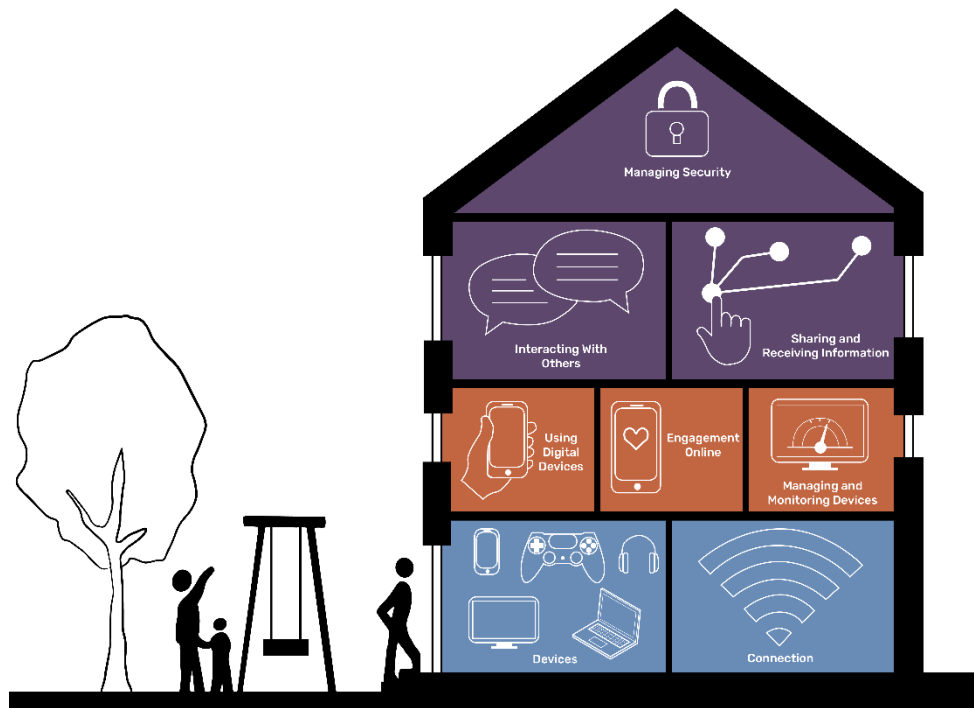


A UK Minimum Digital Living Standard for Households with Children

Interim Report



Authors

Chloe Blackwell, Abigail Davis, Katherine Hill, Matt Padley
Centre for Research in Social Policy, Loughborough University

Simeon Yates
University of Liverpool

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MDLS Project Team

Professor Simeon Yates, Professor Alex Singleton, Dr Gianfranco Polizzi, Dr Jeanette D'Arcy, Rebecca Harris (University of Liverpool); Dr Chloe Blackwell, Abigail Davis, Katherine Hill, Matt Padley (Loughborough University); Dr Emma Stone (Good Things Foundation); Dr Elinor Carmi (City University); Paul Sheppard (Critical Research).

Executive Summary

This is an interim report which covers the first stage of the Minimum Digital Living Standard (MDLS) research. It reports on the development of MDLS and provides initial findings on what members of the public think is needed to meet MDLS for households with children. This proof-of-concept research establishes that the approach can provide not only a meaningful and accessible definition of an adequate standard of digital living, but also that members of the public can agree on what is needed for that to be reached. This report sets out the range of goods, services and skills that would enable households with children to meet MDLS and feel included in the digital world around them. While some households or individuals will need more in order to meet MDLS, urban households with children will need *at least* what has been described in this report. MDLS sets a benchmark which people agree households with children should be able to reach.

A full report including other strands of the research will be published at the end of the project. This will include: a UK-wide survey; statistical and geographic analysis to explore variation in reaching MDLS; stakeholder consultations to explore the relevance and intersectionality of the standard across key dimensions such as disability, ethnicity, rurality and poverty; and potential costings for the ‘basket’ of MDLS contents.

Background

Digital inequalities – that is, gaps between those who have access to digital devices and data, as well as digital skills and capabilities, and those who do not – have never been more apparent and consequential. With the current cost-of-living crisis placing more pressure on household budgets, those on the lowest incomes are at even greater risk of being digitally excluded.

MDLS aims to move research and policy debate forwards through a citizen-centred and household-focused approach to defining what counts as digital inclusion or exclusion. This makes it distinct from – and complementary to – prior approaches that predominantly focused on individuals used in academic research and by Ofcom, Lloyds Banking Group, Nominet and Internet Matters.

The MDLS approach applies the Minimum Income Standard (MIS) methodology to issues of digital inclusion, using deliberative methods with members of the public to develop a standard based on and rooted in public consensus. Following MIS, the Minimum Digital Living Standard sets a benchmark for digital inclusion, defined with members of the public as a minimum level which will enable households to carry out the tasks and activities they need, and feel included in the digital world.

As a proof-of-concept study, MDLS has initially focused on the needs of households with children through a series of deliberative discussion groups with parents and young people to establish what they think families need to meet this benchmark. This includes devices and internet connection as well as skills and knowledge (outlined in detail in Chapter 4).

The MDLS research process

The MDLS project aimed to establish the feasibility of adapting the well-established Minimum Income Standard (MIS) method to find:

- A meaningful definition of a minimum acceptable digital living standard
- What the public identified as digital needs and how and why they could and should be met.

This initial research focused on households with children living in urban areas, with the intention being to use this as a benchmark to explore different and additional needs of other households.

The MDLS research comprised 17 deliberative groups (13 groups with adults, and four groups with young people) held between February and October 2022. The process involved four stages, with discussions from one stage feeding into the next through a funnelling process. Each group, lasting up to three hours, was conducted in person with between seven and nine participants. At each stage, people were newly recruited by a specialist recruitment organisation.

All groups included a mix of participants across gender, single and couple households, different socio-economic circumstances, people who were in work and not working, as well as participants with different income sources including social security benefits, with different levels of digital engagement, with most groups also including participants from minority ethnic backgrounds. Adults' groups were held in urban locations in Scotland, Northern Ireland, Wales and in the North, South, East and West of England. Young people's groups were held in schools in the East Midlands with students aged 11 to 17.

The research process involved four stages of group discussions.

- **Stage 1: Orientation** > Groups discussed what digital inclusion meant to them and developed a definition of MDLS which could then be presented to the next stages of groups.
- **Stage 2: Task** > New groups worked together to agree the digital inclusion needs of hypothetical individuals within households (rather than their own needs) and how those needs could be met.
- **Stage 3: Checkback** > New groups reviewed the decisions from the task stage, to identify any missing or unnecessary items and resolve where previous groups had been unable to agree.
- **Stage 4: Final** > New groups reviewed the lists of goods, services and skills resulting from the checkback stage and addressed any discrepancies.

Stage 1 Agreeing the MDLS definition

MDLS definition

A minimum digital standard of living includes, but is more than, having accessible internet, adequate equipment, and the skills, knowledge and support people need. It is about being able to communicate, connect and engage with opportunities safely and with confidence.

The MDLS definition was developed during the first stage of the research through deliberative discussion groups. As the definition needs to be relevant beyond this initial study focused on households with children, these orientation groups involved participants from a range of household types. The groups included working-age adults with or without children, pensioners and young people.

Participants were clear about the importance of being included in this digital world, and the implications of exclusion. Key themes from the orientation groups were:

- The **prevalence** of digital technology across all aspects of life, with young people highlighting its importance in school life as well as socially.
- The **inevitability** of needing to participate in a digital world, linked to observations of a decrease in non-digital alternatives. Groups discussed how the pandemic had accelerated the need to be online and accentuated the difficulties of being left behind.
- The **pace of change**. Some found digitalisation overwhelming – ‘*I feel like I’m drowning*’. This had implications for risks of being excluded, the cost of having to upgrade technology, the need to update their knowledge and, for some, the challenges of having to learn new things.

Stages 2-4 Developing the MDLS contents for households with children

Through a further three stages, groups of parents with dependent-age children and young people identified the goods, services and skills which a household with children would need in order to achieve a minimum set of needs. The MDLS contents are summarised in Table 1 below.

Digital goods and services

Groups considered the types of goods and services required to enable households with children to reach an acceptable standard, and how these requirements would change with the age of the child or number of children in the household. Deliberative discussions covered different digital devices, connectivity (mobile data and broadband) and other services (such as subscriptions). Parents and young people emphasised:

- The increasing move of services online, including health, banking and school. Parents and young people noted that contact with schools was becoming significantly more digitised.
- That now, more than ever, parents and children needed to use digital technologies to participate in everyday life and society.

Practical and functional skills for everyday tasks and activities

Groups identified a list of skills that would be necessary for using the devices included in the standard. Their discussions centred around:

- The types of tasks and activities a household with children would engage in so that different family members could access the digital world and perform tasks online that had real-world implications for their everyday lives.
- Tasks related to (1) using digital devices, programmes and the internet, (2) engagement online and (3) managing and maintaining digital devices and data usage.

Skills for understanding and managing digital risks

Groups considered what households would need in order to be able to understand and manage digital risks and engage in the digital world safely and confidently. Their discussions covered:

- General wariness of things going wrong online or being scammed.
- Potential digital risks and harms for children and young people.
- Skills related to (1) managing security, (2) interacting with others and (3) sharing and receiving information.

A significant aspect of MDLS is that it is holistic and highlights that digital needs are interrelated. Reaching MDLS involves a combination of needs and specifications to meet those needs. Groups with parents and young people felt that households with children require a range of goods, services and skills to meet MDLS and feel included in the digital world. For example, MDLS requires not only mobile data but also an adequate home broadband connection; it also requires not only the appropriate level of goods and services to carry out the tasks and activities families need, but the skills and understanding to use them safely and confidently.

MDLS contents for households with children

DIGITAL GOODS AND SERVICES

Home Broadband	<ul style="list-style-type: none"> With sufficient reliability and speed to support all family members to access the internet at the same time
Mobile Phone and Data	<ul style="list-style-type: none"> An entry-level smart phone per parent and secondary school age child + 5GB data per month each An extra 3GB of data per month if they have a child of pre-school or primary school age
Laptop/ Tablet	<ul style="list-style-type: none"> An entry level laptop per household – parent(s) and first child share one device An additional device for every further school age child
Headphones	<ul style="list-style-type: none"> A set of headphones for school age children
Television and TV Subscription	<ul style="list-style-type: none"> A smart TV, entry-level 32 inch screen An entry-level TV subscription service (e.g. Netflix, Disney+) in addition to a TV licence
Smart Speaker	<ul style="list-style-type: none"> An entry-level smart speaker
Gaming Console and Subscription	<ul style="list-style-type: none"> A gaming console and an entry-level online gaming subscription

PRACTICAL AND FUNCTIONAL SKILLS

Using digital devices, programmes and the internet	1	Using device functions
	2	Using apps and programmes
	3	Downloading apps and programmes
	3	Saving and recovering documents
	3	Connecting devices to the internet/hotspots
	4	Changing settings

Engagement online	3	Using Zoom/Teams/Google Classrooms
	3	Performing browser searches
	4	Using school apps (homework, school-home communication)
	5	Creating an email account and sending emails
	5	Online bookings and forms (e.g., appointments)
	5	Cashless/online payments

Managing and monitoring digital devices and data usage	2	Creating and sorting files and folders
	2	Turning off devices properly
	3	Deleting old files to manage device storage
	4	Monitoring and managing phone data usage

UNDERSTANDING AND MANAGING DIGITAL RISK

Managing security	3	Using secure passwords
	3	Knowing about and avoiding in-app purchases
	4	Using phone safety features out and about (e.g., 'triple tap' or 'SOS')
	5	Monitoring banking activity online
	5	Removing bank card details to avoid accidental purchases
		Knowing how to apply parental controls

Interacting with others	2	Evaluating what details to share online
	2	Identifying risks (e.g., scams, unsafe links, catfishers, groomers)
	3	Evaluating friend requests
	3	Managing social pressures and time online

Sharing and receiving information	3	Evaluating quality of information (e.g., identifying mis/disinformation or unrealistic images)
	3	Knowing how to avoid and report inappropriate/offensive content
	4	Understanding digital footprint

Skills

The skills outlined above are needed by parents, and symbols indicate the age/stage by which children need to begin developing these skills, according to parents and young people.

1 Pre-school 2 Early primary school 3 Late primary school 4 Early secondary school 5 Late secondary school

Barriers to reaching MDLS

The MDLS process is about establishing *needs*: but meeting these needs and reaching MDLS depends on access to a range of resources. Affordability, alongside other factors such as location and access to infrastructure, can affect the *ability to meet* digital needs and MDLS, rather than the needs themselves, which in theory remain the same. Groups identified several common barriers that households could face to obtaining the necessary digital goods, services and skills to reach MDLS.

Barriers to goods and services included:

- **Costs and resources** – access to resources restricted by household-level incomes (becoming even more relevant in the context of the current cost-of-living crisis).
- **Physical infrastructure** – access to broadband and mobile data connectivity as dependent on the coverage, availability, reliability and speed of those services, with implications for affordability, and knowledge needed to manage data usage.
- **Wider infrastructure** – for example, proximity to community centres or library services.

Barriers to acquiring skills (for practical tasks and for safety and confidence) included:

- **Feeling ‘out of touch’** – for example, parents feeling unaware of digital issues on particular apps because they are not ‘part of their world’.
- **Feeling overwhelmed** and unable to keep up, including (for both adults and young people) concerns around potential digital risks and harms. Parents especially were concerned about digital safety for children and how to manage this.
- **Time pressures** among parents which make it difficult to make the time to learn.
- **Uncertainty about where to go** to get reliable information – also linked to the trustworthiness of sources of information.

Conclusions

The Minimum Digital Living Standard is a successful approach to understanding digital needs

This proof-of-concept research established that members of the public could:

- Agree on a definition of MDLS and a set of minimum needs.
- Agree on the types of goods, services, and skills that would meet those minimum needs.
- Identify not only what parents and children of different ages would need to reach the minimum needs (highlighting how needs could change over time), but also how those individual needs combine at a household level.

The MDLS is a holistic package of goods, services and skills

The MDLS research identifies a list of goods comprising a minimum benchmark for digital inclusion. However, reaching MDLS also requires reliable services and a set of skills for each member of a household, depending on their age.

- Equipment, infrastructure, services and skills are interdependent elements in the standard.
- Households with children need access to all of them in combination for digital inclusion, opportunities and choice.
- Additional and/or different ways of meeting MDLS may be required for some households related, for example, to disability, ethnicity, housing circumstances or rurality.

Digital safety was identified as a key component of the MDLS for households with children

Parents and young people identified digital safety as a collective responsibility. They felt:

- Family members could take an active role in informing themselves of digital risks.
- Schools were crucial in providing up-to-date information on digital risks.
- Service providers and device manufacturers should be more responsible for providing information about the importance of security features and using them.
- Social media companies should ensure the safety of their platforms, and both social media and traditional media could do more around advice and awareness.
- Greater regulation was needed, while recognising the challenge this presents.

Further work is needed to develop MDLS and use it to shape policy and practical action

Further funding is required to develop MDLS for other household types, building on this proof-of-concept study, and to understand where additional or different ways of meeting MDLS may be required. Alongside this, as a citizen-led definition of digital inclusion, MDLS can be used to:

- Set a vision for digital inclusion strategies.
- Identify policy and practical actions to help meet MDLS for every household.
- Inform and measure progress at a household level. (The next step for the MDLS project is to undertake a UK-wide sample survey with measures informed by MDLS).

Recommendations

- Establish the Minimum Digital Living Standard as part of a vision for digital inclusion, reflecting what members of the public say is needed 'digitally' to participate in society today.
 - In Wales, the Welsh Government has already taken steps towards this.
- UK Government to work with the regulator (Ofcom) and telecommunications sector to ensure that the broadband and mobile data infrastructure is in place so MDLS can be achieved.
- MDLS to be used by government at all levels - in Westminster, devolved administrations, combined authorities, and local authorities – in order to:
 - Identify policy and practical actions to help meet MDLS for every household
 - Catalyse coordinated, cross-sector and collaborative action on digital inclusion.
- Organisations across public, private, voluntary and community sectors to consider how they can use MDLS to assess their own approach, services and products – including their role in addressing all three components of the standard (goods, services, and skills).
- Funding is allocated to develop MDLS for other household types, and also to understand the experiences of households below MDLS and/or where additional or different ways of meeting MDLS may be required (for example, related to disability, housing circumstances or rurality).

1 Introduction and background

What is the minimum basket of digital goods, services and skills that households need to live and participate in the digital world?

The 'Minimum Digital Living Standard' (MDLS) project addresses this question through a novel household-based assessment of digital needs. The project, which is funded by the Nuffield Foundation and Nominet, has been developed by an interdisciplinary team combining social, geographic and economic researchers, and utilises a range of interlinked methods:

- It uses the proven and innovative Minimum Income Standard (MIS) methodology to undertake a proof-of-concept study to develop (through a series of focus groups with members of the public) a definition of MDLS which sets out what the standard should encompass and establish a 'minimum basket of digital goods, services and skills' that households with dependent-age children need to meet this standard. Once this initial proof-of-concept project has been undertaken, there is potential to extend the methodology to look beyond households with dependent children and include the needs of other household types in the future.
- The next stages of the project include a UK-wide survey and statistical and geographic evaluations of MDLS to explore correspondence with other social, economic, cultural and digital metrics and to assess regional variations.
- In-depth group consultations with stakeholders will explore the relevance of the standard with regard to key dimensions of lived experience and intersectionality, such as disability, ethnicity, rurality, poverty.
- Ongoing engagement with government, regional, public and third sector organisations to explore the use of MDLS as a tool to inform ongoing policy development. This includes exploring the relevance of MDLS in the Welsh context on behalf of the Welsh Government (Yates et al., 2023).

This is an interim report which covers the first stage of MDLS research. It reports on the development of MDLS and provides initial findings on what members of the public think is needed to meet MDLS for households with children. A full report, including other strands of the research, will be published at the end of the project.

The core issues

The MDLS project examines an ongoing social issue that the Covid-19 pandemic and subsequent cost-of-living crisis brought sharply up the policy and public agenda – the risks and realities of digital exclusion. The scale and significance of digital systems and media in our everyday lives has never been more apparent. As a result, digital inequalities between those that have access to digital devices and data and the skills and capabilities - and those who do not have never been more consequential. With the cost-of-living crisis placing more pressure on household budgets and people having to make difficult decisions about which bills to pay, those on the lowest incomes are at even greater risk of being digitally excluded.

While there is a complex interplay between levels and types of social and digital inequalities, current policy often focuses on digital access (broadband) and defines digital ‘exclusion’ predominantly in terms of material access to technologies. Many prior academic studies have focused on individuals’ access and skills, as do many measures used by policy makers here in the UK and globally. There is therefore a substantial need for deeper understandings and robust measures to guide interventions. This must build on an in-depth assessment of what individuals, households and communities need to be digitally included. This report provides the first results of a project to do this via the development of a ‘Minimum Digital Living Standard’ (MDLS) based on the established and innovative Minimum Income Standard (MIS).

To date, the majority of research on digital inequalities has focused on three issues: first, inequalities in material access to computers, an internet connection or information sources; second, differences in digital skills; and third differences in digital use. These can relate to socio-economic variations and the personal and economic resources that people have available to them (Hargittai, 2001; Helsper, 2012; Van Deursen et al., 2014; Yates and Lockley, 2018; Yates et al., 2015; Yates and Lockley, 2020). However, these predominantly survey-based methodologies are effectively ‘top-down’ in their assessment of what counts as digital inequalities, inclusion or exclusion, and are derived from a policy or theoretical position rather than citizens’ perceptions of needs.

This MDLS study moves research and policy debate forwards – away from simple individualised measures of access or skills – by taking a new ***citizen- and household-focused*** approach to understanding digital inclusion, exclusion and inequalities. By utilising the MIS methodology to develop MDLS, we will draw directly on the lived experience of citizens but situate the measure at the level of the household. This is particularly relevant in households with children where individual family members’ needs and resources can interlink with each other. This will help us to:

- a) Understand digital exclusion as the product of a mix of factors (access to goods, services and skills and knowledge) that limit citizens’ and households’ digital opportunities and participation.
- b) Understand digital inequalities as complex, relative to time and social context and deeply linked to other aspects of social inequality.
- c) Understand which digital inclusion policies and interventions do or might best address the factors and contexts that limit citizens’ and households’ digital capabilities.

Building MDLS on the MIS methodology

The Minimum Income Standards (MIS) methodology is central to developing MDLS. The MIS methodology utilises deliberative methods to determine a minimum budget that meets material needs but also enables social participation and inclusion and is based on and rooted in public consensus. Full details of how it is drawn on in this project are outlined in Chapter 2.

The MIS approach is founded on the assertion that what constitutes a minimum living standard should be informed by the lived experience of individuals and households in a society. It aims to identify a minimum socially acceptable standard of living; it is a

‘minimum’ in the sense that it refers to a benchmark which people should be able to reach; it is ‘socially acceptable’ in the sense that it is defined by society; and it encompasses participation or connections with others in society, recognising that while it is possible to survive at a lower level, this is not a dignified or acceptable standard. Within the MIS approach, minimum living standards are viewed as a reflection of the values in a given society.

Echoing the roots of MIS, our approach to establishing MDLS focuses on the public’s perspective of what is needed ‘digitally’ in order to participate in UK society. Just as MIS determines a ‘participation income’ needed in order to achieve a minimum living standard, so MDLS establishes a ‘digital participation benchmark’ of goods, services and skills, which individuals and households need in order to take part in ordinary living patterns, customs and activities in the UK.

Report structure

Chapter 2 outlines the research methodology, and Chapter 3 explains how the MDLS definition was developed. The research findings are presented in the subsequent chapters – the different elements that make up the contents of MDLS for households with children (Chapter 4), and insights into the barriers that can inhibit people reaching MDLS and views about the responsibilities of different stakeholders (Chapter 5). Concluding thoughts and recommendations are drawn together in Chapter 6.

2 Methodology

This chapter presents the methodology used to develop the Minimum Digital Living Standard (MDLS). The approach of this research was adapted from the Minimum Income Standard (MIS) methodology. This chapter outlines the MIS methodology and how it was adapted for the MDLS research.

Drawing on the MIS approach

The MIS approach was pioneered and developed by the Centre for Research in Social Policy (CRSP) at Loughborough University, and the Centre has undertaken a programme of research, supported by the Joseph Rowntree Foundation, since 2006. The first findings were published in 2008 and have been updated annually since (Davis et al., 2022). The MIS research is focused on establishing what the public in the UK thinks everyone needs in order to have a minimum standard of living – what everyone should be able to have in order to live with dignity and take part in the world around them. The research is used to develop and describe detailed ‘baskets’ of goods and services, listing what the public think is needed to provide a minimum socially acceptable standard of living that meets material needs and enables social participation and inclusion.

The MIS approach has previously been adapted for research looking at a range of different living situations and circumstances, including the additional and different needs of Deaf people (Hill et al., 2015), of people across different age groups with visual impairments (Hill et al., 2016), of households with children on the autism spectrum (Blackwell, 2022) and of people living in remote and rural England and Scotland (Hirsch et al., 2013). In 2013, the MIS approach was also used to find public consensus on what constitutes a minimum acceptable ‘place’ standard (Padley et al., 2013) to identify what places need to have and be like as a minimum. These studies showed that the key aspects of the MIS methodology could be adapted to address different types of questions, not confined to those designed to set out the income needed to provide a specified living standard. The MIS methodology was therefore seen as an appropriate basis for looking at what households need to be digitally included in society. By that, we mean exploring not only the material needs, but also the skills which will make sure people have a minimum that will enable them to be digitally included.

Key aspects of the MIS approach drawn on for establishing MDLS:

- The method is rooted in the public’s opinion of need, from the perspective of citizens themselves, and what they think is important in everyday lives; it is a ‘bottom up’, rather than a ‘top down’, expert-led approach.
- The method involves holding several stages of discussion groups with members of the public from a range of backgrounds and circumstances to develop a definition (what the standard should encompass), and work towards consensus on a list of resources that are needed to meet this standard. The MDLS process is outlined in detail below.
- The method accounts for different needs of individuals within the context of a household.
- Group discussions produce rich qualitative data on how the public perceive needs, what is needed to meet the standard and why those elements are important.

- The final lists of goods and services (and of skills and knowledge, in the case of MDLS) represent a benchmark which households should be able to reach. Equally, the compiled lists are intended to present a minimum level of need.
- Once these minimum needs (for MIS or MDLS) are established, they act as a benchmark which can be used to look at who may or may not be meeting this level, and barriers to doing so.

The MDLS research process

The MDLS project was designed as a proof-of-concept study. It aimed to establish the feasibility of adapting the MIS method to find a) a meaningful definition of a minimum acceptable digital living standard and b) what the public identified as digital needs and how and why they could and should be met. The research focused on households with dependent-age children (under 18), in recognition of the significance of digital use and inclusion for children and young people, and its importance within the home and family context. The scale for this initial research was limited to households living in urban areas of the UK, with the intention being to use this 'urban' standard as a benchmark which could be used to explore different and additional needs of similar households in rural communities in the future.

The MDLS research comprised a total of 17 deliberative focus groups (13 groups with adults, and four groups with young people each made up of between seven and nine participants) held between February and October 2022. Each of the groups, lasting up to three hours, were conducted in person with newly recruited participants (i.e., participants from each stage only contribute to one group in the process). Adult participants were recruited through a professional research recruitment organisation, using local recruiters and included face to face approaches. All groups included a mix of participants across gender, single and couple households, different socio-economic circumstances, people who were in work and not working, as well as participants with different income sources, including social security benefits, or different levels of digital engagement, with most groups also including participants from minority ethnic backgrounds. Adults' groups were held in urban locations in Scotland, Northern Ireland, Wales and in the North, South, East and West of England. The groups with young people were recruited through direct liaison with secondary schools and held in schools in the East Midlands during the school day, with students aged 11 to 17.

The views of children and young people on their own minimum digital needs contributed a key aspect of the research, given the importance of digital use and inclusion for young people. The groups with young people were held in parallel with the later phases of the research with parents. While the starting point in young people's groups was what they themselves felt was important and should be included, findings from the parents' groups were also shared with the young people. In turn, the key points from those discussions were fed forward, with the process concluding with a final group of parents. Including the perspectives of young people in this research allowed us to reflect on the differences between their experiences and opinions and the perspectives of adults in our groups held with parents. The findings from the young people's groups are integrated into the overall picture of the digital needs of families contained in this report, and an overview focusing specifically on this aspect of the research will be reported separately.

The groups involved four stages, with discussions from one group or stage feeding into the next and the research outcomes, formed through a type of funnelling process explained in detail below.

- **Orientation** > Groups discussed what digital inclusion meant to them and developed a definition of MDLS which could then be presented to the next stages of groups.
- **Task** > New groups worked together to agree the digital inclusion needs of hypothetical individuals within households (rather than their own needs) and how these could be met.
- **Checkback** > New groups reviewed the decisions from the task stage, to identify any missing or unnecessary items and resolve where previous groups had been unable to agree.
- **Final** > New groups reviewed the lists of goods, services and skills resulting from the checkback stage and addressed any discrepancies.

Developing an MDLS definition - Orientation stage

Before the MDLS research could explore what households with dependent children need to meet MDLS, it was necessary to first establish what MDLS should encompass – to develop the MDLS definition. Having a publicly-determined definition of the standard you are trying to articulate is crucial when seeking to build public consensus. It provides a framework and reference point so that participants start from a shared understanding of what is being discussed. The orientation stage in MIS and MIS-related research involves bringing groups of people together to identify and describe a living standard in meaningful terms. Participants in the MDLS orientation stage deliberated on what digital inclusion meant to them and developed a definition of MDLS which could then be presented to the next stages of focus groups, which were tasked with compiling a list of goods, services and skills required for meeting MDLS. The full process of developing the MDLS definition is outlined in Chapter Three.

The MDLS orientation stage comprised four groups with adults and one with young people. Although this project focuses on the minimum digital needs for households with children, we intend to extend the work to look at the needs of other household types, including pensioners and working-age adults without children, and households living in rural areas. It was therefore important to consult people from these different demographic groups to ensure that the developed definition was meaningful for not only parents and children but also for people from across the life course. Orientation groups were held with adults from each of three demographic groups (pensioners, working-age adults without children and lone and partnered parents with dependent children). A fourth group brought these different demographic groups together to check that the definition was accessible and relatable. The orientation groups discussed what members of the public understood by the term ‘digital inclusion’ in the context of broader discussions about current societal norms and expectations regarding technology, for example relating to the provision and delivery of digital services. The orientation group with secondary school pupils explored what aspects of digital living they thought were important, and their reflections on the definition. The key factors they identified corresponded closely with those in the adults’ orientation groups and

they said that they felt that the existing definition was meaningful and relevant to young people.

The orientation groups discussed:

- The importance of being able to use technology in today's society.
- The pros and cons of living in a digital society – perceived advantages and disadvantages.
- What being digitally included would enable people to do and/or have (across different aspects of life).
- What being digitally excluded stops people from doing and/or having.

We compiled a draft definition of the key elements of digital inclusion from the findings of these groups. We then consulted the project's advisory board, which included industry and academic experts, as well as representatives from organisations campaigning for and supporting wider digital inclusion for particular groups. See Chapter 3 for a discussion of the findings from the orientation groups and the process of constructing the definition.

Establishing the contents of MDLS for households with children

Task group stage

The task group stage comprised four groups with parents and one with young people. The parents were purposively recruited based on their household composition (either lone- or partnered-parents), and the ages of children they lived with, in order to gain insights into the needs of both parents and children at different ages. The researchers presented the MDLS definition at the beginning of each group, either as a printed sheet for each participant, or written on a flip chart and displayed on a wall in the room where the group was held. The researchers explained how it had been devised and emphasised that it was not intended to express a standard that could or would meet *everyone's* needs but was one that no one should fall below.

Discussions focused on hypothetical individuals within households whose digital inclusion needs the groups considered and discussed. This is another key characteristic of MIS research – rather than asking participants to reflect on their own needs, they are asked to work collaboratively to agree how the needs of someone in a household similar to theirs would be met. This encourages people to take a more collectively objective stance and helps participants to work together towards consensus. The same examples of hypothetical families used in the MIS research were drawn on. These are deliberately broad – for example, they do not specify if a parent works or not – in order not to narrow discussions or shift the focus onto either what households can afford (rather than what they need) or what they 'deserve'. As in MIS, MDLS is intended to be a benchmark for all citizens of this household type, rather than reflecting a specific set of circumstances. Hence the examples used present a family living in an urban area with one or two parents who have children in particular age categories (infant/toddler, preschool, primary school and secondary school) in order to allow discussion of their individual needs as well as those of the whole family. The discussions are also based on the assumption that family members under consideration are in reasonably good health – this is in recognition that health conditions or disabilities can make a difference to people's needs and warrant separate consideration.

Technological goods and services already included in MIS for the household example under discussion were referred to and presented to groups as a starting point, with group facilitators introducing the rationale for the included goods and services as well as their specifications. These pre-existing lists were discussed to explore the degree to which they were appropriate for allowing households with children to meet MDLS and, where necessary, what would need to change. Groups also expanded on the lists of goods and services in MIS to include skills and knowledge that would be vital for MDLS. Other discussions featured infrastructure (for example, experiences of home broadband or connecting to public Wi-Fi).

Checkback stage

The checkback stage comprised three groups with parents and one group with young people. Findings and decisions from the task group stage were presented to the checkback groups for discussion and review, with participants asked to identify any missing or unnecessary items and resolve any instances where previous groups had been unable to agree. The checkback groups brought a fresh perspective to any issues where the task groups were divided or could not make a clear decision. For example, although parents in the task groups said that parents needed more data for their mobile phones, they did not identify an amount of data that would be an appropriate minimum. This was resolved in subsequent groups where participants took into account the views of both the earlier parents' groups as well as information from young people's groups.

Final stage

In the final stage, another set of two groups with parents and one group with young people reviewed the lists of goods and services resulting from the checkback stage and addressed any discrepancies or apparent anomalies arising from previous groups' discussions. The last groups of this sequence brought together parents of a range of ages of children, and a final group with young people to check the lists of goods, skills and knowledge compiled through the process and to have a final discussion on where responsibility lies for enabling people to meet the standard.

All the focus groups were digitally recorded and transcribed to enable thematic analysis of, and reflection on, the discussions that informed the decisions. The resulting list of goods, services, skills and abilities were compiled and organised into categories, which make up the contents of MDLS for households with children and are outlined in detail in Chapter 4.

Ethics

The project was given full ethical clearance by the Loughborough University ethics committee. Participants were given information about the project – including its purpose and what would be involved in taking part – and informed of their right to withdraw from the project at any time. All details were kept confidential and any quotations in the report were anonymised. We used a professional recruitment company that specialised in social research to recruit participants for the discussion groups with adults which were held in accessible venues. Young people were recruited via staff in schools. Groups with young people were held during the school day on school premises. Separate research information

sheets were designed specifically for young people and their parent/guardian, and consent/assent forms were signed in advance by a parents/guardian as well as the students themselves.

The quotations used in the following chapters refer only to 'participant', and where multiple participants are speaking, the number attributed to them (P1, P2 etc.) serves only to indicate the order in which participants spoke within each particular quotation, rather than to identify individual contributors throughout a specific group.

3 Developing the MDLS definition

This chapter presents the MDLS definition developed with the orientation groups, alongside a summary of the discussions that informed its development. The definition is an integral aspect of the research, describing the standard of living that groups will consider when deciding what is needed to reach it. After the orientation stage, the MDLS definition is then presented to all of the focus groups tasked with deliberating on and compiling the list of the resources (including the digital goods, services and skills) required to achieve MDLS. The MDLS definition therefore provided a clear reference point for participants and was at the heart of all the focus group discussions around the contents of MDLS and what was needed for this benchmark.

MDLS definition

A minimum digital standard of living includes, but is more than, having accessible internet, adequate equipment, and the skills, knowledge and support people need. It is about being able to communicate, connect and engage with opportunities safely and with confidence.

As outlined in Chapter 2, the MDLS definition was developed during the first stages of the research (the orientation stage) through deliberative discussion groups involving a broad range of household types, as the definition needs to be relevant beyond this initial study. This comprised four groups with adults including one group with pensioners, one group with working age adults without children, one group with lone and partnered parents with dependent-age children, a further group comprising a mix of these household types, and one group with young people. These groups started with broad discussions around the benefits and challenges of living in a digital world and the implications of digital inclusion or exclusion, before moving onto the task of developing a definition. Several overarching themes emerged from these initial discussions:

The importance and challenges of digital life

- Groups noted the **prevalence** of digital technology across all aspects of life – from work, leisure, shopping, accessing services, to getting around, with young people highlighting its importance in school life as well as socially. Lack of access to the online world therefore inhibits participation in the real (offline) world too.
- Needing to participate in a digital world was **seen as inevitable**. There was a feeling that, like it or not, there was no going back. This was linked to observations of a decrease in non-digital alternatives, for example, loss of in-person services. Groups discussed how the pandemic had accelerated the need to be online and accentuated the difficulties of being left out or left behind.
- The **pace of change** was a recurring issue. Some participants found the move towards digitalisation overwhelming and hard to keep up with – it was *'going too fast', 'I feel like I'm drowning'*. This not only had implications for the risk of being excluded from things, but participants also noted the cost of technical obsolescence and having to upgrade technology, alongside the need to update their knowledge and for some the challenges of having to learn new things.

Overall, groups were clear on the importance of being included in this digital world, and the implications of exclusion.

Nowadays if you want to get anything done, you've got to be able to get onto the internet. And for me, things like that, I found it really, really difficult even to make an appointment, going to bank, trying to sort things out, it was always, go on the website, help, how, where?

(Pensioners Orientation Group, Leicester)

'Everything has technology now, it doesn't matter where you go, what you do, what job, there's always some element of it. And if you don't know how to use it you can be looked upon differently and not get the same opportunities as other people, so that's why it's important'

(Parents Orientation Group, Edinburgh)

In my group we talk about stuff that we see online and the internet and we kind of like relate to what we have been seeing. I think if you don't have that, if everyone around you is talking about it, you kind of feel like the odd one out because you don't know what is going on and what people are talking about.

(Young People Orientation Group, Leicestershire)

It is important to note that people are seldom either digitally included or excluded in a binary way – there is much nuance and there are multiple intersecting aspects to being engaged with technology and sustaining access to the digital world. This understanding of relative digital inequality was highlighted in the orientation groups, which included participants with a diversity of experiences of, and attitudes towards, digital use. Discussions demonstrated how those who were hesitant or resistant to some aspects of digitalisation, such as using social media or online banking, could at the same time feel more positively towards other applications, such as using Google Maps or doing online shopping.

The benefits of digital life discussed in the orientation groups were broad ranging and included:

- Convenience, efficiency and extending choice, for example through access to online shopping, services, information and tools for navigation and getting around.
- Communication and connection. Keeping in touch with others through video calling, social media, entertainment, playing games online and expanding horizons, for example connecting people with shared interests.

A wide range of challenges and concerns were also raised by participants:

- Concerns about online harms, relating to perceived risks from others or what was 'out there' online, such as security breaches, identity theft, scams, distrust of automated systems, mis/disinformation and trolling. In particular, risks for child safety online – grooming, bullying and exposure to inappropriate content – were seen as 'scary' and worrying.
- Potential disadvantages or difficulties for the individual or family were also raised. Participants expressed frustration about the time spent navigating online systems, but also concerns about the extent of time spent online recreationally. The expectation of

people always being available to others online, and the impact of that on family life and wellbeing was discussed. Young people noted pressures associated with navigating social media, getting 'sucked in' by the digital world, having to present a 'perfect' version of their lives online and of regularly seeing filtered images which could affect their perceptions of themselves.

- While parents recognised the importance for children to be included in digital life, they noted the difficulties in finding a balance between setting limits and monitoring activity and giving their child independence and showing them trust.

So they have Instagram or Snapchat but you have no control, you feel like you open a Pandora's box and anything could happen. But you also want to find a balance where your child feels like they can be amongst their friends and not be picked on.

(Parents Orientation Group, Edinburgh)

Agreeing a definition

These broader conversations provided a useful context to then talk to participants about developing a definition for MDLS. As a starting point, participants gave their views on two different existing definitions of digital inclusion/exclusion, before moving on to discuss what should be in a new definition. This led to the MDLS definition being formulated and refined during the latter adult orientation groups, and confirmed in the orientation group with young people.

In line with Minimum Income Standard principles, the definition relates to a socially acceptable minimum, reflecting social, economic and cultural norms. It is based on *needs* (*not wants*) but represents more than survival. When developing the definition, participants were clear that it needed to be multi-faceted. Meeting MDLS is about more than just having devices or an internet connection. As participants pointed out, someone might have a laptop, but if they don't have a sufficient connection or know how to use it properly, then that isn't inclusion. The definition has three aspects felt to be integral by members of the public: equipment, connectivity and skills/knowledge, and in order to meet MDLS, people's needs must be met across *all* of these areas. These relate to what an individual or household needs as well as having implications for infrastructure (the physical and organisational systems that provide digital services).

- Devices and online connection have to be adequate and fit for purpose to perform the tasks for which people need them. This has implications for the number of digital devices households need, the features and condition of digital devices and the types of data and broadband packages required.
- People need the skills, knowledge and understanding not only to be able to use devices effectively and confidently, but importantly to do so safely. This relates to concerns expressed around online harms and minimising risks, and what to do when things go wrong. Reflecting group discussions, the definition recognises that this may require support and this will vary depending on people's different needs – so should be tailored to the individual and could range from receiving formal training to being able to access suitable information when required.
- Reflecting MIS, the MDLS definition relates to what people need in order to feel included, and participate in the (digital) world around them, so they can connect,

engage and not miss out on opportunities, for example, work, education, keeping in touch, services, thus grounding the definition in everyday life.

Participants felt that the definition provided a 'real world view' of what people need for digital inclusion and what the outcome is.

P1¹: So if we take an example of laptops and education, like yeah, you can have those things and they might be accessible, but you need to be able to use them as of like a means to an end, for lack of a better phrase, as in like they need to be able to achieve on-line lessons or the completion of homework or blah blah blah, and if you have like the hardware, you have all those things but you still can't use it to do what you need it to do, whether it be order a PCR test or whatever then are you included?...

P2: You can't have one without having the other....

P1: But to be able to have the accessibility, you need it all.

(Working age Orientation Group, Southampton)

It is worth reiterating that this process is about establishing *needs*, and meeting these needs and reaching MDLS depends on access to a range of resources. Affordability is crucial to people being able to meet their digital needs. However, while what is affordable will vary from household to household and over time, whether someone has sufficient financial resources or not, their needs, in theory, remain the same. Hence, affordability alongside other factors, such as location (for example, rurality) and access to infrastructure (for example, reliable Wi-Fi, mobile signal, services, support), can affect the *ability to meet* digital needs and MDLS, rather than the needs themselves.

I think what this is about is just saying what is the standard so that anyone and everyone, what do they need to get through life now? It's not like what budget you've got.... Whatever we do, whether we work, we're in school, we're retired, we're just setting the standard of what do we need to live nowadays.

(Mixed Orientation Group, Swansea)

¹ Where multiple participants are included in a quotation, the number attributed (P1, P2 etc.) indicates the order in which people spoke in that particular extract, and does not relate to individual contributors within a specific group throughout the report.

4 Minimum Digital Living Standard contents for households with children

This chapter outlines the contents of the MDLS basket for households with dependent-age children based on the decisions of task groups, checkback groups and final groups with young people and parents. It also draws on discussions from the groups to give an insight into the reasoning behind their decisions. The contents of MDLS are organised into three components:

- Digital goods and services
- Practical and functional skills
- Skills and knowledge for digital safety and confidence

The content of each of these components is detailed below – outlined at the beginning of each section with a summary included at the end of this chapter (Table 1).

Digital Goods and Services for a Minimum Digital Living Standard

Groups considered the types of goods and services required to enable households with children to reach an acceptable Minimum Digital Living Standard (MDLS), and how these requirements would change with the age of the child or number of children in the household. In discussing what was needed for MDLS, groups emphasised the increasing move of services online, which included not only health and banking services but also school, with homework and contact between schools and parents becoming significantly more digitalised, especially during and since Covid-19. Groups said that now, more than ever, parents and children needed to use digital technologies to go online.

[Daughter's] nursery on Google Classrooms were like, has she got a spare change of clothes, has she got wellies. Every question you're having to go on to Google Classroom.
(Parents Checkback Group, Norwich)

You get homework set online and you have to do it online, like Doctor Frost and Quizlet.
(Young People Task Group, Leicestershire)

We're in a digital society, aren't we? We are talking about minimum standards...everyone has got to have that, you know, from logging your gas and electricity bill online now all the way to getting your prescription, it is just life. So everyone has got to understand it
(Parents Final Group, Liverpool)

Parents with children as young as three years old said that preschools were introducing children to educational touchscreen games to be accessed at home via classroom apps such as Seesaw - such activity being undertaken with a view to preparing children for primary school. Participants also described their experiences of the increasing prevalence and normalisation of the digitalisation of everyday services and interactions, for example, such things as ordering food at a restaurant or paying for car parking via phone apps. These experiences informed groups' decisions of what types of goods and services an MDLS basket would need to include, described below.

Broadband

- **Home broadband – with sufficient reliability and speed to support multiple family members to access the internet at the same time.**

Home broadband was included as a core component of the basket of digital goods and services for households with children. Groups described broadband as a prerequisite for use of devices at home, essential for family members to access entertainment, information and opportunities. Groups said that lacking an internet connection in the home, or having an unstable connection, would greatly disadvantage households with children. For example, it was observed by participants that since Covid-19, video calls were more frequently used, and were a part of everyday life, with people using them in a personal context as well as for work and other more formal interactions such as online parents' evenings.

You could have whatever laptop you want but making sure the internet quality is good...has got to be key...to be able to hold conversations on the internet is key.

(Parents Task Group, Bristol)

Groups also pointed to the ubiquity of smart devices in the home. They mentioned, for example, that televisions without built-in smart functionality are becoming a rarity. With so much of life being online, and with so many devices using an internet connection, groups agreed that an adequate home broadband connection would be one which was stable and fast enough to enable all family members to be online at the same time, and which would allow family members to access the internet via a range of devices. This has implications for the speed of internet needed, as the required broadband speed would vary depending on the size of the household and how it is being used. Given the types of devices groups felt that a family needs for MDLS (see below), an internet connection might need to support the multiple demands of gaming and live streaming as well as video calls, accessing digital TV or music, internet browsing and/or online shopping. Groups noted the difficulties of having insufficient speed, where lagging or buffering inhibited their internet use, for example, video calling, or gaming, which affects their ability to participate socially and use technology for work and educational purposes. Some groups did discuss various internet speeds and what might be considered reasonable (for example, some groups said that 67MBps would be a good provision for many households). However, a key issue that arose during these discussions related to whether households are able to access adequate internet speeds, and barriers to doing so, including infrastructure (these are discussed in Chapter 5).

If mine drops, Facebook goes off, I can't watch Netflix. You're just going to be stressed and angry that you can't do anything.

(Parents Checkback Group, Norwich)

Smart Phone and Data

- **An entry-level smart phone per parent and secondary school age child and 5GB data a month, each.**
- **Plus an additional 3GB of data per month for parents of a pre-school or primary-school age child.**

Parents and young people said that the prevalence and normalisation of online services and communication meant that access to the internet whilst out and about and away from home broadband was critical. They therefore described the smart phone and data as vital for people's participation in the world around them, and especially for their social inclusion. Parents and young people alike talked about the risk of exclusion which could result from, for example, not engaging with online messaging groups, as shown in the excerpt below:

P1: Some children in my son's rugby team, their parents are not on the WhatsApp group thing, so sometimes those kids miss out on the games or whatever because their parents haven't received that information because the coach forgot...that they were just not included in that group.

P2: That's happened to me as well...I've got Facebook just strictly...to get on to my daughter's school Facebook page because there has been events where like because of Covid, we never got to get school photos, so they did it all on Facebook, saying that they're going to create school photos...and because someone told me about it, I got onto the page. But there was some parents that got their kids missed out of their group school photo.

(Parents Orientation Group, Edinburgh)

The smart phone and data were also considered crucial for family organisation and opportunities. It was important for parents to be able to access school apps on the go and outside the home because there was an observed expectation from schools that parents would receive and respond to information delivered online. This rationale was intermixed with the time pressures associated with parenting, and parents talked about the need to coordinate school and family life while attending to other parenting responsibilities outside of the home.

You could wait till you get home, but often I'm sitting two, three hours in a dance class ...so I do these things, I pay what I've got to pay and I sort out my appointments, I go through the kids' school apps and pay for school trips, I do it then ... otherwise it would be eleven, twelve o'clock at night

(Parents Checkback Group, Norwich)

Groups also said that children needed a smart phone and data by the time they went to secondary school, as they would be travelling and socialising independently. The need for a smart phone and data was therefore partly about the child's safety, allowing the child to contact their parents, as well as about accessing the applications needed for travel, for cashless payments, accessing bus timetables and so on.

In primary school, you're more dependent on your parents and carers...when you get up to secondary school, you're less dependent on them, like you can walk to your friend's house after school or something and then, after a few hours you need to text your parents

to come and pick you up...I think another factor could be in case, like at the end of year six if someone is walking to school by themselves there could be a need for a phone just in case something happens.

(Young People Task Group, Leicestershire)

The smart phone and data were also considered essential for the social participation of young people, not only enabling them to keep in touch with their friends and relatives via online messaging, but also to be able to access the same online content and thereby sharing cultural reference points with their peers, even when interacting offline.

Groups considered an entry-level smartphone to be adequate to meet MDLS for parents and secondary-school-age children. They agreed that to meet a minimum acceptable need the smart phone didn't have to be a particular brand, as long as it had the functions and capabilities required for the tasks they needed to do. For example, an entry level phone with 32GB of device memory and 2GB of RAM, was seen as acceptable, with an expectation that it would need to be replaced after two years to maintain its functionality.

Having sufficient mobile data was seen as fundamental to ensuring that families could access what they needed for completing important everyday tasks, staying safe and interacting with others. Group decisions on the level of required mobile data centred around the agreed principles that the data allowance needed to be high enough to make it possible to use it for day-to-day tasks without the worry of running out of data – but at the same time, as a minimum, it was reasonable to expect people to monitor and manage their data usage, including young people using their own phone (having the skills to do so is discussed in Chapter 5).

P1: I would worry if like ... because sometimes it will come up and say I've used 2 GB and I think, oh my God what have I got left?...There was a point where I did only have 3 and it constantly come up every single month, you've got like 500 megabytes left, and at that point, I'd turn the data off, turn everything off!

P2: And you do panic in case you need it for something.

(Parents Checkback Group, Norwich)

In order to meet MDLS, households should have access to reliable home broadband, hence discussions about the level of mobile data were predominantly around the need for online connectivity when out and about. The inclusion in MDLS of at least 5GB of mobile data per month each for parents and secondary school age children assumes data being used in combination with a stable home broadband connection. The agreed level of mobile phone data related to personal use rather than tasks related to employment, based on the assumption that an employer would provide a phone or data if it was required for work purposes.

Although younger children of pre-school and primary-school age do not have their own phone in MDLS, the groups felt that some allowance for extra data acknowledged that they may access the internet on the go (for example, while travelling in the car or joining adults on a shopping trip), whether through the use of their parent(s)' smart phone or through another device tethered to the parents' phone. The 3GB of data included in MDLS for

younger children was viewed as a flexible resource, which could be added onto the parents' data to increase their total monthly data or used on a SIM with an old mobile phone handed down, for example when a parent replaced theirs.

Laptop/Tablet

- **An entry-level laptop per household – parent(s) and first child share one device.**
- **Plus an additional device for every further school-age child.**

Groups acknowledged that while smart phones enabled people to do many things, it was also important for the MDLS basket to include a laptop because of the additional functionality this provided, especially to enable school-aged children to complete schoolwork.

A phone is a lot smaller than a laptop so sometimes a laptop is easier, and then things like Word, they are a lot easier to type up on a laptop compared to a phone, it is just a bit quicker with a keyboard.

(Young People Final Group, Leicestershire)

When discussing the requirements for a laptop, decisions were made on the basis of it being for personal use and for homework. *Groups agreed and therefore MDLS assumes that parents needing a laptop for their work would have equipment provided by their employer rather than using the personal family laptop.* As within the MIS research, groups agreed that, as a minimum, households with one child could share a laptop between them, but a further laptop would need to be included for each additional school-aged child.

Groups deliberated on the specifications of the laptop with the overall decision that this could be an entry level device. For example, a device with at least 64GB of storage, 4GB of RAM and an 11.6-inch screen was felt to be suitable for everyday personal and school use, such as word processing, searching the internet and streaming videos. It was acknowledged that in particular circumstances a higher specification would be required, for example if young people were studying graphic design or had more advanced computing needs, but groups felt that the level specified above served as a minimum for everyday use. Groups said that the lifetime of the laptop was important for its functionality. They agreed, on this basis, that a laptop of the above specifications should be replaced every three years. The same resource could also be used to cover the cost of a tablet instead which, especially for younger children, might be more appropriate in terms of ease of use according to participants in the parent groups.

Television and TV subscription service

- **A smart TV, 32-inch screen**
- **A basic TV subscription service and TV licence**

The MDLS basket includes a smart TV for social participation and entertainment. Its inclusion would mean that family members would not be limited to viewing content on a laptop and could watch TV together or with visitors. Groups agreed that a 32-inch screen, as originally presented from the main MIS basket of goods and services, would be the minimum adequate level to meet the needs of households with children, and that the TV would last for 10 years. A TV licence was also included as a legal requirement to access BBC content.

In recent work for the main MIS, a streaming service, such as Netflix, was added by groups to reflect the changing norms around how people access content and watch TV: 'it gives you freedom to actually choose what you want to watch'. Groups within the MDLS research agreed that, as a minimum, an entry-level, single-screen subscription such as a Netflix subscription would meet the needs of households with children.

P: My teenagers love Netflix and all their friends are, what are you watching on Netflix? And it's all about keeping up with the other children isn't it.

Q: So if they didn't have Netflix, what impact would that have?

P: Just being left out of conversations at school

(Parents Task Group, Milton Keynes)

Smart Speaker

- **A basic smart speaker**

A basic smart speaker was also included as a means of listening to music and radio on a standalone device in the most recent MIS (2022). While MDLS groups did not necessarily see a smart speaker in itself as being necessary for digital inclusion, its inclusion in MDLS is based on changes relating to the ways in which people consume media, with access to music or radio now commonly involving digital technology. Although some needs met by a smart speaker could also be met by a digital radio or a standard speaker, groups felt that the similarity in price between an entry-level smart speaker (for example, an Amazon Echo Dot) and a digital radio, and the additional functionality of a smart speaker, justified its inclusion in the MDLS basket. Specific to parenting, groups said that the ability to use a smart speaker to set reminders and timers as a digital way to organise and coordinate family life was especially beneficial.

Console and Online Gaming Subscription

- **A console and an online gaming subscription for households with school age children**

A games console is included in MIS and MDLS for households with primary or secondary school age children. MIS participants have suggested that a second-hand console would be adequate to meet children's needs, but a subscription would be necessary to enable online gaming with others. Having the ability to participate in gaming online was often seen as especially important for the social needs of school-aged children – communicating with friends, being involved in networks and the risk of feeling left out if they could not do so. Groups agreed that school-age children therefore need a games console and an entry-level subscription to enable multiplayer online gaming.

Now if I'd have said to you Xbox, PlayStation, is it desirable or essential, most people would say, oh it's absolutely desirable. But during Covid, and just learning from my younger boy, there's a thing called Xbox Live where you're able to play with your friends and talk with your friends, and during lockdown if he didn't have that, he would have really felt like he was missing out. And I just think how much tougher it could have been for him if he didn't have that Xbox Live, you know, because people would just see it as oh it's just desire, he doesn't need that, but you can argue the case that no, it is essential.

(Mixed Orientation Group, Swansea)

Headphones

- **A set of headphones for a school-age child.**

A set of headphones are included in MDLS for primary and secondary school-age children. Parents and young people felt that they would be useful in several ways: to cancel background noise for a child doing homework on a laptop; when they are gaming to minimise the noise for others in the home; or to use with a mobile phone for privacy or listening to music. Groups felt that entry-level over- or in-ear headphones would be adequate.

Skills and Knowledge for a Minimum Digital Living Standard

Throughout the research, it was clear that goods and services alone were not sufficient to meet the needs of households with children. Rather, reaching MDLS would require a set of skills to ensure that people could use devices and digital services confidently and safely, as set out in the definition of MDLS.

Groups worked to compile lists of the skills and knowledge parents and children would need to achieve MDLS. These are presented in two broad categories: practical and functional skills for everyday tasks and activities; and skills for understanding and managing risks. When describing and listing skills, groups often discussed the types of functions parents and young people would need to be able to perform in order to use technology and engage online. However, it was also clear that knowledge, understanding and the ability to evaluate, for example, the quality of information or the risks of digital spaces, were equally vital elements of what it means to use devices and the internet skilfully and confidently.

In this chapter, therefore, the term 'skill' is used to encompass all of the elements described above, including functions that can be executed as well as the knowledge and understanding informing those functions and the critical thinking, evaluation and assessment needed to avoid digital risks.

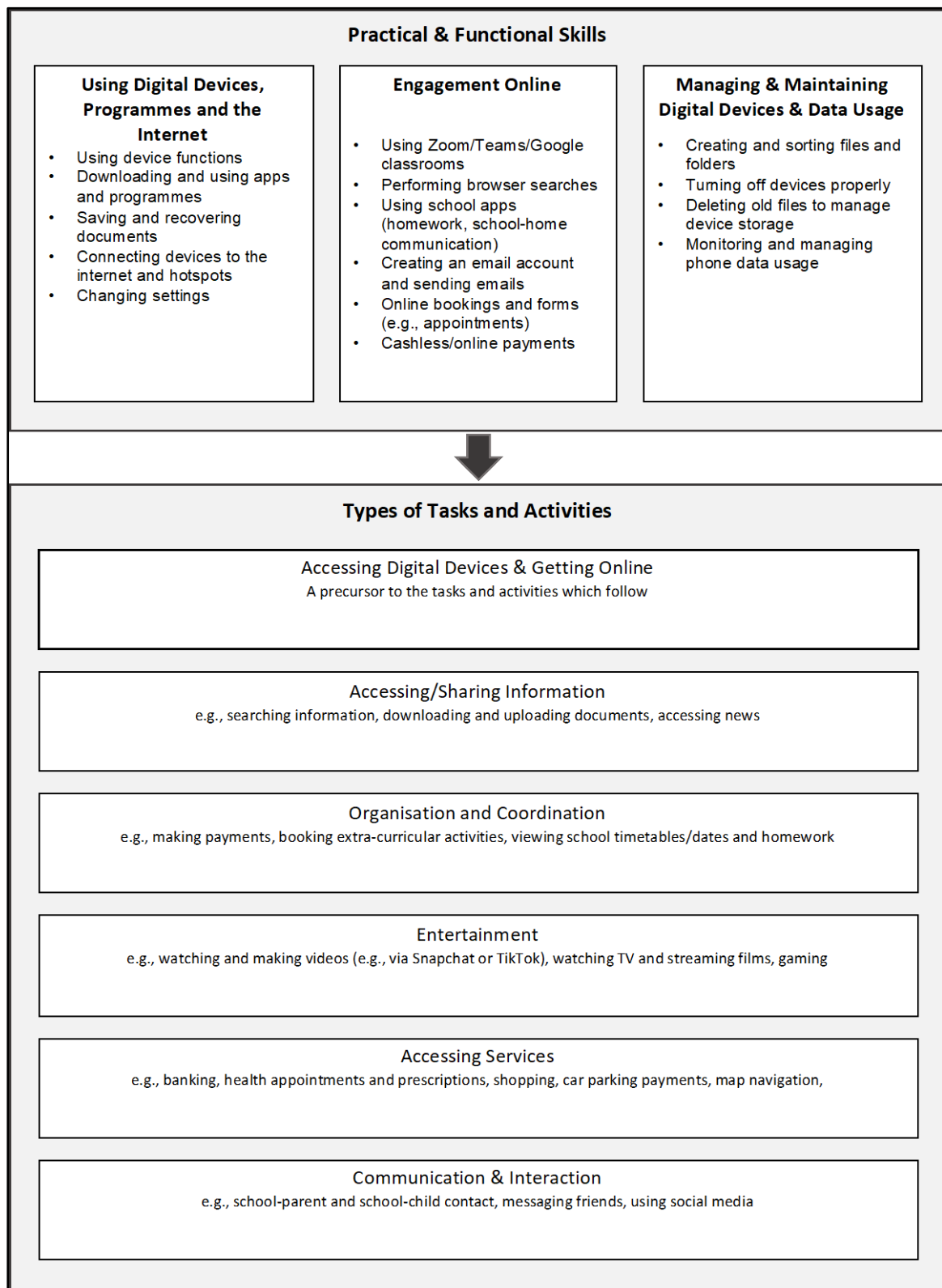
Groups described the skills covered in this section as necessary for young people as well as parents, but they were clear that acquiring and needing particular skills was dependent on the age and stage of the child. Groups said that parents needed all of the described skills, although they highlighted the challenges linked with acquiring skills, such as parental time constraints and of feeling 'out of touch' and unable to keep pace with aspects of the digital world (see Chapter 5 on barriers for full discussion).

Practical and Functional Skills for Everyday Tasks and Activities

Groups identified a list of skills that would be necessary for everyday use of the types of devices included in MDLS. These practical or functional skills are organised into three groups: 1) using digital devices, programmes and the internet, 2) engagement online and 3) managing and maintaining digital devices and data usage. The list of skills agreed upon by groups centred around the types of tasks and activities a household would engage in so that different family members could not only access the digital world, but also perform tasks online which had real-world implications for their everyday lives (see Figure 1 for a map of practical and functional skills and their relevance to everyday tasks and activities). The links

between skills and the list of tasks are outlined below, from the perspective of parents and young people.

Figure 1 Map of practical and functional skills and the types of tasks and activities they enable parents and young people to undertake



The Importance of Being Able to Use Digital Devices, Programmes and the Internet

Parents and young people said that being able to use digital devices, apps and programmes and understanding how to connect a device to the internet was fundamental to performing any online tasks or activities. This category of skills was about using the functions of devices, changing settings, knowing how to download apps to different devices and being able to create, save and recover documents.

As soon as you start, like, getting set online homework...you want to know how to save it, so you don't just do the homework and then just delete it, you want to be able to keep it, put it in a document or put it in the cloud and then you can access it...if something does accidentally lose something, to know where it goes when it is deleted and if you can get it back or not.

(Young People Final Group, Leicestershire)

As noted above, groups discussed the age or stage at which young people would need particular skills (with the assumption being that parents would need all of them). Groups said that if preschool children used devices, they would mostly look to older family members, such as parents or siblings, for help operating those devices, although it might be useful for the child to have an understanding of some of the basic device functions, such as volume control. Groups said that the skillset of the child would need to expand as the child developed and progressed through school. For example, groups said that a child in Key Stage 1 (aged 5-7) would need to be able to operate different apps for example on a tablet or parent's phone, while functions such as downloading apps or saving and recovering documents would be necessary for a child in Key Stage 2 (aged 7-11), as they are expected to use devices and the internet more independently for schoolwork. Older children, as they progress through secondary school (aged 11-18), would need to develop the skills to change programme and device settings. Similarly, children's needs to connect devices would change as they moved from using shared digital devices at home to using their own when out and about (for example, using Wi-Fi or connecting to a hotspot).

Using Digital Technology to Engage Online

Given the wide range of tasks and activities for which technology was described as necessary, groups discussed the set of skills that family members needed in order to access services, to interact with others and to find out information, as well as for entertainment. This category groups together the types of skills which define the meaning and purpose of technology for households with children in a digital age.

As education was identified as a significant area of life for households with children, it featured again when groups discussed the skills categorised here for family online engagement. Groups said that having the skills to be able to download and use interactive platforms such as Teams, Zoom, Google Classroom and Tapestry (as well as other school communication apps) was vital for children's educational development and school-home contact. They said that these platforms had become well-established during Covid-19 and have remained in use since. For example, parents said that video conferencing software and apps were still used by schools for parents' evenings. In particular, groups pointed to the

importance of using the internet for submitting homework online and keeping up to date with school notices:

My phone and my iPad, I live off them for school because that is where I have got all of my emails, all of my work content is there as well. A lot of lesson plans are sent there because our school, in particular, is digitalised.

(Young People Group, Derbyshire)

You're expected to be able to, like, email your teachers if you don't know how to do a piece of homework or something.

(Young People Final Group, Leicestershire)

For my kid's school, they have got, like, an app, and they send, obviously, all of the letters, instead of sending them home a letter, everything is on the app.

(Parents Final Group, Liverpool)

Groups therefore identified that families needed to be able to use the range of educational and communicative interfaces mentioned above, as well as other more general online engagement, with the extent of skills required of children depending on their age. For example, groups said that children in Key Stage 2 would need to develop the skill to be able to upload homework or download and complete school tasks more independently. This could include using online browsers to search for information on the internet. Meanwhile, younger children engaging in similar school tasks digitally would be more reliant on older family members for support. Older children progressing through secondary school would need to be able to set up an email account and send emails, as another form of teacher-student contact, as well as to access opportunities (for example, to apply for jobs or work experience). Young people in particular highlighted the importance of developing skills for communicating professionally with a view to developing as young adults and entering the working world. Out and about, groups also said that young people of secondary-school age would also start to carry and use their own bank account card or use their phone for cashless payments (for example, when travelling on the bus).

Groups said that parents, as adults in the household, needed all the listed skills and discussed examples of the tasks and activities requiring digital skills which are part of everyday life now. Those examples included needing to complete online bookings and forms (for prescriptions, appointments or leisure activities), to manage and monitor banking online, to make online and cashless payments for goods and services, to search for information, and to use comparison sites, navigation and parking apps. As well as skills required for their own engagement online and managing the household, parents noted the need for digital skills specifically associated with parenthood. This included supporting their children's schooling and education, engaging with school apps and managing the online tax-free childcare system.

Managing and Maintaining Digital Devices and Data Usage

Groups identified that parents and young people also needed the skills to be able to maintain their devices, storage and data usage so that they could get the most from technology and continue to use their devices for the types of tasks and activities outlined above.

I think everyone should know how to optimise your computer, but no one does, and you're not told because you'll go and buy a new one when it starts playing up.

(Parents Final Group, Liverpool)

The ability to maintain devices was primarily about family members being able to monitor storage and knowing how to free up space when this was full (mainly by deleting old or duplicated files). Groups said that children in Key Stage 2 would need to begin developing this skill. Some participants also talked about the importance of understanding that devices, such as laptops, should be shut down properly to avoid software issues. Given that MDLS includes a laptop that would be shared between multiple family members, participants also said that the family would need to know how to organise document folders in order to avoid family members accidentally deleting or moving each other's files. This was regarded as an especially important skill among secondary-school-age children in the lead up to GCSE exam preparation.

Similarly, although groups included different amounts of mobile data (of *at least* 5GB per month for parents and secondary school-age children, and *at least* 3GB per month for preschool and primary school-age children) that they agreed were acceptable for MDLS, one of the caveats to this was that parents and young people would need to have the skills to monitor and manage their data usage. Groups said that strategies for managing data could include downloading video and gaming content when at home for use outside the home, or deciding which apps and content to access and when (for example, limiting live streaming). Groups said that the ability to manage and monitor data was important for secondary school-age children as this was the age at which a child in MDLS would have their own smartphone. Parents agreed that managing data usage was important but did not all think that young people would accept a data allowance that they needed to monitor. However, young people themselves acknowledged that it might be hard at first to keep track of data usage, but felt it was reasonable to be expected to have the ability to do so once they got used to having their own phone:

P1: I think, at fourteen, you would be capable of knowing I have not got much [data] left, I am not going to watch this hour-long YouTube video because I will save it so I know I have got enough to get home or whatever.

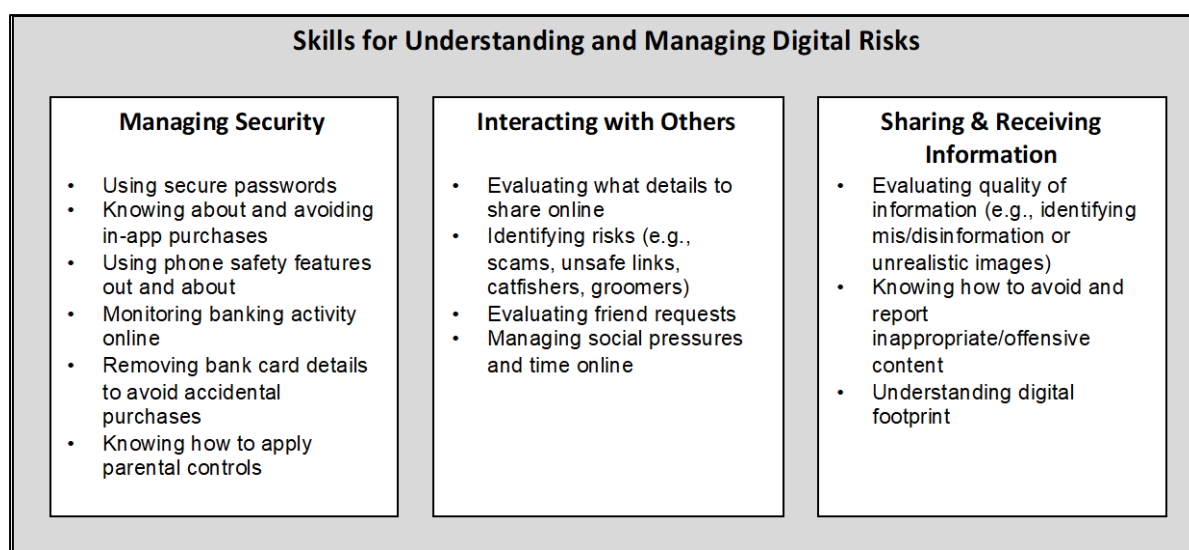
P2: If they are 14 they are a teenager, so their parents obviously should look after them but they can also, like, think for themselves...they know that they need to save [their data] and can't just waste it because it is a waste of money as well.

(Young People Final Group, Leicestershire)

Skills for Understanding and Managing Digital Risks

Throughout the groups, participants mentioned the potential digital risks and discussed concerns about digital safety. In addition to a general wariness among participants of things going wrong online or of being scammed, a key concern voiced by groups, given the focus of the research on households with children, centred around the potential risks and harms for children and young people. It was therefore the intention to consider what families would need in order to be able to understand and manage digital risks and engage in the digital world safely and confidently. The skills for understanding and managing digital risks are organised into three categories: 1) managing security, 2) interacting with others and 3) sharing and receiving information (see Figure 2).

Figure 2 Skills for Understanding and Managing Digital Risks



Managing Security

This category of skills includes understanding digital risks and the actions that family members would need to take to mitigate potential harm which could threaten an individual's privacy and security. For example, groups identified that families' awareness of scammers, hackers and identity fraud was crucial, and would inform preventative actions such as creating secure passwords. Creating a password with sufficient security therefore required multiple levels of skill, in the sense that it would require a person to a) know why a secure password was necessary (identify the risks), b) know what characterised a secure password and c) be able to use that knowledge, combined with functional skills, to create a secure password. Groups said that children needed to develop this skill as they progressed through Key Stage 2 on the principle that they would be using devices and the internet more independently.

Other issues of security discussed by groups included making accidental online purchases. While groups felt that, ultimately, parents needed to be able to remove their card details from apps (for example, to avoid unintended in-game purchases), it was also important that children, by the time of reaching Key Stage 2, understood, when buying coins or different 'skins' for game characters, that these transactions would cost real money. Young people said that, since a child of secondary school-age could have their own bank account and bank

card, they would need to develop the skill to monitor their banking activity, with the inherent requirement that they would also need to develop an understanding of risks associated with online payments, such as banking fraud.

Staying Safe When Interacting Online

Groups shared positive experiences of interacting with others online, but they also highlighted that there were risks associated with, for example, online multiplayer gaming and socialising on social media.

The game console is good...because it will keep you connected with friends, but my opinion is it will need some sort of like parental restriction or something because, like on lots of games nowadays there is adults talking to children who aren't supposed to be talking to children in the ways they are, because most games allow headphones and they can just talk to like... enemies and there is lots of vile language which then... which then it sometimes can lead to bullying on certain things.

(Young People, Task Group, Leicestershire)

I hear my nieces talking and they have friends, twelve years old, who have over 400 followers...on TikTok. That is terrifying, absolutely terrifying. You don't know who's looking at them.

(Parents Task Group, Belfast)

So, my...son's nearly twelve, he's at secondary school. He had all the social medias when he first started...and a lot of them, bullying was involved.

(Parents Task Group, Sheffield)

Groups identified risks such as scammers, catfishers and groomers, and said it was important that different family members had an understanding of these risks when interacting online. As adults, the parents identified their own exposure to digital risks too, reporting, for instance, experiences of receiving fraudulent emails containing suspicious links or fake friend requests on Facebook.

Groups agreed that parents and children needed to employ their understanding of digital risks to take the necessary steps to manage and mediate them, and again what this meant for children was age- and stage-dependent. Groups said that children in Key Stage 1 needed to understand that it could be dangerous to share personal information online, such as their surname, address or the name of the school they attended.

Groups also identified digital risks that could affect a person's mental health and wellbeing. Young people in particular discussed the social pressure which could be felt when interacting with others online, either because they felt the need to portray a 'perfect' version of themselves and their lives, or simply because they felt it was expected of them to reply instantly to private messages. Parents and young people noted that devices could be 'difficult to put down' or 'step away from'. Groups felt that these challenges could affect the wellbeing of parents as well as children, including how they felt about themselves. Although all groups agreed that managing online pressures was challenging for all ages, young people said that Key Stage 2 was the point at which children might interact online more

independently and would therefore need to begin developing their skills around online interaction and monitoring their own time online.

Although MDLS includes a mobile phone for children by the time they start secondary school, usually age 11, its inclusion does not imply that groups thought that all children of this age should have access to social media platforms below relevant age restrictions. Participants in the young people's discussion groups included those below and above the age recommended as suitable for use of apps such as WhatsApp, Snapchat and Instagram. From group discussions (and wider research- e.g., Ofcom, 2021), it is clear that some children have access to social media from a younger than recommended age, and therefore the skills to help understand and manage its use and risks will be required.

Sharing and Receiving Information Safely and With Confidence

Groups said that access to information was a significant advantage of the internet and the digital age, yet they were also concerned about mis/disinformation. They felt that having an awareness of mis/disinformation was important when viewing online content, and acknowledged that individuals would need skills including the ability to think critically and to factcheck so that they could be better able to evaluate the veracity of received information.

Groups said that it was important that family members knew how to avoid seeing harmful content online. For example, they said that parents needed to be able to apply parental controls to different devices and browsers if they chose to. In the event that a family member saw something harmful or experienced a harmful interaction, groups said that the individual would need to know how to report it and to whom.

Groups also discussed the need for family members to understand that the information sent and shared online could be discoverable in the future, even if they deleted it. This was referred to in groups as 'the digital footprint':

Epecially for the older children, who are fifteen, sixteen, [the digital footprint] can affect their career in years to come. Because employers can look at that...When they get to secondary school they have got to start thinking about after secondary school...

(Parents Final Group, Nottingham)

The implications of the digital footprint were particularly emphasised in the context of young people because they were growing up in the digital age and could therefore be more likely to share information online which they might be embarrassed about in the future.

Summary of MDLS contents

Table 1 summarises the range of goods, services and skills which are needed to enable households with children to meet MDLS and feel included in the digital world around them. A significant aspect of MDLS is that it is holistic and highlights that digital needs are interrelated. Reaching MDLS involves a combination of needs and specifications to meet those needs. For example, MDLS requires not only mobile data but also an adequate home broadband connection; it also requires not only the appropriate level of goods and services to carry out the tasks and activities families need, but the skills and understanding to use them safely and confidently.

Table 1 MDLS contents for households with children

DIGITAL GOODS AND SERVICES		PRACTICAL AND FUNCTIONAL SKILLS		UNDERSTANDING AND MANAGING DIGITAL RISK			
Home Broadband	<ul style="list-style-type: none"> With sufficient reliability and speed to support all family members to access the internet at the same time 	Using digital devices, programmes and the internet	1	Using device functions	Managing security	3	Using secure passwords
Mobile Phone and Data	<ul style="list-style-type: none"> An entry-level smart phone per parent and secondary school age child + 5GB data per month each An extra 3GB of data per month if they have a child of pre-school or primary school age 		2	Using apps and programmes		3	Knowing about and avoiding in-app purchases
Laptop/ Tablet	<ul style="list-style-type: none"> An entry level laptop per household – parent(s) and first child share one device An additional device for every further school age child 		3	Downloading apps and programmes		4	Using phone safety features out and about (e.g., 'triple tap' or 'SOS')
Headphones	<ul style="list-style-type: none"> A set of headphones for school age children 		3	Saving and recovering documents		5	Monitoring banking activity online
Television and TV Subscription	<ul style="list-style-type: none"> A smart TV, entry-level 32 inch screen An entry-level TV subscription service (e.g. Netflix, Disney+) in addition to a TV licence 		3	Connecting devices to the internet/hotspots		5	Removing bank card details to avoid accidental purchases
Smart Speaker	<ul style="list-style-type: none"> An entry-level smart speaker 	4	Changing settings		<ul style="list-style-type: none"> Knowing how to apply parental controls 		
Gaming Console and Subscription	<ul style="list-style-type: none"> A gaming console and an entry-level online gaming subscription 	Engagement online	3	Using Zoom/Teams/Google Classrooms	Interacting with others	2	Evaluating what details to share online
		3	Performing browser searches	2		Identifying risks (e.g., scams, unsafe links, catfishers, groomers)	
		4	Using school apps (homework, school-home communication)	3		Evaluating friend requests	
		5	Creating an email account and sending emails	3		Managing social pressures and time online	
		5	Online bookings and forms (e.g., appointments)				
		Managing and monitoring digital devices and data usage	2	Creating and sorting files and folders	Sharing and receiving information	3	Evaluating quality of information (e.g., identifying mis/disinformation or unrealistic images)
			2	Turning off devices properly		3	Knowing how to avoid and report inappropriate/offensive content
			3	Deleting old files to manage device storage		4	Understanding digital footprint
			4	Monitoring and managing phone data usage			

Skills
The skills outlined above are needed by parents, and symbols indicate the age/stage by which children need to begin developing these skills, according to parents and young people.

1 Pre-school 2 Early primary school 3 Late primary school 4 Early secondary school 5 Late secondary school

The goods, services and skills listed in the table present what groups felt was **needed** for reaching MDLS. However, MDLS does not set out **how** these needs should be met, nor what should be **provided** by any organisation or government body.

5 Reaching MDLS – perspectives on barriers and responsibilities

In the process of discussing the necessary goods, services and skills for digital inclusion, groups highlighted several common barriers that families could face to obtaining the resources identified as necessary for meeting MDLS. First, obtaining the equipment and connectivity included in MDLS requires sufficient financial resources, and groups noted that affordability would be an issue for some families. Second, groups reported barriers to acquiring an adequate broadband connection, describing different experiences of internet service provision depending on their geographical location and even the type of housing they lived in. Third, barriers to acquiring skills were identified, an issue which groups felt was especially relevant to adults. In addition to identifying these barriers, groups discussed MDLS in the context of responsibility and the need for the involvement of multiple actors and stakeholders in people's ability to meet MDLS.

The Cost of Meeting MDLS

When compiling the list of contents for MDLS, task groups, checkback groups and final groups focused on what people would *need* rather than what they could *afford*. Yet, broader discussions about barriers to MDLS did highlight access to financial resources as crucial to the ability of families to meet digital needs. This was discussed, particularly in the orientation groups, in terms of the cost of purchasing devices and internet connection, with implications that people might be left out if they could not afford to buy or replace items or services. Some participants noted that this would add to the exclusion of already disadvantaged households, as highlighted in the extract below where participants talked about the challenges of low incomes and purchasing digital goods:

P1: I'm on a very, very limited budget and income and these things don't come cheap, do they? I'm not being a moaning Minnie now, but you've got to sort of budget your money.

P2: And if you haven't got these things and you come from a background where your parents you know haven't got the money to spend to buy all these things, it can be really embarrassing for children, you know, as well as the fact that they're not being included in things. That can have like a detrimental effect, that can, and again be looking at then a massive gulf between advantaged children and disadvantaged children.

(Orientation Group, Swansea)

Participants discussed the fast pace of change, the obsolescence of digital goods and the need to upgrade devices as a source of financial pressure and frustration if households found themselves having to manage with devices of diminishing functionality.

You constantly upgrade them. And you are paying a lot of money all the time, because the faster you want it, you have to pay more money for it. So, all these things are included as well, like you can't afford to pay every time. And if your phone is old and your computer gets slower, you are stuck, sometimes you can't finish everything what you are doing.

(Orientation Group, Leicester)

Covid-19 was also seen as adding to digital needs, with devices, such as a laptops, becoming essential. Groups described Covid-19 and the emergence of additional digital needs creating

new pressures where devices less frequently used before the pandemic were no longer up to the tasks they needed to use them for.

Suddenly when you're in lockdown and you've got this scabby old laptop that's, I think it's ten years old, it's not compatible with this programme, I cannot open this PDF, I've not got whatever it is, Adobe that opens it. And then it became a problem, we had to get a computer from the school, so's my daughter could learn, because whatever it was in that programme didn't run on our old dinosaur thing. So yeah, in the last couple of years it's become apparent that what I thought was enough isn't quite up to scratch.

(Orientation Group, Edinburgh)

Furthermore, discussions around financial pressures highlighted the need for a holistic approach to digital inclusion and that the different aspects of MDLS would be required to meet needs. For example, one participant said that although some children had been given devices during Covid-19 lockdowns, their digital needs could still remain unmet because their parents could not afford internet connection.

Twelve months ago when children weren't allowed into school, the government were providing laptops etc., etc. Charities were buying laptops to give to schoolchildren who hadn't got access to them, but they still needed access to the internet and Wi-Fi, and some of them couldn't even afford that. So, although they had the ability to do it, they hadn't got that cost built in to carry it out.

(Orientation Group, Southampton)

Barriers to Acquiring an Adequate Broadband Connection

Accessing home broadband with a stable connection and adequate speed was fundamental to MDLS, and was needed to allow families to engage in a variety of tasks simultaneously without causing each other difficulties. Groups identified that existing (or lacking) infrastructure meant that not all households could access the same broadband speeds and packages.

P1: I think it's probably what's available in your area... I know a lot of broadband [providers] aren't available in different areas... We're obviously on a new development... there are wee versions which are lower options, maybe, but you can't get it in your area, so...

P2: We're out of town and we really struggle to get a good Wi-Fi... and we had to pay for a really big package.

(Parents Task Group, Belfast)

Near ours... they have better internet, and they can get Virgin Media, yet just like two minutes up the road you can't get the Virgin Media... you're stuck with the BT and that's it, that's what choice you have. You don't have other ... you can't just shop around, which broadband do you want.

(Parents Checkback Group, Reading)

It was identified that households could experience disparate access to home broadband on the basis of what type of property they lived in (for example, in a new development) and where in the town or city the property was located. Infrastructural issues represent a significant barrier to the adequate level of home broadband access described by groups as a minimum digital need.

A further potential barrier highlighted by groups was the cost of accessing broadband. Groups referred to providers charging a higher price at renewal as they are not offered or eligible for the same deals as new customers unless they disputed it and negotiated for a better price – a ‘loyalty premium’ was felt to be unfair and result in people facing unnecessarily high broadband charges. Consumers’ bargaining power could also be restricted where there was a limited choice of provider.

Because every year when it's due to run out, I get a month where it's just like high, and then I'll phone them and they'll be like, right, this ain't on! I'm paying for the same thing for like triple the price... They don't notify you, they just do it. [agreement from other participants]. So, you have to barter with them to get it back down.

(Parents Task Group, Sheffield)

Barriers to Acquiring Digital Skills

Groups were concerned about digital safety. They felt that successfully navigating the potential risks of the internet depended on all household members having the practical and functional skills as well as the understanding and critical thinking skills to avoid and mediate those risks. Parents, in particular, tended to express that they wanted to improve their digital skills, and many parents said that they felt that their knowledge was inferior in comparison to their children's.

You might find that your seven-year-old is teaching you...My one will say, Mummy, that's not what you do! Here, let me show you, let me download it.

(Parents Checkback Group, Reading)

Our school used Twitter...and I had no idea how to use it, so I had to get my daughter to show me how to use it. I'd literally no idea how to go onto the school bit and look at what they'd been doing on there.

(Parents Task Group, Milton Keynes)

While parents often seemed to take pride in their children's levels of digital skills, these often surpassed their own, and could contribute to a feeling of being helpless and unable to support them in times of need. Parents were also concerned that they were not sufficiently aware of digital risks. Understanding the types of apps, games and social media platforms their children engaged with was described as a fundamental part of parenting in an

increasingly digital society. Yet, parents sometimes felt that entering and understanding the digital world that their children inhabited was difficult:

Q: And how important is that, then, for parents to understand [digital safety issues]?

P1: Very important, but I think it just goes by the by because they are in that bubble, the kids, where they are all going to be on social media, I don't know if it is Facebook or whatever, and they all want to be part of that and TikToking, whatever else it is... Yes, I wouldn't have a clue where to start with TikTok but I think, you know, both my kids run circles round me so it would be great to be educated about it but where would I start?

P2: We haven't got enough time to learn what they know...

(Parents Final Group, Liverpool)

The children of today are going to be the parents of tomorrow and hopefully they're going to be more equipped to handle what we're sat here talking about because we're a generation that didn't have that, did we? So, we've kind of grown with it through our kids, I think. You know, I've gone from, you know, I still just about can manage to look at Instagram but really can't connect with it properly because I'm not interested, I'm just not interested.

(Parents Task Group, Milton Keynes)

Parents' perspectives indicated several, often interlinked, issues. First, parents' social circles did not necessarily require them to use certain apps and social media platforms, and therefore they were not necessarily engaging with them and learning about them as part of their everyday life. Second, with busy schedules, parents often felt they had limited time to learn and actively engage with apps that they did not already use. Third, it was hard to keep up with the pace of change, and fourth, it was difficult to know where to find (reliable) information, with parents describing the results of online searching as 'overwhelming' or a 'minefield' when trying to work out what information they should trust.

Young people themselves expressed less fear of online dangers, although they did identify that, for a number of reasons, some young people could be more vulnerable and/or have fewer skills and less understanding of ways to avoid harm than their peers. They disputed the perception of some adults (including some of the participants in parent groups) that all young people had the same level of knowledge and were 'digital natives' who somehow acquired their skills and knowledge through being exposed to technology from an early age, rather than by being taught. In terms of protecting children from digital harm, groups noted that while parents need to know how to use parental controls, there can be a difficulty, especially as children get older, of finding the balance between giving children independence, and monitoring their online activity which risks being seen as overly controlling. Indeed, young people also recognised the tensions this brought – that while parents cared for their children's safety and wellbeing, they shouldn't 'invade your privacy'.

Once your teenager sees it as control, the conversation is over then, that is finished so you have got to make sure you don't do it.

(Parents, Final Group, Liverpool)

If you find your parent doing something on your phone you would lose the trust with them and then you will rebel more. So, having some sort of system, say parents know how much they should be seeing what you're up to would definitely give parents and young people more trust.

(Young People Final Group, Leicestershire)

Collective Responsibility: Participant Views on the Role of Multiple Actors in Society

Participants talked about a broad range of stakeholders and their role in digital safety. Young people and parents said that, as individuals, they each played their own part in taking responsibility for learning the necessary skills, and finding out where to learn them. They also said that some of the responsibility for staying safe online lay with them as individuals.

I would feel like, if I did get scammed, that was kind of me ...like I should have known better.

(Parents Checkback Group, Reading)

P: Sometimes you can search up like how do I... like what does a scammer do, how do you see...

Q: So, looking it up yourself?

P: Yes.

(Young People Task Group, Leicestershire)

Yet, parents said that wider support was needed in terms of time barriers and knowledge gaps (as discussed above):

You need someone to support parents when they take their eye off the ball, you have got a couple of difficult weeks in work or something has happened and you're not aware of what is going on, you need that back up that is there.

(Parents Final Group, Liverpool)

I think the children should also learn those sorts of things separately at school as well, because it's actually about their personal safety, and that isn't always information that the parents know about as well.

(Parents Checkback Group, Norwich)

Outside of the family, groups felt that schools were the primary source of learning about digital skills and in particular digital safety of children. Parents and young people generally expressed trust in schools and satisfaction with the types of education and awareness they raised in relation to digital skills and methods for keeping safe online, with a feeling that schools were likely to be more informed about these issues than parents might be. Young people recognised that it was important for schools to update information on this regularly.

Your family...they know a lot of stuff about, like, how to keep you safe, they might not necessarily know the way that groomers and stalkers work these days because again it has changed over time. School might have more of an idea on that because they are getting information from like the police and just people who know more information and

they are able to give that information to everyone else, maybe that be the student, the parent themselves.

(Young People Checkback Group, Derbyshire)

It was therefore unsurprising that many parents said that they would look to schools first for external support if they needed it. Some felt that, given the ongoing relationship with parents, schools were a good forum for extending digital support to parents. However, it was recognised that this would require funding as schools were already at full stretch. Yet, groups also indicated that families could not realistically rely solely on schools, and they said that other stakeholders needed to work to support households with children in different ways. Groups said that online safety was a collective, societal responsibility, involving multiple actors and stakeholders:

P1: I don't think it should be all on the parents...

P2: It's a society thing...

(Parents Task Group, Belfast)

It is society, digital society. Society is made up of all of those groups and everyone has to do something.

(Parents Final Group, Liverpool)

P1: I think if you see social media, they should be more responsible... and I think the Government...

P2: Taking that ownership.

P1: Yeah, and the Government need to act as well on that as well.

P2: Yeah, I think it's teamwork. Maybe the Government and the social media...if all of them, they combine and do something good, that would be brilliant. Just, let's divide it, let's work together...So you have like the Government and providers and all companies involved trying to prevent [digital harms] and also the Government has responsibility.

(Parents Checkback Group, Reading)

Groups also gave examples of the types of support for online safety and awareness different stakeholders should be responsible for. Groups said that service providers and device manufacturers should be more responsible for providing information to customers about the importance of security features and how to use them (such as parental controls or secure passwords). They suggested including easy-to-access guidelines such as physical leaflets or pop-up information on the device itself.

Groups strongly felt that providers of social media platforms such as Facebook, Instagram, Snapchat, TikTok and YouTube should take more social responsibility, given their role and influence, particularly in the lives of young people, and the potential for digital risks. This could include providing safety information, as well as taking more action to make their platforms a safer place for young people to interact, though participants had mixed views about the potential effectiveness or desirability of government regulation (see below).

Groups suggested that safety information for parents and young people could be delivered via targeted advertising or by sponsoring platform influencers to spread awareness and

information. Groups also thought that traditional media, such as television and radio were still useful media through which to share safety campaigns (which would be funded and developed with the Government).

P1: I think... when you... say you're scrolling through Instagram, I think there should be more pop-up sort of ads and whatever that are specifically like about staying safe online. Because if you have got... if you're scrolling and you see it...

Q: Do you ever see anything like that?

P2: No.

(Young People Checkback Group, Derbyshire)

Groups repeatedly emphasised that messages about digital safety were currently lacking, and felt that information and campaigns to raise awareness needed to be ongoing, with messages that were 'hard hitting' so that they got through to people. Parents sometimes referred back to campaigns about road safety or 'stranger danger' which they felt had helped messages to become embedded as they grew up.

P1: There should maybe be a bit of umph, or onus on ...

P2: Yeah, Government, yeah.

P1: TV campaigns ...about how this stuff could be avoided.

P2: Yeah, because they have campaigns on road safety and not using your phone while you're driving

P1: One of [the] campaigns they did about drink driving and when this bloke's head that's tattooed in my head.... so stuff like that could be really useful for kids.

P2: A powerful message.

(Parent Checkback Group, Reading)

Participants' views on the role of Government were varied. Some participants said that it was the Government's responsibility to ensure that key stakeholders took measures to improve internet safety and to promote digital safety awareness, arguing, for example, that social media platforms would not take responsibility unless regulation dictated it. While groups often expressed frustration and disappointment, perceiving the digital world to be largely unchecked, they were unsure if the government was able or could be expected to tackle digital harms effectively, given the global scale of the problem. Other participants were not convinced that further government intervention in internet spaces would be beneficial or appropriate, and had reservations about the potential for negative consequences, for example if the monitoring of online spaces went 'too far' resulting in tensions relating to censorship and over-surveillance.

6 Conclusion

This proof-of-concept research has established that the MDLS approach can provide not only a meaningful and accessible definition of an adequate standard of digital living, but also that members of the public can agree on what is needed for that to be reached. MDLS sets a benchmark which people agree households with children should be able to reach.

This research took a unique approach, working with citizens to find out their perceptions of digital living and what they agreed was essential in order to feel digitally included in their everyday lives. The approach has proved successful in giving us rich data about not only what is needed but why and by whom. The preceding chapters have explained how this process was undertaken, as well as presenting the findings of the research. This initial study has identified what parents and children of different ages need, highlighting how needs could change over time, but also how those individual needs combine at a household level, and the implications for adequate provision.

This chapter sets out the key findings and recommendations of MDLS established at this interim stage. It emphasises that MDLS requires several interacting elements (goods, services, infrastructure and skills) and that needs for digital inclusion should be viewed holistically. Some of the key considerations and challenges that are relevant across the different aspects of MDLS are discussed – meeting the costs of goods or internet connection, variation in adequate internet access, as well as support with skills and issues around digital harms and safety. The chapter concludes with a set of recommendations from this first stage of the MDLS research, an outline of the next stages of the project and suggestions for further research.

The Minimum Digital Living Standard – a Holistic Approach to Digital Inclusion

A key aspect of MDLS is that it comprises a package of interdependent goods, digital services and skills. From the deliberative conversations with groups of members of the public, it was clear that, in order to reach MDLS, households need to have or be able to access *all* of these elements in combination for digital inclusion, opportunities and choice. It was observed that having a laptop and no broadband was like owning a car but not having any fuel for it – and having an out of date or obsolete model meant that it was barely functional. Similarly, without the skills needed to drive the car or navigate to a destination, it would sit unused and not perform any of its intended functions. So, to reach a minimum acceptable digital living standard, it is not enough to own technology if it is not fit for purpose, and up-to-date equipment is insufficient without internet access and the skills needed to use it effectively and safely. In order to meet MDLS, urban households with children will need *at least* what has been described in this report. It is recognised that some households may have different and/or additional needs, relating, for example, to disability, ethnicity, housing circumstances or rurality – and these would need to be explored in further research.

Considerations and Challenges in Taking Forward MDLS

A range of issues are relevant across the different dimensions of MDLS that impact on the potential for households to meet their digital needs. Some key points raised by this first stage of research are outlined below, and will be explored further as the project progresses.

Meeting the costs of digital inclusion

In the context of the current cost-of-living crisis, concerns for financial pressures and the risk of families being unable to afford the costs of meeting digital needs have become even more salient. With rising living costs, squeezed household budgets may compel families to divert financial resources to other areas of expenditure. This could include households cutting back on their broadband or mobile plan, and putting off replacing or starting to share devices to save money (Anderson, 2022). There is already an indication that households are having to go without broadband to attempt to cut costs. Recent research from Ofcom (2022) and Lloyds Bank (2022) showed that more than a third of people reported struggling with communications costs or felt that the rising cost of living would impact on their ability to go online. Ofcom's report also shows that those on the lowest incomes 'are most likely to experience affordability problems' (p.6), meaning that the most vulnerable are most at risk of being digitally excluded. As noted in Chapter 5, the 'loyalty premium' can mean that people are paying more than they need to for home internet. Lack of awareness of cheaper options, including social tariffs, further disadvantages lower income households who spend a greater proportion of their income on telecoms than high earners (Dixon, 2022). This needs to be at the forefront of conversations about pricing and efforts being made to ensure connectivity is within reach for all. Now that a list of what people say is needed for MDLS has been agreed for households with children, the project team will be exploring the feasibility of costing some of the contents of MDLS (where relevant) for the final project report.

Implications of variation in internet access

A key component of MDLS is having accessible internet. Without access to adequate broadband internet at home, the ways in which a household could meet a digital living standard would change. For example, if mobile data were the only way of accessing the internet, the amount of mobile data required for each household member would be significantly higher, which would incur additional mobile data costs. Broadband infrastructure is therefore a key consideration as coverage, availability and speed of internet service vary widely geographically and for those with fewer options or lower service levels, compensating for this variability can also have a cost element. For homes where there are a limited number of service providers, or the existing basic service is too slow to be practical, people have to pay more to achieve the same (or even an inferior) service as those who are able to benefit from competitive rates between a range of providers or where services have been updated (for example, to superfast or ultrafast broadband). More standardised levels of provision that align with advertised rates would help and provide greater clarity and choice for consumers.

Knowing where and how to access appropriate support

Parents are aware that young people's lives are more digitally interactive in ways that did not exist when they themselves were growing up, but young people also challenged the assumption that they were all 'digital natives' who knew how to do everything they needed to because they had 'grown up with it'. Schools were seen as a key provider of digital knowledge for young people. But more broadly, while local initiatives to support digital skills may exist, there is uncertainty about where to start, where to access help and how to keep up with the pace of change. Greater efforts need to be made to signpost to available support and tailor it to match the needs of those who require it.

Tackling digital harms and taking responsibility for digital safety

Digital safety was a significant issue in discussions with parents and young people and is a key component of MDLS for households with children. Group participants were aware of a range of digital harms which were perceived as largely unchecked and inevitable, and expressed a need for a societal approach to digital safety. However, uncertainty about how problems around digital harms and safety could be resolved suggests that whatever legislation and protection is in place is not providing reassurance or confidence that these issues are under control or even controllable. Although there are some reservations among some parents about the potential for online monitoring to be taken too far, there is also an expressed desire for social media companies to take greater responsibility for the content on their platforms to minimise potential harms, especially to children and young people, as well as frustration about the lack of legal requirements for such companies to do so.

Providing a National Benchmark and Using MDLS in Policy and Practice

MDLS has the potential to inform conversations between the public, policy makers and service providers on issues related to digital inequalities. Our engagement with stakeholders from business, government, third-sector organisations and industry experts throughout the project has demonstrated the appetite and the need for a public-led definition of, and consensus on, what is required for digital inclusion. We are confident that the MDLS approach can identify a minimum acceptable standard for digital inclusion, which provides a benchmark which households should be able to reach. This will be an important factor in ongoing discussions about digital inequalities and in decision-making about services, infrastructure and support. We hope that, as a citizen-led definition of digital inclusion, MDLS can be used to set a vision for digital inclusion strategies and identify policy and practical actions to help households meet MDLS.

Recommendations

The following are an initial set of recommendations from this first stage of the research.

- Establish the Minimum Digital Living Standard as part of a vision for digital inclusion, reflecting what members of the public say is needed 'digitally' to participate in society today.
 - In Wales, Welsh Government has already taken steps towards this.
- UK Government to work with the regulator (Ofcom) and telecommunications sector to ensure that the broadband and mobile data infrastructure is in place so that MDLS can be achieved.
- MDLS to be used by government at all levels – in Westminster, devolved administrations, combined authorities and local authorities – in order to:
 - Identify policy and practical actions to help meet MDLS for every household.
 - Catalyse coordinated, cross-sector and collaborative action on digital inclusion.
- Organisations across public, private, voluntary and community sectors to consider how they can use MDLS to assess their own approach, services and products – including their role in addressing all three components of the standard (goods, services and skills).
- Funding to be allocated to develop MDLS for other household types, and understand the experiences of households below MDLS and/or where additional or different ways of meeting MDLS may be required (for example, related to disability, housing circumstances, rurality).

Next Stages of the Project and Further Research

The next stage of the research will be a survey involving individuals from 1,500 households with children across the UK to identify where households are in relation to MDLS. The project will also include: statistical and geographic analyses to explore variation in reaching MDLS; stakeholder consultations to explore the relevance and intersectionality of the standard across key dimensions such as disability, ethnicity, rurality and poverty; and potential costings for the 'basket' of MDLS contents. These will be reported in a final end-of-project publication in Autumn 2023.

Given that this was a proof-of-concept study, we focused as a starting point on the needs of households with children living in urban settings across the UK. There is potential, subject to further funding, to expand the MDLS research with additional studies to encompass the needs of other household types. This could include for example, pensioners and working-age adults without children; the inclusion of these demographic groups in the orientation stage of this research means that the developed MDLS definition will be meaningful to these groups, and not just to parents and children. It would also be valuable to conduct additional work to explore the potential additional or different needs of people living in rural communities. This would then give us the basis to repeat the upcoming survey with a larger, more comprehensive sample, which would offer further detail and insights into the overall picture of digital inequalities in the UK.

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Further information

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A separate report covers the recommendations and research findings from a project commissioned by the Welsh Government to develop a Minimum Digital Living Standard for Wales, undertaken by the MDLS project team with Cwmpas, Swansea University, and Digital Inclusion Alliance Wales.

Links

- MDLS Project page: www.mdls.org.uk
- MDLS for Wales report:
 - <https://www.gov.wales/towards-welsh-minimum-digital-living-standard-final-report>
 - <https://www.llyw.cymru/tuag-y-safon-ofynnol-ar-gyfer-bywyd-digidol-adroddiad-terfynol-crynodeb>