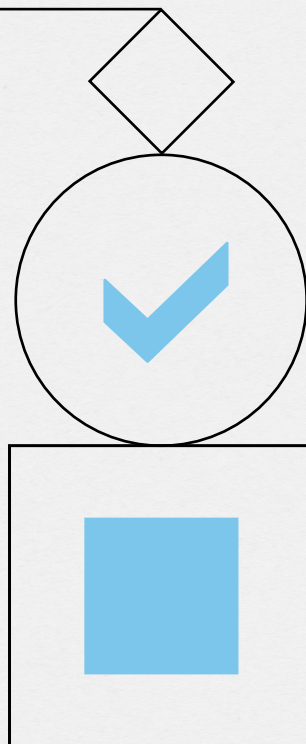




NATIONAL ACTION PLAN FOR DIGITAL INCLUSION

**For a digitally
inclusive society**



THE GOVERNMENT
OF THE GRAND DUCHY OF LUXEMBOURG
Ministry for Digitalisation



Imprint

This brochure presents the national digital inclusion action plan adopted by the Council of Government on September 24, 2021. This is an English translation from the French original.

Coordination of work for the development of the national action plan

Ministry for Digitalisation

In collaboration with

Ministry of State

Ministry of Foreign and European Affairs

Ministry of Culture

Ministry of the Economy

Ministry of Education, Children and Youth

Ministry of Energy and Spatial Planning

Ministry of Higher Education and Research

Ministry of Equality between Women and Men

Ministry of the Environment, Climate and Sustainable Development

Ministry of Family Affairs, Integration and the Greater Region

Ministry of Finance

Ministry of the Civil Service

Ministry of Housing

Ministry for Consumer Protection

Ministry of Health

Ministry of Internal Security

Ministry of Sport

Ministry of Labour, Employment and the Social and Solidarity Economy

Production

Quattro Creative Studio (wearequattro.com)

Printing

Exepro Print & Packaging



OVERVIEW

04

For a digitally inclusive society

07

A concerted approach to address varied and manifold challenges

- What is digital inclusion?
- Who is affected?
- What are the priorities?
- Which solutions could be put in place?

13

The strategic levers

- Increasing digital motivation and building digital confidence
- Facilitating digital access
- Developing digital skills

34

Follow up and assessment

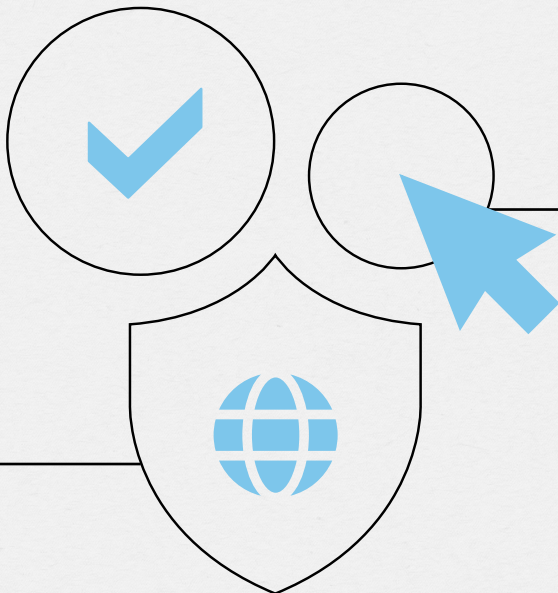
FOR A DIGITALLY INCLUSIVE SOCIETY

The digital revolution brought about by the technological developments of the last decades is having a huge impact on our lives. Our habits are changing in all areas: online administrative procedures or online banking have become commonplace: we do our shopping online or we can find a rare book at the other end of the world without even leaving our sofa...

While for some, terms such as the cloud, virtual reality, artificial intelligence or blockchain are already part of their vocabulary, there are many who, for various reasons, feel

overwhelmed or even excluded when confronted by the new opportunities offered by the digital world. The gap between those who feel at ease in this digital world and those who are less familiar with it is therefore liable to widen incrementally.

The health crisis caused by the coronavirus has highlighted the dangers of a possible digital divide. Right from the onset of this exceptional crisis, some of our citizens experienced difficulties with the digital products and services offered to them: carrying out administrative procedures



online, being able to assist one's children with home schooling, having the tools to stay connected with people who are geographically distant ... This critical period provided a very drastic illustration of how essential digital inclusion is for the socio-economic cohesion of our country.

In order to counteract a digital divide that is damaging to society as a whole, the government undertook to draw up an action plan designed to ensure the inclusion of all citizens in the digital transformation of our society. An inter-ministerial working

group, coordinated by the Ministry for Digitalisation, has been set up to analyse all facets of digital inclusion and to initiate coordinated actions to address the needs identified. Moreover, in order to take into account all the challenges presented by digital inclusion and to provide suitable solutions, the Ministry for Digitalisation has also taken care to consult a wide range of non-state stakeholders active in this field.

This action plan is the result of all these discussions and consultations and aims at facilitating the emergence of

an inclusive digital society. It lays solid foundations for sustainable action in the field of digital inclusion and acts as a facilitator to make digital technology an economic and social lever for all those who choose to go digital.

Xavier BETTEL

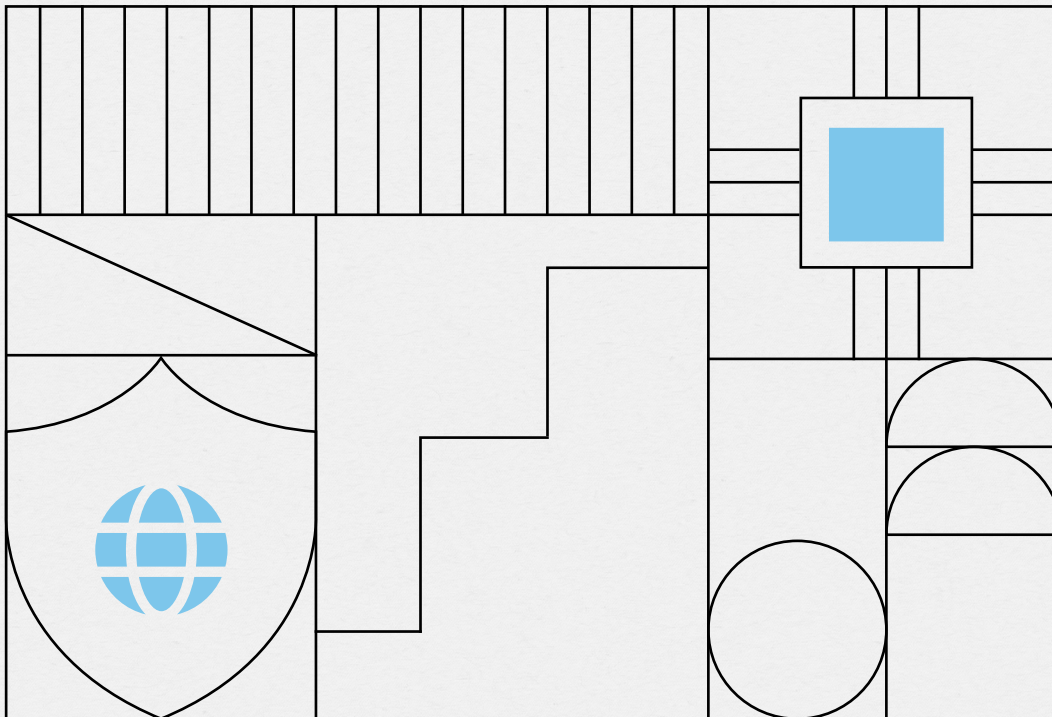
Minister for Digitalisation

Marc HANSEN

Minister Delegate for Digitalisation

A CONCERTED APPROACH

TO ADDRESS VARIED
AND MANIFOLD
CHALLENGES



What is digital inclusion?

Digital inclusion sets out to give every individual the same opportunities to participate in the digital society. To do this successfully, it is essential to identify the challenges to be met.

The government has placed digital transformation at the heart of its agenda, while affirming its desire to avoid a digital divide, which would be detrimental to all. This National Action Plan for Digital Inclusion was drawn up by the Ministry for Digitalisation, in close consultation with an inter-ministerial working group dedicated to digital inclusion and with the help of bilateral exchanges with associations and various non-state actors close to populations which may be isolated from the digital world.

Based on the observation that the commitment of society as a whole is needed to avoid a digital divide, a multitude of stakeholders were involved in drawing up this Action Plan:



Consultation debate
in the Chamber of Deputies
organised at the request of
the Ministry for Digitalisation.

3 meetings of the inter-ministerial working group with 27 representatives from 19 ministries.

39 questionnaires
handed in on existing
initiatives within
the State.

17 exchanges
with non-governmental actors.

19 questionnaires handed in
on the needs and expectations
of civil society.

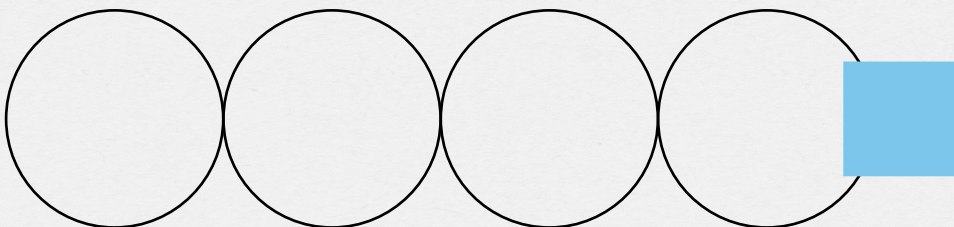
The exchanges with the members of the inter-ministerial working group made it possible to draw up an initial inventory of current government actions as well as a catalogue of actions and projects, which the various state entities intend to implement in order to counteract a digital divide among their target audiences. This inventory was supplemented by information gathered during consultations with civil society. These exchanges allowed the Ministry for Digitalisation to fully grasp the difficulties faced by people who are isolated from the digital world.

It can be noted that the parties consulted emphasised that the obstacles to the digital world faced by citizens vary considerably depending on the individual and that the reasons for digital isolation are often manifold.



The obstacles to the digital world faced by citizens vary considerably depending on the individual (...)

The eclectic nature of society and the different needs and expectations of citizens, depending on their degree of digital vulnerability, add to the complexity of the situation. Factors such as age, disabilities, and language skills ... may also have an impact on the degree of digital inclusion. It should also be borne in mind that technological development is a never-ending process. As a result, digital inclusion projects and initiatives must evolve in tandem with new technologies to constantly provide quality information and training.



Who is affected?

- Many **elderly people** have no or few necessary digital skills and lack the motivation or confidence to use digital tools.
- Some **people with disabilities** face problems of digital accessibility.
- The **least skilled workers** often lack the necessary basic digital skills.
- Among the **unemployed**, there is evidence that some do not have the basic digital skills needed for reintegration into the labour market.
- A number of **people on low incomes** face problems with digital access and show a lack of motivation to use digital technology.
- A number of **migrants** do not have access to digital technology or do not have the basic digital skills to access it.
- A fraction of **applicants for international protection and beneficiaries of international protection** lack the means to access digital technology.
- A number of **women and girls** still suffer from a digital literacy gap with men.
- Some **young people** lack basic digital skills.

What are the priorities?



Facilitate
access
to digital
tools



Foster
the development
of digital
skills



Counteract
regional
differences in
digital offerings



Sensitise
to online security
and online information
management



Motivate
people
to use digital
technology

According to the associations contacted, technological developments must be integrative so as not to create social vulnerabilities or present an obligation for citizens in Luxembourg. To this end, analogue alternatives must remain guaranteed. The representatives of the associations also repeatedly stressed that there is an

increased need for more training for the teams of associations and other actors active in the field of digital inclusion in Luxembourg.

The non-state organisations and associations contacted also consider online security, access and digital learning as **the biggest challenges**

for successful digital inclusion in Luxembourg. According to these organisations, access and training in digital skills will then help to develop motivation and digital confidence.

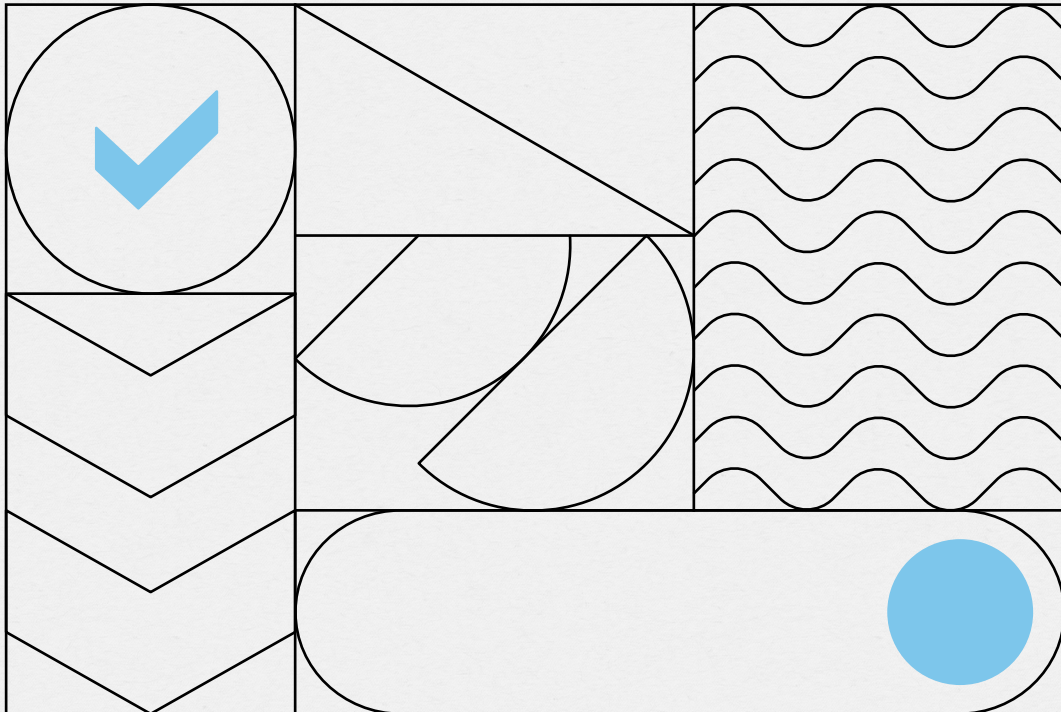
Which solutions could be put in place?

In view of the disparity of target populations, the following solutions are considered the most useful:

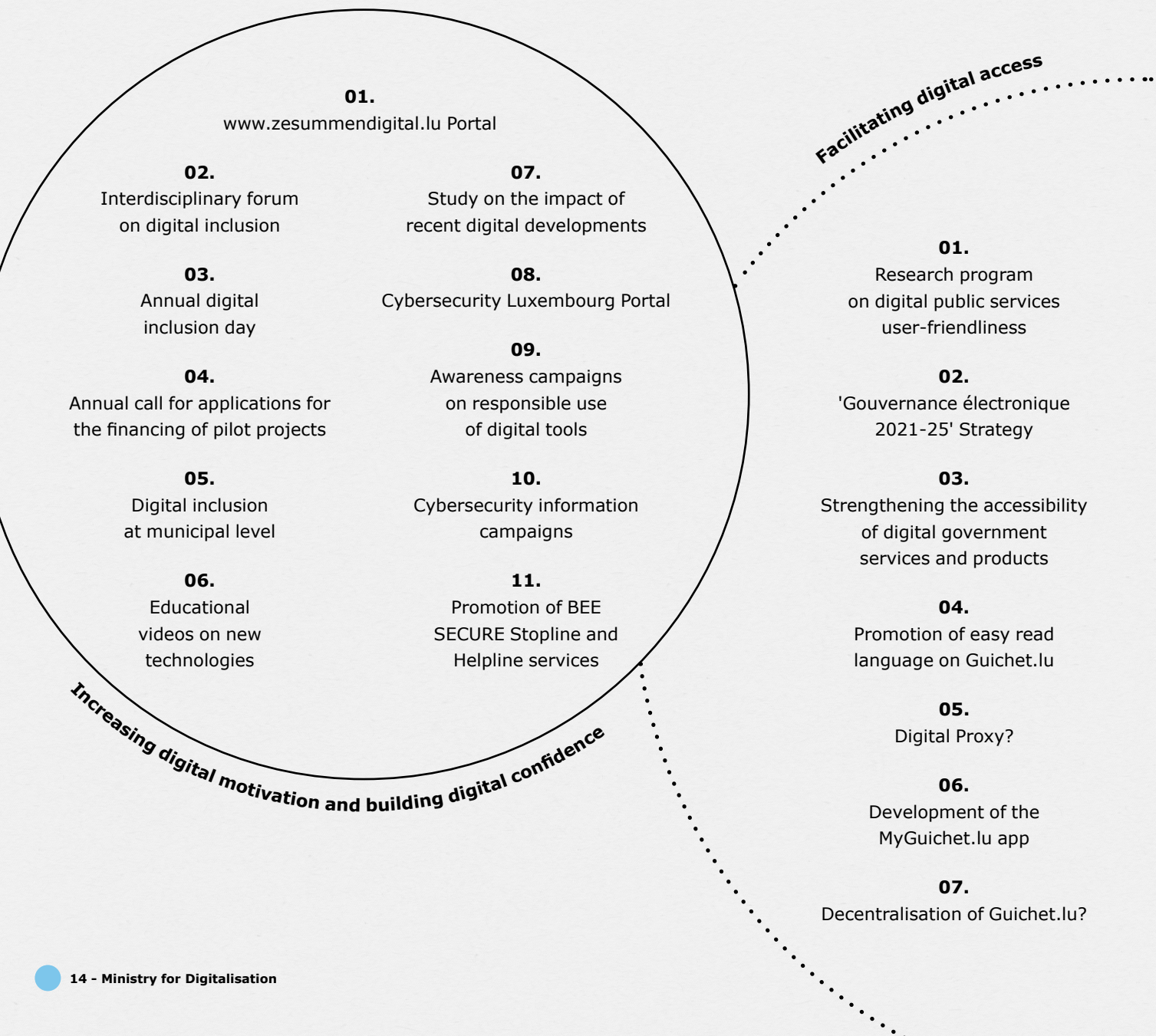
- offer decentralised group and individual training courses,
- offer physical helpdesks,
- offer digital public spaces,
- allow a third party to carry out administrative procedures online on behalf of someone else,
- develop tutorials and explanatory videos and offering them online.

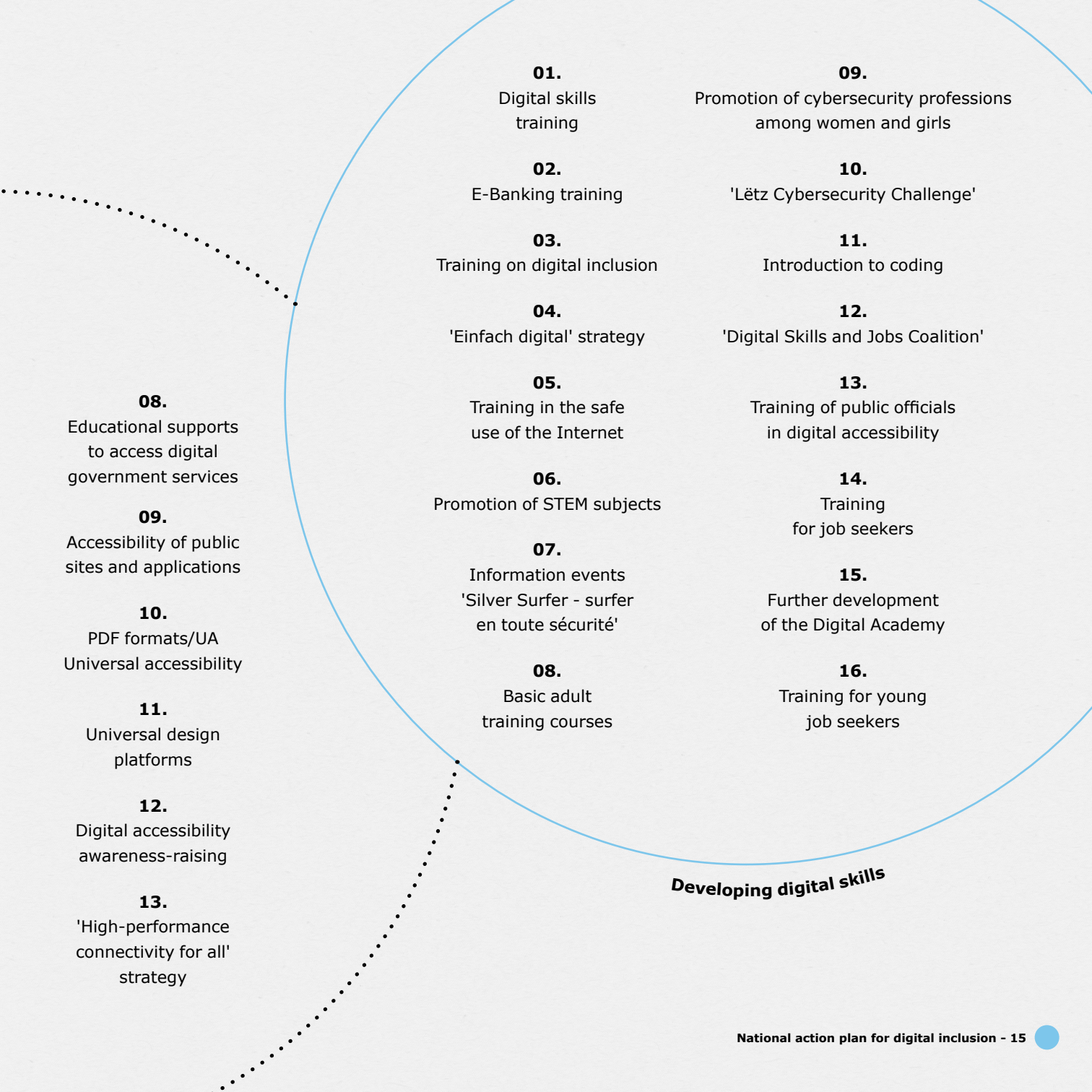
THE STRATEGIC LEVERS

FOR A DIGITALLY
INCLUSIVE SOCIETY



The 40 initiatives at a glance

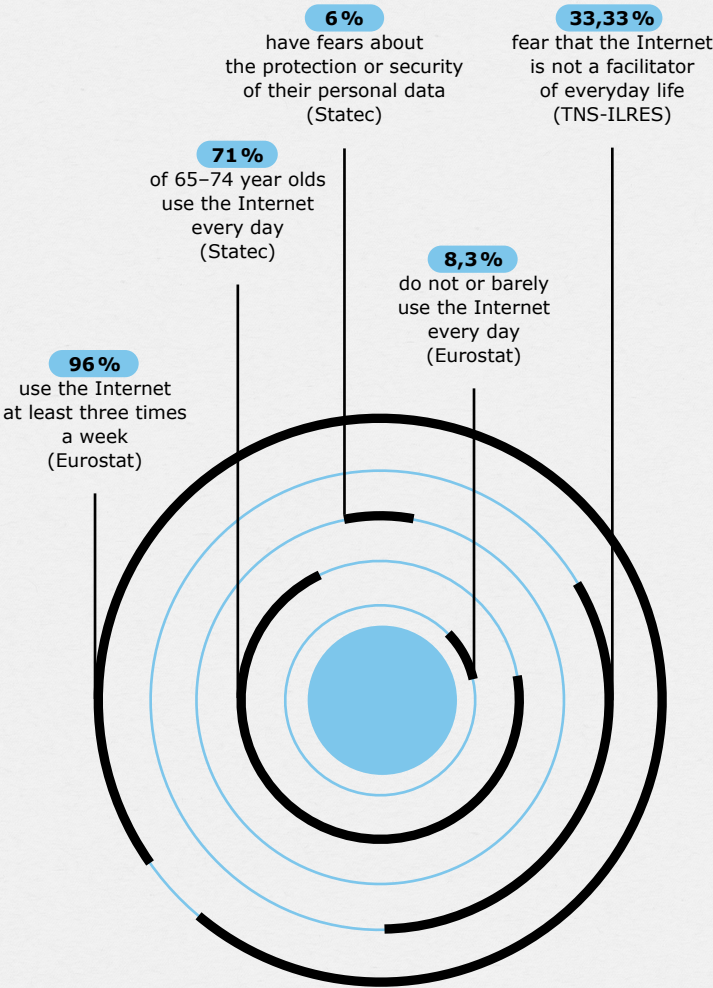


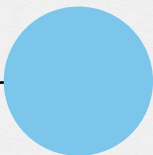


Increasing digital motivation and building digital confidence

Digital motivation indicates an individual's level of commitment to engage in the digital world and to use digital tools and the Internet. In a broad sense, 'digitally motivated' people clearly perceive how digital technologies help them to move forward or access new opportunities. Motivation can be understood in terms of two distinct aspects: the perceived usefulness of digital solutions and the knowledge of online information and services that are useful to the user.

Trust in the digital world relies, on the one hand, on the view that digital infrastructures, tools and services are secure. On the other hand, it increases in accordance with the user's own capabilities. Confident users therefore understand the potential risks and threats of online tools and have the right reflexes to protect themselves.





The initiatives to strengthen digital confidence therefore focus on two main aspects: **sensitisation of digital issues and risks**, as well as **the skills needed to use basic technologies**.

01

Development of a web portal dedicated to digital inclusion 'zesummendigital.lu' by the Ministry for Digitalisation. This portal will provide useful information about actors in the field of digital inclusion and existing offerings, as well as informative, awareness-raising and self-help publications and resources promoting digital inclusion. **It thus aims at giving maximum visibility to existing offerings, along with promoting resources and making them available to the public.**

02

Animation of an interdisciplinary forum, by the Ministry for Digitalisation, bringing together ministerial departments, representatives of actors active in digital inclusion and stakeholders supporting people that are isolated from the digital world.

03

Organisation of a day dedicated to digital inclusion on May 17th by the Ministry for Digitalisation, as part of World Telecommunication and Information Society Day. The aim is **to increase the visibility of existing actors and initiatives** in Luxembourg in connection with digital inclusion.



04

Launch by the Ministry for Digitalisation **of an annual call for applications** for the financing of pilot projects promoting digital inclusion.

05

Exploration of various collaborative ventures between the Ministry for Digitalisation and Syvicol **in order to foster digital inclusion at the municipal level**. The aim is to **encourage and support digital inclusion at the local level** and to counteract the regional differences in offerings.

06

Creation of a series of educational videos on new technologies and digital usage and their positive impact on citizens and society by the Ministry for Digitalisation. This series is **intended to make the public aware of the opportunities afforded by digitalisation**.

07

Launch by the Ministry for Digitalisation **of a study on the impact of recent digital developments** on people who are isolated from the digital world.

08

Creation of the 'Cybersecurity Luxembourg' portal, by the High Commission for National Protection, Luxinnovation and SECURITYMADEIN.LU, bringing together Luxembourg public and private players dedicated to cybersecurity. The portal hosts, among others, awareness-raising initiatives and information such as the 'European Cyber Security Month' and the 'Cybersecurity Week Luxembourg'.



09

Continued awareness-raising of the public on the responsible use of the new information and communication technologies through awareness-raising campaigns and resources on online security, online behaviour and digital usage by BEE SECURE, under the aegis of the Ministry of Education, Children and Youth. BEE SECURE's national campaigns **increase citizens' knowledge of secure digital use, develop digital citizenship and thus strengthen citizens' confidence in the digital world.**

10

Implementation of campaigns or information sites such as spambee.lu and secure-iot.lu by SECURITYMADEIN.LU, the Cybersecurity Agency for the Luxembourg Municipalities and Economy, under the aegis of the Ministry of the Economy, in partnership with the National Commission for Data Protection (CNPD) and BEE SECURE. 'Spambee' is an application for analysing and reporting potentially dangerous SPAM e-mails and websites. The 'Secure internet of things' website provides information about the potential risks of connected objects and gives advice for more secure use.

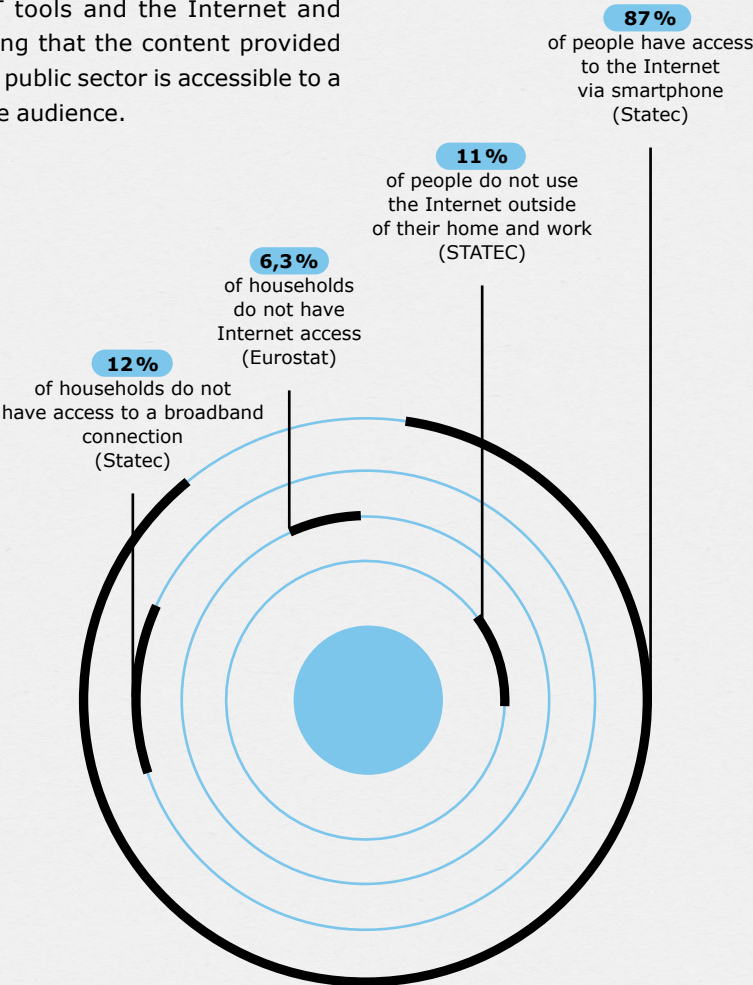
11

Increased communication about the BEE SECURE Stopline and Helpline in order to make them better known to the public in Luxembourg. The BEE SECURE Helpline offers free, anonymous and confidential advice on online security and responsible digital use. This service, among others, also caters for people with disabilities. With its Stopline service, BEE SECURE provides an online form for the anonymous and confidential reporting of specific illegal content on the Internet.

Facilitating digital access

Digital access sets out to give everyone access to information and communication technologies.

The ambition is to guarantee access to ICT tools and the Internet and ensuring that the content provided by the public sector is accessible to a diverse audience.



This action plan **aims to extend and improve access to digital technology, along with prioritising digital inclusion in the design of digital solutions so as to ensure better user-friendliness and increased access** (digital inclusion by design). The aim is also to **encourage the creation of public access and contact points at the national and municipal level**. While widespread and improved digital access must be promoted, it is the government’s intention to continue to provide non-digital access to government services.



01

Establishment of a research programme by the Ministry for Digitalisation and the Interdisciplinary Centre for Security, Reliability and Trust (SnT) on the user-friendliness of public digital services, as well as the socio-technical aspects of the user interface and their impact on digital inclusion. The research programme will **examine how new technologies and research can promote digital inclusion.**

02

Implementation of the 'Electronic Governance 2021-2025' strategy by the Ministry for Digitalisation and the Government IT Centre. The strategy aims to **strengthen eGovernment** and support the transition to digital governance with the objective of creating real added value for citizens. The ambition is **to promote transversal digital accessibility, develop user-centred services, offer attractive online public services and invest in citizens' trust** in online state services.

03

Strengthening efforts to implement accessible digital state services and products through the CTIE in accordance with the ReNow framework (standardisation framework for websites). This framework constitutes an approach and assistance in terms of web quality for state and public sector bodies and entities that includes many aspects of standardisation, such as quality standards, web-accessibility standards and a user-centred approach.



04

Ongoing development and provision of descriptions in easy read (*Leichte Sprache*) of digital administrative procedures on www.guichet.lu by the CTIE.

05

Launch of a legal and technical feasibility study for the possible introduction of a 'digital proxy' by the Ministry for Digitalisation to enable a third party to carry out digital administrative procedures on behalf of a relative.

06

Continuous development of the mobile application MyGuichet.lu by the CTIE to provide citizens with simple mobile access to their private space on MyGuichet.lu. This measure supports the development of 'cross media access', as set out in 'Electronic Governance 2021-2025'.

07

Analysis of the decentralisation potential of Guichet.lu by the Ministry for Digitalisation.

08

Promotion and development of analogue, audio-visual and digital media supports by the CTIE to securely access digital government services. This may include instructional videos, online tutorials, flyers, brochures and user guides, which ensure that all citizens are given support when connecting to and using digital public services.

09

Ongoing assessment of the accessibility of public websites and mobile applications by the government's Information and Press Service (SIP). In this context, the General Framework for Improving Accessibility (RGAA), adapted to the Luxembourg context, serves as an accessibility reference framework for all Luxembourg administrations.

The SIP carries out accessibility checks on public digital content and draws up regular reports on its findings. In addition, the SIP manages complaints about accessibility and ensures effective mediation between citizens and the various administrations while

raising awareness of digital accessibility and its legal framework in Luxembourg among the various stakeholders and the public.

The SIP manages the digital accessibility portal <https://accessibilite.public.lu>, which offers access to a set of resources to make websites and mobile applications accessible to the greatest number of people and provides a tool to easily generate accessibility declarations for each published website and application.

10

Conversion by BEE SECURE, under the aegis of the Ministry of Education, Children and Youth, **of all its current and future publications into universal accessibility PDF/U.A. format.**

11

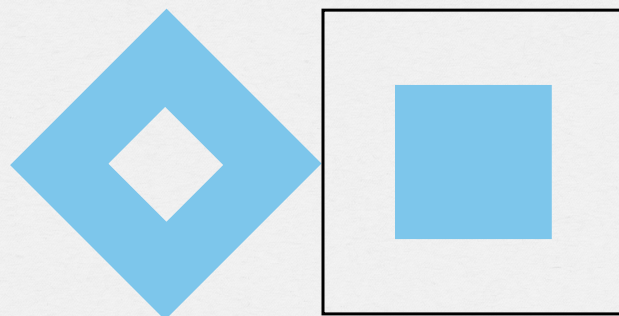
Development of inclusive and accessible 'universal design' platforms by the National Institute for Public Administration of the Ministry of the Civil Service for administrations and municipalities, which make it possible to offer content (webinars and e-learning) to people with disabilities or with special learning needs.

12

Development of digital accessibility and awareness-raising of the various issues connected therewith through the execution of the national action plan for the implementation of the Convention on the Rights of Persons with Disabilities 2019-2024 by the Ministry of Family Affairs, Integration and the Greater Region. The action plan contemplates a more systematic use of easy read language to improve communication for and with people with disabilities.

13

Launch of the broadband strategy 'High-performance connectivity for all' – the national strategy for ultra-high-speed electronic telecommunications networks 2021-25 – by the Department of Media and Telecommunications of the Ministry of State. In order to avoid a digital divide, the strategy includes the provision of connectivity for all households, regardless of their social situation, through targeted support measures. Consequently, it is estimated that, by 2025, every household should have a connection of at least 100 Mbps in download speed in order to become fully integrated into a modern society.



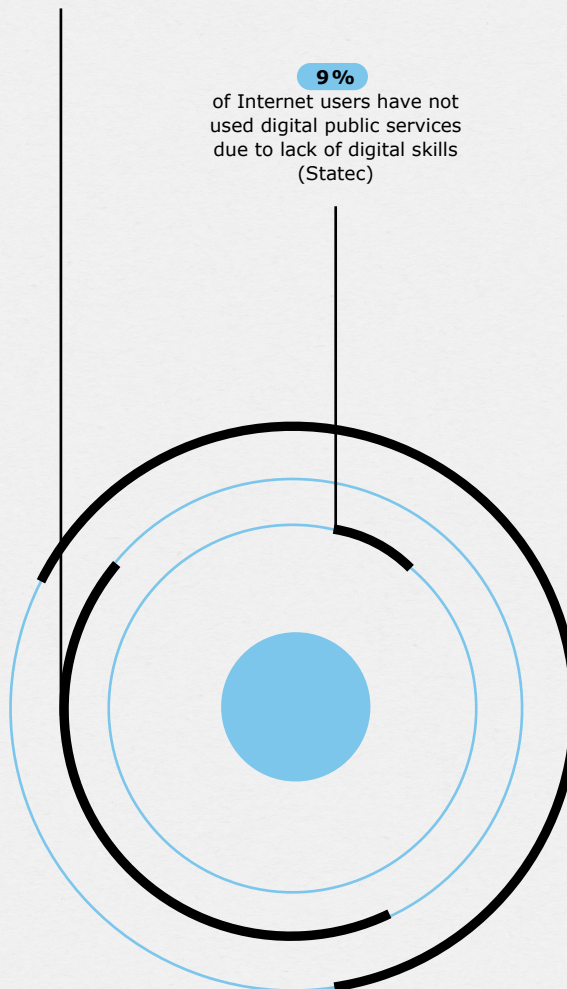
Developing digital skills

Technological change means that **digital skills** are increasingly important for participating in a connected society, accessing information and satisfying the changing demands of the digital economy. Digital literacy means having the basic digital know-how needed to use ICT tools and the Internet in a conscious and beneficial way. Digital skills are divided into three main categories or concepts: **using, understanding and creating**. Within each of these capabilities, there is a wide range of different skill levels, but the goal is for everyone to acquire basic level digital skills.

43%
of resident Internet users think that the State should help them become more familiar with digital tools (TNS-ILRES)

65%
of Internet users have at least basic digital skills (Eurostat)

9%
of Internet users have not used digital public services due to lack of digital skills (Statec)

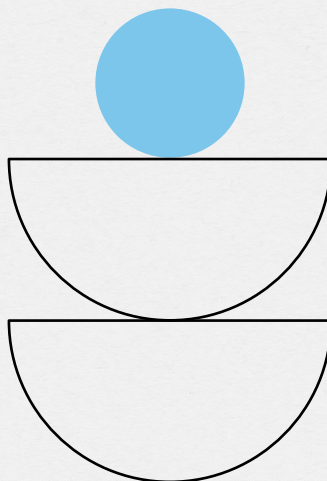


This action plan therefore focuses on the **development of skills and digital citizenship** in order to enable individuals to navigate the digital world in a more autonomous and safer way, regardless of their age, level of education or gender.

In order to encourage digital familiarization from an early age onwards, formal and non-formal education, as well as analogue, audiovisual and digital resources are essential. It is essential to offer training adapted to different levels of abilities and in different languages in order to satisfy everyone's needs to make them digitally autonomous. By offering a multitude of decentralized initiatives across the Grand Duchy and building on existing structures, the Luxembourg government is committed to providing opportunities for retraining and strengthening digital skills.

01

Collaboration between the Ministry for Digitalisation and the non-profit organisation Erwuesse-Bildung **to develop digital skills training courses tailored to different levels and available in several languages**. The training courses will be made available free of charge to organisations working in the social field in order to be accessible to as many citizens as possible throughout the Grand Duchy.

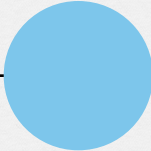


02

Development of an e-banking training module as a preparation for the use of digital banking services by the Ministry for Digitalisation and the Ministry for Consumer Protection, in collaboration with the Commission de Surveillance du Secteur Financier and the non-profit organisation ErwuesseBildung and the ABBL Foundation for Financial Education.

03

Development of a participatory vocational training course on digital inclusion for associations and organisations dealing with audiences that are digitally isolated by the Ministry for Digitalisation. The workshop will train and inform staff on digital inclusion topics and offerings to facilitate the digital inclusion of their target audiences.



04

Implementation of the *einfach digital* education strategy by the Ministry of Education, Children and Youth with the aim of getting oneself acquainted with digital technology from an early age on.

The general framework of the strategy is provided by a reference guide for education about and by the media, the *Medienkompass*, which helps teachers and educators to raise children's and young people's awareness of media use and train them in that regard. The strategy introduced plans for the systematic teaching of coding and computational thinking throughout the primary and secondary school curricula.

Since the 2020-2021 school year, learning to code has been integrated into mathematics lessons throughout cycle 4 of primary education and will be extended to the other cycles as from September 2021. From the start of

the 2021-2022 school year, a new multidisciplinary Digital Sciences course will be gradually integrated into all lower classes of classical and general secondary education in order to develop the technological, human and cognitive skills to successfully and securely operate in a digitalised environment.

The Centre for Educational IT Management (CGIE) continues to implement the Digital Classroom initiative and the multi-annual national 'one2one' strategy, which consists of generalising the introduction of iPad-type tablets in secondary schools by 2023 and turning them into a production and learning tool, which is supporting teaching.

05

Provision of training on safe use of the Internet for children and young people in primary and secondary schools, and likewise for senior citizens, by the BEE SECURE initiative, under the aegis of the Ministry of Education, Children and Youth.

BEE SECURE offers training on current trends and the online behaviour of young people to multipliers, i.e. teachers and educators. BEE SECURE training and teaching materials are integrated into the new Digital Sciences course, taught in lower secondary school classes from the start of the 2021/2022 school year. A specific training course for teachers will present BEE SECURE teaching materials which are designed to teach the responsible and secure use of digital technology and can also be used by staff dealing with people with disabilities.

In addition, BEE SECURE offers evenings for parents as well as training courses for pupils or groups of children or young people in the context of the day-care centres (maison relais) or the youth centres.

06

Increased interest in STEM subjects through the initiatives 'Scienteens Lab - De Labo fir Jonker', 'Luxembourg Science Center', 'BEE CREATIVE' and 'Science.lu' of the Ministry of Education, Children and Youth.

As part of the 'BEE Creative' initiative, the National Youth Service coordinates the Makerspace Base1, a space where young people can carry out their own projects in collaboration with experts in various technological and digital fields. In addition, BEE CREATIVE and SCRIPT coordinate 24 makerspaces in secondary schools at the regional level and 4 makerspaces in day-care centres and primary schools at the municipal level.

With the support of the National Research Fund, the National Youth Service launched the *Makerkoffer* project, a set of activities in the field of coding aimed at children from the age of 8, which is made available free of charge to everyone in German, French and English.

07

Organisation of a series of interactive senior-to-senior information events called 'Silver Surfer – *surfer en toute sécurité*' (Silver Surfer - Safe Surfing) by BEE SECURE, in which participants learn the basics of the secure handling of new media and get practical tips.

08

Provision of specific courses for basic digital literacy by the Department of Adult Education of the Ministry of Education, Children and Youth. The basic training courses are organised throughout the country and allow for an individual approach. In addition, the Department of Adult Education will include the development of basic digital skills in the language integration programmes, as well as in the integration classes of the back-to-education programme.

09

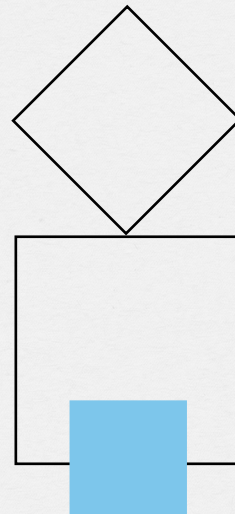
Professional reorientation of women and promotion of their role in cybersecurity careers by SECURITYMADEIN.lu in partnership with Cyberwayfinder.com and the non-profit organisation 'Women Cyber Force'.

10

Organisation of the annual 'Lëtzt Cybersecurity Challenge' by SECURITYMADEIN.lu and the Ministry of the Economy in order to encourage young people to pursue a career in cybersecurity and related fields.

11

Organisation of free workshops as part of the international 'Rails Girls' initiative to introduce girls and women to coding by the Digital Luxembourg initiative in collaboration with the non-profit organisation WIDE. Workshop participants create web applications using the Ruby on Rails programming tool to stimulate their interest in coding and related subjects.



12

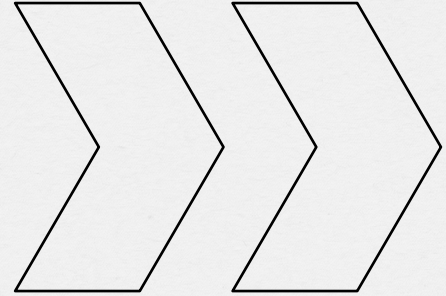
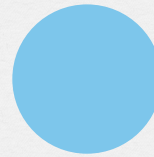
Governance of the 'Digital Skills and Jobs Coalition' by the Digital Luxembourg initiative together with the Chamber of Commerce and the Chamber of Skilled Trades and Crafts. The initiative is coordinated by the non-profit organisation WIDE in consultation with the Digital Luxembourg initiative. The 'Digital Skills and Jobs Coalition' is a platform for exchange and matchmaking between supply and demand for digital training courses, and the promotion of basic and advanced digital skills.

13

Digital accessibility training for public-sector officials by the government's Information and Press Service (SIP) in order to raise awareness of digital accessibility issues, digital accessibility criteria and its legal framework in Luxembourg. The objective is to ensure that accessibility is taken into account and implemented at the various stages of digital projects.

14

Coordination and development of the Fit4DigitalFuture 2.0, Future Skills Initiative and Basic Digital Skills projects by the Ministry of Labour, Employment and the Social and Solidarity Economy. These projects provide jobseekers with basic IT, technical and behavioural skills to develop their digital literacy and autonomy.



15

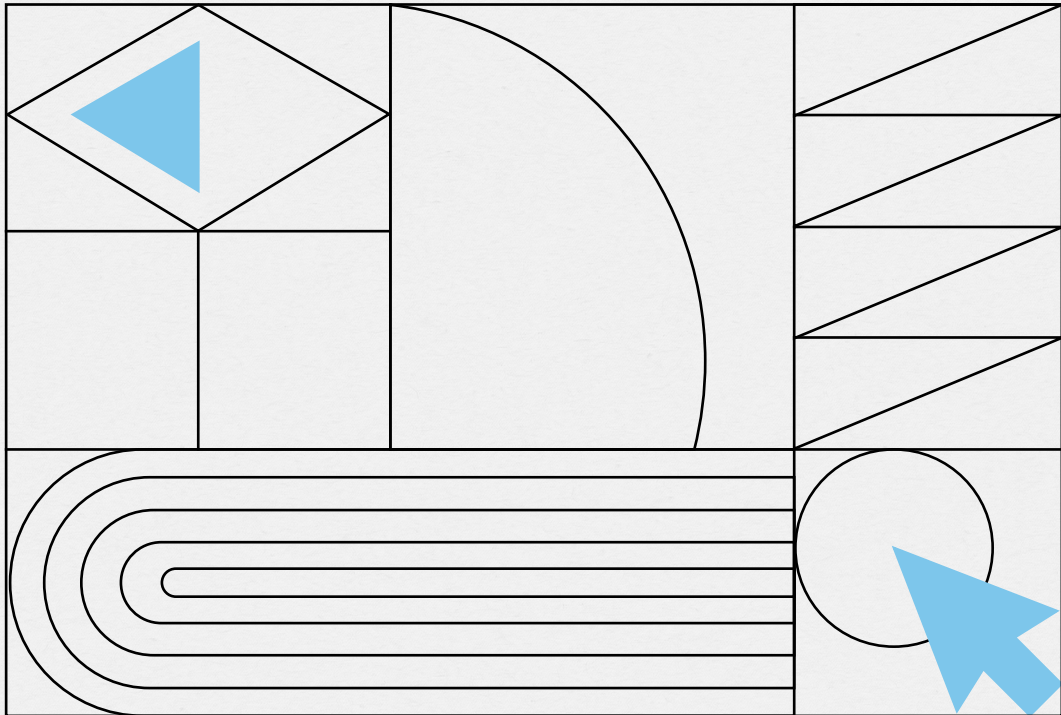
Continued development of the Digital Academy of the Ministry of the Civil Service at the National Institute for Public Administration (INAP) in order to allow all state officials to pursue training to develop their digital skills. The aim is to offer officials assessments of their digital skills and to support them in their digitalisation by familiarising them with digital technology through training in the form of webinars and/or e-learning. INAP offers ICDL (International Certification in Digital Literacy) digital training courses for officials in preparatory and continuous training cycles.

16

Support for young jobseekers by the Ministry of Labour, Employment and the Social and Solidarity Economy through the Youth eAcademy project. The project offers young jobseekers registered with ADEM the opportunity to autonomously strengthen the skills that they consider useful for the achievement of their professional career. ADEM gives young people under the age of 30 free access to the e-learning platform 'Belearn'. On this platform, candidates can choose to follow a range of digital training courses available in 5 languages.

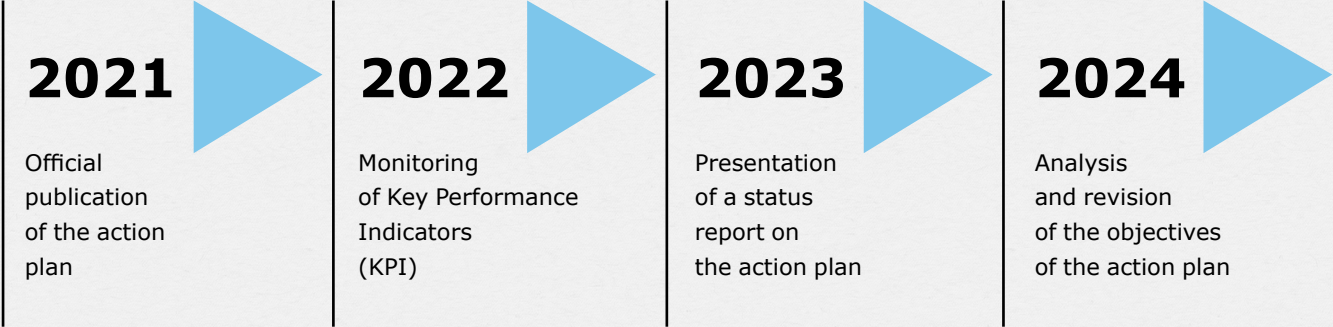


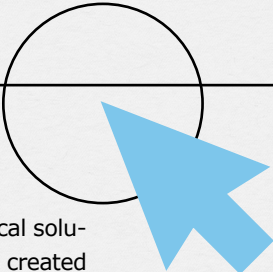
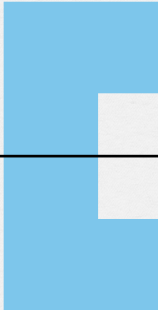
FOLLOW UP AND ASSESSMENT



This action plan is dynamic and allows for ongoing changes at different levels. The Ministry for Digitalisation will continue to monitor its implementation with the support of the inter-ministerial working group for digital inclusion.

In keeping with the dynamic nature of this plan and to allow for possible periodic adaptations which take account of societal needs and technological developments, this plan will be assessed annually.





Dear readers,

Digitalisation can offer ecological solutions, so this brochure was not created haphazardly! In fact, this document was thought out by following durable graphic codes.

The minimalist design, the colours, the format, the type of paper, the place of printing as well as the carbon footprint guarantee the most ecological compromise possible.

This brochure is available in French, German, English and Luxembourgish in the Publications section of www.digitalisation.lu.

