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A review of international policies and programmes to support digital inclusion

Anne-Marie McGauran and Lydia O'Neill

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1.1 Introduction

The digitalisation of economic, social and cultural systems worldwide has opened up new opportunities and challenges in how we live, work, and relate to one another. This requires people and businesses to engage competently with the digital world; the changes in ICT use, accelerated by the Covid-19 lockdowns, underline this. However, a number of groups are poorly engaged with ICT—in particular, those who are older, have lower levels of education, lower incomes, and/or live in rural areas. In addition, the extent to which those online fully engage with the digital world varies. This is a cost for our economy, society, government and individuals. To address this, NESC recently published *Digital Inclusion in Ireland: Connectivity, Devices & Skills*, a report that focuses on how Irish policy can improve digital inclusion.

This paper complements that report. It reviews a number of international programmes that support digital inclusion for individuals, in order to identify practices that can inform policy-makers in Ireland. The paper gives examples of how some key dimensions of digital exclusion—connectivity, the cost of connections and devices, and lack of skills and confidence—have been addressed. It is structured as follows:

- Section 1.2 outlines practices to support groups who are vulnerable to digital exclusion, with the costs of ICT access.
- Section 1.3 describes a number of programmes that support vulnerable groups to move online, often through increasing their skills and confidence, but sometimes by providing support with costs or adapting services usually accessed online.
- Finally, Section 1.4 shows how collaboration by stakeholders at national and/or community level can make digital inclusion happen, and provides some detail on innovative funding solutions.

1.2 Support with the costs of devices and connections

This section will outline some projects that support disadvantaged groups with the costs of accessing ICT.

1.2.1 School children and young people

England has run a number of programmes to increase access for students in less well-off groups to digital devices and internet connections. In 2005, the Computers for Pupils initiative was set up to target pupils who lived in the 10 per cent most deprived areas. It provided a mixture of desktops, laptops and internet access to

students, who were chosen by school leaders (Lynch *et al*, 2010). Between 2008 and 2010, this initiative was replaced by the Home Access Programme. This offered home access to computers and internet connectivity to pupils aged from five to nineteen, who were eligible for free school meals. Eligible families applied for a grant to buy a Home Access package, consisting of a computer and a year’s internet connection, from an accredited supplier. An evaluation found that the programme helped address cost barriers for the lowest income groups, including lone parents, and sped up internet adoption, although not as much as planned. It also led to accelerated educational benefits (SQW, 2011).

Singapore has a number of schemes to equip disadvantaged students or those on low incomes with devices and internet connections. As far back as 2009, various aid programmes were introduced to ensure that every school-going child could buy a home computer and subscribe to home internet access at heavily subsidised prices (Lim, 2010). In early 2020, it was announced that all secondary school students would have a laptop by 2024—these would be free for low-income students.¹ Covid-19 has accelerated delivery of this programme, so that all secondary students will have a laptop by 2021.²

In addition, a two-year subsidy supports Singapore citizens under the age of 25, at school or post-school, to own a new computer with free software, and a free subscription to broadband services for three years. The subsidy targets low-income households, although there is a co-payment element. However, those with particularly low incomes, who cannot afford the co-payment, can fund it through three to twelve hours of community service (Starkey, 2018).

1.2.2 Social housing residents

People in social housing in the UK are twice as likely as the general population to be without a broadband connection (CREW Regeneration Wales, 2016). To address this, Wales has trialled the provision of broadband to two social housing developments—one of 76 apartments in Swansea, and one of approximately 4,000 properties in the Merthyr Valley. Landlords in large-scale social housing units can use their purchasing power to bulk-buy and achieve economies of scale, thus enabling less expensive broadband provision. The social housing associations in these developments paid for a basic broadband service, and tenants could choose to pay for an additional ‘top up’ service (Berry, 2012).

¹ <https://www.channelnewsasia.com/news/singapore/secondary-1-students-own-device-digital-learning-12498494> 8 February 2021

² <https://mothership.sg/2020/06/secondary-school-students-get-laptop-2021/> 8 February 2021

In New Zealand, broadband installation in social housing has been difficult due to complex approval requirements. The state social housing body is in discussion with fibre broadband companies to enable the installation of ultrafast broadband in all such housing (New Zealand, 2020)—although this initiative does not include details on the costs for users.

1.2.3 Sponsored data

New Zealand has also developed a sponsored data initiative, giving the public access to key health sector websites via mobile phone networks, without incurring data-use charges. These costs are automatically charged to the Ministry of Health instead. This is particularly valuable to those on low incomes who depend on mobile data.³

1.3 Programmes targeted at vulnerable groups

This section will look at international supports for digital inclusion targeted at helping older people; refugees and migrants; people with a disability; and initiatives to help groups with difficulties using ICT to access public services. Some of these supports help with skills and confidence, and others focus on costs. Meanwhile, people with disability often need a wider range of assistance.

1.3.1 Older People

Singapore's Seniors Go Digital programme offers a series of learning journeys to assist older people with everyday tasks they can carry out online. These include the e-payment learning journey, the supermarket learning journey and the library learning journey (Singapore Government Digital, 2021). Digital ambassadors have also been employed in over 50 one-stop digital hubs in local community centres and libraries, to provide personalised support for those aged over 60 (SmartCitiesWorld, 2020).⁴ Older people can attend the hubs for advice, and to register for the learning journeys (IMDA, 2020).⁵

Singapore also supports younger people teaching digital skills to older people, through the Intergen IT Bootcamp programme (IMDA, 2021a). Students act as cyber-

³ <https://www.health.govt.nz/our-work/digital-health/other-digital-health-initiatives/sponsored-data#:~:text=The%20Sponsored%20Data%20initiative%20allows,information%20and%20digital%20health%20services.>

⁴ Street traders are also supported by the digital ambassadors.

⁵ Those registered for the learning journeys receive a Seniors Go Digital Activity Pack, which allows participants to track their progress. Progress through the learning journeys is also incentivised through receipt of stamps for completed learning journeys, with the stamps redeemable on prizes.

guides and are matched to older people, to provide both ICT training and intergenerational links. Digital Luxembourg has developed a number of similar practices as part of their GoldenMe initiative, which has a range of digital inclusion programmes targeted at older people. Smartphone Cafes help old and young to meet in a social setting to discuss smartphones, tablets and other devices. This allows the older generation to learn from their younger counterparts, and aims to combat loneliness and isolation through digital inclusion (Government of Luxembourg, 2021b). Another initiative developed as part of GoldenMe is 'E-seniors', a series of 10 educational digital clips broadcast on national television (ESCH Administration, 2020).

As outlined in the NESC (2021) report, *Digital Inclusion in Ireland: Connectivity, Devices & Skills*, France has developed an innovative programme to support older people online, connecting a number of organisations. The Ardoiz tablet was specially designed for older people; it is delivered and set up by a local postal worker, who shows the older person how to use it. The tablet has a simplified user interface and is offered at a competitive price, with the option to return it and be reimbursed within 30 days.⁶ A telephone helpline for queries is open six days a week. There is also a remote access option, so that a relative or friend can access the tablet and help the older person with any difficulties. The Ardoiz was developed by the Tikeasy company, which is now part of the publicly-owned French postal company. Tikeasy's goal is to help older people live more comfortably at home through their ICT products, and so to become more integrated into the new digital world.⁷

1.3.2 Refugees and migrants

The refugee and asylum seeker population is diverse, with various degrees of digital competencies and abilities. However, overall they are less likely to own smart phones, and are vulnerable to gaps in digital access, affordability and access to information (Farahat, 2021).

In France, one project used questionnaires to assess the digital skills of refugees and asylum seekers (E-Migra, 2020). This helped inform decisions on how best to allocate resources, e.g. on provision of material devices, or training and skills. Meanwhile, Digital Inclusion Luxembourg uses a team of employees and volunteers to refurbish computers for refugee families. The project has expanded to provide such

⁶ The basic model costs €219, with SIM and support services available for an extra €20 a month.

⁷ See https://www.ardoiz.com/?_ga=2.206953044.677068752.1614599523-223161722.1614599523, accessed 12.04.21.

refurbished computers to other groups in need, as well as providing digital skills training to speakers of foreign languages, including Portuguese or Arabic.⁸

In Greece, the HELIOS project provides support on a one-to-one basis to refugees, helping them to access digital public services, including the issuing or renewal of unemployment cards, and e-registration for education (International Organisation of Migration UN Migration, 2020). In France, several organisations working to welcome migrants and to integrate them into French society, have included ICT training as part of this work (E-Migra, 2020).

1.3.3 People with a disability

Supporting digital inclusion for people with a disability is complex, due to the broad range of disabilities experienced. Individualised supports are necessary to ensure that specific needs are addressed.

In Singapore, the Enable IT Programme supports people with a disability to use ICT and assistive-use technologies to enable independent living. The programme includes a loan library, which allows people with a disability to rent and trial assistive-use technology, to inform their purchase decisions. The IMDA (Infocomm Media Development Authority) also trains people with a disability to become IT ambassadors in assistive-use technology, so that they can support others with the adoption of this technology. In addition, the IMDA hosts seminars and workshops with disability sector stakeholders and potential employers, to encourage the use of assistive-use technology and raise awareness of it (IMDA, 2021b).

Australia has developed an Assistive Technology Strategy, which aims to support and stimulate a supply-side market, and to empower people with a disability to choose technology that best supports their needs (NDIS, 2015). The National Disability Insurance Agency, which developed the strategy, provides a range of individualised supports to help people with a disability to purchase, maintain and repair their assistive-technology.

In the UK, a number of digital inclusion programmes have targeted people with a disability. The Widening Digital Participation Programme provides training in using digital health information and tools, to hard-to-reach groups such as those with disabilities, and older people. The training led to 10 per cent of participants making fewer calls to NHS services, with more participants subsequently booking

⁸ <https://digital-luxembourg.public.lu/initiatives/digital-inclusion>, accessed 28 June 2021.

appointments and ordering repeat prescriptions online (Legislative Council of Hong Kong, 2017).

In Turkey, support with the costs of broadband connections is available to people with a disability; such customers are legally entitled to a 25 per cent discount on internet services from Turk Telecom (Polat, 2012).

1.3.4 Access to Public Services

The UK provides guidance to public sector bodies on how to give assisted digital support to users who need it.⁹ The guidance includes a detailed breakdown of the confidence levels of different groups when using digital services. It identifies nine groups, ranging from the ‘never have, never will [go online]’ to expert users, and a variety of groups in between, such as the ‘willing, but unable’ and ‘reluctantly online’. The types of support each group needs are related to their level of access, skills and confidence. Similarly, the way a public service is provided needs to be adapted to the skill and attitude of each of these groups.¹⁰

Denmark recognises that not all individuals can access public services, and its Digital Strategy 2016-2020 renews its commitment to provide assistance to those with poor digital skills. Individuals who cannot use digital technology can get correspondence by post, and support from a third party. However, such individuals must apply for and receive an exemption from digital-only access to public services. People who are eligible for an exemption include the following: those with a disability that prevents them from receiving post digitally; those without home access to a computer with sufficient internet connection; those who are homeless; and those with language difficulties.¹¹

⁹ see <https://www.gov.uk/service-manual/helping-people-to-use-your-service/designing-assisted-digital>, accessed 28 June 2021.

¹⁰ <https://www.gov.uk/government/publications/government-digital-inclusion-strategy/government-digital-inclusion-strategy#annex-2-digital-inclusion-scale-for-individuals>

¹¹ <https://en.digst.dk/policy-and-strategy/mandatory-digitisation/digital-post/#:~:text=Individuals%20can%20be%20exempt%20from,as%20having%20left%20Denmark%20permanently> 28 January 2021. However some argue that this does not adequately those who are on the margins of society and do not apply for exemption from digital services—see Shou & Pors, 2019.

1.4 Bringing stakeholders together, and generating funding for initiatives

This section will look at a number of ways in which stakeholders have worked together to support work on digital inclusion, and at innovative ways of funding this work.

1.4.1 Collaboration within and between different sectors to support digital inclusion

The UK has developed a number of Digital Skills Partnerships, which bring together the public, private, and community and voluntary sectors, at regional level to tackle the digital skills divide.¹² The partnerships provide training at all levels, for young people, those outside of the workforce or returning to work, employees looking to retrain, and highly skilled digital employees who want to continue to learn. The Digital Skills Partnership Board, which is chaired by the Minister for Digital and Broadband, oversees the work of the partnerships at national level.¹³

In New Zealand, the Digital Action Plan for 2020-21 was influenced by the experience of Covid-19, and so its commitments include a focus on affordability, e-government, ensuring non-digital access to government services, and collaboration with the wider digital inclusion sector (New Zealand, 2020). The Action Plan includes a government Digital Inclusion Cross-Agency Forum that brings together state agencies working on aspects of digital inclusion. In addition, a Digital Government Leadership Group ensures the coherence of all digital work undertaken by the state. The membership comprises the secretary-generals of government departments.

In several countries, companies that are particularly engaged in ICT, work to support digital inclusion. For example, South Korea's SK Telecom company provides a range of supports for this purpose, including an exemption on telecommunications fees for households on low incomes, those with a disability, and veterans. Other projects include training older people on how to use smartphones, donating PCs to disadvantaged families with schoolchildren, and touring innovative technological

¹² They are partnerships between local authorities and local enterprise partnerships, which are business led partnerships between local authorities and local private sector businesses. See <https://www.gov.uk/guidance/digital-skills-partnership#local-digital-skills-partnerships>, 16 March 2021

¹³ <https://www.gov.uk/government/publications/the-digital-skills-partnership/the-digital-skills-partnership-board-board-members-and-terms-of-reference>, 16 March 2021

products to districts with relatively little access to cutting-edge ICT services (SK Telecom, 2017).

Lloyds Bank in the UK works with the Good Things Foundation to create and fund 100 centres, which will provide training and support on managing money online, online banking and staying safe online. It also has a Digital Champions programme under which over 20,000 bank staff volunteer to teach digital skills. In addition, the bank publishes the annual UK Consumer Digital Index,¹⁴ which draws on Lloyds Bank customer data, and on a survey commissioned from Ipsos/MORI.¹⁵ In Australia, Telstra (a large telecommunications company) provides funding to produce the Australian Digital Divide Index (Thomas *et al*, 2020).

Several companies also run volunteer programmes. As well as Lloyds Bank, the Community Fibre Company in the UK trains members of the community to become qualified Digital Ambassadors, to help others with all aspects of being online and becoming more digitally empowered.¹⁶ In Australia, under the Telstra Digital Ambassadors program, Telstra employees volunteer their time to provide coaching for older Australians who have minimal or no digital literacy skills.

1.4.2 Community hubs

A number of countries have established multi-stakeholder initiatives in communities to allow a more customised approach to providing appropriate ICT training, support and infrastructure.

Since 2001, Korea has set up over 350 Information Network Villages (INVIL) in remote rural areas. In each village, an information centre is established with computer facilities, and a full-time INVIL manager is employed to operate the centre, educate and connect people within the community, and monitor progress. Each INVIL also has a committee of approximately 15 local members who oversee the programmes run in the centre, and promote its activities to local community members. One of the programme's aims is to help these remote villages to boost their local economy through e-commerce. In the early stages most of the training programmes focused on basic computer use, but once the centres became well established, training to set

¹⁴ The UK Consumer Digital Index uses the behavioural and transactional data of one million consumers to build a view of digital engagement in Britain.

¹⁵ See <https://www.goodthingsfoundation.org/projects/lloyds-banking-group-digital-inclusion-programme>, and Lloyds Bank, 2021,

¹⁶ <https://communityfibre.co.uk/community-connect>, 12 February 2021

up e-commerce sites, online marketing, systems operation and online finance become more popular (Park *et al*, 2013).

New Zealand has also established a number of regional digital hubs, which offer services such as free Wi-Fi, co-working spaces, guidance about using the internet for business purposes, and help to develop digital skills. A range of local organisations, including councils, runs the hubs in their region (New Zealand, 2020).

In the UK, the Good Things Foundation coordinates the Online Centres Network. The centres are primarily based in disadvantaged areas, and are generally located in community centres, public libraries and social enterprises. However, smaller centres are also located in village halls, places of worship, cafes, pubs and clubs. While the centres deliver a variety of social supports, they are also used to reach those who need support with digital skills. Forty per cent of the centres provide free or low-cost access to the internet, while 60 per cent provide training in digital skills. They also support volunteer Digital Champions. The centres use the Learn My Way initiative, which (in addition to other supports) has downloadable training resources to help people teach someone else how to be online.¹⁷

To help generate initiatives reflective of the needs and interests of local communities, Singapore's Digital for Life website allows individuals or organisations to propose new initiatives to support digital inclusion. A digital tool kit can be downloaded and used to make a formal suggestion for such an initiative.¹⁸

1.4.3 Funding for digital inclusion

Different countries have used a range of funding mechanisms to promote digital inclusion.

In Singapore, the Digital for Life movement is co-funded with the State, which matches individual and corporate donations. The movement aims to galvanise the community to help citizens of all ages and walks of life to embrace digital learning,¹⁹ and the Seniors Go Digital project outlined earlier is one of several projects it funds. Others include a programme to encourage safe use of ICT. The movement is promoted heavily by the President of Singapore, and a significant proportion of donations in 2021 came from large companies, with government matching bringing total funds to \$7.6 million (Chee, 2021). Non-profit organisations, which want to run

¹⁷ See <https://www.learnmyway.com/help-someone-else>, 18 March 2021

¹⁸ See <https://www.imda.gov.sg/digitalforlife/starter-kit> and <https://form.gov.sg/#!/6012b5abc5ec750011d81ab5>, accessed 28 June 2021.

¹⁹ <https://www.imda.gov.sg/digitalforlife/about-us>, accessed 25 June 2021

community initiatives to support digital inclusion, can apply for subsidies from this fund.

In San Jose, California, the revenue received from 5G pole attachment fees is allocated to a Digital Inclusion Fund (Callahan and Siefer, 2019). The Fund awards grants to non-profit and community organizations developing initiatives on internet access, device distribution, awareness campaigns, digital literacy skills and innovation pilots (San José Digital Inclusion Fund, 2021).

1.5 Conclusion

This paper has briefly outlined a number of ways in which digital inclusion has been supported internationally. Some governments have put in place national-level programmes to support disadvantaged groups with the costs of accessing ICT devices. There are also examples of national-level decisions and support with the mechanisms to provide public services to those who are not adept at accessing these services online. The paper outlines ways in which networks of private, public and community stakeholders are brought together to combat digital exclusion—these include raising funds, providing community ICT centres, training, and volunteer partnerships. These examples can help to inform Irish policy makers and other stakeholders working to promote digital inclusion, and to build on existing Irish programmes.²⁰

²⁰ For example the development of Acorn tablets for older people, which are similar to the French Ardoiz tablet (see NESCC, 2021); Transition Year students supporting digital skills among older people through the work of Age Friendly Networks, which is similar to work in Singapore and Luxembourg; and the development of Broadband Connection Points.

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