

ICT Projects and WSIS Action Line Related Activities in Europe Regional WSIS Stocktaking Report 2021-2022



Information and
Knowledge Societies for
Sustainable Development Goals
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World Summit
on the Information Society
Turning targets into action
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WSIS Stocktaking Regional Report 2021-2022

(Zero Draft)

ICT Projects and WSIS Action Line Related Activities

Europe

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Introduction

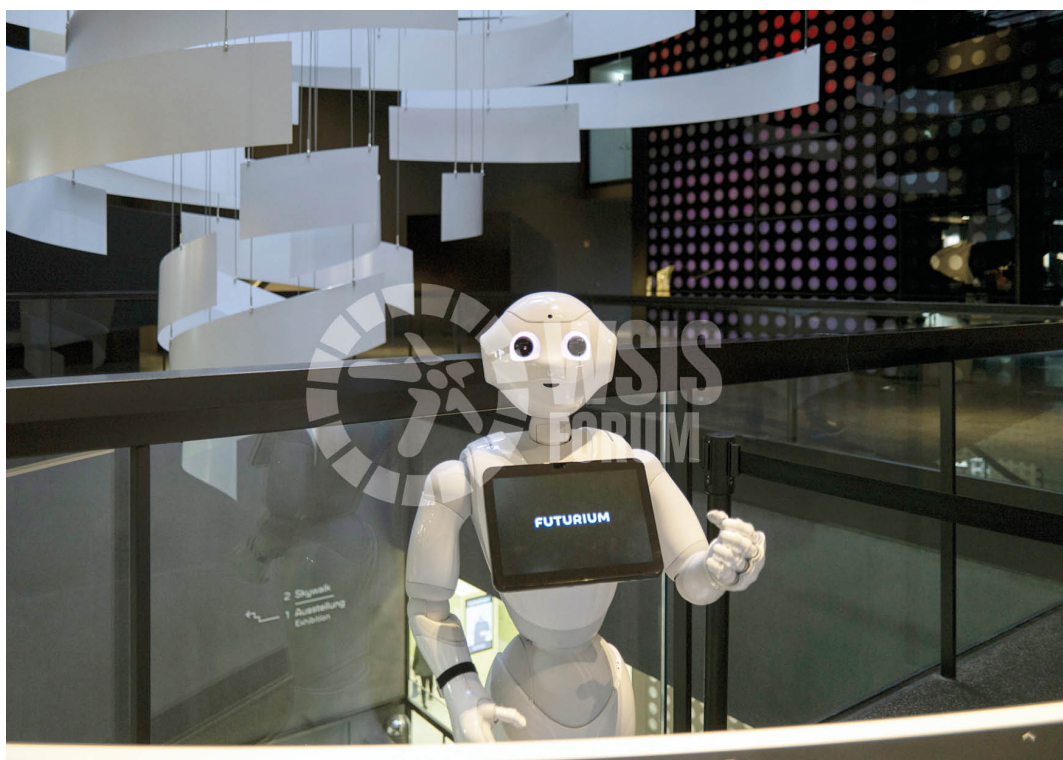
The World Summit on the Information Society Forum 2020 represents the world's largest annual gathering of the 'ICT for development' community. The WSIS Forum, co-organized by ITU, UNESCO, UNDP and UNCTAD, in close collaboration with all WSIS Action Line Facilitators/Co-Facilitators, has proven to be an efficient mechanism for coordination of multi-stakeholder implementation activities, information exchange, creation of knowledge, sharing of best practices and continues to provide assistance in developing multi-stakeholder and public/private partnerships to advance development goals. World leaders committed themselves to regularly review and follow up progress in implementing the action lines outlined in the WSIS Outcomes.

ITU has been contributing enormously to WSIS implementation and follow-up from 2005 to the present. The tasks carried out by ITU at the operational and policy level cover all mandates assigned to it relating to the WSIS process, in particular:

- In its capacity as lead facilitator in coordinating the multi-stakeholder implementation of the [Geneva Plan of Action](#) (§ 109 of TAIS) and primary organizer and host of the annual event, the WSIS Forum;
- As facilitator for Action Lines C2 (Information and communication infrastructure) and C5 (Building confidence and security in the use of ICTs), as well as C6 (Enabling environment);
- As co-facilitator for Action Lines C1, C3, C4, C7 and C11
- As partner in Action Lines C8 and C9;
- As rotating chair and vice-chair of the United Nations Group on the Information Society (UNGIS) (§ 103 of TAIS);
- As lead partner on Measuring ICT for Development (§ 114 of TAIS);
- As facilitator of the WSIS Stocktaking process (§ 120 of TAIS);
- As organizer of World Telecommunication and Information Society Day (§ 121 of TAIS);
- As lead of the Connect the World Initiative (§ 98 of TAIS).

The United Nations Economic and Social Council (ECOSOC) [Resolution 2019/24](#) and ECOSOC [Resolution 2020/12](#) "Assessment of the progress made in the implementation of - and follow up to the outcomes of the World Summit on the Information Society", that reiterates the importance of sharing best practices at the global level, and, while recognizing excellence in the implementation of the projects and initiatives that further the goals of the World Summit, encourages all stakeholders to nominate their projects for the annual WSIS Prizes, as an integral part of the WSIS Stocktaking process, while noting the report on the WSIS success stories.

The outcome document of the UNGA High-level Meeting on the overall review of the implementation of the outcomes of WSIS recognized the importance of reporting and sharing of best practices for the implementation of WSIS outcomes by all stakeholders beyond 2015, recognizing the WSIS Forum as a key platform for doing it. In this context the WSIS Stocktaking process plays a strategic role in supporting WSIS Forum in its endeavor.



The Futurium Museum of Berlin , Germany, WSIS Photo Contest 2022

Moreover, the WSIS Overall Review called for close alignment between the WSIS process and the 2030 Agenda for Sustainable Development, highlighting the cross-cutting contribution of ICTs to the Sustainable Development Goals. In this context also the WSIS Stocktaking evolves into the unique global process for collection of information on actions carried out in context of WSIS, while underlining their contribution to the implementation of the 2030 Agenda for Sustainable Development.

In the period 2021-2022, WSIS Stocktaking Reports have reviewed 380 (323 in 2021 and 57 in 2022) ICT-related projects and activities carried out by international organizations, governments, the private sector, civil society and other stakeholders in the Europe Region. WSIS Stocktaking reports are based on the multi-stakeholder approach, including input from stakeholders from all

over the world responding to ITU's official call for stocktaking updates and new entries. The inputs from WSIS action line facilitators and co-facilitators also contribute to the reports.

Most of projects listed in this Report were also nominated for the WSIS Prizes contests in the period 2021-2022, while some of them were awarded with the WSIS Prize Winner or WSIS Prize Champion recognition. WSIS Prize is a unique global recognition for excellence in the implementation of WSIS outcomes. The contest is open to all WSIS stakeholders.

The WSIS Stocktaking community comprises of more than 300,000 stakeholders who are eager to contribute to the WSIS Process year after year. By identifying trends in implementing WSIS Outcomes, the WSIS Stocktaking Process makes a significant contribution towards building an inclusive Information Society.

The principal role of the WSIS Stocktaking exercise is to leverage the activities of stakeholders working on the implementation of WSIS outcomes and share knowledge and experience of projects by replicating successful models designed to achieve SDGs.

We take this opportunity to extend sincere gratitude to all of the stakeholders from the Europe region who have been engaged in the WSIS Process, sharing their national advances on implementation of the WSIS outcomes since 2004. We would also like to invite all ITU Member States and Sector Members of Europe region to continue engaging with the WSIS Stocktaking process by submitting projects relevant to WSIS Action Lines and the newly established SDGs, promote the WSIS Stocktaking process within their communities, and follow new developments of the WSIS Prizes 2022 contest.

The WSIS Action Lines break down into 18 categories



- 1) The role of governments and all stakeholders in the promotion of ICTs for development
- 2) Information and communication infrastructure
- 3) Access to knowledge and information
- 4) Capacity building
- 5) Building confidence and security in the use of ICTs
- 6) Enabling environment
- 7) E-government
- 8) E-business
- 9) E-learning
- 10) E-health
- 11) E-employment
- 12) E-environment
- 13) E-agriculture
- 14) E-science
- 15) Cultural diversity and identity, linguistic diversity and local content
- 16) Media
- 17) Ethical dimension of the information society
- 18) International and regional cooperation

The 17 Sustainable Development Goals (SDGs)

Goal 1. End poverty in all its forms everywhere

Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Goal 3. Ensure healthy lives and promote well-being for all at all ages

Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 5. Achieve gender equality and empower all women and girls

Goal 6. Ensure availability and sustainable management of water and sanitation for all

Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all

Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Goal 10. Reduce inequality within and among countries

Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable

Goal 12. Ensure sustainable consumption and production patterns

Goal 13. Take urgent action to combat climate change and its impacts

Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development

Countries in Europe Region

- Albania
- Andorra
- Austria
- Belgium
- Bosnia and Herzegovina
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Iceland
- Ireland
- Italy
- Latvia
- Liechtenstein
- Lithuania
- Luxembourg
- [Malta](#)
- [Republic of North Macedonia](#)
- Monaco
- Montenegro
- Netherlands
- Norway
- Poland
- Portugal
- Romania
- San Marino
- Serbia
- Slovak Republic
- Slovenia
- Spain
- Sweden
- Switzerland
- Turkey
- Vatican
- United Kingdom

WSIS Stocktaking 2021: Summary

In 2021, the WSIS Stocktaking Platform has seen the biggest increase in new entries, including the number of stakeholders registered, reaching a total of more than 100,000 stakeholders representing governments, the private sector, international organizations, civil society and others. This has strengthened its position as the major ICT for development (ICT4D) online platform. This increase was predominantly the result of the Online Voting Phase during which almost 100,000 individuals cast more than 2 million votes.

The WSIS Stocktaking Global Report was officially released during the WSIS Forum 2021. It has reflected 1,260 WSIS-related activities that were submitted to the WSIS Stocktaking process for the period September 2018 - January 2021. Most of the submitted projects also ran for the WSIS

Project Prizes contest, which as a part of the WSIS Stocktaking Process is a unique way of recognizing excellence in the implementation of WSIS outcomes.

About 46 percent of the projects submitted were government initiatives, while 12 percent originated from civil society, 26 percent from the private sector, 6 percent from international organizations, and another 10 percent from academia. Regarding the geographic distribution, **26 percent were from Europe.**

The WSIS multi-stakeholder community was invited to participate and cast its vote for one project in each of 18 categories. The list of the 18 most appreciated/ voted projects was identified and winning projects were announced officially to the public during the prize ceremony held during the WSIS Forum 2022. The success stories showcased examples of projects on the implementation of WSIS outcomes, emphasizing the achievements of stakeholders working towards achievement of WSIS goals, transferring experience and knowledge at the global level, and spreading and fostering WSIS values.

WSIS Stocktaking 2022: Summary

In May 2022, almost 13,000 updated entries were registered in the WSIS Stocktaking Database, reflecting all entries submitted since its launch in 2004. The WSIS Stocktaking Report and the Success Stories for the year 2020 were officially released during the final week of the WSIS Forum 2022 (May 2022, in Geneva, Switzerland).

Following a comprehensive review of projects submitted, the ITU Expert Group nominated 360 projects, which were published online for public appreciation.

The 360 nominated projects break down into 165 projects from the government sector, 93 from private sector, 36 from the academia, 44 from civil society, and 22 from international organizations. As regards to regional distribution, **57 from the Europe region.**

The success stories showcased examples of projects for implementation of WSIS outcomes, emphasizing the achievements of stakeholders working towards the achievement of WSIS goals and SDGs, transferring experience and knowledge at the global level, and spreading and fostering WSIS values.

WSIS Stocktaking Regional Report 2021-2022: ICT Projects and WSIS Action Line Related Activities

Action Line 1



In **Spain**, the **OSICO Platform** is a community of people from different types of organizations that work for the development of an open innovation space for analysis, reflection, and collaboration of some of the most important challenges that we have through Social Innovation, especially to through Collective Intelligence. All of this, to make proposal ideas that can be provided to governance in the process of formulating public policies, having as a common denominator the principles that inspire circular thinking in cities. The strategy adopted by the OSICO Platform is based mainly on the contribution of knowledge from researchers, teachers and experts on each of the challenges, either through articles, reports, interviews, opinions or proposals for each of the areas. The Innovation process is a complex process, which includes the same management and therefore requires both the acquisition of competencies on knowledge, experience, aptitudes, good practices, and skills, as well as tools at the service of the innovation. The OSICO project contemplates the pillars of a large-scale sustainable development. The participants of the OSICO project carry out open innovation actions in order to give rise to the production of creative knowledge in the area of sustainability and resilience of cities, taking advantage of emerging technologies such as open data, knowledge networks or open hardware. This project is related to **SDG8, SDG11, SDG15, SDG17**.



Action Line 2



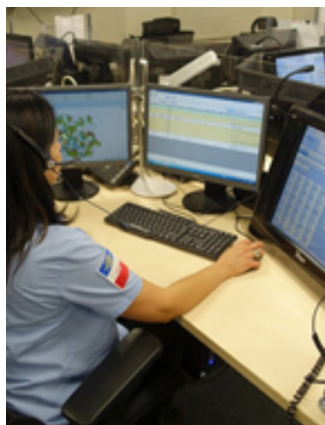
In **Cyprus**, **Hellas Sat** has partnered with Africom Holdings to assist the efforts of the Government of the Republic of Zimbabwe in the fight against the spread of COVID-19. Hellas Sat is providing free unlimited broadband connectivity to 127 public clinics and hospitals across the country. The deployment was undertaken by Africom Holdings which resuscitated connectivity to infrastructure that was initially set up in 2016 at various clinics and hospitals but due to challenges in accessing adequate foreign currency to pay monthly rentals the sites have been idle. ICT Tools used: The connectivity service is provided through satellite (Hellas Sat 3 satellite @39°E). The satellite broadband gateway that used is installed and operated in HELLAS SAT Teleport facility in Cyprus. At the remote sites (hospitals and clinics) a satellite modem and small VSAT antenna is installed for the reception and transmission of the internet broadband traffic. The network is operating in star network topology. At the remote sites (hospitals, clinics), telephony and Information Gathering tools are interconnected to the satellite modem for the use of the broadband service provided. Information gathering provides faster times in collecting data and moving it to policy makers. Telephony aids faster coordination and lowers communication cost. Thanks to this partnership, 127 public clinics and hospitals around the country are benefiting from broadband connectivity. This collaboration has also allowed Africom Holdings to resuscitate connectivity to infrastructure that was initially set up in 2016 at various clinics and hospitals but due to challenges in accessing adequate foreign currency to pay monthly rentals the sites have been idle. The project is relevant to **SDG3 and SDG10**.



In **Luxembourg**, the Colombian Ministry of Telecommunications (MinTIC) selected **SkyNet** to install, operate and maintain five free Wi-Fi hotspots in Leticia to connect residents, as well as a high-speed dedicated broadband service for the local hospital's medical and administrative teams to carry out telemedicine sessions and other eHealth activities to effectively respond to the crisis.

These Wi-Fi hot spots were installed in the health centers. SkyNet and SES, through its O3b non-geostationary (NGSO) satellite constellation, have extended their partnership and increased network capacity within days to support COVID-19 mitigation efforts. SkyNet could thus deliver reliable connectivity services to households and businesses in Leticia and enable access to e-learning platforms for local students impacted by COVID-19. Residents and public institutions located in the two major cities of the remote department Amazonas have thus experienced efficient, reliable, and high-performing Internet connectivity. The project is relevant to **SDG1, SDG3, SDG4, SDG8, SDG9**.

In **Poland**, the **Connectivity for Hospitals** is under DGT Sp. z o.o.. We have prepared an ICT solution for hospitals, ambulances, and paramedics, which allows for fast and precise communication and diagnostics thanks to video connections. Our solution allows to determine the position of the paramedic who is closest to the patient who needs help and guide him to isolate or hospitalize as soon as possible. Our solution is fully integrated with the European 112 number and allows for cooperation with operators. It is a comprehensive solution that allows interoperability between the various digital and analog systems used. Our solution uses the IP infrastructure via LTE or WIFI and is integrated, for example, with the TETRA or DMR radio system. Accelerating the effective use of paramedics and faster isolation and possible hospitalization of patients. Group communication between rescuers and services, regardless of the communication system used. The use of group video transmission allows for remote diagnosis in crisis situations. It is also possible to use video transmission from the drone to monitor isolated areas. Our solution can be effectively implemented in any country where 112 operates. The project is directly linked to **SDG3** and **SDG11**.



Action Line 3



In **Belgium**, **Eurochild** is a network of organizations and individuals working with and for children in Europe. We are striving for a society where all children and young people grow up happy, healthy, confident and respected as individuals in their own right. We aim to bring about positive changes in the lives of children, in particular those affected by poverty and disadvantage. We reach our goal by influencing policies, building civil society capacity, facilitating mutual learning and exchanging practice and research. We are committed to child participation and to actively involve children in different aspects of our work. Eurochild was established in 2004 by a group of organizations formerly working together in the European branch of the International Forum for Child Welfare. Eurochild works closely with the European Union, as protecting children's rights is among the EU's aims and values. The project is relevant to **SDG3 and 16**.



In **United Kingdom**, **KTP project developing existing CE-marked, cognitive health app to prevent cognitive decline in older people** is under MyCognition. Holistic therapeutic platform, validated assessment personalizing mindfulness based cognitive therapeutic games and lifestyle support. Making technology more granular, personalized, and clinically relevant for monitoring and preventing cognitive decline. Neuroadaptive algorithms to increase accessibility and usability. App developments mixing mindfulness and cognitive training games. Full-service model/companion online platform providing personalized lifestyle support, social engagement and enhanced monitoring features. Co-design used to ensure feasibility and RCT planned to produce evidence base for evaluation.

The app has been clinically proven to slow cognitive decline in older Parkinson's disease patients, receiving a 75% satisfaction rating. Holistic therapeutic platform, validated assessment personalizing mindfulness based cognitive therapeutic games and lifestyle support. Making technology more granular, personalized, and clinically relevant for monitoring and preventing cognitive decline. The project is relevant to **SDG3 and SDG8**.



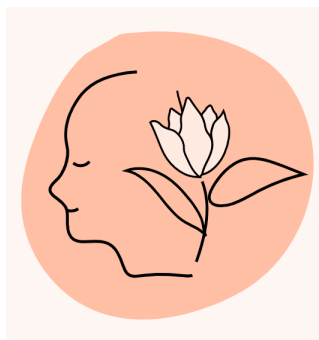
In **Hungary**, **Smart Kindergarten Program** is under Digital Success Nonprofit Ltd.. Geoimaging. The Program provides an opportunity for kindergartens that need online presence to make their activity visible and to share information about daily kindergarten life quickly and efficiently and communicate their values. The Program started in 2018, since that, every year, 100 kindergartens / nurseries have been eligible for free website services for three years. The service includes hosting, an own domain name, and the use of a website builder, all with a training course and support. The tender is published every year in May (regarding Children's Day). By January 2022, there are 340 active websites, with more than 4 million views. Since 2018, there were 379 successful proposals. By January 2022, 340 independent pages are online (list: <https://digitalisgyermekvedelem.hu/okos-ovoda>), 398 kindergarten teachers took part in the preparatory training. In total, there were 4,234,317 views on all the relevant webpages. Kindergarten teachers mostly use this page to share photos and documents (70520 media elements). This way, the Digital Child Protection strategy of Hungary can reach educators and parents with educational content (coming from <https://digitalisgyermekvedelem.hu> and partners), such as information on online risk, educational content, useful sites and applications. Kindergartens also take part in the DigiMini research. This project is related to **SDG10**.

In **Italy**, the **PeRformance Operational and Multilingual Interactive Services to support Inclusion and Compliance Internationally** project is under PROMIS. The E-Platform is a Cloud/SaaS and Intranet eco-system of tools and interactive services that supports citizens and different types of organizations in adopting and leveraging scientific, business and techno-economic knowledge. It facilitates small and large organizations in decision making through multilingual, interactive services aiming at providing real-time online support, eLearning and community building among different stakeholders on a global scale. The eBusiness approach supports the creation of alliances between institutional and private stakeholders. To this end, the tools available can be further customized for any sector, opening the way to an enormous economy of scale and to considerable perspectives in many areas of need. The approach of PROMIS®, which is based on the concept of

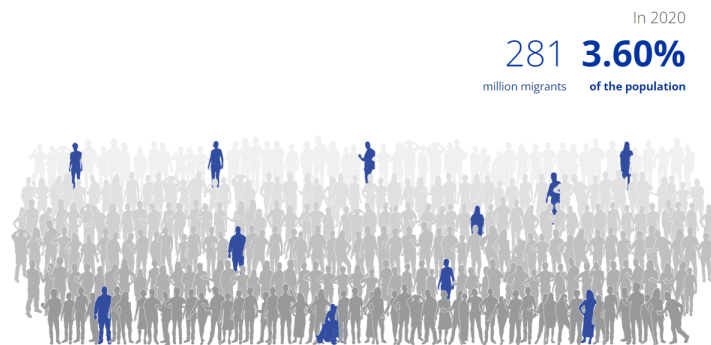
collaborative working environment and community building, treats the collective wisdom and experience as societal asset or “commons”. This “commons” is a kind of social capital, which can be leveraged many times to both harmonies and improve the level of competitiveness and quality of life, following the PROMIS® human-centered technology and collaborative community-based approach, which has proven to be successful. The project is relevant to **SDG1, SDG2, SDG3, SDG4, SDG5, SDG6, SDG7, SDG10.**



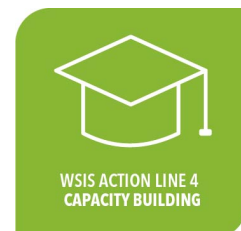
In **United Kingdom, Bloom** is a remote trauma support service from Chayn, a global charity supporting survivors of abuse across borders. We launched Bloom in 2020 as a response to the pandemic and the knowledge that not only were many survivors trapped inside with abusers, but those recovering from assault were left stranded from their usual therapeutic and other support systems. We also know that for many survivors, therapy or in-person support groups are not accessible, due to safety, cost, time, availability, or stigma. Bloom offers online, trauma-informed mental health courses on topics relevant to survivors of gender-based violence. Last year, we ran 5 courses on healing from sexual trauma, recovering from toxic and abusive relationships, reclaiming resilience in your trauma story, managing anxiety, and creating boundaries, with more courses coming this year. During these courses (4-7 weeks in length) users received biweekly video sessions, daily message prompts, and the option to message facilitators directly for 1-on-1 support. Since 2020, Bloom has reached over 1000 survivors across the world. The impact of Bloom has been transformative. Our service has been described as ‘life changing’, ‘liberating’ and ‘fulfilling’. The project is relevant to **SDG3, SDG5, and SDG16.**



In **Switzerland**, the **World Migration Report (WMR) Interactive** is a digital platform that draws on key data in IOM's biennial flagship report series of more than two decades and presents the latest report edition (2022) in a visually engaging and interactive way. The microsite increases the utility and accessibility of the report's analytical content by making it possible for anyone interested in migration to interact with the data to identify key migration trends and patterns quickly and easily - and then access additional information in the full (pdf) report. This digital platform is meeting the growing need for digestible, accurate and balanced information on this salient topic of migration. The Report's Interactive platform has received very positive feedback from target audiences and stakeholders, including requests to present the platform at webinars and on expert panels. This webpage has also been used by key partners, such as the World Economic Forum and International Baccalaureate, including by integrating the platform in collaborative initiatives, such as the World Migration Educators' Toolkit (with IB) for teachers all around the world. The Report Interactive was recognized in the 2021 International Annual Report Design Awards (gold and silver in two categories) and the 2021 iNOVA Awards. This project is related to **SDG10**.



Action Line 4



In 2022 so far in Europe region there is no project under Action Line 4.

Action Line 5



In **Switzerland**, **IDENTT Vision** project allows to confirm identity remotely - which is crucial to continue usual business processes. Promote business continuity and social distancing while provided highest security levels. Our solutions are used worldwide by major financial institutions, state offices, local authorities and any organization looking to reduce identity fraud. IDENTT continuously evolves its machine learning and data curation strategies to bolster its platform, the IDENTT Verification Engine. The IDENTT Verification Engine is an intelligent KYC system that uses real-time identity fraud risk scores in addition to analytics-based digital document verification. The main beneficiaries are any entity required to confirm user identities. Confirm identity minimizes fraud risk. Our solutions are used worldwide by major banks, lenders, telecom,

government offices, sharing industries, e-signatures issuers, legal and health entities. This project is related to **SDG1, SDG8, SDG11, SDG12, and SDG13**.

In **Portugal**, the **Digital Mobile Key (DMK)** is the national mobile eID solution, provided by the Administrative Modernisation Agency (AMA), which serves to authenticate national and foreign citizens when accessing online services. Besides the citizen's phone, whose number is registered during the enrolment process, authentication requires a user-defined PIN to receive a one-time password, which is then validated by the authentication services. There's also a mobile app that allows citizens to receive the code through a push notification. This way, citizens can access digital services anywhere and anytime, in a secure, free-of-charge and user-friendly way. Besides authentication, the DMK also allows to digitally (and remotely) sign documents, both as a regular citizen or in a professional capacity, thanks to the added value of the Professional Attributes Certification System, that links attributes from different sources to the DMK - for instance, as a public official (through the official journal) or as an attorney (through the bar association). With the outbreak of COVID-19 and as Portugal entered a state of emergency, developments were made to ensure any DMK remains active until June 30, regardless of the expiration date on the physical ID card, to avoid unnecessary travels to onsite services. While digital public services could already be accessed before the release of the DMK, namely through the citizen's ID smart card, this option wasn't as user-friendly, since a smart card reader was also needed – a constraint that was successfully surpassed with the Digital Mobile Key. Nowadays, our citizens (both national and foreign) have a secure and easy-to-use electronic means of authentication and signature, completely user driven as there is only one PIN for every online service using the DMK (over 60 and growing). The Digital Mobile Key enables both public and private entities to provide a better and simpler authentication method, while decreasing communication problems, lowering operations and development costs and diminishing the human resources needed. This allows them to make available a variety of digital services that they could not previously provide, such as the renewal of the Identity Card, the opening of a bank account, the changing home address, or the request of a medical ePrescription, for instance. The project is relevant to **SDG16**.

In **Switzerland**, **CyberVictim.help** is under TaC-Together against Cybercrime International. All human activity has gone online since the coronavirus lockdown began. This has resulted in an exponential rise in fraudulent online activity. TaC International has developed a real-time free assistance for victims of cybercrime. The assistance is offered worldwide by trained Youth IGF (www.youthigf.com) Senior Ambassadors located on different continents around the world and able to assist in different languages (Arabic, English, French, Portuguese, Russian) and time zones. The service is to offer to victims of cybercrime a real-time assistance with the first advice on what to do after the problem has been identified. The beneficiaries are victims of cybercrime. This real-time assistance platform can be also implemented at national level. The project has been already tested during the lockdown in Europe and became already sustainable. The sustainability is also

based on the fact that the assistance is made by the trained Senior Youth IGF Ambassadors based in different countries. All human activity has gone online since the coronavirus lockdown began. This has resulted in an exponential rise in fraudulent online activity. TaC International has developed a real-time free assistance for victims of cybercrime. The assistance is offered worldwide by trained Youth IGF (www.youthigf.com) Senior Ambassadors located on different continents around the world and able to assist in different languages (Arabic, English, French, Portuguese, Russian) and time zones. The project is relevant to **SDG1, SDG4, SDG9 and SDG16**.

Action Line 6



In **Belgium**, the **ALL Program** is a funding program that aims to create better quality of life for older people and to strengthen industrial opportunities in the field of healthy ageing technology and innovation. We do this by funding projects that work towards creating market-ready products and services for older people. Each project consists of SMEs, research bodies and end-user organizations. Since 2008, we have funded over 300 projects. The specific aims of the AAL Program are to: Foster the emergence of innovative ICT-based products, services and systems for ageing well at home, in the community, and at work. Create a critical mass of research, development and innovation at EU level in technologies and services for ageing well, including the establishment of a favorable environment for participation of SMEs. Help create the market conditions for the industrial exploitation of healthy ageing products by providing a European framework that supports the development of standardized solutions and facilitates their

adaptation to local, regional and national levels to account for varying social preferences and regulatory requirements. "We are AAL, a funding program that aims to create better quality of life for older people and to strengthen industrial opportunities in the field of healthy ageing technology and innovation. We do this by funding projects that work towards creating market-ready products and services for older people. Each project consists of SMEs, research bodies and end-user organization. Since 2008, we have funded over 220 projects. Our projects address a number of issues, including management of chronic conditions, social inclusion, access to online services, mobility, management of daily activities, and support from informal careers. AAL is co-financed by the European Commission (through Horizon 2020) and 17 countries until 2020 for an approximate budget of €700 million."The project is relevant to **SDG3, SDG4, SDG8**.

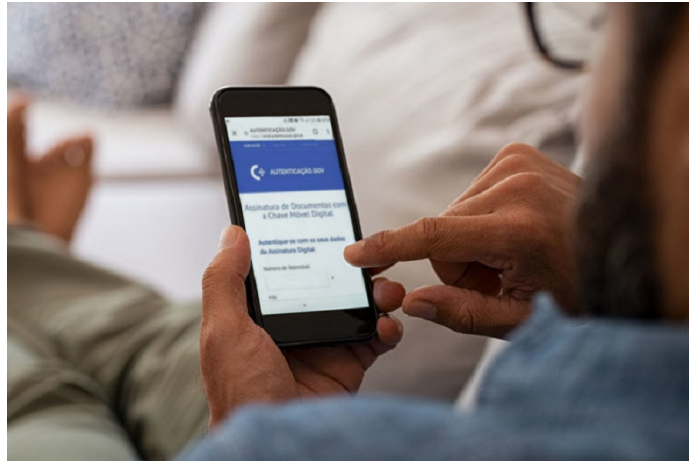
Action Line 7: E-GOVERNMENT



In **Albania**, **Permission to leave the house e-services** is under National Agency of Information Society. All citizens leaving the house for: 1. Grocery shopping, pharmacies or urgent matters; 2. Working reasons; 3. Health-related reasons; 4. Business-related reasons; are required to obtain a special permission from the e-Albania portal. Interoperability ensures that: The online form with personal vehicle data already prefilled is provided to the citizens who own a vehicle and have it registered under their name. After the real-time validation, the permission is sent immediately electronically to the citizen via email/SMS and the QR code ensures the authenticity of the permission when showed to the police officers. The project is relevant to **SDG3 and SDG9**.

In **Portugal**, **The Digital Mobile Key (DMK)** is the national mobile eID solution, provided by the Administrative Modernisation Agency (AMA), which serves to authenticate national and foreign citizens when accessing online services. Besides the citizen's phone, whose number is registered

during the enrolment process, authentication requires a user- defined PIN to receive a one-time password, which is then validated by the authentication services. There is also a mobile app that allows citizens to receive the code through a push notification. This way, citizens can access digital services anywhere and anytime, in a secure, free-of-charge and user-friendly way. With the outbreak of COVID-19 and as Portugal entered a state of emergency, developments were made to ensure any DMK remains active until June 30, regardless of the expiration date on the physical ID card, to avoid unnecessary travels to onsite services. The project is relevant to **SDG16**.



In **Portugal**, **The Interoperability Platform of the Public Administration (iAP)** is a platform that enables the public administration to exchange data in an anonymous and secure way, providing an easy and integrated method of delivering digital multichannel services for citizens and businesses. Examples are the Medical ePrescriptions, the Automated Social Energy Fare (processing of social benefits related to the energy bill) and the Automated Income Tax Declaration (prefilling of citizen's income statement). Implemented in 2007, the iAP is used by over 120 entities, offers more than 100 services and covers both public (all areas of governance) and private sector (mostly from the finance sector and ERP software developers). It open standard-based, easy to use and replicate by entities that wish to reinforce security and efficiency in their service delivery. iAP's impact is evident, with an accumulated total of over 1900 million interactions (250 million in 2020 alone) and significant savings in time (over 500 million hours for citizens + public administration), money (over €6500 million) and natural resources (over 495 tons of neutralized carbon; more than 31700 spared trees). The national eDelivery node is about to be made available through iAP, connecting it to international access points and further broadening its scope. The project is relevant to **SDG1**, **SDG9**, and **SDG16**.



In **Serbia**, **“Be a Volunteer” National Volunteer Application Platform** is under Office for Information Technologies and eGovernment of the Government of Serbia. "Solidarity and empathy for the most vulnerable during the coronavirus pandemic is crucial. In the days when it was necessary for the most vulnerable to stay at their homes in order not to become infected with the coronavirus, the help of volunteers was of the utmost importance. The government has set up a national volunteer application platform at www.budivolonter.gov.rs and issued a public call to all citizens who do not belong to population groups at risk due to their age and/or medical condition, and wish to help, to volunteer for this duty. All non-at-risk citizens who wish to help our oldest fellow citizens and other at-risk population groups can apply by filling out an application form at www.budivolonter.gov.rs by themselves, or by calling the Unified COVID-19 Contact Center operators to fill out the form for them. Operators can be reached at 19819 free of charge every day from 08 am until 10 pm. All applications submitted are inspected in order to prevent even the slightest misuse. Once the application is approved by the competent services, volunteers will be contacted by city and municipal centers with detailed instructions and first tasks. Up to mid-May 2020 almost 8,000 volunteer applications had been received." The project is relevant to **SDG2 and SDG3**.

In **Serbia**, an **Unified Contact Center for National-level Inspection Bodies** is launched that can be reached at 011/6350-322, with an aim to mitigate the negative effects of the pandemic on the growth of the shadow economy. By dialing 011/6350-322, citizens and business entities can report abuses and unfair practices, such as an illegal price gouging, i.e. raising of the prices of food, medications, medical devices and protective equipment during the COVID-19 pandemic. Operators are available from 9 am to 4 pm, yet it is possible to file a report outside of business hours by leaving a voicemail, and to submit online complaints via an e-form at www.inspektor.gov.rs. Complaints may be submitted anonymously, but those who leave contact information will receive feedback within 72 hours, since national-level inspections have a legal deadline to notify of the process's course. It is also possible to file a complaint regarding the actions of the national-level inspections' officials. In case of complaints within the provincial and local inspections' jurisdiction, the operators refer them to the competent provincial or local inspection. Over a thousand citizen reports had been received up to mid-May 2020, and inspections had grounds for acting upon 832 reports and imposed sentences accordingly. The project is relevant to **SDG16**.

In **Serbia**, **e-KINDERGARTEN 100** is under Office for Information Technologies and eGovernment of the Government of Serbia. The Office for Information Technologies and eGovernment rolled out digital public service that enabled an end-to-end electronic registration of children in preschool institutions through the national e-Government Portal, available at <https://euprava.gov.rs>. The service was available to registered users of the e-Government portal, in all municipalities and cities throughout Serbia. The service was intended for parents who wanted to e-enroll their children in kindergartens, since regular non-digital procedure was not possible as the kindergartens were temporarily closed due to the novel coronavirus outbreak, the

state of emergency and the lockdown. Parents did not have to provide and submit documents by themselves, but these were automatically obtained ex officio. The recommendation for all preschool institutions in case they needed any additional documents which they could not obtain by themselves, was to allow parents to provide these documents by e-mail, and not to ask them to pay visits to the preschool institutions or post offices to physically submit the documents. 2020 was the first year the service was 100% electronic, end-to-end (without the need for parents to visit various counters and obtain other documents), available in 100% of the kindergartens nationwide, and that 100% children have been enrolled online. The project is relevant to **SDG3 and SDG4**.

In **Serbia, COVID-19 Open Data Serbia** is under Office for Information Technologies and eGovernment of the Government of Serbia. During times of crisis, it is vital that governments provide accurate, useful and up-to-date information. Publishing statistics about the outbreak helps people make informed decisions about their daily routines, builds public trust, as well as enables public authorities to make informed decisions and act decisively to flatten the curve. A dedicated subdomain on Serbian COVID-19 website, namely covid19.data.gov.rs, was established within the national Open Data Portal (data.gov.rs) for publishing covid19-related open data. To make machine-readable data sets suitable for further analyses and “reading” by the general population (not only by machines), we have visualized the data so that citizens can follow the reports themselves. Data sets published include daily data on infected persons by a local self-government unit, the number of individuals who are in mandatory self-isolation, the number of tested, hospitalized, and deceased individuals, as well as the number of persons who are on a respirator, as well as the number of those who have been cured. Information on special COVID-19 outpatient clinics, their working hours and contact information is also available on the Portal. The project is relevant to **SDG3**.

In **Serbia, COVID-19 Vaccination Information System** is under Office for Information Technologies and eGovernment. This project supported the establishment of a state-of-the-art system for application, scheduling and tracking of vaccines and the immunization of the population of Serbia. This web-based IT system is designed to ensure optimal coordination in allocation, supply, distribution and administration of vaccines i.e. deliverance of safe and effective vaccine doses to the citizens willing to receive them, as quickly, efficiently and reliably as possible. The system integrates the entire nationwide vaccine delivery chain and monitors every step: from expression of interest to receive a particular vaccine and scheduling an appointment, to tracking of every vaccine bottle and handling procurement procedures, to vaccination and record keeping on all persons immunized against the SARS-COV-2 and issuance of certificates of vaccination. Hard-copy certificates of vaccination are issued immediately after the vaccination, and digital copies are delivered by e-mail. This system integrates hundreds primary health care centers, national institute of public health, 24 territorial institutes, Central Registry of Compulsory Social Insurance

and the Ministry of Health, facilitating information sharing, interoperability and governance. Information System is capable of supporting and tracking distribution, administration, and other necessary data, since the safety, control and visibility, as well as traceability of vaccines have to be ensured. In Serbia citizens are provided with an opportunity to decide whether they want to receive the COVID-19 vaccine, as well as to pick and choose the vaccine they want to receive among multiple vaccines approved by Medicines and Medical Devices Agency of Serbia . Administering vaccines represents a massive logistical challenge, since different vaccines require different conditions (e.g. some require ultra-cold storage), and all the vaccines require two doses spaced several weeks apart. Thus a precise coordination across government levels and many different stakeholders is necessary. The service is free of charge. The project is relevant to **SDG3**.

In **Turkey**, the **Artificial Intelligence Justice System** is a reorganization of the justice system for a fairer, more transparent and more trusting world, along with growing injustices and insecurities in the world. This project is fully committed to replacing the existing justice system by using the artificial intelligence system and replacing it with a fairer, more transparent mechanism. It aims to create a fairer and more transparent state system together with developing artificial intelligence technology. AI is now being used in situations that previously required human judgement, and its proposed solutions are making many people uncomfortable. For example, artificial intelligence has already made its way into the justice system. An AI was tasked to calculate the likelihood of an inmate violating his parole conditions, then given all available data on 500,000 parolees. The AI was responsible for calculating the relative risk of each inmate violating probation. This meant that the artificial intelligence program decides the relative weights that should be placed on dozens of different variables, then produces an algorithm that simply spits out a number. This is simply a more mathematically sound alternative to the parole system. Instead of a human being deciding how likely a person is to reoffend based on limited information, an AI can draw on hundreds of thousands of cases to back up its decision. The project is relevant to **SDG16**.

In **Switzerland**, with digital security threats on the rise as the world grapples with COVID-19, encryption is more important than ever. **DuoKey** mission is to protect the privacy and sensitive information when using cloud. We help companies and individuals to store highly sensitive documents or files in cloud services with an innovative way to protect the encryption key using MPC (Multi-party computation). We offer strong privacy and trust by hiding the encryption key from the cloud provider. We provide key management as a service. DuoKey helps secure our work from home, protects the integrity of critical public health information, and keeps our communications with friends and family confidential. Willing to work with government and public/NGO for helping them to move their workload to cloud while keeping their sensitive document protected and own/keep control of their encryption keys in their jurisdiction. The project is relevant to **SDG8, SDG9, SDG16**.



In **Turkey**, **UETS** is the system established, operated and secured by PTT to carry out notifications prepared electronically by the authorities specified in the Notification Law. It is designed for establishment and operation of the necessary infrastructure to be transmitted to the e-notifications' recipients via PTT with the irrevocable and undeniable proofs. Notification recipients can securely access their electronic notifications over the internet whenever they wish. An electronic notification can be made at a lower cost and at a rate that can be measured in seconds compared to the notification made in the physical environment, thus saving a great deal of cost and labor. Thanks to the time savings provided by electronic notification, delays due to physical notifications have been reduced to a minimum and judicial processes have been accelerated tremendously. The commissioning of the infrastructure required for sending electronic notification messages, using domestic and unlicensed software at a relatively low cost, contributed to the retention of software money paid abroad and to the reduction of the current account deficit. In order to create accounts more easily and to provide convenience to users, integration with other public IT systems has been ensured and the need for physical document declaration for account opening transactions has been eliminated. UETS service can be accessed by the users via e-government, mobile signature, electronic signature and disposable SMS on the web or via the UETS mobile application. Although electronic notification has a much lower cost compared to notification made in the physical environment, it can be made at a speed that can be measured in seconds. Thus, a great deal of time and labor savings are achieved. Thanks to the time savings provided by UETS, delays arising from physical notifications were reduced to a minimum and the processes related to notifications were accelerated tremendously. With the commissioning of the UETS Project, thanks to approximately 91 million electronic notifications sent from the system, with the savings achieved in the use of 3,162 tons of paper, approximately 53,750 trees were saved from being cut down. Thus it contributed to the protection of nature. Thanks to the project, it has been calculated that only the sending expenses of the institutions decreased by a minimum of 1,220 million TL (90,416,400 \$) so far. In addition, the material benefit obtained from the project reaches much higher figures by taking into account the savings from labor, fuel, paper-toner expenditures. The project is relevant to **SDG15**.



Ptt



VOLEYBOL MİLLİ TAKIMI
RESMİ KARGO TEDARİKÇİSİ

In **Turkey, Contract Termination in eCommunication** is under Information and Communication Technologies Authority. Subscribers were not able to terminate contracts easily, faxes were asked by operators and consumers were struggling to fulfil the procedural requirements, by this project using e-Government portal any subscribers submit their termination request to operators through e-Gov Portal. Subscriber should several types due to security requirements. First way is consumer can use her/his eID card chip&PIN feature. Second one is using banking account session transmission ie. once consumer is logged in any Turkish bank by at least 2-factor authentication he/she may click eGovt Portal. Third way is using e-signature cards or mobile e-signature. Once signed in eGov portal web services asks all operators (sending users National ID number) whether there is a registration on their databases as subscriber and lists his/her all subscriptions. eGovt Portal user selects the subscription to be terminated and proceeds. Service can be used by all citizens, immigrants, expats etc. only tourists cannot use, but once they get a foreigner ID number they also can use. During pandemic conditions especially disadvantageous groups (elder people, physically disable people, rural areas inhabitants) are happy to be able to terminate contracts at their homes without being obliged to visit operator shops or try to find a fax machine. By terminating service consumers may seek for a better competitor and subscribe new operator. This facilitates operator shifts, promotes competition and protect consumers. The project is relevant to **SDG4, SDG8, SDG9, SDG10, SDG12.**

Action Line 7: E-BUSINESS



In **Poland**, **Bowwe** is a website builder service, which consists of programmers, graphic designers, customer service and marketing specialists. Bowwe helps to sell products and services online, suggests how to do it more efficiently and monitors the results. Bowwe's team of experts also provides assistance and advice at every step of the website building process. This includes sales and marketing tips, professional copyediting, advice on how to rank higher in Google, and even a template-design service. Everything is supported by an easy-to-use website builder for users with no IT or eCommerce experience. We helped SME owners to start their businesses online in the time of the pandemic and to succeed. We are concentrating on medium and small service companies. In Poland, there are about 1,8 mln small businesses, in the UK about 5.5 mln and in the USA about 27 mln and in the world over 300 mln. During the coronavirus pandemic, we helped SME owners start their businesses. This project is related to **SDG8**.

In **Switzerland**, the **"EAD Customs Declarations" mobile application** is about the software development and distribution (through the Google Play and Apple App stores) of a free mobile application for customers of the UPU's global postal services. The application is used to securely capture well-formed electronic Customs declarations, and to speed-up the transmission of these declarations from the Post in the sending country to the Post and the Customs organization in the destination country (note: EAD stands for Electronic Advance Data). Thanks to the mobile application and related IT infrastructure provided by the UPU, electronic declarations can be screened by Customs at destination before the mail item is physically shipped from abroad, which makes Posts compliant with the latest regulations worldwide, and providing a sustainable solution

globally. As of December 2021, Posts in 43 countries have adopted the application and made it available to their customers (the application targets specifically individual customers, and small and medium size businesses). The mobile application is the visible tip (for the customer) of a portfolio of IT solutions provided by the UPU which connects all actors in the postal supply chain (posts of origin and destination, Customs organizations, transport companies) and secures the speedy transmission of Postal data between them. The mobile application improves both the quantity of Customs declarations collected electronically, and the quality of these declarations, which leads to faster and more efficient cross border clearance of postal parcels and packets through customs. Note: at question 27 we can only select 38 countries from the list. The project covers additional 5 island economies/overseas territories that work as independent Postal Organizations (Anguilla, UK Overseas Territories - Bonaire, St. Eustatius, And Saba - Cayman Islands, UK Overseas Territories - Sint-Maarten - Turks and Caicos Islands, UK Overseas Territories). We therefore consider that the project covers 43 countries and territories. The EAD Customs Declarations App is only one technical solution supporting the collection of electronic Customs declarations directly from the shippers. Other solutions provided by the UPU include Application Programming Interfaces (API) and file interfaces by Customs Declarations System (CDS) software, web pages accessing directly CDS, and kiosk web pages that can be integrated in the Postal Organization's web site. At the moment the UPU does not measure the source of the declaration (which technology was used for data capture) but that will be changing in 2022. This project is related to **SDG9, SDG10, SDG12, SDG13, SDG17**.

In **Spain, Correos Market** is a digital marketplace, an e-commerce platform by Correos, which aims to give further promotion to local manufacturers and artisans who make, design or treat products in Spain by enabling a virtual shopping centre where they can advertise and sell their products by themselves through the online channel. The main objective is to promote sustainable development of the rural environment contributing both to digital transformation in rural areas and to fight against depopulation, given that rural Spain is emptying out causing a demographic challenge at a national level. Therefore, access to our Marketplace is easy, and our intention is to continue making the marketplace grow and have as many manufacturers as possible joining to promote rural economy through e-commerce. Thus, those who wish to continue living in their villages can have wider opportunities and engage in new consumption habits in a growingly digital environment. This project aims to bring traditional products from Spain, mainly food and drinks but also cosmetic or crafts to consumers who increasingly demand some genuine and authentic products, guaranteeing the continuity of the traditional business through new sales channels. Selling their products on Correos Market's platform does not only mean that sellers have the tools to manage their digital business and can benefit from the logistics services of Correos. They also receive support from Correos in the process of business digitization, which provides the small sellers with tools to manage it: sellers receive specific training related to online sales, e-commerce design or order and stock management. Besides, sellers are offered the logistics services provided by Correos for order deliveries. In addition, by offering both the sales channel and the logistics,

our marketplace allows sellers to optimize their online sales in an agile way, without financially investing to start a digital business. The project is relevant to **SDG8, SDG9, SDG10**.

In **United Kingdom, Electroneum** is a cryptocurrency and blockchain organisation that has created a payment platform that facilitates the transfer of value from one mobile device to another from anywhere in the world without the need of a bank account. It's first primary use case, AnyTask.com, launched in February 2020 and has since grown to more than 600,000 users worldwide. The platform enables anyone, including unbanked citizens, to sell digital tasks online to thousands of buyers around the world. No bank account is required and no fees are payable - unlike competition sites like Fiverr.com which charge 20% in fees. Freelancers get paid immediately, as soon as their task is approved by the buyer, and Electroneum (ETN) earned through the sale of their task can be used to purchase a range of services such as mobile airtime and data, electricity, and very soon a selection of other services like medicine, building materials, and food. Alternatively, freelancers can exchange their ETN into other cryptocurrencies and FIAT currency via an exchange. Together, Electroneum and AnyTask.com is changing the face of freelancing worldwide and providing new earning opportunities for thousands of unbanked citizens worldwide. We are literally connecting buyers and sellers around the world without the need of a bank account. All they need is a computer and an internet connection. This is opening the door to thousands of freelancers already; think what we can do as we grow and are able to educate others in the way of freelancing and earning a living online. Imagine the impact we will have on people's lives and the cycle of poverty that's perpetuating across unbanked regions. The project is relevant to **SDG1 and SDG8**.



In **Poland**, **Bowwe** helps to sell products and services online, suggests how to do it more efficiently and monitors the results. Everything is supported by easy to use a website builder for users with no IT or eCommerce experience. We helped SME owners to start their business online in the time of the pandemic. The project is relevant to **SDG 8**.

In **Poland**, **Implementation of personalized cosmetics recommendations tailored to the client's needs** is under innect feeCOMPASS sp. z o.o. "The project is a response to market challenges, including the consequences of Covid-19. The goal is to implement an innovative recommendation engine on the website (stage 1) and a conversational interface - chatbot (stage 2). As a result of the implementation of this tool, the client will receive personalized advice, which he could count on so far in the stationary shop. Due to the closure of the brick-and-mortar store and the cancellation of the fair and SPA activity, the client was deprived of the possibility of an individual conversation and the selection of cosmetics that would meet his/her needs. In stage 1, the Needs Survey was implemented. After answering a few simple questions (e.g. age, complexion, major skin problems), the user-friendly survey recognizes the most important needs and recommends best-suited products. The purpose of stage 2 is to implement a conversation interface (chatbot) that provides individual customer service online 24 hours a day and enables the finalization of the transaction. Models of interface conversation paths were developed on the basis of prepared transcripts of real conversations with clients, professional knowledge of Creamy employees and the use of a set of data obtained in the survey. The goal of stage 2 is also to define customer profiles with different skin needs, segmentation and analysis of the product portfolio, which will further improve the e-commerce sales process." The project is relevant to **SDG9** and **SDG12**.

In **Serbia**, **E-GREENMARKET** is under Office for Information Technologies and eGovernment of the Government of Serbia. "During the COVID-19 outbreak in Serbia, the Ministry of Agriculture, Forestry, and Water Management in Serbia initiated the first electronic greenmarket portal as a substitute for traditional greenmarket and wholesale facilities that were closed due to the pandemic. e-Greenmarket portal ("ePijaca" in Serbian language), was launched on April 10 2020 to support the trade of fruits, vegetables, dairy products and all other products normally available at green markets throughout Serbia, that is, to connect stores, shoppers and those who were ready to deliver the goods e-Greenmarket is available to all agricultural producers in Serbia, majority of which are small or family producers, who due to the pandemics and the country lockdown could not sell their products on the green markets. The registration of buyers, sellers and distributors is very simple. On the map, a buyer can easily identify a food producer in his area, check through the offering, select products, and ask for delivery. Organic food is specially marked. On the first day of operations of the electronic green market, 771 food producers registered and more than 19,000 people visited e-Greenmarket. It managed to attract over 2,000 registering

farmers as sellers of farm products, and mapped 1.300 agro producers in April 2020." The project is relevant to **SDG2 and SDG3**.

In **Spain**, **SHE IS ONLINE** is a social company based in Colombia, its major objective is to be the first digital space made for women and by women. She Is Online is going to reunite all kinds of social entrepreneurs from Colombia and all over the globe to sell their goods specialized only for women. SHE IS ONLINE expectations are to become the women's Amazon. It is for that reason, that we are committed to receive and search for small, medium and large companies from all over the globe that promotes gender equality inside their main goals and sustainability in their production, this way we are also addressing the environmental footprint from all kind of industries and in the process, changing the way consumers behave towards the world. The project is relevant to **SDG1, SDG3, SDG4, SDG5, SDG8**.

In **Sweden**, **Local Food Nodes** is under Local Food Nodes Röstånga ek Förening. We create an independent, donation based, fully financial transparent and not for sale, digital open source solution, for peoples driven, pre-orders only, local farmers markets, and a sales tool for small scale farmers to build real life first hand relations with their costumers, without revenue loss. This as a way to encourage small scale local food production for local markets, to increase local resilience and local food sovereignty. The key reason we started the project was to find ways to help existing small scale producers get to market, and provide them with tools for better financial sustainability, aswells as pave the way for more people to step into small scale local food production. target: Small scale food producers that wants to sell to end consumers first hand, and building and owning the first hand relation between them without third party interference. The project is relevant to **SDG2, SDG3, SDG8, SDG12, SDG17**.



In **Switzerland**, **Linking Central American Women Business Enterprises with the Global Gifts and Home Decoration Market**, which is funded by the European Union (EU) and implemented by the

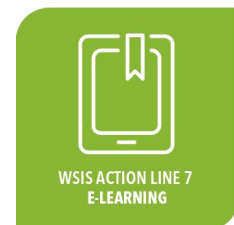
International Trade Centre (ITC) in collaboration with the Secretariat for Central American Economic Integration (SIECA) and national implementing partners, aims to support 200 Central American women-led businesses from Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama to export their handicrafts through e-commerce channels. Alongside work to improve product quality and design, the women-led businesses are trained and prepared to list on international online marketplaces such as Etsy and eBay, develop and optimize their own websites, use different digital marketing channels to generate traffic and sales, receive online payments, prepare orders for shipment and provide quality customer service. The project applies the train-the-trainers methodology: a network of trainers from local trade promotion organisations are trained by ITC to support the businesses on their e-commerce journey. In addition to the training of trainers, ITC has piloted the e-lab model to provide specific support to the most advanced businesses in the project. The e-labs follow the lean-start up methodology that combines testing, measuring and learning. By testing different online channels and digital marketing techniques, and measuring the performance, the more advanced businesses can develop their e-commerce strategy and share lessons learned with beginners. The project is relevant to **SDG5, SDG8, SDG9, SDG17**.



In **United Kingdom**, **Electroneum** is a cryptocurrency and blockchain organisation that has created a payment platform that facilitates the transfer of value from one mobile device to another from anywhere in the world without the need of a bank account. Its first primary use case, AnyTask.com, launched in February 2020 and has since grown to more than 600,000 users worldwide. The platform enables anyone, including unbanked citizens, to sell digital tasks online to thousands of buyers around the world. No bank account is required and no fees are payable - unlike competition sites like Fiverr.com which charge 20% in fees. Freelancers get paid immediately, as soon as their task is approved by the buyer, and Electroneum (ETN) earned through the sale of their task can be used to purchase a range of services such as mobile airtime

and data, electricity, and very soon a selection of other services like medicine, building materials, and food. Alternatively, freelancers can exchange their ETN into other cryptocurrencies and FIAT currency via an exchange. Together, Electroneum and AnyTask.com is changing the face of freelancing worldwide and providing new earning opportunities for thousands of unbanked citizens worldwide. The project is relevant to **SDG1 and SDG8**.

Action Line 7: E-LEARNING



In **Hungary**, the **Artificial Intelligence Challenge of Hungary** was launched as of 1 December 2020 with a double purpose. Firstly, a total of 1 million citizens should be made aware of the benefits and effects of Artificial Intelligence via exhibits, events, brochures, contests and the website <https://ai-hungary.com/>; secondly, the members of the Hungarian society can complete a free locally developed online course that was drawn up by professionals of ELTE University. It helps participants to get an overall idea about what AI is all about, and it provides an overview about its ethical implications and common use cases. As regards the first purpose of the AI Challenge, in 2021, nearly 4 million out of 10 million Hungarian citizens received information about AI. As regards the second purpose of the AI Challenge, in 2021, more than 11,000 people have completed one of our AI Courses. As part of the AI Challenge, we shot 5-10 minutes YouTube videos from a variety of industries, for a total of 10 unique episodes with a well-known expert on the subject. We have also provided training for lawyers. The basic level Hungarian language AI course will be followed by specialized ones. In 2021, nearly 4 million out of 10 million Hungarian citizens received information about the AI technology and more than 11,000 people have completed one of our AI Courses and earned an AI course certificate. As part of the AI Challenge, we shot 5-10 minutes YouTube videos from a variety of industries, for a total of 10 unique episodes with a well-known expert on the subject. We have also provided training for lawyers. The currently available basic level AI course will be followed by specialized ones that will provide

knowledge of a wider scope. The English version of the basic Hungarian language course is being uploaded. The basic course will be available in the V4 languages soon. The project is relevant to **SDG4**.

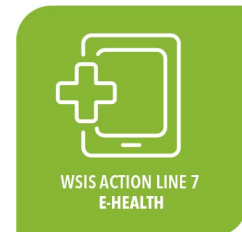
In **Turkey, BTK Academy** was established as the training centre of Information and Communications Technologies Authority- ICTA/BTK, the national regulatory authority of Turkey, as an online education portal to provide free-of-charge trainings in the field of ICTs in order to meet the professional and technical needs of the society and to increase the expertise level of Turkey's human resources. In addition to the online trainings, BTK Academy provides various in-class trainings. There are 86,600 minutes of online training material for 175 topics under 8 main categories: K12 World, Software World, System World, Business World, Personal Development World, Safe Internet World, Design World and Regulation World. Participants can enroll in these categories according to their interests. In addition, BTK Academy organizes workshops, hackathons, conferences and seminars to raise awareness of all segments of society, especially youth and children, for the conscious and effective use of ICTs. BTK Academy has 776,309 registered users and the number of weekly visits is around 600,000. About 3,000 new users join BTK Academy every week. A Career Guide has been prepared in cooperation with the relevant stakeholders including public and private entities, academia and professionals from the sector for more than 20 positions in the field of ICTs. The scope of the trainings and relevant material provided by BTK Academy are designed to contribute for removal of the barriers to accessing information in the field of ICTs, in which the education methods rapidly evolves, for raising awareness of all segments of the society, especially youth and children, for the conscious and effective use of ICTs, for contributing to the increase of the quality workforce needed by the public and private sectors. BTK Academy is a free-of-charge, user friendly, accessible online education portal for all segments of the society. The project is relevant to **SDG4**.

In **United Kingdom, Intelsat and Mindset Network NPC**, an award-winning developer and distributor of educational materials in Africa, announced they have formally extended their partnership to ensure students, out-of-school youth, teachers, healthcare professionals and patients across Africa have access to high-quality and free educational television and online content. Intelsat has partnered with Mindset since the nonprofit was founded in 2002, providing free access to satellite capacity and technology that allows Mindset to rapidly and efficiently broadcast and IP multicast its educational content to over 1,600 schools and 1,025 healthcare facilities across just South Africa. This partnership extension comes at a time when nearly 300 million students throughout Africa have been impacted by school closures and other learning disruptions due to the novel coronavirus (COVID-19), according to UNESCO. Given the scope and scale of the impending crisis sweeping across Africa, Mindset and Intelsat are offering a free, unencrypted channel that allows governments, departments of education, broadcasters and nongovernmental organizations across Sub-Saharan Africa within Intelsat's satellite coverage area

to downlink and redistribute Mindset's Learn channel. Mindset educational resources focus on topics such as COVID-19, HIV/AIDS, tuberculosis, Ebola, child survival, science, mathematics, information technology and English. In addition to the broadcast, and IP streaming and multicasting distribution that Intelsat assists with, Mindset also delivers its educational content through multimedia, DVDs and print materials and their newly launched App. Thanks to the extension of this partnership, students, out-of-school youth and teachers across Africa have access to high-quality and free educational television and online content. Since 2002 this partnership has benefited 1,600 schools and 1,025 healthcare facilities across just South Africa. Today, governments, departments of education, broadcasters and nongovernmental organizations across Sub-Saharan Africa within Intelsat's satellite coverage area can downlink and redistribute Mindset's Learn channel. The project is relevant to **SDG4, SDG10**.

In **Poland**, in 2021, the Office of Electronic Communications started implementation of the **"J@Online" educational campaign**. The campaign is aimed at both young internet users and older people who need to improve their digital competences. It is a response to the changes occurring in cyberspace accompanying the pandemic: the transfer of an increasing number of services online, the start of using the Internet by new social groups, and at the same time the development of threats such as phishing and scam. The main goal of the campaign is to increase the digital competences of various social groups (primarily seniors, people with special needs and children), to present the benefits of e-administration, e-banking and online shopping, while sensitizing to Internet crimes and learning to avoid threats. Enabling the improvement of digital competences of people who have not used the Internet so far or have done it occasionally, as well as people with special needs. The acquisition of such skills will allow them to use Internet safely and independently. Thanks to this, they will not be left behind. The project is relevant to **SDG3, SDG4, SDG8, SDG12, SDG16**.

Action Line 7: E-HEALTH



In **Netherlands**, **Free App "Are You Okay Today"** is a self-learning system that learns my pattern of the electricity consumption of each individual device in my home. If It shows an abnormal pattern of behavior, the system sends a notification, first to me to guaranty 100% privacy, and if I do not answer to my son and the traffic light turns orange. If this takes longer, it turns red and it's time for him to contact me. This free App "are you okay today" has changed my life, I feel safe again in my own home again." "What happens when I fall down the stairs, how long does it take for someone to find me? My son Matthew often calls me with an excuse. He also had a problem: he was worried about his old father. We both had a problem. We sat together and put our demands on the table: Matthew always wanted to keep an eye on me via an app with a traffic light such as green indicating is OK. My requirements: I don't want anything at all no buttons around my neck or watch around my wrist and no camera or extra sensor in my house. We have invented a unique system that met all our requirements and has been tested in 100 locations over 3 months in the Netherlands. "With this free App areyouokaytoday my dream comes true to help families across the globe experiencing similar issues. This App could have a significant impact on families across the world.

- Independence o Elderly extends the time that older people can live in their own homes o Caregiver Monitoring from a distance create more freedom
- Safety o Elderly feels safe in their own homes because the system is keeping an eye on them o Caregiver A better concentration at work improve the productivity and might improve the safety
- Health o Elderly early alert prevents serious complications after an incident o Caregiver Stress, overloading and feeling guilty are reduced
- Security of persons 60+ o This is a monitoring systems which is watching 24/7 while a alarm system only works (in 70% of the cases) when something is wrong". The project is relevant to **SDG3**.

In **Austria, MoreGrasp** aims at developing a multi-adaptive, multimodal user interface including brain-computer interfaces (BCIs) for intuitive control of a semi-autonomous motor and sensory grasp neuroprosthesis to support activities of daily living in individuals with SCI. "MoreGrasp will consequently follow the concept of the user-centered design by providing a scalable, modular, user-specific neuroprosthesis together with personalized EEG recording technology. "MoreGrasp will consequently follow the concept of the user-centered design by providing a scalable, modular, user-specific neuroprosthesis together with personalized EEG recording technology. Novel multimodal software architectures including interoperability standards will be defined to integrate neuroprostheses into the field of assistive technology." The project is relevant to **SDG3**.

In **United Kingdom, Preventive Care for Older People** project is under Age Care Technologies. "Two-thirds of the most significant threats to older people's wellbeing, independence and health are not reported. The objectives of this project were to: 1. Enable older people to report their concerns. 2. Mobilise local resources to address their priorities for support. 3. Measure impact on improving lives and saving costs. 4. Use information and communications technologies to enable ease of access, ease of use, ability to scale. This project builds on a 30-year research and development programme, with methods validated in 30 countries in all WHO regions, providing proof of concept for a universal approach to helping older people report concerns such as loneliness, pain, financial insufficiency and needing help with activities of daily living. More than 90% of older people reported high satisfaction from involvement in the process, with many reporting life-changing benefits. Randomised controlled trials provided strong evidence for improvements in independence and reduced hospital admissions. Economic modelling suggests an average gain of one extra quality life year per older person, with an estimated saving in long-term care costs of more than \$45,000 per person due to a compression of morbidity (UK data). Optimised uptake of the assessment in the eligible population globally would result in a cost saving in reduced long-term care costs of up to \$5T. With our technology-enabled platform we expect to realise these benefits for 100 million older people by 2030." "Independence: ACT Assessment on its unique technology platform generates a score for overall level of independence of the older person in relation to need for support in activities of daily living, The score is responsive to interventions, demonstrating that improvements in independence are possible. Safety: Part of the assessment addresses concerns about safety, including risks within and outside the home, and from discrimination and abuse. Wellbeing, social connection and staying healthy: Scores are generated for wellbeing, social connection and staying healthy. These scores can be used with individuals as motivational tools to address concerns and with populations to describe levels of need, the impact of interventions and trajectories in health-related quality of life. Security: The holistic approach helps older people build resilience, with population data available to inform the development of community assets to build system resilience." The project is relevant to **SDG1, SDG3, SDG10, SDG11, SDG17**.

In **France**, **Tiramisu** is a social network of kindness - a network that specifically focuses on health-positive activities like peer support and volunteering, and is designed to encourage close connection, real-world activities, and supportive exchange. The solution works both for local and digital connections with ample safety mechanisms, including in-app audio/ video call and ML-based controversial message detection. Clubs function as more intimate groups to discuss issues like climate anxiety or digital wellbeing, and as tools for community organizers to coordinate and provide support. Over time, we strive to understand the wellbeing impact of various digital activities, and aim to build a recommendation system that helps users to make the healthiest activity choices. This will be supplemented by a reward system, allowing companies and cities to launch challenges that promote and reward healthy and sustainable behaviour. Our aim is to turn social networks from a potential amplifier of unhealthy behaviour into an advertising-free preventive mental health tool that is more accessible to youth. Tiramisu is a winning project of the EUvsVirus hackathon and was listed on Fast Company's World Changing Ideas List 2021. The Tiramisu app is currently available in open Beta (Android, iOS, simplified web app) in 3 languages (English, French, Italian). For community members, we facilitate requesting, matching and exchange of hour-based services. Community members can also dedicate their time to volunteering causes. The benefits: Our research shows that while many community members are willing to help others, most are hesitant to request help, and do not know where to direct their engagement. The solution offers the opportunity to (1) get help when needed and (2) build connections and feel valued providing support. Especially for people whose mental health or employment has been affected by the crisis, these efforts can reduce pressure by getting support, improving mental health by building connections and self-esteem, and allowing to learn new skills or supporting others, which are both favourable for employability. For non-profit organizations (and their end beneficiaries), we provide an easy solution to find skilled additional volunteers to temporarily support causes when needed. At the same time, we provide analytics of time spent and impact made. This helps to get more done with limited funds and resources, and to efficiently communicate results. For organizations, we provide opportunities for volunteer placement of employees, and the option to create campaigns around causes. We also provide valuable insights into the causes and engagement of local communities. The project is relevant to **SDG4, SDG5, SDG8, SDG10, SDG17**.

Action Line 7: E-EMPLOYMENT



In **Portugal**, The **reBIRTH** on the internet project (REviver na Rede) is an initiative to support online social networks to strengthen new forms of active job search and promote employability, social integration, socialization, and social and digital inclusion in the Madeira Region, Portugal. The aim is to help unemployed adults to take advantage of social networks (e.g. Facebook) to improve their employability. These global social instruments can respond to these needs and contribute to the development of local communities. Currently, the various online spaces involve more than 50,000 people, in a region with less than 255,000 inhabitants. In view of the various implications of the coronavirus pandemic (COVID-19), from the social level of individuals to their professional and economic situation, the project has mobilized a number of initiatives to help the relief of social isolation, improve the good use of social networks, strengthen media literacy and digital skills, and promote job search through social networks. These initiatives have a strong pedagogical, social and solidarity basis, relying on voluntary work, in a spirit of social entrepreneurship.

The reBIRTH on the internet project (REviver na Rede) is intended to residents in the Madeira Region, Portugal, namely unemployed people. The initiatives we have developed in the context of the coronavirus pandemic (COVID-19) are also intended to all those who were employed, but due to the measures taken by the government to control the pandemic, were forced to suspend their labor activities and were isolated at home in confinement. In the online spaces of the project learning content about the use of social networks and the incentive to use social networks as a tool for active job search are available, as well as support to doubts and also opportunities to communicate with people in the same situation in a safe way. The economic crisis is one of the great consequences of this pandemic crisis, and unemployment is a reality felt by the target public of our project. Thus, an important benefit of the project is the sharing of job offers and providing assistance in the application's processes. On the other hand, we support entrepreneurs in designing and sharing job advertisements, in a contribution to bring supply closer to job search in the context of the region. The project is relevant to **SDG4 and SDG8**.

Action Line 7: E-ENVIRONMENT



In **Germany**, **Endeema** is an EU-based company offering a software which matches energy consumption with renewable energy supply in the electricity grid. The machine learning based software then provides recommendations and automated responses to change the company's production plan. This helps companies save electricity costs and greenhouse gas emissions while still meeting customer orders. Endeema effectively makes companies more competitive and sustainable, while also integrating intermittent renewable energy in electricity grids. We could reduce hundreds of tons CO2 emitted per Industry by enabling them to shift their energy demand to the time when renewables supply is available in power mix. As renewables correspond to cheaper electricity price, it will also help industries to minimise their energy cost. This project is relevant to **SDG7, SDG11, and SDG12**.

In **Turkey**, the **e-notification** project was launched on 29 June 2015 with the aims of improving the Quality and Efficiency of the Civil and Criminal Justice System, Strengthening the Notification System, and improving informatics services in the judiciary. e-Notification refers to the delivery of official documents electronically by the notifying authorities to the parties concerned. To use the e-Notification system, the person concerned is required to have a KEP (Registered e-mail) address and must inform the notifying authority about using this address. In legal context, e-Notification bears the same legal consequences as the physical one. Thanks to this Project, the notification process that typically takes weeks can be completed on the electronic medium in mere seconds. e-Notification addresses a large mass. By evaluating reports about usage of this service, feedbacks and active usage, studies and efforts are on-going to make the service more user-friendly and to provide new and statistical information according to demand. Also, thanks to meetings with the call centers that have been set up, it becomes possible to survey satisfaction and complaints and to solve to the problems of usage. The project is relevant to **SDG13, SDG15, SDG16**.

In **Denmark**, **#YREstayshome challenge** is the challenge that YRE International is launching to prove everybody can still be an ambassador of the environment and influence his/her community while being at home. Indeed, YRE students from all around the world show solidarity by staying inside to avoid the spread of COVID-19. FEE and the YRE program also want to transform this unusual time into an opportunity to keep investigating environmental topics and to have a little fun! Every week, there will be shared ideas on how people can still be involved in the YRE program and gain new skills, raise awareness and investigate environmental issues from home. The project will have an impact on: - students age 11-25 years old - teachers - parents - communities -

different stakeholders. Everyone can become an ambassador and show how important it is to stay at home during a pandemic to limit the spread of the virus. In addition, the project will provide an opportunity to explore environmental issues. The project is relevant to **SDG4**.

Action Line 7: E-AGRICULTURE



In **Czech Republic**, the objective of **Open Land Use for Africa (OLU4Africa)** is to build an open seamless harmonized vector multipurpose and multilayer land use and land cover map of Africa from available open data sources. Land cover and land use themes are important for many human activities and actions, while their availability and up-to-date validity is a very important aspect. OLU4Africa is being populated by datasets from African regions such as the Africover project and CCI Land Cover 2016 and newer, which has done the land cover mapping of particular African countries. Then, it was possible to use other tags from OpenStreetMap to identify land use except for the 'landuse' tag. For example, 'natural', 'amenity', 'leisure' tags, and so on. ESA CCI LAND COVER map and classification of images from Earth observation satellite data are being incorporated into the process of creating the OLU4Africa as well. The OLU4Africa will be enriched with other available thematic datasets in the next development; especially focused on current LULC on medium and large scales. Availability and accessibility of this product can help for example detect changes in ecosystems at the area of interest from LULC and climatic perspective as well. OLU4Africa is being incorporated into the SmartAfriHub platform (www.smartafrihub.com). OLU4Africa is bringing new quality to the seamless mapping of Africa and is a good opportunity for a number of different analyses. We plan to diversify our business strategy, there are more possibilities how to make a profit from our data: - The first is to offer our services to international map-making initiatives in Africa. An example could be FAO, GEO, UNEP ESA, Bill & Melinda Gates Foundation, etc. - The second possible model is to offer this service to countries, where we plan to also use sources from developing programs. We are now analyzing existing developing programs for single countries. For example, now we are analyzing possibilities of Czech development Funds. - As the last possibility is to offer services to private investors who are interested in data from certain regions in Africa. The project is relevant to **SDG2, SDG3, SDG4, SDG6, SDG9, SDG10, SDG11, SDG13, SDG15, SDG17**.

In **Serbia**, during the COVID-19 outbreak in Serbia, the Ministry of Agriculture, Forestry, and Water Management in Serbia initiated the first electronic greenmarket portal as a substitute for traditional greenmarket and wholesale facilities that were closed due to the pandemic. **e-Greenmarket portal** ("ePijaca" in Serbian language), was launched on April 10 2020 to support the trade of fruits, vegetables, dairy products and all other products normally available at green markets throughout Serbia, that is, to connect stores, shoppers and those who were ready to deliver the goods e-Greenmarket is available to all agricultural producers in Serbia, majority of which are small or family producers, who due to the pandemics and the country lockdown could not sell their products on the green markets. The registration of buyers, sellers and distributors is very simple. On the map, a buyer can easily identify a food producer in his area, check through the offering, select products, and ask for delivery. Organic food is specially marked. On the first day of operations of the electronic green market, 771 food producers registered and more than 19,000 people visited e-Greenmarket. It managed to attract over 2,000 registering farmers as sellers of farm products, and mapped 1.300 agro producers in April 2020. ICT Tools used: e-

Greenmarket ("ePijaca") is a web portal that connects those who want to buy, those who want to sell, but also those who deliver those goods from point A to point B. If a producer has something to offer, he can register it electronically. All interested citizens can, after completing a simple registration process, buy online a wide variety of fruits, vegetables, meat, cheese, milk, eggs, honey, as well as a variety of other traditional Serbian food products. Ordered goods can be shipped directly from the producer, as well as through a number of courier services. Call center operators provide assistance with the registration process free of charge at several phone numbers. The e-Greenmarket solution is used not only by individual buyers, but also by companies that supply retail chains and cooperatives. Every buyer can directly order goods from "e-greenmarket" by searching for desired products or contacting the manufacturer by phone or e-mail. The delivery is done directly to the home address, or through courier services. One of the main accomplishments was the fact that several retail chains had included products offered by e-Greenmarket farmers on their shelves. This project is related to **SDG2 and SDG3**.

Action Line 7: E-SCIENCE



In Italy, **COVID-19 Vaccine Opinion Analysis** project is under Artificial Intelligence Laboratory - University of Udine. With the recent approval of COVID-19 vaccines, a large debate about safety has emerged on social media. Positions in favor and against the vaccines have fueled such a discussion with arguments that are often based on unreliable sources, when not on fake news. This project aims at monitoring and visualizing the dynamics of the Twitter debate, to get a sense

of the public sentiment, while highlighting tweets that mention potential adverse events. A website has been created and has been a constantly updated to visualize what the crowd is talking about and what pieces of information are being shared. Team: Lead Board Giuseppe Serra (University of Udine) Enrico Santus (AI Advisor @ Women's Brain Project) Emmanuele Chersoni (Hong Kong Polytechnic University) Developers Beatrice Portelli (University of Udine) Roberto Tonino (University of Udine) Edoardo Lenzi (University of Udine) Simone Scabaro (University of Udine). To our knowledge our initiative is unique around the world, and all citizens of the world can use it. A website has been created and has been a constantly updated to visualize what the crowd is talking about and what pieces of information are being shared. Team: Lead Board Giuseppe Serra (University of Udine) Enrico Santus (AI Advisor @ Women's Brain Project) Emmanuele Chersoni (Hong Kong Polytechnic University) Developers Beatrice Portelli (University of Udine) Roberto Tonino (University of Udine) Edoardo Lenzi (University of Udine) Simone Scabaro (University of Udine). The project is relevant to **SDG3**.

In Portugal, Wikis, Education & Research within the School Libraries (WEIWE(R)BE) project aims to promote strategies to develop information literacy skills, within curricular and school libraries practices, by training both students and teachers in and with ICT, as well as sustainable digital contents (OER). Description: The WEIWE(R)BE project emerges to overcome the weaknesses witnessed in different educational levels, from basic to secondary school, in the information literacy and digital skills of the pupils/students. Therefore, the project's objectives are the following: -to empower pupils/students for critical and reflective reading, when accessing various sources of information and in the analysis of Web content, namely Wikipedia articles, understood as Open Educational Resources; -to promote information literacy as a key requirement and competence for learning, and an essential asset in the networked society; -to trigger a change in the information behavior within learning and research processes. The results achieved point out to the fact that the aims can be fulfilled – and indeed they have been, even in the midst of the pandemic difficulties. Besides, the best practices accomplished will certainly be maintained, shared, and improved, namely in the promotion of both the SGDs and the WSIS values in the Society. Finally, the impact generated has been greater, e.g. the whole school communities are being empowered – not just the students, but their teachers and families too. Moreover, as the school principals have valued the project, they will support its replication and sustainability, thus probably entailing new partnerships.

During the pilot stage, 5 school communities were involved in the project, 2 of which in rural/remote district areas, totaling 152 participants: - 129 students – of which: 59 F and 51 M (the remaining 19 didn't answer to this question of the survey); the majority (74) said to be 15 years old; and 108 were enrolled in the 10th grade (the first of the three years of Portuguese Secondary School); - 23 teachers – of which: 15 F and 8 M; 5 school principals, 6 teachers, 6 librarian teachers, 4 Inter-municipal Coordinators of School Libraries, and 2 members of the School Libraries network; the majority (21) with over 50 years old. The generated impact of the WEIWE(R)BE project – Wikis, Education & Research within the School Libraries – is listed as

follows: - Empowering students for critical and reflective reading in accessing various sources of information and in the analysis of Web content, namely Wikipedia articles, understood as an Open Educational Resource (OER); - Assuming information literacy as a requirement and an essential competence for learning and in the networked society; - Triggering a change in the information behavior research; - Implementing strategies for research, evaluation and effective use of information to produce credible content and according to quality and usefulness criteria; - Compliance with the Essential Apprenticeships, curricular guidance documents (by the General Directorate of Education, Portuguese Ministry of Education) based on planning, conducting and evaluating teaching and learning, aiming to promote the development of the areas of competence described in the Profile of Students Leaving Mandatory Education (<https://www.dge.mec.pt/aprendizagens-essenciais-0>); - Preparing and hosting meetings/work sessions among the WEIWE(R)BE project's core team, the school principals, the Inter-municipal Coordinators of School Libraries, the librarian teachers, the teachers and the students; - Creating a sustainable learning community, within the global open movement principles; - Contributing to reduce the gender gap in ICT access and use, as well as the access and use of open (educational) resources by remote/rural school populations; - Enabling critical and ethical reading of Web content, including Wikipedia articles; - Implementing research strategies to produce credible content with quality and usefulness criteria; - Recognizing the educational potential of digital tools, including Wikipedia, as an Open Educational Resource; - Improving the motivation and involvement in the activities/assignments to be fulfilled in formal educational settings, including in the school library; - Acknowledging that the use of Wikipedia in formal learning activities/tasks caters for the development of more competences (in comparison with traditional school assignments), including the following, among others: collaborative work, critical thinking, media literacy, argumentative skills, and scientific research abilities; - Promoting pioneering teaching practices, through the curricular integration of Wikipedia, as a result of the WEIWE(R)BE training that has been "relevant, current, innovative, appropriate, efficient and effective" (according to the teachers' words); - Committing to the use of Wikipedia as an OER, an OEP and a pedagogical strategy integrated in the school curriculum; - Willingness to continue to collaborate in Wikipedia, by updating existing articles or creating new ones; - Fostering a collective sustainability mindset, consciously acting accordingly, and working to strengthen an education of and with quality, fair and committed to create a (more) human, democratic, equitable and inclusive society. The project is relevant to **SDG1, SDG4, SDG5, SDG8, SDG10, SDG16, SDG17**.

In **United Kingdom**, the **UK's Government Digital Service (GDS)** support to the COVID-19 response. GDS have been at the forefront of the UK's response to COVID-19. Our existing services have been in high demand. They are ensuring citizens remain informed and able to access vital services. Across the digital, data and technology function across government, 39 user facing digital services have been developed as part of the COVID-19 response, with a further 40 in the pipeline. Examples of our existing services operating at scale and at pace include: GOV.UK, the place to find government information and services online, is supporting the design of a range of new products

(for example their latest is [gov.uk/ask](https://www.gov.uk/ask), where citizens can ask questions at the daily press briefings). The GOV.UK content team is also working closely with the Prime Minister's Office to organise the management and improvement of all coronavirus content. Visitors to GOV.UK per week have gone up over 600%. <https://www.gov.uk/ask> GOV.UK Notify - the government's messaging platform, has been used for National Health Service (NHS) text message support for the extremely vulnerable and those isolating at home; business continuity messaging for public sector staff; and FCO travel alerts. Over 250 local authorities and 173 services use Notify. At its peak, over 8 million SMS messages were sent using Notify, compared to a daily average of 150,000. GOV.UK Verify, used to prove identity online, has also seen a serious increase in usage linked to the unprecedented demand for government services (in particular Universal Credit). Verify is receiving approximately 500% more traffic from certain services, and this has risen to up to 900-1000% at its peak. GOV.UK PaaS is a cloud hosting platform that allows departments to deploy applications without infrastructure specialists. PaaS has been used to support the build of key services such as the Extremely Vulnerable People Service.

The government's response to COVID-19 is going to develop and change over time, and as government plans for the lockdown are revealed. However, at its core its built on our existing digital infrastructure, so everything that has been done, can be done again, at scale and at pace. GOV.UK particularly will remain high profile, not only because of the crucial advice for citizens but because we will likely continue to host new services at speed, which are also iterated at speed. <https://www.gov.uk/> For example, since GDS set up the landing page on GOV.UK new services have been developed including - Get coronavirus support as a clinically extremely vulnerable person and Offer coronavirus (COVID-19) support from your business. These services can be viewed from the landing page. <https://www.gov.uk/coronavirus-extremely-vulnerable> <https://www.gov.uk/coronavirus-support-from-business> GOV.UK now streams the government's daily press conferences live from GOV.UK Since going live, these products have been continually iterated and scaling up continues. The landing page is essentially the campaign landing page for all government content on coronavirus information and brings together wider signposts to existing and new content and allows GOV.UK to iterate at pace and move content around. The sustainability of what we have done is grounded in the fact that the bulk of our response has been built from existing digital services, standards, skills and policies ('digital foundations'). The UK's COVID-19 response has demonstrated the critical importance of having strong underlying cross-government digital foundations that can be a springboard for innovation and moving at pace in a crisis. It is also what will enable us to scale back up in the face of future shocks. However, we have also learnt new lessons and identified areas for improvement which we have either rectified as we've moved along, or identified them for further work in the future. The project is relevant to **SDG2, SDG5, SDG9, SDG11.**

In Italy, Finapp Cosmic Rays Neutron Sensing is under Finapp srl. A correct water measurement is a fundamental prerequisite for many applications, from meteorological forecast to flood prediction, drought, agriculture and, in general, water management. FAO states that water is the

biggest problem that humanity will face in this century. At global level, 70% of water resources, used by humanity, are currently destined to agriculture. In 2050 the water demand will grow by 50%, especially in developing countries. The water supply emergency currently affects about eighty countries in the world, involving 40% of the world's population. It is evident that the programmed and sustainable use of the water resources in agriculture is crucial, not only to meet the food demand, but also to the water lack. Precision farming is the answer to this problem. Irrigation is needed and we need to do it better, without wasting water. The advantage of irrigating crops is evident: with irrigation, farmers can produce more food. Irrigated agriculture accounts for only 20% of the total cultivated land on the planet, but produces 40% of the food it needs. Our company aims to provide a solution for sustainable consumption of water in agriculture. Our product is able to measure the water content of the soil, mediated on a large area (about 5 ha), up to 50cm deep with only one probe by measuring the neutrons produced by cosmic rays. This quantity is directly related to the water content in the soil. Precise knowledge of soil moisture content, available for plant growth, is one of the key pillars on which precision farming is based. This new technology will be the key for an efficient and cost-effective environmental monitoring. We can obtain a sustainable agriculture only employing programmed irrigation, in order to both maximize crops and minimize waste, above all. The most rational use of water will be, in the near future, not only a goal to be pursued in agricultural production, but also the qualifying element of policies in Italy, Europe and all around the world

Our technology can be used by any type of farmers. The measurement overcomes the inhomogeneities of the soil and therefore becomes a representative measure of an area even wider than that one measured. It can be used for medium to large crops, where it is impossible to accurately measure soil moisture with standard technique, and where satellite data cannot provide information at an interesting depth. On the contrary, it can also be used on smaller crops, reducing the range of action of the sensor thanks to special shielding. Anyone who needs to know the real water content of the soil is a potential user of our technology. Not only precision agriculture but also environmental protection agencies, meteorological centers, reclamation consortia, water management bodies. Our probe can measure water in any form and is intended to be a winning tool in the management of the most precious resource that we must protect in this century. In the short term, our focus is still on the product. First of all, it is necessary to make the production process scalable, having clear all the steps necessary to reach specific levels of production. Only through careful planning can a newborn and very small company like ours hope to be successful. No less important is the choice of our collaborators: we firmly believe that regardless of the product, the marketing, the financing, it is people who decree the success of a company. Finding the best collaborators, both professionally and humanly, who share our same objectives of ethics and safeguarding the Planet, are of primary importance for us. In the medium term, we will be more focused on acquiring new customers, through a targeted marketing strategy, letting the intrinsic value of the product, its ability to combine greater agricultural yield and protection of natural resources speak for us. We are also favorably evaluating the possibility of commercial partnerships with companies already rooted in the world of agriculture, to reach a

wider and more international audience of potential customers. The project is relevant to **SDG2, SDG3, SDG4, SDG12, SDG13**.

In **Belgium**, in a world where we want to feed the growing human population with healthy and sustainable produced food, farm biosecurity is key. It encompasses all measures that are taken to prevent the entry and spread of diseases (and pests) on a farm. Higher levels of on-farm biosecurity will result in improved animal health and welfare, lower mortality, morbidity and less need for medicine such as antibiotics. **Biocheck.UGent** provides an objective and scientifically validated risk-based scoring tool to measure and evaluate the level of on-farm biosecurity in livestock production. The system is survey-based with separate surveys for cattle, poultry and pig production. The calculation algorithm that takes into account all important risks for introduction and spread of diseases, their frequency of occurrence and interaction, uses the survey's results to compute a score which is then compared with national and global averages to allow for benchmarking. Separate scores are given for external biosecurity (= the measures taken to prevent disease entry) and internal biosecurity (=the measures taken to prevent disease spread). Furthermore, the system also provides separate scores for several subcategories which represent the most important aspects of the specific type of animal production. These scores can then be used to identify the strengths and weaknesses of the farm's biosecurity programme and thus advice where improvements are to be made. On a regional/national level, information on biosecurity levels can help with the control of (re)emerging infectious diseases. tech: Web platforms (forums, communities, e-governance); Broadband internet (mobile, satellite, cable); Cloud (data storage and computing, Big data); Digital communication (telephone, messenger, email); Software solutions (programs and packages)

With the new platform, we want to expand our services and products. We recently launched 7 e-learning modules on different topics of biosecurity (currently available in English and Dutch), with a Chinese version coming soon and plan to launch more modules with time. Additional functionalities to guide farmers and consultants will be added to the platform over time as well. The project is relevant to **SDG2, SDG3, SDG8, SDG9, SDG12, SDG13, SDG14**.

In **Switzerland**, **Co-creating Fun Care** project is under Breathing Games Association. Without air pollution, our life expectancy would increase by 34 months. With a commons-based economy, each and every human could afford medical care (vs one in two today). How not to produce risks? How to foster mutual care? We, people across regions and disciplines, get engaged to value pluralism and collective wisdom. We embrace play as a natural way to experiment, socialize, learn. We document and share our work so that everyone can freely use, study, improve, adapt it. In traditional medtech, corporate experts build a technical tool to manage a disease. Sealed in a black box, its price make it unaffordable to some. At Breathing Games, volunteer, diverse

contributors co-create an evolving, rewarding, immersive story to promote holistic health. Free to use, study, improve, its gratuity helps develop solidarity.

470 professionals and researchers mobilized across five countries. 175 participants in clinical studies. 450000 viewers reached through broadcast and documentary. 35000 hours of contributions. 75 scientific communications. 16 media interviews including the documentary A new Economy. 320 K research funds and donations received. 23 co-creation events organized. 23 games prototyped. 8 game controllers prototyped. Two games translated in 12 languages. One multiplayer online game basis developed to encourage communities to create game levels that recount *their* stories. The project is relevant to **SDG1, SDG3, SDG4**.

Action Line 8



In **Switzerland**, **ACTIVE AGEING** project is under ISOFOCUS. Contrary to common negative perceptions, older adults are creating a new niche market and fuelling growth and innovation. Eighty is the new 20! A demographic shift is creating the so-called “silver” economy and a new and powerful consumer class. Here, we look at how new products and services meet the needs and expectations of an older population, and where standards will help. Most academics agree that an ageing population lowers the long-term structural growth rate of an economy, citing Japan as a real-life example of this phenomenon at work. And while demographics are undoubtedly an important and enduring influence on the economy, raising clear long-term challenges for governments, there are also opportunities. "Eighty is the new 20! A demographic shift is creating the so-called “silver” economy and a new and powerful consumer class. Here, we look at how new products and services meet the needs and expectations of an older population, and where standards will help. Read: <https://www.iso.org/news/Ref2168.htm>". This project is related to **SDG3, SDG8, SDG9, SDG11, SDG12, SDG16**.



In **Germany**, **Global Teens Program** was created as a branch program of the Global Competence Online Project to give more support to all the students who have been studying from home during COVID-19, as well as support their families by running these weekly free Global Teens Meet-ups, where a professional educator will facilitate a 50-minutes meeting with students from all over the world. Students from 9 to 15 years old get to meet each other online, play fun games that help them to discover/share how they are feeling in order to unwind and know that they are not alone. Each MeetUp has a Genius Hour where one of the students gives a sharing about something they have experienced or something they like, such as moving to another country, learning to code or teaching each other magic tricks. Each MeetUp has a Genius Hour where one of the students gives a sharing about something they have experienced or something they like, such as moving to another country, learning to code or teaching each other magic tricks. 9-15-year-old students who can express themselves in English on an intermediate level. Students from Zimbabwe, UK, Spain, France, China, Zambia, South Korea, India, Colombia, Uganda have joined our Meetups so far. The project is relevant to **SDG4** and **SDG17**.



Action Line 9



In **Serbia**, “**The Wiki Senior project** has been launched in 2019 in Belgrade City Library, in partnership with Wikimedia Serbia. The basic idea of the project is to train seniors, especially retired ones, to work on a computer and then get involved in spreading free knowledge on Wikipedia. The project is based on the principles of healthy aging, volunteerism, civic activism and lifelong learning. Objectives: - Contributing to healthy aging through the development of IT skills and encouraging activism, creativity, socialization and self-esteem of seniors. - Improving the quality of seniors’ life through regular activities that represent a type of obligation, but also the

possibility of self-development and socializing. Activities: 1. Training of librarians for workshop moderators. 2. Weekly in the library: a) computer literacy workshops; b) Wikipedia article editing workshops (during Covid-19 lockdown we organized it online!). 3. Organized visits to museums, excursions. 4. Annual celebration, awarding certificates and gifts. Over the course of two years, 6 librarians held about 120 workshops, involving 52 participants, writing nearly 1,000 articles and donating about 2,000 photos to Wikimedia Commons. The evaluation showed that Wiki Seniors are delighted with the project which had a great impact on them – they acquired computer literacy, shared their knowledge with the widest community, wrote articles thereby developing their creativity and improving their knowledge, increased their visibility in the digital world, enriched their social life, made new friendships. The Wikipedia community got new editors, and the wider community got new quality articles on Wikipedia. The project won two awards."

"Through constant informal and occasional targeted interviews, we are checking the impact of the project on our Wiki Seniors, as well as the possibilities of improving the project in accordance with their needs. The evaluation shows that all beneficiaries are extremely satisfied with participating in the project and that the project strongly impacted silver economy and healthy aging in several ways. Through the service based on ICT (IT course, training for writing articles and workshops on writing articles on Wikipedia), the IT competencies of the elderly are raised, which makes them more independent to live in the digital, online age. For example, it is especially important for many of them that they can now correspond by e-mail or communicate via Skype with family members who live far away. Also, by raising their knowledge about online security, they became safer in this domain. Writing texts on Wikipedia develops the creative abilities of beneficiaries, they feel active, useful members of society, and they are satisfied that they can share their knowledge with the widest community. By participating in the project, they fill their free time with quality activities that allow them to contribute to the community, but also to socialize in workshops that are held permanently. Many Wiki Seniors became friends during the project, which thereby has a significant impact on their socialization, making new acquaintances and maintaining relationships. Workshops and socializing within the project reduce the risk of loneliness. Through writing articles on Wikipedia, they also continue with lifelong learning, by consulting the literature available in the library and various professional papers and other relevant content on the Internet. The project was particularly significant to some participants during the lockdown due to COVID-19. At that time, all seniors were almost trapped in their homes for about two months. That is why we organized online workshops with those who could work from home (they have a computer and Internet access). According to the participants, this work was extremely important for preserving their mental health. Owing to the number and quality of written articles, one of them was chosen as a Wikipedian of the Year 2020, on the Serbian Wikipedia. The impact of the project on the participants is pictorially illustrated by the statement of one of them: "Although I was born a long time ago, in the last century, I spent twenty years in school, forty years working for the people and the state ... Here I am again in the classroom, trying to learn something else using this technology born after my peers. If nothing else, with the time I have enough now, it will be easier for me to go around the globe, renew geography lessons and "meet" some friends lost in the whirlpool of this crazy time ..." (<https://bit.ly/3qzNRSP>) All the

above shows us that the project strongly contributes to the healthy aging of older people who participate in it. Almost everyone has stated that they feel more useful, alive and younger since they became Wiki Seniors." The project is relevant to **SDG3, SDG4, SDG16**.

In **Poland**, the number of false publications on the Internet has been growing. Their aim is to spread disinformation and panic and injecting fear into people's minds. The **#FakeHunter** project was born out of the need to counter such a situation. #FakeHunter is a community-based project for verifying content published on the Internet. It aims to demystify and refute false information related to the SARS-CoV-2 virus. Every Internet user will be able to identify and report doubtful content for verification and then receive a reliable, fact-based answer, cross-checked by external opinion leaders and PAP experts, based on trusted, official sources.

#FakeHunter project has helped to limit the spread of misinformation about the coronavirus pandemic and provide users with correct information about the coronavirus pandemic. Moreover, the project has encouraged websites and all social media users to responsibly share only evidence-based messages. The project is relevant to **SDG4, SDG16**.

Action Line 10



In **Belgium**, **Mapping the Spread of Covid-19** is under Dalberg Data Insights. Ministries of Health need data-driven insights when facing a pandemic. High geographic resolution maps and data analysis reports on the spread of the virus can help make more informed decisions, particularly regarding prioritizing resources and influencing the economic development of a nation or region during these crises. Our data products analyze and visualize both public and private data from different sources in order to provide actionable insights for a more evidence-based response to COVID-19 and beyond. In Belgium, we implemented the data product, called ESTER, to support both the Prime Minister and the National Security Council in their national response to the outbreak. We leveraged aggregated and anonymized telecom to monitor mobility patterns within the population and assess the impact of governmental restrictions on population movements at national and sub-national levels. This information served to forecast the spread of the disease and prioritize interventions, while empowering the public with the right information.

In Belgium, we worked with the Prime Minister and National Security Council in their Covid-19 response. We develop our data products in close collaboration with, and with continuous

feedback from, the end-users. Our team has the skills and experience to effectively engage end-users, understand their data needs, and identify key barriers and opportunities that might limit the potential impact of the data analytics tool. The main benefit for our end-users is that they receive an easy-to-use tool that offers a defining overview of what is happening in their respective countries, and where it is happening at a highly granular level. This allows them to act upon the pandemic in a more effective way with limited resources. This project is related to **SDG3** and **SDG17**.



In **Spain**, **Empodera.org** is a collective intelligence platform that makes it easier for citizens to create challenges and concrete actions to achieve the SDGs, which provides an itinerary to carry out the full cycle of social innovation, from knowledge of the SDGs, identification needs, through the provision of creative solutions, to the design and implementation of the best initiatives that can generate social impact. The digital platform and methodology are recognized by the United Nations through UNITAR (United Nations Institute for Professional Training and Research), with whom Fundación Cibervoluntarios signed a framework agreement in September 2018 to promote the values of the Agenda 2030. Its director and Undersecretary General of the United Nations, Nikhil Seth, with whom we signed the agreement, is one of the outstanding fathers of the 2030 Agenda, and its objective is for it to be transversal and reach all citizens, especially young people. Hence its recognition to Empodora.org it is very important. In 2021, the platform has been used by more than 1,500 people, more than 300 initiatives have been generated, and 100 organizations and entities have joined to this multi stakeholder ecosystem. This impact highlights robustness, efficiency and effectiveness of Empodera.org. Fundación Cibervoluntarios has been a pioneer in the development of this digital tool at European level, testing it 2018 with educational centers and Universities across Spain, as well as NGOs and public institutions, From the collected evaluations show the need to transmit youth information on the importance and raise awareness on the SDGs.

In 2021, the digital platform Empodera.org has been used by more than 1,500 people, more than 300 initiatives have been generated, and 100 organizations and entities have joined to this multi

stakeholder ecosystem. This impact highlights robustness, efficiency and effectiveness of Empodera.org. Implementation through 2 specific lines of action: 1) www.competencias2030.org: Program for the acquisition and certification of digital skills in entrepreneurship and innovation to achieve the SDGs and the 2030 Agenda. 2) www.ideatones.org: Marathon of ideas to involve civil society in the search for creative solutions and the development of concrete actions to meet the needs raised to achieve the SDGs. Both initiatives are based on a procedure created by university experts and a tested methodology that is certified by Fundación Cibervoluntarios. The implementation of both programs has been adapted since 2020, taking into account the situation generated by COVID-19, with constant online human and technological support to create the initiatives, coordinate actions, generate engagement, facilitate communication, measure the impact and guarantee the sustainability of everything that is generated before, during and after online events. Providing a comprehensive online platform for training, monitoring and certification. Implementation of Competencies 2030: it lasts 20 hours of practical training for university students, 5 of those hours of live digital face-to-face format and 15 hours of autonomous work. The groups for training are a maximum of 25 students in each event. The entire process is accompanied by expert facilitators. Implementation of the Ideathons: the online training events consist of two work stages: one part of digital presence and another part of autonomous work by the participants, assisted by expert trainers who facilitate the entire process, from the creation of the initiative to the implementation of collaborative actions to achieve the desired impact. The project is relevant to **SDG2, SDG3, SDG4, SDG5, SDG8, SDG10, SDG16, SDG17**.



#EmpoderArte LA OBRA DE ARTE LA CREAS TÚ

#EmpoderArte es una obra de arte digital, viva y colectiva, en la que tú eres co-creador y protagonista. Una convocatoria abierta para que puedas contar, mediante una imagen o un video, esa historia, ese momento importante o emocionante que has vivido gracias a la tecnología.

[Participa](#)

In **Netherlands**, the **SIENNA** project (2017-2021) addresses ethical issues in human genomics, human enhancement and AI and robotics. SIENNA focusses on ethical and human rights challenges. While these technologies offer significant benefits to individuals and society, they also present major ethical challenges, e.g., in relation to human autonomy, equality, personal liberty, privacy, and accountability. In collaboration with a variety of stakeholders, SIENNA has identified

and assessed ethical and socio-economic issues, public opinions, legal regulation and human rights implications of each technology. It has developed ethical frameworks based on social, ethical and legal analyses that address major present and future ethical issues in human genomics, human enhancement and AI & robotics.

This project is important to society because it considers the ethical and human rights aspects of three major emerging technology areas that will have important socio-economic impact in the European Union and the rest of the world: AI & robotics, human genomics and human enhancement. It is one of very few projects with this focus and the ability to influence EU policy and practices regarding the development and use of these three technologies. It will foster implementation of high ethics standards at EU and international level for the three technology areas through general ethical guidelines for society, codes of responsible conduct for researchers who develop the technologies and end users who use them, and will suggest improvements to existing ethical and legal frameworks. The project will provide new approaches for developing, translating and adapting ethical frameworks for new and emerging technologies, and such approaches now hardly exist and are needed. The project is unique in its breadth, its international scope, its policy implications, its use of innovative new methodologies for analysis and the formulation of new tools. The unique impacts of the SIENNA project are the result of buy-in procedures for the unique approaches and tools that it has developed in the project. These include the following, many of which have never been attempted before:

- An Ethics by Design approach for developers of AI & robotics technologies which integrates ethical considerations in a comprehensive manner in the development process
- Ethical guidelines for human enhancement, which moreover have extensive stakeholder support
- An International Code of Conduct for Data sharing in Genomics, which moreover has extensive stakeholder support
- Frameworks and protocols for research ethics for AI & robotics, human enhancement and human genomics
- A framework for AI ethics education and training at universities and in industry
- Regulatory proposals for AI & robotics, human enhancement and human genomics to support ethical and human rights considerations
- A comprehensive multi-stakeholder strategy for ethical AI & robotics
- Methods for including critical social science and humanities perspectives in AI
- Generalized methods for ethically assessing and guiding new emerging technologies
- Generalized methods for legal and human rights analysis and regulatory recommendations for emerging technologies

In addition, the project has yielded unique data and analysis to support stakeholders in their work:

- An extensive overview of existing ethics codes and research ethics protocols for human genomics, human enhancement and AI & Robotics in EU member states as well as internationally.
- A comparative legal analysis of legislation for the three fields in EU member states and internationally, especially in relation to human rights issues.
- Foresight analyses covering human genomics, human enhancement and AI & Robotics
- Comprehensive ethical analyses of the three fields, covering both fundamental ethical issues and ethical issues in relation to specific products and application domains, and covering both present and potential future developments
- Quantitative surveys in 11 countries, including in EU member states (7 countries), and one country each from North America, South America, Africa and Asia. the USA, to obtain public's awareness and views of the three technology areas.
- Consultations with

expanded focus groups (“panels of citizens”) in five EU member states to obtain qualitative data to further understand the views of the general public on these three fields of technologies input from a wide range of stakeholders as well as consultations of the public. The project is relevant to **SDG3 and SDG10**.

In **Germany**, the **SIENNA** project (2017-2021) addresses ethical issues in human genomics, human enhancement and AI and robotics. SIENNA focusses on ethical and human rights challenges. While these technologies offer significant benefits to individuals and society, they also present major ethical challenges, e.g., in relation to human autonomy, equality, personal liberty, privacy, and accountability. In collaboration with a variety of stakeholders, SIENNA has identified and assessed ethical and socio-economic issues, public opinions, legal regulation and human rights implications of each technology. It has developed ethical frameworks based on social, ethical and legal analyses that address major present and future ethical issues in human genomics, human enhancement and AI & robotics. This project is related to **SDG3 and SDG10**.

In **Germany**, **BardyConsult** is focusing on the Internet, a public good in the COVID-19 Pandemic: Do we need more Internet governance? The Internet, in its nature as a public good (even though it can be monetized and can exclude users from access), produces benefits, sets challenges and may create hazards. During the COVID-19 pandemic, both the positive and negative impacts of the Internet have become very meaningful, and this has perhaps forever changed how society views and uses this service. Production and consumption of any public good are fostering sustainable development. With the Internet, the most outstanding connection is to the sustainable development goal of building strong partnerships, and the role of the Internet in fighting COVID-19 is about implementing the health-related sustainable development goals. The effects of the pandemic and the situation it creates should induce policy makers to reconsider the way in which public and private entities provide and regulate the Internet. In order to contribute to this investigation, the authors have reached out to several experts who partake in various expert advisory groups in the U.S., Germany and Switzerland. The first task is to design formats for involving leaders in business and government. The next step would be to test how these formats can be applied in a decision-making process on a transnational scale.

It is generally expected that the COVID-19 pandemic will most likely dominate political and private decision-making for quite some time and that a resilient base must be built to deal with further health crises. This will depend on decision-makers establishing improved rules for Internet governance and Internet security. The impact of these rules on economic, social and environmental progress can be estimated, partially, from GDP recovery rates after the main waves of the COVID-19 pandemic have subsided. This project is related to **SDG3, SDG4, SDG6, SDG17**.

Action Line 11

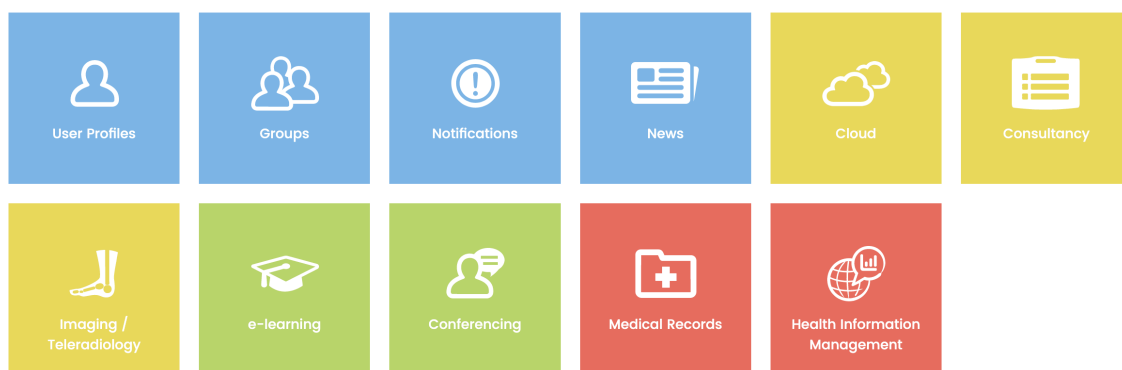


In **Luxembourg**, for years, Luxembourg Government's **SATMED** project has helped various NGOs by giving healthcare professionals access to a dedicated e-Health software via SES's satellite service. Thanks to the unparalleled reach of the satellites, the platform can be utilised even in remote locations, where no other means of connectivity are possible to deploy. Friendship NGO serves two floating hospitals off the remote islands of Bangladesh and a hospital on-land. Patient data is sent from the Friendship Central server to the National Healthcare Database via satellite. The same connectivity also helps reinforce the triage system, which quickly identifies and refers patients to the dedicated governmental COVID-19 centres. Since the start of the COVID-19 outbreak in the country, the hospitals have served more than 10,000 patients. SATMED is also utilised by the Serabu Hospital in Sierra Leone that is supported by the German Doctors NGO and is responsible for providing care to thousands of patients. The hospital is located in a remote region and SATMED constitutes its only connection to the outside world. Drawing from its experience fighting Ebola in 2014, the hospital also expanded the existing triage system and set up information exchange with the dedicated government COVID-19 centres. SATMED is an e-Health cloud-based platform that allows real-time situational assessment and data exchange with other hospitals both in the country and abroad. It also supports provision of various critical services to the population. This existing solution has become increasingly important and necessary during the ongoing COVID-19 pandemic. The monitoring and tracking of the spread of COVID-19 is key for identifying disease hot spots, management of resources and access to information. The software platform enables collection and presentation of epidemiological information with real-time visualization in a dashboard.

SATMED is dedicated to assisting non-governmental organisations that are providers of healthcare, education or health management services, governmental organisations that support regional development programs and humanitarian operations, institutes such as medical universities, hospitals and health management institutions. Thanks to the satellite reach, SATMED can be utilised in remote and underserved areas, with the lack or even absence of infrastructure. SATMED has been tailored by the experience and expertise of non-governmental and

governmental organisations, together with the innovative technologies of leading universities and IT companies in order to answer the needs of the global health community. This project is related to **SDG3, SDG4, and SDG10**.

SERVICES AND TOOLS

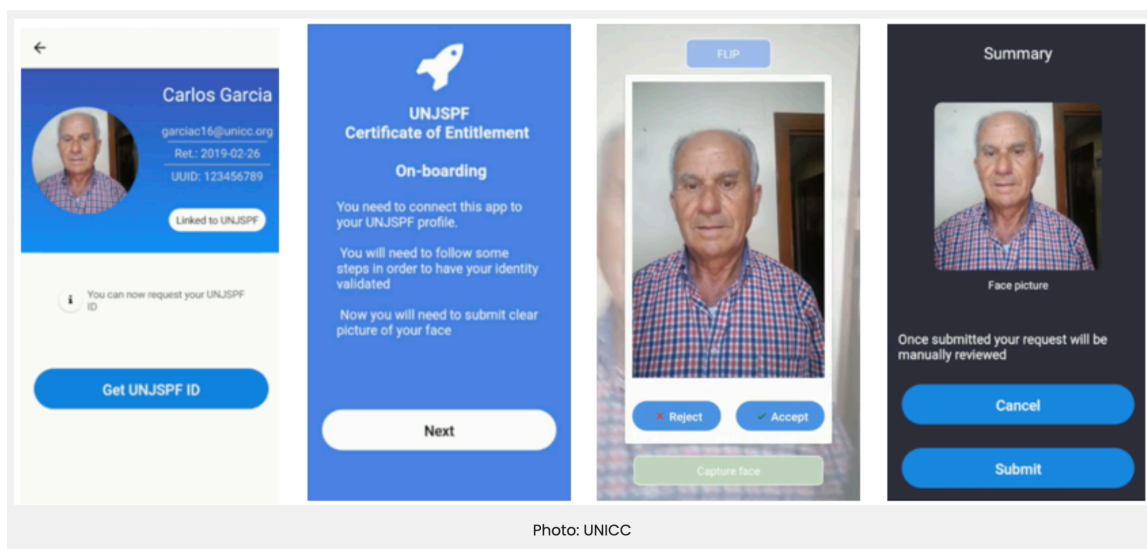


In **Turkey**, **DEMO** is the launchpad for emerging technology and trends. Each year over 2,500 people from around the globe attend DEMO to experience innovation at its birth. At each DEMO event, a hand-selected class of new products are introduced to the world for the very first time to global press and prolific bloggers; investors; corporate acquirers; strategic partners and buyers. And for the first time ever in Africa, we are launching DEMO Africa. Throughout its 21 years of existence, DEMO has earned a reputation for consistently identifying new innovations that are most likely to disrupt the markets they serve and/or change the way we use technology overall. DEMO will take your product from concept to customer. We are Showcasing African Innovation. The project is relevant to **SDG8 and SDG9**.

In **Switzerland**, UNJSPF has taken the leap into emerging technologies to streamline service delivery to clients, the 205,000 retired UN staff around the globe. Spearheaded by Dino Cataldo Dell'Accio, CIO, UNJSPF, this is part of the Fund's journey towards digital transformation, leveraging technology to update manual processes and streamline systems. **The Fund's Certificate of Entitlement (CE)** certifies that retiree beneficiaries are who they say they are, are still living, and still reside at their registered locations. This has been a cumbersome and manual process that has been prone to error. The Fund together with the UN International Computing Centre, with the partnership of Hyperledger open source blockchain solutions, has created a solution to automate and make immutable the CE process with blockchain, biometrics and a mobile app. The project team created and completed a Proof of Concept prototype demonstrating technology applied to overcome issues with the CE without introducing risks to hamper the flow

of entitlements. The pilot was a success and approved at the Annual UNJSPF Board Meeting. Now the Fund is beginning to implement the solution, first with food Agencies in Rome, including WFP, IFAD and FAO, attesting to the cost savings and process streamlining with these innovative digital solutions.

Economic: Cost-saving solution reducing manual processes. The biometric system prevents fraud (another person cannot use a static photograph to receive the pension). This ensures that the beneficiary is who he or she says and is alive, so pensions are only released to authorised beneficiaries. **Social:** Facilitates processes related to Certificate of Entitlement (CE) to receive pension. Accessible by all, as long as they have a smartphone and Internet connection. **Environmental:** The digital process is a clean and environmentally-friendly process, that will help reduce paper waste and other resources derived from the current manual, paper-based system. This project is related to **SDG8, SDG9, SDG12, and SDG13**.



Conclusion

The International Telecommunication Union (ITU) remains committed to the World Summit on the Information Society (WSIS) process, and to implementation of the WSIS goals beyond 2022. ITU recognizes and highly appreciates the extremely valuable contributions made by stakeholders to enable the continuation of WSIS monitoring and reporting. There can be no doubt whatsoever that, in today's fast-moving world, innovation and efficiency are vital to success. Accordingly, the WSIS Stocktaking Report in the Europe Region 2021-2022 shares with you the most recent updates and success stories in the WSIS stocktaking process of this region.

The WSIS Stocktaking Platform continues to foster implementation of the WSIS outcomes and to facilitate exchange of information among 300,000 members representing governments, the private sector, international organizations, civil society and other stakeholders. As the Web platform continues to flourish, so does the promotion of social development and economic growth through ICTs. We continue to maintain and improve the WSIS Stocktaking Database, which contains around 13,000 entries this year. This encouraging outcome reinforces stakeholders' belief in and commitment to the WSIS Stocktaking process and their desire to share best practices.

In addition, the WSIS Overall Review called for close alignment between the WSIS process and the 2030 Agenda for Sustainable Development, highlighting the crosscutting contribution of ICTs to the SDGs. In this context too, WSIS Stocktaking is evolving to become the unique global process for the collection of information on actions carried out within the framework of WSIS, while underlining their contribution to implementation of the 2030 Agenda for Sustainable Development.

We are also pleased to announce the recent launch of a new and innovative interface, which will make it easier to search all WSIS-related activities. All stakeholders benefit from the sharing of interesting case studies, as this undoubtedly facilitates the transfer of knowledge, experiences and models for project implementation. The WSIS platform helps to create partnerships, provide greater visibility and add value to ICT projects all around the world. The many and varied stakeholders who have implemented innovative projects and contributed to the success of the WSIS Stocktaking process deserve our sincere gratitude.

Secretary-General of ITU launched a new Call for Submissions for the WSIS Stocktaking 2022, inviting all stakeholders to contribute to the WSIS Stocktaking process undertaken in support of the WSIS Implementation and Follow-up.



She, elderly, modern and connected, Spain, WSIS Photo Contest, 2022

Information and communication technologies continue to play a vital role and ITU is now more than ever committed to bringing the benefits of these technologies to people everywhere. The COVID-19 crisis has highlighted this critical role of ICTs for continued functioning of societies and I would like to thank you for your efforts in sharing your projects and initiatives reflected in a special report on [Coronavirus \(COVID-19\) Response – ICT Case Repository](#).

The WSIS Stocktaking process has been maintained by ITU since 2004 as requested by the WSIS Outcomes ([Tunis Agenda for the Information Society](#), Para 120). This **publicly accessible WSIS**

Stocktaking database (www.wsis.org/stocktaking), currently with a growing community of more than 300,000 stakeholders, is a unique global tool for collecting information and regular reporting on information and communication technologies related initiatives and projects, carried out by governments, international organizations, the private sector, civil society, academia and other entities, in the context of 11 WSIS Action Lines.

In 2015, the UN General Assembly within the framework of the ten-year review of the WSIS ([Res. A/70/125](#)) called for a close alignment between the WSIS process and the 2030 Agenda for Sustainable Development ([Res. A/70/1](#)). The WSIS Stocktaking process responded by highlighting the contribution of 11 WSIS Action Lines to the achievement of 17 Sustainable Development Goals (SDGs).

We are pleased to invite you to update and submit new entries online at the WSIS Stocktaking page <https://www.itu.int/net4/wsis/stocktaking/Project/Projects/Submit>.

Submitted activities will be reflected in the **WSIS Stocktaking Report 2023**, which will be released at the [WSIS Forum 2023](#). We look forward to receiving your responses.