Slovenia ranks 18 out of the 28 EU Member States in the European Commission Digital Economy and Society Index (DESI) 2016. Slovenia is part of the catching up countries cluster: countries who score below the EU average but whose score grew faster than that of the EU as a whole compared with 2015. The Integration of Digital Technologies by the business sector is the dimension where Slovenia made most progress. However Slovenian citizens are not very active when it comes to private use of Internet and use of e-government services. Nevertheless Slovenia benefits from a digitally skilled population. Slovenia ranks low in the use of Digital Public Services and access to open data. There exists a gap between the fine potential of its human resources and the take-up of digital services. Slovenia will benefit from improved supply of e-services and content.

In terms of broadband connectivity Slovenia has made some progress; but further improvements are needed. In March 2016, the Slovenian government adopted Digital Slovenia 2020, comprising the Development Strategy for Information Society 2020; the Development Plan for Next Generation Networks; and the Cybersecurity Strategy. Digital Slovenia 2020 is a horizontal national strategy (Digital Strategy) building on the Europe 2020 Strategy, the Digital Agenda for Europe and the Digital Single Market Strategy. Slovenia has provided updated information on projects and measures adopted in late 2015.

1 – Connectivity

In terms of connectivity, Slovenia’s performance is below the EU average, but it is making progress.

Fixed broadband is available only in 84% of Slovene rural areas which is significantly below the 90,6% EU average for rural broadband. Also Slovenia is well below EU average as far as the take-up of both

---

1 The Digital Economy and Society Index (DESI) is a composite index developed by the European Commission (DG CNECT) to assess the development of EU countries towards a digital economy and society. It aggregates a set of relevant indicators structured around 5 dimensions: Connectivity, Human Capital, Use of Internet, Integration of Digital Technology and Digital Public Services. It clusters countries in four groups: Running ahead, Lagging ahead, Catching up and Falling behind. For more information about the DESI please refer to https://ec.europa.eu/digital-single-market/en/desi
3 Other catching up countries are Spain, Italy, Latvia, Romania and Croatia
4 DIGITALNA SLOVENIJA 2020 Strategija razvoja informacijske družbe do leta 2020
mobile broadband (50% of subscribers against 75% EU average) and fixed fast broadband above 30 Mbps (21% against 30% EU average) are concerned. However, Slovenia is ranked at the EU average for individuals actually using a mobile phone or smart phone to access the internet via 3G (42,5% of population). Furthermore, there was a significant increase in high-speed broadband subscriptions compared with last year (21% v 10%); and Slovenia has a relatively good NGA coverage of 79% of Slovenian households which is significantly higher than the EU average of 71%. Different aspects can be seen as factors which contribute to the low take-up, ranging from those related to the limited demand for high speed internet, and high prices for fast broadband. Note that Slovenia has higher prices than EU average for speeds of 30 – 100 Mbps and it is the second most expensive for speeds above 100 Mbps. In terms of internet use, Slovenia ranks 24th among Member States (lower than EU average).

A major challenge for Slovenia is to make further improvements to ensure better broadband connectivity in rural areas. In March 2016, Slovenia adopted a new National Broadband Plan. It sets new coverage targets to be achieved by 2020, with a planned 96% of households to be connected with broadband speeds of at least 100 Mb/s and the remaining 4% of households connected with speeds of at least 30 Mb/s. As next steps for the implementation of this strategy, Slovenia will test market interest to provide access to broadband speeds of at least 100 Mb/s and should then establish a list of planned investments along with a description of the prioritisation of investments in areas affected by market failure. According to the National Broadband Plan, 355 million EUR should be invested to reach the broadband targets that the plan sets. The plan foresees public funding, mostly European, amounting to € 72,5 EUR Million, and private funding of € 292,5 Million. Slovenia still has to fully transpose the Cost Reduction Directive, which could help to speed up broadband roll-out.

2 – Human Capital

Regarding human capital, Slovenia is making good progress and performing well. Slovenia still has a relatively low percentage of regular Internet users (71%, below the EU average of 76%). Slovenia has a good position regarding the share of ICT specialists in the workforce (4,8%, well above the EU average of 3,7%) and in the share of STEM (Science, Technology and Mathematics) graduates, where Slovenia is above the EU average and ranks 9th among EU Member States. Nevertheless, Slovenian companies still find it difficult to recruit ICT professionals as the young, educated and foreign language-speaking generation of Slovenian STEM graduates is very mobile. The development of digital skills and the raising of digital awareness are already well embedded in the whole education cycle, from kindergarten to university, and in the later stages of lifelong learning. Slovenia has announced complementary measures to the formal education cycle. Several stakeholder and public financed, bottom-up initiatives exist for lifelong learning, typically improving competences of already ICT-aware citizens, those who are employed or better educated.

The development of digital skills and digital awareness are two cornerstones of Slovenia’s recently adopted Digital Strategy. Slovenia has announced in its Digital Strategy the setting-up of a Slovenian Digital coalition bringing together stakeholders in the development of the digital economy and digital jobs. Slovenia announced measures to provide vocational training to less educated and less skilled labour force segments above 45 years of age. Slovenia has earmarked € 11 Million in the period 2016 - 2019 for financing training programmes primarily aimed at increasing digital competences among the labour force.

In Slovenia the younger generations benefit from the development of digital skills during the existing formal education process. Lower levels of ICT awareness and digital literacy among certain population segments - the older generation, people living in rural areas, less skilled workers - limit the use of internet, including for example e-government services. Computer literacy- and e-inclusion of citizens living in rural areas, unemployed, less educated or older citizens remain a challenge for which EU co-financing could be used as a complementary resource.

3 – Use of Internet

In terms of Use of Internet, Slovenia is performing below the EU average and has not progressed since last year. Compared with the previous year, Slovenian Internet users are less keen to engage in "private" Internet activities such as reading news online and the use of Social Networks. On the contrary, there has been an uptick in "commercial" Internet activities such as: banking and shopping transactions. The Digital Strategy foresees measures to enhance the use of Slovenian in the digital environment; these will contribute to the take-up of demand for digital content. Further take-up is expected in future due to measures on the supply side that continue to be introduced successively. For example, eGovernment services with new features were introduced in autumn 2015 and more relevant eContent is now available).

4 – Integration of Digital Technology

In terms of Integration of digital technologies Slovenia is performing well and is making solid progress. This is the dimension where Slovenia performs best. In particular progress was made in eInvoicing and SMEs selling online cross-border. In terms of Electronic Information Sharing, Social media and Cloud computing Slovenia is slowly progressing. Slovenian SMEs take advantage of online commerce. 16% of SMEs in Slovenia sell online, mirroring the 16% EU average, and make 15% of turnover, compared with the 9.4% EU average.

Digital Slovenia 2020 comprises references to the digitisation of business and Industry 4.0. However, there exists no sector specific business-led Industry 4.0 strategy.

Most private business sectors and especially SMEs seem to be on right track towards integrating digital solutions rapidly into their production processes, business models and distribution channels. In addition to already existing "bottom-up" initiatives (OpeningUp Slovenia, Slovenian Internet Forum) new stakeholder initiatives fostering the digitisation across the industry have been announced. Slovenia has no specific policies aimed at stimulating eCommerce and has not introduced any specific and targeted fiscal breaks for investment in digital.

In Slovenia eInvoices became mandatory in all transactions with the public administration in January 2015. It is expected that the mandatory use of eInvoices in dealing with public administration and promotion of opt-in use of eInvoices - for example for household billing in the utility sector - will drive up the adoption of eInvoices in other areas.

5 – Digital Public Services

In terms of Digital Public Services, Slovenia is performing below the EU average and has not progressed since last year. The number of eGovernment users went down by 5%. Slovenia is according to data available in 2015 performing well below the EU average in terms of access to Open Data, however new functionalities and ePublic services made available in the last months of 2015 are expected to contribute to the take-up of ePublic services. Only the completion of online services improved and is now above the EU average.
Slovenia is seriously lagging behind in the introduction of an efficient eProcurement system covering all stages of the procurement cycle.

Recently a new eGovernment portal (eUprava) with improved interoperability, covering among other things life events and transactional procedures with pre-filled forms on-line was launched. eUprava is designed to be user-friendly, simple to use and offers access to more than 30 public registers.

The Digital Slovenia 2020 Strategy foresees the roll out of e-government services by 2020 on all levels of government. Additionally, the Digital Strategy addresses introduction of digital solutions in the judiciary. The strategy introduces a "digital by default" principle. The Digital Strategy also includes measures enhancing open data policy. Digital Slovenia 2020 refers to the development of various key enablers for access and interoperability to eGovernment services, such as eIdentity, eAuthentication, eSignature and eDelivery.

It is expected that the recently adopted legislative changes implementing the Directive on the re-use of public sector information (Directive 2003/98/EC) as well as the already publicised completion of a national interoperability platform will improve access to and re-use of public sector data.

The improved availability and wider scope of available e-public services; the successive opening of public registers; the introduction of key-enablers for eAuthentication, and the use of digital public services are all expected to increase in Slovenia in future.

Highlight: ePrescriptions

Slovenia informed the European Commission about recent progress in e-health. Building on its tradition of introducing new solutions using a big-bang changeover, Slovenia rolled out e- Prescription and e-Referrals in October 2015. By December 2015 all general practitioners in Slovenia were using e-Prescriptions, taking the country from 0% to 100% usage in just a few weeks. The Slovenian preference for big-bang changeovers compensates for delays that accumulate during the long process of consensus-building, decision-making, planning culminating with lengthy procurement procedures. The success of the approach can serve as a good example.