

Towards a Welsh Minimum Digital Living Standard: Final Report

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This report describes the results of the ‘Welsh Minimum Digital Living Standard (W-MDLS) Project’.



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1 Introduction

This report covers a project commissioned by the Welsh Government to develop a Minimum Digital Living Standard for Wales (W-MDLS). It builds on a UK wide project funded by the Nuffield Foundation and Nominet to develop a UK Minimum Digital Living Standard (MDLS)¹. The idea of an MDLS was developed by the Nuffield project team – (University of Liverpool, Loughborough University, Good Things Foundation and City University) just before the onset of Covid-19 and the current stress on household incomes under the “cost-of-living crisis”.

In developing an MDLS for Wales we are examining one of the key issues that the 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 become very clear. As a result, the digital divide between those who have the devices, data as well as the skills and capabilities, and those who do not has never been more apparent and consequential.

Digital inequalities encompass differences, lacks, and limitations in access, skills and capabilities with regard to digital systems and media that have significant tangible consequences for citizens, households and communities. These consequences range from direct impacts such as a lack of access to education or healthcare, through higher costs for services and everyday goods, on to everyday challenges such as managing finances. Lack of digital access can also leave citizens culturally or personally isolated as everyday life, relationships and media move online. Those already most disadvantaged have the potential to continue to lose out the most. Access to digital systems, media and skills are also now being seen as a core part of human rights and issues of equality more broadly as noted by UNESCO and the Equality and Human rights Commission².

The pandemic and cost-of-living crisis have, on the one hand, revealed *absolute* digital exclusion where citizens fully lack the access, skills, and capabilities to use digital systems and media. Therefore, already vulnerable individuals have found themselves significantly disadvantaged – socially disconnected, economically struggling, unable to access benefits, health services, government assistance, or make online payments. On the other hand, these recent events have also revealed the complexity of *relative* digital exclusion, thus making visible the challenges faced by ‘limited users’, as millions with access yet fail to fully benefit from access to digital systems and media due to a lack of skills, support, and capabilities³. A focus on relative exclusion highlights the combination of digital resources and skills needed to underpin households’ ability to maintain work, education, and social interaction. Previously documented evidence³ showed that the opportunities and abilities to utilise digital tools to work from home and provide educational opportunities are inequitably distributed. The cost-of-living crisis has raised further questions about the impacts of affordability on digital access and access to digital skills and support⁴.

But the challenges of digital exclusion and inequalities are not new. Nor are they specific to the Covid-19 pandemic, nor to challenged household incomes. Research evidence⁵ and intervention experience point to a complex interplay between levels and

types of social and digital inequalities. Despite the history of work on digital inequalities, many current policy proposals around the world continue to return to a focus on digital access (broadband). Often, such approaches define digital 'exclusion' predominantly in terms of material access to technologies rather than skills and support. There is therefore a substantial need for a deeper understanding of digital inclusion and for more robust measures to guide interventions. The Welsh and UK MDLS projects have responded directly to the need for such a robust measure.

Wales faces distinct challenges in terms of digital inclusion, in particular issues of language, social deprivation, isolated rural populations, and an aging population⁶. A new national indicator for digital inclusion was therefore proposed in 2021 to measure the status of digital inclusion. The definition for this indicator will be informed by the result of this research project on a Minimum Digital Living Standard commissioned by Welsh Government and undertaken by the team of University of Liverpool, Loughborough University, Good Things Foundation, and CWMPAS. In the meantime, results from the National Survey in 2021-22 show that 93% of those aged 16 and over personally use the internet at home, work or elsewhere. The survey currently also asks questions about digital activity and the skills people have. These are grouped into 5 types of skill:

- handling information and content
- communicating
- transacting
- problem solving
- being safe and legal online

In 2021-22, 78% of internet users had performed activities that related to all 5 of these skills compared with 73% in 2019-20. Overall, though the survey indicated a promising upward trend with 92% of households in Wales with internet access in 2021-22 compared to 73% in 2012-13. In 2021-22 the National Survey for Wales found 7% of citizens aged 16 and over living in Wales do not personally use the internet. This figure is higher than the rest of the UK as measured by Ofcom⁷, which suggests a widening gap between those who have access, and therefore whose needs will be centred around skills and support, and those for whom access is still the foremost issue.

However, the Digital Strategy for Wales has 6 missions covering public services, inclusion, data, economy, skills, and connectivity. This includes the desire to develop a Minimum Digital Living Standard for Wales as a key indicator to assess progress on digital inclusion. This must build on an in-depth assessment of the meaning and consequences of digital inclusion and exclusion for citizens, households, and communities in Wales. Working with the Welsh Government, we seek to develop a W-MDLS based on the goals of the Well-Being of Future Generations (Wales) Act, and the Digital Strategy for Wales (2021) that can help deliver the Status of Digital Inclusion National Indicator included by the Senedd in December 2021.

1.1 Broader digital inclusion and digital literacy landscape

Such research sits within a much broader discussion of digital skills and digital literacies. Exploring this broader discussion goes beyond the scope of this project and

report but international, national, and regional stakeholders are building the idea of digital literacy and digital skills into broader cultural and economic policy making. An international view can be found in the work and policy advocacy by UNESCO⁸. UK wide policy can be found in the recently published Digital Strategy⁹ as well as prior DCMS work the Online Media Literacy Strategy¹⁰. Ofcom has undertaken comprehensive research and policy recommendation work on Media Literacy more broadly with annual reports going back to 2007¹¹. Regarding the importance of basic digital skills, especially for economic impact there is the UK government Essential Digital Skills Framework¹². The Good Things Foundation has also recently published updated figures on the economic impact of digital inclusion¹³. For a discussion of UK citizens digital and data literacy see the prior Me and My Big Data project led by University of Liverpool¹⁴.

1.2 Key insights from the research

- Members of the public felt the definition of a Minimum Digital Living Standard and the contents of the MDLS for urban households with children were appropriate and reflected needs in Wales. Discussion centred around barriers to meet those needs.
- Stakeholders in Wales (across public, private, voluntary and community sectors) welcomed the ideas of a national benchmark for digital inclusion for Wales. They felt this could:
 - Support coordination across Wales, encouraging the Welsh Government and others to take more risks and work more collaboratively to achieve such a standard.
 - Enhance and develop their digital offers as organisations based or working in Wales, directing more resources into supporting the digital lives of people they support.
- Consolidate a long-term commitment to improving digital equality in Wales, driving prioritisation of digital inclusion higher up the agenda for policy and investment.
- Most stakeholders supported the MDLS definition for Wales. Stakeholders identified key areas to consider in taking forward a Minimum Digital Living Standard for Wales:
 - Affordability barriers, particularly in the context of the current cost of living crisis
 - Infrastructure barriers - broadband and mobile data infrastructure, but also wider infrastructure especially (but not limited to) rural areas in Wales.
 - Parity of the Welsh language in digital systems, services, training, and support
 - Ability of providers and organisations to help households achieve the standard.
 - Importance of recognising, identifying, and addressing equalities, diversity, and inclusion
 - Identifying roles for the Welsh Government, local government, and others, including to influence central Government, regulators, and UK companies on behalf of Wales.

2 Approach

2.1 The argument for an MDLS

As noted above, this W-MDLS project has been proposed and procured by the Welsh Government. It benefits from and draws upon a Nuffield Foundation and Nominet funded project to develop a broad UK wide MDLS for households with children. This work is itself founded in the Minimum Income Standard approach¹⁵. The project also builds on a track record of research around the impacts of digital inequalities by the University of Liverpool and Good Things Foundation. Importantly this W-MDLS expands the assessment of an MDLS to consider the Welsh national context, the needs of Welsh stakeholders, and the policy goals of the Welsh Government.

Much prior research on digital inequalities has focused on two issues:

1. Inequalities in terms of material access to digital devices (e.g., laptop, tablet, or smartphone), an internet connection or information sources. This issue of *absolute* access to resources has remained a key focus of policy, but it has long been noted that inequalities are more complex than just access.
2. Divides and differences in skill levels and uses. Recent research has identified that digital divides in skills correspond with relative differences in citizens' socio-economic position.

While much policy work remains stuck at these first and second 'levels', recent work has focused on differences in 'tangible' outcomes and considers the correspondence of digital inequalities to other aspects or 'fields' of inequality⁵. This position argues that digital inequalities need to be understood in relation to individuals' available social, cultural, and economic capital and the embedding of the digital within their everyday 'lifeworld'. These studies are predominantly based on surveys and are effectively 'top-down' in their assessment of what counts as digital exclusion. Meanwhile, qualitative case studies have explored the importance of understanding digital inequalities regarding their domestic integration, the value of digital to lower socio-economic status communities or in relation to levels of social and cultural capital⁵.

The MDLS, W-MDLS, and Welsh Government policy noted above intend to move the research and policy debate forwards by taking a new citizen and society focused approach to understanding digital inclusion, exclusion, and inequalities. We are doing this by building on the Minimum Income Standard (MIS) methodology developed by Loughborough University to develop our MDLS. This method allows us to draw directly on the lived experience of citizens. In other words, this robust methodology allows us to understand:

1. Digital exclusion as the product of multiple factors that limit citizens' digital *capabilities*.
2. Digital inequalities as complex, relative to time and social context, and deeply linked to intersectional aspects of social inequality.
3. Which digital inclusion policies and interventions best address the factors and contexts that limit citizens' digital capabilities.

2.2 Building MDLS on the MIS methodology

The development of an MDLS for Wales and the UK applies the consensus-based Minimum Income Standard (MIS) methodology¹⁵ to issues of digital inclusion. The MIS methodology utilises deliberative methods to develop a social minimum based on and rooted in public consensus. MDLS and W-MDLS are therefore citizen-centred, rather than being a top-down definition of what counts as digital inclusion or exclusion.

MIS is founded on the assertion that the definition and description of what constitutes a minimum living standard should be rooted in the lived experience of individuals in a given society. It aims to identify a minimum socially acceptable standard of living; it is a 'minimum' in the sense that it refers to a threshold under which no one should fall; it is 'socially acceptable' in the sense that such a threshold 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.

Following MIS, our approach to establishing MDLS focuses on the public definition of what is needed 'digitally' to participate in UK society. Just as MIS determines a 'participation income' needed to achieve a minimum living standard, so MDLS will establish a 'digital participation threshold' below which individuals do not have all they need to take part in UK everyday activities.

The key features of the methodology are:

1. Iterative stages of deliberative groups comprising members of the public from a range of defined household types. At each stage, groups are intentionally freshly recruited to test and broaden public consensus.
2. Developing a shared definition with the public that is used as the basis for discussion. This is done to ensure that there is shared understanding when members of the public are discussing and devising the minimum 'standard'.
3. Development of comprehensive lists of goods, services, skills and capabilities that are required for individuals and households to reach the standard.
4. Collecting rich qualitative data by facilitating discussions to produce negotiated consensus and rationales explaining the inclusion or exclusion of goods, services and skills.

2.3 Capabilities: Outcomes for individuals and communities

The MDLS approach builds on the work of Townsend¹⁶ and is based on relative and consensually derived measures rather than assuming essentialist or universal needs. However, we see value in Nussbaum and Sen's capability approach¹⁷, which entails the acceptance of two core normative claims. First, freedom to achieve well-being is of primary moral importance. Second, that freedom to achieve well-being is to be understood in terms of people's capabilities – that is, their real opportunities to do and be what they have reason to value. MDLS then encapsulates three central components that support and define digital capabilities:

1. Knowledge and skills that enable decisions on what goods and services to access and how to utilise these.
2. The material ability to afford or access digital goods and services at an appropriate level.
3. Digital infrastructure and environment that dictates the type of goods and services that can be supported in any given location and by provider capacities.

MDLS is therefore made up of a basket of “digital goods, services and skills” that facilitate an individual’s digital capabilities to live a life they value and are effectively able to lead.

2.4 Current MDLS definition

The agreed definition of an MDLS is:

‘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.’

This definition was used as a starting point in the discussion with Welsh stakeholders (see section 3.4 below).

3 Building a W-MDLS

3.1 Key Research Questions for a Welsh MDLS

What then is the minimum basket of digital goods, services, and skills a Welsh citizen needs to gain an adequate quality of life, including social participation? What are the social, economic, and cultural consequences of not having this minimum basket? How do these needs, capabilities and consequences vary across demographics, locations and life stages for citizens and households?

These issues have been examined through a range of interlinked activities outlined in this report:

- A review of new academic and policy literature relevant to the Welsh digital inclusion context.
- Qualitative in-depth interviews with stakeholder organisations exploring how needs vary in terms of a W-MDLS, and the factors that can impact on the ability to reach a W-MDLS.
- A Delphi review, based on the distribution and analysis of a survey, designed to summarise the key findings from stakeholder interviews, administered among both participant organisations and other organisations within the sector (see Appendix) for them to review and comment upon findings.
- Use of the proven and innovative Minimum Income Standards (MIS) methodology to undertake a consensus-based assessment of Welsh perceptions of digital citizenship and digital needs. This builds on the UK-wide MDLS to develop a Welsh Minimum Digital Living Standard (W-MDLS) focused on the needs of Welsh households with children.

Additional elements of the research will provide further in-depth exploration (depending on follow on funding) by:

- Building on the surveys, statistical and geographical evaluations of the UK-wide MDLS to explore the correspondence of the UK/Welsh MDLS with other social, economic, cultural, and digital metrics.
- Conducting qualitative in-depth interviews with Welsh citizens who do not meet the W-MDLS, exploring experiences and consequences of unmet digital needs and the factors that can impact on the ability to reach a W-MDLS.

3.2 Research activities

In February 2022 the team met with members of the Digital Inclusion Alliance Wales (DIAW), a network of organisations that meet quarterly to discuss digital inclusion in Wales (See Appendix 1). In March, the team also undertook a literature review to scope the current literature within the field. From May-June 2022 the team organised and conducted in-depth Delphi online interviews with key stakeholders from across the Welsh digital landscape working to address issues of digital exclusion in Wales. An interim report based on these findings was published in July 2022. This was followed by a Delphi survey to review final findings for this stage of the project. Throughout Autumn

the team concluded the UK MDLS field work and undertook additional Welsh MDLS groups sessions to explore the full MDLS definition and contents with Welsh households.

3.2.1 Delphi stakeholder interviews

These included policy makers (e.g., Ofcom), service providers (e.g., BT), regional organisations (e.g., DIAW) and local groups or charities (see Section 8: Appendix 2). We conducted a total of 11 interviews. These lasted approximately 1 hour and began by taking participants through the ethics of the project and gaining consent. These semi-structured interviews followed a three-part structure with questions to elicit information on three issues:

1. Definition of a Welsh Minimum Digital Living Standard and its components.
2. Policy implementation of the Welsh Digital Minimum Living Standard.
3. Practical implementation of a Welsh Minimum Digital Living Standard as part of digital inclusion interventions. (See Appendix 3 for full interview guidance document).

The interviews were then transcribed and thematically analysed using the NVivo software tool. Part of the interview included giving stakeholders our MDLS and asking their opinion on its effectiveness.

3.2.2 Delphi survey

Following the interviews, a Delphi survey was undertaken through the design, distribution and analysis of an online survey outlining key findings from the interviews and inviting responses from both participant organisations and other stakeholders in this field. We gathered a total of 23 responses (see Appendix 2 for table of respondent organisations). These organisations covered the following digital inclusion activities and communities:

- Distribution of digital devices and data packages
- Providing digital skills training
- Providing informal learning opportunities
- Conducting digital inclusion research
- Development of apps and toolkits
- Supporting schools and students
- Supporting digital health professionals, carers, and young carers
- Supporting people applying online for such things as benefits, mental health and wellbeing support
- Creating connected care communities
- Assisting job seekers
- Supporting elderly people and people with disabilities
- Supporting Black, Asian and ethnic minority communities
- Project consultation, interorganisational collaboration and support of government bodies

3.3 Key findings from the literature

Alongside the current reports on digital inclusion by the Welsh Government, there is a small amount of academic literature specifically focused on digital exclusion in Wales. The available work covers several topics. First, there is some work on digital exclusion and marginalised groups in Wales. For example, Tsatsou et al¹⁸ explored the role of information and communication technologies (ICTs) in supporting minority communities in Wales. The paper argues that ICTs and the Internet are perceived by these communities as being key to promoting community connectivity in contemporary society and that Welsh minority communities are at risk of both social and digital exclusion, though Higgs and Berry¹⁹ note that extensive evidence on the use and role of ICTs in marginalised Welsh communities is lacking. Several papers address issues of digital media use and health. Gann²⁰ notes a strong link between digital exclusion and ill health in Wales. He notes that those who are least likely to be online (including older people and people with disabilities) are exactly those who experience the greatest burden of ill health. In this health context Gann argues that Wales has challenges in terms of digital inclusion, including social deprivation, an ageing population and poor broadband connectivity in remote rural areas. Wu et al²¹ examined the role of ICT in supporting sensory impaired citizens in Wales. They concluded that sustained training and support are crucial in helping sensory impaired Welsh citizens to understand the full range of interactive services available on digital platforms. Similarly, Davies et al.'s²² report on a survey of 1,252 Welsh citizens (16+) found inequalities in accessing the internet at home, particularly in relation to health services. This remains evident in Wales, with lower access in older populations, more deprived populations, and those in poorer health. Overall, though, engaging with digital technology to support and monitor health in Wales is a common activity. A higher proportion of those with low mental wellbeing used digital technology to find emotional support online. This national survey highlighted that 34% of the Welsh population have used technology to self-diagnose, 16% to manage a long-term condition and 9% to manage medications.

As we expected that issues of rural-urban differences to be raised in the field work, we therefore explored UK and international literature on rural digital exclusion. Saleminck et al²³ point out the paradox that globally rural areas need greater digital connection to compensate for remoteness but are in fact the worst served. Philip et al²⁴ and Townsend et al²⁵ both argue for the closing of the urban-rural divide, especially through novel technologies to address the most remote communities. Though Malecki²⁶ points out that access alone is not enough and that there needs to be a linked development of local human capital – skills and expertise. Norris²⁷ examined the urban-rural digital divide in the UK pointing to a greater gap in Wales than in other areas of the UK. Though, as noted below, recent Ofcom data and interview responses by Ofcom and BT indicate that this gap is lessening. Much of the international work in this area focuses on the benefits in key areas such as farming in global south and health care as noted in the Welsh context above – especially in relation to mobile phone use. Roberts et al²⁸, Ashmore²⁹, and Young³⁰ also argue that increasing rural digital inclusion can support community resilience in relation to economic and social participation. Finally, there is a small amount of literature on “smart villages” – akin to smart cities – arguing for greater

digital connectivity to allow for remote working and limit depopulation of rural communities where citizens move out to seek better work opportunities³¹.

3.4 Key findings from Delphi stakeholder interviews and survey

Stakeholders have welcomed the idea of a W-MDLS and have provided insights into both potential benefits of such a standard, and potential challenges regarding its implementation. They have indicated that the current MDLS definition is sound (see section 2.4 above), but there are key areas that stakeholders raised as important to consider as it is taken forward. The following key messages have emerged from our thematic analysis of the stakeholder interviews.

3.4.1 General overall observations

For local Welsh organisations, three issues came up repeatedly as significantly important for a W-MDLS:

1. Rural (Remote) access – lack of good broadband and/or mobile access for some communities.
2. Welsh language – especially access to many services and systems not currently available in Welsh.
3. The role of the Welsh Government, local government, and Wales based organisations in addressing issues of digital exclusion.

We would note that national organisations such as BT and Ofcom did not see the first of these issues as specifically ‘Welsh’. They pointed to similar issues and levels of exclusion due to lack of broadband in other areas of the UK, such as Scotland, the Lake District and the West Country. They pointed out similar technical solutions including further roll out of broadband, ‘Shared Mobile Provision’, and satellite. Where they saw a potential ‘Welsh’ (or at least devolved nations’) role in this issue it was focused on the balance of public/private involvement in reaching those communities where these additional technical solutions are needed. In terms of a W-MDLS the question might be what role the Welsh Government, or local government, or even housing providers have in supporting these connections. This could be through subsidising costs (e.g., satellite access) or through other service offers (e.g., social housing). There was a question of level of Welsh national/local government involvement tied to the speed at which solutions for these more remote locations might be delivered. Much of this was couched in terms of the Minimum Service Guarantee (currently 10MB). Our ongoing current UK MDLS work indicates that this level of service may well be considerably below what UK citizens – including Welsh participants – consider adequate to meet the MDLS definition above (section 2.4). More broadly, BT pointed out that key digitally excluded groups – customer segments – are similar across the UK: those with poor or no broadband access, low digital skills, older non-users, people lacking digital confidence. The relative numbers of these groups vary by region or community.

This does raise an interesting question regarding a W-MDLS – to what extent is the key value of the W-MDLS to be found in key differences with the UK MDLS or in the Welsh devolved administration’s response to this? In particular the ability of Welsh organisations and government to mobilise local resources, regulation, legislation and

stakeholders to address digital exclusion and ensure all Welsh citizens can meet the W-MDLS. As we will discuss below our findings indicate that the needs identified in the W-MDLS were in line with those of the UK wide MDLS but that both stakeholders and families identified the specific challenges of meeting those needs in the Welsh context. Our interviews to date with stakeholders indicate that it will be a mix of W-MDLS specificities and the devolved nation response to the W-MDLS.

3.4.2 A WMDLS standard could change the ways in which organisations work.

“I think *bringing* a minimum digital living standard in is going to change the whole focus”.

Leader of a charity that provides support for people with disabilities.

Stakeholders spoke of how a W-MDLS standard could affect their practice. Findings from the Delphi review suggest that most respondents (18 of 23) either agreed or strongly agreed that having a Welsh MDLS would help drive issues of digital inequalities to the top of their organisation’s priorities. As discussed in the interviews, participants suggested that the W-MDLS could help them to:

- Enhance and develop their digital offers.
- Put more resources into supporting the digital lives of their clients.
- Consolidate a concrete long-term commitment to improving digital equality.
- Break down barriers of organisations.
- Encourage them to take more risks and work more collaboratively to achieve such a standard.

As organisations that would be key in policy and implementation, the W-MDLS could help them encourage digitally excluded clients to engage with support offered and take up more digital opportunities. They noted that the use of a W-MDLS to increase digital inclusion would have the long-term benefit of being able to move more services to digital. This would help to reduce costs for most organisations. Additionally, the Delphi review respondents recognised that the implementation of a W-MDLS would also come with challenges, specifically for policymakers. Data collected through an open-ended question revealed the following challenges:

- Digital inequalities and digital access are still seen as an after-thought both in the private and public sectors, where there is a lack of knowledge about digital exclusion.
- Organisations often struggle to obtain funding for undertaking initiatives that promote digital inclusion.
- Any implementation needs to take into account the diversity of the Welsh population (e.g., those who speak neither Welsh nor English).
- We need to challenge the assumption that certain groups are more digitally capable and motivated than others and that some other groups are inherently excluded.
- It is important to encourage private companies to comply and support the standard.

- The digital landscape is constantly evolving, which requires flexibility and adaptability.
- Much greater two-way communication and collaboration is needed between government/public-sector bodies and others.
- People would not need much digital training if digital services and products were designed in more user-friendly ways.
- It is difficult to communicate with the public and let people know where they can get help in terms of accessing and using digital technologies.

Building on the last point, findings from the interviews indicated that it will be important to communicate the WMDLS clearly and get people interested:

“The problem doesn't start with digital education and knowledge and confidence, it sort of starts a bit more broadly than that, like the sense of excitement about digital, right? ... It's something to be really excited about not scared and intimidated by, it's a form, it can be a force for good, it can really change the world, we really need to embrace it.”

Head of a South Wales broadband provider

The communities and individuals that would be reached by a W-MDLS are extremely diverse. There are many and varied reasons that people can be digitally excluded, including by choice. Stakeholders pointed out that the fear of risk or surveillance, lack of digital confidence and/or skills, or simply a lack of interest in or knowledge about the digital provision available can all be barriers to access. The clear communication of a W-MDLS, with the backing of Welsh Government, could be used to help to communicate the importance of digital connection in everyone's lives, as well as to raise awareness of and excitement about the kinds of opportunities and benefits that people are missing out on.

From the survey there was a broad consensus among participants that our definition of an MDLS is both valuable and timely, while also applying to the UK and specifically to Wales. 18 respondents of 23 (i.e., almost 80%) either agreed or strongly agreed with the statement that the UK MDLS definition works well for defining what the minimum digital living standard should be for a Welsh household. While four respondents neither agreed nor disagreed, only one disagreed.

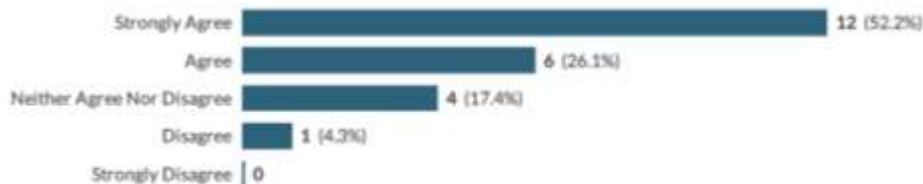


Figure 1: This definition works well for defining what the minimum digital living standard should be for a Welsh household.

17 of 23 respondents (i.e., more than 70%) either agreed or strongly agreed that that UK MDLS definition would work well in the Welsh context. While five respondents neither agreed nor disagreed, only one respondent disagreed.

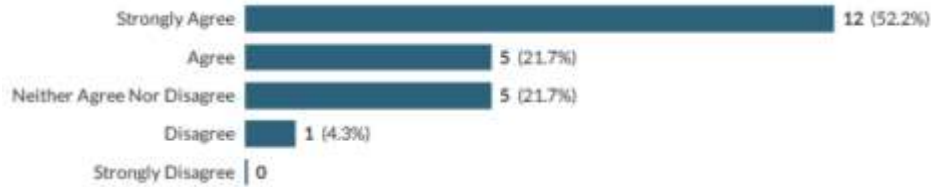


Figure 2: This definition would work well in a Welsh context.

When asked if or how the definition might need developing our survey respondents highlighted the following points:

- **To make training (which is implicit in “support”) explicit** – as we will discuss later in section 4 this is made explicit in the detail of the full UK and Welsh MDLS that was not available at the time of the survey.
- **To ensure that the definition is also available in the Welsh language.**
- **To include affordability** – as we note in our discussion of the UK MDLS and the W-MDLS discussed below in section 4, we do not include affordability in MDLS. As with MIS affordability comes in when one assesses how a household will *achieve* MDLS. Solutions may include making services affordable – such as a social tariff for broadband access – or through public provision of access. Affordability is a factor in delivering MDLS.
- **To account for the needs of people with disabilities (e.g., sight loss)** – the current UK MDLS and W-MDLS are defined in terms of the needs of households with children, with W-MDLS including discussion of rural and language contexts. As with MIS on which this work is based, we can use W-MDLS as a baseline for further work to explore the additional needs of other groups and communities such as those dealing with disabilities. Phase two of this current project will seek to address this question for key Welsh communities.
- **To spell out that “accessible internet” should also be reliable, and that “equipment” should be accessible** – we take this as implied in the definition and in the full detail of the UK and W-MDLS (see section 4 below) we discuss the specifics of reliability and access constraints.
- **To clarify how households are expected to “communicate, connect, and engage with opportunities safely and with confidence”** – these details are provided below in the detail of the full UK and Welsh MDLS that was not available at the time of the survey.
- **To be mindful of the fact that focusing on households leaves certain individuals out (e.g., homeless people)** – Again, we can use W-MDLS as a baseline for further work to explore the additional needs of other groups and communities such as those who are homeless. As noted above, Phase two of this current project will seek to address this question for key Welsh communities.

Most survey respondents (18 of 23) either agreed or strongly agreed that having a Welsh MDLS would help drive issues of digital inequalities to the top of their own organisations.

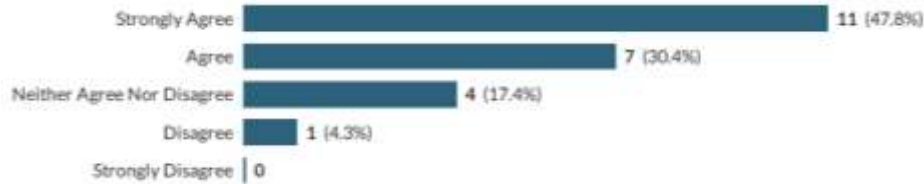


Figure 3: having a Welsh MDLS would help drive issues of digital inequalities to the top of your own organisation.

Similarly, most respondents (21 of 23) either agreed or strongly agreed that implementing a Welsh MDLS would help the work of their organisations in terms of supporting digital inclusion.



Figure 4: Implementing a Welsh MDLS would help the work of my organisations in terms of supporting digital inclusion.

When asked what challenges organisation might face in working with a Minimum Digital Living Standard (MDLS) for Wales they listed several key issues including:

- Increasing demand for resources (e.g., staff, training, funding, time, etc.)
- Funding should be consistent and long term.
- Measuring and reporting outcomes
- Equality organisations should be fully involved.
- Services should be designed with accessibility in mind (e.g., disabled people, first language, age, etc.).

3.4.3 Affordability is an important aspect of accessibility.

“In terms of that cost and affordability side, it's not just broadband at the moment, it's electricity, if you'd have can't pay your electricity bill, then you can't access the internet”.

Policy lead at a social housing provider.

Given the current cost-of-living crisis it was to be expected that the issue of affordability would be in the foreground. That said, and as noted in the introduction, both Covid-19 and the cost-of-living crisis have brought into the light and potentially exacerbated existing issues that underpin digital inequalities. This is a concern across the range of household types, household incomes, and employment circumstances of citizens in Wales and UK.

All respondents that took part in the Delphi survey either agreed or strongly agreed that affordability is a key issue to account for when considering the access to digital technologies of different populations in Wales. All respondents either agreed (4 of 23) or strongly agreed (19 of 23) that affordability is a key issue to account for when considering access to digital technologies.

Stakeholders we interviewed very often work with communities and individuals who are not able to easily obtain either connected devices or the fast broadband connections necessary to use devices to their full potential, as well as struggling financially in other areas. When basic needs for food and power are not being met, internet connection becomes seen as a luxury that can be sacrificed and many stakeholders spoke of the need for a social tariff or subsidy. Though social tariffs are available current Ofcom data indicates that many households are unaware of this option or do not believe that it is targeted at or appropriate for them³².



Figure 5: Affordability is a key aspect inherent in the issue of access to digital technologies.

Overall, both our stakeholder and survey respondents highlighted that many of the members of the communities could not afford reasonable broadband access as currently offered by the major service providers even under current social tariffs. Especially when combined with the cost-of-living crisis at present. It was also noted that some groups, for example people with disabilities, have additional costs for specialist digital equipment on top of the basics of standard devices and broadband.

For some, a focus on skills development is less important than this basic material provision, as without reliable access to broadband and connected devices, people are unable to apply any skills they have learnt in the real world. Someone might attend courses in a library, for example, but then not have access to a computer at home to use or practice those skills.

Some respondents raised concerns that Wales “lagged” behind in relation to digital inclusion for a range of reasons but especially levels of deprivation in some Welsh communities. Therefore, they felt that affordability is especially relevant to Wales, as Wales is economically behind other parts of the UK with many areas of deprivation and high numbers of children living in poverty. However, this is not just an issue for the public, as stakeholders themselves can struggle with funding to provide the best levels of support. Furthermore, the W-MDLS needs to consider the affordability of implementation for providers as well as their clients.

However, affordability itself is not part of MDLS. The MIS methodology leads to a costed basket of goods and services. At this point the affordability of that basket becomes an issue for policy and/or organisations to address how households can be supported through various means to meet that cost (e.g., the market, employment, benefits, social tariffs, or direct provision etc.). MDLS contains a combination of material goods, services, and skills and is therefore more complex than just a single cost. The policy question becomes how to meet this full set of MDLS needs – of which the affordability of some aspects is just one of the challenges to be addressed. As for its implementation, this was seen as a major challenge in terms of infrastructure and stakeholders felt it would need to be clear who would be responsible for funding and delivery of infrastructure and training. At the same time, they also felt that the W-MDLS could act

as a tool for ensuring Welsh parity with the rest of the UK in terms of funding and focus on digital equality.

3.4.4 Rurality

From the Delphi interviews and survey, all respondents either agree or strongly agree that rurality is a key issue to consider in the process of developing and implementing a W-MDLS. Open survey responses emphasised that it affects provision of infrastructure (i.e., access), promotion of digital literacy (i.e., skills) and issues of connectivity, all of which may have an impact on the wellbeing of residents in rural areas. Also, they acknowledged that there are issues of geographical variance and social deprivation that need to be accounted for when considering rurality in Wales. As captured in the quotation below, this also emerged prominently from the interviews:

“There are very isolated communities and homes, within Wales, big farming communities, coastal communities. And I think they do present some challenges around internet connectivity. And that's something that needs to be at the forefront of thinking around any digital offering.”

CEO of a Housing Association

During interviews, access to broadband was raised as a challenge in rural areas of Wales and a W-MDLS should take this into consideration. One representative of a provider building internet connectivity in marginalised areas talked passionately about how the very existence of the network in these areas enables people from all kinds of backgrounds to have better connectivity. Importantly, the pointed out it would be there for future generations with the capacity to grow, preventing these communities from being left behind. Another stakeholder felt that while in an ideal world we would want everyone on the ‘gold standard’ of full fibre, the reality is that this will not reach some rural locations, advocating, rather, for innovative uses of alternative technologies such as fixed wireless access and the communication of what is available to those in the final few percent without full fibre coverage. MDLS could be helpful here, for example to better target interventions at areas below the minimum – this includes helping identify either by LA or possibly WIMD level.



Figure 6: Rurality is a key issue to take into consideration in the process of developing and implementing a Welsh MDLS

Nearly half the survey respondents provided longer responses to the open question on this topic, identifying both issues and intervention ideas. Importantly, they highlighted the complexities in the rural context. For example, that in some regions poorer infrastructure was not under high demand therefore found to be “good enough”. Increasing levels of use and access may therefore reduce quality of service. Increasing digital skills and inclusion therefore needed to be matched with improvements in

infrastructure. It is also clear that mobile connectivity is highlighted much more for rural contexts – this also comes out in our MDLS group interviews (see section 4). The lack of 4G/5G access was described as “discriminatory”. One respondent pointed out the correspondence of below Universal Service Obligation broadband, limited 4G and 5G access and populations that face higher poorer scores on the Welsh Index of Multiple Deprivation, especially regarding transport and journey times. Another respondent highlighted that poor 4G/5G access precludes some communities from digital access solutions based on mobile data – such as the National Data Bank.

3.4.5 Welsh Language

“From our point of view, [the development and implementation of a W-MDLS] ... has to be bilingual, it has to be through the medium of English and Welsh, and both languages given equal prominence”.

SMT for an organisation providing support, advice, and funding opportunities to civil society organisations.

Stakeholders were clear that the Welsh language must be considered in the design of the W-MDLS onwards, rather than something added on or simply translated from an English version. Our survey respondents agreed with most respondents (21 of 23 – more than 90%) either agreeing or strongly agreeing that a key issue to consider in the process of developing and implementing a Welsh MDLS is the Welsh language. While only one respondent neither agreed nor disagreed, no respondents either disagreed or strongly disagreed.

Welsh language is a key issue to take into consideration in the process of developing and implementing a Welsh MDLS

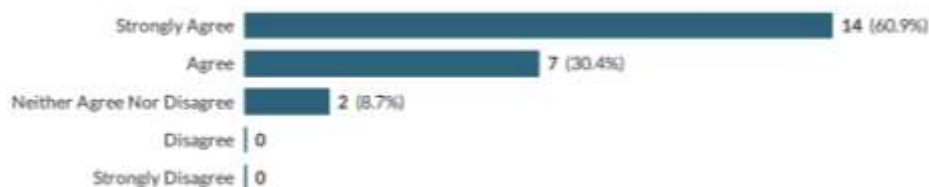


Figure 7: Rurality is a key issue to take into consideration in the process of developing and implementing a Welsh MDLS

It was felt by stakeholders that, in many digital services and many systems Welsh citizens needed to use, English is often given the priority which disadvantages those for whom Welsh is their first language, or who prefer to communicate in Welsh. More specific examples given by stakeholders of those in danger of exclusion included people with learning disabilities who have grown up in Welsh-speaking homes, and older people with dementia for whom language skills in English are lost before those in Welsh. There remains a question for the Welsh Government and stakeholders about the extent to which they can address this issue. One of our survey respondents clearly articulated the need for digital skills development to be available in Welsh.

Services developed and used by Welsh and UK Governments and by Welsh stakeholders can and may be required to be provided or built in the Welsh language. This does not hold for many other digital systems services, or for content produced and hosted outside Wales and the UK. This issue ranges across all areas from financial

services, health advice, and education materials to entertainments media and apps. In these cases, there is no legal nor commercial requirement to provide a Welsh version. As a result, access to digital content and services for Welsh speakers may be limited as compared to other groups and UK regions. The question for the implementation of a W-MDLS might be the extent to which intervention by the Welsh government or stakeholders can effectively mitigate this innate inequity in digital systems and services. In the Delphi review, while most respondents (21 of 23) either agreed or strongly agreed that Welsh language is a key issue to consider when developing and implementing a W-MDLS, another challenge identified by an open-ended question was that this can be a divisive issue. One respondent pointed out that, for some, the policy requirements for Welsh language provision can be an impediment to the economy and service delivery in Wales.

3.4.6 Welsh Ownership

“The narrative that comes out is that English action is UK action when that isn’t always the case”.

Manager for a charity representing people with learning disabilities.

It was felt by stakeholders that a W-MDLS could be more successfully introduced if it were perceived as ‘owned’ by the Welsh people, within a digital ‘vision for Wales’. Stakeholders stressed the importance of listening to wider civil society in order for people to feel that they have had a say in shaping these standards, which is why we will be interviewing digitally excluded people in the next phase of the project. Implementation of the W-MDLS will require commitment and ownership from Welsh government to drive it forward.

3.4.7 Diversity of communities and individuals

As mentioned above, one of the challenges for policymakers when implementing a W-MDLS identified in the Delphi review was the need to take into account the diversity of the Welsh population. As shown in the quote below:

“People could ask someone, have they got a piece of technology? Or do they use tech? Yeah, everyone’s interpretation of what technology is, is different as well. So, you know, I could go to my grandmother, do you use technology, she goes no, but in reality, she’s got a smartphone in her pocket that’s got more power in it than the Space mission flight”.

Community Support Worker with an organisation providing support to older people.

Stakeholders we spoke to work with groups who are more likely to be digitally excluded, including older adults, people with disabilities, people in social housing, and people on low incomes. They stressed the importance of reflecting the specific needs, circumstances and preferences of the groups they worked with. It was not always clear the extent to which these circumstances reflected something that was specific to Wales or rather to these groups and communities in general. Several voiced concerns about the difficulty of reaching those who are most digitally excluded. All stakeholders

stressed that within communities there is great variation in the level of individuals' digital access and skills. Stakeholders pointed out that some individuals were digitally excluded by choice, or that the understanding of what was meant by being digitally excluded may vary from person-to-person and this will be key in the communication and implementation of a W-MDLS. These issues should be considered in relation to wider Welsh government equality strategies, and implementation would need to be in line with wider Welsh legislation.

3.4.8 Training and Skills

“There is no core digital standards for training for staff... I think it should be a mandatory requirement that you go for that course. Right, because it's going to drive change, and it's going to drive people to realise the potential”.

Leader of a charity that provides support for people with disabilities.

While access to broadband and devices are important, without the requisite skills access to the internet will not bring people the benefits it potentially affords. Stakeholders are aware of the importance of digital skills for both their clients and their staff. Training for support staff was considered equally important, with stakeholders indicating a lack of consistency in the digital skills and confidence of the workforce, and the opportunities for training available to them. While Digital Skills Wales³³ offers digital inclusion training, and providers are making offers of training for their own staff, there are currently no core standards or mandatory skills level for those in the public sector. Some stakeholders were concerned about the level of support staff would be able to give to clients if they themselves were digitally excluded, under-skilled, or underconfident.

“Without the training, they just don't know about these things”.

Community Support Worker with an organisation providing support to older people.

In terms of clients, stakeholders were aware that many people lack the skills and/or confidence to engage fully with the digital offer available. Sometimes a person will be highly skilled when using a particular device (e.g., a smartphone) but not able to utilise other devices (e.g., a laptop), or be skilled in one area and not others. This means that they may be able to pursue some opportunities online but not be able to fully take advantage of digital services, which may rely, for example, on the use of health or government sites. One stakeholder pointed out that the pandemic has brought groups and individuals online who were not engaging with it before. Stakeholders talked about how training can help people feel more secure as they understand how to stay safe online, making them more likely to engage. On a positive note, stakeholders identified many organisations and groups working collaboratively already to offer opportunities to upskill for both clients and support staff. However, some participants identified in response to an open-ended question in the Delphi review that, while opportunities for training are already in place in Wales, training should be explicitly stated in the definition of a W-MDLS. Currently, this is implicit in the idea of 'support' included in the definition.

3.4.9 Implementing a Welsh MDLS

Importantly the majority of our survey respondents (21 of 23) either agreed or strongly agreed that a Welsh MDLS would help drive issues of digital inequalities to the top of policymakers' agendas. When asked about the challenges of implementing a Welsh MDLS as part of policy our stakeholders and survey respondents raised several issues. Most respondents (20 of 23) either agreed or strongly agreed that implementing a Welsh MDLS from a policy perspective would require more effective collaboration between different government bodies.

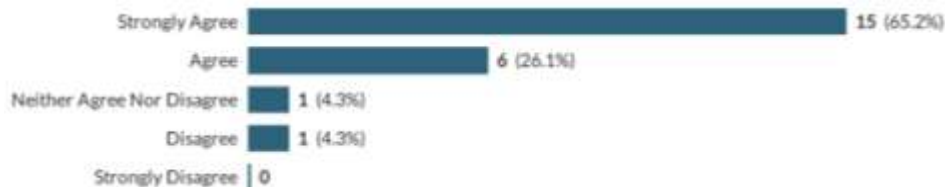


Figure 8: Having a Welsh MDLS would help drive issues of digital inequalities to the top of policy makers agendas.



Figure 9: Implementing a Welsh MDLS from a policy perspective would require more effective collaboration between different government bodies.

Most respondents (20 of 23) either agreed or strongly agreed that implementing a Welsh MDLS from a policy perspective would require more effective communication with the public as to why meeting the standard is needed and important. While one respondent neither agreed nor disagreed, two respondents disagreed.

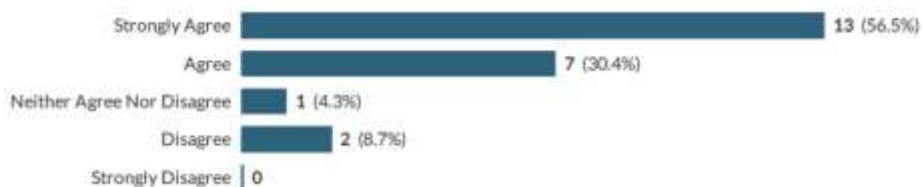


Figure 10: Implementing a Welsh MDLS from a policy perspective would require more effective communication with the public as to why meeting the standard is both needed and important.

Other challenges raised by stakeholders and survey respondents included:

- Digital inclusion is still as an after-thought both in the private and in the public sectors.
- Organisations often struggle to obtain funding for undertaking initiatives that promote digital inclusion.
- It is difficult to communicate with the public and let people know where they can get help in terms of accessing and using digital technologies.

- Any implementation needs to consider the diversity of the Welsh population (including those who speak neither Welsh nor English).
- There is a need to challenge the assumption that certain groups are more digitally capable and motivated than others and that some other groups are inherently excluded (e.g., younger vs older groups, urban vs rural).
- It is important to encourage private companies to comply and support the standard.
- There is a need to recognise that there is a lack of knowledge in relation to digital exclusion both in the private and in the public sectors.
- The digital landscape is constantly evolving, which requires flexibility and adaptability.
- Much greater two-way communication and collaboration is needed between government/public-sector bodies and others.
- The competing demands on public finance.
- People would not need much digital training if digital services and products were designed in more user-friendly ways.

4 Welsh MDLS groups results

4.1 Method

Establishing a Minimum Digital Living Standard for Wales (W-MDLS) involved building on the Minimum Digital Living Standard for the UK (UK MDLS), as it provided a 'baseline' from which to explore if and how digital needs might vary for people living in Wales. The aim of MDLS research was to establish a benchmark of what people say is needed for a socially acceptable minimum (specifically, what they need to be able to *access*, need to *have*, and need to be able to *do*) in order to be included in today's digital world. To this end, the research involved setting out the range of goods, services, skills, and knowledge that individuals and households would need, as determined by members of the public. The UK MDLS was designed as a 'proof of concept' study. While the base MDLS definition applies across household types, when looking at what is needed to meet this standard, the UK-MDLS study focused on the needs of households with dependent age children. This was seen as a useful starting point for developing MDLS, given the significance of digital use and inclusion for children and young people, and its importance within the home and family context. Consequently, the contents of W-MDLS outlined below, focus on the needs of households with children. This initial study can be used as the basis for further discussions about digital needs and how these might be met across different household compositions and locations within Wales.

As noted in section 2, UK and Welsh MDLS research draws on the Minimum Income Standard (MIS) methodology¹³. Updated annually since the first set of findings published in 2008, the MIS research is focused on establishing what the public thinks everyone needs in order to have a minimum socially acceptable standard of living which meets material needs and enables social participation and inclusion, detailing the range of goods and services required to meet those needs. The MIS methodology has been used to look at how needs vary in different contexts, and it was selected as a suitable approach for examining what households need to be digitally included in society. Key aspects of the MIS approach that are central to its use with developing a MDLS are:

- The method involves holding a series of discussion groups with members of the public, feeding through from one group to the next, to build towards consensus.
- It is based on a minimum *acceptable* standard of living which is about more than survival – it includes what everyone should be able to have in order to feel included, live with dignity and take part in the world around them.
- It is rooted in the public's opinion of need, from the perspective of citizens themselves and what they think is important in everyday lives, rather than a 'top down', expert-led approach.
- It accounts for different needs of individuals within the context of a household.
- The focus is on what people *need* to reach the living standard in question, and once these needs 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 standard sets out what people feel is *needed*, but is not prescriptive, and has no legislative authority to compel government or other bodies to provide for these

needs. The standard is, however, a powerful tool providing detailed information based on public consensus, which not only stimulates debate but can be drawn on by organisations in their own practices. MIS, for example, is used by numerous grant-giving charities and notably informs the setting of the Real Living Wage.

4.1.1 Building on the UK MDLS

The UK MDLS involved a series of focus groups held across England, Wales, Scotland, and Northern Ireland with members of the public – including adults and young people - between February and October 2022. This initial research focused on households living in urban areas of the UK, which could act as a benchmark to explore any difference in needs in rural communities in the future. The groups involved four stages, with discussions from one group or stage feeding into the next to form the research outcomes. The process is outlined below, and full details of the UK MDLS methodology are contained in the report for that study ([A UK Minimum Digital Living Standard for Families with Children: Interim Report](#)).

4.1.2 Developing an MDLS definition

During the initial ‘orientation’ stage of the research, groups decided what MDLS should encompass to develop a definition. The MDLS definition was formulated based on five discussion groups, including people from different demographic and household types (including working age, pensioners, parents, and young people). Although the UK MDLS and W-MDLS established what households with children need to meet MDLS, it was important to include people from different ages and life stages in the orientation groups to ensure that the developed definition was relevant to pensioners and people without children as well as parents and young people. At the orientation stage, groups discussed the benefits and challenges of living in a digital world and the implications of digital inclusion and exclusion. A definition of the key elements of digital inclusion was compiled from the findings of these groups and used throughout the research to ensure that there was a shared understanding of the ‘standard’ under discussion.

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’.

When developing the definition, groups were clear that it should be multi-faceted to include more than just having devices or internet connection; these also need to be adequate and fit for purpose to enable people to perform the tasks they need to. Furthermore, MDLS was defined by the orientation groups as requiring knowledge and skills, not only for people to be able to use digital technology effectively, but also to do so safely and confidently. As participants pointed out, someone could have a laptop, but if they didn’t have a sufficient broadband connection or didn’t know how to use the laptop properly, they would not be digitally included. Hence, the definition was

developed to encompass what an individual or household would need to have, as well as the infrastructure they need to support this.

It is worth reiterating that MDLS research is about establishing *needs*: but meeting these needs and reaching MDLS depends on access to a range of resources. Affordability can be crucial to people being able to meet their digital needs, and the research with stakeholders questioned whether it should be explicitly included in the W-MDLS definition (see Section 3). However, 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) 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.

Participant, UK MDLS Orientation group, Swansea

4.1.3 Deciding what is needed for MDLS.

Further series of groups discussed what would be required to meet MDLS for families with children. Nine groups were held with parents, including groups specifically with parents of children at certain stages – pre-school, primary or secondary school age – to ensure a thorough focus on how children's (and their parents') digital needs could vary at different ages. Three groups with young people aged 11 to 17 were held alongside the latter stages of the parent groups and enabled feedback between adult and young people's views.

The MDLS definition was presented and explained at the beginning of each group to provide a framework to discuss the needs of hypothetical individuals within households. These were used to help participants reflect on how the needs of someone in a household like their own would be met. Where relevant, technological goods already included in MIS were drawn on as a starting point and groups were asked to consider the types and specifications of equipment, services, skills, and knowledge needed by whom and to do what. Decisions were fed through the different stages of groups – Task groups, Checkback, and Final –and reviewed through a funnelling process to move towards consensus about the contents of MDLS.

4.2 Developing MDLS for households with children in Wales

Once the UK MDLS was established, it provided the potential to extend the research to specifically look at the digital needs of families in Wales. Three focus groups (each comprising 8 participants) were held in November 2022 to enable further exploration of MDLS with members of the public in Wales. Two groups were held with parents, including lone and partnered parents (a mix of mothers and fathers) from different socio-economic backgrounds (including people working / not in work, on means tested benefits and in different housing tenure), who had children aged from under 1 to 17 years old. The first (Task group) was held in a town in South Wales and included

participants from surrounding areas. The other (Final group) was conducted online to enable a wider geographic spread of participants, including some in more rural locations. The groups included Welsh speakers, and some participants had children who went to Welsh-speaking schools. A (Checkback) group with young people (aged 13-16) was held in a secondary school in another town in South Wales, and took place in-between the two parent groups, which provided the research team the opportunity to feed decisions and perspectives back between parents and young people. The focus group with young people did not take place in a Welsh-speaking school, although Welsh was taught as part of the curriculum.

It is important to note that the W-MDLS research does not attempt to draw a direct comparison with UK MDLS. UK MDLS is based on the needs of families living in urban areas, whereas two of the focus groups in Wales were in towns, the other included the views of people in more rural areas too. Rather it is an opportunity to focus specifically on the views of people living in Wales about their digital needs and issues of relevance to them.

The MDLS definition was presented and explained at the beginning of all three W-MDLS groups. Participants felt that the MDLS definition was appropriate and covered the different aspects of needs for digital inclusion, and this agreement with the MDLS definition was made further apparent when participants referred back to it during discussions.

The three W-MDLS discussion groups reiterated the wide-ranging and increased need for technology and access to the internet. Examples of the prevalence of digital needs included parents working from home, online interaction with schools, the use of GPS/Google maps, digital entertainment channels, gaming, as well as the importance of apps for social media and entertainment, especially for young people. Participants noted how online access had not only become more important during Covid but had had lasting impacts for parents and children. This was particularly relevant and often discussed in relation to education where online parent/school interaction and online homework continued and digital engagement for children and parents was seen as essential.

Since Covid, they have found that it is easier and quicker for them to do parents evenings online ...there is no reason to have that anymore, but they choose to do that.

Parents, Task Group^f

In my children's school, primary and secondary, all of the homework is set on [school app name], that is the app that we have. We have to book parents evening through the app, I have to book a seat at the Christmas concert through the app, I have to book all the after-school activities, school reports are sent through it, he has to do all of this revision online, he has to mark his tasks off he

^f To protect anonymity, the quotes used in the following sections refer only to a 'participant'. 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 quote, rather than to identify individual contributors throughout a specific group.

has done. The other day, he needed to check something, he had to email his teacher from home. So, it is digital by default, really.

Parents, Final Group

Drawing on UK-MDLS as a starting point, the group facilitators presented the lists of items (devices/technological goods), online connectivity (mobile data and broadband), and skills and knowledge that had been agreed by participants in the UK research as necessary to meet MDLS. Discussions invited participants to comment on each aspect of the MDLS contents – whether they felt they were appropriate, whether there might be any differences in needs to UK MDLS, as well as issues that could be relevant to peoples’ ability to meet the different aspects of MDLS. This included asking whether there were any factors related to living in Wales that could have implications for the issues under discussion, such as use of Welsh language. The contents of both the Welsh and UK MDLS were organised into three components:

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

The contents of each of these components are outlined below alongside rationales from groups’ discussions detailing the importance of the different elements for digital inclusion, and as encompassed in the MDLS definition people’s needs *across* these areas.

4.3 Digital goods and services for W-MDLS

This section outlines the goods and services that are included in W-MDLS for households with children. While groups had broad discussions around devices and online connectivity, they did not make significant changes to the overall list of goods services and skills compiled by groups for UK MDLS. Rather, participants in the groups for Wales tended to focus on issues which could inhibit a person or household reaching MDLS; for example, infrastructure (see also Section 4.5.1). Participants therefore recognised that there were important factors influencing people’s abilities to meet MDLS rather than feeling that the needs themselves should change. The goods, services and skills for W-MDLS are presented below and refer to the perspectives of participants living in Wales.

4.3.1 Broadband

- **Home broadband – with sufficient speed to support multiple family members using devices / being online at the same time.**

Groups agreed that home broadband was a necessity for families with children, pointing to the ubiquity of devices requiring online access in the home to access entertainment, communication, and information, such as televisions with built-in internet, mobile phones, laptops, and gaming consoles. With so much of life being digital, groups felt that an adequate home broadband connection should enable multiple family members to access the internet at the same time, via a range of devices, and engage in the activities they wanted to, without having to make compromises or worry about an

unstable connection. The required broadband speed would vary depending on household size and how it was being used. Given the range of technology included in MDLS (presented below) and activities discussed in groups, an internet connection could need to support the simultaneous demands of online gaming, viewing digital TV or streaming music, and browsing the internet, social media or YouTube for a family with several children, as well as for some parents working at home which could entail online meetings or calls.

A key issue raised across the W-MDLS groups was accessing broadband that was sufficient to meet a family's needs. Participants' experiences varied, and depended on the area they lived in, as well as the type of housing and how it was constructed. For example, being in an area with superfast broadband, or a new-build property which came with a built-in ultra-fast fibre connection meant being able to run multiple devices – as a parent with four teenagers in the house noted this 'kept everyone happy'. However, other participants described struggling for an adequate broadband connection, especially if they lived in a rural area with limited speeds available, or an older property, with thicker walls that made it difficult to establish stable Wi-Fi connectivity throughout the home. Mediating these circumstances could involve having to use additional routers, extenders or a booster to improve the quality of connection, even after upgrading to a faster service. The implications of having unreliable home broadband included difficulty doing online homework that required a laptop, having to use mobile data (if they could access it) and paying more for a faster broadband package where a standard package was not meeting their needs.

'If I am watching Disney Plus and my boyfriend is on the Xbox, like very often it will go off. And then I have to end up using my mobile data if I want to go on the internet. But like, we're still playing £27.50 a month but it is useless. It is so bad. Like, upstairs very rarely you can use the Wi-Fi.'

Parents, Task Group

'I have had to pay for having the super-fast extra scooby doo Wi-Fi and broadband just so that my son can play on his Xbox while I work on the laptop because when we just had the standard, we noticed that his game was leggy all the time. And that is just two of us.'

Parents, Final Group

The home broadband speed required for a family to carry out the tasks they need to would not only vary depending on household size and the types of activities it would be used for, but also because of disparities around connection quality and achieved home broadband speed (see also Section 4.6). These factors mean that what could be sufficient for one household would not be enough for another. Reflecting this potential variation, rather than specifying a particular home broadband speed for MDLS, groups agreed on a principle that the level of broadband speed a household requires should be sufficient to allow all household members to use it simultaneously without experiencing difficulties, including for broadband-intensive activities such as gaming and streaming. As noted in Section 3, need is not different from the UK MDLS. However as discussed

in Section 3 and below how to meet this need in the Welsh context may raise different challenges and require different policy responses than in other UK locations.

4.3.2 Mobile phone and data

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

The inclusion of a smart phone and data was seen as vital for parents' and young people's participation in the world around them, given the prevalence and normalisation of online services and communication whilst out and about. Groups agreed that an entry-level smartphone would be adequate to meet MDLS for parents and secondary-school-age children. To meet a minimum acceptable need, the smart phone did not have to be of a particular brand as long as it had the functions and capabilities required for the tasks they needed to do - an example of an entry-level smart phone with 32GB of device memory, that would last for two years, was seen as a reasonable benchmark⁹.

Parent and young people's groups agreed that, to meet MDLS, it would be necessary for a child to have their own mobile phone by the time they went to secondary school. This decision was based first on safety, as a child in secondary school could be travelling to school on their own or beginning to go out with friends independently, and second on the principle that they could be increasingly organising more aspects of their home and school life. Young people explained that as a child progressed through secondary school, their use of a smart phone would develop – this linked to parallel discussions about the skills and knowledge young people would require for digital safety and confidence at different ages and stages of engagement with technology (see Section 4.4). Young people discussed using a smart phone and data to keep track of homework and school messages, making payments when they have their own bank accounts, and for entertainment and keeping in touch with friends and family. These were aspects of digital engagement which were considered vital for social participation and connecting with the wider world, especially as children got older and more independent (the young people in the W-MDLS discussion group were aged 13-16).

***P1:** I have got Google Classroom on my phone, and I downloaded it on my mum's phone and logged in to my account on hers so when I get a notification saying I have homework, it comes up on hers as well. So, then she can remind me if I have got homework.*

***P2:** I use like a gym membership, I have got it on my phone, I downloaded an app and I go up there with a QR code and I go up to the buzzer thing, scan it and then I can go.*

Young People, Checkback group

⁹ MDLS mobile phone provision is based on personal use, and if a phone/data was required specifically for work purposes it was an additional need and could be provided by an employer.

Mobile data generated much discussion. Having sufficient mobile data was fundamental to ensuring that families could access what they needed for completing everyday tasks, staying safe and interacting with others. However, it was acknowledged that as a minimum it was reasonable to expect people to manage their data use, for example, by downloading entertainment at home using Wi-Fi in order to watch it when out and about. However, the data allowance needed to be high enough to minimise the worry of running out. Crucial to these discussions is that in order to meet MDLS, households should have access to reliable home broadband (though it is acknowledged that this may not be the case in reality – see above). Therefore, discussions around mobile data focused on the need for online connectivity when out and about, and the amounts of data agreed as a minimum for families were felt to be ‘pretty fair’ when used in combination with home broadband access.

For parents a key issue is being able to do things on the go when they have busy lives, and the Welsh parents’ groups particularly noted the use of Google maps and the need to keep in touch with children if they were elsewhere. While some expressed the importance of ensuring that they had enough data in an ‘emergency’ or for navigation on long journeys, discussions among participants noted that it was use of videos or streaming rather than maps that used most data. Both parents and young people recognised that their use of social media, keeping in touch with friends, watching and sharing digital content could incur heavy data use. While some parents suggested that keeping to 5GB of data a month could be ‘a problem’ for some teenagers, they felt it was reasonable to set limits for children’s data use and use discretion about which apps to use and when – and as packages generally come with unlimited minutes and texts this would provide reassurance that they could still keep in touch.

She can still phone me and has unlimited texts and unlimited phone calls because I need that safety for her, but data runs out because she uses her data for scrolling ridiculously in school. She could do it at home on my broadband.

Parents, Task Group

Young people felt that 5GB a month was reasonable as a minimum but noted the challenges of managing their data, with varying degrees of knowledge about how to monitor this on their phones - from using apps to track their data use to ‘*just learning from your mistakes*’ when they ran out. This links to the need for skills and knowledge about how to manage data (see below). The ability to access Wi-Fi hotspots outside of the home can also help reduce the demands on mobile data, however, while these were reported as potentially available in some urban spaces such as city centres, this was felt to be less of an option for those in other areas. Participants also noted that free Wi-Fi in some locations was not necessarily easily accessible to young people.

It is not as often as you think it would be like free wi-fi is not everywhere, so you have to use your data.

Young people, Checkback Group

P1: I suppose they could go to McDonalds but then they get moved on from there if they are not ordering food. And then the other place is a place like

Wetherspoons, but kids can't really go so there is not a lot of opportunity for them to get on to a hotspot, so they are on their data all the time.

P2: *I was just going to say that I think I noticed the other day there was like Cardiff Street wi-fi, so you can just access wi-fi on the high street there. But I imagine there is going to be a lot more of these hotspots within a city.*

P3: *There is very little here and plus we have problems with mobile signal full stop...*

P4: *Where I live which is very rural there is no free wi-fi sort of within 10 miles.*

Parents, Final Group

Groups also agreed that the MDLS should include extra data to cover the needs of primary or pre-school children. This would allow for younger children to use a parent's phone from time to time to watch content or play games while out and about. As children become older the data could be used on a SIM with an old mobile phone handed down, for example when a parent replaced theirs – this was sometimes mentioned as a first step towards a child having a phone before they have their own mobile and data. The skills and knowledge that both parents and children of different ages would require to help manage device use (outlined in Section 4.4) were also integral to MDLS, highlighting the importance of taking a holistic approach to digital needs.

A key issue raised across the Welsh groups when discussing phone use and data, was difficulty accessing mobile signal or data at all. While lack of coverage was particularly problematic for participants living in rural locations, getting a mobile signal could be tricky in areas that were not necessarily isolated, for example, just outside an urban area with difficulties even noted in a city location.

P1: *It is like in a basin, so as soon as you drop down it is like back in cave man times, there is no signal, you can't even make a phone call.*

P2: *I used to work there and as soon as I got to [place] my phone used to go whoosh and just dead.*

Parents, Task group

In like the countryside's as well so if you're going out like down the lanes, you won't get much signal there so you can't use your sat nav and stuff like that on your phone.

Young People, Checkback Group

Participants talked about 'dead zones' where there was no mobile connection and having to search around for a signal or try and find access to Wi-Fi. The implications included concerns about breaking down and being unable to use a mobile to get help, not being able to keep in touch with a child on their mobile or being out of contact themselves, as one participant described:

It is actually really scary like a stupid thing we went Christmas shopping on Monday and the place we went Christmas shopping we had no mobile signal and me and my partner were there it was like what if the school needs to phone us? They are not going to get us.

Parents, Final Group

It could also mean being restricted to using their mobile in certain rooms of the house, changing providers to try to get a better signal, and some participants who experienced difficulty with mobile coverage noting that having a landline phone becomes more important than otherwise would be the case.

We can't think about giving our landline phone up because our mobile signal does sometimes vanish. I keep getting offered deals without a landline, but I am like no, I am keeping it for now because I don't trust the mobile signal is going to stay there all the time.

Parents, Final Group

So, while participants agreed on the level of mobile data needed for MDLS, some people would have difficulty accessing this, and if they had restricted signal, it could also inhibit using unlimited minutes and texts that often to come with mobile data packages. Given that the UK-MDLS was focused on urban areas, and W-MDLS included some participants in rural areas direct comparisons cannot be made, but, reflecting stakeholder comments (see Section 3), 'patchy' mobile coverage was seen as very relevant to people's ability to meet the MDLS across Wales.

It is important to reiterate that this mobile device access and data provision assumes broadband access is available at home. In our groups it was clearly articulated that mobile data was in addition to access at home. Households without this access, that is households dependent on mobile data only, would be falling below the standard. The ability to manage data across mobile device and home access was a core need articulated by our MDLS group participants. This raises specific policy issues as mobile only solutions and data banks are a key intervention strategy at the time of writing. These provide incredibly important lifelines for many households, but we would stress that, like food banks, they are a 'last line of defence' that can provide support and digital access. However, they fall below what our respondents viewed as a reasonable minimum to allow full but basic participation in contemporary society.

4.3.3 Laptop

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

Participants agreed that households should have access to a laptop, and for school-age children this was particularly important for doing homework and submitting it online.

They will use their mobile phones sometimes just to go into the firefly app and they will mark the tasks off as done but anything significant you know needs a proper big screen ideally that is computer work. I don't want him doing it on a small screen where you're like struggling to see it.

Parents, Final Group

Groups agreed that it was acceptable for parents and one child to share a laptop, but that families would need another device for each additional school-age child to minimise clashes and ease the pressure if siblings were trying to do homework at the same time.

An entry-level laptop was included to meet the families' needs for everyday personal and school use^h. It should be noted that the items included in MDLS are not prescriptive, but rather suggested ways in which households can meet their digital needs. Indeed, parents with younger children felt that a tablet might be a more suitable device for that age group. The key issue is that a laptop or tablet provides another form of technology and internet access rather than being limited to using a mobile phone, with some participants discussing the importance of children having access to a laptop for schoolwork and to develop computer skills.

4.3.4 Television

- **A smart TV, TV licence and basic TV subscription service**

W-MDLS groups agreed with the provision of a smart TV in the household for social participation and entertainment which would mean that family members would not be limited to viewing content on a laptop and could watch TV together or with visitors. They agreed that a relatively inexpensive 32-inch screen TV would be adequate to meet the needs of families with children. A TV licence was included as a legal requirement to access BBC content. Reflecting social norms around how families watch TV, groups also agreed to the inclusion of a basic TV streaming service, such as Netflix, to provide families with children a minimum level of participation, and some choice beyond free channels.

4.3.5 Smart speaker

- **A basic smart speaker**

In 2022, a smart speaker replaced an analogue portable radio that had previously been included in the main MIS budgets as an item that all households should be able to have if they chose to. W-MDLS groups agreed with the inclusion in MDLS of a basic smart speaker. It was acknowledged as being an updated version of a standalone radio, which would not only provide households with a way of listening to a wide range of music and radio stations but would also be beneficial for households with children for its extra functionality, for example, to set timers or reminders and as a source of information.

I think for my children it is quite educational you know they actually ask Alexa questions so for me you know it is another learning tool.

Parents, Final Group

4.3.6 Gaming

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

A games console was included in MIS and MDLS for families with primary or secondary school age children. The type of console was not specified as it would depend on the preference and age of the child. The console was included in MDLS based on its

^h MDLS laptop provision is based on personal household use, with the assumption that an employer provides devices required for work purposes, for example working from home.

identification by groups as an item that households with children would need to feel included in today's digital society. MIS participants suggested that a second-hand console would be adequate to meet children's needs. A subscription was also included as this enables online gaming with others for social participation. Parents in the W-MDLS groups acknowledged that being able to play multiplayer games with others could be particularly important for the social needs of children as they got older, as a way of communicating with their friends and keeping involved in their networks. Parents also noted that being unable to take part could lead to a child's social exclusion:

P1: That is how they join in, that is how they do it now, that is how they talk

P2: ...And they have to game in this day and age because they will get picked on in school if they don't.

Parents, Task Group

Some of the skills and knowledge outlined in Section 4.4 are particularly relevant to gaming and online interaction. While parents felt that (age appropriate) gaming was important for children's social participation, they were also concerned about potential digital risks that children might encounter and identified the need for awareness especially around online contact with other people.

4.3.7 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.

4.3.8 Printer

The UK MDLS does not include a printer in the home as after lots of discussions, groups did not agree that it was a minimum need for families. Similarly, the in-person W-MDLS groups with parents and young people thought that it was unnecessary to print at home, with secondary school students noting that their schoolwork was completed online, submitted electronically, and they were able to print at school if they needed to. However, some mixed views in the online parents' group highlighted variation in some primary schools' expectations around the need for printing, and the potential difficulty in accessing alternatives, such as a library, for those living in rural areas indicating that needs may vary in specific circumstances. This point reemphasises the complexities of meeting MDLS for people in rural areas. In much of the digital inclusion literature rurality equates to poor broadband or mobile coverage, whereas the lack of supporting infrastructure creates other demands. For example, the lack of local accessible library or similar services can lead to a need for additional equipment or additional non-digital costs such as for travel.

Q: *Would it be acceptable to expect someone to access their printing via the library?*

P1: *For here no, because the nearest library is in [town around 10 miles away].*

P2: *Yes, our library is quite big, and it is open access there, so yes.*

P1: *I have got a car, but it would be sort of petrol to get there, it all then adds to the expense of just printing things out.*

(Parents, Final Group)

4.4 Skills and knowledge

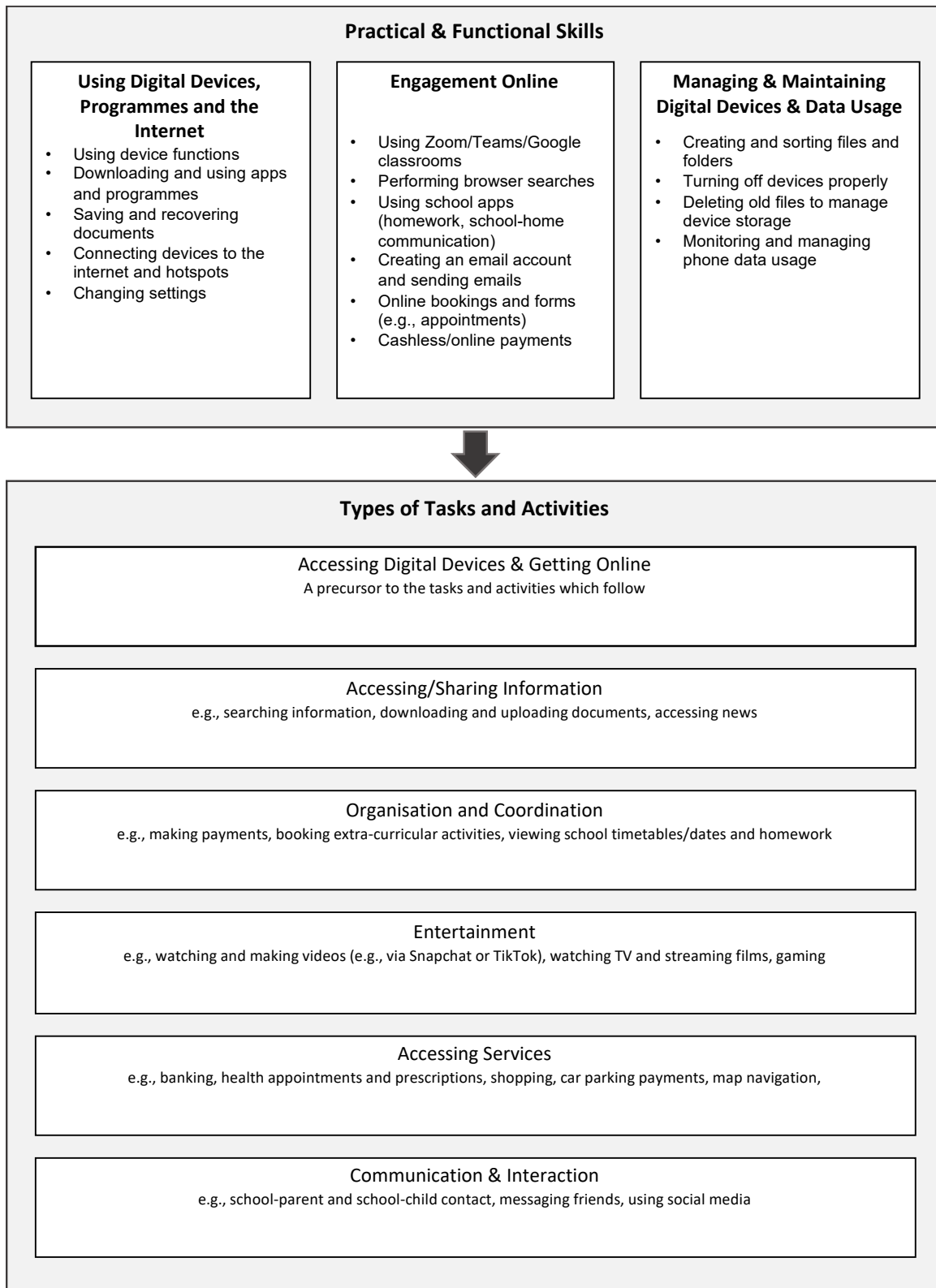
From group discussions throughout the project, it was clear that skills and knowledge were a vital aspect of the requirements to meet MDLS. Participants felt that skills and knowledge were central to ensuring that parents and children are not only confident in how to use their devices, get online and perform the tasks they needed to, but importantly, were able to do so safely.

The three W-MDLS groups were presented with the types of skills and knowledge identified by previous groups in the UK-MDLS research. Participants were asked to consider whether these seemed appropriate and relevant in the context of families with children living in Wales. The skills and knowledge identified fall into two broad categories: practical and functional skills for carrying out everyday tasks and activities, and the skills needed for understanding and managing digital risks. Skills therefore encompass 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. These are summarised below under each section including participants' expectations around what age or stage of education various skills or knowledge might become relevant to children (these are outlined in detail in the UK MDLS report (www.mdls.org.uk)). W-MDLS participants agreed with the range of needs included and shared their thoughts about why they felt these were important – the following sections also provide an insight into the barriers and issues to acquiring these skills highlighted in the W-MDLS groups.

4.4.1 Practical and functional skills for everyday tasks and activities

A range of practical digital skills are included in MDLS that are associated with tasks and activities needed to get by, not only in the digital world, but also for wider everyday life. These include: using digital devices; programmes and the internet; engagement online; and managing and maintaining devices and usage. Figure 11 provides a map of these practical and functional skills.

Figure 11: Map of Practical and Functional Skills and the Types of Tasks and Activities they Enable Parents and Young People to Engage in



Parents and young people discussed how these sets of skills would be needed by parents and acquired by children as they grew older. So, while a pre-school child might use a device and have some idea of the basic on/off/volume functions, the skillset of a child would need to expand as their interaction with technology progressed. For example, moving from basic use of apps in Key Stage 1 (aged 5-7) to using technology and the internet more independently in Key Stage 2 (aged 7-11) would require them to learn how to download apps, save and recover documents, upload homework online and perform browser searches effectively. As children moved through secondary school, they would need skills to communicate and organise themselves independently (for example, setting up an email account and sending emails), change computer/programme settings, and deal with online finances. For parents and secondary school age children being able to manage and monitor mobile data or device storage was an important skill, to be able to meet their digital needs within the parameters set by groups as acceptable. For example, having 'unlimited' mobile data was agreed to be the 'nice to have' amount rather than the 'need to have', which would mean that to avoid running out, people would have to be mindful of how much they had remaining, and which apps and activities would use most (for example, streaming videos on YouTube uses data faster than accessing emails).

While parents and young people in the W-MDLS groups felt that the skills presented above were important, they noted that people would not necessarily have them all. This included parents reflecting on their own level of digital knowledge and skills, often noting that their children were more advanced in comparison, as illustrated by a discussion in one of the parent groups.

***Q:** So how about this from the parents' perspective, are we saying that parents have these [skills]?*

***P1:** Nope.*

***P2:** No, my kids change my settings for me. I can't fill out a form when I am supposed to ...*

***P3:** I get my boyfriend to fill them in.*

***P1:** It is overwhelming.*

***P4:** I can do most of them but there is definitely times where I do ask my kids and they definitely know....*

***P3:** ... I haven't got a clue how to do half of that. So, I am going to be blooming stupid....*

***P2:** You find once the kids start school, they know more than you. So, they can do it and you're like wow.*

***P1:** They are good at it yes just from school they are really good at it.*

***P4:** I think they are just like you said, they just get on with it.*

***P2:** It is because it is what they grow up with it yes, when I was a kid, I didn't have computers or nothing.*

Parents, Task group

Some young people who said that they had their own bank accounts were confident about making cashless transactions and said that they shopped online and made online payments 'all the time'; they also noted their digital skills had broadened and improved during the Covid-19 pandemic, driven by the necessity to make video calls and complete schoolwork online. However, the views of young people highlighted that it can't be assumed that people their age are all 'digital natives'. Some felt that there was less awareness amongst their peers around skills which were more functional or operational, suggesting a need for more support in some aspects of how to use technology or devices and a potential gap in school IT provision.

P1: *[We need] more technological support in school, not just learning about how to be safe online. Things like learning how to make a call for younger children, avoid calls, learn things like that in school.*

P2: *Like you have ICT as a subject in secondary school, in primary school you don't necessarily.*

P1: *...Yes but I think you also need to learn skills and how to use an iPad, how to use your phone properly, things like that.*

Young people, Checkback group

Another area highlighted was how to manage mobile data usage, which is part of everyday life for young people, and relevant to the MDLS expectation of managing on a certain amount of data.

P1: *I don't think it is that easy to control your data, personally because especially for people in like younger [year groups in] secondary schools, they are not going to know how much data they actually have. So, it is a bit difficult to like figure out if you have got enough.*

P2: *You can access it through different apps depending on what type of phone you have, and then you can put limits for each day on them.*

P1: *Yes, but it's people knowing, like the knowledge yes.*

P3: *It should be a bit more obvious.*

P2: *It should be a bit of both, like tells you how much data you have, say OK you think to yourself OK what should I be using this data for? And when should I be using it.*

Q: *And some things use more data than others. Do you think people know about that?*

P1: *No.*

P3: *Not really no.*

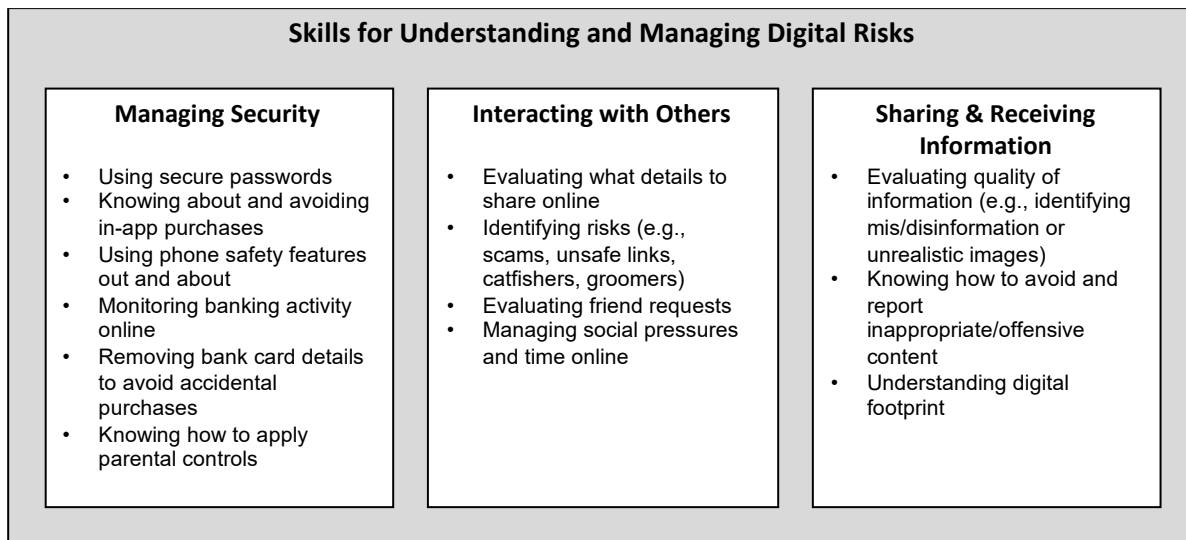
Young people, Checkback group

4.4.2 Skills for understanding and managing digital risks.

As well as general wariness of being scammed, online security or things going wrong, a key concern of groups was potential digital risks and harms for children and young people. The set of skills and understanding outlined below were seen as important for families to help manage and mitigate these risks while engaging in the digital world – so

people would be better able to perform the tasks and activities described above confidently and safely. These can be organised into three broad categories: managing security; interacting with others; and sharing and receiving information. Figure 12 provides a map of these skills.

Figure 12: Skills for understanding and managing digital risks.



These skills and knowledge related to various online risks that groups said parents and children could encounter as they become more engaged in online activities. Parents discussed the need to be aware of the age suitability of online games for children, and were aware of age restrictions, though noted parents would take different approaches to what they let their child access. This would apply to accessing gaming, social media or other content. A child who was gaming or interacting online with others would need to have an awareness of online “stranger danger”: people posing under false identities with harmful intentions, this includes evaluating if friend requests were genuine and what to share about themselves. As children progressed through primary school and accessed the internet more independently for schoolwork and entertainment, they would need to understand the importance of passwords and secure logins, build the skills to evaluate the quality and intentions of online content, and be aware of the potential impact of digital engagement on their mental health. This could take the form of monitoring the time they spent online and managing pressures associated with keeping up with social media and understanding that what they shared would potentially have a ‘digital footprint’ when posted online. Groups felt that parents need an awareness of online risks, to know how use parental controls, and to take measures to avoid accidental online purchases (alongside children understanding the reality of in-game purchases).

Parents and young people in the W-MDLS groups recognised the risks outlined and agreed on the range of knowledge and skills included to help families manage online life more safely, noting *‘It’s all important’: ‘it’s sad that they have to learn those types of things, though it’s the way the world is, isn’t it?’*. They reported a range of issues around staying safe and acquiring and exercising the necessary skills. Parents were especially concerned about digital safety for children. They talked about the potential deleterious

effects of inappropriate content online which might promote, for example, bullying, eating disorders and suicidality.

Young people themselves commented on how difficult it could be to evaluate the reliability of information and authenticity of images they encountered online and the implications this could have for their understanding as well as their wellbeing.

P1: Once you access social media and the internet you can see anything and if you don't know what is fake or not, you can believe anything and that could really affect what you believe and what you know is true or not.

P2: And definitely filters as well, people can compare themselves to other people and then they have anxiety about it, and try and make themselves look the same. So, I think they need to know that there are filters, it isn't always reality.

Young people, Checkback Group

Although MDLS includes a mobile phone for children when 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 group were aged 13-16, and therefore at or above the age recommended as suitable for use of apps such as WhatsApp, Snapchat, and Instagram, which they mentioned as using when communicating with their friends. However, from group discussions (and wider research³⁴) 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. Parents discussed their concerns around who their children interacted with online, and the risks of their child becoming exposed to dangerous people or being pressured into sharing explicit images. As one parent expressed, '*it makes me nervous*'. Yet, parents also reported the difficulties they faced in trying to manage online risks.

I feel very out of my depth with all of this, I feel like I should know way more, my son is 9 coming on 10 and I know he has had a few days in school about this sort of thing, but I feel like I know nothing, it is really scary.

Parents Final Group

4.5 Summary of MDLS contents for households with children

These are the goods, services and skills which are needed to enable families 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 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" screen ● An entry-level TV subscription service (e.g., Netflix, Disney+) in addition to a TV license
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
Skills	
<p>The skills outlined below are needed by parents, and colours indicate the age/stage by which children need to begin developing these skills, according to parents and young people.</p>	
Practical and functional skills	
Using digital devices, programmes and the internet	<ul style="list-style-type: none"> ● Using device functions (<i>Pre-school</i>) ● Using apps and programmes (<i>Early primary school</i>) ● Downloading apps and programmes (<i>Late primary school</i>) ● Saving and recovering documents (<i>Late primary school</i>) ● Connecting devices to the internet/hotspots (<i>Late primary school</i>) ● Changing settings (<i>Early secondary school</i>)
Engagement online	<ul style="list-style-type: none"> ● Using Zoom/Teams/Google classrooms (<i>Late primary school</i>) ● Performing browser searches (<i>Late primary school</i>) ● Using school apps (homework, school-home communication) (<i>Early secondary school</i>) ● Creating an email account and sending emails (<i>Late secondary school</i>) ● Online bookings and forms (e.g., appointments) (<i>Late secondary school</i>) ● Cashless/online payments (<i>Late secondary school</i>)
Managing and monitoring digital devices and data usage	<ul style="list-style-type: none"> ● Creating and sorting files and folders (<i>Early primary school</i>) ● Turning off devices properly (<i>Early primary school</i>) ● Deleting old files to manage device storage (<i>Late primary school</i>) ● Monitoring and managing phone data usage (<i>Early secondary school</i>)
	<ul style="list-style-type: none"> ●

Skills for Understanding and Managing Digital Risks	
Managing security	<ul style="list-style-type: none"> • Using secure passwords (<i>Late primary school</i>) • Knowing about and avoiding in-app purchases (<i>Late primary school</i>) • Using phone safety features out and about (e.g., 'triple tap' or 'SOS') (<i>Early secondary school</i>) • Monitoring banking activity online (<i>Late secondary school</i>) • Removing bank card details to avoid accidental purchases (<i>Late secondary school</i>) • Knowing how to apply parental controls (<i>Parents</i>)
Interacting with others	<ul style="list-style-type: none"> • Evaluating what details to share online (<i>Early primary school</i>) • Identifying risks (e.g., scams, unsafe links, catfishers, groomers) (<i>Early primary school</i>) • Evaluating friend requests (<i>Late primary school</i>) • Managing social pressures and time online (<i>Late primary school</i>)
Sharing and receiving information	<ul style="list-style-type: none"> • Evaluating quality of information (e.g., identifying mis/disinformation or unrealistic images) (<i>Late primary school</i>) • Knowing how to avoid and report inappropriate/offensive content (<i>Late primary school</i>) • Understanding digital footprint (<i>Early secondary school</i>)

4.5.1 Important caveat: needs and their provision.

Table 1 summarises the contents of MDLS for families with children. The goods, services and skills listed in the table present what groups felt was **needed** for reaching MDLS. However, MDLS is not intended to be *prescriptive*, it does not set out **how** these needs should be met, nor what should be **provided** by any organisation or government body. Rather, establishing what people need to reach MDLS, informs potentially wide-ranging efforts to support families to feel confident, safe, and included in the digital world.

4.6 Reaching MDLS – responsibilities, barriers and what could help.

The UK-MDLS research identified a range of stakeholders that groups thought had a potential role in helping families towards an MDLS – including schools, service providers, device manufacturers, social media companies, government as well as parents and young people themselves. The following section captures some of the discussions from the W-MDLS groups. The issues raised here are not necessarily unique to Wales and resonate with many of those found in the UK MDLS research but emerged as important to participants in the Welsh groups.

4.6.1 Infrastructure – accessing broadband.

Infrastructure was identified as an overarching issue and access to reliable broadband that allowed families to meet their needs generated much discussion among parents. Key barriers or issues of contention were lack of sufficient speed in an area or property, limited choice of broadband providers and packages, alongside (and linked to) cost.

Lack of provision was an issue, particularly for households living in more rural areas, including where households were waiting for improvements to their local broadband service. For example, a participant mentioned that fibre optic might be coming to their area, and another discussed a local initiative trying to improve broadband speed, but in the meantime, they had limited options.

Our broadband is 29 mg and that is as much as we can get but the next village along are still on a lot less... We have only had decent broadband for a few years, and it is like wow have got like it in the 10's meg. So, to be fair I thought my broadband was good at 29 meg.... This new thing that they're rolling out, they are putting in satellite broadband and if a group from the same area signs up, they will try and put it in.

Parents Final Group, online

Groups said that insufficient internet speeds not only affected what households could do online, but also bore additional financial costs. Some said that it had been necessary to upgrade to faster and more expensive broadband packages to attain an adequate level of service because although standard packages were advertised as being an *average* speed, in reality the provision fell far below this threshold. Participants felt aggrieved that they had no choice but to pay for a higher speed to reach an acceptable level. They felt that broadband providers should offer a standardised speed as well as price, and a more accurate description of what customers could expect to access.

Social tariffs should in theory help provide affordable internet. However, participants in both parent groups who had enquired about social tariffs had not taken them up because they believed, and in one case were explicitly advised, they were insufficient for their needs – these were single parents who worked from home, with one or two children who liked gaming. There was a feeling that ‘you get what you pay for, because it is slow’, and that people restricted to this level of provision would be disadvantaged. Participants agreed that there is a need for lower price tariffs to help with costs, particularly with higher demands on household budgets, but they need to be fit for purpose – and for families to meet MDLS this included sufficient speed for several family members to be online at the same time.

There was one that I had heard of where if you are on a low income you could get through Virgin a very cheap broadband which I did look into. But Virgin advised me that it wouldn't be suitable for our household so it was kind of well you're offering something, that actually as a mum to two boys wouldn't be suitable so you know that was a bit disappointing. They said you may as well stick on the package you're on now It is more expensive and with the cost of living and everything, I was looking at trying to cut costs.'

Parents, Final Group

Parents also felt that the charging practices of broadband providers were ‘*unscrupulous*’ and lacked clarity and consistency. Given the high importance of home broadband as a household utility, participants felt that there should be more regulation of broadband providers, to protect consumers from unreasonably high pricing, arguing in particular that the loyalty penalty (increased charges for remaining customers) was unfair and

likely to disadvantage people less able to negotiate and haggle with providers to get a better price or when their contract came up for renewal.

P1: I think these companies, they need to be regulated better because they are taking the mick out of people. Everyone needs it like you say, and ... I am perhaps just tight and pushed for a good deal like you know but they will, they are in the market.

P2: Last month the bill went up and [wife] wasn't even told about it, so it had gone up like so much and then she had to ring them... it is so scammy the way they work and the way they just add extra money on top.

P1: Some people are not as educated as other people and some people are maybe disabled or have certain aspects of mental health or whatever it is that is going to affect them from even wanting to delve into the small print.

Parents Task Group

4.6.2 School and parent support

There were mixed experiences and expectations around the responsibility for supporting children with digital skills and knowledge, with the input from both schools and parents seen as vital. Schools were viewed as a primary source of knowledge, particularly for digital safety.

In terms of social media and safety, the school is taking a big lead on that, and they are keeping parents informed of the themes that they have covered and that sort of thing so we can talk to them at home to support them.

Parents Final Group

But parents noted that what was taught in school only goes so far, and that there's a difference between what children learned in school and what they did at home where they felt that parents should have responsibility for managing their children's digital safety. There were varying accounts about the extent of support with practical skills to use devices effectively. Parents and young people noted that parents would not always be in a position to help if they were not familiar with technology themselves, families might not have a laptop in the home so it couldn't be assumed that children would know how to use one. There were some experiences of support for parents during Covid when schools moved to online learning and Google classrooms which had been useful at that time.

There was little awareness of formal support for parents with digital skills and knowledge, other than courses for people who were unemployed or pensioners. It was thought more likely that they would try to source information through looking things up on the internet, or asking their children or peers, for example asking other parents how to use a school app.

Parents sometimes felt that they ought to be more familiar with digital skills and knowledge, and a suggestion that free classes to support parents with technology would be helpful. However, it was pointed out that having busy lives, and not necessarily knowing where to start with finding information meant that a lack of time could be a significant barrier.

There is probably something, I imagine there is something somewhere, some worthy Welsh government something, but I work full time, I have got two children, I don't have time to be searching this stuff out so I would get my information from my children, from the school, social media or the parents WhatsApp group. I really don't have necessarily the time to go searching for something beyond that.

Parents Final Group

4.6.3 Wider responsibility – service providers, platforms, and Government

Participants also shared their views about the need for wider responsibility for digital safety. There was a feeling that tech companies who operate in the spheres where risks lie should have more of a role in digital safety, for example gaming and social media companies, and internet providers who should have some ethical responsibility to people using their services. Participants therefore see meeting the need to understand and manage risks as being a responsibility of wider civil society, government, and industry not just themselves. This has implications for where the balance of responsibility lies for online safety in legislation such as the UK Online Safety Bill³⁵.

Groups felt that there was a lack of advertising or campaigns to raise awareness around children's online risks and safety and discussed the need for a broader overall body who could provide guidance and information. They also suggested that this body would need to take on a monitoring role as the internet was seen as a free for all with the extent of false information or scams and participants wanted it to be easier to report 'dodgy' activity.

Well, I use my phone, I use the internet all day and I have never seen anything that was like an advert or anything about me understanding more about child safety on the internet, there doesn't seem to be any campaign out there.

Parents Final Group

There were mixed views about who would be 'trusted' and might have the resource to take this role on – for example, the Welsh Government or an independent forum such as a consumer organisation – and indeed if it was possible to regulate or control the internet.

P1: *I mean if they had just some basics on gov.uk website or something, I don't know exactly but I wouldn't leave it to the government to do it.*

P2: *You want an independent, somebody who is going to turn around and say OK the government isn't doing this right.*

Parents Final Group

P1: *There is no infrastructure or anything that is big enough to police the internet.*

P2: *There has got to be resource around it ... because it is all about money the internet and these big companies like Facebook it is all about advertising, they don't care.*

P3: *But it has got to be someone who has got the power to close a website down if it is deemed as inappropriate.*

P2: *But it is going to cost, isn't it? Big cost.*

Parents Task Group

4.7 Welsh language

It was recognised that Welsh language must be central to any information or support provided.

I think it goes without saying really but whatever there is available for parents, I think they need to raise awareness of it, and if there is anything formal, it needs to be bilingual.

Parents Final Group

Parents' discussions around the use of Welsh language with technology related to translation and transcription. The internet was helpful where Google Translate was used by families to help with homework in families where children went to a Welsh speaking school and parents didn't speak Welsh. However, several participants noted that Google Translate was not so useful at Welsh beyond simple sentences (noting that this is not necessarily unique to Welsh). A participant who had online work meetings in Welsh noted that the automatic transcription feature did not cope with transcribing the audio to text in Welsh. Young people who were in the group discussion said that they tended not to use Welsh language outside school but said that they could access websites or apps in Welsh if they wanted to and could adjust the language on their phones.

5 Conclusions

5.1 W-MDLS Definition

Stakeholders valued the idea of a W-MDLS. They valued its potential as a tool for enhancing their work, and for improving the lives of those affected by digital inequalities. They argued that the W-MDLS definition should make specific *reference* to affordability as part of accessibility. As noted above we view affordability as part of the policy responses to W-MDLS therefore would argue that it needs to be a key part of such responses. They also emphasised the importance of training and the Welsh language to ensure that this is not an afterthought. W-MDLS should be a collectively decided standard with as much involvement and interest from wider civil society as possible, including those who are digitally excluded.

5.2 Policy Implementation

Implementation of W-MDLS will need financial and political commitment from both Welsh government and organisations, especially where powers are not devolved. There should be a commitment to ensuring the standard is communicated clearly where it is needed most and that strategies to help people meet it are effective, as well as more generally raising awareness about the importance of the digital in enhancing the lives of citizens. While affordability is implicit in the standard in ‘accessibility’, funding will be particularly important in implementation of this standard, as affordability has emerged as a key concern in this respect.

5.3 Practical implementation

Rurality and the difficulty of reaching those who do not meet W-MDLS will be challenging in terms of policy implementation. The diversity of communities and individuals in Wales should be accounted for. It is important that the W-MDLS considers what barriers are likely to exist for particular groups but also allows for more nuanced understandings of individual circumstances in its application, taking the individual as the focus of this standard.

5.4 W-MDLS vs MDLS

In our discussion with Welsh stakeholders, it is clear that key regional issues such as the Welsh language, poor connectivity speeds in rural/remote areas, specific community groups and local Welsh resources (e.g., community and charity providers) are all key issues to be taken into account. We would also note a number of respondents commented that Wales “lagged behind” on some aspect of digital inclusion compared to rest of UK. We already noted above the comments regarding relative poverty and affordability. Other comparisons were made around:

- Broadband or fibre roll out.
- Changes to flexibility of planning regulations to aid digital roll out.

- Number of providers in the market for certain regions due to commercial viability
- Use of digital in voluntary sector

We believe these comments reflect important regional and Welsh perceptions. However, a better understanding of the actual difference with other UK regions and practices is needed to tease out any specific Welsh needs or policy. This point was made by the national organisations interviewed (e.g., BT). Also, the broader digital inclusion literature, and national UK statistics point to these being factors that are common in other areas of the UK and internationally. For example, issues around English as a second language and digital access are found in migrant urban communities in Wales and the wider UK. Similarly, issues of rural/remote access are pertinent in Scotland and the West Country, for example. This is not to deny the importance of these issues, far from it. Though, without pre-empting our overall findings, it may be the case that the specificities and value of a Welsh-MDLS may lie as much in how policy, practice, and technology can be deployed to address these locally in the Welsh context and to ensure as many Welsh citizens as possible meet this standard.

5.5 Areas for policy intervention or focus

The comments from stakeholders and Welsh households appear to highlight a set of areas where policy intervention may be needed to deliver a Welsh MDLS.

- Access and affordability
- Training and support
- Linkage to other local or regional resources

5.5.1 Access and affordability

Both the UK and Welsh MDLS work has fallen at a time when many households, if not the majority, are facing a ‘cost-of-living’ crisis. Therefore, access to sufficient and low-cost internet is likely to become ever more important for families, given increasing dependency on the internet but with squeezed budgets people are having to make difficult decisions about which bills to pay. In recent research from both Ofcom³⁶ and Lloyds Bank³⁷, over a third of people had struggled with communications costs or felt that the rising cost of living would impact their ability to go online. In the UK and Welsh MDLS we have not chosen a specific level of broadband service (e.g., a specific MBs speed) as this is relative to size of household. Rather we have stated: **“With sufficient speed to support all family members to access the internet at the same time”**.

Though in many cases a real access rates considerably over the Universal Service Obligation³⁸ (USO) of 10MBs is far below this minimum. However, in much of our work for the MDLS and other recent work on digital inclusion in other regions (e.g., Greater Manchester Combined Authority, Liverpool City Region) we find that experienced broadband speeds combined with levels of mobile data – including presence of poor connectivity and not-spots – all combine to leave many households below the MDLS minimum requirement. The Ofcom “affordability” criteria of USO being less than £45 per month also seems far more than low-income families’ ability to pay. Again, recent work for Greater Manchester has found that a social tariff price point above £15 per month to be too high for social housing tenants to be willing to pay for access. Delivering this

minimum via a range of policy and practical means therefore remains the fundamental starting point for digital inclusion.

5.5.2 Training and support

From our Welsh MDLS group findings additional support for both parents and children in practical, safety, and confidence building skills is needed. This is true for other parts of the UK, but we would note the comments made by respondents around the role of education and schools in supporting broader digital skills. We would note the WJEC GCSE in Digital Technology as an example of a Welsh intervention to address this need.

5.5.3 Linkage to other local or regional resources

From our work issues of rurality and digital inclusion go much further than the delivery of USO to households. They also include addressing access to other local resources – from schools and libraries to mobile communications – that can support access, skills, and practical support. We would argue that MDLS as developed here provides a framework for assessing the extent to which households are embedded within communities and locations that can support all aspects from digital goods and services to skills and confidence. The goal of MDLS is to be a tool to help make such assessments for households within different Welsh communities – and to identify which of the key areas within MDLS need greatest local support.

5.6 Recommendations

- Welsh Government should establish a Minimum Digital Living Standard for Wales, as a threshold that households in Wales should be supported to attain and not fall below, as part of setting a shared vision for digital inclusion in Wales.
- Welsh Government should work with central government and the regulator to ensure that the broadband and mobile data infrastructure is in place so that the standard can be achieved where policy and regulatory levers lie outside devolved powers.
- Welsh Government should use the Minimum Digital Living Standard for Wales to inform and measure progress towards the Status of Digital Inclusion National Indicator.
- Welsh Government and local governments across Wales should use the standard to catalyse coordinated, collaborative action across sectors and identify tangible policy and practice actions to help meet this for every household in Wales.
- Welsh Government has a role to play in promoting parity of the Welsh language in the design and delivery of digital systems, services, training, and support in Wales.
- Organisations based in Wales - across public, private, voluntary and community sectors - can use the Minimum Digital Living Standard for Wales to assess their own approach, support collaboration, and direct resources into digital inclusion.

- Reflecting the stage of MDLS development, more work is needed to develop the MDLS for other household types and rural areas; to communicate the MDLS, including with Welsh citizens; to explore additional barriers in achieving MDLS; and to convene policy and practice stakeholders in Wales to identify who needs to do what to achieve MDLS across Wales, and how this can be taken forward.

5.7 Acknowledgements

We would like to thank of the people who took part in the focus groups who gave their time and shared their views with us and the stakeholders who gave their time to interviews or survey responses. The MDLS comes from your thoughts and contributions. We would also like to thank our various academic and work colleagues who have been sounding boards and critical friends for the work. Finally, and by no means last, we would like to thank our colleagues at the Welsh Government, especially Lisa Thomas and Stephen Thomas for all their input to the project and the report.

6 Welsh Government Digital Resources

- [National Survey for Wales: Headline results, April 2019 to March 2020 \(gov.wales\)](#)
- <https://www.ogi.wales/>
- Digital strategy for Wales How we will use digital, data and technology to improve the lives of people in Wales. Available at <https://gov.wales/sites/default/files/pdf-versions/2022/3/4/1646322827/digital-strategy-wales.pdf>
- <https://gov.wales/well-being-of-future-generations-wales>
- <https://digitalanddata.blog.gov.wales/2021/01/07/digital-strategy-for-wales-mission-4-digital-inclusion/>
- <https://www.digitalcommunities.gov.wales/blog/digital-strategy-for-wales-mission-5-digital-connectivity/>
- <https://digitalpublicservices.gov.wales/toolbox/digital-service-standards/>
- <https://gov.wales/digital-inclusion-progress-report-towards-digitally-confident-wales-html>
- <https://gov.wales/sites/default/files/statistics-and-research/2018-12/080313sb102008en.pdf>
- Welsh Government, 2022. Digital Communities Wales. Available at <https://www.digitalcommunities.gov.wales/> [Accessed 18 March 2022]

7 Appendix One: DIAW Network Meeting

7.1 Network Meeting 17 February 2022

The Digital Inclusion Alliance Wales (DIAW) is a network of organisations which meet quarterly to discuss digital inclusion in Wales. The focus of each meeting is taken from the five priorities in our ‘Agenda for Digital Inclusion: From Inclusion to Resilience’:

1. Embedding digital inclusion across all sectors
2. Mainstreaming digital inclusion in health and social care
3. Addressing data poverty as a key issue
4. Prioritising digital skills in the post-Covid economy
5. Setting a new minimum digital living standard and adopting co-production approaches

This briefing will give a concise summary of issues raised by DIAW Network members during the meeting on 17 February 2022 where Priority 5: Setting a new minimum digital living standard (MDLS) for Wales and adopting co-production approaches was discussed.

This meeting was attended by MS Jane Hutt, Minister for Social Justice, Nigel Moss, Welsh Government Head of Financial and Digital Inclusion, and Professor Simeon Yates of Liverpool University.

1. Breakout room discussions were framed around three set questions:
2. What would you or your organisation expect to see covered in a Minimum Digital Living Standard for Wales?
3. How might a Minimum Digital Living Standard be useful to you and the communities you work with?
4. More broadly, how can DIAW members support co-production approaches in digital inclusion policy and programmes?

For ease of reference, this briefing will be set out with those three questions as headings.

7.1.1 What would you or your organisation expect to see covered in a Minimum Digital Living Standard for Wales?

- There was a consensus from DIAW members that an MDLS must include measures of connectivity, skills and confidence, access to devices, accessibility and affordability. An MDLS for Wales should ensure that everyone in Wales has a reliable and affordable connection in their home, access to a device, and the support to gain the skills to use the internet in the way that they want to, if they wish to do so.
- This standard will require geographical mapping of all measures: connectivity, skills, access to devices, accessibility and affordability. There is a need to get a complete national picture to understand the situation.
- There is a concern that we are already missing people in current digital inclusion initiatives and that the only people we reach are those who have reached out

themselves to services or support organisations and made themselves known. It is hoped that an MDLS and the data gathering exercises that will follow it will help organisations to identify individuals who may have been “under the radar” previously.

- Nearly all breakout rooms discussed the fact that affordable and reliable connectivity remains a persistent problem in many areas of Wales and would need to be addressed first and foremost.
 - *Quotes: If we don't light up the unconnected areas in Wales very quickly, the divide is going to be insurmountable. We can provide devices, data, skills support - but we can't make broadband reach a house that it doesn't.*
- There is a need to focus on the individual in creating this national standard. There will be many and diverse needs amongst citizens in Wales for their digitally connected life so what is a minimum to some, may not be true for others. Individual needs and community needs will be very different across Wales, so local knowledge will be key in implementing this appropriately.
 - *Quote: The problem this standard is trying to solve will be different in every area – rural to urban, areas of deprivation, changing demographics – it must take into account things such as infrastructure and how that articulates with all the other issues such as deprivation.*
- It will be necessary to have targeted, ongoing support for those who are digitally excluded, and for those who support people to be digitally included. Investment from Welsh Government for this will remain essential in the medium term. The burden of bringing individuals up to a minimum standard cannot be placed on already over-stretched, often volunteer-led support organisations without providing additional resources to them. As a greater proportion of citizens get online, those that remain excluded will require the most help.
 - *Quote: It can't just be put onto support organisations that they have a legal requirement to get the people they support to an MDLS - it takes resources and support for those organisations - they could be the ones who support the individual, but they should be supported to do so.*
- This minimum standard will need to be revisited often – technology and the digital world and what citizens require from it changes rapidly and this standard will need to be adaptable to this changing landscape.
- An MDLS for Wales must consider Welsh language standards and this includes Welsh content and Welsh language accessibility tools. There needs to be parity of access to the internet for people whose first language is Welsh, so their experience of the internet is not less than those whose first language is English. An MDLS should include a standard for people being able to participate in the way that they want and in the language that they want. Welsh language needs to be designed in from the beginning, not just translated afterwards.
- In designing and delivering digital public services organisations should be aware of inclusion, including data poverty issues, and services should be designed to minimise the impacts. Zero rating of webpages (meaning that there are no data charges for people to access those services) is part of the answer, but so is designing sites that don't require significant amounts of data use to access.

- There were many questions around what criteria will be used for what it means to be digitally connected. If we limit it to essential services, i.e. “I have the skills, device and connectivity to have a video call with my GP”; then people may miss out on the many wellbeing and financial benefits of being online. What level of connectivity will be considered the minimum? What skills framework will we use to decide whether someone is digitally included? Who will make those decisions? How can we use this standard to measure digital confidence, not just digital inclusion?
 - Quote: *the status of 'digitally included' needs to have a basket of indicators underneath it. So, what are those indicators? We need research, evidence, data sources, lived experience and once we know that we can look at policy interventions to address that.*

7.1.2 How might a Minimum Digital Living Standard be useful to you and the communities you work with?

- This standard will only be useful if it is legislated for or there is a strong mandatory steer being given to organisations that they must demonstrate how they are meeting and exceeding the standard using standardised measures.
 - Quote: *It needs to have teeth.*
- There is already an indicator around connectivity in the [Welsh Index of Multiple Deprivation](#) and broadband providers are obligated to provide a minimum of 10Mbps, but this isn't perceived to have had an effect on affordable connectivity in reality in large areas of Wales. There needs to be accountability and responsibility for this standard.
- This standard should be built into areas such as commissioning, funding streams, and reporting requirements. Having a baseline with clear guidelines and standards which everyone in Wales must work to will be very beneficial to ensuring that every individual is getting the support that they need and that organisations supporting those people are working to the same standard across Wales and getting the support that they need to do so.
- The mapping and data gathering exercises that are going to take place in order to make this standard effective should be open for organisations to access and utilise to help them to understand the situation individuals in their communities are facing. This data is going to be extremely useful for many organisations in the Network to understand the true nature of the problem in their area and to strategically target resources. We know that digital exclusion is a determinant of health (“the digital inverse care law”) and so knowing who is below MDLS will be important for health and social care providers too.
 - Quotes: *'Mrs Jones has this, this and this so all good' - but what's really important is where that information goes - what does that matter - where do we report these things to? There needs to be a national gathering of data, a place where this information is collated and is visible to us so that we can see that we're feeding into the national picture.*
 - *We need that information to be collected, and we need to be able to use it to join up the dots. If we have someone come into social services for*

whatever reason, if we could know where there are digitally, that would help us to tailor the services they need to assist them much better.

- This standard must not become just a tick box exercise – it needs to start with an individual’s needs, not just a blanket form that we tick off once someone has been connected. In order for this to be useful to organisations, it should work as a means to an end, not the end result.
 - Quote: *this can't be a tick box exercise; it needs to measure meaningful engagement with digital - legal requirements like a standard can be a perverse incentive as they only focus on the output and not on meaningful outcomes for people*

7.1.3 More broadly, how can DIAW members support co-production approaches in digital inclusion policy and programmes?

- As outlined in Professor Yates’ presentation, this work needs to be informed by the lived experience of a variety of people who are experiencing digital exclusion in different ways. For example, the questions on the survey for MDLS need to be created with people who would fill out the survey. Language can be one of the biggest barriers. The diverse range of members of the DIAW Network will be very beneficial to the co-production approaches outlined for this piece of work. We have reach into a huge variety of communities across Wales and this should be utilised.
- If the Network members want better data, better policies, and better targeted programmes of support, then there is an onus on us to participate and engage with the creation of these policies and programmes. Having these Network meetings and discussing these issues and sharing our knowledge and experience with each other is how we can support co-production of digital inclusion policy and programmes – as long as someone is listening.
- It is not just about how we can support co-production approaches in policy and programmes, but also about how we support each other in the Network, how we share our collective knowledge and experience in order to create better programmes and services.
- The DIAW Network members valued the opportunity to explore this topic and to share their thinking with the Minister and Welsh Government officials and are keen to continue to collaborate with Welsh Government in making the Minimum Digital Living Standard for Wales a reality.

8 Appendix 2: Delphi review respondent organisations

Name of organisation
Cardiff Council – Digital Support Services
The Big Issue
Swansea MAD
Citizens Online
Learning Foundation
University of Wales Trinity St David
RNIB
Newport City Council
University of South Wales
Digital Health & Care Wales
DHCW
Computer Recyclers Wales
ComputerAid
Carers Trust Wales
UNITE North West Retired Members Branch
Medrwn Môn
BCUHB health board
Diverse Cymru
RWG Mobile
Cyngor Gwynedd
Powys County Council
Ystradgynlais Mind
ProMo Cymru

9 Appendix Three: WMDLS Interview Guide for Stakeholders

9.1 Context and the digital

- Can you tell me about your organisation and what it does?
- What does your organisation do to tackle digital inequalities and what types of vulnerable and marginalised groups do you work with?
- What services do you provide the people you work with? How are digital technologies incorporated into the work of your organisation? Which of the services that you provide rely on the use of digital technologies?
- Could you give me some examples of how you've used these technologies in practice? How useful did you find these technologies in terms of the work that you had to do?
- How has the shift in increased use of digital technologies impacted on your work?
- How confident are you and your colleagues in your ability to access and use digital technologies in the context of tackling digital inequalities?
- Would you say that you, and your colleagues, have received adequate training, if any, to use the digital technologies required to fulfil your job? If yes, did you find it useful? What was less useful? Why and what are training gaps?

9.2 Definition of a Welsh MDLS

We are developing a definition of a Minimum Digital Living Standard (MDLS). As part of our national MDLS project – and based on discussions with members of the public – we have come up with a definition of a MDLS that reflects the opinions of different households. The definition reads: “A minimum digital living standard of living includes, but is more than having accessible internet, adequate equipment and appropriate training and support. It is about being able to communicate, connect and engage with opportunities safely and with confidence”.

- As we are exploring what that means particularly in Wales, in your opinion and from your experience what would a Welsh MDLS need to include?
- Do you think a Welsh MDLS would need to look different to an English, Scottish, or Northern Irish MDLS? In what ways and why?
- What do you think about the definition that we have come up with? In what ways, if any, does it relate to the people you help / work with?
- To what extent does it apply to the Welsh context? If so, in what ways? Why / why not? Do you think there are any particular aspects of digital inclusion specifically in?

9.3 Policy and practical implementation of a Welsh MDLS

- What kind of policymakers does your organisation work with and what kind of work do you do with them?
- Do you think it would be beneficial to implement a Welsh MDLS and why?

- Considering our definition of a national MDLS, what do you think needs to be done from a policy perspective to implement it across the UK and, more specifically, in Wales?
- What challenges do you anticipate in terms of implementing this definition, or a revised definition for Wales, through working closely with policymakers? Are there any specific challenges to implementing a Welsh MDLS as opposed to the broader national context? And how would you go about addressing those challenges?
- If a definition of a Welsh MDLS were to be recognised and implemented from a policy perspective, in what ways, if any, would you incorporate it into your practice? In what ways, if any, would you alter, expand and build on your current practices (e.g., lobbying, raising awareness and providing resources, digital literacy training) with a view to tackling digital inequalities?
- What challenges do you anticipate in terms of adapting your current practices?

10 Endnotes

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