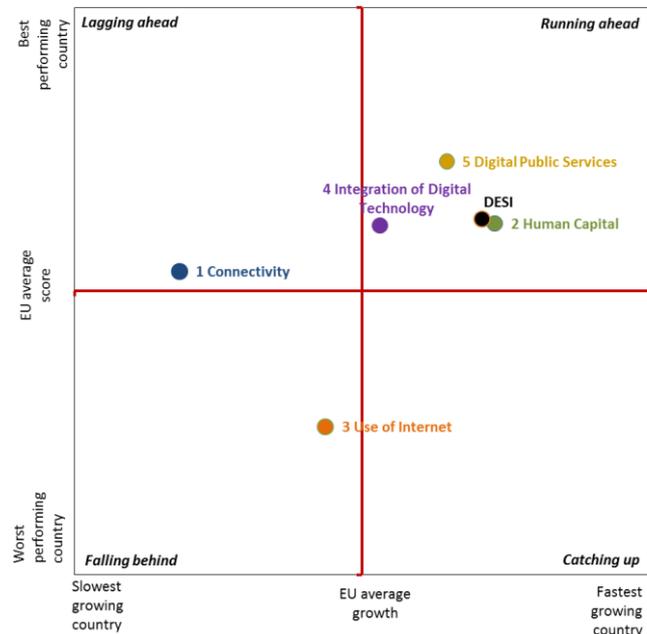


# Europe's Digital Progress Report (EDPR) 2016

A report complementing the Digital Economy and Society Index (DESI)<sup>1</sup> country profile

## AUSTRIA

Austria ranks 12<sup>th</sup> out of the 28 EU Member States in the European Commission's Digital Economy and Society Index (DESI) 2016<sup>2</sup>. Austria is part of the **running ahead** cluster<sup>3</sup> of countries, because its DESI score is above the EU average and overall the country has developed faster than the EU over the last year. Austria is doing relatively well and keeps improving at a relatively faster pace on the dimensions of Human Capital, Digital Public Services and Integration of Digital Technology. On the Connectivity dimension, however, Austria places close to, though higher than, the EU average with a relatively slower pace of improvement over the past year. Austrians benefit from affordable internet and relatively wide availability of high-speed internet. Digital technologies are relatively well exploited by businesses, individuals and public institutions.



Austria's performance in the five DESI dimensions relative to other EU countries

Despite already doing well in most DESI dimensions when compared to Europe, Austria has ambitious plans to improve further. This includes an already ongoing federal scheme to increase accessibility of ultrahigh-speed broadband infrastructures by 2020. In addition, a public consultation on a comprehensive digital strategy called 'Digital Roadmap Austria' was launched in mid-February and closed in March 2016. The discussion paper prepared by expert groups contains proposals for measures relating to the entirety of the digital economy, society and government.

### 1 – Connectivity

Austrians benefit from affordable internet and a relatively high availability of high-speed internet. Fixed broadband is available to 99% of households as compared with the 97% EU average; and 89% of all households in Austria now have the possibility to be connected to an NGA infrastructure allowing access to a high-speed broadband connection (versus 71% in the EU).

<sup>1</sup> 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/desi>

<sup>2</sup> DESI Country Profile for Austria: <https://ec.europa.eu/digital-single-market/scoreboard/austria>

<sup>3</sup> In the DESI 2016, Austria is part of the running ahead cluster of countries: countries who score above the EU average and whose score grew faster than that of the EU as a whole (in comparison to the DESI 2015). Other running ahead countries are Germany, Estonia, Malta, the Netherlands and Portugal.

The key connectivity challenge is to ensure rural NGA coverage, given the country's geography. To this end, Austria is implementing an ambitious funding scheme to increase NGA coverage, using the proceeds of spectrum revenues. Austria's National Broadband Strategy 2020 supersedes DAE targets in several aspects to achieve 70 % coverage of ultrafast-broadband (100 Mbps downstream) in metropolitan areas until 2018, with 99 % coverage of ultrafast-broadband for all households in Austria until 2020. While the Austrian Broadband Plan is quite comprehensive, it could benefit from specification of investment needs. To this end it is also worth noting that although fixed-line operators have in recent years upgraded their legacy copper and coaxial cable networks, current market share of fibre-based access networks (FTTH and FTTB) is well below the EU average (7% versus 18.7%).

Despite an overall better than average supply-side situation in broadband, the uptake of fixed and mobile broadband connections is each respectively below the EU average. This notwithstanding, 81% of households in Austria have at least one type of broadband connection (fixed, mobile or both), which largely corresponds to the EU average (80%). It should also be mentioned that Austria is a country with relatively high fixed-mobile broadband substitution (16% of households only have mobile broadband at home, which is well above the EU average of 8%). The take-up of high-speed fixed broadband seems to be particularly low in Austria: only 21% of fixed broadband subscriptions are for high-speed broadband as opposed to a 30% EU average. Austria still has to fully transpose the Cost Reduction Directive<sup>4</sup> which could help to speed up broadband roll-out.

## 2 – Human capital

On Human capital, Austria has moved up considerably, from 14<sup>th</sup> place among EU countries in DESI 2015 to 8<sup>th</sup> place in DESI 2016. The digital skills of the wider population are above the EU average: 81% of Austrians use the Internet and around 64% of Austrians have at least basic digital skills, well above the EU average of 55%. This notwithstanding, as in other countries, the digital divide issue is still present in Austria when it comes to age and the level of education of the user. E-inclusion therefore remains a challenge. When it comes to the specialised ICT segment of the labour force, only 4% of Austria's workforce is made up by ICT specialists. This basically corresponds with the European average. Austria ranks high considering the number of graduates holding a degree in science, technology, engineering and mathematics (STEM). This notwithstanding, as remarked in the 2016 European Semester Country Report, Austria does have comparatively fewer STEM graduates at Masters and PhD level than comparable industrialised countries. This could limit its ambition to further develop as a high technology economy and become an innovation leader.

Austria is, and has been for several years, aware of the importance of digital skills for the labour market and for social integration generally, and also of the challenge of eInclusion. For example, Austria has introduced a national digital education strategy "*efit21*", which focusses on the integration and use of ICT in Austrian educational institutions. Its goal is to enhance the quality of digital education, to teach digital skills to facilitate success on the labour market, and to help integration in society (eInclusion, media skills). There are also targeted programs in place. The project "*Learn forever*" for example, which is being co-financed from the European Social Fund (ESF), aims to improve the digital competences of educationally disadvantaged women. There is also a focus on women and older workers in the '*Qualification for employees*' scheme (also ESF co-funded), which includes strands to improve digital skills.

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<sup>4</sup> Directive 2014/61/EU of the European Parliament and of the Council of 15 May 2014 on measures to reduce the cost of deploying high-speed electronic communications networks (OJ L155, 23 May 2014, p. 1)

The draft '*Digital Roadmap Austria*' includes a comprehensive digital skills strategy. Several specific actions are proposed to increase the digital competencies of the population in their private and professional lives with a number of specific educational measures both for youth and adults, and in particular for women, to tackle eInclusion, to increase the use of ICT and to ensure a high level of digital skills for the labour market. Austria expects to deal with demand for ICT specialists and thereby raise its competitiveness by teaching digital skills to young people from an early age, by providing extensive eLearning programmes, by enabling youth participation in various digital programmes (such as "Sparkling Science", "Citizen Science", "Open Innovation", "Research Internship for Youth" and several initiatives on media science) and by encouraging youth towards an ICT/STEM study programme.

Austria also intends to optimise the deployment of broadband and WLAN connections in schools and to develop financing models, including social tariffs, for digital equipment used in schools (tablets, notebooks).

Austria is not yet one of the 13 Member States which have National and Local Coalitions for Digital Jobs. These multi-stakeholder partnerships developed to enhance digital skills at national, regional or local level can complement centralised initiatives for digital skills.

### **3 – Use of internet services**

Austrians score above the European average when it comes to the more practical uses of the Internet, e.g. internet banking (61%) and online shopping (68%). Austrians are also among the most active cross-border shoppers in Europe. This indicates a general trust in online services and confirms good digital skill competences. However, Austrians seem to make less use of the Internet for classical entertainment purposes (music, videos, games, TV) and make few video calls.

### **4 – Integration of digital technologies by business**

Austria ranks 10<sup>th</sup> in DESI for the Integration of digital technologies by business. Businesses in Austria are ahead of the EU average in some specific uses of digital technology. For example, Austrian companies are the leading users of e-invoicing in Europe. The number of SMEs selling online is still lower than the EU average, notwithstanding a modest year-on-year growth of 2 percentage points. However one of the most digitised sectors in Austria is tourism, where Austrian SMEs are very active in selling to consumers in other countries and raising the average of cross-border trade relative to other European countries (10% of SMEs engaged in online cross-border sales versus the EU average of 7.5%). Austria has implemented measures to encourage the digitisation of industry. For example, since January 2014, federal authorities no longer accept paper invoices or pdf invoices. Contractors to the Federal Government have to provide their invoices in a standard electronic format. This is expected to lead to more efficient transactions with lower costs and is likely to have contributed already to Austria's top spot in the use of electronic invoices. The recently published draft "*Digital Roadmap Austria*" also contains various specific targets and objectives to encourage businesses to take advantage of digitisation. This includes measures to encourage and facilitate e-commerce, in particular cross-border. For companies operating in a relatively small country, cross-border e-commerce of course unlocks a much bigger market and has great economic potential. Another focus is the development of Industry 4.0. Measures include the setting up of an experimental factory in cooperation with industry and science professionals and also the setting up of endowed professorships.

## 5 – Digital Public services

Austria performs well when it comes to the use of digital technologies in public services ranking 6 in the EU overall. Digitalisation of public services has a huge potential as it saves cost, time and effort for users and providers alike. Austria seems to have recognised this potential and is above average for general indicators for the use of online services. It even shows significant year-on-year improvement, e.g. in Online Service Completion.

In view of these results it is not surprising that Austria was one of the first Member States to adopt comprehensive legislation on eGovernment in 2004, which was followed by various implementation measures.

Austria has an eID (the "Citizen Card Concept") for several years which allows for the authentication of a person's identity in electronic transactions with public bodies as well as for qualified signature of the person. This is needed to make interactions with public bodies both secure and traceable. Since the end of 2009 citizens are able to choose between two different citizen card options. One is a traditional chip-based card option, the other is a mobile phone solution called "the mobile phone signature". The latter was developed with support from the European Commission in the large EU pilot project on interoperability of electronic identities called "STORK". The European Commission's 2015 report on eGovernment in Austria identified a positive trend regarding the activation of mobile phone signatures. This trend is continuing and shows the growing acceptance of this technical particular implementation of the Austrian citizen card concept. As of May 2016 there are more than 650 000 active Mobile Phone Signatures in use and every month some 10 000 to 15 000 new Mobile Phone Signatures are activated. Since May 2015 the activation process is even easier; as of April 2016 a smartphone application can be used as an alternative for receiving the one-time-code (TAN) via SMS which further improves security, speed and convenience of use. Again, this development is a reflection of the prominent role of mobile communications in Austria's telecommunications market.

When it comes to eHealth, the beginning of 2014 marked the launch of the electronic health record, which is a system that allows patients and all healthcare providers access to data irrespective of location and time. This system is easily accessible by both the mobile and original version of the eID citizen card.

The draft '*Digital Roadmap Austria*' foresees to extend and improve existing digital public services (e.g. by enabling access from abroad and by further improving interconnection between existing services). It is also proposed to promote eProcurement by creating one single access platform for public procurement.

### **Highlight: Open Data**

In 2014 Austria received the annual United Nations Public Service Award for the Open Government Data Portal (data.gv.at). In the category "Improving the delivery of Public Services", Austria was awarded 1st place for the nationwide Open Government Data Portal (data.gv.at) by the Federal Chancellery of the Republic of Austria. The portal is a unique platform for providing a comprehensive database of freely accessible national government data. The awarding jury pointed out that Austria was an inspiration and a model for other countries.