Internet access: essential utility or human right?

Data Poverty Lab

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with support from



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Summary

Not everyone has the access or skills to use the internet. Digital exclusion is real and damaging. Within this, the experience of *data* poverty - not being able to afford sufficient broadband or mobile data to meet needs - is being felt by more people as the cost of living crisis continues, and the choice to be offline diminishes.

"The internet is not just a technology. It is knowledge, it is opportunity, it is empowerment. It is critical to life in today's world. So today I want to urge you to recognise internet access as a human right; to work with me, the World Wide Web Foundation I co-founded, and citizens across Europe to ensure that the internet is safe and empowering for everyone."

Sir Tim Berners-Lee, Inventor of the World Wide Web¹



In this report, I explore whether internet access should be framed as a human right or as an essential utility. Through my discussions with people with lived experience of data poverty, with other experts, and desk-research, I have come to the conclusion that internet access is both of these.

Framing internet access as a human right and as an essential utility conveys a truth: our society and economy is reliant on internet access. Whether we want to go online or not, internet access is essential. It is a necessity for daily life.

Like Sir Tim Berners-Lee, I believe internet access should be recognised as a human right – a positive right which also allows for the fulfilment of other human rights. We should build on the resolution passed in 2021 by the United Nations Human Rights Council on human rights on "the promotion, protection and enjoyment of human rights on the Internet" and consider how to apply this in the UK, while also recognising people's rights to be offline and receive essential services in non-digital ways.

The question of whether internet access should be described as an essential utility has been harder to explore, as there is no clear articulation about what would happen or be different if it were to be classed, officially, in this way. I believe we need to open this up and have a constructive debate about this – with representatives from the telecoms and tech industries, government (local and regional as well as national), the regulator and civil society organisations – including people with lived experience of data poverty.

In considering these questions, I've developed recommendations for what can be done differently. The recommendations are brought together in the final section.

1. Internet access and data poverty

Internet access is no longer a luxury. The internet has replaced a myriad of analogue activities. As such, the number of people who regularly use the internet continues to rise. Businesses, public services, and society are increasingly reliant on the internet.

Digital exclusion, however, has far from disappeared. This was highlighted by the Covid pandemic, which reshaped how we view data poverty. Now, we are experiencing another crisis as rising living costs have pushed more people into poverty, exacerbating the experience of data poverty within this. In 2022, 1.5 million³ households lacked home internet access; at least 2 million households were struggling to afford internet access.⁴ Once again, leaving no one behind must mean leaving no one offline.

Data poverty has been defined as "individuals, households or communities who cannot afford sufficient, private and secure mobile or broadband data to meet their essential needs." This definition considers affordability, adequacy to meet needs, and recognises that not all access routes are equal – for example, free public WiFi generally comes with risks to security and a loss of privacy.

Data poverty in the UK is exacerbated by wider factors – I call these 'digital exclusion multipliers'. These include:

- Cost of living people are having to prioritise when faced with higher energy, food, and rental bills - forcing some to deprioritise internet access.
- High rates of inflation are impacting on broadband and mobile data costs, with consumers facing price rises of up to 14.4%.⁷
- Austerity a 26% decline in total spending power of local authorities between 2010/11 and 2020/218 has impacted on public internet access in communities through closure or restricted hours of libraries and community centres.
- Channel shift to online services has necessitated internet access for millions. More than half of the UK's bank branches have now closed. More public services are digital by default, with in-person routes becoming harder to access.¹⁰
- Housing people living in poorer and/or temporary housing may be more likely to rely on mobile data and/or be unable to commit to a broadband contract.¹¹
- Time people who can't afford to access the internet lose out on time efficiency savings, as well as money savings, when unable to access online services.¹²
- Poverty and disadvantage related to older age, disability, low literacy, and income poverty correlate with likelihood of being offline or limited internet use.¹³

Internet access is only one part of what people need to be digitally included. Kat Dixon captured this in her 'pointless' triangle: data connectivity is *pointless without* a device, which is *pointless without* digital skills, which are *pointless without* data connectivity¹⁴. Recently, the Minimum Digital Living Standards research has produced a definition of what it means to be digitally included, and a 'basket' of digital goods, services, and skills for households with children.¹⁵ On internet access, households need: home broadband with "sufficient speed to support all family members to access the internet at the same time" *plus* mobile data (5GB data per month per adult and per secondary school age child, plus an extra 3GB data per month for a child of pre-school or primary school age).¹⁶ More mobile data would be needed for a household without home broadband.

The experiences of those who took part in the Minimum Digital Living Standard research resonate with the views of people who experience data poverty. In 2022, as part of my fellowship, I met with APLE Collective (Addressing Poverty through Lived Experience). Members described how the cost of living crisis impacts on their internet access.



"Will have to stop using the internet, will need the money for my heating - as being disabled - I feel the cold more. Energy is my priority"

"Kids will lose their social life as it's all via social media"

"Kids can't do their homework online"

"Basic lack of social communication"

"Loss of jobs"

"Missing vital information not being connected"

"Not being able to afford to buy even the basic smart phone"

"You are charged more for data when you can only afford pay as you go"

Looking ahead, one APLE Collective member explained:

"People experiencing poverty will be pushed further into digital exclusion and isolation because unavoidable spending on energy and food will take up the lion's share of their budget. Internet access will become 'a nice to have' rather than what it is, an essential in the modern-day UK - and that's just not right."

- APLE Collective member

The experience of data poverty is now being felt by even more people. Last year, Citizens Advice predicted that data poverty and digital exclusion would worsen – estimating that inflation–linked mid-contract price rises could cost consumers £2.5 billion extra in 2023.¹⁷

"As we all pull together in the midst of a cost-of-living crisis, mobile and broadband providers should be finding every way possible to help people. We want to see them cancel mid-contract price rises this year.

Ofcom and government should then look to protect consumers from future ones"

- Dame Clare Moriarty, Citizens Advice CEO

As of January 2023, 29% of households were struggling to afford communications services – an increase of seven percentage points from February 2022. Younger adults (42% of those aged 18-24), households with children (38%), benefits recipients (40%) and people

with a disability or limiting condition (42%) are among the most likely to be struggling.¹⁹ These figures cover the range of services, including landline phone and pay-TV; they also predate inflation-linked price rises.

APLE Collective members also described how essential the internet is in their lives.

"No data can be isolating - no Zoom, video calls or family"

"I would not know what's going on in the world"

"We wouldn't be able to have kids do their homework"

"No access to facetime with grandkids etc"

"Zoom and MS Teams for work and social services"

"To make money through Facebook and Gumtree"

"To find locations such as doctor's"

"No gaming time for kids or us"

"I would never have been able to gain employment"

"My mental health would have suffered without it"

"Without internet, I would have struggled to stay sober during lockdown"

"I would be dead as hospital information was essential to me still being alive"

"For universal credit, accounts, doctors, housing"

"Access to courses and access to healthcare"

"Excluded from potential of buying cheaper food, clothes and furniture"

Some talked about being 'forced online', and a sense of stigma if you don't have access.

"Whether or not it is essential, we are being forced online"

"Marginalised and stigmatised if you have to explain you have no internet"

"Making it impossible for it not to be essential"

These experiences reveal the breadth and depth of implications of data poverty for people's lives, especially for those who live on low incomes and/or face other barriers.

The internet is now an essential part of people's life, work and leisure. We need to consider how best to frame internet access to reflect this reality, and to do so in a way which reflects the sort of society we want to live in.

In this report, I explore how framing internet access as a human right and as an essential utility can help to promote action to end data poverty, working towards a goal that everyone can access the internet if they choose to do so - in so far as such a choice still exists.

2. Framing internet access as a human right

The relationship between the internet and the enjoyment of human rights has become increasingly close. Digital-by-default services mean more people access services online, benefiting from this where they can do so easily. Social media has provided greater opportunities for free expression and assembly.

In discussion with APLE Collective members, it was clear that internet access as a right resonated, especially regarding the internet's role in education and health.

"Access to healthcare makes internet access a human right"

"Yes - need it to access education, health and benefits system"

Framing internet access as a right helps express how internet access enables us to carry out essential activities, and allows for the fulfilment of other human rights.



A global perspective

"All human beings are born free and equal in dignity and rights"

(Article 1, Universal Declaration of Human Rights, 1948)

These words signalled a new era with the creation of the United Nations Declaration of Human Rights in 1948. The authors of the Declaration could not have predicted the degree to which our societies would change because of the internet. Nevertheless, they would surely recognise how the internet acts as a gateway to the enjoyment and fulfilment of the rights set out in the Articles of the Declaration.

A few examples illustrate the importance of internet access to the enjoyment of human rights across the world and in the UK today:

- Articles 19 and 20 refer to the right to freedom of opinion and expression, and freedom of peaceful assembly and association.
 Today, online media has made it easier to access information, and social media has made it easier to associate with others who share similar views. Some governments have used social media blackouts to stifle dissent, and cyberattacks to undermine democracy.
- Articles 21 and 22 refer to the right to access to public services and to social security. Channel shift to online services means that in some places, access to public services is restricted with in person or paper/post access removed.²⁰
- Article 26 refers to the right to education. In the pandemic, education moved online, putting those with no or limited connectivity at a disadvantage. Data on Key Stage 4 educational attainment suggests a link with fixed line broadband.²¹

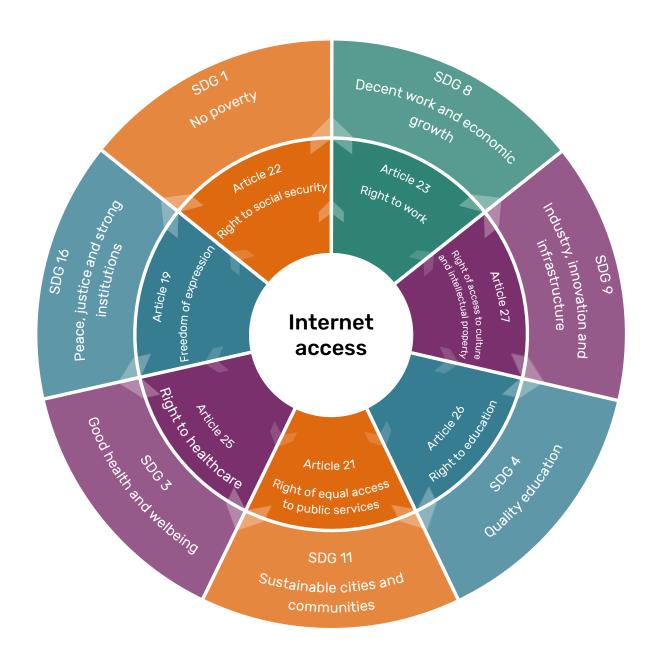
Digital technology does not exist in a vacuum. As a report for the UN Secretary General reminds: "it has enormous potential for positive change, but can also reinforce and magnify existing fault lines and worsen economic and other inequalities."²²

At a global level, internet access has already been incorporated into some of the United Nations Sustainable Development Goals (SDGs).²³ These aim to reduce poverty and inequality, promote education, tackle climate change and stimulate economic growth. Internet access and technology can accelerate the delivery of all 17 SDGs, including:

- Goal 1: No Poverty. Indicator 1.4.1 is the proportion of the population living in households with access to basic services this should include access to a fast and stable internet connection.
- Goal 4: Quality Education. Indicator 4.4.1 covers the proportion of youth and adults with information and communications technology (ICT) skills.

There is a clear role for internet access – and digital inclusion more broadly – in enabling achievement of the UN SDGs as well as fulfilment of human rights in the UK and globally. This feels all the more relevant since the UK has recently won a seat on the ITU Council – the UN specialist agency for Information and Communication Technologies, which also has a commitment to "Connect all the world's people – wherever they live and whatever their means."





Across the world, there are several countries which have included the right to internet access in legislation.²⁵ Mexico recognised internet provision as a constitutional right in 2013 although there is still a long way to go to achieve this. In India, high court rulings in some states declared the internet to be a right, offering redress for residents who missed opportunities. Finland has made internet access a legal right, with major investments in infrastructure and internet services.

In the UK, the Human Rights Act (1998) reflects the time it was introduced and doesn't include internet access. Should this be changed?

In 2021, the United Nations Human Rights Council adopted a resolution on human rights on the internet. This calls upon all states to "accelerate efforts to bridge digital divides, including the gender digital divide, and to enhance the use of information and communications technology, in order to promote the full enjoyment of human rights for all ... [and] to support civil society in its efforts to address barriers to digital access." As the UK is a signatory, we should build on this resolution and explore the possibilities within the UK context. In exploring this, it would also be important to recognise concerns expressed by people who feel 'forced online' – a right to be offline and to access essential services in non-digital ways.

Alongside, I believe that there are other ways we can use the framing of internet access as a human right to guide and advocate for change.

Internet access as a 'positive right'

"All human rights are indivisible and interdependent. This means that one set of rights cannot be enjoyed fully without the other."²⁷

Internet access can be seen both as a human right, and as an essential enabler for the advancement and adoption of other rights. Further, it can be framed as a 'positive right'.

'Positive rights' include the right to food, the right to housing, or the right to an education. These are rights which place a 'positive duty' on society to help a person to have or do something. So, just as the right to education places a positive duty on us to help a child have an education, so the right to internet access should place a positive duty on our state and society to help people access the internet.

Framing internet access in this way puts an obligation on us to support those who need help to do so. It doesn't necessarily mean that internet access should be free for all. But it does obligate us to consider whether access should be free:

- for some groups (e.g. Oyster travel cards are free for under 16s, over 60s, and other priority groups in London²⁸)
- for some purposes (e.g. to use NHS websites, or government services) or
- in some circumstances (e.g. a public health emergency).

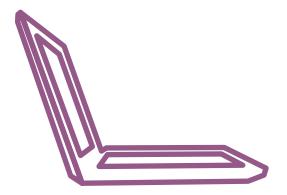


If we believe that access should be free for some groups, purposes, or circumstances - then who pays, and how? Should everyone have a free connection, or should this be based on need and vulnerability? If it were to be free for all, then should costs be enveloped into council tax or housing costs, and which provider then delivers the provision?

Framing internet access as a positive right also obligates us to ensure fulfilment of other human rights is not undermined such as through removal of non-digital access to essential services without appropriate protection, support and safeguards being put in place.

Finally, we can choose to adopt a rights-based approach to developing plans, policies, processes and practices. The PANEL²⁹ model was developed by the European Network of National Human Rights Institutions. It offers a framework for use by duty bearers (e.g. national and local government, the NHS). To the right, I suggest what this could include.

In summary, while lessons from other countries remind that actions speak louder than words, it is clear that talking about internet access as a human right is a powerful way to expresses the importance of internet access in our lives and to our human rights. Framing internet access as a positive right also puts the obligation on us to ensure everyone has access to the internet, and to guide the steps we take.



Participation

- Put people with lived experience at the centre of policies and initiatives
- Ensure participation methods are accessible, and not only online

Non-Discrimination and Equality

 Ensure provision of essential goods and services supports equal and fair access for people facing data poverty or digital exclusion, undertaking equality impact assessments to address digital access risks

Accountability

- Set nationally agreed standards to hold duty-bearers to account - the Minimum Digital Living Standard offers a way to do this
- Monitor how duty-bearers are tackling data poverty and digital exclusion

Empowerment

 Provide easy to find information and support so people are aware of legal remedies and wider support to help access the internet, including the Universal Service Obligation, social tariffs, and support for vulnerable customers

Legality

- Keep non-digital access channels open for essential public services, championing a model of digital-inclusion-by-default
- Ensure legislation, strategies and operational guidance keep pace with digital change and societal norms, reflecting human rights principles

3. Framing internet access as an essential utility

In September 2022, in a workshop with the APLE Collective, I asked if internet access is a human right or essential utility. The consensus was that it is both.

"Essential"

"100% Yes!"

"Shifted to become both"

"Yes - no longer a luxury, a necessity"

"Human Rights = Healthcare, Essential = Universal Credit"

"Essential for shopping online if you are disabled and housebound"

One APLE Collective member framed internet access as a human right where it related to healthcare; and as an essential utility where it related to state benefits. People talked about the vital role that internet access plays in everyday activities – such as buying food – especially where other options are much harder to access.

With greater frequency, internet access is being referred to as the 'fourth utility', reflecting similarities to energy and water for its necessity in daily life, and aspects of how it is already regulated. Similarly to energy and water (also food, finance, transport), communications is one of 13 sectors deemed Critical National Infrastructure: "necessary for a country to function and *upon which daily life depends*." Yet the question of whether internet access should be deemed a utility is live, and contested.

This has been the most challenging part of this fellowship. There does not appear to be a standard agreed definition of what an essential utility is. The Utilities Act 2000 does not provide a clear definition, and it excludes water as well as telecommunications. But what has made this question so challenging to explore is the level of opacity around it. There is no clear articulation, let alone agreement, about what exactly would happen or be different if internet access were to be classed, officially, as a 'utility' in legislation, nor what the benefits and risks would be, or for whom. Our understanding of the traditional three utilities – water, electricity, gas – appears to reflects convention and tradition (political and economic), rather than any solid or clear foundation in law.

There is a need to open this question up properly, fully and constructively. We need to hear from those who may have concerns about the nature of these - beyond a general sense of concern about more regulation, or internet access not being a 'natural monopoly'. We need to do this with telecoms infrastructure and internet service providers, civil society organisations, with government (regional and local, national and central), as well as the regulator.

A brief history

In 1846, the Electric Telegraph Company was founded in the UK - it was the world's first public telegraph company. In 1870, the Post Office took over the UK Telegraph Service by special Acts of Parliament in 1868 and 1869.

In 1982, the Government formally announced its intention to privatise British Telecom. In 1984, over 50% of British Telecom shares were sold to the public. Telecommunications was the first 'utility' to be privatised, followed in 1986 by gas³¹ and in 1989 by water.³²

In 2003, Ofcom was established as the independent telecommunications regulator and competition authority for the communication industries in the UK.

In 2018, the Government introduced legislation for a Universal Service (Broadband) Obligation to improve access across the UK. In 2020, consumers received the right to request this from BT and KCOM as the designated providers.

In 2021, the Government Office for Science suggested that the government should consider declaring broadband an 'essential utility' to facilitate improvements in healthcare access and provision, and free data for access to public health services.³³

In 2022, the Competition and Markets Authority noted that "basic utilities" include "heat, light, broadband and water." The Government also included broadband bills as "utility bills" in its cost-of-living support for households. To households.

In 2023, the House of Lords Communications and Digital Committee launched a new inquiry into the cost of living crisis and the impact this is having on digital exclusion.³⁶ One area being explored is whether internet access should be the 'fourth utility'.



A utility already?

Although we lack a clear definition of what a utility is, there are many commonalities across the three traditional utilities - most of which are shared with internet access.

Service	Natural monopoly	Wayleave	Regulation by national body	Legal rights to minimum provision	Vulnerable customer requirements	Support for those on low incomes
Electricity	✓	✓	✓	~	✓	Mandatory
Gas	✓	✓	✓	✓	✓	Mandatory
Internet	×	✓	✓	✓	✓	Voluntary
Water	✓	✓	✓	✓	✓	Voluntary

Economic convention sees a utility as a service which functions as a 'natural monopoly.' This means that one firm or organisation dominates the market, as the costs of entry are too significant for other firms to compete and generate a profit. In the UK, Openreach is by far the largest internet infrastructure provider³⁷ but it is still a competitive market, with other companies such as Virgin Media O2, CityFibre, and Hyperoptic installing and operating their own fibre-optic networks. Installation costs are low compared with water, gas, and electricity.³⁸ Related to this, all four require 'wayleave agreements' which give permission to lay infrastructure. Companies or organisations delivering utilities require this from landowners in order to lay infrastructure, such as new water or gas pipes, electricity cables, or fibre-optic cables for broadband internet.

All four are regulated by a national body: Ofwat for water, Ofgem for energy, and Ofcom for communications including broadband. The Competition and Markets Authority refers to these as "regulated sectors" providing "basic utilities like heat, light, broadband and water." ³⁹ Ofgem and Ofwat are non-ministerial departments; Ofcom is not. However this distinction also applies to other bodies which are not utilities regulators.⁴⁰

The Communications Act 2003 established Ofcom, bringing five bodies into a single regulator. Its duties are similar to Ofgem and Ofwat: ensuring access to services (including the right to request a decent connection); investigating failures within their respective markets; and ensuring fair treatment of customers.

Regulators, working under the direction of the Government and with industry partners, play an important role in implementing and monitoring fair treatment and protection of vulnerable customers, people on low incomes, and people with debt problems.⁴¹ The nature of support – including whether it is paid for by Government (tax payers) or industry (shareholders, customers) – is determined by the Government. This results in differences in provision. Such differences can feel unfair and confusing: Why are there social tariffs with some (not all) broadband

providers and some water companies, yet no social tariffs for gas or electricity? Yet this approach also enables utility-specific responses to wider factors, such as the Government's time-limited Energy Price Guarantee in response to global gas prices rocketing after Russia's invasion of Ukraine.

The UK is not the only country which is grappling with the internet's role in a nation's society, economy, and security. In the USA, the recent Infrastructure Investment and Jobs Act (2021) has allocated significant funding for internet access, alongside other infrastructure investments in roads and highways, renewable energy, and water. Comparisons to electricity and roads appear to have played a powerful role in securing the support required for the bipartisan infrastructure law, and for the accompanying significant investment in the "Internet for All" initiative: "Generations before us brought electricity to rural America and built the interstate highways... our generation's task is to connect all Americans online." The will required to bring this into the statute books has also drawn directly on the experience of living through the Covid 19 pandemic.

"The pandemic shed light on what many Americans already knew: access to the internet is a necessity for everyday life."43

This is surely where we are now. Access to the internet is a necessity for everyday life.

We need an open, constructive debate about the implications of designating internet access as an essential. Alongside this, we should focus attention on securing affordable, equitable internet access, and ending data poverty. So, what should change?



What should change

If we focus on internet access, and use the framing of internet access as the fourth utility, there are several actions which could be taken to reduce data poverty.

Reduce VAT on broadband and mobile data services

Now: VAT rates vary across the three traditional utilities. Domestic energy usage is charged at the reduced rate of 5%. Water and sewerage is charged at 0% VAT.⁴⁴ Broadband services are charged at the standard rate of 20% VAT.

What should change: VAT on internet access should be reduced to 5% or 0%. Internet access does not need to be a utility for this to happen. There are other Critical National Infrastructure sectors where services are exempt or charged at a reduced rate. For example, some food is charged at standard rate and some zero-rated. The treatment of postal services varies, with services provided by Royal Mail under a universal service obligation exempt. As a minimum, VAT on social tariffs and basic packages should be zero-rated, with the costs saved passed on to customers on low incomes.

Reassess the minimum speeds for the Universal Service Obligation

Now: The Universal Service (Broadband) Obligation Order (2018) set an important principle: a safety net to request a decent broadband connection for households and businesses. This only applies if a household does not have access to a 'decent' connection by *any* technology – including mobile broadband. Also, if the cost of connection is over £3,400, the customer pays the excess. In broadband 'not-spots' in urban areas as well as remote, rural areas, this can make connectivity prohibitive. In some areas, connectivity may only be feasible through satellite technology. Only five years on, what is defined as a decent connection (10Mbps download and 1Mbps upload) is too low; it would not meet the Minimum Digital Living Standard for a household with children. Living Standard for a household with children.

What should change: The Universal Service Obligation specifications are set by the Secretary of State, on advice from Ofcom. The Secretary of State should commit to reviewing – regularly – the specification to reflect technological advances and today's needs. Eligibility criteria should be extended to enable households to request a decent fixed line broadband connection, as well as mobile broadband; and access to financial support to meet excess costs should be available, at least for priority households. The planned PSTN switchover makes this more urgent.

PSTN switchover: clarify responsibilities to vulnerable groups

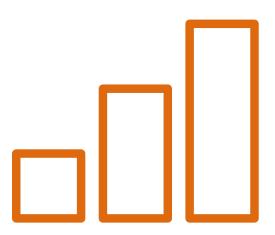
Now: The UK's copper telephone network is out of date. By December 2025, all copper cables will have switched to 'voice over internet protocol' as part of the Public Switched Telephone Network (PSTN) switchover.⁴⁷ The implications go beyond landline phones. This will impact users of analogue telecare; people more likely to be over 75 years old, living alone, and offline by choice or circumstance. Ofcom has said that internet service providers have to proactively identify vulnerable customers to provide information and equipment⁴⁸ and that those who do not access broadband services will not be charged extra for phone services⁴⁹ or necessary upgrades to hardware.⁵⁰

What should change: With concerns rising, including from older and disabled people, Ofcom should provide stronger leadership to ensure protection for priority groups. The Government, telecoms providers, local authorities, housing associations, and telecare providers should work together and agree how costs will be met.⁵¹ Priority groups should be prioritised, not left in the dark. The opportunity to use this to support digital inclusion should also be grasped.

2G and 3G switch off: clarify responsibilities to vulnerable groups

Now: The Department for Science, Innovation and Technology has requested that all mobile network operators stop offering 2G and 3G connections by the end of 2033.⁵² Some providers are starting to switch off their networks in 2023.⁵³ The switch-off will allow for spectrum to be freed up for 5G and 6G connectivity. It is part of DSIT's strategy to support next generation technologies, innovation, and efficient public services.⁵⁴

What should change: This switch-off is Government led. There should be clarity on responsibilities, particularly for priority groups (older people, disabled people, low income groups, people in digital not-spots where reliance on 2G and 3G may be higher). Such support should include digital inclusion, and help to identify appropriate, affordable tariffs.



Ensure customers can access the most appropriate, cheapest tariffs for their needs

Now: Industry, Ofcom, government (at all levels) and the third sector have responded in the cost of living crisis with new services (National Databank), pilots (GMCA Digital Inclusion Social Housing pilot⁵⁵), new products (social tariffs), with the development of a Department for Work and Pensions API to enable faster checks on eligibility for social tariffs by providers. However, uptake of social tariffs remains low (around 3.2% according to Ofcom in 2022). As well as monitoring social tariff uptake, Ofcom is responding to consumer concerns – undertaking reviews about price rises⁵⁶, confusing terminology on full fibre⁵⁷ and investigating the delay by providers in implementing the One Touch Switch service.⁵⁸

What should change: Ensuring customers can access the most appropriate, cheapest deals for their needs must remain a priority for Ofcom, as well as Government and industry. Innovations like social tariffs and One Touch Switch could be of great benefit to people in data poverty. To work, they need promotion, visibility, proactive targeting of priority groups by providers themselves, and ongoing regular monitoring of uptake by the regulator. Local authorities and charities also have a role to play in helping people.⁵⁹ Local authorities could learn from Essex County Council's recent campaign.⁶⁰

Encourage innovation and social value in the market

Now: By comparison to many sectors, the broadband and mobile infrastructure market in the UK is relatively well-functioning, with a record of yearly increases in investment and strong innovation. The underlying technology has improved such that speeds and quality of internet provision is the best it has ever been. Government innovation includes trials to see if water pipes can be used to carry fibre-optic cables to remote homes and businesses. Community innovation includes a pioneering approach in Lancashire, where B4RN, a Community Benefit Society, is encouraging underserved rural communities to build their own gigabit-capable full fibre network.61 The PSTN switchover is an example of industry-led action to replace outdated equipment. 62 Voluntary social tariffs and partnering on the National Databank are examples of innovation for social value. There is also innovation in regulation, with Ofcom reviewing approaches to net neutrality⁶³ and proposing a tiered system which would enable online public services (i.e. central and local government services), and potentially charities, to be 'zerorated' by mobile network operators making them free to access. What started as a pandemic response could be (and in some cases is being) extended.

What should change: More innovation like this is needed to end data poverty - always being watchful for unintended consequences. Net neutrality rules is a good example. A tiered system, carefully monitored, allows people to access online government services without having to use their mobile data to pay for them; but changing other net neutrality rules could exacerbate data poverty (e.g. if providers could charge more for data-heavy sites like streaming films). Another area for innovation is the Social Value Act which could be better used nationally and regionally

as well as locally in public procurement. This could be by added weighting in procurement processes where providers commit to act on data poverty and digital inclusion. For example, Southwark Council's agreement with Hyperoptic and Community Fibre, with commitments to provide staff and resident training, and free gigabit capable connections for community halls.⁶⁴

Leadership and coordination across central government

Now: Internet access and digital inclusion are directly relevant to every single government department. Yet - at a UK level and in England - we are still working to a Digital Inclusion Strategy which was published in 2014. In contrast, both Scotland and Wales have current digital inclusion strategies, with commitments around data poverty. At a cental government level, there is a lack of ministerial leadership, vision, investment and coordination across government departments on digital inclusion. Across political parties, there is growing interest in this including the All Party Parliamentary Group on Data Poverty.⁶⁵

What should change: Digital inclusion, and within this - ending data poverty - needs to be under the remit of the Cabinet Office to ensure digital inclusion is a priority for every department. The new Department for Science, Innovation and Technology could present a significant opportunity for change, but it could also become another silo paying too little attention to inclusion. In England, a digital inclusion strategy should be a priority, backed by significant funding, and accompanied by stronger powers for Ofcom to support equitable internet access and a commitment to infrastructure competition.

Strengthen the role of local authorities

Now: Local authorities are increasingly taking a lead role in addressing data poverty and digital exclusion.⁶⁶ When it comes to internet access - their role stretches across supporting residents battling with rising bills and poverty, implementing digital transformation across local government services, and navigating the complexities involved in full-fibre broadband rollout and 5G masts.

What should change: Local authorities can do more if Government provides adequate funding, sets a clear national strategy for digital inclusion as well as digital transformation, and reduces barriers - such as simplifying wayleave processes and incentivising providers to 'dig once'. With support from regional government also, local authorities should:

- Use 'PANEL' as a framework to decide priorities for addressing data poverty
- Embed digital inclusion and infrastructure strategies into council plans
- Share best practice on fibre-optic rollout and mobile data coverage across local authorities and housing associations
- Identify and target priority groups for PSTN switchover, such as telecare users
- Use PSTN switchover and 2G and 3G switch-off to increase digital inclusion
- Promote action on digital inclusion as part of public procurement for social value.

Explore radical approaches

More radical approaches - (re)nationalisation, universal basic services - are being debated and tested across the world. Given the changes that have taken place over the last decade, there is value in further exploration and blue sky thinking.

Universal basic services: A universal basic offering could provide free internet connectivity, access to devices for the entire household, and the provision of digital skills and career training across the UK. In 2021, Camden Council completed a trial for Universal Basic Services for those without work which offered free travel and internet connectivity; it has since evolved to offer access to devices and digital skills as well.⁶⁷

(Re)nationalisation: The 2019 Labour manifesto promised to renationalise broadband and bring BT engineers in-house. Derided at the time, the pandemic shed a different light on the idea. Renationalisation seems unlikely to appear on manifestos in the short term, but the democratisation and ownership of internet access is worth keeping on the table.⁶⁸ It is interesting that 60% of the success stories for re-municipalisation efforts (not renationalisation) listed in the Public Futures global database are in telecoms.⁶⁹

Involve people with lived experience of data poverty

Whether plans and pilots aim to support PSTN switchover, promote social tariffs, increase the number of local hubs using the National Databank, or explore net neutrality options – it will be important to listen to people with lived experience of data poverty. APLE Collective members shared what they'd want to see to reduce data poverty. Their ideas reflect a range of approaches, and that these must be sufficient to meet needs.



"A pathway to free WiFi"

"Knowledge and offer to educate on internet usage"

"Housing providers should give reasonable WiFi access to tenants"

"WiFi hotspots"

"Free WiFi"

"Large amounts of data, not limited"

"A fairer priced internet system for all, across the board of all the phone companies, without being allowed to charge sky high prices"

"Accessibility to devices and better payment plans"

"A dedication to working with people with lived experience"

Conclusion

"We live in a digital age, I would like to see everyone included in that"

- APLE Collective member

I started my fellowship asked whether internet access should be framed as a human right, or as an essential utility. The answer - endorsed by people with lived experience from the APLE Collective - is that it is both of these. It is a necessity for daily life.

Framing internet access as a human right expresses how internet access enables us to carry out essential activities, and allows for fulfilment of other human rights. We should:

- Use the framing of internet access as an effective enabler of other human rights
- Talk about internet access as a positive right which puts a duty on state and society to help people access it
- Champion people's rights to access and receive essential services in non-digital ways while also championing affordable access and digital inclusion
- Adopt a human rights-based approach to internet access (such as the 'PANEL' framework) with people who have lived experience as active participants
- Explore the possibilities to build on the UN Human Rights Council's resolution on human rights on the Internet within the UK context.



Framing internet access as the 'fourth utility' - an essential utility - helps to focus attention on actions that should be progressed to improve internet access for all, especially for priority groups. We should:

- Hold an open and constructive debate on the implications of officially legislating for internet access to be treated as a utility
- Reduce VAT on broadband and mobile data to 5%, and 0% for social tariffs
- Reassess minimum speeds for the Universal Service (Broadband)
 Obligation
- Clarify responsibilities to support priority groups in the PSTN switchover, and the 2G and 3G switch-off, and use these as opportunities for digital inclusion
- Ensure customers can access appropriate, cheap tariffs for their needs - through promotion, visibility, proactive customer support
- Encourage innovation and social value in the market to help end data poverty - building on what's already been achieved
- Strengthen and extend the role of local authorities in addressing data poverty, with funding and support from central government
- Stronger leadership from central government, and a Digital Inclusion Strategy fit for today, with funding, cross-government and cross-sector collaboration
- Explore radical approaches which can provide the basis for future solutions
- Involve people with lived experience of data poverty throughout.

We should never underestimate the transformative powers of the internet and its ability to create a better and more productive society. But this will only be achieved if we tackle digital exclusion and data poverty. Whether internet access is framed as a human right or the fourth utility, its importance is undeniable, and as such access to the internet needs to be protected, extended, and inclusive for us all.



Annex 1: Learning from other countries

India

In November 2019, the government of Kerala decided to provide an internet connection to all households for a fee. Households below a certain income level were offered free internet to bridge the digital divide and support digitisation efforts. The Kerala Fibre Optic Network (K-FON) aims to connect government offices and institutions to the total network whilst also allowing other telecoms providers to utilise their core network. High court rulings in India have taken this further and declared the internet to be a fundamental right and offered redress for residents who have missed out on opportunities. In a 2022 high court ruling in Tamil Nadu, the Madras High Court directed the State Government to pay compensation of 1 lakh rupees – roughly £1,000 – to a prospective medical student who was unable to register for counselling due to poor internet connectivity and technical glitches.

In the UK, Ofcom has an automatic compensation scheme which provides a monetary sum to those who suffer from delays to a new service, missed appointments or a delayed repair following a loss of service.⁷²

Finland

In 2009, the Finnish Parliament passed legislation making 1 Mbps broadband access a universal service obligation. This policy aimed to ensure equal access to the internet for all citizens, promoting digital inclusion and boosting the country's economic development. It became a legal right the following year, with the Finnish Communications Regulatory Authority (FICORA) tasked to ensure the implementation. In 2011, a development program was launched to expand high-speed fibre-optic networks, with a target of 100 Mbps for 99% of the population by 2015. The Finnish government has continued to invest in infrastructure and focus on digital inclusion, updating its goals with faster connection speeds.

In the UK, the UK provision is limited to a right to request access whereas in Finland, the the universal service provision is a right to affordable internet access.



Mexico

In 2013, Mexico established internet and broadband provision as a right in their constitution with the Government designated as the provider of internet access. Article 6 of their constitution states: "Every person shall be entitled to free access to plural and timely information, as well as to search for, receive and distribute information and ideas of any kind, through any means of expression. The State shall guarantee access to information and communication technology, access to the services of radio broadcast, telecommunications and broadband Internet. To that end, the State shall establish effective competition conditions for the provision of such services."⁷³

Internet penetration of Mexico is currently at 75%⁷⁴ with 7 out of 10 high income earners with access to the internet which drops to 1 in 10 for low income earners. However, recent developments have prompted backlash. In September 2021, The Federal Telecommunications Institute's (IFT) Traffic Management and Internet Administration Guidelines came into effect which allows internet service providers to allow for the paid prioritisation of traffic meaning online services can pay for their sites to load faster which puts lesser-funded providers at a disadvantage as they can't compete financially.

USA

The Infrastructure and Investment Jobs Act is a federal statute signed into law by President Joe Biden in 2021. The Act includes \$1.2 trillion funding for infrastructure, including road and highways improvement, clean water, renewable energy, and broadband access. It is a bipartisan infrastructure law, and heralds the launch of the 'Internet for All' initiative in the USA.

Around \$65 billion has been allocated for the Internet for All initiative. The Broadband Equity, Access, and Development program which allocates a minimum of \$100 million to each state, \$4.35 billion for broadband projects to underserved locations in high-cost areas and \$32.2 billion for broadband projects in unserved locations. This is particularly important as more than 30 million Amercans live in areas where there is no broadband infrastructure that provides minimally acceptable speeds. When coupled with State Digital Equality Act funding, and the Enabling Middle Mile Broadband Infrastructure programme funding, the package represents the largest investment in connectivity and digital inclusion in the USA.

This bipartisan infrastructure law demonstrates how, in the wake of the pandemic, internet infrastructure has come to be seen as critical to national and daily life, alongside other critical infrastructure. In the words of the Assistant Secretary of Commerce for Communications and Information: "Generations before us brought electricity to rural America and built the interstate highways... our generation's task is to connect all Americans online."

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Data Poverty Lab Fellow

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