#### Digitalisation Report

#1

Digitalisation for growth and futureproofing





## NOW for tomorrow



"The measures we are taking will build a strong foundation for our economic comeback. By working together to implement them, we will put Austria ahead again."

The "pandemic year" of 2020 brought us the worst economic recession for decades and had a huge impact on some of Austria's key industries. Along with the Federal Government's support for affected businesses, which has been very generous in comparison with other countries, digital transformation is also proving essential in helping many companies to cope better with the crisis and make a fresh start.

Now it's a question of finding a strategy for building on the drive for digitalisation that our country has experienced over a very short period, and making the most of it to ensure a successful comeback for the Austrian economy.

The Federal Ministry for Digital and Economic Affairs (BMDW) is playing a key role in implementing digital transformation. With our initiatives and projects, we are setting the country's course for a successful future.

Our proposed measures are soundly based but also agile: the Digital Action Plan Austria is being developed and continuously refined in close cooperation with experts and stakeholders in the field. In large part due to the pandemic year 2020, it is now clear to the general public that digitalisation is an essential driver for growth and futureproofing. Digital transformation is not only bringing new growth and jobs but also cutting bureaucracy and making many things easier for businesses and ordinary people. The measures we are taking will build a strong foundation for our economic comeback. By working together to implement them, we will put Austria ahead again.

In the light of this, Austria's first Digitalisation Report clearly illustrates, firstly, just how important it is for the economy and jobs in Austria that we make a success of digital transformation; secondly, where we stand in comparison with other countries; thirdly, exactly what kind of digitalisation projects the federal ministries are currently putting in place. Successful digitalisation will not happen of its own accord – it needs us all to work together now to ensure that growth, wealth creation and a promising future can secure a strong comeback for us all.

#### Dr Margarete Schramböck

Federal Minister for Digital and Economic Affairs





## Digitalisation for a brighter future



"Climate protection and digitalisation are the key factors in ensuring a resilient and innovative future for Austria as a business centre."

The year 2020 was dominated by the biggest health and economic crisis in recent history. COVID-19 and its impact on all our lives pushed many other things into the background. However, we must not lose sight of the fact that, even during the coronavirus crisis, there was no let-up in what is probably the greatest challenge of all for the medium term – the climate and biodiversity crisis. In fact, 2020 was the warmest year in Europe since records began. So time is running out!

To mitigate the economic impact of the crisis, the Austrian government put in place some comprehensive aid packages.

At the same time, it was clear right from the start that ensuring a sustainable and climate-friendly future must be at the heart of our management of the crisis. The European Union is pursuing a "twin transition" policy, meaning that climate protection and digitalisation must both play a key role in revitalising the economy, and that they go hand in hand.

It's essential to take the necessary steps today to make Austria's economy and society more resilient and ready to face future crises. Making the right investment now will secure Austria's position as an attractive place to do business and safeguard green, futureproof jobs for tomorrow. We must take advantage of the opportunities and possibilities that digitalisation opens up to build a better future – and that includes the energy turnaround, the mobility turnaround, protecting nature and expanding the circular economy.

Because the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK) has such a broad area of responsibility, digitalisation is the common thread that offers the potential for trying out and deploying digital technologies in all kinds of areas of application – from climatefriendly freight transportation to the use of artificial intelligence in protecting biodiversity. This interaction between climate protection, digitalisation and innovation will be good for Austria's industry, businesses and jobs and therefore for its future as a business centre.

I am convinced that, if we are to make Austria climate-neutral and a cleaner and better place to live by 2040, as well as getting our economy moving again, then it is essential that we address both climate protection and digitalisation at the same time. Only then will Austria become a leader among European countries.

#### Leonore Gewessler, BA

Federal Minister for Climate Action, Environment, Energy, Mobility, Innovation and Technology

### Achieving more together

The Austrian government's new Digitalisation Fund and the IT consolidation policy show how, when it comes to digital transformation, more can be achieved together. Michael Esterl and Eva Wildfellner, who are both members of the government's IT Consolidation Steering Committee and Digitalisation 2022 Taskforce, report on the goals and expected impacts of the two initiatives.

Eighty million euros has been allocated to the new Digitalisation Fund for both 2021 and 2022. What will the money be used for?

*Esterl:* It can be used to fund interdepartmental projects which are intended to support either the government's IT consolidation policy or the expansion of services for both businesses and citizens that accelerate processes and increase efficiency.

#### Why is action needed in connection with the government's IT consolidation policy?

*Esterl:* Consolidated processes are necessary if we are to enable people to work effectively and to a high quality in the government environment; this infrastructure is essential to help them fulfil their responsibilities. Because we support projects that affect all departments, we can often provide a single solution for them all. This is already paying off: take the examples of e-forms, ELAK (the e-filing system of the Austrian Federal Ministries), electronic document delivery and websites such as the business service portal and *oesterreich.gv.at*.

*Wildfellner:* Providing this kind of interdepartmental service centrally is important because it makes use



**Michael Esterl** Secretary General of the Federal Ministry for Digital and Economic Affairs

"Achieving digital transformation together is the critical success factor for Austria's long-term competitiveness and the state's future capacity to act."

of synergies. After all, ministerial IT departments are increasingly preoccupied with their own specific digitalisation projects. The example of dealing with the pandemic has shown us how IT systems often need setting up or adapting quickly. So it's important for the people working in a ministry's specialist IT department to be able to rely on a central, highly reliable infrastructure so that they can concentrate on defining and meeting their own requirements.

#### Who decides which projects should benefit from the Digitalisation Fund?

*Wildfellner:* The Digitalisation 2022 Taskforce is responsible for evaluating and prioritising the projects. The aim of the Digitalisation Fund is not only to set new standards but also to take account of the numerous existing standards and baseline components and shared services.



**Eva Wildfellner** Secretary General of the Federal Ministry for Arts, Culture, the Civil Service and Sport

"It's vital for the government to have a standardised and efficient IT landscape to ensure that the public administration system is sustainable and innovative and can cope with complex demands in the interests of Austrian citizens."

What role does IT consolidation play in enabling innovation in public administration?

*Esterl:* It's an important factor for success. It's vital for the government to have a standardised, secure, user-focused and efficient IT landscape if the public administration system is to be modern, flexible and innovative and set the benchmark for other European countries. IT consolidation is not just an internal preoccupation but has a very positive impact on the user-friendliness and innovativeness of the public administration system.

*Wildfellner:* IT consolidation is a prerequisite for making full use of the benefits of digitalisation. IT technology can play an important role in driving forward research and innovation.

But every time it is used, we need to make sure that the system is set up for the benefit of individuals and the community at large. "Leave no one behind" has to be our motto. Vital elements of the state such as democracy and the rule of law can be supported and made more effective by using this technology. Its areas of application are many and varied, and they have the potential to impact on many aspects of public administration. Both the processes within administrative departments (internal and external services) and the way they communicate with Austrian citizens (keywords: participation and transparency) are being shaped by digitalisation. Of course, we have to pay special attention to developing the potential and skills of our employees, who are the key to deploying and using the IT technologies effectively. To that end, we are working very hard to provide targeted training programmes.

#### What are the first actual steps being taken to bring about IT consolidation?

*Esterl:* The first consolidation measures are projects to create a common video conferencing solution for government departments, a single Service Desk and centralised management of software licences.

*Wildfellner:* At the same time, consolidating the government's IT landscape in terms of providing and developing services centrally is also on the agenda – everything from workplaces and networks to file management, cybersecurity and computer centres. It's important for the individual departments to be freed up from routine tasks such as customer care and maintaining servers, so that they can dedicate themselves to department-specific digitalisation tasks and their own specialist information systems.

*Esterl:* Our common goal is for the services that are created as part of IT consolidation to be introduced by the various federal ministries in their areas of responsibility when the time is right for them. The end result should be that all federal ministries are using the same standard IT services but at the same time can continue to use and develop their own specialist applications.

#### So, when it comes to digitalisation, we can achieve more together, even though the requirements may differ?

*Wildfellner:* We're all in agreement there. The coronavirus crisis in particular made the importance of managing digitalisation properly even more obvious. Ensuring that digital transformation is planned strategically is vital, not just for coping with the immediate crisis but also for ensuring that it is implemented sustainably, there is a paradigm shift in attitudes and state capacity is maintained in the future.

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# Austria as a digital country

#### Facts & figures

Source: accenture, Digitalisierung - Konjunkturmotor in der Krise [Digitalisation - driving the economy during the crisis], June 2020 By the year 2035, the use of artificial intelligence (AI) should enable Austria to generate additional net domestic product worth over



42%

of all Internet connections in Austria are gigabit-capable. The number has tripled in the last 18 months. Source: breitbandatlas.gv.at € 1 billion invested in digitalisation will generate a further

€ 1.2 billion

Source: accenture, Digitalisierung – Konjunkturmotor in der Krise [Digitalisation – driving the economy during the crisis], June 2020

#### Introduction of artificial intelligence by businesses

51%	Austria
42%	EU 27

use at least one form of AI technology.

37%	Austria, <b>Top 3 in EU</b>
25%	EU 27

use at least two forms of AI technology.

20%	Austria
18%	EU 27

plan to use Al in the next two years. Source: ec.europa.eu, 2020 Investment in digitalisation has a positive effect on the whole economy.

The current coronavirus crisis has clearly shown businesses the importance of having basic digital capability – for many small and medium-sized companies (SMEs), it was even essential for their survival. Source: Digitalberatung 48%

of Austrians under the age of 30 use mobile payment methods. Source: Mobile Payment Report 2019

## € 800 million

was the value of goods sold by m-commerce (bought via mobile phone). Source: Statista 2020

The success of digital transformation is bringing Austria an annual increase of 1.9% in GDP and 20,000 new jobs.

15%

of online sales in 2019 by Austrian SMEs were cross-border (EU average: 8%). Source: DESI 2020 Austria is clearly **NUMBER 1** in the D-A-CH region for the

use of e-government Source: eGovernment Monitor, 2020

81%

of users of the cloud believe it is important for digitalisation of their business. Source: KPMG Cloud Monitor, June 2020



Two-thirds of Austrians were very satisfied with the way that dealing with the authorities online worked during the coronavirus crisis. Source: eGovernment Monitor, 2020

## € 3.1 billion

can be saved by consistent digitalisation and implementing an inter-organisational system on the once-only principle (see page 14). Source: accenture, Quantifizierung Digitalisierungseffekte [Quantifying the effects of digitalisation], 2020

## Digitalisation for faster growth and futureproofing

The potential of digitalisation to bring about growth in the economy and create jobs is now more important than ever. However, new online public administration services are also making a significant contribution to Austria's success. New business models, new ways of creating wealth, new innovative strength for the whole country: digitalisation has proved to be an essential driver for growth and futureproofing. Digital transformation is not only changing the way we live and work but also having an extremely positive effect overall on growth in the economy and new jobs. A study called "Digitalisierung – Jobmotor in der Krise [Digitalisation – driving jobs during the crisis]" that was carried out by accenture on behalf of the BMDW (Federal Ministry for Digital and Economic Affairs) in 2020 sums up the main findings:

- → Moving towards digitalisation not only increases businesses' productivity and efficiency but also boosts growth in national economies. The results of European studies show that increasing the level of digitalisation in a national economy can bring about growth ranging from 0.4% to 1.9% per year. The accenture study shows that taking the weighted average of all the simulations gives a growth effect amounting to an extra 0.9% on GDP per year.
- → WIFO, the Austrian Institute of Economic Research, estimates that expanding digitalisation in Austria could result in additional growth in em-

#### Successful digitalisation generates potentially





ployment of up to 0.4% per year. That equates to potentially nearly 20,000 extra jobs a year thanks to digitalisation.

→ According to the simulated calculations, the use of artificial intelligence (AI) alone could result in a potential additional increase of 1.6% in economic growth per year by 2035. That equates to additional net domestic product worth over 7 billion euros per year. Experts say that using AI could increase the productivity of workers in Austria by up to 30%. For Austria, that would represent potential additional growth in GDP of up to 3.6 billion euros per year. Cumulatively over ten years, the effect would be an increase of almost 83 billion euros in GDP, calculates the accenture study.

→ In addition to the positive effects on competitiveness and productivity for businesses, investing in digitalisation provides a stimulus for the whole economy. In the short term, investing in digitalisation can lead to an increase in productivity because of the lower unit labour costs in the economy. In the long term, digitalisation boosts the competitiveness of entire sectors and therefore of the whole national economy. → According to findings by WIFO, the multiplier or leverage effect of investing in digitalisation in Austria is about 2.2. That is to say, every euro that is invested generates a further 1.2 euros in the economic system. If 1 billion euros is invested in digitalisation, this would mean that a further 1.2 billion euros of economic activity would be stimulated by that investment, concludes the accenture study. A comparison of investment in different areas of activity shows that investing in digitalisation has one of the highest long-term beneficial effects on the economy.

#### Big opportunities for "the little ones"

Something that is especially important for Austria, as a country of SMEs, is that digitalisation is a particularly effective lever for success at small and medium-sized companies. During the current coronavirus crisis, for example, digital marketing channels have often been essential for their survival.

However, the data shows that the potential for digitalisation among Austria's SMEs is far from exhausted. Digitalisation also has a direct impact on turnover because it boosts innovative strength: according to the experts at accenture, those companies which were early adopters of digitalisation achieved growth in turnover within just a few years that was up to twice as high as those which lagged behind when it came to introducing digital technologies. The "digital dividend" from being a leader in innovation is significant for the whole country as a centre for innovation.



"Because official processes can be performed more quickly thanks to digital transformation measures, the resulting time savings and legal security lead to increased productivity for businesses."

#### Higher growth thanks to effective digital public administration

Digital transformation is an opportunity to completely rethink our bureaucracy. Targeted digitalisation can increase the efficiency and effectiveness of public administration systems and significantly improve interaction between the state, society and the economy. With faster processes and greater transparency, a modern digital administration system can help business people to achieve their goals sooner, increase their productivity and operate even more successfully in the international arena.

For example, thanks to the once-only principle, corporate data only has to be reported once, and after that it can be transferred between administrative departments. The data is not stored centrally but is exchanged efficiently between authorised bodies using a standard interface and in compliance with data protection regulations. The more widely the infrastructure is implemented and the more use cases there are, the more value will be gained from the once-only principle. According to recent estimates by the management consulting company accenture, potential savings of 1.6 - 1.9 billion euros per year, and an indirect potential economic benefit of 2.5 - 3.1billion euros, could be achieved by consistently applying the once-only principle for companies across the whole country.

#### Digitalisation supports sustainable business management

Austria's green economy has already achieved significant results in sustainable growth – both in Austria and beyond.

In Austria, the entire "environmental production and services" sector had a turnover of 36.9 billion euros in 2018 and supported 183,000 jobs, according to a study by KPMG (Mit digitalem nachhaltigen Wirtschaften Wachstum und Zukunft sichern [Securing growth and the future with digital sustainable business management], 2020).

The study highlights just how important the potential gains from digitalisation are for sustainability and for achieving the ambitious European climate targets. Digitalisation is a key factor for success and a multiplier in sustainable business management.

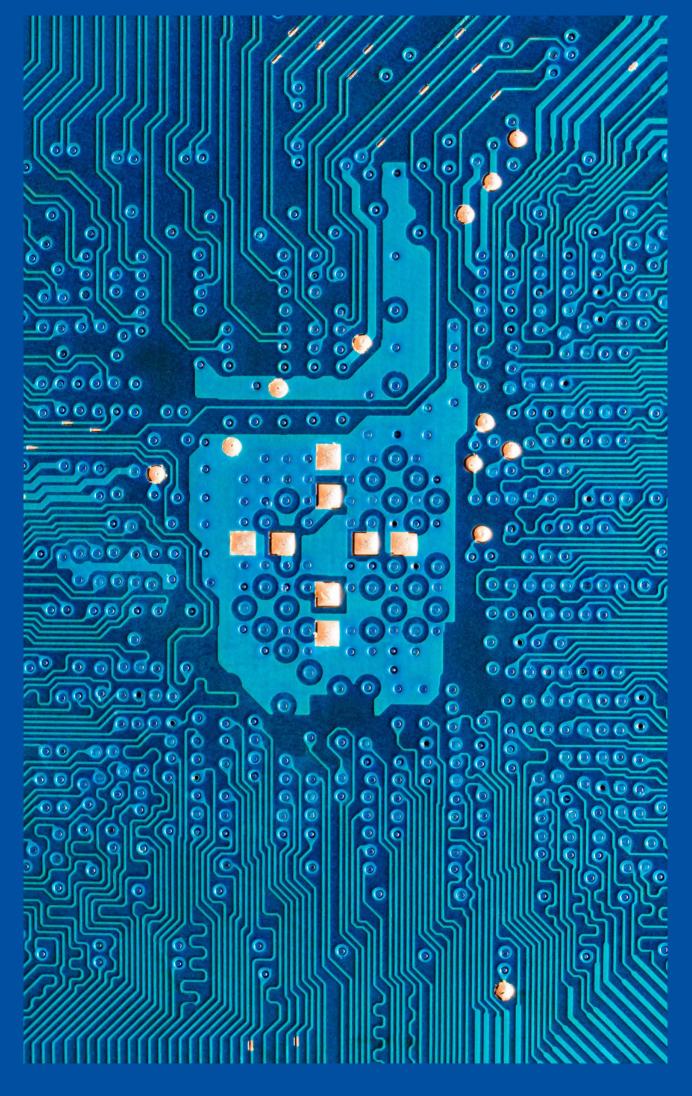
Converting to a circular economy would boost Austria's GDP by about 0.6% by 2030. The circular economy would also have a net effect on the Austrian labour market of about 0.6% by 2030 – equating to about 25,000 to 26,000 net new jobs.

One example of technological excellence and economic success in the environmental sector is Green Tech Valley in Styria. The companies in the Green Tech Valley cluster are growing by 14% per year, nearly twice as fast as other global markets at around 8% per year. 96% of the products and machinery made in Green Tech Valley in Styria are exported abroad.

This means that around 550 million tons of  $CO_2$  emissions around the world are being saved simply thanks to Styrian products from Green Tech Valley, says the KPMG study.

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## Digitalisation as a political priority

The Austrian Federal Government has made successful digital transformation in Austria and a modern digital public administration system its political priorities. The digitalisation of state services has already proved its worth during the coronavirus crisis. Two-thirds of Austrians were very satisfied with the way that dealing with the authorities online worked during the coronavirus crisis. Austria is clearly number 1 when it comes to the use of e-government services in the D-A-CH region (Germany, Austria, Switzerland), according to the eGovernment Monitor, 2020. Austria also enjoys a leading position in the European Commission's "eGovernment Benchmark 2020" report: it is joint third with Latvia among 36 countries that were studied – putting it among the top 3 nations in Europe, along with Malta and Estonia. Austria performs particularly well for being user-centric, scoring 96% of the total possible marks.

#### Digital Economy and Society Index

Austria's overall ranking in the European Commission's Digital Economy and Society Index (DESI) improved by one in 2020 compared with the previous year, placing them 13th. Austria's performance on e-government (ranked 8/28) and human capital (ranked 9/28) was above-average in 2020.

ec.europa.eu

#### eGovernment Benchmark

In the EU's eGovernment Benchmark report, Austria is currently among the top 3 countries, along with Malta and Estonia. Austria scores particularly highly for being user-centric and for the availability of digital public administration services. Austria is one of the leaders in m-government and electronic document delivery.

ec.europa.eu

Digital rankings: "Austria is out in front when it comes to digital public administration services."

#### Making Austria a leading digital nation

What lies behind these leading positions in international rankings is an ambitious digitalisation policy and a clear commitment by the Federal Government to digital transformation. The government's current programme states: "The Federal Government is committed to the goal of making Austria one of the leading digital nations in the European Union. Every citizen of Austria should be able to take full advantage of digitalisation in all areas of their lives, as independently, transparently and successfully as possible. Our active digitalisation policy is creating the required sociopolitical, economic, legal, infrastructure and democratic framework and supporting the development of digital skills."

#### Simple and modern public administration

One of the government's key concerns in this context is for digitalisation to make public administration simpler and "modern, efficient and citizen-centric – focused on people and their situation in life". "All citizens and companies should be able to conduct their official business online wherever possible (...) The aim is for processes to be handled online from end to end (from submitting information to receiving a final decision)", states the government's programme. An important factor in ensuring that the procedures are simple and time-saving is the use of the "onceonly" principle in administrative matters, for both companies and citizens: the government's aim is for all relevant data to only need to be submitted to the authorities once and then be available to download automatically on a range of official channels.

#### Agile overall strategy

The government decided that a combined approach should be taken to managing the digitalisation process and the numerous digitalisation projects in its programme. This launched a comprehensive and strategic process of consultation and consolidation (see page 18). The announcement by the Council of Ministers said: "Our aim is to move from numerous partial strategies to one overall strategy by putting in place an agile drafting process. This will give Austria a digital vision for the future based on political focus areas and design principles, key issues, prioritised objectives and an action plan that is regularly updated."

#### € 160 million for investment

A further announcement by the Council of Ministers in October 2020 set out the basic principles for the Digital Action Plan Austria and specific digitalisation measures. "Investment in a citizen-centric, service-oriented public administration system using contemporary digital infrastructure is investment in the future. It makes an important contribution to speeding up administrative processes and therefore to safeguarding jobs, prosperity and quality of life," says the government. A further 160 million euros has been made available for more digitalisation measures in 2021 and 2022. At least half of this funding is to be used for interdepartmental projects aimed at implementing the government's IT consolidation policy. The remaining funding is for interdepartmental projects to expand services for citizens and businesses and projects to speed up and increase the efficiency of administrative processes.

ing, defining milestones." It is on the basis of these fundamental political decisions that Austria is continuously developing its digitalisation strategy, under the leadership of the Ministry for Digitalisation – and implementing it across the board. It has been a big advantage that Austria's digitalisation strategy was designed to be agile, because the coronavirus crisis had, and continues to have, an impact on priorities and the pace of implementation. Nevertheless, Austria's objective of becoming a leading digital nation is more important than ever.

> "Investment in a citizen-centric, service-oriented public administration system using contemporary digital infrastructure is investment in the future. It makes an important contribution to speeding up administrative processes and therefore to safeguarding jobs, prosperity and quality of life."

#### **Digitalisation Taskforce**

Since then, government departments have been submitting specific project proposals and implementing them in partnership with the BMDW. The plans for governance of the digitalisation strategy were also set out in the announcement by the Council of Ministers in October 2020: "The Federal Chancellor, Vice-Chancellor, Federal Minister for Finance and Federal Minister for Digital and Economic Affairs will each assign one representative to the Digitalisation 2022 Taskforce, whose main responsibilities are understood to be as follows: selecting relevant projects, deciding on the allocation and use of fund-

#### eGovernment Monitor

Not only the EU's eGovernment Benchmark report but also the eGovernment Monitor – an annual examination of the e-government situation in Austria, Germany and the Switzerland – puts Austria in the lead in the D-A-CH region.

initiatived21.de

## Digital Action Plan Austria: the strategy

Successful digital transformation that brings wealth creation and jobs to Austria needs to be properly managed. In compiling its agile digitalisation strategy, the Digital Action Plan Austria (DAA), the BMDW is drawing on the knowledge of experts and stakeholders.

Digitalisation is not always handled in the same way. A look at other countries shows that widely differing political approaches are taken around the world. In the USA, for example, a few players in the digitalisation industry with nearmonopoly power dominate the scene and present a challenge to politicians and states worldwide. In China, by contrast, digitalisation has become an instrument by which the state controls its citizens. "We have a different vision for digitalisation. In Europe and especially here in Austria. We want digitalisation that is made-to-measure for people. Digitalisation that secures our business and social model for the future," says the Minister for Digitalisation, Margarete Schramböck.

#### Vision of a "responsible digital society"

It is this concern that shapes Austria's major digitalisation strategy, the Digital Action Plan Austria

(DAA). The vision behind it is not technological or purely economic but a sociopolitical one: a "responsible digital society" which sets its own trustworthy standards and provides a framework that supports innovation.

#### Strategic framework for digitalisation projects

One important benefit of having an action plan for successful digital transformation is that it provides a strategic framework for all the government's digitalisation projects and for stakeholder initiatives. "This framework guarantees that the digitalisation projects in different political areas are brought together so they can be implemented as a cohesive package of measures," explains Federal Minister Schramböck. Her department coordinates the Digital Action Plan Austria and works with the specialist government departments on content and projects relating to the various aspects of the action plan.

#### Drawing on high-calibre expertise

Making use of internal and external expertise is crucial here. More than 200 experts and stakeholders from the fields of public administration, academia and business have so far been involved in developing the Digital Action Plan Austria, including Professor of e-Governance Peter Parycek from the Danube University Krems, Professor of AI Sepp Hochreiter, Professor of Administrative Law Michael Mayrhofer from the Johannes Kepler University Linz, the "Security Forum for the Digital Economy in Austria" from the Kuratorium Sicheres Österreich KSÖ [Advisory Board for a Safe Austria] and representatives of all the specialist government departments and numerous Austrian companies.

Since July 2019, working groups and expert forums have been studying the various priority areas and identifying specific measures to be taken. In 2020, partial strategies were developed for "Data Usage", "Crisis Resilience" and "Digital Economic Transformation". For 2021, the plan is to prioritise "Digital Sustainable Business Management", "Digital Talent", "Digitalisation in Universities" and "Digital Tourism". The projects in the action plan are being implemented step by step, in parallel with the proposed expert review process.

### The "responsible digital society"

The Digital Action Plan Austria is based on clear core values: the vision of a democratic, digital Austria by 2050 that is a good place to live, free of companies with monopolies and control by the state. This vision for the future has been summed up in the concept of a "responsible digital society".

#### → BEST POSSIBLE CONDITIONS

The state creates the conditions that enable dynamic digital development of the economy. Digital skills reach a high level across the whole of society.

#### → COMPATIBILITY BETWEEN

**PRIVACY AND INFORMATION SHARING** Data is only made available and reused in compliance with data protection regulations. Privacy is a high priority.

#### PUBLIC ADMINISTRATION BASED ON THE LATEST KNOWLEDGE AND EXPERTISE

Recognised applications for new technologies increase the efficiency of government actions.

#### → CLEAR REGULATORY FRAMEWORK FOR GREATER LEGAL SECURITY

Experimentation and innovation zones make Austria a more dynamic business location and more attractive to investors, business people and researchers.

"We want digitalisation that is made-to-measure for people. Digitalisation that secures our business and social model for the future."



#### Digital Action Plan Austria: the complete process



#### Objectives

- → Create growth, jobs and prosperity
- → Improve quality of life for people in all age groups in all regions
- → Provide a secure, modern and accessible public administration service for businesses and citizens

#### Key principles

- → Make "System Austria" more crisis-resilient
- → Improve competitiveness
- → Position Austria as a centre for digital innovation
- → Make targeted use of data for the purpose of innovation
- → Design education and training to provide a digital competitive advantage
- → Deliberately promote cutting-edge digital research
- → Simplify digital communication between the state and its citizens

#### Action fields

- → The Digital Action Plan Austria identifies measures to be taken in those areas that are crucial to Austria's future
- → ECONOMY: More growth and jobs based on better use of data
- → STATE: More online services and reduced costs for businesses and citizens
- → EDUCATION, RESEARCH AND INNOVATION: A better future thanks to digital innovations that benefit everyone
- → HEALTH AND CARE: Better health and quality of life for all generations
- → SECURITY AND INFRASTRUCTURE: More data security and resilience for Austria as a whole

#### Digital Action Plan Austria in action

Around 30 projects are currently being implemented as part of the digitalisation strategy. Examples include:

- → Introducing digital identities, with ID Austria
- → Promoting mobile government, with oesterreich.gv.at and the "Digitales Amt" [Digital Office] app for smartphones and tablets
- → Digital platform for crisis resilience, with the Digital Team Austria campaign
- → Supporting lifelong learning, with fit4internet
- → Setting up Digital Innovation Hubs as the central point of contact for SMEs

#### Key themes of the Digital Action Plan at a glance

area for action 1 Economy	Digital transformation of the economy	
AREA FOR ACTION 2 Digital state	Public administration	Â
AREA FOR ACTION 3 Education, research & innovation	Art & culture, energy & climate, education	<b>S</b>
AREA FOR ACTION 4 Health	Health & care systems	÷
AREA FOR ACTION 5 Security & infrastructure	Foreign affairs, security & defence infrastructure	

#### Political objectives for the recovery in Austria

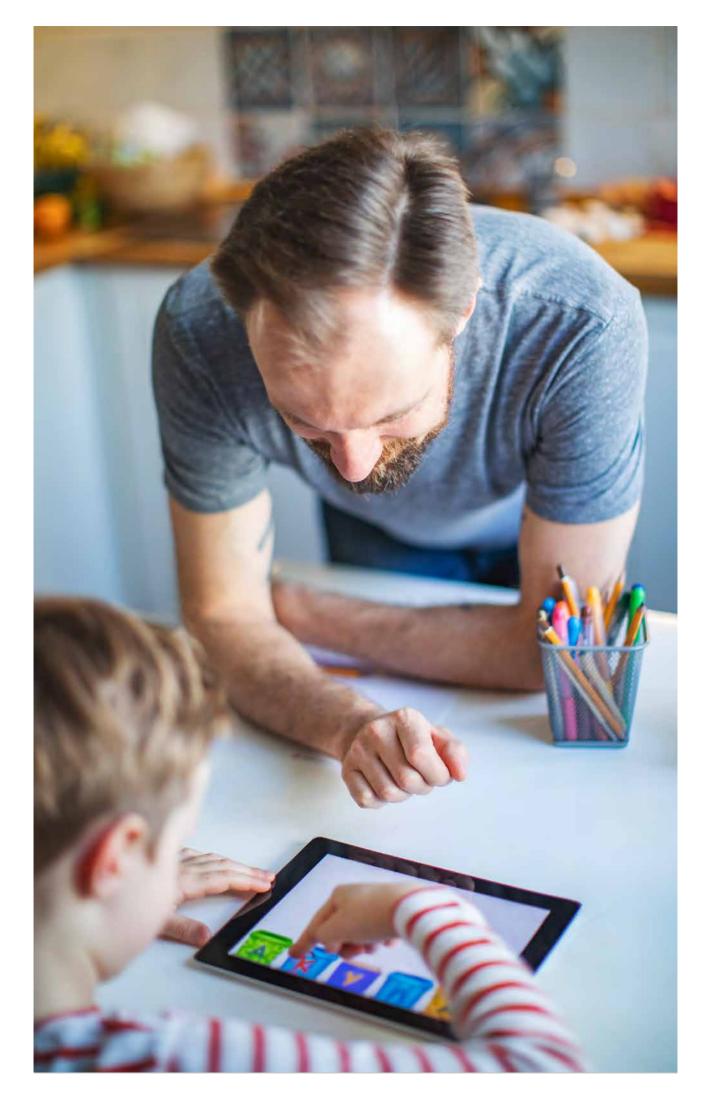
With the Digital Action Plan Austria, the BMDW is pursuing important political objectives for Austria that have also been confirmed by the Council of Ministers in the form of key principles for the DAA. Aspects that are of particular importance for the recovery and therefore for creating wealth and jobs include:

- → Digital transformation should make "System Austria" more crisis-resilient. Digitalisation should support decision-making in crisis situations, for example through simulations and data sharing.
- → Successful digitalisation should specifically improve the country's competitiveness and ability to innovate. Austria's small and medium-sized businesses in particular should benefit from digitalisation in accessing domestic and international markets.
- → Overall, digitalisation should be used to make Austria one of the leading regions for digital

innovation and experimentation. Businesses should be allowed to try out new digital technologies and applications under clear legal conditions in dedicated innovation centres.

→ In the light of the future need for specialist and skilled workers, digitalisation that supports lifelong acquisition of expertise and skills should also be accelerated. Education in STEM subjects (science, technology, engineering and mathematics) at universities should be more geared towards meeting the needs of businesses and science.

A study by Arthur D. Little on digital crisis resilience concluded that: "The areas for action in the Digital Action Plan Austria are the right ones and are essential for boosting crisis resilience." According to the business leaders who were questioned, the key measures are those designed to establish an agile regulatory environment, develop infrastructure and technology and increase digital competence.



## Crisisresilient learning and working

No-one would dispute that digitalisation has played an important role in helping the economy to weather the storm during the coronavirus crisis. Public debate has focused particularly on learning and working from home, and continues to do so. During the coronavirus pandemic, digitalisation has proven to be an important tool for managing the crisis. It was only possible to keep critical parts of the economy and society going, despite social distancing, thanks to digital tools, as shown in a study carried out by Arthur D. Little on behalf of Cisco and in collaboration with the BMDW (Digitalisation als Treiber zur Stärkung der Krisenfestigkeit Österreichs in Pandemien [Digitalisation – driving Austria's crisis resilience during pandemics], 2020). The study highlights in particular the "acceleration of the digitalisation of internal processes and business models" and the "sweeping aside of long-existing barriers, with increased acceptance of digital technologies among employees and customers".

Two areas where digital services were deployed in order to withstand the crisis were, and remain, a particular focus for public debate, because they affected large parts of the population: working from home and distance learning.

#### Working from home: a sound basis

In Austria, working online from home was not something that only began during the coronavirus crisis. A trend towards working from home had already been detected in Austria in earlier years, according to the ADL study. A survey in 2019 showed that the proportion taking advantage of the opportunity had doubled since 2017 from 42% to 86%. As a result of the coronavirus crisis, the working from home model was adopted by a far larger target group. WIFO calculated that an estimated 45% of all employed workers in Austria could potentially work from home.

A survey for the jobs portal Stepstone shows that working from home during the coronavirus crisis was generally very popular among employees: 53% of those questioned said they were happy working from home. 64% said that they would like to continue to work more from home even after the coronavirus crisis. Businesses lacking sufficient expertise to introduce working from home were helped by, for example, the Digital Team Austria initiative: for three months, providers of digital systems offered free support for tools to do with video conferencing, collaboration, cybersecurity and digital services that enabled people to work, study and conduct their everyday lives.

In January 2021, the Federal Government – with an eye to the future – adjusted the tax regulations around working from home, which continues to be an option: employees can use their tax return to claim up to 300 euros a year as professional expenses if they have to purchase certain equipment for their work. Furthermore, payments of up to 300 euros a year made by employers to offset their employees' additional expenses while working from home are tax-free.

#### Distance learning: digital transformation in education

Working and learning remotely also played a large role in education. Compared with other countries, the Austrian education system scores well in terms of technical equipment and training connected with digitalisation, and this was confirmed by recent data from the OECD.

However, there is still huge potential for expanding the use of digital technologies for teaching "Employees can use their tax return to claim up to 300 euros a year as professional expenses if they have to purchase certain equipment for their work. Furthermore, payments of up to 300 euros a year made by employers to offset their employees' additional expenses while working from home are tax-free."

purposes. Consequently, most Austrian schools were ill-prepared for the rapid switch to homeschooling during the first lockdown.

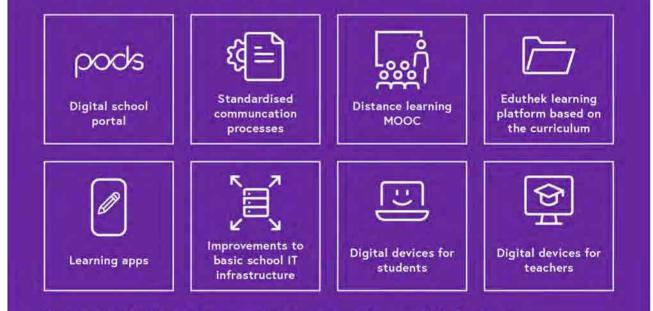
According to the Schools Barometer produced by the IBB (Institute for the Management and Economics of Education) at the University of Teacher Education Zug, during the first lockdown 47% of pupils received no live online teaching, for example in the form of webinars. 48% of schoolchildren sometimes found it hard to communicate with their school.

A study by the University of Vienna ("Lernen unter COVID-19-Bedingungen" [Learning in COVID-19 conditions]) in the spring of 2020 found that students wished that all e-learning could be organised on the same learning platform, and that there was consistent support available to help with structuring the learning day. Overall, the study found that the more competent students and teachers were in using digital technologies for teaching purposes, the more successfully they coped with distance learning. In the light of findings from academic supporting studies and practical experience during the first lockdown, the Federal Ministry of Education, Science and Research (BMBWF) developed a Digitalisation Masterplan and put together a comprehensive package of measures for digitalising education in schools.

The Digital School initiative, with its 8-point plan, is gradually being rolled out across the country. When the 8-point plan is fully implemented, digitalisation will be permanently embedded in the education system and a significant step forward towards crisis-resilient and futureproof education will have been taken. A further study by the University of Vienna after the second lockdown reported a considerable improvement in the communication channels and level of contactability.

In addition to the rollout of digital devices on loan from the state, federal regions or local authorities, the improvement was also thanks to accompanying measures to support school psychologists and quality management in schools.

#### The 8-point plan to digitalise education in schools



Digital School is being rolled out across the country on the basis of the 8-point plan.

With regard to university students, in an online survey for the BMBWF in early April 2020, three out of four of those questioned said that they were coping "very well" or "quite well" with the COVID-19 pandemic. For two-thirds, online teaching had improved significantly, even in this very short time since switching to distance learning, so that many of them judged it to be "very good" or "good". 54% said that they had already had some experience of e-learning at their university before the switch necessitated by COVID-19.

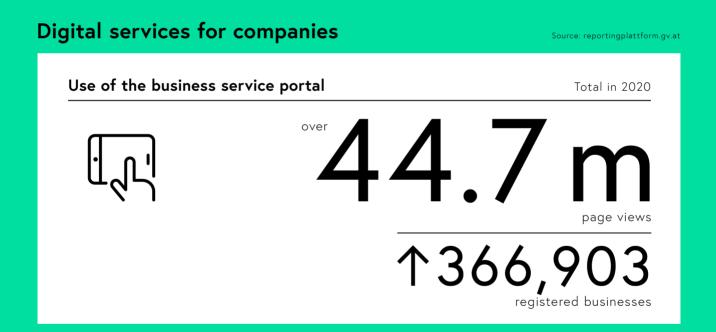
In retrospect it seems that universities, teaching staff, students and the support institutions coped well with the sudden switch to online teaching in the 2020

summer semester. Further internal university questionnaires and experience have shown that appropriate expertise in working in an online teaching and learning environment is required, and sufficient knowledge about how to implement online teaching from an educational perspective. That is why numerous universities have set up special training courses and support services for both students and teaching staff.

In order to encourage universities across the country to share their practical experience, the BMBWF organised two hybrid events on the theme of "Distance Learning - Lessons Learned" in September and a virtual workshop with experts in the field in December 2020.

### e-Government Dashboard

Austria is at the top of several European rankings for e-government. This is thanks to its successful expansion of digital public administration services and other services for individuals and businesses. The e-Government Dashboard provides up-to-date data and findings for a range of digital services. Austria clearly delivers, when it comes to digital services that save time, cut costs and put the whole country on the front foot.



#### Top 3 processes

#### 1. WEB-BE customer portal

Online information for BVA and Österreichische Gesundheitskasse (ÖGK) account-holders

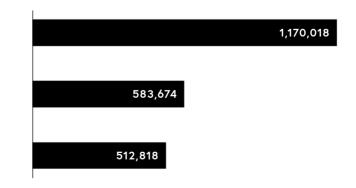
#### 2. My Mailbox

System for delivering official documents to businesses and private individuals

#### 3. SVA contributions account for authorised users

Online information for self-employed social security account-holders

#### Total number of process views in 2020



Source: reportingplattform.gv.at

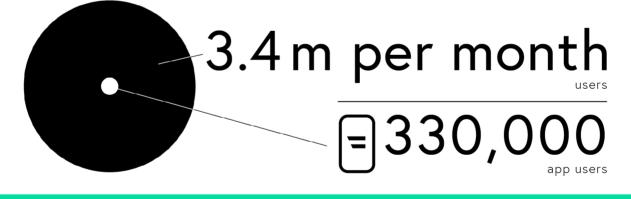
100 24

# Digital services for companies Source: usp.gv.et Use of electronic document delivery Data as of December 2020 Registered participants 639,546 Number of documents 2,024,175

#### Digital services for citizens

Determining the provided of the p

Registered users of *oesterreich.gv.at* and the Digital Office app



#### Top 3 situations where people use the services Total number of process views in 2020

#### 1. Birth

Everything about having a baby

#### 2. Motor vehicles

Everything about registering and deregistering motor vehicles, change of ownership etc.

#### 3. Driving licences

Everything about learning to drive and driving licences

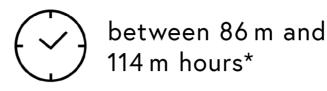
	0,120,011		
	3	,284,604	
0 000 5 47			
2,229,547			

#### Digital services for citizens

Source: reportingplattform.gv.at

#### Citizen-focused

Time saved for citizens



\* based on estimated time of 1.5 – 2 hours spent travelling to and from an office appointment and 57 million visits

The Digital Office, in addition to providing information about more than



situations in life, also gives access to numerous other services such as JustizOnline, theft reporting and My Mailbox.

#### Skills

Source: reportingplattform.gv.at

#### Digital occupations - an upward trend

Already 15% of apprentices

are training for digital occupations.



#### Federal government infrastructure

Source: reportingplattform.gv.at

The federal government IT landscape is diverse 92,000 workplace computers computer centers

2,000 applications

**96,000** telephones

33,000 smartphones

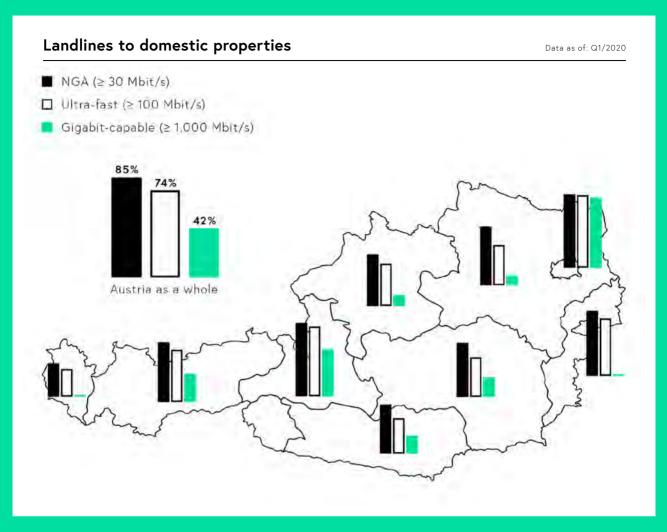
The central IT organisations in government departments employ over

1,700 staff along with



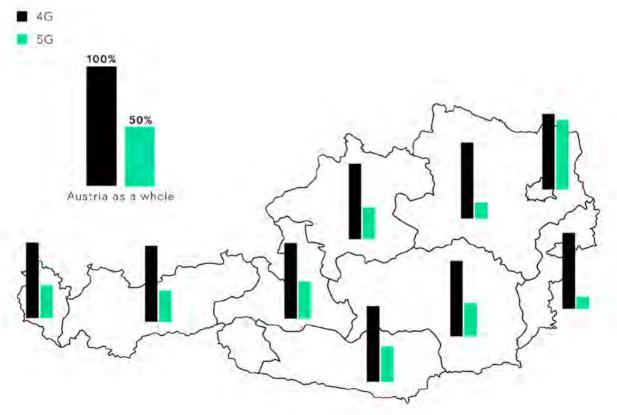
#### Austria's infrastructure as a business centre

Source: BMLRT



#### Mobile coverage of domestic properties

Data as of: Q2/2020



## NOW FOR

## USABILITY

## How Austria is achieving its digital transformation

Selected projects at government departments

# Going digital safely and together



"Austria should aim to be among the best in the world when it comes to digitalisation and e-government. To do that we need to provide the best possible environment and solutions." The demands on the state are increasing: the COVID-19 crisis has clearly demonstrated that the state must have the capacity to act effectively. At the same time, citizens and businesses rightly expect modern, easy-to-use services that save them both time and money. Digitalisation is a vital lever not only for increasing the state's ability to take control and act but also for making its systems more transparent and user-friendly. In this first Digitalisation Report for Austria, we show what progress has already been made and on what strategic basis the state is pressing ahead with digital transformation in Austria.

It is our role, as the taskforce of government Chief Digital Officers (CDO), to steer the strategy for digitalisation. Austria should aim to be among the best in the world when it comes to digitalisation and e-government. To do that we need to provide the best possible environment and solutions. We must drive our projects forward, purposefully and in a spirit of cooperation, because the full impact will only be felt if individual services and institutions work together. Synchronising the law and the technology when finding solutions will be one of the main factors for ensuring that digitalisation is widely accepted and successful. Increased cooperation at CDO level is crucial for successful implementation. That is what ensures that properly coordinated technical, organisational, logistical and legal measures are taken across all departments in public administration. That is what guarantees that digitalisation in Austria is used as effectively as possible in the interests of growth and future security.

Federal Government CDO Section Head Maria Ulmer Federal Ministry for Digital and Economic Affairs



"Digital solutions open up new ways of using resources more sparingly and more intelligently." Digital transformation has reached almost all areas of life and was given a further boost during the pandemic year 2020. This digital transformation will play a vital role in tackling the major challenges of the future, above all the climate crisis. Not for nothing are the green and digital transformations referred to as the "twin transition", because the one cannot work without the other. Whether it's a question of energy production, transport or establishing a circular economy, digital solutions open up new ways of using resources more sparingly and more intelligently.

For digital transformation to succeed in production, mobility and energy, it's essential to increase the innovative capability of all the stakeholders. In its programme, the Austrian Federal Government proposes further improvements to the framework conditions for encouraging innovation. This will support the development of new ways of creating wealth sustainably – nationally and internationally. Our environmental technology industry has already chalked up many successes and through its exports is also helping other countries, for example in renewable energies, waste handling technologies and air pollution control.

Austria has already achieved a great deal in its digital transformation and is constantly breaking new ground. Many of its successes are described in this Digitalisation Report. To ensure that digitalisation continues to be used successfully and sustainably and in the interests of climate protection, and that the instruments of the state are deployed in a targeted manner, the CDO Taskforce is an important inter-departmental coordinating committee.

Interim Deputy Federal Government CDO Head of Department Dr Franz Haider Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology

# Sustainable digitalisation

**Federal Chancellery** of the Republic of Austria

#### Going digital safely and efficiently

The Federal Chancellery (BKA) uses digital tools for modern personnel management, to promote cybersecurity and to press ahead with IT consolidation.



#### Personnel management for teachers in the federal states

The Federal Chancellery is implementing a programme called "Personnel management for teachers in the federal states" (PM-LL). The aim of the programme is for the federal states to use personnel management IT processes that are provided and managed by the state for handling the payroll for their regional teaching staff. The states collect data directly in the programme and also provide data about the distribution of teaching subjects and the structure of the education system that is then transferred into the federal IT process. The organisations cooperating on the PM-LL programme are the BKA (overall implementation), the BMBWF (for approximately 82,500 teaching staff in the federal states), the BMF (for approximately 49,250 retired regional teaching staff), the BMLRT (for approximately 1,900 agriculture and forestry teaching staff in the federal states), the BMKÖS and nine federal states. The transfer of data about teaching staff in the federal states and the rollout in the Education Departments of the federal states is taking place in stages. By the end of 2020, the data transfer and payroll for teaching staff in the federal states of Lower Austria and Styria, and for retired teaching staff in Vienna, had been successfully tested, ready for going live from 1 January 2021.

#### Updating the Austrian Cybersecurity Strategy

During 2020, the Federal Chancellery coordinated work on updating the Austrian Cybersecurity Strategy (ÖSCS 2.0). Experts on business, education, research and development and also from the government were all involved, and the requirements of a modern strategy were defined.

The aim was to build on experience gained from the first strategy dating from 2013, the Network and Information Systems Security Act (NISG) and the European Cybersecurity Strategies from 2013 and 2020, to create an updated framework that takes account of the challenges and opportunities presented by the cyber environment. The existing strategy is a success story which has resulted in the current cybersecurity status report for Austria, the state Government Computer Emergency Response Team (GovCERT) – the central point of contact in the event of cyber incidents in the public sector – and CERT. at, Austria's Computer Emergency Response Team for the private sector.

#### bundeskanzleramt.gv.at

### Signing of a single-metric licensing agreement with SAP

For many years now, the public administration departments have relied on software products from SAP for their central, system-relevant IT systems (such as personnel management and budgeting). In the context of the IT consolidation initiative, negotiations began at the end of 2018 about a nationwide licensing agreement with SAP (single metric). The idea was that, in the light of the General Secretaries' remit under "Key Technologies", this would better support the goals of IT consolidation than the existing separate agreements. Thanks to cooperation between the departments, a very good outcome to the negotiations was achieved.

The licensing agreement consolidates the existing complicated set of contracts into unambiguous, easy-to-use contractual terms. By combining the agreements in the interests of IT consolidation, the required number of licences were acquired, licence management was optimised and significantly better terms were obtained than under the previous separate agreements. The new licensing agreement also gives us years of planning security, makes for the efficient use of budget resources in the long term and, moreover, provides a sound basis for further steps towards digitalisation in public administration.

### Introduction of an information security management system (ISMS)

In spring 2020, the Federal Chancellery began to add a centrally controlled information security management system (ISMS) to its internal ICT security system. The aim of this is to put in place a complete structured package of measures, procedures and rules so that information security in the department can be defined, controlled, monitored and maintained at all times and continuously improved.

Work began on setting up the ISMS in summer 2020 as part of the project to increase cyber defence in the Federal Chancellery. It should be operational by the end of 2021 and it complies with the ISO standard 27001 that is widely used in the German-speaking world.



CDO Erich Albrechtowitz

### Digitalisation that works

We too were challenged by the pandemic during the last year and digitalisation projects were speeded up. Keeping the department working normally despite coronavirus and people working from home was at times very labour-intensive. I am therefore all the prouder that we were still able to accomplish most of our agenda and implement some important projects.

For example, more than 50,000 colleagues were connected to PM-SAP as part of the "Personnel management for teachers in the federal states" project. On cybersecurity, we worked with experts from all kinds of fields on a new strategic framework, ÖSCS 2.0, while a singlemetric licensing agreement with SAP supports the objectives of ICT consolidation within federal government. The project to set up an information security management system (ISMS) at the BKA increased the resilience of the Federal Chancellery.

Federal Ministry of Labour



CDO Andreas Moser

### Going online for services, specialists and jobs

The Federal Ministry of Labour (BMA) is a pioneer in implementing the government's ICT strategy. Both citizens and businesses benefit from faster processes and unbureaucratic support services.

### Better service for citizens

The opportunities presented by digitalisation affect our everyday lives - both private and professional - in many different ways. This has been made particularly clear by the COVID-19 pandemic. It showed the potential benefits of digital solutions and had the effect of significantly speeding up digital transformation, especially in public administration. The Federal Ministry of Labour (BMA) has supported mobile working in principle ever since it was first set up. This initial advantage enabled it to react swiftly and effectively to the rapidly changing situation in March 2020. Allowing people in public administration to work more flexibly enables them to offer a higher standard of service to Austrian citizens. Encouraging online working will therefore continue to be a focus for ICT at the BMA in future.

### BMA pilot project under the government's ICT consolidation initiative

The government's ICT strategy outlines a policy for ICT consolidation between the federal ministries, in cooperation with the Federal Computing Centre (BRZ). The BMA has played a leading role in implementing the government's ICT strategy, focusing on optimising processes. It produced a detailed concept, tailored to the needs of the BMA as the pilot department.

In partnership with the BRZ, a viable model for working together in the future was established which offers multiple advantages and services. The BMA, as the pilot department, has implemented all the relevant services at the Federal Computing Centre. This includes ways of accessing advanced technologies and centrally managed and standardised innovations, in the interests of boosting productivity. Having centrally managed solutions means that operating costs can be reduced and the commercial, licensing and legal risks are minimised. Standardised products and processes also increase ICT security, because



they provide better ways of monitoring hardware and software components, and the number of known interfaces that are open to attack is reduced.

Furthermore, standardised solutions also offer more flexibility when it comes to integrating or outsourcing new organisational units. When ICT consolidation is implemented in other departments, it should be possible to carry out organisational changes far more easily, quickly, dynamically and cost-effectively because of the experience gained in the BMA pilot project.

The BMA guarantees that all its staff can work from home. This innovative concept was introduced as a pilot project in connection with the Coronavirus Family Hardship Fund, in cooperation with the BRZ – and it soon proved its worth for the citizens of this country.

### eJOBmeeting: finding jobs and specialists online

Reducing unemployment while meeting businesses' need for workers is an important challenge for Austria. However, the traditional channels for advertising and finding jobs were also affected by the coronavirus pandemic. Many businesses are still looking for workers, despite the pandemic. Such businesses therefore need an alternative to the existing formats for matching workers to jobs.

The eJOBmeeting project is a new online tool offered by Arbeitsmarktservice Österreich (AMS -Public Employment Service Austria). As an online job exchange, it offers an alternative to traditional jobfinding services in Covid times. The AMS's eJOBmeeting is a virtual jobs fair that enables employers and people looking for work to introduce themselves in a modern, flexible way, regardless of where they are located – and in full compliance with data protection regulations. Even when the pandemic is over, eJOBmeeting will continue to offer a useful way of setting up virtual job fairs to find and pre-select candidates from all parts of the country. Following the successful pilot phase, the project is due to be rolled out right across Austria.

eJOBmeeting is helping the BMA to offer AMS's clients an efficient online service. It meets the needs of both employers and people seeking work in a way that is less labour-intensive and cuts costs. Furthermore, all the results are available in real time.

**Federal Ministry** for Education, Science and Research



### Educating for a digital future

The Federal Ministry of Education, Science and Research (BMBWF) is forging ahead with digital transformation in Austria's schools, universities and research centres and is supporting outstanding Austrian initiatives. Ř

Even in the first year of the programme,

**1,510** schools participated in the issuing of digital devices to pupils, i.e.

> 93% of the target group.

### Digital school: a plan for online teaching

The COVID-19 crisis gave digitalisation in education a big boost. The Digital School programme is now set to establish digitally-assisted learning and teaching across the board, and introduce innovative formats for learning and teaching in eight priority areas (see also page 27). The Digital School portal (PoDS) serves as the single point of entry for accessing the main educational and administrative applications and is intended to improve communication between teachers, students and parents or legal guardians. It has been in use at all state schools since December 2020 and is continuously being expanded. One of the main priorities for the Digital School programme is to issue digital devices to pupils in Year 5 (and in 2021/22 exceptionally also in Year 6). This ensures that the educational and technical requirements for IT-assisted teaching at Secondary Level I have been met. Even in its first year, this initiative has reached over 1,510 schools, i.e. 93% of the target group.

### Universities: focusing on digital and social transformation

In addition to the goals and projects in its service agreements, the BMBWF has reserved 50 million euros in its university funding budget for 2019–2021 for a competitive tendering process on the theme of "Digital and social transformation in university education". Even though expanding and developing IT facilities and infrastructure have been among the department's priorities for universities for many years (e.g. supporting open-access and "open education" projects, promoting blended learning and e-learning formats), this is the first bidding process that is explicitly dedicated to digitalisation – in line with its strategy and the slogan "digital as well (!) in everything they do". The projects are due to be completed by 2024 (see also the Universities Report 2020).

### Research: expanding infrastructures

In the field of research, having competitive framework conditions, access to international and European research infrastructures and e-infrastructures are all of great importance. That is why the BMBWF is continuing to develop existing instruments and measures (such as the research infrastructure database) and is making provision for refurbishing some large-scale research infrastructures.

Access to large-scale international research infrastructures is essential for both fundamental research and applied research and development (R&D). In addition to maintaining its existing memberships (BBMRI, ESRF, EMBL, ILL, CTA etc.), the department is considering participating in, or being a member of, new initiatives geared towards major societal challenges (for example in the fields of climate, geology, biodiversity, aerosols).

The department is actively involved in platforms and networks to do with societal change, for example the European Time Machine Organisation working on artificial intelligence and cultural heritage, the Consortium of European Social Science Data Archives (CESSDA) and the European Holocaust Research Infrastructure (EHRI).



CDO Iris Rauskala

### Getting closer to 21st century skills

The COVID-19 crisis has presented everyone involved in the education and academic world with huge challenges in terms of maintaining learning and teaching at schools and universities. At the same time, though, this year has provided an opportunity for digitalisation like no other before it.

We have moved a huge step closer to "21st century skills" and are finding that we are not entirely defenceless in the face of the crisis, at least in the education system. In 2021, our main priority must be to continue teaching basic digital skills and ensuring that institutions at all levels of education are properly equipped. **Federal Ministry** of European and International Affairs



CDO Sonja Harreither

### Digital services without boundaries

Digitalisation is also an area of special interest at the Ministry of European and International Affairs (BMEIA). It speeds up complex work processes, especially where people are separated by geography or space. The Heimflug (Flight Home) platform that it helped to set up, to look after thousands of Austrian citizens abroad in the biggest-ever repatriation operation, was a perfect example. For consulates, the fact that people can now apply online for certificates and services is particularly useful. Since 1 September 2020, the descendants of victims of the Nazi regime have been able to acquire Austrian citizenship by submitting a written declaration.

In order to offer this service in an efficient and user-friendly way, the BMEIA worked with Vienna's Municipal Department 35 to prepare an online questionnaire. The questionnaire has so far been successfully completed over 13,000 times.

### Crisis management without borders

The aim of the digitalisation projects of the Federal Ministry of European and International Affairs (BMEIA) is to provide Austrians abroad with the help they need, and important services, quickly.

### Working from home & digital work processes

At the BMEIA, which is active all around the world, the principle of "anywhere, anytime, from any device" has been the rule for years when providing equipment for working online. To ensure that the full range of services for citizens could continue to be provided even during lockdown periods, the equipment provided to staff for video conferencing and working from home was further improved. Due to the rapid rise in the number of calls to the BMEIA call centre, that infrastructure was also upgraded and modernised. For example, BMEIA employees working from home are now able to receive calls made to the call centre, by using "softphone" software.



### Biggest repatriation operation in the history of the BMEIA due to the COVID-19 crisis

During the repatriation of Austrian citizens due to the COVID-19 crisis, the BMEIA's online crisis and contact database, and the Heimflug (Flight Home) platform that was developed in close cooperation with various partner organisations, played a key role: they enabled about 7500 Austrian citizens to be safely brought home on 39 special flights from 29 different countries, and thousands of others who were abroad to report their personal situations and receive help, all over the world. This database is regularly upgraded in an evaluation process.

### Digitalised visa system is more user-friendly

The BMEIA visa system is bound by certain legal requirements which determine the extent to which it can be automated. In the VIS 2.0 project, the following legally permitted online processes have been implemented:

→ electronic application processing with digital supporting documents (applications are no longer handwritten but completed online, with intelligent menu guidance),

- → procedural documents (such as decisions) are generated directly in the program,
- → application tracking (creating a way of checking the status of an application online at any time)
- → an electronic feedback form for assessing customer satisfaction.

Firstly, this has made the system easier for citizens to access and use and, secondly, the administrative processes have been streamlined.

### Online questionnaire about citizenship for the descendants of victims of the Nazi regime

In October 2019, as an expression of its historical responsibility towards the victims of National Socialism and their descendants, the Austrian Parliament unanimously approved an amendment to the Austrian Citizenship Act: as of 1 September 2020, the descendants of victims of the Nazis can acquire Austrian citizenship by submitting a written declaration.

In order to offer this service in an efficient and user-friendly way, the BMEIA worked with Vienna's Municipal Department 35 to prepare an online questionnaire. The service has been used intensively: the questionnaire has so far been successfully completed over 13,000 times. **Federal Ministry** for Digital and Economic Affairs

### Digitalisation for wealth creation and futureproofing

The flagship digital projects being introduced by the Federal Ministry for Digital and Economic Affairs (BMDW) are setting Austria on course to enjoy further growth and wealth creation. Digital transformation is a vital lever for making life easier for businesses and citizens. me"). In 2020, over 40 million people visited *oesterreich.gv.at*, calling up over 97 million web pages.

The free Digital Office app offers an even more convenient way of using the *oesterreich.gv.at* services while on the move. Since its launch in March 2019, the app has been downloaded from app stores over 300,000 times. This centralised way of accessing m-government means that all the government's online information services are available at all times, from anywhere.





### The first port of call for contacting administrative authorities: oesterreich.gv.at and the Digital Office app

In *oesterreich.gv.at*, Austria has a comprehensive online platform that enables its citizens to download information or conduct their official business from their computers or mobile devices, at any time and from anywhere ("Bringing public administration to

### Ö-Cloud initiative boosts the data economy

added value. According to KPMG's Cloud Monitor, 47% of businesses in Austria employing over 20 people use cloud-based solutions, but in Germany that figure is already 76%. One reason for the reduced use of cloud services is lack of trust: 45% of companies do not use cloud services because they are worried about people having unauthorised access to sensitive company data. 98% therefore expect providers to comply with the European Data Protection Regulation (GDPR).

The BDMW's Ö-Cloud initiative is designed to meet exactly that expectation. It creates the necessary standardised framework to ensure that our companies' valuable data is kept as securely as possible and that consequently better use can be made of it to generate wealth and jobs: under the Ö-Cloud initiative, providers of cloud services in Austria are obliged to comply with strict and transparent European security standards, legal security requirements and the GDPR.

#### oe-cloud.gv.at

### ID Austria makes it safe and simple to contact the authorities

To make online contact between citizens, businesses and public administration authorities simple and secure, the BMDW is working with the Federal Ministry of the Interior (BMI) to implement ID Austria – a secure electronic proof-of-identity system. This will enable business and administrative processes to be handled quickly and securely on the basis of a modern, digital infrastructure.

What's important is that users always determine for themselves exactly which personal data may be shared with others digitally. In addition to offering complete data sovereignty and legal security, ID Austria also provides protection from identity theft and cybercrime. Thanks to this further development of the mobile eID ("Handy-Signatur"), people will be able to have their personal ID also available in digital form in future.

### Business service portal even more user-friendly

The BMDW offers a major service portal specifically for businesses: the business service portal (USP) gives users direct access to 70 services. Following the first major redesign in 2020, which made it even easier for businesses to find their way around the portal and use all its features, now the log-in template and functions for selecting or switching company have also transitioned into the new design. So now the USP makes it even clearer to businesses how to register for their personal workspace, "My USP", and the service has also been optimised for use on a mobile phone.

usp.gv.at

### Digitalising public administration the modern way

The BMDW's Reporting Platform makes it possible to see the status of the various major digitalisation projects at a glance and identify specific steps that need to be taken. Decision-makers can therefore use the Reporting Platform from wherever they are to find the up-to-date statistics they need to manage the project and ensure that digitalisation proceeds successfully.



CDO Wolfgang Ebner

### A plan and a strategy for digitalisation

The BMDW is leading the process of digital transformation in public administration and is therefore very concerned to operate efficiently and transparently, on the basis of a clear strategy.

With the Digital Action Plan Austria, we have created a solid foundation for doing so: it presents a digital vision for the future based on political focus areas and design principles, key issues, prioritised objectives and an action plan that is regularly updated, agreed and built upon. This is how we are ensuring that digitalisation in Austria is used to best effect for growth, jobs, prosperity and a brighter future.

reportingplattform.gv.at

# Knowledge check

What opportunities does successful digital transformation offer Austria as a business centre? What kind of framework conditions is it particularly important for the state to put in place if digitalisation is to succeed? What chance does Austria have in the international race to become a digital centre? Experts in the field tell us what's really important for digitalisation in Austria to succeed.

Emeritus Prof. Dr Christoph Badelt Director of the Austrian Institute of Economic Research



"Austria is in a strong position in Europe when it comes to e-government. The public sector can be an important driver of digital transformation by offering

digital services for citizens and businesses. If Austria is to develop into a leading digital nation overall, improving digital skills among the wider population will be key. Along with general digital skills, we must not lose sight of the growing need for ICT specialists. Here, the education system has a lot of leverage. Finally, the digital turnaround will be most successfully achieved if it is combined with infrastructure that works well." **Prof. Edeltraud Hanappi-Egger** Rector of Vienna University of Economics and Business



"If we look across our national borders, we can see that the countries that are ahead on digitalisation & innovation set great store by using knowledge and

research. These can deliver important answers and findings about how to handle digital transformation, explore its potential and in this way drive new developments. There is a great deal of academic expertise at Austria's universities and research institutions. Provided this is drawn on appropriately, it will certainly help the country to become one of the top regions in Europe for innovation."

**Prof. Peter Parycek** Head of the E-Governance in Business and Administration department, Danube University Krems



"Accomplishing digital transformation in business and public administration requires not only sociotechnical innovations but also, and especially, legal

innovation. I'm referring not only to legislative principles and making laws that take account of digitalisation, but also to creating legal innovation spaces where digital services can be tested out and regulated." **Prof. Sepp Hochreiter** Director of the Institute for Machine Learning, JKU, ELLIS Board Member



"New machine learning technologies are the driving force behind the AI revolution which will fundamentally change our lives and our economy.

While many of these new technologies were invented in Europe, they have mostly been put to commercial use by America and China. That needs to change. We now have a unique opportunity to shape the global AI revolution along European lines and to use AI to build on Europe's leading position in production and processing industries. Like other European countries (Germany, France, Italy, Finland, Belgium), Austria, too, can take advantage of this opportunity by having an AI university in the ELLIS network, with strong links to business."

#### Private lecturer Dr Monika Köppl-Turyna Director EcoAustria



"If digital infrastructure and services are to be used to maximum effect not only in normal times but also in times of crisis, the key requirements are for them

to be universally available, for people to be e-literate and for there to be sufficient willingness to invest. This will help ensure that important digital services such as applications for working from home, cloud computing, VPN, e-government, e-health and e-teaching are more widely used. That's why it's important not only to support sponsorship schemes on the supply side but also to increase take-up on the demand side (for example with vouchers), combined with relevant educational programmes." **Prof. Petra Schaper-Rinkel** Vice-Rector for Digitalisation, Karl Franzens University Graz



"Successful digital transformation requires us to look ahead and embrace visions which don't simply aim to reproduce what others are doing but actively shape

the future of society. Interdisciplinary fundamental research into digital options and experimental projects combining the worlds of academia, politics and business are essential. Success will be guaranteed by an innovation policy that puts democracy at its heart and therefore makes freedom, equality and civil rights the irreducible design principles behind digital change."

**Prof. Wilfried Sihn** Director of Fraunhofer Austria Research GmbH



"Digital transformation will enable Austria to access new markets for sourcing and selling goods by having a global presence on digital platforms. If we use

automation and technology relatively extensively in industry while at the same time keeping the degree of cross-linking between process chains low, the potential for increasing efficiency can be exploited and significant cost savings made. New digital business models will enable longer product lifecycles. New opportunities will arise for Austria as a digital centre in the international race: new key industries can be opened up and existing ones expanded. The "Made in Austria" quality seal will need to be reinterpreted in a "digital version."

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Federal Ministry of Finance



CDO Dr Manuel Zahrer

### Our services support growth

With our chatbot, Fred, we have reached a new level of digitalisation in financial administration. Friendly Fred has become very popular since he was "born" in September 2019. He saves us all time and money. Thanks to our greatly simplified and improved customer service, capacity at Austrian companies has been freed up to give a further stimulus to growth in our economy. In the interests of the economy and jobs, we are also applying the methods of predictive analytics and are using our DAI-SY program to fight fraud, so that honest taxpayers are protected and companies can operate in a fair competitive environment. All this puts our financial administration service well ahead compared with other countries.

# The bill for digitalisation adds up

The Federal Ministry of Finance uses digital tools to provide services that save time for citizens and companies. Fairness in taxation is also even better protected digitally – so that the bill adds up for everyone who pays their taxes honestly.

### Chatbot Fred is there to help



Chatbot Fred represents another important step towards the digitalisation of customer services at the

financial authorities. The aim is to maintain a high quality of service even as the number of customer enquiries continues to grow all the time. At the moment, private individuals and sole traders are the main target group for our learning chatbot, but in future small and medium-sized companies (SMEs) should also be able to obtain information from Fred. For SMEs in particular, it means being able to access information faster, more easily and without spending time and money on bureaucracy. This is achieved, on the one hand, by using machine learning to provide automated answers to the most common enquiries and, on the other, by offering the option of live chat with the financial authorities – just in case Fred isn't yet able to answer your question.

Fred received 33,600 calls in the first six weeks of 2021 alone. He conducted 21,500 conversations with people who made enquiries. In future, Fred will also be able to process personal data, in compliance with data protection regulations. That means that soon even automated information will be personalised and even more tailored to the taxpayer in question, for example information about the status of a tax return.

### chat.bmf.gv.at



### Digital customer services save time and money

Customer service is an important matter in efficient, citizen-focused public administration. The BMF combines digital tools such as FinanzOnline with automated information services. If necessary, the caller is passed seamlessly to professionally trained, friendly members of staff. This happens in the same way for everyone in Austria, via a multimedia contact centre. It means that everyone can choose the best kind of personalised support for them: via live chat, email or phone call, or an office appointment. Our regional offices remain open, but customer service is also available online or over the phone.

If tax advisers enter their client's tax ID number over the phone, they can also be automatically put through to the right team to handle that file. Appointments for discussing specific topics can be booked in advance online. So waiting times are now a thing of the past – and when you make your appointment you will be told which information you need to bring to the office. On the BMF's cocreation platform e3lab (*www.e3lab.at*), clients are invited to participate online to help develop and improve the services.

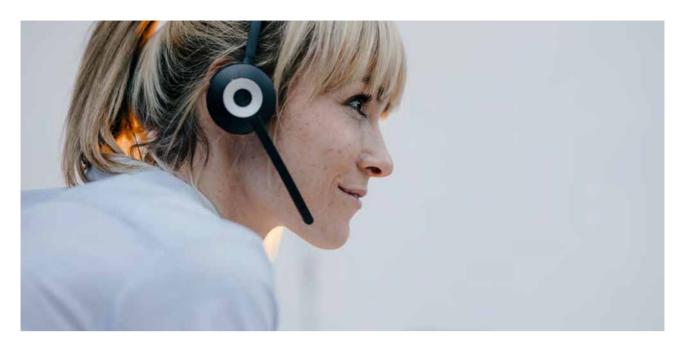
### Fighting fraud online

The way that digitalisation can provide a valuable service in combatting fraud was demonstrated in the case of coronavirus aid payments. In order to spot as quickly as possible any potential misuse of the support funding that had been budgeted for, appropriate measures to prevent fraud were incorporated when the various aid schemes were being set up and when they paid out. And with good reason: if even 1% of the claims were fraudulent, it would have resulted in the loss of 380 million euros. That's why taking these steps made sense, not only as a preventive measure but also from the point of view of fiscal policy.

When putting them in place, the ministry was able to rely on existing expertise and infrastructure relating to predictive analytics. A high degree of automation, enormous technical expertise and earlier investment in staff and developing innovative technologies meant that Austria was able to make the aid payments far faster than other countries, without overlooking the need to prevent fraud. Despite thousands of applications, it took on average less than two weeks from making the initial application to receiving the first payment.

### DAI-SY safeguards fairness in taxation

DAI-SY stands for data analysis and information system – and is the name of a new anti-fraud system being used by the financial authorities. The software was developed in a research project at the BMF. DAI-SY uses new automatic recognition methods and analyses the content of documents to expose typical patterns of fraud. The system helps to reduce distortion of the market due to dishonest practices and thereby creates fair conditions and growth opportunities for all Austrian companies. Federal Ministry of the Interior



## Going digital for security

With its digitalisation projects, the Federal Ministry of the Interior is boosting security by sharing data online and providing up-to-date training.

### More rapid deployment

Under the "New control centre" project, the Federal Ministry of the Interior (BMI) has merged around 100 police control centres into nine regional headquarters for receiving emergency calls and deploying officers. At the same time, accompanying software support was introduced in the form of a nationwide operations control and communication system (ELKOS).

All nine regional control centres use ELKOS to access four georedundant computing centres, giving them fail-safe reliability and enormous flexibility in handling the deployment of officers. All nine regional control centres have been in operation since 21 July 2020 and ELKOS is in use across the whole country. The system is already set up with interfaces to other organisations for sharing data online and receiving text-based emergency calls. There are plans for further steps in digitalisation, such as setting up a central platform for text-based emergency calls for use by all the emergency services in Austria. It is hoped that in future there can be a Europe-wide system for text-based emergency calls – similar to the standard European emergency phone number, 112.

### Interpreting services by video

A new booking function has been incorporated in the Interpreters' Register (DMR) for calling on the services of interpreters remotely, by video. Officials can use the DMR booking system to reserve available videoconferencing endpoints. Integrating the department's PCs via an internal chat client enables them to be used even more flexibly. When the booking has been successfully made, the interpreter automatically receives an email telling them to which nearby official videoconferencing endpoint they should go. Using video interpreting sessions has clear benefits for the officials handling the case, the parties involved and also the interpreter. For the authorities, the increased volume of cases handled, combined with reduced travel time, results in lower costs, shorter processing times and a win-win situation for all concerned.

### New standards in cyber-training

Digital transformation is opening up new opportunities for the police and security agencies in particular, but it also presents them with new challenges. That's why, in 2020, the BMI upgraded its electronic learning platform (e-Campus), to which all its nearly 40,000 employees have access, and equipped the e-learning centre with new production systems. By working with expert partners, online training courses on specific topics such as "Using IT safely", "Cybercrime and cybersecurity" and "GDPR" were developed and are already available on the BMI's e-Campus for use by all officials.



The courses address important aspects of cybersecurity in everyday working life, such as password security, encryption, malware and social engineering techniques. These topics are increasingly also being included in basic police training. The phenomenon of cybercrime is also being highlighted in specialist working groups for instructors, especially those on criminal law and criminology. A specialist working group on "Digital operational communication" has been set up to look at how to use digital operating resources. The BMI is also working on plans to modernise its training programmes.



**CDO Section Head Hermann Feiner** 

### We're going digital – but safely!

Austria enjoys a very high level of security and a quality of life that is envied by many. To maintain these standards and even raise them if possible, we must consistently take advantage of the benefits of digitalisation in policing, as elsewhere.

Making Austria fit for the future depends not only on digitalising official channels, for example online reporting of thefts, but also on measures to enhance the capabilities of our front-line officers, such as introducing a standardised, modern operations control system across the country and making more use of e-learning. The BMI's motto is: we're going digital – but safely!



CDO Martin Hackl

### That's how digital change works!

Digitalising the proceedings in court and public prosecution cases represents an enormous challenge because of the complexity of the different branches that are involved. I am therefore all the more delighted that the concept is now very widely accepted. The vital success factor is always to remain in close communication with the practitioners at court and public prosecutor's offices. That, I believe, is how digital change works.

With JustizOnline, we are now able to offer the benefits of digital justice directly to those involved in a case. Launching it is just the start of an ever-increasing range of online services.

### Making justice easy

The main objectives of the Federal Ministry of Justice (BMJ) in implementing its digitalisation projects are to bring procedures up-to-date and make access to justice easy and secure. This benefits both businesses and private individuals.

### Justiz 3.0 introduces online proceedings

With its strategic initiative Justiz 3.0, the BMJ – in partnership with all the occupational groups and professional bodies concerned – is working on making its processes fully digital and providing the necessary IT workstations at courts and public prosecutor's offices.

In order to conduct cases online, IT solutions are being prepared both for handling official internal processes and for managing files online. Online files will then be available at all times, with a finely tuned system of authorisations so that they can be efficiently read and edited in parallel. Reading files online not only saves time and effort for the parties in the case but also reduces the workload of Ministry of Justice employees.

When work on the rollout intensified last year, tremendous progress was made: by the end of January 2021, about 1000 Ministry of Justice employees at 42 offices were working with Justiz 3.0. They have handled over 70,000 cases exclusively online and conducted over 37,000 trials using digital files. That means that, already, 1.5 million documents with 7.5 million pages have not needed to be printed out or stored.

### bmj.gv.at

### Quick and transparent information thanks to JustizOnline

Citizens and businesses expect that a modern, transparent and user-oriented justice system will be able to answer their questions as quickly and simply as possible. The idea of JustizOnline is, firstly, that going to court will no longer be necessary and, secondly, that information and answers will be provided quickly. The chatbot "Justitia" guides people in search of information directly to the information and functions that are relevant to them. It can also answer simple justice-related questions.

Following the Justiz 3.0 pilot scheme and the introduction of the option of managing files entirely online, the process for viewing files electronically was completely revised (see above), improved and tailored to meet the needs of citizens. Now court files can be reproduced in full for cases handled online – including all legal documents, attachments and rulings by the decision-making body. This satisfies people's strong desire for information about the progress of their case and the current status of court proceedings. Searches of the Companies Register and Land Register can now also be carried out simply and directly online. Links and interfaces to other e-government portals, such as the business service portal and oesterreich.gv.at, mean that information about representation and authorisation now only needs to be updated in a single place.

For more information go to: **justizonline.gv.at** 

### Automatic processing of Companies Register documentation

Ever since the early 1990s, the Electronic Legal Communication system (ERV) has provided the main channel for electronic communication between the courts and professional representatives of the parties in the case. Although use of the ERV in relation to the Companies Register has been well established for many years, until now – apart from structured end-of-year reports – only PDF documents were sent to courts. Now the various kinds of application to the Companies Register have been structured so that in future these too can be automatically processed by the court. That saves time and reduces errors in submitting an application.

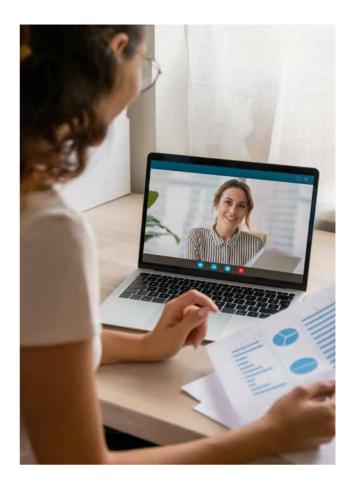
Following preparatory technical work in 2020, a pilot project began in February 2021 for submitting structured applications for changes to domestic GmbHs (private limited companies), and in the middle of 2021 this was extended to include founding and dissolving GmbH companies. Soon after, other kinds of application (relating to companies with a different legal status) will also be implemented in the Companies Register so that the process of registering a company start-up is straightforward and entirely online.



**Federal Ministry** for Arts, Culture, the Civil Service and Sport

### The state as a digital role model

The Federal Ministry for Arts, Culture, Civil Service and Sport (BMKÖS) is pressing ahead with using digital services, shaping digital transformation and making the associated changes to work and life in the federal administration system. It is serving as a role model in many different areas.



### Digitalisation supports results-based working

New and complex demands are increasing the need for data- and evidence-based decision-making. The concept of "results-based public administration" is a central management tool that has an important role to play. Introducing digital solutions has helped enormously when it comes to defining joint targets, measures to be taken and performance indicators - right across all areas of politics. Digital solutions are being used not only in day-to-day work but also in strategic planning for the future. Focus areas include agentbased modelling and simulation as the foundation for evidence-based policy-making, user-centric interfaces in digital processes and dashboards and their application at senior management level. The impact of using these technologies is the subject of regular analysis (the "Digital administration and ethics" project).

### Digitalisation in HR

In addition to its use in managing public administration, digitalisation also has a useful role to play in staff recruitment and development. For example, computer-based suitability tests are an important tool that government departments use in staff selection. Applicants are able to take the suitability tests online from home as a form of online assessment. The Job Exchange for the Republic of Austria is the main platform for online applications. Work is underway to introduce an IT-assisted onboarding programme.

> About **2200** courses have been changed into an online format.

Following the imposition of COVID-19 restrictions in March 2020, most of the educational services provided by the Academy of Public Administration (VAB) have taken the form of online training courses. Around 220 online courses in all kinds of different specialist areas are on offer – from basic training material to various leadership courses, innovation in public administration, performance management and language courses. Since November 2020, a new e-learning tool to prevent corruption in public service – "I am ANSWERable – it's a QUESTION of ethics" – has been available online.

### Going digital for new ways of working

Mobile methods of working will be a core element of the digital future for public administration. In a real-life laboratory project called "The future of work – hybrid working in Austria's public administration service", GovLabAustria, Austria's first innovation lab for the public sector, is working with civil servants and partners from the worlds of academia and engineering to examine how hybrid working can be adapted to meet the special requirements of public service and what this demands in terms of leadership, organisation and technology. Training programmes will accompany civil servants on their journey into the digital future.

### **Digital participation**

The department is working with experts in the fields of digitalisation and public participation to develop a new "Practical Guideline for Participation in the Digital Era" (by spring 2022) and (by spring 2023) an online service to help the federal government, federal states and local authorities to design, implement and evaluate participation projects.

### Digital stimulus for arts and culture

Digital technologies open up new possibilities for creative artists – from production processes to forms of display. For institutions of art and culture, these digital technologies have potential applications in archiving, presentation and education. Digitalisation also brings new opportunities for preserving and benefiting from our cultural heritage. In 2020, BM-KÖS provided 1.1 million euros of funding to support cultural institutions and artists in implementing innovative digital projects in all branches of the arts. In 2021, in partnership with all nine federal states, it is awarding funding amounting to a total of 2.5 million euros for projects under the heading "Call 2021 – art and culture in the digital arena". The Pixels, Bytes & Film programme also sponsors and supports innovative film projects with a digital focus.



CDO Felix Hauer

### Digital transformation – shaping the future

In order to benefit most from digital transformation, the civil service must adapt to the changing circumstances that result from the use of technology and also to the evolving needs and expectations of citizens, businesses, politicians and its own employees.

The opportunities presented by a digitalised public administration service are many and varied and must be developed in partnership with politicians, academics, business leaders and civil society. Public administration must take a goaloriented and pragmatic approach encompassing everything from the digitalisation of routine processes to the transformation of entire areas of activity thanks to the use of new technologies and processes.

# Austria as a digital branc on Österreich

The Digital Austria platform shows how digital transformation is being implemented in Austria – and what makes Austria stand out as a digital centre. It is particularly important for states to have a digital branding strategy in connection with the digitalisation process. One of the international pioneers in digitalisation in Europe is Estonia. On its E-Estonia platform *e-estonia.com*, Estonia demonstrates in exemplary fashion how to build a digital society and what services are required. On the other hand, Denmark promotes itself as "Europe's most digital country", tracing its digital success story on the digitaldenmark.dk platform and describing the services and solutions that it offers.



### The Digital Austria brand and platform

Austria is also highlighting its own digital credentials. In a statement by the Council of Ministers, the Federal Government established Digital Austria as "the government's initiative and umbrella brand for successful digitalisation in Austria." It set up the digitalaustria.gv.at platform. The government described its purpose as follows: "*digitalaustria. gv.at* showcases digital players from Austria and best practices from around the world. The website also serves as a knowledge database, telling people about government activity on digitalisation, one of its top priorities."

### Digital services and priorities

Since then, the Federal Ministry for Digital and Economic Affairs (BMDW) has been using the platform to document how Austria is progressing as a digital centre and what its special features are. The information available on *digitalaustria.gv.at* covers various different fields. As well as the Digital Action Plan Austria, the country's large-scale yet agile digital strategy, the platform also presents numerous projects and digital services that have put the country close to the top of European rankings for e-government (see pages 18 and 19). The platform also provides information about current priority areas for digital Austria such as the Digital School portal enabling successful online teaching (see page 27), the Ö-Cloud initiative for secure data management (see page 44) and Digital Team Austria, the initiative that helps businesses to switch to remote working.

### Strategy, raising awareness, the digital community

One important feature is that Digital Austria is a community platform which also invites institutions and businesses to present their own digital success stories there. The spectrum ranges from e-learning for hairdressers to artificial intelligence in industry. More and more "digital ambassadors" for Austria are seizing the opportunity to showcase their latest digital projects. In this way they are demonstrating how digital transformation in Austria has already reached the everyday lives of its citizens and businesses. The Digital Austria platform also offers useful information about digital tools and developments in the form of explanatory videos ("Digi-Wiki"). Recent studies have also confirmed the importance of digital transformation for the country as a business centre.

Digital Austria is the link between public administration, business and society and is intended to become the face of Austria as a digital country.

digitalaustria.gv.at

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#### **Federal Ministry**

for Climate Action, Environment, Energy, Mobility, Innovation and Technology



CIO, interim CDO Head of Department Dr Franz Haider

### Innovative ways forward

The Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK) is responsible for many aspects of life that are important for Austria's future. In all these areas, the BMK has projects for bringing about digital transformation.

### Managing digital change

The Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK) is responsible for many aspects of life that are important for Austria's future. In addition to the enormous challenges of climate change, environmental protection and the circular economy, vital infrastructure such as the energy supply and transport also fall within its remit. And the BMK is responsible for applied research and technology development, too.

Using digital technology has a crucial role to play in coping with all these challenges. In virtually all of the BMK's policy areas, there are exciting projects to make digital transformation a reality. Innovative strength and digitalisation are the main drivers of a sustainable future.

### Better environmental protection with EDM

Our electronic data management (EDM) system is constantly being developed as a way of combining online applications and databases to perform the complex documentation, recording and reporting tasks connected with environmental protection. As the register of rulings evolves on the EDM platform, it is providing easier access for users and a place where those rulings which have to be disclosed and brief project descriptions can be published automatically. Expanding the electronic authorisation procedure in the EDM is bringing increases in efficiency because authorisations are handled electronically without media discontinuity. The EDM user area can be used for secure, trackable communication and has advanced interfaces connecting it to the dual document delivery service of the Federal Computing Centre.



### Digital certification for waste transportation

Under the Waste Management Act, hazardous waste must be accompanied by certificates confirming that such waste will be disposed of correctly. In future, this will also apply to persistent organic waste. A pilot project is paving the way towards converting this as yet paper-based process to an entirely digital procedure.

Under a fully electronic certification system (VEBSV), electronically authenticated information will be entered in the EDM system (EDM = electronic data management for environmental protectionrelated data, see above) and made available for local authorities and inspection bodies to download from the moment when transportation first begins. The VEBSV system will also include a messaging system so that the companies involved can communicate online about the handling of waste transportation.

### Electronic rulings on emissions allowances

Under the Emissions Allowances Act (EZG), the BMK is responsible for administering the allocation of free allowances to airline and industrial plant operators as part of the EU's emissions trading system. Rulings on this are delivered electronically, in accordance with the e-Government Act. The first document deliveries were made in autumn/winter 2020. The approximately 170 EZG rulings passed so far in 2021 were all delivered electronically.

### Digitalisation at the Civil Aviation Authority

The Aviation group at the BMK is currently running several digitalisation projects. The BMK has been working with the Federal Computing Centre and an external partner to develop a web-based software solution for supervising activities in the aviation sector. The aviation audit tool LAT enables inspections to be carried out remotely for the first time, which saves resources, and data relating to safety supervision to be managed more efficiently.

The BMK is also developing a web-based software solution to provide digital support for background checks on aviation employees. This will enable the authorities and companies concerned to conduct all necessary processes efficiently and transparently.

### Going digital to innovate

The BMK is implementing numerous digitalisation projects to promote innovation. For example, it is working on an FTI (Fast Track to Innovation) programme about making better use of artificial intelligence in protecting the climate. The "Digital trademarks and samples" project at the Austrian Patent Office enables national and international trademarks and samples to be processed efficiently in a workflow that is digital from end to end. All paper files relating to current protective rights are being retrospectively digitised. Federal Ministry of Defence



### Digitalisation keeps us safe

The Austrian armed forces are prioritising the use of digitalisation to strengthen their capability. One example is language training, focusing on the specialist terminology that is relevant to security and the armed forces. Digital systems are also being used to provide information about careers in the armed forces and up-to-date catering services.

### Online language training

The many and varied international commitments of Austria's armed forces call for a range of different language skills at a high level. The necessary expertise is provided by the Language Institute for the Armed Forces at the National Defence Academy.

Thanks to the targeted use of digital tools, the Ministry of Defence (BMLV) is increasing efficiency and optimising the use of resources. The department's objective is to set up a centre of excellence – recognised not only in Austria but by the whole of the EU – for online language learning at the Language Institute for the Armed Forces, focusing on the distinguishing characteristics of specialist language relating to security and the armed forces. The required work processes, procedures, methodology and infrastructure are being digitalised and interlinked.

Digitalising the management of language training has already resulted in significant savings due to the reduced manpower requirement, less frequent business travel and the far lower cost of teaching materials. The Global Online Language Service (GOS) for the armed forces is expected to be in full operation by the end of 2023. It will provide language services encompassing language training and preparation for deployment, maintaining and extending language skills, language assessment and linguistic support, available worldwide and at all times.

### The armed forces online platform for the future

"Unser Heer" [Our Armed Forces] is a central information platform for everyone who has to perform military service or any Austrian citizens considering an apprenticeship with the BMLV. Users can find information, communicate and perform certain official procedures online.

Services range from information about military service placements and the criteria for partial fitness to further training courses, financial incentives to sign up as a volunteer and new training courses for military officers. Some e-government functionality (such as the mobile eID which can be activated by the BMLV in the course of the military service placement process) has already been implemented and this is being continuously expanded.

karriere.bundesheer.at

### **Reliability in catering**

The purpose of the armed forces' Catering Services User Account (VTA) is to record everyone who uses catering services by means of a turnstile installed at the entrance to the dining room. Individuals identify themselves by means of the access control media that are already used by the armed forces as part of the digital "Access Management System". A personalised RFID (radio-frequency identification) card is used for automatic and contactless identification of the user – and access is granted subject to the user being authorised to do so, and logged in their VTA. The following month, users are charged for the food they have consumed via the SEPA direct debit procedure. The use of food vouchers is being discontinued.

The system enables participants to use catering services anywhere in Austria with no further steps required. It simplifies the administrative work of employees in the catering services, as there is no need to keep a manual record of people using catering services or administer food vouchers. The increased transparency makes it easier to manage procurement, production and food preparation. This ensures that food is used more efficiently, and reduces food waste.



CDO Lt Gen Norbert Gehart

### More digital interaction

As a result of the COVID-19 crisis and the associated restrictions on face-to-face contact, many people have recognised the potential value of digitalisation for the first time. Many households made more use of online education services and digital communication with official bodies in one form or another. In addition to the basic digitalisation of the armed forces, many of the BMLV's projects are also rooted in these areas. The steps taken to digitalise language learning and to provide an information platform are leading to more online interaction. The option of activating a mobile eID during the military service placement process, in particular, will play an important role as a multiplier in Austria's digital transformation.

**Federal Ministry** of Agriculture, Regions and Tourism



CDO Section Head Dr Reinhard Mang

### The opportunities presented by a digital world

Digitalisation is changing our lives and enabling us to respond appropriately to rapid change. The past year has demonstrated this especially clearly. The use of digital technoloaies is becoming ever more important in the areas for which the Federal Ministry of Agriculture, Regions and Tourism is responsible: this is equally true of efforts to provide a citizen-centric and service-oriented public administration service and of the need for modern and sustainable methods in agriculture and forestry, flexibility in providing protection from natural disasters and new ways of connecting consumers, visitors and businesses. The expansion of broadband availability is playing an important role in making the opportunities presented by a digital world available to all and enabling people in all parts of the country to enjoy the same quality of life.

### Digital infrastructure and services make for strong regions

Digitalisation is an important instrument for bringing economic strength and a good quality of life to every part of Austria. The Federal Ministry of Agriculture, Regions and Tourism (BMLRT) is responsible for ensuring – through the broadband rollout, digital innovation in agriculture and online services for businesses – that digital transformation brings benefits for the whole country.

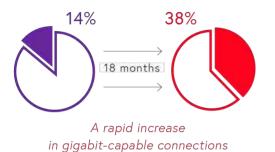
### Well-connected for growth and the future

An efficient, high-performance communication infrastructure is one of the most important prerequisites for successful digitalisation. The government's aim is therefore to provide fixed and mobile gigabitcapable connections across the whole country by 2030. The Broadband Austria 2030 initiative also includes targeted funding mechanisms for ensuring digital equality of opportunity between urban and rural populations. On the basis of the Broadband 2030 strategy, the Federal Ministry of Agriculture, Regions and Tourism (BMLRT) is developing the necessary funding schemes. These are designed to accelerate the nationwide availability of gigabit-capable access networks and the provision of symmetrical gigabit connections for public institutions and businesses in particular. The first invitations to tender will be issued in autumn 2021. The initiative is aimed at the federal states, local municipalities, public institutions, telecoms operators and SMEs. Everyone in Austria will benefit from this investment.

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The progress that is being made and the success of Broadband Austria 2030 can be measured by the number of Austrian households with gigabit-capable landline connections and 5G. The initiative comes under "Connectivity" on the Digital Economy and Society Index (DESI). Over the last 18 months, the number of consumers with gigabit-capable connections in Austria has risen from 14% to 38% (as of January 2021).

#### breitbandatlas.gv.at



### Better service, increased safety

Notification and reporting requirements are an important part of life for businesses and authorities involved in the mining industry. Being able to access accurate information quickly is essential, especially in the event of an emergency. Specific responses to both these challenges are being delivered by the BMLRT's "Digitalisation strategy for administration in the mining industry".

The department is encouraging companies to communicate online with the authorities when it comes to fulfilling their notification and reporting obligations. It should reduce the costs and effort required on the part of companies in order to comply with the Mineral Raw Materials Act and increase the efficiency of the administrative authorities. Miningrelated information for companies is presented in a digital format in such a way that companies can edit the data. Digital resources can also help with assessing the situation at a mine in the event of a crisis. It is intended that all this information will be made available to the general public as far as is legally permitted.

Work is currently being carried out under the "Digitalisation strategy for administration in the mining industry" on possible concepts for connecting it to other technical systems used by the department (for example, electronic data management relating to the environment).

### Digitalisation for agriculture and the economy

Digitalisation is also opening up new ways forward for agriculture. Modern technologies can be used to support resource-efficient production methods, better use of equipment and improvements in animal welfare – while reducing farmers' workload at the same time. To enable Austrian agriculture to benefit from these effects, a project called Innovation Farm is ensuring that the latest developments are put into practice as rapidly as possible. Digital technologies, trends and developments in arable farming, grassland management and indoor livestock systems are being trialled and implemented at locations in Wieselburg, Raumberg-Gumpenstein and Mold and on 20 more pilot and demonstration farms. The main stakeholders in the field of new technologies in agriculture – research institutions, interest groups, educational institutions, agricultural machinery and stable-building companies - are sharing their knowledge in a hands-on way. There are, for example, projects about site-specific fertiliser application, feed management, the use of sensors to rescue wild animals, animal health and the monitoring of tractor functionality.

By involving training organisations, the knowledge that is gained can quickly be put into practice. The Innovation Farm project is geared towards not only agricultural businesses but also consultancies and the manufacturers of agricultural equipment and software. The Innovation Farm project is part of the "Digitalisation of Agriculture" cluster that is sponsored by the state, the federal regions and the European Union under the LE 14–20 rural development programme.

#### innovationfarm.at



**Federal Ministry** of Social Affairs, Health, Care and Consumer Protection



### Going digital for better healthcare

In order to maintain and even raise the high standard of Austrian healthcare, the Federal Ministry of Social Affairs, Health, Care and Consumer Protection (BMGSPK) is increasingly relying on the latest technologies. The electronic notification system and digital vaccination certificate are two of the main projects.

### The electronic vaccination certificate

The electronic vaccination certificate ("elmpfpass") is one of the flagship projects in healthcare reform. It has numerous benefits for both citizens and the public healthcare authorities.

Doing away with paper proof of vaccination means that the days of forms getting lost or becoming illegible are gone. In future, the electronic documentation should only need to be supplemented in cases where only paper vaccination certificates (WHO forms) are accepted for travel to certain \*countries. Being able to send vaccine recommendations based on Austria's vaccination plan and automatic reminders about required boosters enables the government to play a more active role than previously in disease prevention.

### Central vaccination register

A key element of the elmpfpass scheme is the central vaccination register. A database is being built up that brings together important information about vaccinations in a standardised format. Only by having such a complete and rapidly accessible database is it possible to assess current rates of vaccination or identify potential gaps in vaccination take-up.

### Viewing your personal vaccination data

The original plan was to trial the technology for implementing this in a regional pilot project involving limited numbers. However, due to the pandemic and in preparation for the vaccination campaign to deal with it, the pilot project was rapidly extended to cover the whole country. The legal basis for the elmpfpass was established in parallel, so that the process of recording first vaccinations could begin with a trial run in autumn 2020. The nationwide rollout of the elmpfpass began at the same time. By spring 2021, several thousand vaccination centres had already been digitally connected to the central vaccination register via a variety of technical solutions. Progress with the vaccination rollout can be tracked on a daily basis on the Ministry of Health Dashboard. People can view their own personal vaccination data at any time via the ELGA portal.

### New functions

The additional functionality of the elmpfpass that has not yet been implemented, such as personalised vaccination calendars and reminders about forthcoming vaccinations, should be available nationwide in the near future. A mobile application (app) for citizens is also being planned and developed, so that they can access their electronic vaccination certificate via their smartphones.

In line with a Europe-wide initiative, the digital green pass should also be ready by about the middle of 2021. The aim is to use the data in the central vaccination register to issue digital vaccination certificates that can be used both for travel and for admission to certain settings, for close-contact services and for cultural events where people are gathered together. The electronic vaccination certificate will therefore make a big contribution to helping us return to normality.

### The Epidemiological Notification System, EMS

During the pandemic, the EMS has proven to be an essential data hub for the authorities and, with its inter-district, inter-state workflows, it permits end-to-end digital processes from laboratories right through to the EU and the WHO. While complying with the highest data protection standards, it provides a database for forecasts and dashboards that makes Austria one of the leading countries in Europe for digital solutions. The EMS delivers important information for use in generating the digital green pass and elmpfpass.



CDO Section Head Dr Brigitte Zarfl

### Digitalisation benefits everyone

We are systematically exploiting the potential of digitalisation to maintain our high standard of living and world-class healthcare system. Digital transformation projects in all areas of the Federal Ministry of Social Affairs, Health, Care and Consumer Protection (BMSGPK) are bringing benefits for people, businesses and the administration system. Be it by increasing the transparency of the pension system, expanding barrier-free services or providing quality-assured health information – digitalisation brings benefits for everyone.

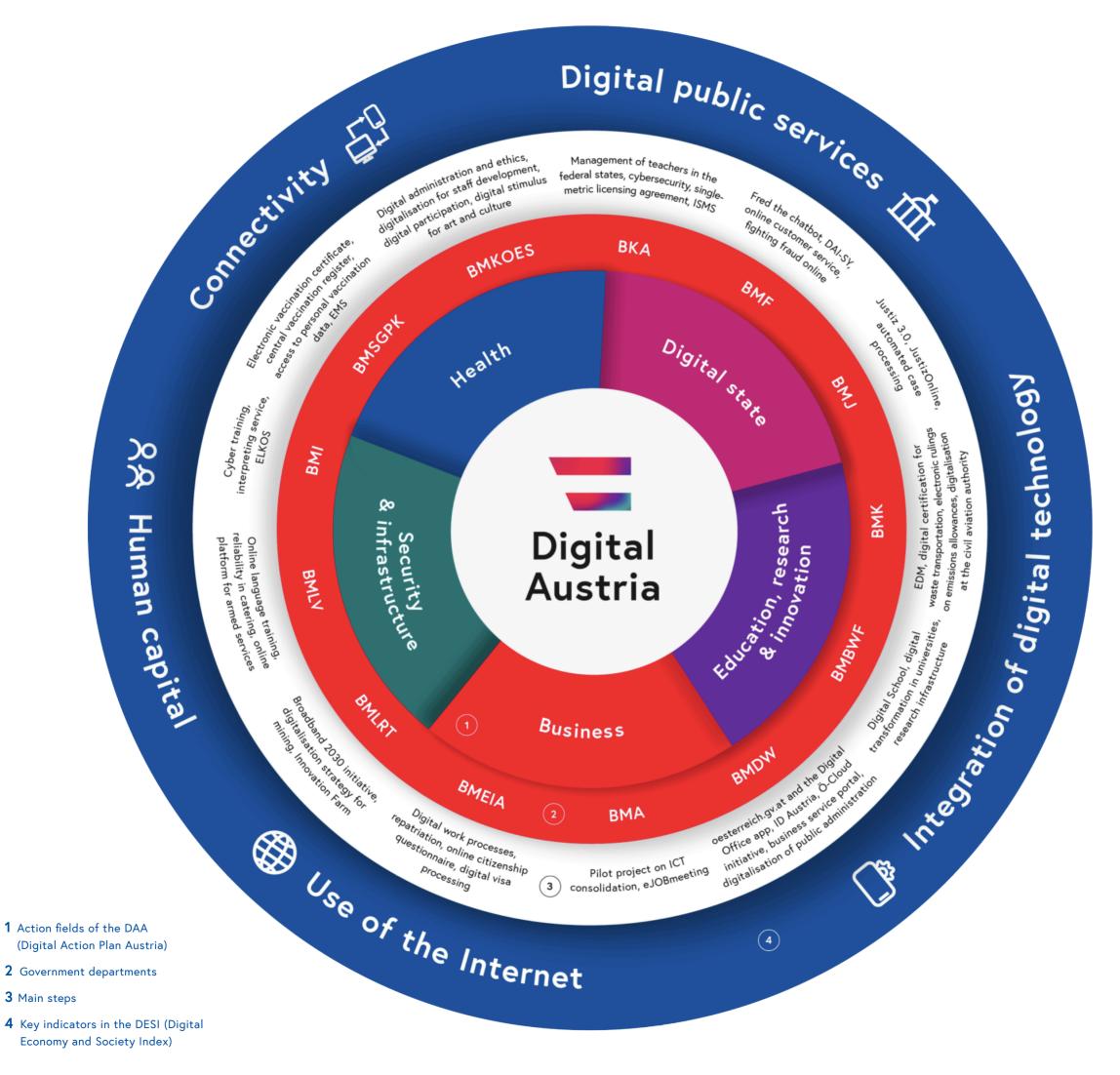
However, digitalisation will not make the health and social care system more impersonal. On the contrary: using the technology properly will enable staff working in the social, health and care sector to spend more time looking after people in person. =

Successful digitalisation requires strategic priorities, measurable goals and specific projects for implementing them. The diagram on the right is a representation of the Digital Austria "operating system", showing the focus areas in the Digital Action Plan Austria: business, the digital state, education, research & innovation, healthcare and security & infrastructure.

Government departments are taking concrete, coordinated measures in all these areas. This will ensure that Austria can forge ahead in the areas that are critical for the future: public services, integration of digital technology, use of the Internet, connectivity and human resources.

These are measured on a regular basis on the EU's DESI Index. Through this "operating system", the federal government aims to ensure that digital services and future developments will reliably reach Austrian citizens, businesses and public administration authorities and have the greatest possible impact. If we carry out digital transformation together, on the basis of sound concepts and strategies, the whole of Austria will benefit.

Ξ



**BKA** Federal Chancellery, **BMA** Federal Ministry of Labour, BMBWF Federal Ministry of Education, Science and Research, BMEIA Federal Ministry of European and International Affairs, **BMDW** Federal Ministry for Digital and Eonomic Affairs, **BMI** Federal Ministry of the Interior, **BMF** Federal Ministry of Finance, **BMJ** Federal Ministry of Justice, **BMKOES** Federal Ministry for Arts, Culture, the Civil Service and Sport, **BMK** Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology, **BMLV** Federal Ministry of Defence, **BMLRT** Federal Ministry of Agriculture, Regions and Tourism, **BMSGPK** Federal Ministry of Social Affairs, Health, Care and **Consumer Protection** 



### Ongoing government digitalisation projects at a glance

### A

### ABA service centre for the Red-White-Red Card | BMDW

Creation of a one-stop shop for procedures to do with the Red-White-Red Card

### Accessibility at the BMSGPK | BMSGPK

Ensuring accessibility in sustainable procurement in compliance with the Federal Disability Act

### Administration of aviation obstructions | BMK

Web-based software solution for recording and processing aviation obstructions

### Administration of background checks | BMK

Web-based software solution for administering background checks

### Administrative penalty register | BMI

Introduction of a nationwide administrative penalty register to include traffic offences

### AI for Good BMK

Development of an FTI programme on the use of artificial intelligence to achieve climate targets

### AI marketplace | BMDW

Platform for Austrian providers of AI applications and other interested parties

### Albert AI: Customer service chatbot at the Austrian Patent Office | BMK

Chatbot solution using artificial intelligence for more complex enquiries

### Anonymisation of court rulings | BMJ

Anonymisation of court rulings using artificial intelligence so that they can be published online in accordance with legal requirements

### Audio guide to the Hofburg Palace, Innsbruck | BMDW

Commissioning of a new digital guide to the Hofburg Palace in Innsbruck for use on phones and tablets

### Austrian Microdata Center | BMBWF

Access for researchers to statistical microdata from Statistik Austria and administrative data

Aviation audit tool (LAT) | BMK See page 59



**Biggest repatriation operation in the history** of the BMEIA due to the COVID-19 crisis | BMEIA See page 43

**BMA pilot project on IT consolidation |** BMA See page 38

### BOSS (BigOneStopShop) | BMF

Implementation of new e-government projects including an e-commerce package

**Broadband Austria 2030: Access |** BMLRT See page 62

**Broadband Austria 2030: Connect |** BMLRT See page 62

**Broadband Austria 2030: GigaApp** | BMLRT Supporting applications for the "gigabit society"

### Broadband Austria 2020 initiative BBA20 | BMLRT

Supporting the expansion of the broadband network to disadvantaged areas where private investment would not be worthwhile

### Broadband Austria 2030: OpenNet | BMLR

Supporting the planning and creation of nationwide open-access networks

**Broadband expansion strategy** | BMLRT Revised strategy for expanding broadband availability

**Business service portal |** BMDW See page 45 Ξ

### C

Catering Services User Account | BMLV See page 61

Chatbot "Fred" | BMF See page 48

**CDO Taskforce 2020 |** BMDW Coordination of digitalisation by Chief Digital Officers (CDO) at the Ministries

**Coordination of stakeholders |** BMLRT Coordination of equipment, systems and components for standardised data exchange over open interfaces

Cybersecurity strategy | BKA

See page 36



**DAI-SY (Data analysis information system)** | BMF See page 49

#### Depository register | BM

Introduction of a joint police and judiciary deposit management system for greater clarity and transparency

**Development of the register** of rulings on the EDM platform | BMK See page 58

#### Digital Action Plan | BMDW

Definition of a strategy for the projects and measures to implement the plan, in collaboration with the specialist departments

**Digital customer service |** BMF See page 49

**Digital freight transport information |** BMK Europe-wide digitalisation of freight transport information in Austria

**Digitalised language teaching |** BMLV See page 60

### Digital lessons from COVID-19 at universities | BMBWF

Working group recommendations for online teaching after COVID-19

**Digital Office – legal affairs package |** BMDW The legal framework for the development, testing and application of electronic processes in public administration

**Digital Office – real-life laboratories |** BMDW Procedure for standardised legislation covering Austrian real-life laboratories **Digital School portal |** BMBWF See page 40

#### Digital skills | BMDW

Giving people the skills they need to use digital technologies so that participation in digitalisation is widespread

#### Digital skills for teachers | BMBWF

Improving the digital skills of teachers and their competence to teach them

**Digital trademarks and samples (MMD)** BMK See page 59

Digitalisation campaign for cultural heritage | BMBWF Working together to develop guidelines

#### Digitalisation in agriculture – training | BMLRT

Five-year focus on agriculture and digitalisation (Wieselburg)

### Digitalisation in federal accounting | BMF

Automated invoicing and the use of robotics technology to reduce and simplify the workload

#### **Digitalisation in HR |** BMKOES See page 54

**Digitalisation in the mining industry** | BMLRT See page 63

### Digitalisation of the visa application process $\mid$ BMI

Introduction of an electronic visa application process and a digital visa

#### Digitalisation strategy for tourism | BMLRT

Creation of a central innovation hub (Next Level Tourism Austria) with Österreich Werbung (the Austrian National Tourist Office)

#### Digitalisation strategies for universities | BMBWF

Producing an institutional digitalisation strategy for every university

### E

#### Economic status report: implementation of the data strategy | BMDW

Observing, describing and assessing the status of economic issues as a foundation for decision-making by the government

#### Electronic communication | BMLRT

Harmonising the content of applications for water management permits

Electronic data management of the licensing process | BMK See page 58 Electronic delivery of rulings under the Emissions Allowances Act 2011 | BMK See page 59

#### eHYD for mobile end devices | BMLRT

current example: enabling the eHYD-WEB app for measuring groundwater and water levels also for use on mobile devices

### eJobMeeting BMA

See page 39

**End devices for schoolchildren** | BMBWF See page 40

#### ERASMUS without papers | BMBW

Digitalised administrative processes for ERASMUS mobility programmes (European Student Card Initiative)

### EU justice | BMJ

Expansion of the cross-border communication infrastructure eCodex in relation to electronic evidence (eEvidence)

### EuroQCI BMK

Development of European security technologies to provide encryption for sensitive communications

### European Student Card | BMBWF

The student card is also to be made available in electronic form so that, ultimately, it will be possible to begin a course of study without being physically present.

### **Expansion of electronic**

**management of law enforcement |** BMJ Implementation of the necessary workflows for classification

**Expansion of interpreting services by video |** BMI See page 50

Expansion of the ERV legal communication system for structuring the Companies Register |  $\mathsf{BMJ}$  See page 53

#### Expansion of the use of IT

**experts in criminal proceedings |** BMJ Expanding the use of IT specialists in IT forensics and analysis



#### FABIAN (new family benefits) | BMF

IT procedure for awarding and paying out family benefits and travel subsidies for schoolchildren and apprentices

Fighting fraud online | BMF See page 49

#### Further development of Eduthek | BMBWF

Aligning the platform for digital teaching and learning materials with the curriculum and enhancing its content

#### Further structuring of the Land Register | BMJ

Filing of certificates and structuring of easements and buildings on third-party land

### G

#### Geodata infrastructure for water | BMLRT

Creation of the "Geodata infrastructure for water" for the Federal Ministry for Sustainability and Tourism and other authorities

### GoverControl-BMSGPK | BMSGPK

Information security management system including information object management, administration of directives and documents, compliance and reporting

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#### Headquarters for secure ICT | BMI

Bundling all the BMI's cyber activities within the BMI



### ICT consolidation | BKA, BMDW

Standardisation of existing and new government ICT and IT solutions

### ICT accessibility | BMSGPK

An inter-ministerial working group to generate and transfer knowledge about barrier-free information and communication technologies

### IDA Identity Austria | BMDW, BMI

See page 45

### ID platform | BMDW

Making it practical and safe to have ID on smartphones – and ensuring it can be securely monitored

### Implementation of Plan S at universities | BMBWF

Strategy for enabling free access to academic literature

### Inclusive procurement | BMSGPK

Knowledge transfer at the Academy of Public Administration and at the BMSGPK seminar for senior managers

#### Increased university funding | BMBWF

More investment in digitalisation, internationalisation and innovation

### Innovationfarm Austria | BMLRT

See page 63

### Introduction of an ISMS at the BKA | BKA

See page 37

### IPUR BMK

Standardisation of how the titles of identical natural and legal entities are written in Patent Office registers



**Justiz 3.0 – digital legal proceedings |** BMJ See page 52

### Justice in claims management | BMJ

Creation of an upstream system for HV-SAP showing daily updated balances on court fees and other costs

JustizOnline BMJ

See page 53



### **KIHORIMO |** BMLRT Al application for merging all relevant information in flood risk monitoring



Legal framework for the availability of infrastructure | BMLRT Creating the legal framework for the availability of infrastructure (e.g. shared use, frequencies)

### M

Master plan to promote broadband | BMLRT Revised strategy to expand broadband availability

**Measure 2 / Support for consultancies |** BMLRT Supporting consultancy work in agriculture and forestry in all federal states

N

**"New start for culture" packages |** BMKOES See page 55



Ö-Cloud initiative | BMDW See page 44

**oesterreich.gv.at – platform and app |** BMDW See page 44

**Once-Only |** BMDW System for entering and recording data once only, and in compliance with legal requirements

#### Online environmental badge under § 57a of the Motor Vehicles Act (KFG) | BMK

Environmental badge also available in digital form as a QR code on a vehicle assessment form printed out by the registered keeper

### Online questionnaire about citizenship in accordance with §58c of the Citizenship Act (StbG) | BMEIA See page 43

**Onlinesicherheit.gv.at portal |** BMDW Central Internet portal for all aspects of security in the digital world

ÖPA portal | BMK

Patent Office portal for registering protective rights and accessing services

Open Science and EOSC policy | BMBWF

Implementation of the Open Data and Public Sector Information Directive in the Re-use of Information Act

"Our armed forces" online platform |  $\mathsf{BMLV}$  See page 61



Participation in the EOSC partnership | BMBWF Application of FAIR principles in specific measures

Partnership between the BMI and the BMBWF | BMI Closer cooperation on science and research

**Payment information system (ZIS)** BMK Modernisation of the payment information system

Performance indicators for courts and prisons | BMJ Developing key indicators for monitoring the performance of the penal system

Personnel management for teachers in the federal states | BKA See page 36

Police basic and advanced training | BMI See page 50

**Practical guideline on participation |** BMKOES See page 55

**Predictive Analytics and RPA |** BMF Used in fighting fraud

Ξ

### R

Real-life laboratory projects "The Future of Work" | BMKOES See page 55

Research data processing centre (on the VSC) | BMBWF Strengthen and expand the national e-infrastructure and its data management structures

**Research infrastructure |** BMBWF See page 41

**Reporting platform |** BMDW See page 45

### RIS and e-law | BMDW

Further development of the Austrian legal information system and electronic regulatory processes

### S

#### Single Digital Gateway | BMDW

EU Project for digital public services and information on specific topics (e.g. employment) across all member states

Single-metric licensing agreement with SAP | BKA See page 37

**Single platform for subsidies |** BMLRT Single platform for non-area-specific subsidy programmes

**Strategy for immigration eligibility |** BMI Digital development of the Red-White-Red Card

### Supporting the development of new standards for a transport solution | BMLRT

Support for programmes that drive and speed up the development of new standards



#### Technology monitoring | BMDW

Technology radar and media monitoring for the Digital Action Plan

**Telemedicine and video interpreting** | BMJ Developing the use of technology in prison hospitals

Transport certificates for waste transportation | BMK See page 58

**Tendering for digital transformation projects |** BMBWF See page 41



#### Union Customs Code (UZK) | BMF

Adapting existing IT procedures and developing new ones to implement the code

### University places to study

**STEM subjects, digitalisation |** BMBWF 1,450 additional places for people starting courses in IT, Industry 4.0 and digital technologies



### Visa digitalisation brings

**greater user-friendliness |** BMEIA See page 43

#### Visualisation of ÖPA services | BMK

Decision-making basis for future R&D activities, dealing with competition and international patent applications



Working from home & digital work processes | BMEIA See page 42

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