22SK04

Output 2

Assessment and upscaling proposal of the RRP pilot training scheme

30 March 2023

1 Assessment and upscaling proposal of the RRP pilot training scheme

General assessment of the RRP pilot training scheme

Based on the findings from the OECD mission to the Slovak Republic (Žilina, Nitra, Bratislava) during 17th-20th January 2023, the overall objective of the RRP investment no.7 (i.e. to provide digital skills training for seniors and distribute senior-tablets) was positively perceived. Interviewed seniors and trainers agreed that there was a real need to strengthen the digital skills of seniors in the Slovak Republic and were pleased with MIRRI taking active steps in this area. Interviewed seniors also agreed that the pilot training scheme had certain positive externalities. For example, the opportunities for socialisation and meeting new people provided by the pilot training scheme were appreciated by the interviewed seniors.

However, the implementation of the pilot training was not without challenges. Interviewed administrators and co-ordinators of the pilot training scheme pointed to issues related to co-ordination and information sharing (e.g. on logistical details) between MIRRI and themselves, as well as heavy administrative and time-intensive workload related to the pilot implementation which had to be borne by the administrators and co-ordinators. At the same time, the administrators and co-ordinators appreciated constrained HR capacities of the MIRRI project team especially in light of the sheer scale of the pilot training and underlined that it was clear that the MIRRI project team did their best to ensure that the pilot training ran smoothly. Finally, members of the Project Consultation Group (PCG) pointed out in a PCG meeting held in Bratislava on 20th January 2023 the need for exploring synergies between the RRP investment and other, relevant ongoing projects, programmes and strategies related to digital upskilling of seniors and/or digital upskilling more broadly.

Pre-training phase

Communication with seniors following the training registration

Each senior is required to register for the training. However, findings from the virtual mission[1] during which the OECD consulted operators of a call centre set up by MIRRI to provide assistance to seniors (see more on the call centre in the "Post-training phase" section) suggest that when there is a delay between training registration and the start of the training, seniors are not being adequately updated on when and where the training will take place, or at least when they can expect to receive more information. Approximately 85% of seniors who contacted the call centre with an enquiry falling into the "other" category (second largest category of all enquiries) (Figure 1.1) were requesting more details on the logistics of the training (time, place, etc.) that they had already registered for. Insufficient and irregular information on the logistical details of the training can create doubts and cause confusion amongst seniors.

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[1] The virtual mission took place following the in-person mission during 17th-20th January 2023.

Figure 1.1. Seniors' call centre enquiries by category, 2022-2023

Number of enquiries made by seniors
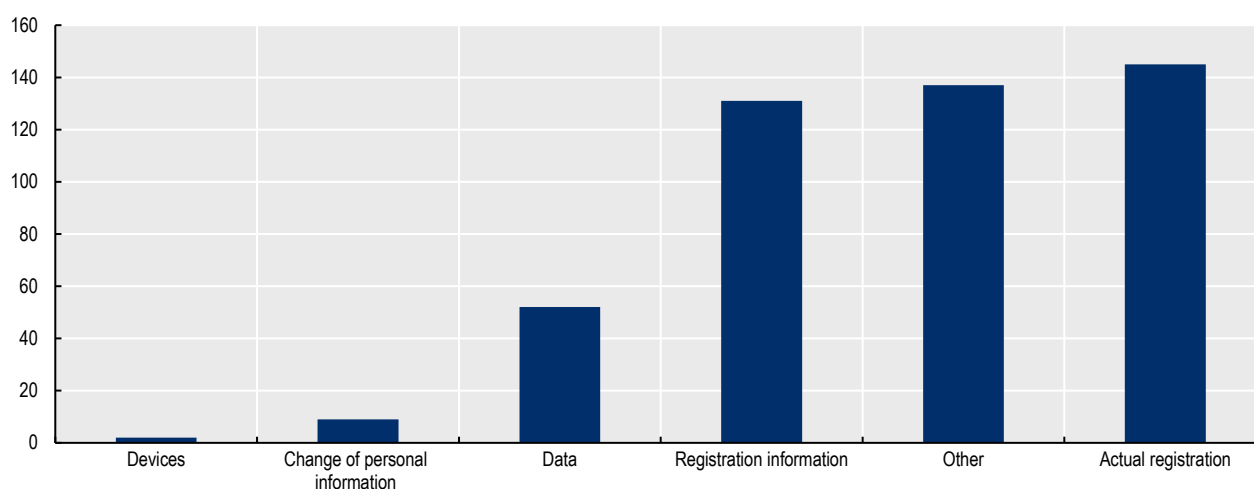
Note: The figure shows the number of seniors' call centre enquiries by category between 19.09.2022 - 15.03.2023. The call centre also collects information on the number of enquiries made by disabled individuals in each category. "Devices" refers to enquiries related to performing tasks on the tablets and/or solving the tablets' technical issues.
Source: Data made available to the OECD by the National Agency for Network and Electronic Services.

Recommendation: Keep seniors updated on logistical details of the training after registration.

MIRRI should ensure that once seniors register for the training, they receive regular updates on the logistical details of the training (i.e. when and where the training will take place) or at least updates on when more information will be provided. More regular and continuous stream of communication would provide greater reassurance and clarity to seniors while decreasing the pressure on the call centre operators at the same time.

Allocation into groups by skill level

Prior to the start of the pilot training phase, seniors were divided into two groups – beginners and advanced – according to their level of digital skills. To facilitate allocation into the two groups, seniors were asked to complete a self-assessment of their digital skills, which consisted of choosing which of the two levels (beginners vs advanced) seniors most closely identified with, based on a description of the two levels provided by MIRRI. Once allocated into groups, seniors[2] also undertook an online entry test, which was intended to help observe improvements in seniors' levels of digital skills at the start and end of training[3].

However, interviewed seniors and trainers mentioned that it became clear during the pilot that some seniors were not placed in a group accurately reflective of their level of digital skills. Many seniors underestimated their level of digital skills in the self-assessment test because they did not feel comfortable to describe themselves as "advanced". Other reasons for allocating seniors into wrong groups mentioned in the focus groups interviews included i) logistical reasons (e.g. insufficient numbers across both skill

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[2] Only those seniors who had the digital skills required to complete the online test took the entry test. The tests of those seniors who did not possess sufficient digital skills to complete the test were marked with 0.

[3] Entry test scores were compared with the exist test scores at the end of the pilot training.

levels in certain regions), due to which it was not possible to create two distinct groups based on seniors' true skill levels and necessitated merging of the groups, ii) training administrators potentially incorrectly assigning seniors to groups based on the self-assessment results by accident. In addition, the results of the online entry test were not used to more accurately "re-allocate" seniors into groups.

As a result, certain seniors with intermediate levels of digital skills ended up in a beginner group, leading some seniors (especially those who trained on computers) to report that the training provided only few opportunities to learn something new, exacerbated by the fact that the trainers had to devote most of their time to assisting "real beginners" with questions and queries. Those seniors who reported insufficient opportunities to learn something new would welcome an opportunity to continue learning how to carry out practically applicable tasks using their tablets, which the pilot training, however, did not provide enough room for (see more below).

> **Recommendation: Design and implement mechanisms for allocating seniors into groups that are as closely reflective of their real skill levels as is possible.**

The training entry test could be improved to assign seniors to the correct level. The current test is taken after seniors are allocated to the beginner or advanced sections. Therefore, the test is not used to allocate seniors to different levels. As discussed above, a share of seniors is misallocated, which results in a suboptimal learning process.

Seniors should take an entry test and its results should be used to allocate seniors to the different training levels. The entry test could be taken directly on the tablets during a "testing day" before the start of the course

When organising the testing day, there are several logistical and practical aspects that MIRRI should ensure that the seniors have a smooth experience with the test:

1. **Test platform:** MIRRI should choose a test platform that is compatible with the tablets that will be provided to the seniors. Easy-to-use and accessible test platforms such as Survey Monkey or Google Forms could be used. It is important to test the platform in advance to ensure that it works properly and does not have any compatibility issues with the devices.

2. **Instructions:** Clear instructions should be provided to the seniors on how to access and take the test on the tablets. The instructions should be simple, concise, and easy to follow, as seniors may not be familiar with the technology or the test platform. To facilitate seniors taking the test, the tests could be pre-loaded into the tablets so that when unlocking the devices the test will be ready to be taken.

3. **Support:** Technical support should be available on the testing day to assist seniors with any technical issues they may encounter while taking the test. This could include offering one-on-one assistance to seniors to ensure that they can focus on the test and not be distracted by technical difficulties. Technical support could be given by the trainers, who would ideally be present that day at the testing site. MIRRI could also partner with local organisations (e.g. universities) to provide additional support. MIRRI should ensure that seniors with disabilities, such as those with visual impairments or hearing difficulties can receive adequate support. Seniors who, despite the available support, are unable to use the tablet and take the test should be assigned to the beginner level.

A comprehensive test that assesses various dimensions can provide an accurate evaluation of seniors' digital skills. It would be preferable to use true-false, multiple-choice, and matching questions, and to test questions with a sample of seniors before deploying the test widely.

The entry tests should at least assess senior's proficiency in the topics covered in the training and could be structured around the following dimensions:

1. **Basics of working with a digital device**: This dimension measures the ability of seniors to perform different operations on a mobile device, such as turning the device on and off, changing the device, using the onscreen keyboard to type, adjusting the volume, taking photos, recording videos, setting alarms, and navigating through different mobile applications, menus, and settings.

2. **Search for information:** This dimension measures the ability of seniors to search for information on the internet, use search engines, and navigate through different websites.

3. **Online communications**: This dimension measures the ability of seniors to communicate through different mobile applications, such as email, phone, messaging, videos conferencing and social media.

4. **Information security.** This dimension measures the ability of seniors to protect their mobile devices from malware, viruses, and other security threats, and to manage their personal information.

The scores in the entry test can be used to determine the number of training levels and allocate seniors to different levels. To do this, it would be required to:

1. **Determine the minimum and maximum scores for each level** (i.e. beginner and advanced) based on the objectives and topics to be covered in each level.

2. **Adjust the number of levels** if the results of the test indicate that having only two levels would not be sufficient to match the observed proficiency levels. For example, if the distribution of scores is such that only 20% of seniors are proficient enough to attend the advanced course and 20% of seniors should attend the beginner course, the remaining 60% would not be well-matched to either level. Therefore, a third level (e.g. intermediate) would be required. It is important to note that it is not possible to know a priori how many levels would be needed. This is an empirical question that can only be answered after analysing the results of the entry tests. For this reason, it is advisable to conduct a pilot test with a representative sample of seniors to determine the final number of levels.

There are many tests on the market to assess digital skills. Some examples include MyDigiSkills (MyDigiSkills, 2023[1]), IT Fitness in the Slovak Republic (Digitálna koalícia, 2023[2]), and the Europass digital skills (europass, 2023[3]) test. However, in general the tests are not adapted for the senior population. Moreover, the vast majority of tests focus on digital skills in the context of using computers and not tablets or phones. On exception is the Mobile Device Proficiency Questionnaire (MDPD) questionnaire developed by the Center for Research and Education on Aging and Technology Enhancement (CRATE) in the United States. This instrument, further detailed in Box 1.1 can provide a useful benchmark and starting point for developing a new test for the programme.

Box 1.1. The Mobile Device Proficiency Questionnaire (MDPD)

The Center for Research and Education on Aging and Technology Enhancement (CRATE)

CRATE is an American multidisciplinary and collaborative centre founded in 1999. CRATE is funded by the National Institute on Aging through the National Institutes of Health. CREATE researchers develop and evaluate interventions and technology solutions to promote health and wellness for older adults.

The Mobile Device Proficiency Questionnaire (MDPD)

The Mobile Device Proficiency Questionnaire (MDPD) is a tool developed by CRATE for measuring mobile device proficiency by assessing both basic and advanced proficiencies related to smartphone and tablet use across eight dimensions or subscales: (i) Mobile Device Basics, (ii) Communication, (iii) Data and File Storage, (iv) Internet, (v) Calendar, (vi) Entertainment, (vii) Privacy, and (viii) Troubleshooting and Software Management.

The MDPD asks seniors to rate their ability to perform 46 operations on a smartphone or tablet device on a 5-point scale: 1 = never tried, 2 = not at all, 3 = not very easily, 4 = somewhat easily, 5 = very easily.

To calculate the final score, first the average score for each subscale is calculated. These averaged scores were then summed across subscales to come up with a total proficiency measure. Therefore, equal weight is given to each dimension.

A shorter version of the test containing 16 questions (2 questions from each subscale are kept) is also available and has shown to provide reliable measure of proficiency.

The full questionnaire as well as the shorter version can be requested directly in CREATE's website and can also be found in the appendix of this paper.

Source: Roque et al. (2018[4]), *A New Tool for Assessing Mobile Device Proficiency in Older Adults: The Mobile Device Proficiency Questionnaire* https://journals.sagepub.com/doi/10.1177/0733464816642582; CREATE (n.d.[5]), *Center for Research and Education on Aging and Technology Enhancement* https://create-center.org/

Training phase

Design of the training

According to interviewed seniors and trainers, the length of the training was too short to assimilate all the learning material and to effectively learn how to use the tablet. This issue was particularly relevant for seniors with no previous experience with technology or with basic knowledge of technology. This view was not reflected in the Summary report (Annex 4), which concluded that the vast majority of seniors were happy with the duration of the training. However, based on mission findings, these results may hide divergent views of senior with different initial digital skill levels.

Before the start of the pilot training phase, seniors were divided into two groups based on their self-reported level of digital skills. However, both trainers and seniors highlighted the fact that there are significant differences in the pace at which seniors of different age groups can learn. For example, seniors in the lower age range (e.g. 65-70 years old) can learn much faster than those who are older (e.g. 80-85 years old). Trainers also highlighted that the teaching methods may need to be adapted to older seniors and noted that more iteration is needed for effective learning.

Seniors, especially those in the beginner group, indicated that they had limited time to learn how to use the tablet for everyday life activities. Even though they valued the training, significant time was spent on learning the basics of operating the tablet, leaving limited time to apply this knowledge to practical application. Some trainers were able to cover practical applications and it was the trainers ' own initiative, but it was not the norm.

Seniors indicated that they would like to use technology, and in particular, the tablet to book an appointment with doctors, obtain medical prescriptions and communicate with family and friends.

They also indicated not feeling safe in a digital environment, especially when it comes to banking or payments. The lack of knowledge of how these systems work generated mistrust among them.

Seniors considered that the class materials provided were useful, especially after the training. In particular, seniors indicated that the materials on how to use the table were particularly helpful to overcome simple operational problems. Nonetheless, there is still space to further adapt the training content to better reflect seniors' needs.

Recommendation: Adapt the content of the training to better reflect the needs of seniors.

Similarly to the mission findings, results from the Finnish KÄKÄTE digital skills training programme showed that the topics, which were the most strongly linked to everyday life and the authentic needs of the elderly were judged to be the most useful by seniors (Nordlund et al., 2014[6]). A study conducted by Xie also found that the lack of connection between the training and participants' needs and wishes could lead to errors and inefficient use of the tablet and, in the worst case, to the abandonment of the use of the device (Xie, 2007[7]).

Based on the analysis of topics already covered by the four training modules in the MIRRI-sponsored training, it would be beneficial to include several additional, practical ones, particularly into module 2 (online information search). The feedback from the pilot indicates that in module 2, participants often missed practical exercises. Under module 2, where seniors learn about interesting websites, MIRRI could therefore consider complementing the useful information by practical exercises (see Table 1.1).

Table 1.1. Suggested activities to be added under training module 2

Existing vs new activities to be potentially added in training module 2, section "interesting websites", sub-section "authorities and institutions online"

Module 2. Online information search Interesting websites (Chapter 5), Authorities and Institutions Online (Section B)	
Existing topics covered	**Suggested practical exercises to add**
• Banks and insurance companies	• Paying bills online
• Social insurance agency	• Booking appointments with the social insurance agency • Accessing online Q&A tool of the social insurance agency
• Health-related information	• Booking doctors' appointments

More specifically, the activities, which have applicability in seniors' everyday lives, some of which were also highlighted as desirable by seniors during the mission, and which could be added to module 2, include:

1. **Paying bills online.** While module 2 did cover searching for banking-related information, the related, practical exercise was limited to searching for the contact details of seniors' banks. However, learning how to pay bills online in practice allows the elderly to grow their self-efficacy and self-reliance (Gatti, Brivio and Galimberti, 2017[8]). Age UK, UK's leading charity for older people, classifies "managing money" amongst the "online essentials" for seniors (especially seniors who already have a basic level of digital skills), and provides tips related to online banking, transferring online money, and smart online shopping for seniors (Age UK, n.d.[9]). Evidence shows that learning tasks related to online banking services posed a great challenge for the elderly, and even after a long training period, many of the participants were still unconfident in executing online

transactions (Vaportzis, Clausen and Gow, 2017[10]), further underscoring the need for practical training in this area. During the MIRRI-sponsored training, applicable examples and exercises for seniors to undertake could include paying an electricity, internet or phone bill online. During the exercises, the trainers should take into account seniors' concerns about online security when accessing online services (Vaportzis, Clausen and Gow, 2017[10]; Alden et al., 2021[11]), and provide adequate guidance and reassurance.

2. **Booking appointments with the Social insurance agency and accessing the agency's online Q&A tool.** While module 2 did cover searching for information related to the Social insurance agency, the practical exercise was limited to searching for the nearest branch and its opening hours. However, to save time with accessing support with questions and queriers, such as those related to pensions (e.g. obtaining an official form, declaring address changes, etc.), it would be beneficial if seniors could practice booking appointments with the Social insurance agency online. At the same time, the training could include a practical exercise whereby seniors learn how to submit a query via the agency's online Q&A tool, to save time potentially spent on unnecessary travel.

3. **Booking doctors' appointments**. While module 2 did cover searching for health-related information, the practical exercises were limited to searching for the nearest emergency room and pharmacy. However, booking doctors' appointments online was frequently mentioned during the mission as a useful skill that seniors would like to learn. Similarly, learning how to make medical appointments online is covered by Singapore's digital skills training programme for seniors (SG Digital, n.d.[12]).

The introduction of these new, practical exercises into module 2 should be matched by an increase in the duration of module 2, more specifically for beginner seniors and seniors 75+, who may require more time to carry out and digest the practical training (see recommendation below and summary in Table 1.2).

Recommendation: Adapt the duration of the training by level of skills and by age.

As foreshadowed above, MIRRI could consider increasing the duration of training for the beginner group (Table 1.2), as well as for seniors aged 75+ in the advanced group (Table 1.3).[4]

The suggested increase in time allocation would be particularly useful for modules 1-3. Reasons for extending time allocation for module 2 are explained in the section above. Extending time allocation for modules 1 and 3 would be equally useful, given that the feedback from trainers and seniors who participated in the pilot suggested that getting acquainted with the digital device during module 1, and setting up emails and passwords in practice during module 3, took much longer than expected. The overview of the proposed changes to the training duration, by level of digital skills as well as by age, is outlined in Table 1.2 and Table 1.3.

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[4] Table 1.2 and Table 1.3 assume that splitting seniors into two groups by skill level will be sufficient. However, in practice, there could be a need for more than two groups, depending on the distribution of the actual entry test scores (see more in section on "Allocation into groups by skill level" above).

Table 1.2. Suggested adaptation of the training duration for beginner group

Original beginner training duration vs suggested adaptation by skill level and age of seniors

	Beginner		
	Original	**Suggested**	
		65-74 y.o.	**75+ y.o.**
Week 1	**Original** 1 session of 3 hours	2 Sessions of 2 hours each	2 Sessions of 2 hours each + 1 Session of 1 hour
Week 2		2 Sessions of 2 hours each	2 Sessions of 2 hours each + 1 Session of 1 hour
Week 3		2 Sessions of 2 hours each	2 Sessions of 2 hours each + 1 Session of 1 hour
Week 4		1 Session of 3 hours	1 Session of 3 hours
Week 5	1 session of 2 hours (device personalisation)	1 session of 2 hours (device personalisation)	1 session of 2 hours (device personalisation)
Total	12 hours (training) + 2 hours (device personalisation)	15 hours (training) + 2 hours (device personalisation)	18 hours (training) + 2 hours (device personalisation)

Table 1.3. Suggested adaptation of the training duration for advanced group

Original training duration vs suggested adaptation by skill level and age of seniors

	Advanced		
	Original	**Suggested**	
		65-74 y.o.	**75+ y.o.**
Week 1	1 session of 3 hours	1 session of 3 hours	2 Sessions of 2 hours each
Week 2			2 Sessions of 2 hours each
Week 3			2 Sessions of 2 hours each
Week 4			1 Session of 3 hours
Week 5	1 session of 2 hours (device personalisation)	1 session of 2 hours (device personalisation)	1 session of 2 hours (device personalisation)
Total	12 hours (training) + 2 hours (device personalisation)	12 hours (training) + 2 hours (device personalisation)	15 hours (training) + 2 hours (device personalisation)

Based on the results of the entry test (see above), MIRRI could consider increasing the original duration of modules 1-3 from 3 hours each to 4 hours each, for beginner seniors aged 65-74 (Table 1.2), as well as for advanced seniors aged 75+ (Table 1.3). For beginner seniors aged 75+, it is advisable to further increase time allocation for modules 1-3 from 3 hours each to 5 hours each (Table 1.2). The content of the training would remain the same for all groups, but in addition to the adapted time allocation, the pedagogical approach would be adjusted based on seniors' skills level and age, building on the existing, methodological note which MIRRI distributed to trainers in the pilot phase. The methodological note could be further adapted as set out in the "Trainers" section below.

The suggested age split in Table 1.2 and Table 1.3 reflects existing research showing that seniors can be differentiated into different age categories depending on the degree of technology penetration into their daily routine over their productive lives (Lee, Chen and Hewitt, 2011[13]). These categories include: the "young-old" of 65-74 years, the "older-old" of 75-85 years and the "oldest-old" of 85 years and more. In addition, evidence from UNESCO shows that seniors living in Europe aged 75+ use the internet significantly less on a daily basis than the younger generations. Both sources indicate that older seniors (75+) may face much larger challenges to start learning and using computer-mediated information technology than younger senior groups (UNESCO, 2021[14]).

The suggested age split in Table 1.2 and Table 1.3 also considers existing evidence on the impacts of aging on individuals' cognitive abilities and general health. Several studies show that the ability to accumulate knowledge starts to decrease crucially at the age of 75 (Vaportzis, Clausen and Gow, 2017[10]). 75 years of age is also when certain physical transformations, such as the declining speed of information processing and deteriorating hearing and vision, start to hinder digital learning capacity. Seniors aged 75+ also experience higher level of personal anxiety and have more limited self-confidence in dealing with new technologies (Lee, Chen and Hewitt, 2011[13]).

Where increases in time allocation per module are suggested, it would be advisable that these are separated more widely throughout the week, to support more efficient learning and increase seniors' knowledge retention. Results from the Finnish KÄKÄTE digital skills training programme for seniors show that seniors struggled with decreasing focus during the training, which was one of the primary obstacles to effective training implementation (Nordlund et al., 2014[6]). Therefore, MIRRI could split modules 1-3 could into 2 different sessions of 2 hours each (including 15 min breaks) per week on different weekdays for the beginner seniors aged 65-74 (Table 1.2), as well as for advanced seniors aged 75+ (Table 1.3). For beginner seniors aged 75+, a further, separate 1 hour session could be added (Table 1.2).

Should MIRRI find, in designing the practical exercises mentioned in the section above, that the use of email is required to complete some of the exercises, while the use of email is only covered in module 3, consideration should be given to covering those exercises requiring email as part of module 3, while re-distributing the extra suggested time (see Table 1.2 and Table 1.3) between modules 2 and 3 accordingly.

The suggested split by age and skill level, as outlined in Table 1.2 and Table 1.3, assumes that a sufficient number of seniors participating in each group. Bearing in mind the implementation considerations around efficiency and cost-effectiveness of the training, merging of groups in certain cases may be necessary, but should be minimised to logistical reasons only.

Recommendation: Upload materials directly onto the tablet.

In the full-scale phase of the training, MIRRI should consider the possibility of uploading the training materials directly onto the tablet, which might further aid autonomous revision of learning material and use of tablets by seniors between sessions, but also provide additional support following the training completion (see more below).

Trainers

In general, the evaluation of the trainers was very positive. In addition to being satisfied with the level of technical preparation of the trainers, the seniors highlighted the effort and dedication with which they were taught. They also emphasised their patience and their willingness to repeat the instructions and exercises so that the seniors could assimilate the contents of the training.

In addition to teaching them the technical contents of the training, the trainers played a very important role from a psychological and motivational point of view, helping them to overcome the fear of facing a new technology and increasing their self-confidence in utilising digital devices.

Recommendation: In the open call, emphasise the need to adapt pedagogy in order to compensate for some of the cognitive losses that can occur naturally with aging.

MIRRI's existing methodological guide for trainers emphasises taking into account the following "didactic principles", related to teaching the specific target group of seniors, who:

- need their own pace and their own way to understand new information
- need clear and illustrative information
- need information to be broken down into several parts
- need to be asked whether information explained was conveyed in an understandable way
- cannot be asked to memorise
- need to know the limits of their capabilities (as well as why they are undertaking a specific activity and to what end)
- need to be rewarded for their effort and diligence.

In addition to these principles, based on experience from similar kinds of training programmes (Nordlund et al., 2014[6]), as well as mission findings, MIRRI could further complement the information in the methodological guide by emphasising the need for:

1. **Repetition.** It would be helpful to dedicate adequate time at the beginning of each module to briefly revise what the key concepts learned so far during the previous module, and at the end of every session to briefly revise the key concepts that had been learned during that specific session. Also, throughout the sessions, the trainers should repeat the key concepts to reinforce the learning experience in the long-term memory.

2. **Reassurance.** Many seniors may feel intimidated by the prospect of autonomously using digital devices, especially if they had no previous experience doing so before, as was mentioned by trainers interviewed during the mission, and is confirmed by research (Vaportzis, Clausen and Gow, 2017[10]; Alden et al., 2021[11]). At the same time, existing research shows that seniors are particularly concerned about online security, especially when accessing online services (QA Research, 2020[15]). Trainers should therefore not underestimate the importance of providing reassurance and encouragement to seniors during the training. Equally, trainers should emphasise that the classroom is a safe space for asking questions.

3. **Clarity and simplicity.** While the methodological guide emphasises the need for clear and illustrative information, trainers should equally pay attention to avoiding the use technical jargon, which seniors cannot be expected to understand, and minimise the amount of time seniors have to devote to reading instructions while in class (Gatti, Brivio and Galimberti, 2017[8]) See an example from Sweden in Box 1.2.

The existing methodological guide, with the suggested updates (see above), should be distributed to each trainer before the start of the training in the main phase of the training.

Box 1.2. Relevant International Practice: Mixed-skills Learning Groups in Sweden

The University of Jonkoping in Sweden conducted a study about teaching English for mixed-level upper secondary level students with varying motivation and special interests. The study concluded that when teaching students with varying skill levels, the most important factor is to reinforce co-operation among students to create a good atmosphere. In addition, it is important to give only clear instructions for the student and establish clear routines and structure during the classes. Creating this kind of stability is known to help especially the weaker students to learn better, and peer-support during the teaching should be emphasised to reinforce the confidence of the students with lowest skill levels.

Source: Svärd (2006[16]), *The challenge of mixed-ability classes-How should upper secondary English teachers work in order to help the weaker students?* fulltext01.pdf (diva-portal.org).

It would be important to note that for seniors aged 75+, following the didactic principles outlined above would be even more important. Seniors 75+ may require the application of the above principles to an even greater degree (i.e. an even slower pace of instructions, even simpler language, even more repetition and reassurance, etc.) (see (Lee, Chen and Hewitt, 2011[13]). In addition, research shows that older seniors may have different learning styles preferences (e.g learning by doing, learning by watching, learning by thinking) (Truluck and Courtenay, 2010[17]), which reinforces the idea that training didactics have to be adapted to accommodate seniors with different learning styles.

For further inspiration and guidance on other methodologies for teaching digital skills to seniors, as well as profile characteristics of trainers for digital skills training targeted at seniors, MIRRI can consult Box 1.3.

Box 1.3. Relevant international practice: Training methodologies for teaching digital skills to seniors

"slowlearning" is an Erasmus+ project that supports skills development of trainers providing ICT training to seniors. Project partners include education and training providers and private sector organisations from Slovenia, Denmark, Greece and Spain.

The project partners worked together with education and training providers, trainers and seniors to develop the "Job Profile of IT trainers for seniors" guide. Among others, the guide outlines a methodology for teaching seniors. The methodology emphasises several didactic approaches, including active listening, providing positive feedback to seniors, adopting an empathetic approach, slowing down the pace of delivering instructions, and being patient.

The guide also specifies the required qualifications and skills of IT trainers of seniors, trainers' roles and responsibilities, as well as indicative ways of assessing the required knowledge, competences and skills of the trainers.

Source: slowlearning (n.d.[18]), *slowlearning: making Digital World easy for seniors*, https://slowlearning.eu/

Devices

The group of seniors who participated in the computer training indicated that the transition to tablets was difficult. The transition not only meant a change of device but also of the operating system. As they received the tablets at the end of the training, they were not able to use the knowledge they learned during the training. Therefore, they started using the tablets on their own and without much prior knowledge.

The training was carried out with Huawei tablets. For legal reasons, Google apps and services cannot be downloaded and used on these devices. Therefore, seniors could not use Google apps such as Gmail, Google Maps, Chrome or YouTube etc. which are widely used around the world. Some Google services were, however, still accessible through Huawei's built-in internet browser. For example, seniors could access the Gmail desktop application from the browser. However, desktop applications have limited functionality if used on mobile devices or tablets, limiting seniors' learning and experience.

In addition, Google Play was also restricted and could only download apps from the Huawei store. Therefore, this restriction limited seniors' experience even further as many apps are only available on Google Play and not on Huawei store.

> **Recommendation: Ensure that devices distributed to seniors at the end of the training are compatible with Google Services.**

It is welcome that for the purposes of the full-scale training, MIRRI has decided to distribute Lenovo tablets to seniors, which should facilitate an easier connection to Google Services.

Logistical aspects

The tablet was finally handed over to the seniors only at the end of the training. Apparently, for legal reasons, the seniors were not allowed to take the tablets with them after each training session and they were kept at the training site. As a result, it was not possible for them to practice what they had learnt between each session and they could only use the tablet once a week during the training. This made learning difficult and each week they felt they had forgotten what they had learned the previous week.

Due to delays in the procurement of the tablets, many of them arrived late which meant that many seniors only got the tablet towards the end of the training or after its completion. A similar situation occurred at some sites where the training materials did not arrive on time and were delivered with some delay.

> **Recommendation: Consider implementing strategies allowing the seniors to keep the tablets for the duration of the training during the full-scale programme.**

Existing evidence confirms the importance of repetition to help seniors learn (Lee, Chen and Hewitt, 2011[13]), which is why it would be ideal to allow seniors to take the tablets home in-between training sessions. To reduce the risk of seniors quitting the training early once they are allowed to take the tablet home, MIRRI could consider several strategies – both "softer" and more "enforceable".

With respect to the "softer" strategies, as noted in sections above, a key determinant of sustained learning amongst seniors is learning useful, practical things, which are easily applicable in seniors' daily lives. This was confirmed by interviewed trainers during the mission. Even those seniors who might be motivated to join the training only by the prospect of obtaining a tablet can be persuaded about the usefulness of the training and "get hooked", as long as the training is sufficiently aligned with seniors' needs. The preceding sections provide recommendations for how to further increase the practicality of the training to seniors. In addition, seniors could be informed at the start of the training that the last training module will be dedicated to the personalisation of the tablets to their own, individual needs, which might further increase the likelihood of seniors completing the training until the very end despite having the tablets available for home use in between sessions.

Regarding the more "enforceable" strategies, MIRRI could consider obliging participants to sign an agreement whereby seniors would assume material liability for the tablets. The agreement could specify that if seniors quit the training, they will be required to return the tablet within a certain time period. Those seniors who do not return the tablet within the specified time period will be charged a pre-defined amount. Similarly, the agreement could specify that seniors would be liable for any damage of the tablets during the training.

Across the OECD, many universities and public libraries have been lending laptops and other electronic devices to students with a set of written conditions and responsibilities defined beforehand. For example, the University of Portsmouth in the United Kingdom has extensive laptop borrowing system for their students, with binding terms and conditions. One of the conditions is: "students who withdraw or are excluded from their studies will be expected to return their laptop immediately via the returns procedure". The loan service is free and if the device gets lost or damaged, borrowers may be liable to pay for the replacement. Terms also involve a part which the University reserves a right to invoice a replacement fee (50% of the total worth) in case the laptop is damaged or not returned (University of Portsmouth, n.d.[19]).

Post-training phase

Exit tests

As mentioned above, the seniors who participated in the pilot training took an entry as well as an exit test to help the MIRRI project team measure the improvement in the level of seniors' digital skills. Certain interviewed seniors and trainers agreed that the questions in the exit test were worded in an excessively complex manner, where it was not always clear to seniors (and also to trainers, in certain cases) what exactly the seniors were asked to do. A future version of the exit test should use simpler wording and be testes in a sample of seniors before its full-scale implementation.

In theory, the entry and exits tests should be different because they serve different purposes. As suggested above, the former should be designed to assess the baseline knowledge and skills of seniors before they begin the training programme to help allocate seniors to different groups based on their current skill levels. The exist test is intended to assess the learning outcomes of the training programme and to measure how much seniors have learned.

However, MIRRI could consider requiring that seniors take the entry test also at the end of the training. Even though it would not assess learning outcomes directly (as the entry test would be self-reported), it can give an insight into the progress the seniors have made during the course.

Support for use of devices

Follow-up modules

The pilot training consisted of four core modules – plus a fifth, follow-up module – during which the seniors who trained on tablets during the four core modules had an opportunity to personalise and configure the tablets to their needs, and the seniors who trained on computers could familiarise themselves with the tablets for the first time. Both interviewed seniors and trainers agreed that that the follow-up module did not provide enough time for seniors who trained on computers to familiarise themselves with the tablets, especially as it is not easy for seniors to switch between digital devices and apply skills acquired on one device (e.g. a computer) onto another (e.g. a tablet) (see more above). In addition, certain amount of time during the follow-up module needed to be dedicated to taking the exit test. As a result, trainers only had time to cover the very basic settings (e.g. how to turn the tablet on, adjust the brightness, etc.) during the follow-up module, without time to explain how seniors can use the tablet to simplify their everyday tasks and/or how to configure the tablet to their needs.

> **Recommendation: Continue with plans to solely train seniors on tablets and not computers, to provide adequate time for seniors to familiarise themselves with the tablets.**

Based on the mission findings suggesting that seniors find it difficult to switch between different types of technological equipment easily, MIRRI should continue its plans to provide training to seniors solely on

tablets during the full-scale programme to allow seniors to familiarise themselves with the tablets better and from earlier on.

Data packages

Following the completion of the training, MIRRI provided not only tablets, but also data packages, to seniors. While the tablets were distributed to seniors at the end of the follow-up modules, the delivery of the data packages was delayed due to logistical issues related to public procurement. Interviewed seniors agreed that they would appreciate to receive the data packages as soon as possible after the training. The delay in receiving the data packages was quoted by some interviewed seniors as one of the reasons why they did not use the tablets as much as they would have liked after the training. Moreover, while it was clear to most interviewed seniors how to activate the data packages, but not all seniors understood exactly how long the amount of data provided would last, and how to adjust their data use in light of this.

> **Recommendation: Provide data packages as soon as possible after the completion of the training to seniors and integrate instructions on data use in the last training module.**

MIRRI should undertake efforts to provide data packages as soon as possible after the training completion.

MIRRI should also consider providing instructions on data use for seniors as part of the last module. In developing the instructions on data use, MIRRI could consider relevant, existing international examples, such as the "Mobile Data: How Much Do You Really Need?" online tutorial, developed by an NGO called "Cyber-Seniors" (Box 1.4).

Box 1.4. Relevant international practice: Online tutorial on responsible data use for seniors

Cyber-seniors is an NGO based in Canada and the United States, which provides tech-training to seniors via an inter-generational, volunteer model. High school and/or university students are provided with training to act as digital mentors for seniors, while seniors get access to technology training as well as inter-generational communities, helping in turn to keep seniors socially engaged.

The online tutorial called Cyber-Seniors webinar covers the most important and useful information for beginners about mobile data use. This includes how to access the data such as by connecting to the Wi-Fi, how to know how much mobile data you have left on your device and how to use the data in a reasonable and economical way so that it does not run out quickly. The webinar is hosted by a teen tech mentor who demonstrates how seniors can monitor their own data use at the end of the tutorial.

Source : Cyber-Seniors (2022[20]), *Mobile Data: How Much Do You Really Need?*, www.youtube.com/watch ?v=qowL72ONHbk

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Phone support

Interviewed seniors would welcome continued support and assistance in their tablet use even after the completion of the training, referring often to "friend on the phone" whom they would appreciate. Considering this, MIRRI's idea of setting up a call centre to assist seniors with technical questions and training inscription appears as a step in the right direction. The call centre is run by the National Agency for Network and Electronic Services and is open to seniors during the work week from 8am-4pm. However, despite the call centre's existence since September 2022, no seniors interviewed during the mission were aware of it, pointing to opportunities to improve communication and awareness raising by MIRRI.

Recommendation: Continue to run a call centre for technical assistance to seniors during the full-scale training, but raise better awareness of it.

MIRRI should increase the elderly's awareness of the call centre. Relevant time to mention the available call centre assistance to the seniors would be at the end of the last, personalisation module, when the training is ending, and the seniors continue prepare for using the tablets on their own. Trainers could show the number of the call centre for the elderly, who then can save to number to their devices. Alternatively, the number of the call centre could be placed on a sticker attached to back of every tablet, making it easily accessible. In addition, it would be good to add information about the call centre on the project web page (www.digitalniseniori.gov.sk/), where the training material can also be accessed, to raise better awareness of the call centre among the elderly.

Recommendation: Consider installing remote access software onto tablets to facilitate the efficient resolution of technical issues.

Seniors who undertook the training may encounter a range of technical issues when using the tablets. While the data from the call centre suggest that so far seniors mostly contact the call centre to solicit help with training registration and obtaining training-related information rather than to seek assistance with using their devices (see Figure 1.1 above), it should be borne in mind that seniors who volunteered to participate in the pilot phase are likely more motivated and more highly skilled than the average senior. As a result, it is likely that the number of seniors who will require technical assistance with their devices after the training completion will increase during the full-scale programme phase.

Elderly who encounter technical issues when using their tablets may struggle to accurately describe during a phone call the specific issue they need assistance with, which might prolong the time needed to find the right solution.

Therefore, MIRRI could consider installing remote access software onto seniors' tablets such as was done in Japan (Box 1.5). A remote access software service would enable the call centre operator to momentarily access and take control of the device remotely to fix the problem or show the senior how to perform a certain operation. The senior would only need to communicate the serial number of their tablet (which could be placed as a sticker on the back of the device) to the call centre operator, and then accept the remote control request on the screen. Seniors could be informed about the possibility of obtaining help via the remote support software at the end of the training, when they are also informed about the call centre more broadly (see above).

Prior to the installation of remote access software on seniors' tablets, MIRRI should carry out a detailed analysis of legislation to rule out any potential data privacy issues. The consulted call centre operators mentioned that concerns around such issues are one of the reasons why the call centre does not yet use the remote access software at present.

Box 1.5. Relevant international examples: Remote technical assistance for seniors in Japan

In the context of a local IT promotion project called e-Namokun in Nagoya, Japan a focus group of sixty Japanese seniors from age 60 to 80 received remote assistance support with using their computers via a software package called e-RemoSupp. The programme of e-Namokun was developed to help Japanese senior citizens to familiarise themselves with technical devices and the Internet.

The programme offered technical software tests, development of social support mechanisms and formation of IT volunteer groups. The E-RemoSupp software received a lot of positive feedback from the pilot group. The results of the programme show that if the remote-control tool is combined with a video call function between the assistant and the senior, the assistance can be as useful and efficient as face-to-face support.

In addition, if the software programme is simple to use, it can be a very convenient and effective way of providing technical assistance even for seniors who are beginners in using digital technology. After the experiment, almost all the participants agreed that the remote support method was am effective way of assisting seniors with their problems and questions related to the use of technology. The study also notes that free or low-cost software can pose a higher security and virus risk, which is why it is better to use widely used programmes with a positive track record, even though they may be more costly.

Source: Zhou (2006[21]), *A Study of Remote Support by IT Volunteer Group for Senior Citizens*, www.jstage.jst.go.jp/article/jsi/2/1/2_KJ00005825828/_pdf/-char/ja.

In-person support

In addition, both seniors and trainers mentioned the need to supplement the technical assistance provided over the phone with in-person assistance to help seniors solve everyday use issues (e.g. how to deal with a forgotten password, etc.). The importance of in-person assistance was underlined by interviewed trainers as particularly important for the senior target group (and especially for seniors who are complete beginners in digital technology use), for whom trust and confidence in the trainers is crucial for building motivation and courage to use digital devices. While the trainers themselves will not have sufficient capacities to provide in-person support following the training especially as the pilot is scaled up, ideas to involve ICT students or personnel from local libraries were mentioned during focus groups and in the PCG meeting.

Recommendation: Provide in-person support to seniors following training completion.

MIRRI could consider several options for providing in-person support to seniors following the completion of training, depending on the availability of resources and logistical feasibility. Ideally, the access points for in-person, post-training support should have sufficient human resource capacity to accommodate those seniors who require additional support, be easily accessible to seniors, and provide support in a friendly and supportive environment.

First, MIRRI could consider including a clause in agreements with the contracted training providers, which would provide additional compensation to trainers who are available to provide post-training support to seniors (e.g. via "drop-in sessions") at pre-defined times for a certain period after the training, and at the place where the training was carried out.

Second, given that individual trainers might not have the capacity to assist all seniors whom they had trained, MIRRI could consider organising drop-in sessions for seniors led by other relevant stakeholders, such as students in third age universities/schools, local libraries, "contact points" for seniors managed by senior associations/NGOs, day centres (i.e. centres funded by cities to organise various cultural and social activities for seniors, provide social counselling, etc.), seniors' clubs (members only), community centres, and/or other contact points that are easily accessible to seniors. In OECD countries where inter-generational tutoring schemes for seniors have been established, the schemes have often involved both university students and/or high school students (Box 1.6). In the past, similar schemes implemented in the Slovak Republic involved students from VET schools (SPŠE Prešov, 2017[22]).

Box 1.6. Relevant international examples: inter-generational tutoring schemes for seniors

United Kingdom

Imperial College Business School in the United Kingdom[5] organises drop-in sessions for seniors led by university students under the What the Tech digital literacy programme. During the drop-in sessions, which are held at local community centres on a weekly basis, university students volunteer their time to provide in-person assistance to seniors with using their digital devices. The sessions provide space for seniors to seek advice on a range of digital tasks that they struggle with or are unsure about – from downloading applications to navigating online security – in a friendly environment. The sessions typically last 1.5 hours each.

United States

The ElderTech Academy in the United States, California, is an inter-generational technology programme that connects interested seniors with tech-savvy high school students (overseen by site supervisors), in order to advance seniors' understanding of, and skills required to, use digital technologies and devices. Seniors can book 45-min appointments with students, and bring their own digital devices, to seek assistance with technology-related questions.

Source: Imperial College London (2017[23]), *Student project teaches digital skills to elderly White City residents,* www.imperial.ac.uk/news/182903/student-project-teaches-digital-skills-elderly/ ; ElderTech Academy (2023[24]), *ElderTech Academy – Technology Training for Older Adults,* http://eldertechacademy.com/

In order to attract a sufficient number of students to provide post-training support to seniors, MIRRI would need to put in place adequate incentives. For example, in comparison with the What the Tech programme (see Box 1.6), which relies on students volunteering their time, the ElderTech Academy (see Box 1.6) provides students with internships to incentivise their participation in the programme (ElderTech Academy, 2023[24]). Cyber-Seniors, a Canadian/US NGO, providing digital skills training to seniors via an intergenerational, volunteer model incentivises the participation of volunteer students by documenting their volunteer hours and awarding them with digital badges and certificates (Cyber-Seniors, 2023[25]). The students are also provided with training to become digital mentors (Cyber-Seniors, 2023[26]).

MIRRI could incentivise students to provide post-training support to seniors by collecting academic credits in exchange for the completed service. Given that in the Slovak Republic the recognition of volunteer activities in exchange for academic credits is governed at the university level by internal university regulations (UMB, n.d.[27]), linking support provided to seniors to collecting academic credits would require that MIRRI co-operates with selected universities to ensure that this possibility is available to interested students, and also that universities actively raise awareness of the opportunity to assist seniors amongst students.

Third, depending on the demand and budget availability, MIRRI could consider providing resources to local libraries to create "drop-in hubs", where seniors could seek support with addressing issues encountered in using digital devices. In the UK, several such drop-in hubs are in place (Age UK, n.d.[28]; Lewisham Council, n.d.[29]; Trafford Council, n.d.[30]). For instance, in the Sheffield Central Library, Age UK operates a free, digital drop-in service for seniors. Once every two weeks, during a set time window, seniors can stop by the Library without the need to book in advance, and ask questions related to the use of digital devices to Age UK volunteers (Age UK, n.d.[28]). In exploring potential collaboration with libraries in providing further,

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[5] Imperial College Business School is part of the Imperial College London. The latter is one of the UK's top universities specialising in science, technology and engineering.

in-person support to seniors, MIRRI could start by initiating discussions with the "Libraries for Slovakia" consortium, overseen by CVTI SR. The consortium aims to transform libraries into hubs for promoting lifelong learning and digital skills development (among others) and has 40 library members spread across the Slovak Republic (CVTI SR, n.d.[31]). The possibility of developing a collaboration with "Libraries for Slovakia" was also raised during the PCG meeting. At the local libraries, seniors could be assisted by the library staff, and/or student tutors (see above).

Monitoring of continued use of devices

With the view of increasing the potential value added of the RRP investment, MIRRI project team are considering ways of monitoring the extent to which the seniors use tablets following the completion of the training, and what challenges they face in doing so. While mobile device management (MDM) solutions were considered, they were judged to be too expensive to implement while deemed as an overtly intrusive approach by some.

> **Recommendation: Consider collecting information on the continued use of devices by combining online and in-person data collection approaches.**

MIRRI could consider using online, follow-up surveys, as a primary tool for collecting information from seniors on their continued tablet use, as well as challenges and enabling conditions, which facilitate and hamper continued use of the device after the training. Information on the use of, and satisfaction with, the post-training support (see recommendation above), and potential participation in follow-up training by seniors (see recommendation below), could also be collected.

Collecting information via online surveys would be a cost-efficient solution and would not run the risk of being perceived as too intrusive by seniors, as it may be the case of tracking user activity via MDM, especially as seniors are particularly concerned with online security (Vaportzis, Clausen and Gow, 2017[10]; Alden et al., 2021[11]). Once the survey becomes available, seniors could receive a notification with a link on their tablets to fill the survey in.

The downside of collecting information via online, follow-up surveys is that the surveys would not be able to gather information from seniors who might have abandoned tablet use after the training, and/or who might not be able to fill out the survey (e.g. due to potential deterioration of digital skills since the training end, etc.).

To collect additional information, MIRRI could consider organising events for seniors (e.g. "digital seniors days"), to which a representative sample of training participants could be invited after a certain period following training completion. At the event, the information could be collected from seniors via questionnaires (for those who have not filled out the online survey) and focus groups (for all training participants). As evidence shows that social contacts are an important reason behind seniors' participation in digital skills learning (Pihlainen et al., 2022[32]; QA Research, 2020[15]), seniors may be drawn to participating and sharing information on their continued tablet use and post-training experience by the prospect of socialising with other seniors.

MIRRI could consider holding such "digital seniors days" in collaboration with the regional and local authorities, on the side of existing events for seniors (e.g. seniors festivals, senior expos, etc.), which are organised at the regional and local level, typically in the fall as a nod to the month of respect for seniors ("mesiac úcty k starším") in October (Banská Bystrica, 2022[33]; Petržalka, 2022[34]; Košice – Staré Mesto, n.d.[35]; Dnes24Nitra, 2017[36]; Prešov, 2021[37]; Trenčiansky samosprávny kraj, 2021[38]; Trnava, 2022[39]; Mesto Žilina, 2022[40]). Similar events for seniors are also commonly organised outside of the Slovak Republic, for example in Australia (NSW Government, 2023[41]), France (Salon des Seniors, 2023[42]), or the US (Golden Future Expos, n.d.[43]).

Holding the "digital seniors days" on the side of existing events would enable MIRRI to further raise the appeal of the former and secure greater participation by seniors. It would also enable MIRRI to use the "digital senior days" for raising awareness about the MIRRI-sponsored training, and other, relevant, digital skills programmes/projects, amongst the seniors who have not yet participated in the MIRRI-sponsored training. The "digital senior days" could similarly include digital skills workshops for seniors (such as in Finland, see Box 1.7), in-person technical support sessions (see recommendation above) and provision of information on further digital skills learning opportunities, besides the MIRRI-sponsored training (see recommendation below). Seniors who have already filled out the online, follow-up survey but still decided to participate in the "digital seniors day" could therefore take advantage of a range of useful activities, and also share further insights on their post-training experience with tablet use via focus groups (see above).

Box 1.7. Relevant international practice: SeniorSurf programme in Finland

The Finnish Association for the Welfare of Older Adults co-ordinates free SeniorSurf programmes around the country to help strengthen the digital skills of the elderly. The objective of the SeniorSurf programme is to foster peer support among seniors by organising workshops in several locations, such as in public libraries and community colleges.

The workshops encourage seniors to use digital tools in their every-day life more actively, by introducing seniors to new apps, digital devices, and programmes. In addition, a central theme of these workshops is to learn how to use the public online services more independently, such as accessing to the online web page of National Pension Institute. In the SeniorSurf model, digital guidance teachers are also seniors themselves who are trained to teach digital skills to others, and participants of these workshops can be people from all skill levels and age groups. The reasoning behind this is that, if the teachers and learners are from similar age groups, it reinforces better peer support, and the elderly are more likely to ask questions and participate in these workshops.

In the instruction page for event co-ordinators, the most emphasised aspects include creating a positive atmosphere among the participants.

Source: SeniorSurf (2023[44]),, *Vanhustyön keskusliitto,* https://seniorsurf.fi/seniorit/

Support for further learning

Several interviewed seniors (especially those who did not have adequate opportunities to familiarise themselves with the tablets and to learn move than the basic tablet settings, see above) mentioned the desire to continue improving their digital skills following the completion of training. In this regard, interviewed representatives of third age universities raised the possibility of directing these seniors to third age university courses following the completion of the training. In fact, several of the interviewed seniors were already continuing to further develop their digital skills at courses run by third age universities. However, it should be noted that the sample of interviewed seniors is not representative and might capture the behaviours and attitudes of the most motivated seniors.

> **Recommendation: Put in place guidance for seniors to navigate them towards further learning possibilities.**

To strengthen the sustainability and long-term impact of the RRP investment, MIRRI could consider requiring that contracted trainers inform those seniors indicating interest in accessing further training where they can do so at the end of the last MIRRI-sponsored session. A similar approach was adopted by the New York City as part of a tablet distribution scheme (see Box 1.8). Equally, seniors could receive

notifications on their tablets reminding them of opportunities for further training. For example, third age universities in the Slovak Republic have a history of running digital skills training for seniors and would be well-placed to support seniors in further development of digital skills. MIRRI could work with the Association of universities of third age (ASUTV), which has 18 third age university members (ASUTV, n.d.[45]), to ascertain the interest and capacity of third age universities.

Cost can pose an obstacle to further learning and use of digital devices to seniors (Alden et al., 2021[11]), especially for seniors from socio-economically disadvantaged backgrounds. Therefore, MIRRI, the ASUTV, as well as its members, could also explore the potential of offering seniors, who had completed the MIRRI-sponsored training, digital skills courses at preferential rates.

Box 1.8. Relevant international example: Guidance for further learning for seniors in the United States

In the United States, New York City (NYC), the Department for the Aging (DFTA) launched an initiative to distribute 10,000 tablets to senior (age) New Yorkers, in line with the DFTA's long-term effort to keep senior New Yorkers digitally connected while combating social isolation.

The tablet-distribution targets older New Yorkers who do not have an internet-enabled electronic device and reside within a Taskforce on Racial Inclusion and Equity neighbourhood. As part of the programme, the beneficiary seniors are provided with free tablets. The tablets are equipped with free internet service for a specified period, provided by T-Mobile, and are pre-loaded with several applications, including Zoom, Gmail, and the NYC COVID Safe app.

In addition to receiving the tablets, seniors will be able to access free digital skills training at local senior centres. During each tablet distribution event, DFTA is referring tablet recipients to the nearest senior centre that offers the training.

Source: City of New York (2022[46]), *Mayor Adams, Department for the Aging Distribute 1,000 Free Computer Tablets to Older New Yorkers and Connect Them With City Services,* www.nyc.gov/office-of-the-mayor/news/221-22/mayor-adams-department-the-aging-distribute-1-000-free-computer-tablets-older-new-yorkers

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