difficulties for consumers in terms of making comparisons. Moreover, the ASA had confirmed that consumer knowledge regarding broadband services was low, and this might be a barrier to consumers choosing the best deal for their needs. Cityfibre suggested that a review of broadband labelling could be conducted in the context of a “switchover strategy” as a key element in explaining the benefits for consumers of migrating to fibre. Cityfibre highlighted European examples such as the Italian traffic light system as potential model that the UK could follow.

The case for review of the information available about broadband services in the UK has been reinforced by the publication in October 2019, of the UK Digital Strategy, which notes (paragraph 56) that:

“The UK’s Digital Strategy made clear that Government would work with regulators and industry to ensure broadband advertising more accurately reflects the speeds consumers can expect to receive and accurately describes the technology used. The Government welcomes the reforms that the Advertising Standards Authority (ASA) has made to the way broadband speed claims can be advertised, which came into force on 23 May 2018, and Ofcom’s changes to its Code of Practice on Broadband Speed, which came into force in March 2019. In the context of the strategic objective to secure the roll-out of full fibre

205 Futuresight: consumer engagement with communications services

broadband, Government would ask Ofcom to consider whether the information available to consumers about the characteristics of different types of broadband services, and in particular full fibre broadband, is helping consumers make informed choices.”

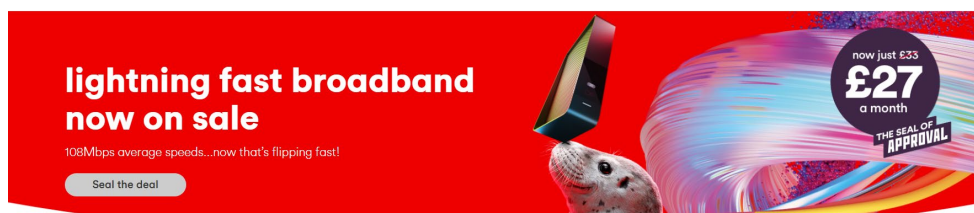
Ofcom’s draft 2020/2021 work programme, published for consultation in January 2020 includes the following action point, for which work is “ongoing”:

- **Consumer information on gigabit-capable / ultrafast broadband.** To ensure that people and businesses have the right information to make informed decisions about the broadband services best for them, we are considering whether they would benefit from more information about the characteristics and capabilities of gigabit-capable / ultrafast fixed and mobile broadband technologies and how it should be communicated.

13.4 Advertising practice (past and present)

UK broadband advertising includes various direct or indirect references to “fibre” in relation to services that are provided only partially via fibre. For example, Virgin Media, whose network is based predominantly on cable, is advertising “lightning fast broadband” with an image showing fibre optics, and references to “fibre broadband” in relation to a 200Mbit/s product that is likely in most cases to be delivered via cable.

Figure 54: Virgin Media UK broadband advertising



Broadband

M200 Fibre Broadband

- Average download speeds of 213Mbps
- Built for households that do and watch more
- Intelligent WiFi helps to deliver our most reliable signal

Source: Virgin Media website Jan 2020

BT, which provides broadband services predominantly via FTTC/VDSL, with a small, but expanding FTTH footprint, refers to “fibre” across their full portfolio. For example broadband services with speeds of just 36Mbit/s (likely based on VDSL) are being advertised as “superfast fibre essential”. True FTTH-based products at speeds of up to 300Mbit/s are meanwhile being advertised as Ultrafast fibre. Thus, with references to “fibre” predominating – the focus has switched to distinguishing between “superfast” and “ultrafast”.

Figure 55: BT broadband advertising

SUPERFAST FIBRE
ESSENTIAL

Average speed 36Mb

Everyday browsing and streaming on one or two devices at once

- Smart Hub – more powerful than the hubs from other big broadband providers
- BT Virus Protect on 2 devices

~~£29.99~~
£27.99 ^Δ a month
Includes BT line rental
24 month contract, then £35.99 a month

£19.99 upfront [What's this for?](#)

Add and continue

Get Stadia Premiere Edition worth £119 on us

ULTRAFAST FIBRE 250

Average speed 300Mb

Speed guarantee of at least 150Mb

Our fastest fibre, a connection that's ready for anything

- Smart Hub – more powerful than the hubs from other big broadband providers
- BT Virus Protect on 15 devices
- Stadia Premiere Edition – includes Chromecast Ultra, controller and 3 months' Stadia Pro subscription*

[More about Stadia >](#)

£49.99 ^Δ a month
Includes BT line rental
24 month contract, then £52.99 a month

£9.99 P&P [What's this for?](#)

Add and continue

Source: BT website Jan 2020

Meanwhile, Talk Talk, which relies primarily on LLU and FTTC-based wholesale access provided by the incumbent is advertising unlimited superfast fibre offers with a download speed of 67Mbit/s.

Figure 56: Talk Talk broadband advertising



Unlimited Superfast
Fibre

Average download speeds of 67Mb/s

Plan includes:

- ✓ Over 6x faster than standard broadband
- ✓ Totally unlimited usage
- ✓ Award-winning Wi-Fi Hub
- ✓ No mid-contract rises
- ✓ [30-day Great Connection Guarantee](#)

Source: Talk Talk website Jan 2020

13.5 Outcomes

The UK continues to have amongst the lowest rates of FTTH deployment and take-up in Europe. Notwithstanding the limited availability of FTTH, research by WIK for Ofcom in January 2018 suggested that UK consumers had relatively bandwidth usage and would likely be early adopters (compared with other European countries) of new technological trends such as 8K TV, VR and AR, in the absence of bandwidth constraints.