Europe's Digital Progress Report (EDPR) 2016

A report complementing the Digital Economy and Society Index (DESI)¹ country profile

HUNGARY

Hungary ranks 20th out of the 28 EU Member States in the European Commission Digital Economy and Society Index (DESI) 2016². Hungary’s score was lower than the EU average, and over the last year the overall score grew at a slightly slower pace than the EU. As such, Hungary is part of the falling behind cluster of countries³.

Hungary scores relatively well in the Use of Internet, and is slightly below the average on Connectivity and Human Capital. The greatest challenges remain the Integration of Digital Technology by businesses and the area of Digital Public Services. Hungary progressed most in Connectivity, the Use of Internet and Digital Public Services.

1 – Connectivity

Regarding Connectivity, Hungary is just below the EU average. There was good improvement compared with last year, which is caused mainly by the progress in the take-up and coverage of fast broadband technologies. Fixed broadband services are available to 95% of homes in Hungary, which leaves a gap of 5% to achieve universal coverage compared with only 3% in the EU. Nevertheless, fast broadband technologies are already widespread, covering 78% of homes as opposed to 71% in the EU. In Hungary, there is strong platform competition between xDSL and cable broadband. Cable technology is mainly responsible for the high availability of fast broadband currently, but VDSL coverage is also growing. Hungary is catching up regarding the take-up of fixed broadband access: in 2015, 69% of households had a fixed broadband subscription, up from 66% a year ago, but still below the EU average of 72%. The Hungarian mobile market showed a rather stable market structure with three mobile network operators for many years. Following the outcome of the multiband auction in 2014, the cable operator DIGI also acquired rights in the 1800 MHz range, as the fourth mobile network operator. Throughout 2014 and 2015, two new MVNOs entered the mobile market alongside the existing one, and branded resellers started to provide services as well. At the same time, Hungary has the lowest score in the EU for mobile broadband take-up. 4G coverage increased to 95% by June 2015, which may trigger growth in mobile broadband subscriptions over the coming years.

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 falling behind countries are Bulgaria, Cyprus, the Czech Republic, Greece, France, Poland and Slovakia.
The development of digital infrastructure is one of the pillars of the National Infocommunication Strategy 2014-2020\(^4\), adopted in 2014. The strategy also includes broadband related targets, which are consistent with those of the Digital Agenda. Overall, the Hungarian broadband strategy envisions primarily promoting market-based broadband roll-out by enacting adequate public policy and regulatory measures. Where deployment incentives for market players are lacking, credit or tender schemes (e.g. tax relief for developments and allocation of application funds to support investments not recoverable on a market basis) will be developed to support network upgrades. With regard to budgetary issues, the National Broadband Plan states that about 180 – 210 Billion HUF (600 - 700 Million €) investments are needed in order to assure at least 30 Mbps internet speed for all households in Hungary. The country still has to transpose the Cost Reduction Directive\(^5\) which could help to speed up broadband roll-out.

It remains to be seen whether the financial incentives made available will be able to compensate for the effects of levies established on telecom operators, in particular the infrastructure tax introduced in 2013. It is also important to note that the current strategy focuses mainly on the 30Mbps connectivity target, although the Digital Agenda also stresses the need to deploy superfast broadband networks (at least 100Mbps) by setting the target of 50% of homes subscribing to such speed by 2020.

2 – Human Capital

On Human capital, Hungary ranks 17th among EU countries, slightly below the EU average, and its progress was limited last year. 72% of people in Hungary use the internet, compared with 76% in the EU. Hungary shows a mixed picture in digital skills: only 50% of individuals have at least basic digital skills (EU average 55%), while ICT specialists represent a relatively high share of the workforce (4.9% compared to 3.7% in the EU). Hungary is lagging far behind on graduates holding a STEM (Science, Technology and Mathematics) degree.

The development of digital competences is one of the pillars of the National Infocommunication Strategy. The strategy underlines Hungary's huge backlog regarding digital literacy with 3.5 million people not yet benefitting from digital technologies. Internet users mainly engage in only basic activities on-line. It is also acknowledged that digital competences are not sufficiently developed in public education, since the curriculum have not yet been adapted to digital, the teachers have limited knowledge and the IT tools are insufficient. Hungary has set itself the objective of reducing the number of digitally illiterate adults as well as increasing the number of regular internet users. In addition, the shortage of ICT experts (estimated at 10,000 people in 2013) should be significantly reduced by doubling the number of students studying ICTs by 2020 and improving higher education to better respond to the needs of the labour market.

Having defined the overall strategic framework to address the challenges in human capital, the focus from now is on the effective implementation of the planned measures. Hungary has not yet set up its National Coalition for Growth and Jobs\(^6\), which may be very important to ensure that all the key stakeholders are involved. Funding opportunities to consider include Erasmus+, European Structural and Investment Funds, and the Employment and Social Innovation programme.

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\(^4\)http://www.kormany.hu/hu/nemzeti-fejlesztesi-miniszerium/infokommunikacioert-felelos-allamtitkarsag/hirek/infokommunikacios-akciotervet-fogadott-el-a-kormany


3 – Use of Internet

In general, Internet users in Hungary engage in a broad range of internet activities and outperform the EU average on the Use of the Internet. As for the most popular activities on-line, 86% of internet users read news, and 83% use social networks. The use of social networks is the highest in the EU. 47% of internet users listen to music, watch films or play games online, and 55% make video calls. Despite progress last year, Hungary still falls well below the average on internet banking and online shopping. On eCommerce, this is also linked to the supply side, as the percentage of SMEs selling online is also below the average.

4 – Integration of Digital Technologies

On the Integration of Digital Technology by businesses, Hungary's ranks 26th, well below the EU average, and its worst performance ranking among all five DESI 2016 dimensions, and progress was also limited last year. The percentage of businesses using technologies such as electronic information sharing (16%), cloud services (6%) or social media (11%) is among the lowest in the EU. Hungarian businesses need also to take advantage of the possibilities offered by on-line commerce. Very few SMEs in Hungary sell online (10%), and even fewer sell online to other EU Member States (4.5%). The reluctance of people to engage in transaction-based services such as electronic payments, banking and shopping online is partly responsible for the low performance.

The government in its ICT strategy sets the objectives that 90% of the micro and small enterprises should have internet access by 2016 (and 99% by 2020) and 50% of the micro and small enterprises should have internet presence (website, Facebook profile, etc.) by 2016 (80% by 2020). In addition, the value of Hungarian software and services exports should increase by 100% by 2020; 33% of SMEs should make purchases or sales online by 2020, and the rate of SMEs having integrated corporate systems should reach the then EU average by 2020. Government measures include support for the development of ICT services for export, support to the development of internal IT and electronic services of SMEs and instruments to boost the market of electronic commerce, electronic invoicing and payments as well as e-Signatures.

The timely and effective implementation of relevant schemes in the Economic Development and Innovation Operational Programme (EDIOP) could significantly contribute to overcoming the challenge in this area.

5 – Digital Public Services

On Digital Public Services, Hungary performs fourth worst in the EU, well below the average, despite the fact that the growth of the related DESI indicators was somewhat higher than the EU average last year. It is, however, remarkable that Hungary nonetheless improved in online service completion, measuring the extent to which the various steps in an interaction with the public administration can be performed completely online.

The Digital State pillar of the National Infocommunication Strategy focuses on the supply of internal IT services, the provision of digital public services for both citizens and enterprises as well as on security. The government aims at improving not only the IT background in the public administration, but also the digital competencies of people working for the public administration. By 2018, citizens and enterprises should be able to manage the full range of public administration services (including cross-border) on-line, and 60% of adult population should use e-government services by 2016.

During the implementation of the measures, it may be worth taking into account the results of the latest eGovernment Benchmark Report, which states that Hungary is well below the average in all
the four dimensions, i.e. on user centricity, transparent government, cross border mobility and the key enablers (such as electronic identification).

**Highlight: The new Hungarian eID card**

In January 2016, Hungary launched a new electronic ID card. The new card has an integrated Near Field Communication (NFC) chip, and it meets the requirements of the European Union’s eIDAS regulation. Apart from the eID function, there are two other electronic functions available: the ePASS function and the e-Signature function. The card also stores the citizens’ Tax ID and National Health Insurance Number. The eID function of the card is secured with a 6 digit PIN, and the optional e-Signature function with a 7 digit PIN. During January 2016, 133,000 eID cards were issued by the Hungarian authorities, out of which 51,000 includes the biometrics necessary for the optional ePASS functionality, and 19,000 include the digital certificate needed for the e-Signature function. The necessary card readers are officially distributed by the Hungarian Post, the cheapest available from 13,000 HUF (approx. 40 euros).