

AFFORDABLE CONNECTIONS

ESSENTIAL DIGITAL
TECHNOLOGIES FOR ALL

Andrew Harrop November 2020

Acknowledgements

This paper started out from a very different research project before the Covid-19 crisis. In fact, much of the thinking predates the last general election when the Labour party proposed free broadband for all. Its central proposal is a targeted, fast and cost-effective alternative to that socialist pipedream. I am very grateful for the ideas and information provided by colleagues at Ofcom and a major telecoms company in preparing this paper. Their assistance does not imply any form of endorsement or agreement. Thanks also to my wonderful colleagues at the Fabian Society over the course of this project, especially to Ben Cooper for research support and Kate Murray for her usual excellent editorial input.

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SUMMARY

Basic digital technologies are ubiquitous, essential services just like water, energy, voice calls and television. That was already evident before Covid-19 but the emergency we have been living through in 2020 has proved the point beyond doubt. Politicians should commit to affordable access to digital connections for all.

This paper therefore proposes a British broadband discount scheme, modelled on the Warm Home Discount for energy bills and the US social tariff scheme Lifeline. With millions of families losing their jobs or seeing their incomes plummet as a result of the Covid-19 crisis, the policy would keep people connected to essential technologies.

The scheme would offer a monthly discount on digital connections of between £7 and £12 for low-income households. Depending on the resources available, it could be offered to all households receiving out-of-work benefits; or a targeted scheme could be introduced for low income families with children.

A scheme costing around £350m like the Warm Home Discount would extend affordable digital connections to 4.2 million homes. The discount could bring the cost of standard broadband down to around £10 per month, or it could be used flexibly to buy packages with bundled devices like laptops or tablets. It would be for ministers to decide whether the scheme should be funded by taxpayers or other telecommunications billpayers.

This new policy should replace an existing voluntary BT discount broadband scheme. In 2016 the BT scheme was used by just 18,000 homes – equivalent to three in 1,000 of the 5.2 million eligible households then on out-of-work benefits. Before a market-wide discount scheme begins, the government and Ofcom should agree a plan with BT to promote the existing scheme adequately: as unemployment rises, it could save around £100 per year for up to 6 million households immediately.

Action to improve digital affordability is needed because of very high levels of digital inequality and disadvantage. Research on minimum needs shows that the public considers a basic smartphone, laptop and broadband connection to be reasonable essentials that everyone should be able to

access. But more than half of adults in the UK live in households that do not have this package in full:

- 13 per cent (7 million adults) have no internet in the home
- 23 per cent (12 million adults) have no internet or only a smartphone
- 47 per cent (25 million adults) have no internet with a computer in the home

People aged over 75, households in unskilled occupational classes, households with low incomes and disabled people are especially likely to go without.

Digital connections are particularly important for children but many young people are missing out too. Looking at UK households with children aged 5 to 15:

- 2 per cent (over 200,000 children aged 5 to 15) have no internet in the home
- 7 per cent (over 600,000 children aged 5 to 15) have no internet or only a smartphone
- 22 per cent (over 2 million children aged 5 to 15) have no internet with a computer in the home

Among UK secondary school children (aged 12 to 15) 15 per cent (500,000 children) do not have a mobile phone and 28 per cent (900,000) do not use a computer at home.

1. INTERNET-BASED TECHNOLOGIES ARE BASIC ESSENTIALS

Developments during the coronavirus pandemic have proved that digital technologies are basic essentials for everyone

As the four nations of the UK each implement sweeping measures to tackle the second wave of the Covid-19 pandemic – including another Englandwide lockdown - there is now no doubt that internet-based technologies are essential for people to function in the UK today.

During the first lockdown, internet-enabled devices were the main way people communicated with the outside world. There was an explosion in video calls for business and pleasure. Online shopping surged, becoming the only way to buy anything but food and other essentials. School-aged children and students had to access education through digital platforms. And online services were the default for interacting with government, from booking a coronavirus test to claiming universal credit.

Even the small minority of people without any form of internet access have only been able to get through 2020 by relying on circles of support powered by the internet. Millions of relatives, friends, neighbours and volunteers have helped vulnerable people stay safe, connected and provisioned using digital networks and services on their behalf.

After this year's surge in online activity, things will not go back to before. New habits have been formed that won't be undone, with respect to e-commerce and video-conferencing in particular. In both these cases, usage subsided after the first lockdown but has remained far higher than before the pandemic.1 And with Covid-19 measures likely for months or years to come, the need for enhanced digital connections will not abate quickly.

Digital devices were already essential before the crisis

Experience during the pandemic is the final proof, but even at the start of 2020 communication technologies were ubiquitous and essential. We had reached the point where for most people it was impossible to participate in British life without internet-enabled technologies.

Over the last two decades digital networks have transformed the lives of everyone in Britain, from the richest to the poorest in society. The list of innovations since the late 1990s seems almost endless - mobile internet, smart phones and tablets; video, music and television streaming; online retail, gaming, finance, transportation and government services; cloud computing and storage; social media, video calls and messaging; and the digital revolution in journalism.

Long before coronavirus, internet-enabled devices helped people to thrive in their lives and to participate in society. People use their devices for fun and for social connection. But they also use them for the business of everyday life – shopping, booking appointments, managing money, job-hunting and transactions with officialdom.

The public agree and now view entry-level digital technologies as necessities of life

According to Joseph Rowntree Foundation and University of Loughborough research on minimum needs, a basic 4G-enabled smartphone, a simple laptop and a broadband connection are part of the basket of goods and services that people consider to be the minimum required for an acceptable life in Britain.2 These are the technologies that the public think people should be able to afford.

The JRF study explains that "new technologies become a recognised part of the minimum when they become widely used, moderately priced and important for the practicalities of everyday life. At this point, a basic 'entry level' version of the technology is considered necessary."

This means that action to tackle poverty now needs to ensure that people with low incomes have the resources they need to access basic digital technologies – just as having a telephone became an essential in the 20th century.

Digital technologies bring particular benefits for lowincome and disadvantaged consumers

Many of the benefits that today's communication technologies bring are particularly important for households with modest spending power or who face other forms of disadvantage. These benefits mean that current technologies advance the wellbeing of people with low incomes and have the potential to help level the playing field in society.

Key benefits of communication technologies for low-income and disadvantaged groups, include:

Free services: Low-income consumers find it harder to afford devices, connections and data, but once they have overcome this barrier today's communication technologies provide access to a huge range of free services – eg music services, video content, news media, information and educational resources, messaging services, social media networks, international calls and video links.

Cheap services and robust price competition: digital business models have reduced the costs of delivering many consumer goods and services; it is easier to shop around (including via price comparison services) and find the cheapest price; and increased competitive pressure has led many firms to reduce their prices. The internet also offers huge second-hand markets with cheap (or sometimes free) recycled products.

Job-seeking: finding job vacancies is far easier than ever before, with hundreds of thousands of opportunities advertised online. International evidence suggests online job search has helped people to find work faster than would otherwise be the case.3

Worker-matching: Platform technologies offer new ways to connect workers with businesses or directly to consumers, including relatively low-skilled workers (eg taxi driving, take-away delivery, domestic cleaning). Many platform services come with well-documented risks for both workers and consumers, but this does not detract from the success new networks have had in growing markets and matching workers to work more effectively.

Recent migrants: Communication technologies have transformed the experience of migrating to Britain. They have enabled migrants to communicate with relatives, network with compatriots, access affordable money exchange and money transfer services and book cheap flights. Recent migrants to the UK often have low incomes but are eager to make the most of digital technologies, reflecting patterns seen among black and minority ethnic consumers who are more likely than average to use key technologies (see figure 2).

Disabled people: accessible online services offers significant benefits for people who face barriers with respect to accessing conventional shopping, education, healthcare and work. Smartphones and apps are also driving the costs of assistive technologies down, enabling disabled people with low incomes to access them: augmentative and alternative communication (AAC) devices used to cost thousands of pounds but AAC apps are now inexpensive. Voice recognition software on devices such as Alexa are also playing a growing role in how disabled users interact with their devices.4 Despite this, digital participation by disabled people is significantly lower than for the rest of the population (see figure 2).

2. THE UNDER-USE OF EVERYDAY TECHNOLOGIES

Millions of people are under-using essential technologies

This paper is published online. Most people reading it will therefore view a simple computer, smartphone and broadband internet connection as just a fact of life. But a very large number of people in the UK are not making good use of these basic digital technologies. If you take such mainstream devices and connections for granted, it may come as a surprise to discover how many people in Britain do not have full and effective access to them.

A small but important minority of households still do not use internetenabled devices at all. Non-internet users are disproportionately from low income and older households: in 2019 27 per cent of people from poorer occupational backgrounds (classes D and E) and 51 per cent of people aged over 75 did not have access to the internet, compared to just 13 per cent of all adults (see figure 2).

But digital disadvantage is no longer just a question of total exclusion from communication technologies. These days we need to be just as focused on variations in the extent to which people access different devices and connections, because too many people have limited access to the internet. This problem affects far more people than the binary issue of whether someone uses the internet at all.

Just before the Covid-19 pandemic, in addition to the 13 per cent of adults who didn't use the internet, an additional 11 per cent only used the internet with a smartphone and 34 per cent used the internet but didn't have a computer at home (figure 2). These numbers are incredibly high and they have not been declining in recent years.

FIGURE 1: A HIERARCHY OF DIGITAL DISADVANTAGE (ADULTS)

5% 3m adults No mobile phone

13% 7m adults No internet

23% - 15m adults No internet OR only internet via a smartphone

47% - 25m adults No internet via a home computer

53% - 28m adults No internet via BOTH a home computer AND another device

FIGURE 2: ADULTS WITH RESTRICTED ACCESS TO DIGITAL TECHNOLOGIES, 2019

	Alladults	Age 75+	Disabled	Class DE	Financially	Rural	Non-white
No mobile phone (personally)	5	25	14	11	9	5	2
No internet (household)	13	51	33	27	22	10	6
No internet OR via smartphone only	23	53	40	45	39	19	17
No internet via a home computer	47	73	60	69	58	44	26
No internet via BOTH a home computer AND another device	53	85	69	74	65	53	30

Source: Ofcom media literacy tracker 2019, adults, fieldwork Sep-Nov 2019

Ofcom figures also show that millions of people are not accessing the three digital technologies which the public considers to be a reasonable minimum. In early 2020, 18 per cent of adults didn't have a smartphone, 20 per cent didn't live in a home with fixed broadband and 34 per cent didn't have a computer at home (excluding tablets). Looking at these technologies together, half of adults were not accessing the internet via both a home computer and another internet device.

Lacking all three of these 'essential' technologies is much less serious than having no access to the internet at all, but it is still striking that half the

nation goes without a package of technologies that millions view as essential for everyday life and that the public see as reasonable minimum needs.

Some of those going without make full and effective use of the technologies that are relevant to them without money being a constraint (eg a wealthy pensioner may choose to have a computer but not a smartphone). But the profile of people who don't use the internet on both a computer and another device shows that affordability is a big part of the story. For example, 74 per cent of households in social classes D and E are in this category.

FIGURE 3: PEOPLE WITHOUT THE THREE TECHNOLOGIES THE PUBLIC CONSIDERS TO BE 'ESSENTIAL'

	All adults	Age 75+	Disabled	Class DE	Rural	Low income	Minority ethnic
Don't use a smartphone	18	17	43	28	22	39	8
No fixed broadband in household	20	42	35	36	15	50	18
No fixed or mobile broadband in household (excluding smartphones)	18	42	33	34	12	49	15
No computer in household	34	61	48	56	31	65	23

Source: Ofcom technology tracker, 2020, fieldwork: Jan-Mar 2020

Limited access translates into less wide-ranging and effective use of digital technologies

People from all backgrounds have embraced new technologies in 2020. But evidence from before the pandemic clearly demonstrated that low income and disadvantaged consumers make less broad and effective use of internet-enabled services than other households.

Ofcom surveys find that internet users from disadvantaged backgrounds make less use of online shopping, online banking, government services and health-related content. For example in 2017, among low-income consumers only around 35 per cent shopped online, 27 per cent banked online, 18 per cent accessed health information and 16 per cent used government digital services (see figure 4).

FIGURE 4: USE OF KEY ONLINE SERVICES, 2017

	'Narrow' internet user ¹	Online shopping	Online banking	Government information / services	Health- related information
All adults	25	61	57	36	36
Class DE	31	43	35	19	20
Low income	27	35	27	16	18
Over-75	26	21	20	11	13
Disabled	28	40	33	23	28
Minority ethnic	23	50	55	32	36

Source: Ofcom technology tracker, 2017

Restricted use of digital services is much less discussed than the question of whether people use the internet at all. But as everyone becomes connected in one way or another, this less visible dimension of digital inclusion is becoming increasingly important.

Low-income and disadvantaged consumers are circumscribed in the use they make of internet-enabled services because of the limited access they have to devices and data networks. This demonstrates the functional value associated with securing for people the devices and connections which the public sees as a social minimum.

Smartphone-by-default places constraints on effective use of digital services

Part of the story of digital inequality is the high number of people who rarely or never use a conventional computer to access the internet. Smartphones – and also tablets, games consuls and internet-enabled TVs – have made communication technologies accessible to more people. But their use can be associated with narrower or less effective use of services and applications.

Consumer research shows that people who use 'smartphone by default' face disadvantages when compared to other internet users, especially those who were forced by circumstances to mainly use a smartphone, rather than those

¹ Internet users who reported taking part in 4 or fewer of 15 types of internet activity: email, transactions, communications, banking, social media, news, information (work/school/college), watch short video clips, health information, government services, watching TV content, radio/audio services, upload/add content to the internet, remote use (cloud services/control household services), games.

who chose to. ⁵ Participants reported being constrained by small screens and app architecture from comparing information, products and services between providers. They said they needed other devices for complex tasks such as typing, printing and managing multiple sources of information – which are important to secure work or housing – and that they had difficulties or delays in completing complex tasks. Those only using a smartphone who had not used other technologies previously also struggled to develop wider technology skills and some rushed tasks because of fears about data constraints.

Permanently and exclusively using a smartphone puts people at a disadvantage

Children are under using key technologies

Children's access to key technologies has been a huge issue during the pandemic, with millions of children needing to access education online, as well as socialise, play and stay connected. Covid-19 has revealed deep inequalities in children's access to everyday digital technology.

FIGURE 5: A HIERARCHY OF DIGITAL DISADVANTAGE – HOUSEHOLDS WITH CHILDREN AGED 5 TO 15

2% No internet at home (over 200k 5-15s)

7% No internet at home OR only internet via mobile (over 600k 5-15s)

22% No computer with internet at home (over 2m 5-15s)

Some children live in homes with no access to the internet at all (2 per cent of families with dependent children). But many more do not have access to the technologies their peers take for granted: 22 per cent of school-aged children live in a home without with a computer and 7 per cent are without a fixed broadband connection.

FIGURE 6: SCHOOL-AGED CHILDREN WITH RESTRICTED INTERNET AVAILABILITY IN THE HOME

	Children 5 to 15	Children 5 to 7	Children 8 to 11	Children 12 to 15	Children class DE
No internet available	2%	5%	2%	1%	3%
No internet or only mobile internet	7%	10%	7%	5%	14%
No computer with internet	22%	27%	22%	18%	39%

Source: Ofcom media literacy tracker, 2019, children (fieldwork: April-July 2019)

The story gets no better looking just at secondary school children aged 12 to 15. In this most connected of cohorts, 15 per cent (500,000) don't have their own mobile phone and 28 per cent (900,000) don't use a computer at home. This places young people at a huge disadvantage in terms of education, social participation and learning the business of adult life.

FIGURE 7: SECONDARY SCHOOL CHILDREN (12-15) WITH RESTRICTED USE OF THE INTERNET

	Childre n 12 to 15
Does not go online at home	1%
Does not go online at home or only through a mobile connection	8%
Does not have their own mobile phone	15%
Does not have their own smartphone	17%
Does not use a computer at home	28%

Source: Ofcom media literacy tracker, 2019, children (fieldwork: April-July 2019)

During the pandemic, in England the government has been attempting to support children without access to essential technology for distance learning. By October it had distributed to schools around 100,000 4G mobile internet devices (when around 500,000 children in England aged 5 to 16 live in homes without broadband); and 225,000 laptops or tablets (when around 1.8 million children do not have access to a computer at home). While this initiative is clearly welcome, it is a short-term measure that cannot meet children's needs on an ongoing and comprehensive basis.

3. MAKING DIGITAL TECHNOLOGY MORE AFFORDABLE

A full package of essential digital technologies is not affordable to all

Millions of people are not accessing technologies that are now basic necessities and this is strongly associated with socio-economic background. It is clear that huge numbers of low-income households feel they are not in a position to pay for the basket of technologies that the public view as essential.

This is mainly due to the huge pressures on family incomes arising from present economic conditions and past austerity measures. In 2018/19 the median income of the poorest fifth of families was the same as in 2002/03, after adjusting for rising prices and housing costs.⁸ Now the financial position of many low-income households is plummeting, as the effects of Covid-19 are felt. Already an extra 1.5 million households are claiming universal credit and that's before the effects of the second lockdown or the withdrawal of the furlough scheme.⁹

These barriers to affordability come despite entry-level versions of all the most important technologies being relatively inexpensive. For example, in summer 2020 we found a SIM-only 4G contract for £4 per month, a mobile broadband device for £8 per month, a smartphone plus 4G connection for £9 per month, a 12-month fixed-line broadband package for £18 per month, a new SIM-free smartphone for £55 and a new laptop for £170.

Looking across six major international markets Ofcom found that in 2018 the UK had the cheapest entry-level mobile tariffs. However, we were only fourth with respect to the price of entry-level fixed broadband and fifth out of six for cheapest landline services. ¹⁰ Ofcom has also highlighted that many low income and disadvantaged customers are not accessing the best prices, particularly as a result of 'loyalty penalties' in both the mobile and broadband markets.

Nevertheless, the Joseph Rowntree Foundation and University of Loughborough research on minimum needs has found that over the last decade the total cost of the digital technologies that people regard as essential has fallen. This is despite the services in question becoming more advanced. The package people viewed as an essential minimum in 2018 (consisting of a basic smartphone, laptop and broadband) costs less than the much less sophisticated 2008 package (a landline and pay-as-you-go mobile). For a single adult, the cost of the essential package fell from almost £10 per week to under £8 per week (even without adjusting for inflation).¹¹

This makes it even more concerning that so many people are not accessing these basic essentials.

The government should shift the focus of digital policy to affordability

Before Covid-19 the government's digital policy barely focused on the affordability or take-up of essential technologies. Instead the attention of ministers was on the theoretical availability of digital technologies, in the shape of network access. It has taken a global pandemic and the closure of our entire education system for ministers to realise that millions of children do not have access to essential technologies.

The government's pre-pandemic approach was exemplified by developments such as the new universal service obligation for broadband, the development of the 4G shared rural network and the (undeliverable) Conservative manifesto commitment to achieve nationwide coverage of gigabit-capable broadband by 2025. All of them are focused on extending connectivity, with respect to current and future networks.

By contrast, apart from the Department for Education's emergency laptop scheme, there has been no policy response to the problem of people with low incomes having only limited access to digital networks and devices. Customer cross-subsidies and taxpayer subsidies are an accepted part of the policy toolkit for widening network coverage, but they play almost no role with respect to improving the affordability, take-up and utilisation of key technologies.

This should now change. The established mechanism for assuring the affordability of essential services are regulator-mandated discounts for low income households or other disadvantaged groups. These 'social tariffs' exist for fixed-line, non-broadband telephone services; water and sewerage; and energy (the 'warm home discount'). Additionally, the BBC license fee is free for over-75s on a means-tested basis.

In 2018 the government rejected a social tariff for broadband, as part of the introduction of the new universal service obligation for broadband. This was in the face of proposals from local government and other stakeholders. ¹² Ministers had previously asked Ofcom to consider the case for a social tariff for broadband but declared: "We remain of the view that it would not be appropriate to introduce a regulatory social tariff at this time. Our priority in introducing a regulatory USO is to extend coverage and ensure universal affordable access to decent broadband." ¹³

Ensuring everyone benefits from essential technology is a government responsibility

In 2018 ministers said their preference was for investing in future networks over reducing prices for consumers now.¹⁴ In the context of the Covid-19 pandemic this position cannot be sustained. Broadband internet is an essential service, but for millions of people it is both more important and less affordable as a result of the crisis.

Ministers must therefore take responsibility not just for digital technologies being potentially available (through improved connectivity) but also for ensuring they actually bring benefits to all, given it is no longer possible to thrive in British society without them.

Indeed, this is a question of human rights because key rights can now only be effectively secured in the UK when people have access to communication technologies. The government has an obligation to ensure that everyone has affordable access to technologies important for realising fundamental political, social, economic and cultural rights. United Nations institutions have declared that governments must ensure that people from all backgrounds can make good use of digital networks.¹⁵

4. TOWARDS A SOCIAL TARIFF FOR BROADBAND

BT already offers a social tariff for fixed-line broadband on a voluntary basis

The case for a discount scheme for low-income households is now as strong for internet access as it is for water, energy, voice calls and television.

In fact, BT already offers such a social tariff for broadband, but on a voluntary and under-promoted basis. 'BT Basic + Broadband' was launched in 2014 and currently costs £10.07 a month which is around £8 less than the cheapest broadband packages currently available on the market. It is an extension of the regulator-mandated 'BT Basic' telephony social tariff and is available to customers receiving five means-tested benefits: pension credit (guarantee credit); universal credit (with zero earnings); income support, jobseeker's allowance (income based); and employment and support allowance (income-based).

Until Covid-19 the broadband social tariff was of little use to many customers because it included a very restrictive cap on data of 15GB per month. This was making the product progressively less relevant to mainstream customer needs, as average monthly broadband use has increased from 30GB per month in 2013 to 240GB per month in 2018.

However this position changed in response to the coronavirus lockdown. On 28 March 2020, the government announced a new deal with the telecoms industry, including a commitment that 'all providers will remove all data allowance caps on all current fixed broadband services'. BT announced that the end of the cap would be permanent: 'This is a permanent change BT will no longer have limited broadband packages.' It means that 'BT Basic + Broadband' is now a good entry-level broadband package that is suitable for millions of low income consumers.

Take-up of the BT broadband social tariff has been extremely low

Until now take-up of BT's broadband social tariff has been extremely low. In 2016 there were around 5 million eligible households but Ofcom reported that only 18,000 were using the tariff – equivalent to three out of every 1,000 eligible households. Ofcom has not collected or published figures for more recent years, but with almost no marketing (and the restrictive data cap, until this spring) take-up is unlikely to have increased significantly.

FIGURE 8: USERS AND PERCENTAGE TAKE-UP OF BT SOCIAL TARIFF 'BT BASIC'

	2014	2015	2016
Phone	412,000 7.5%	364,000 6.8%	322,000 6.2%
Phone and broadband	-	10,000 0.2%	18,000 0.3%
Estimated eligible households	5.5m	5.3m	5.2m

Sources: Access and Inclusion Report 2016, Ofcom, 2016; Expenditure and caseload forecasts, Spring Budget 2020, DWP 2020.

This very low take-up contrasts with the energy sector's social tariff, the Warm Home Discount, which is claimed by 2.2 million households.¹⁹ Around 1 million of this group (older people receiving pension credit) are identified and have their discount applied automatically, using carefully controlled data-matching with DWP social security records.

What's more the number of households who are potentially eligible for the BT social tariff is now rising rapidly because of the Covid-19 crisis, and this will lead to the percentage take-up getting even worse if nothing is done. Around 5 million households were eligible for the tariff in 2019. On top of that, the number of households receiving universal credit with zero earnings increased by an estimated 1 million between February and May 2020.²⁰

This means that 6 million low income households are missing out on a subsidy worth around £100 per year, a total cost of around £600m.

More people need to know about BT's discounted broadband

Since the recent removal of the data use cap, BT appears to have done very little to promote its discounted broadband package. The tariff is listed on the

'inclusion' pages of BT's corporate website but is barely promoted on the company's main retail customer website. Additionally, applications can't be made online. Customers are required to call a number and will be sent a paper application form they must return by post within 14 days.

BT Basic + Broadband is a loss-making scheme that is paid for by subsidies from other BT customers, and it is run by BT on a voluntary basis. But nevertheless, for as long as it is the only way that people on low incomes can access affordable discounted broadband, the company should do more to increase take-up.

As an immediate action BT should work with the government and Ofcom to promote the scheme, both as a response to the Covid-19 crisis and the pre-existing under-utilisation of digital technologies among low-income households. This would be far more effective than the pilot it is currently testing with the Department for Education to provide free access to its wifi hotspots. The company should agree with Ofcom a plan for widely advertising the BT Basic service and create a digital application process. It could also explore working with the government to establish live datachecking and eligibility validation using DWP systems so applications could be approved instantaneously.

Consumer organisations and the media should also vigorously promote BT Basic + Broadband and challenge BT to do more to increase its use.

Developing a market-wide policy to improve broadband affordability

Increasing take-up of BT's broadband social tariff should only be a temporary measure however, because BT is no longer a near-monopoly provider of retail telecoms. It is therefore inappropriate for only BT customers to subsidise low-cost access to essential digital services. Instead the government should introduce a market-wide social tariff for broadband as quickly as possible.

First policy makers need to set objectives. For example, the aim of policy could be for almost 100 per cent of households to have access to broadband *either* through a smartphone or a fixed-line – and for at least 8 in 10 households to have access through a smartphone *and* in the home. There should also be goals for particular groups such as families with school-aged children and households without work. Ministers and regulators should then develop a market-wide policy sufficiently ambitious to meet these goals.

One model could be the USA's federal Lifeline programme, which was originally developed as a social tariff for fixed-line voice calls, but now

encompasses mobile (since 2008) and standalone broadband (since 2016). The scheme provides a \$9.25 monthly subsidy for low income households, subject to services meeting baseline standards, and is financed by an industry-wide levy of up to \$2.25bn per year (ie enough to support 20 million households).²¹ The subsidy has been sufficient for some providers to offer entirely free smartphones with data packages (the so-called 'Obamaphone'). ²² However the emphasis has now switched to supporting families to access mobile or fixed-line broadband.

There is no clear rationale for subsidising voice calls but not broadband since both are now foundational, essential services. Indeed in the USA, Lifeline is gradually phasing out support for voice-only tariffs. A British broadband discount scheme could help pay for broadband for children's homework or cheap smartphones for homeless people without a permanent address. It could also be used to support older people and disabled people to take-up broadband.

The US subsidy is available to any authorised provider who wishes to offer discounted services, at or beyond a minimum specification. This is important because it creates a commercial incentive for providers to promote take-up, in contrast to the UK where consumers can only access a discount from one company. It also creates flexibility for providers to create a variety of packages to meet different needs. This is different from the UK energy sector's Warm Home Discount which is offered by all major providers on a compulsory basis but has not been linked to the design or marketing of new service offerings.

The British Broadband Discount scheme

A British broadband discount scheme for low income households should be introduced, with a monthly discount of between £7 and £12 (the value of Lifeline and the Warm Home Discount scheme respectively) for households receiving means-tested benefits with no earnings or savings. This would bring the cost of a standard fixed broadband connection down towards £10 per month.

It should be possible to use the discount on a wide range of products and services (ie not just a basic broadband connection). For example, a discount voucher could be used to reduce the costs of superfast or ultrafast fixed-line broadband or 5G mobile. Providers could also use 12 to 24 months of discounts to create very cheap packages that could include fixed or mobile broadband connections plus devices (ie smartphones, tablets or laptops).

As part of this approach, fixed-line and mobile services should be treated on an equal basis, as in the USA, based on the capabilities they offer not the nature of the technology. This matters because mobile is the default product for many low income and disadvantaged households; and 5G mobile is starting to offer better speed and data capacity than the current generation of fixed-line broadband.

Social tariffs are usually funded by other bill payers – this is the case for the US discount scheme and the UK schemes in other sectors. In the UK this has increased since austerity began in 2010 (eg energy discounts and free TV licences). Such a cross-subsidy would be one option for funding this scheme. However, it would make more sense to fund the new discount from general taxation because when other customers pay for government-mandated subsidies it is in practice a regressive, flat-rate stealth tax. An industry-funded scheme would also divert money away from investment in the networks of the future at a time when margins in the sector are quite low. However, this is ultimately a choice for ministers.

FIGURE 9: ESTIMATES FOR THE COST OF A BRITISH BROADBAND DISCOUNT

Annual cost	£160m	£220m	£280m			
No of households	1,900	2,600	3,300			
Households with children on income-based benefits - £7 per month						
Annual cost	£120m	£160m	£210m			
No of households	800	1,100	1,400			
Households with children on out of work benefits - £12 per month						
Annual cost	£250m	£350m	£450m			
No of households	3,000	4,200	5,400			
Households on ou	t of work benefits -	£7 per month				
Take-up of eligible households	50%	70%	90%			

The Warm Home Discount scheme encompasses subsidies for low-income consumers worth around £300m per year. A well promoted broadband discount for all households currently eligible for the BT scheme might cost a similar amount. For example, it would cost £350m to provide a £7 per month subsidy to 4.2 million homes (assuming claims by around 70 per cent of those eligible, following the Covid-19 rise in universal credit recipients).

Alternatively, a more targeted and cheaper scheme could be introduced just for households with children. Spending in the region of £150m would provide either a £12 per month subsidy for households with children receiving means-tested out of work benefits, or £7 per month for families with children both in and out of work eligible for universal credit or tax credits.

ENDNOTES

- ¹ Effects of Covid-19 on online consumption in the UK, Ofcom, 2020; Internet sales as a percentage of total retail sales (ratio) (%), October 2020, ONS, 2020
- ² Davis, A et al, A minimum income standard for the UK 2008-2018: continuity and change, Joseph Rowntree Foundation, 2018
- ³ Kuhn, P, 'The internet as a labour market matchmaker: how effective are online methods of worker recruitment and job search?', IZA World of Labor, IZA Institute of Labor Economics, 2014; Suvankulav, F, Jobsearch and the internet: e-recruitment and labor market outcomes, RAND Corporation, 2010; Green, A, et al, Job search study: literature review and analysis of the Labour Force Survey, Department for Work and Pensions, 2011; Green, A, et al, Employment and the internet, Nominet Trust, 2012
- ⁴ ICT for disabled people, POSTnote 411, Parliamentary Office of Science and Technology, 2012
- ⁵ 'Smartphone by default' internet users: a qualitative research report, Ofcom, 2016
- ⁶ Households with children access to internet and devices, Technology tracker 2020, Ofcom, 2020
- ⁷ Laptops, tablets and 4G wireless routers progress data, Department for Education, 2020; Ofcom media literacy tracker 2019 parents of children aged 5-15 and children aged 8-15, Ofcom 2019
- ⁸ Households below average income: 1994/95 to 2016/17, Department for Work and Pensions, 2018
- ⁹ Households on universal credit, DWP StatXplore, DWP 2020
- ¹⁰ Pricing trends for communications services in the UK, Ofcom, 2018
- ¹¹ Davis, A et al, A minimum income standard for the UK 2008-2018: continuity and change, Joseph Rowntree Foundation, 2018
- ¹² A new broadband Universal Service Obligation: government's response to consultation on design, Department for digital, culture, media and sport, 2018
- ¹³ Establishing world class connectivity throughout the UK, digital, culture, media and sport committee, House of Commons, 2016
- ¹⁴ A new broadband universal service obligation: Government's response to consultation on design, Department for digital, culture, media and sport, 2018; Future telecoms infrastructure review, Department of digital, culture, media and sport, 2018
- ¹⁵ Report of the special rapporteur on the promotion and protection of the right to freedom of opinion and expression, Frank le Rue, Human Rights Council, Seventeenth Session, United Nations, 2011
- ¹⁶ Communications market report 2018, Ofcom 2018
- ¹⁷ 'Government agrees measures with telecoms companies to support vulnerable consumers through Covid-19', 29 March 2020, Department for digital, culture, media and sport, 2020
- ¹⁸ Coronavirus: what you need to know about service, bt.com, accessed October 2020
- ¹⁹ Warm home discount, 2018-2019, Ofgem, 2019

 $^{^{\}rm 20}$ Households on Universal Credit, People on Universal Credit, DWP Statxplore, DWP, extracted October 2020

 $^{^{21}}$ 'FCC modernizes Lifeline program for the digital age' $31^{\rm st}$ March 2016, Federal Communications Commission, www.fcc.gov

²² For example www.qlinkwireless.com