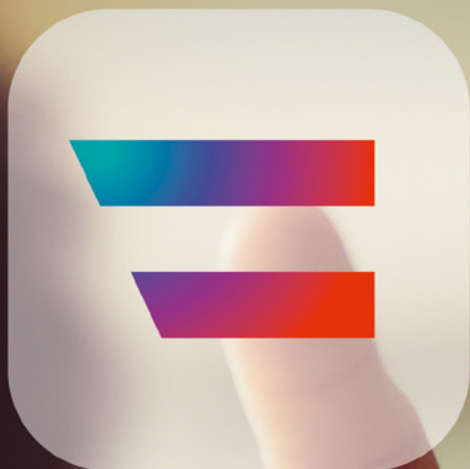


Digitalisation Report

#3



READY FOR THE FUTURE

Smart administration.
Shaping the future.

READY FOR THE FUTURE

Smart administration
Shaping the future



Smart proximity to citizens



“We can make things easier, better, more efficient and faster through the intelligent use of digital technologies.”

The Federal Ministry of Finance has been, is, and will remain a pioneer when it comes to making services more digital, more citizen-centric, and more efficient. With our FinanzOnline portal, the functionalities of which are constantly being expanded, we operate the best-known and most widely used eGovernment service in the whole of Austria.

FinanzOnline is an excellent example of how we can make things easier, better, more efficient and faster through the intelligent use of digital technologies. After all, it is the data – and not the citizens and businesses – that should be doing the running. Digital transformation gives us the opportunity to design processes and procedures in a much more modern way – for example, using the “once only principle” – and to establish new forms of control. This requires data and registers to be networked in an intelligent and secure way.

In this spirit, this third Digitalisation Report shows how we in Austria are taking concrete steps from eGovernment to “smart government” at both the federal and state levels. I would like to thank all those who are working towards this goal at the federal, state and local levels for their contributions.

Our common ambition must be to lead the way in digitisation, because it makes all the difference in terms of value creation, jobs and social security, but also in terms of proximity to citizens and quality of everyday life.

With this in mind, I hope you will enjoy reading this forward-looking third Austrian Digitalisation Report 2022!

Dr. Magnus Brunner, LLM
Federal Minister of Finance

Getting more out of digitisation



“The course for a successful future is set.”

In economically challenging times, the impact of successful digital transformation on GDP growth and jobs is particularly significant. Studies show that investment in digitisation can boost GDP growth by up to 1.9% and create around 20,000 new jobs per year. The field of “artificial intelligence” offers exceptional potential: the increased use of artificial intelligence applications alone could add around seven billion euros to Austria’s value added by 2035. In addition to proactively exploiting this potential, it is important to keep an eye on the challenges posed by new technologies. In the world of work, in particular, AI applications present us with new challenges. We need to take an active role in shaping them. We also need to act quickly at the European level to regulate AI: we must not allow AI providers to make the rules for longer than is absolutely necessary.

This Digitalisation Report on “smart government” shows that successful digitisation requires not only innovative technologies, but also responsible policies. On the following pages, we showcase smart solutions from the federal and state governments that create new qualities in terms of proximity to citizens as well as government and administrative action. Of course, this is always a question of digital skills, which is why we have also launched our major Digital Competence Campaign in 2022.

Austria’s course for a successful digital future is set: now it is time to work together to unlock the potential of digital transformation. Thank you so much for your interest and your commitment!

Florian Tursky, MSc MBA
State Secretary for Digitisation
and Telecommunications



Conserving resources digitally

Going digital is about more than new algorithms, codes and machines. People are shaping the digital future with their commitment, creativity and willingness to collaborate. Coordinated and cross-sectoral efforts are needed to achieve the shared goals of sustainable digitisation.

The implementation of the “Digital Competence Campaign”, for example, shows how necessary it is for different (in this case four) departments to work together – and how successful it can be.

The “Climate Bonus” no-stop shop was only possible thanks to the cooperation of four ministries and the social insurance organisations. The driving force here is the cooperative handling of linkable data within the legal framework.

Once again, public administration employees are behind today’s digital accessibility. The aim is to conserve their own resources and those of citizens and businesses in the long term – no longer directly, but nevertheless personally. In addition to maintaining eGovernment classics such as FinanzOnline and EDM, work is always ongoing: from the expansion of e-delivery and the fully electronic consignment note for the transport of hazardous goods to the use of AI in communicating with citizens about the climate bonus. What is clear is that people are the driving force behind increased efficiency and quality assurance.



“We support and promote new digital technologies with a focus on sustainability.”

Similarly, climate protection does not stop at the doorstep of the Federal Ministry of Climate Action, Environment, Mobility, Innovation and Technology. Protecting our climate is another issue that cuts across all areas.

Going digital and tackling climate change go hand in hand. We support and promote new digital technologies with a focus on sustainability (e.g. BMK’s Green AI funding programme). I am certain that climate neutrality by 2040 and the energy revolution – not least through sustainable digitisation – are our mission and a major driver for our entire economy.

Leonore Gewessler, BA
Federal Minister for Climate Action, Environment,
Mobility, Innovation and Technology

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Austria's digital skills in comparison

Austria's digitisation policy strengthens the country's proximity to its citizens and its attractiveness as a business location: in the DESI, eGovernment Benchmark and eGovernment Monitor digital skills rankings, Austria made targeted progress in important areas during the reporting period.



80%

of the population is familiar with oesterreich.gv.at

Austria in the eGovernment Monitor

Since 2012, the eGovernment Monitor survey has provided a comprehensive annual overview of the use and acceptance of digital administrative services in Germany, Austria and Switzerland. The current study shows:

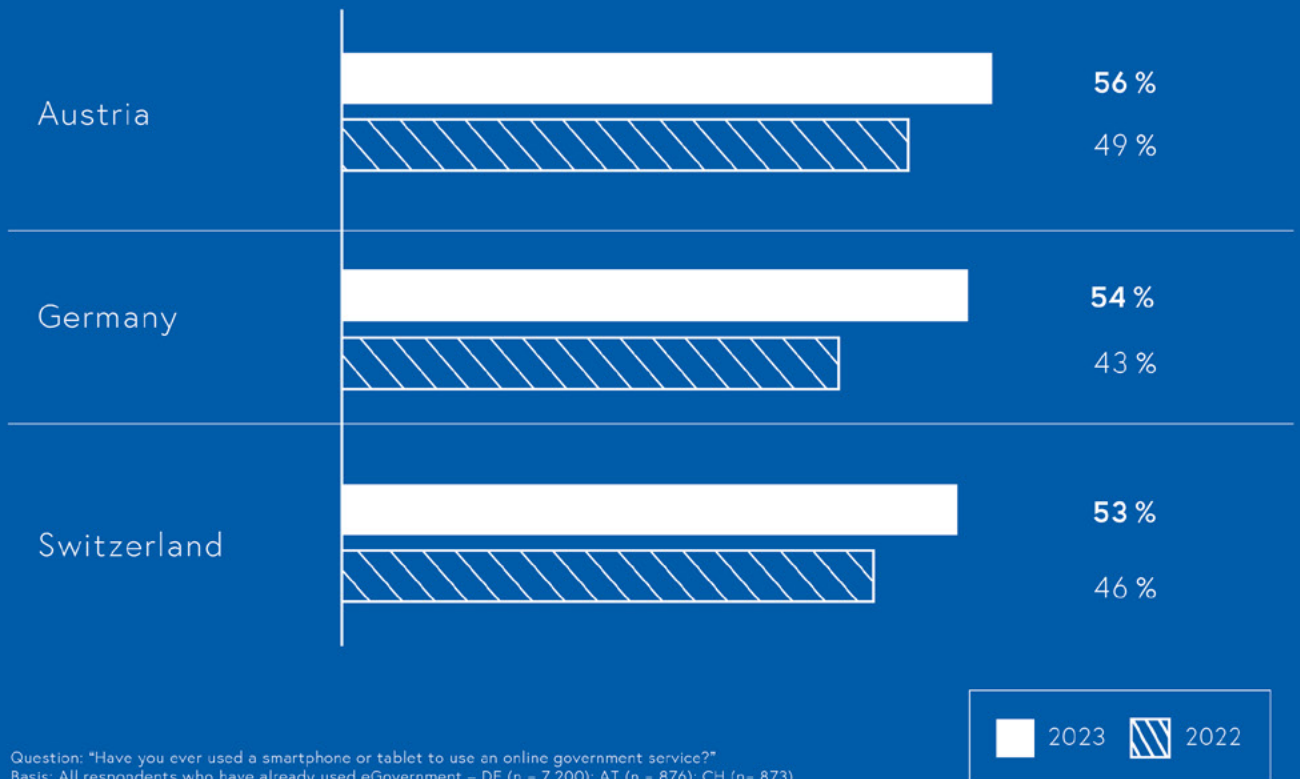
- Regarding awareness of supra-regional administrative portals, Austria with [oesterreich.gv.at](https://www.oesterreich.gv.at) remains well ahead of Germany and Switzerland. In Austria, 80% of the population is familiar with [oesterreich.gv.at](https://www.oesterreich.gv.at).
- At 70%, Austria has the highest usage rate for eGovernment offerings (Switzerland: 60%, Germany: 56%).
- In terms of mobile use of eGovernment services, Austria (56%) is ahead of Germany (54%) and Switzerland (53%). Austria has seen a significant increase of 7% in mobile use via smartphone or tablet compared to the 2022 survey.

Austria in the eGovernment Benchmark

The eGovernment Benchmark has been examining digital administrative services annually since 2001. For the year 2022, these were examined in 35 countries (27 EU Member States as well as Albania, Iceland, Montenegro, North Macedonia, Norway, Switzerland, Serbia and Turkey). In the current survey, Austria ranks 14th (78 points), well above the EU average, and is the clear leader in the D-A-CH comparison (Germany: 21st place, Switzerland: 29th place). Compared to the previous year, Austria improved its performance by 2% or more for many indicators, particularly in the categories "Transparency of service provision" (+4.0%) and "Cross-border online availability" (+3.7%). In this ranking, ultimate user-friendliness is measured by the share of proactive service provision. In this respect, Austria even ranks third after Malta and Luxembourg (18%, 15% and 14% respectively). According to the Benchmark, Austria ranks 4th in "Mobile Friendliness", "Cross Border eID", and "Digital Post". The eGovernment Benchmark identifies the eAusweis app and the digital driving licence, Zoll4D and Grant4Companies services as internationally significant good practices.

Mobile use of eGovernment

Question: Have you ever used a smartphone or tablet to access an online government service?



Mobile use of eGovernment is growing significantly in all countries.

Austria's figures in detail

Women are more likely than men to use online government services on a mobile device

Women **60%**
Men **53%**

Formal education has a directly proportional effect; highly educated people are more likely to use online government services on mobile devices

63%

Highest use of online government services among Gen Y

67%

Austria in the eGovernment Benchmark

The eGovernment Benchmark has been assessing digital administrative services in 35 countries annually since 2001. Austria has improved by 2% across a wide range of indicators.



Category "Proactive service provision"



Category "Mobile friendliness"



Category "Cross Border eID"



Category "Digital Post"

DESI 2023 – Relative result by measurement dimension

	Austria DESI			EU DESI	
	2021	2022	2023	2023	TARGET 2030
Internet Use	86	89	90	89	
At least Basic Digital Skills	NA	63	63	54	80
Above Basic Digital Skills	NA	33	33	26	
At least Basic Content Creation Skills	NA	75	75	66	
Enterprises providing ICT Training	18	18	20	22	
ICT Specialists (aged 15–74)	4.5	4.5	5.0	4.6	10
ICT Graduates	4.5	4.4	4.8	4.2	

The DESI 2023 is mainly based on data from 2022, which is also the reporting period of this Digitisation Report. | Figures in percent.

Austria achieved an above-average increase in IT professionals, from 4.5% of the workforce in 2022 to 5% in 2023.





Austria in the DESI

The DESI (Digital Economy and Society Index) provides an annual monitoring of the digital progress of the 27 EU Member States, currently tracking 32 indicators in four areas: human capital, connectivity, digitisation of businesses and digital administrative services. The indicators are continuously adapted to technological developments and European priorities or objectives. The associated changes in the DESI's structure and methodology make it difficult to compare countries' results with those of previous years. For this reason, the DESI 2023 does not include country rankings.

The data from the Digital Economy and Society Index clearly shows that Austria is making professional use of digital transformation to enhance its attractiveness as a location: Austria scores above average in human capital, digitisation of businesses and digital administrative services. It is in the dimensions of human capital and digital administrative services that the gap with the EU-27 average is most pronounced.



Austria scores above average in human capital, digitisation of businesses and digital administrative services.

On the way to the top

Federal CDOs Maria Ulmer (BMF) and Joachim Tischler (BMK) on Austria's digital performance, the path from eGovernment to smart government, AI in administration and digital skills in Austria.



Federal CDO
SCⁱⁿ Mag.^a Maria Ulmer

If you ask ChatGPT for a definition of “smart government”, it will tell you that “the term “smart government” (refers to) the use of technology and data-based approaches to improve the efficiency, transparency and effectiveness of governance while increasing citizen participation and the quality of public services”. Do you agree with this?

Ulmer: Yes, that's what this is all about. Automated digital processes and the intelligent use of data make things easier and cheaper for citizens, while government and administration can work more efficiently and effectively. Of course, a crucial aspect of “smart government” is the ability to tap into different data sources for this purpose. This is something we are working on. For example, as part of the dadeX multi-agency register and systems network, we make register data available to different authorised authorities via a technical interface.

Tischler: Register data can then be used automatically, for example for subsidies or grants, without having to spend extra time collecting data. We are putting this into practice with the climate bonus. This is smart in every sense of the word – and makes life much simpler and easier for citizens, businesses and the administration.

So the traditional required visit to a government office will be a thing of the past?

Ulmer: This is a key concern: we want to further simplify and digitise official channels for citizens and businesses. In order to be able to offer almost all administrative procedures digitally and via mobile devices, ID Austria will play a central role. This is your personal key to all eGovernment applications. With the eAusweise app and the digital driving licence, we have already taken the first important step in this direction. The digital driving licence will be followed by the electronic registration certificate. The aim is to make as many IDs and certificates as possible available on mobile phones. The smartphone demands and encourages “smart government”.



*ID Austria as a personal key
to smart government*



**Deputy Federal CDO
AL Ing. Joachim Tischler, MSc**

How do you rate Austria's performance in digital services?

Tischler: You can let international rankings speak for themselves. The eGovernment Benchmark 2023, for example, shows: we are well above the EU average and a clear leader in the D-A-CH region. Compared to the previous year, Austria has improved in many indicators and by 2% overall.

Ulmer: A particularly gratifying aspect for us: our eAusweise app and the digital driving licence, Zoll4D and Grant4Companies services are recognised as significant international best practices. The results of the eGovernment Benchmark are therefore a clear mandate to continue to work intensively on expanding the offering. We are doing well here – and on our way to the top.



Successful digitisation is also an educational issue.

Digital literacy is necessary in order to be able to make use of digital services. This is an area where Austria needs to take further action. What is the Digital Competence Campaign, launched in 2022, supposed to achieve?

Ulmer: The best digital offerings and technological innovations are worthless if citizens are not able to use them properly. Successful digitisation is not only a technological issue, but also an educational one. To this end, we need to continuously develop our competences in this area. According to the DESI, around 30-40% of the population aged 16 to 74 lack basic digital skills. This is exactly where the Digital Competence Campaign comes in. It is a national tour de force for the targeted development of digital skills across the whole of Austria. In a large nationwide stakeholder process, a very good and sound strategy was jointly developed. The key findings will be implemented in a digital literacy package.



The issue of “openness to technology” is also a challenge in the field of digitisation. How do you deal with the fears that we are losing control over AI? Or the growing cybersecurity risks?

Tischler: When it comes to cybersecurity, prevention through awareness and education is particularly important. The issue of AI also requires information and education, and of course regulation. This is where the European level with the EU AI Act is very important.

Ulmer: According to the eGovernment Monitor, Austrians see clear benefits in the use of AI: 56% expect the use of AI to reduce the time taken to complete government procedures. 35% expect a reduction in processing errors, and 33% believe that the use of AI will make decisions more objective. The most important factor for acceptance is the question of the final decision, which for 48% of the respondents should be made by humans. This data confirms our stance that AI should create a better and faster basis for decision-making, but of course never decide autonomously. And it must always be clear in which processes AI is involved.

From your perspective as federal CDOs, what is the most important prerequisite for successful digitisation in Austria?

Tischler: The fact that our digitisation portfolios are growing is not something that is happening on its own. Each step requires many individual actions and discussions. Interpersonal skills are a prerequisite for digitisation.

Ulmer: Working together is the key to success in every respect. We can also see this in the E-Government Strategy, which was drawn up by more than 80 representatives of the federal government, the federal states, cities and municipalities. Strategically sound, intelligently planned and jointly implemented collaborations are essential to any digital success story. We ourselves are a good example of that.



56%

expect the use of AI to reduce the time taken to complete government procedures.

Smart government can do more!

Better quality of service for users, increased efficiency and better control for government and administration: Citizens, businesses and administrations alike will benefit from the evolution of eGovernment into smart government.

In a white paper published by Zeppelin University in 2015, “smart government” is described as the fourth “revolutionary leap forward” in government and administration. After the introduction of cameralism in the absolutist state, bureaucracy in the 19th century and information technology systems in the public sector in the 20th century, it is now the “smart state” that is on the agenda. “A smart state, its smart authorities and smart civil servants will use their possibilities within the framework of the existing legal system. But smart citizens and smart businesses will not want to shut themselves off from these opportunities to introduce and implement their own concerns,” says the white paper published by the Open Government Institute at Zeppelin University. The prospects for the future were clear to the researchers years ago: “Approaches to smart governmental and administrative action based on the intelligent networking of existing and new objects open up entirely new possibilities for government and administration. Taken together, these can help to further enhance quality of life, improve the quality of a business location and strengthen civic orientation.”

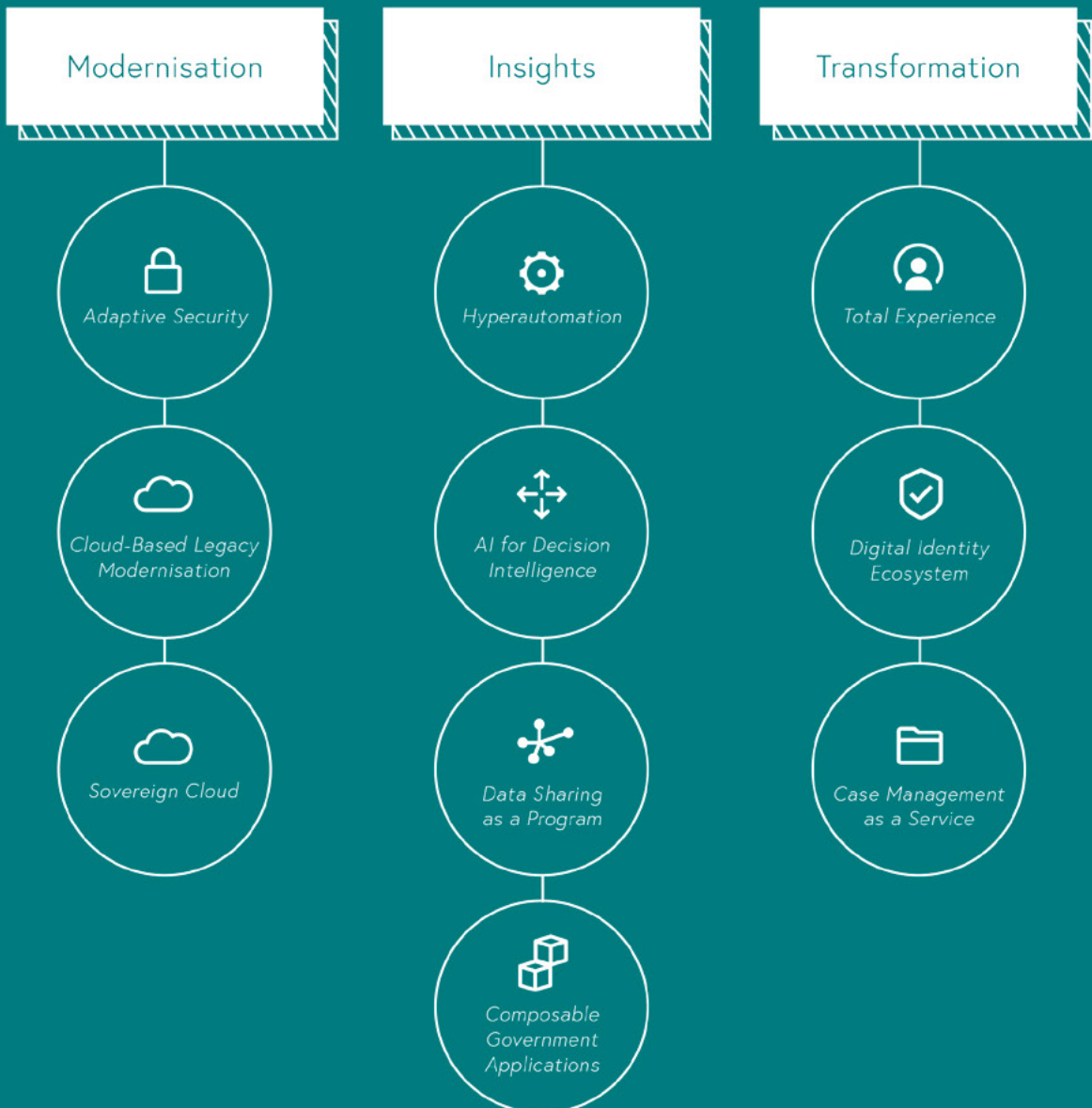
Intelligent networking

Since then, “smart government” has become widely accepted as both a concept and an approach. Nowadays, experts and practitioners generally understand this to mean the handling of processes related to governance and administration using intelligently networked information and communication technologies. Today’s “smart government” is increasingly using artificial intelligence, big data or cloud computing for intelligent networking. Consulting firm Gartner has analysed key technology trends for government activities and concludes that the future is clearly getting “smarter” (see chart).



*Gesamten Artikel lesen
auf www.zu.de*

Gartner top technology trends for public administrations



Source: Gartner (April 2023)

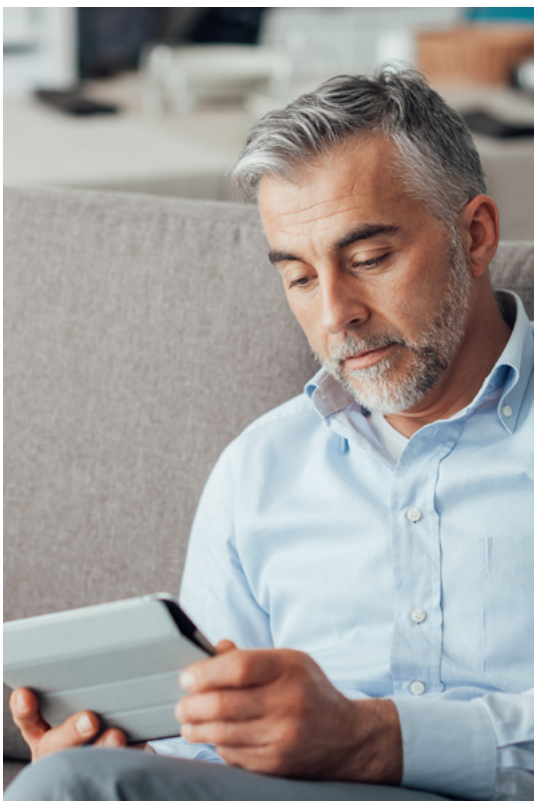
Smart digital solutions are therefore much more than eGovernment – and they offer a crucial step towards an administration in which it is the data, not the citizens, businesses or administrative employees, that does the running. At the same time, the networking and evaluation of the existing data pool allows for concrete conclusions to be drawn for future administrative and governmental action. The result: administration and government can operate more efficiently, deliver higher quality services, respond to developments earlier and provide greater transparency.

AI in administration

Artificial intelligence (AI) applications are being discussed in many areas today. In Austria, the administration is already using innovative AI solutions. This makes it possible, for example, to successfully detect cases of tax evasion and customs fraud, but also to develop subsidies in a targeted manner.



The Ministry of Finance's Predictive Analytics Competence Centre (PACC) is already making use of artificial intelligence today.



Tax morale in Austria is encouragingly high. This makes it all the more important to ensure fair play for those who pay their taxes and duties properly – and to bring tax evaders to justice. “Tax evasion is not a trivial matter, it is a criminal offence that also causes great damage to honest companies. It is our task to ensure that all people and companies in Austria enjoy a level playing field and that the rules are respected,” says Finance Minister Magnus Brunner. To ensure fairness for all, the Ministry of Finance’s Predictive Analytics Competence Centre (PACC) is also making use of artificial intelligence. It is able to derive potential fraud scenarios from a wide range of data sources. Predictive analytics is used, for example, to select tax audits, to check the plausibility of tax assessments and to evaluate business start-ups and applications of all kinds. This makes it easier to detect and curb not only tax evasion, but also customs fraud.



Special algorithms and data analysis

“The spectrum of fraud is wide, ranging from the understatement of revenue in balance sheets to the misstatement of expenses and the declaration of assets that do not correspond to reality. All these measures aim at illegally minimising the tax burden,” says Christian Weinzinger, Head of the PACC. His team uses specially developed algorithms to automatically detect these irregularities and refer the relevant cases to a separate audit. In order to do this, the PACC conducts data analysis. Historical data is used to create or train mathematical models that are then applied to current data. These models can then be used to derive fraud scenarios and perform a risk assessment.

The information used by the PACC is obtained from internal data sources, such as taxpayer registration data, tax assessment notices, declarations, customs declarations or even vehicle data, but also from external data sources, such as the company register, the land register or the trade register. The relevant information is then processed in a pseudonymised form. It serves as a basis for the thematic areas to be analysed by the PACC. “Our data analysis platform, which is available for preparing data, creating mathematical models and deriving results, is an important tool for this,” says Weinzinger. In addition, the PACC uses audit software to provide ready-made and standardised analyses for tax audits. This supports tax auditors in their data-driven analysis of financial data.



Grants4Companies uses artificial intelligence to help companies find the right funding.

Savings of 540 million euros

In 2021 alone, the Predictive Analytics Competence Centre reviewed around 6 million employee tax assessments. In addition, over the past few years, PACC professionals have selected around 5,000 risk cases each year where the tax authorities have conducted a tax or customs audit, or where payroll taxes and contributions and short-time work subsidies have been audited. A focus of the PACC's work in 2021 was the analysis related to the COVID-19 measures. Here, the PACC verified the plausibility of around 1.4 million applications for COVID assistance payments.

In 2022, countless employee tax assessments were once again audited, and numerous applications for COVID assistance payments were reviewed. Further emphasis was placed on the continued development of the real-time risk analysis for submitted income and corporate tax returns. In any case, the use of artificial intelligence more than pays for itself: between January 2020 and the end of June 2022, the staff of the PACC had saved Austrian taxpayers a total of around 540 million euros with their analyses and forecasts in the various areas.

Automatically finding the right funding

The use of AI to combat tax and customs fraud is not unique. Public administration is turning to artificial intelligence in other areas, as well. For instance, AI applications allow companies to quickly access the right funding, for example to develop new technologies. This is what Grants4Companies was developed for. This system compares information about the company known to the administration with relevant eligibility requirements. Grants4Companies uses company data available from the administration's registers via the register and system interconnection (dadeX). This currently includes master data on the enterprise, such as location, legal form or economic activity. The subsidies identified as suitable are proposed to the company. In this way, the company saves time and also finds funding that it would not otherwise have specifically sought. In addition to the company data, Grants4Companies, in cooperation with the Transparency Portal, also processes publicly available data on business subsidies, in particular the name, description and conditions of the subsidy, as well as links to the websites of the funding bodies. Because Grants4Companies uses symbolic artificial intelligence to calculate suitable grants based on logical rules, the results of the calculations are comprehensible. This makes it possible to give concrete reasons for classifying a subsidy as either suitable or unsuitable for a company. The analysis of interdependencies between funding criteria makes it possible to analyse the Austrian funding landscape, for example with regard to gaps in funding or multiple funding. This creates opportunities to further develop the funding system in a targeted manner.



Early identification of trends

AI solutions are also being used to advance the digitisation of the federal administration. The “Reporting Platform” is a management tool that captures, visualises and helps to make better use of the administration’s data pool. This involves linking numerous administrative data sources and enriching them with external economic data. In addition, various forecasting and machine learning techniques are used to identify trends, structural changes and future developments at an early stage. Generative AI methods are currently being tested to provide the administration users with additional support for an efficient retrieval of relevant content through natural language communication options. Once again it becomes clear: no one needs to be afraid of artificial intelligence supporting decisions based on clear rules. It advances the state, society and the economy.



Working together to boost digital literacy

After extensive preparatory work, the “Digital Competence Campaign” for Austria was launched in 2022. The stakeholder initiative, which is supported by the four ministries BMF, BMKOES, BMAW and BMBWF, bundles forces and initiatives for more digital competence throughout Austria.



60-70%

of the population have basic digital skills

1

Responding to the need for skills development

With the initiative, which is coordinated by the State Secretary for Digitisation and Telecommunications, Florian Tursky, within the sphere of influence of the Federal Ministry of Finance, the federal government has set itself the goal of responding comprehensively to the existing need for digital skills in Austria. According to the European Digital Economy and Society Index, around 30-40% of the population aged 16 to 74 lack basic digital skills. According to the survey, there are major gaps in knowledge about general fundamentals and IT security. At the same time, the demand for digital skills in the economy and the world of work continues to grow. This means that SMEs in particular are unable to make sufficient use of digital technologies. Other challenges to digital fitness in Austria include generational, gender and urban-rural divides.

The official launch of the competence campaign was a presentation of the “Digital Competence Campaign for Austria” to the Council of Ministers on 2 December 2022 “In order for Austria to benefit from the economic and ecological advantages of digitisation, it is essential to have a broad and deep base of digital competence in society, business and administration,” say the initiators of the Digital Competence Campaign, Federal Ministers Magnus Brunner (BMF), Martin Kocher (BMAW) and Martin Polaschek (BMBWF) as well as Vice-Chancellor Werner Kogler (BMKOES).

2 Adding value and jobs through digital skills

The huge potential of successful digital transformation for GDP growth and jobs alone shows how important digital skills are for Austria's future: investments in digitisation could contribute up to 1.9% to GDP growth in Austria. Digitisation could create around 20,000 new jobs a year. Already today, every second new job in Austria is due to the digital transformation.



1.9%

*additional GDP growth
in Austria, through
digitisation*

3 Clear objectives and a concrete programme

The concrete goals of the Digital Competence Campaign, as set out in the presentation to the Council of Ministers, are that by 2030 as many people as possible in Austria will have basic digital skills, that the proportion of (female) IT professionals will increase and that digital talent will be better promoted. The introduction of a national reference framework is intended to make digital skills measurable and comparable.

“With the “Digital Competence Campaign” under the European umbrella of the “Digital Skills and Jobs Coalition”, we want to make Austria one of the European pioneers in the field of digital skills and build a strong European axis in this important topic,” said State Secretary Florian Tursky at the presentation.



4

Broad strategy development

The programme of measures for the coming years, which was adopted with the resolution on the campaign in 2022, includes, among other things, the joint development of a strategy with the federal states and stakeholders, a standardised database via Statistics Austria, measures to improve basic skills across all age groups, the strengthening of eGovernment skills and the raising of awareness when choosing a career and training. A key objective of the initiative is also to better coordinate and strengthen ongoing initiatives and projects of the ministries.

The strategy and the work programme of the “Digital Competence Campaign for Austria” were subsequently developed together with more than 500 experts and stakeholders from all federal states and presented at the Digital Skills Summit on 13 June 2023. Some 350 actions and initiatives have been identified, clustered and bundled for the strategy. The core of the strategy is the “digital competence package for Austria”. It aims to strengthen digital literacy across Austria through targeted actions in strategic focus areas – from basic digital literacy for the general population to cutting-edge digital skills for the business community.



Some 350 actions and initiatives have been identified, clustered and bundled for the strategy

Read the strategy paper



Digital skills priorities

The competence package comprises a total of eight strategic priorities for Austria:

1 Introduce a reference framework

Austria will be provided with a national competence framework for digital competences, which will be introduced in a joint effort.

2 Provide low-threshold education

Low-threshold services will be further developed in a target group-oriented manner. This is being done through the “Digital everywhere” workshop programme for basic skills in every municipality in Austria and the follow-up programme “Digital everywhere PLUS”.

3 Train the trainers

Training courses and workshops for adult education institutions, IT trainers and multipliers will be offered to support the educational community in teaching digital literacy.

4 Scale up actions

In order to make the best possible use of existing resources, best practices for teaching digital skills will be identified, scaled up and delivered nationally.

5 The public sector as a role model

As a provider of education, the public sector should also act as a role model when it comes to teaching digital skills. The national reference framework will be introduced at the Academy of Finance and the Academy of Administration, among others.

6 Develop IT experts

In order to counteract the IT skills shortage, a funding call for IT experts will support innovative implementation ideas to address the IT skills shortage.

7 Artificial intelligence

The proliferation of AI in the world of work will be accompanied by interdepartmental action on “digital skills and AI”. To this end, experts are currently in the process of drawing up recommendations and a roadmap.

8 Be an international pioneer

Austria’s pioneering role in teaching and recognising digital competence is also reflected in its participation in international initiatives. For example, Austria is participating in the pilot project for the European Digital Skills Certificate (EDSC).

Joint implementation

The work programme will be implemented through an Office for Digital Competences, which will be established at the Austrian Agency for Education and Internationalisation (OeAD GmbH). Measures are implemented in partnership with the stakeholders. The Federal Government will also hold an annual “Digital Skills Summit” to evaluate the impact of measures taken and to further develop existing approaches.

Find out more at digitalautria.gv.at



Combining forces intelligently



Heidrun Strohmeier
Programme Management
Digital Competence Campaign



Wolfgang Wiese
Programme Management
Digital Competence Campaign

There have already been numerous projects, actions and offers from different actors to develop and promote digital literacy among the Austrian population. So far, however, these have not been co-ordinated or controlled as a whole. In the spirit of “smart government”, the Digital Competence Campaign has succeeded in linking resources, know-how and actors throughout Austria on the basis of a jointly developed strategy in order to boost future digital literacy in Austria. This multi-stakeholder process helps to jointly drive forward not only the development of strategies, but also the implementation of the measures developed – throughout the whole of Austria. In order to ensure the broad involvement of the federal states, dialogue and workshop formats were organised throughout Austria as part of a Digital Skills Tour. In this sense, the Digital Competence Initiative is also a successful example from the administration’s point of view of how Austria can achieve more for its future in key strategic areas through intelligent, strategically sound partnerships.

Wolfgang Wiese & Heidrun Strohmeier
Programme Management Digital Competence Campaign



Florian Tursky

State Secretary for Digitisation and Telecommunications

“Our common goal is to teach digital skills to everyone. We want all Austrians to be digitally fit by 2030. The measures range from funding for future training and development for anyone who is interested, to a unified competency level and certification system.”

Werner Kogler

Vice-Chancellor and Federal Minister for Arts, Culture, Civil Service and Sport



“Tomorrow’s tasks cannot be solved with yesterday’s skills. To shape the big areas of the future – first and foremost the ecological transformation – the workforce must be digitally savvy. With the

Digital Competence Campaign, we are starting to do this in all relevant areas: with the local authorities, in the civil service and, above all, in the education system.”

Martin Polaschek

Federal Minister for Education, Science and Research



“The Digital Competence Campaign provides welcome tailwind for a digitally innovative education landscape that ensures we can make the most of digital opportunities through reliable digital literacy.”

Martin Kocher

Federal Minister for Labour and Economic Affairs



“Digitisation is a crucial factor for a successful business location. It creates jobs and ensures that we remain competitive. With the Digital Competence Campaign, we are launching targeted activities to strengthen the digital skills of entrepreneurs and their employees and to further counteract the shortage of skilled workers in the IT sector.”

Strategic foundations for successful digitisation

The federal government's digitisation initiatives are based on sound strategic principles that are developed together with experts and stakeholders. The period also saw the preparation of key strategic documents.



Strategies in detail



Austria's E-Government Strategy

More than 80 representatives from the federal government, the states, cities and municipalities worked together to develop the E-Government Strategy. Its purpose is the alignment and further development of the Austrian administration towards a uniform, networked and coordinated approach to eGovernment. The main focus is on two fields of action: citizens and businesses. Based on an overall vision, more detailed visions and initiatives have been developed for these areas, including the intelligent networking of service portals. The aim is to make all applications, in particular register queries, accessible via the portal network. At the heart of governance is the cooperation between the federal government, the federal states, the cities and the municipalities (BLSG) with its organisational, legal and technical standards. Jointly defined committees meet on a regular basis and common standards to be applied are set out in writing. The E-Government Strategy was published in early 2023.

“The Digital Austria Act contains 117 measures for successful digitisation in Austria.”

Digital Austria Act for more prosperity, security and new opportunities through innovation



As the federal government’s digital work programme, the Digital Austria Act, which was developed during the reporting period, also contains

important strategic guidelines: it presents a total of 36 digitisation principles and 117 concrete measures to reshape digitisation in Austria. The priorities of the Digital Austria Act are cross-departmental and concern all members of the federal government. One focus is on the “smart government of the future”. The objective is to provide easy and mobile access to all federal administrative services. According to the Digital Austria Act, all federal applications and services are to be designed in such a way that user-friendliness and “user-centred design” are given priority. In the medium term, all applications and services of the administration should – as far as reasonable and technically possible – also be optimally designed for use on mobile devices and connected to the “Digitales Amt” application by means of “single sign-on”.

Digital Action Plan: Digitisation for Austria’s tourism



Making better use of data is also a key issue for the Austrian tourism industry. Each phase of the tourism activity generates data that can be used

for economic purposes. Against this background, the “Digital Action Plan Austria” on “Digitisation for Austria’s Tourism” aims to create more added value through better use of data, more digital skills in tourism and more digital administrative services for tourism. Concrete proposals for action aim to open up new economic perspectives for the tourism sector in Austria, including the establishment of an Austrian Tourism Data Space and the optimal coordination of individual tourism businesses in order to be able to provide up-to-date and coordinated offers. Digital skills are to be promoted in the tourism apprenticeship programme, and new digital apprenticeships will be developed.

Digital skills strategy



Important preparatory work was also carried out in 2022 for the “Digital Competences Austria” strategy of the Digital Competence Campaign.

The strategy was developed through a nationwide dialogue process involving more than 500 experts and stakeholders from 80 institutions. As part of the process, some 350 actions and initiatives were identified, clustered and bundled. On this basis, the “Digital Competences Austria” strategy defines eight strategic priorities in a competence package with concrete measures for the further development of digital skills. Among other things, a “Digital everywhere” workshop programme for basic skills is being implemented in every municipality in Austria.

Digital infrastructure for growth and the future

A high-performance communications infrastructure is one of the most important foundations for successful digitisation. Funding for broadband was significantly increased in 2022. This is benefiting people and businesses all over Austria.



69%

In recent years, the availability rate of gigabit-capable lines in Austria has risen to 69%

The Austrian government aims to make fixed and mobile gigabit connections available throughout Austria by 2030. The “Broadband Austria 2030 Initiative” makes a significant contribution to equal digital opportunities between urban and rural areas through targeted funding instruments. The Federal Ministry of Finance (BMF) has developed corresponding funding instruments based on the Broadband Strategy 2030. The aim is to promote both the ubiquitous availability of gigabit-capable access networks and the establishment of new “symmetrical gigabit connections”, especially for public institutions and businesses. The initiative is aimed at federal states, municipalities, public institutions, telecom operators and SMEs.

Budget of 960 million euros

The first tenders for this project were launched in March 2022 with a volume of 660 million euros. Due to high demand, in particular for the BBA2030: OpenNet programme, the budget available for the first round was increased by a further 300 million euros.

Funding delivers results

The progress and success of the Broadband Austria 2030 Initiative can be measured by the number of Austrian households with gigabit-capable fixed network connections and 5G coverage. In the Digital Economy and Society Index (DESI), the initiative contributes to the “Connectivity” domain. The availability rate of gigabit-capable lines in Austria has risen to 69% over the past few years. Outdoor 5G coverage is also available in 95% of households (as of March 2023).

Municipalities with subsidised broadband rollout

The subsidised broadband rollout is taking place in 1,601 of Austria's approximately 2,100 municipalities and is divided as follows between the Broadband Austria 2020 (BBA2020) and Broadband Austria 2030 (BBA2030) initiatives:

931

municipalities with rollout under BBA2020

247

municipalities with rollout under BBA2030

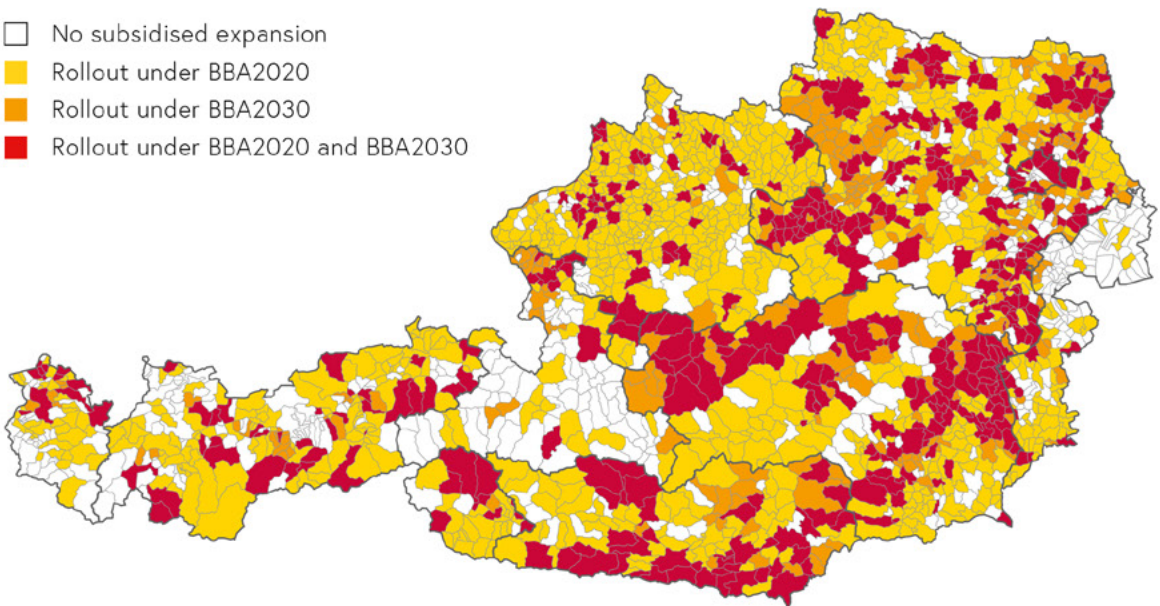
423

municipalities with rollout under BBA2020 and BBA2030

¹In Vienna, all 23 municipal districts are counted separately.

Municipalities with subsidised broadband rollout since 2015

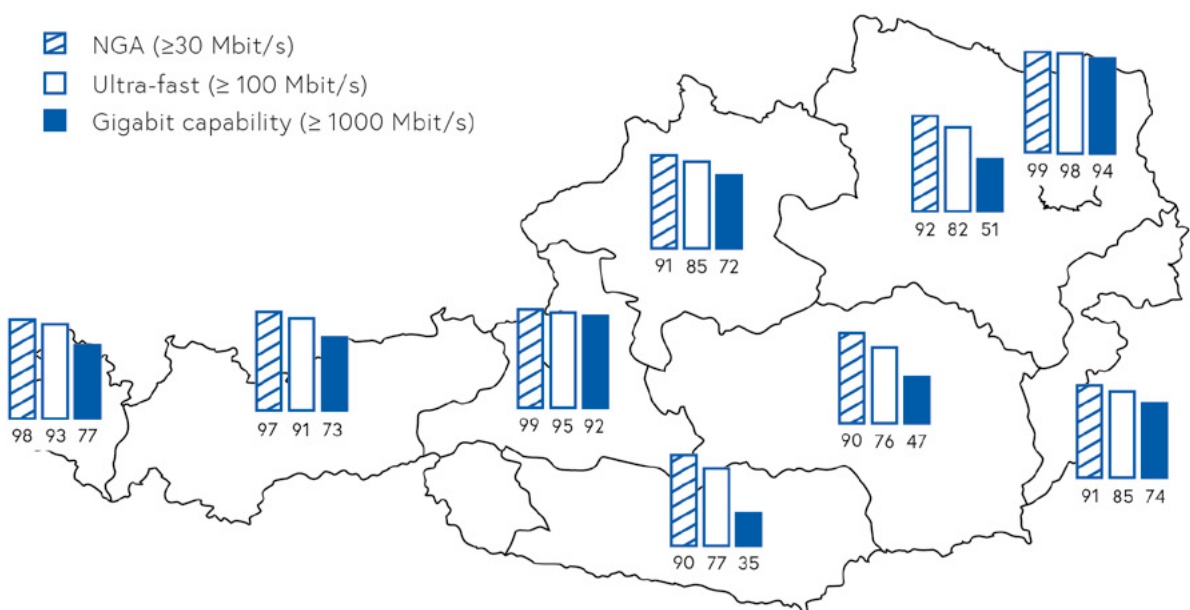
- No subsidised expansion
- Rollout under BBA2020
- Rollout under BBA2030
- Rollout under BBA2020 and BBA2030



Data as of (02/2023); data basis: breitbandatlas.gv.at

Availability of fixed broadband access for households in the federal states

Availability of fixed residential broadband access in percent



Data as of (01/2023); data basis: breitbandatlas.gv.at; technologies: FTTP, xDSL, 5G-/4G-FWA

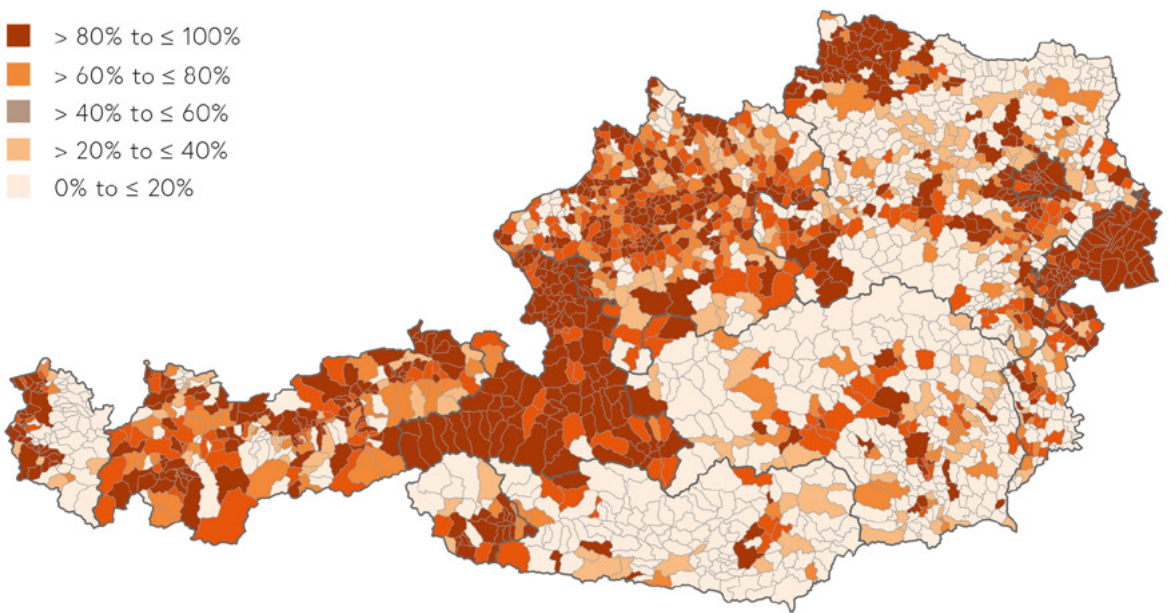
A look at the availability of fixed broadband services at a federal state level reveals the following:

- The highest share of gigabit-capable broadband access is found in Vienna (94%), Salzburg (92%) and Vorarlberg (77%). The average is 69%.
- Above-average growth is expected in the federal states of Carinthia (10.2%), Lower Austria (8.8%) and Styria (8.0%) due to the subsidised expansion under the BBA2020 and BBA2030 initiatives that has not yet been completed. The average expected increase is 4.6%.

Municipal-level availability of fixed gigabit-capable residential broadband services

Municipal-level availability of fixed gigabit-capable residential broadband services

- > 80% to ≤ 100%
- > 60% to ≤ 80%
- > 40% to ≤ 60%
- > 20% to ≤ 40%
- 0% to ≤ 20%



Data as of (01/2023); data basis: breitbandatlas.gv.at; technologies: FTTP, xDSL, 5G-/4G-FWA



For more information,
visit breitbandatlas.gv.at

In terms of availability of fixed gigabit-capable broadband services at the municipal level, it is clear that in Austria, apart from the federal states Vienna and Salzburg and some regional conurbations, it is mainly those communities that have completed subsidised broadband roll-out that have a high level of availability. These include parts of the Waldviertel, the southern part of the district of Lienz and a large number of other municipalities in Upper Austria and Tyrol. Over the next few years, as the subsidised broadband roll-out continues, many more communities across the country will be added.

Smart Dashboard

The data shown in the Digitisation Dashboard presents the most important figures on digitisation in Austria in 2022 – and documents the targeted further development of Austria as a digital location. The current status of the dashboard data can be found at digitalaustria.gv.at. The data, which is continuously updated, is an important basis for further coordination and

management of digitisation activities between the various departments. Search, tags and bookmarks are helpful services for users. The dashboard is an important contribution to “smart government”: the data collected and its analysis allow for targeted, evidence-based policy development. With the Digitisation Dashboard, Austria is getting more out of digital data.

digitalaustria.gv.at



Digital services for companies



69.1 million

Page views on the Business Service Portal (USP)

107

Linked processes

517,505

Registered USP participants

857,859

Times business owners accessed the electronic mailbox

1 in 5

1 in 5 GmbHs was founded digitally in 2022

Digital services for citizens

5.7 million

Logins to the service area of oesterreich.gv.at



108.4 million

Page views on the citizens' platform oesterreich.gv.at

418,391

Activations of the "Digitales Amt" app



58,061

Digital changes of residence

90,153

Voting cards requested digitally ¹

12,720

Certificates issued via the digital Babypoint

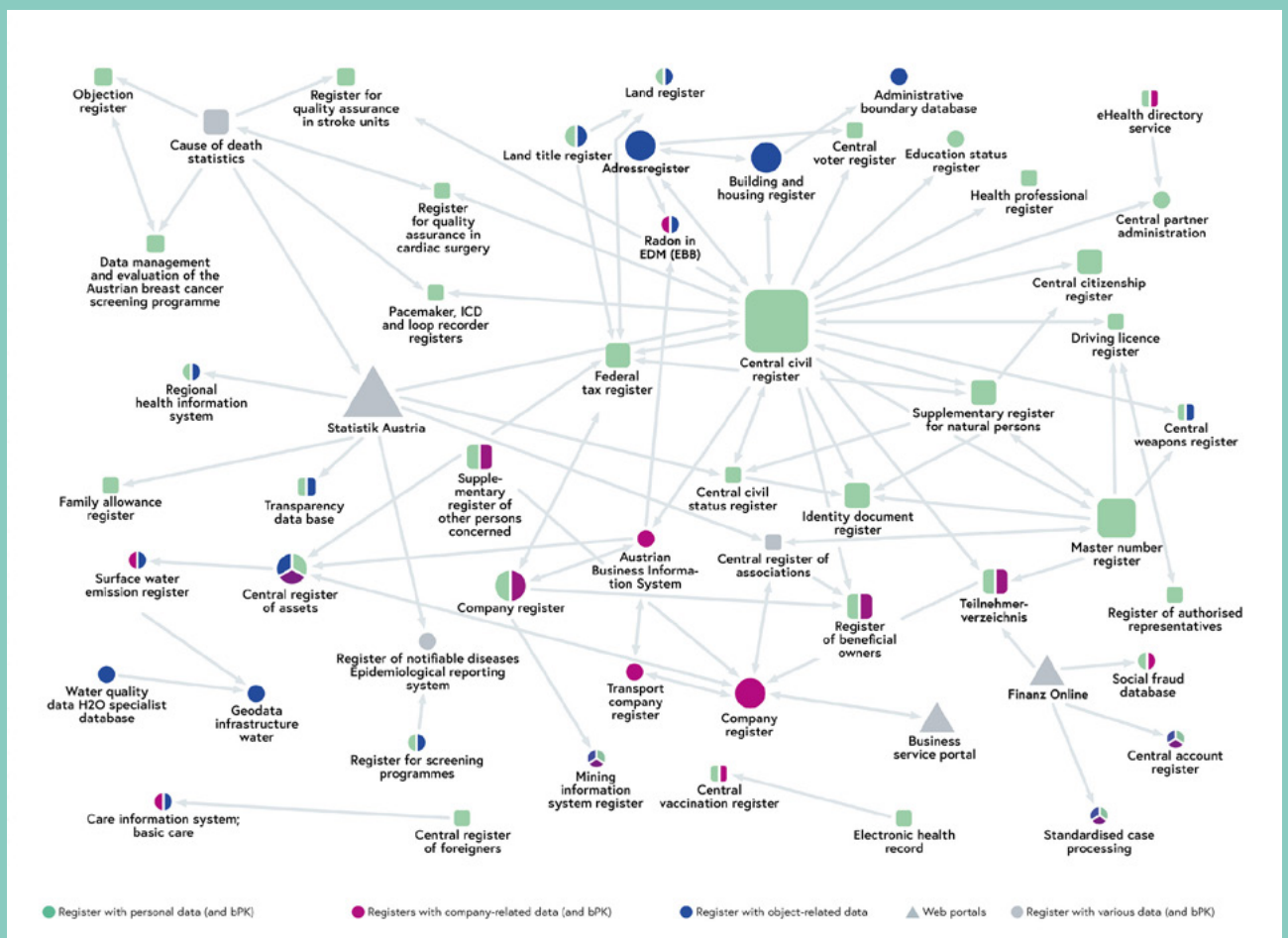
¹ Federal presidential election, municipal election/mayoral election Burgenland, municipal election/mayoral election & provincial parliament Tyrol

Most frequently visited pages by "life situations"

Birth		4,361,268
Motor vehicle		4,067,607
Driver's license		2,931,585
Pension		2,242,468
Passport		2,075,927
Residence		1,970,351
Inheritance		1,343,963
Marriage		1,337,189
Nursing Care		1,343,776
Single Parenthood		1,046,143

All figures in the dashboard refer to the year 2022.

Hub and map for networked data



Networking registers is crucial to making “smart government” work. With the Digital Austria Data Exchange (dadeX), Austria has laid the necessary foundations for this to happen. The register map developed in 2022 shows which registers exist and how they are currently linked.

The register map: all data flows at a glance

The register map was developed in a research collaboration between the Federal Ministry of Finance and the Danube University Krems. It clearly shows which federal registers exist, what they contain, for which target groups they are relevant – and how they are currently linked. The overview of the flow of personal, business and property-related data further simplifies matters and makes life easier for both citizens and the administration. Optimising the register landscape is part of the Austrian administration's ICT strategy.



> 500

*Attributes from public
administration data sources can
be provided via an interface*

The Digital Austria Data Exchange (dadeX): Automatic data retrieval

The Digital Austria Data Exchange (dadeX) is a state-of-the-art data hub. It was developed on behalf of the Federal Ministry of Finance (BMF) by the Bundesrechenzentrum (BRZ), which also operates the platform. The Digital Austria Data Exchange is accessible to authorities at the federal, state, municipal and local levels. The ultimate goal: Data that is already known to individual authorities and stored in registers should be made available to other administrative units via dadeX. With dadeX, data can be automatically retrieved directly from connected data sources quickly, securely and in high quality. Among other things, this can reduce the need for repeated disclosure of corporate information to the authorities ("once-only principle"). The project, which was launched in 2020 under the name "Register and System Network" and renamed "Digital Austria Data Exchange" in 2022, was successively expanded to include additional data sources during the reporting period. By May 2023, more than 500 attributes were already available via dadeX.

Data sources connected to the dadeX

- Company register
- Company register
- Austrian Business Information System
- Central civil register
incl. master number register
- Motor vehicle register
- Edict / insolvency file
- Standardised case processing
of the anti-fraud units
- Criminal record
- EDU.reg
- WKO apprentices
- Transparency database

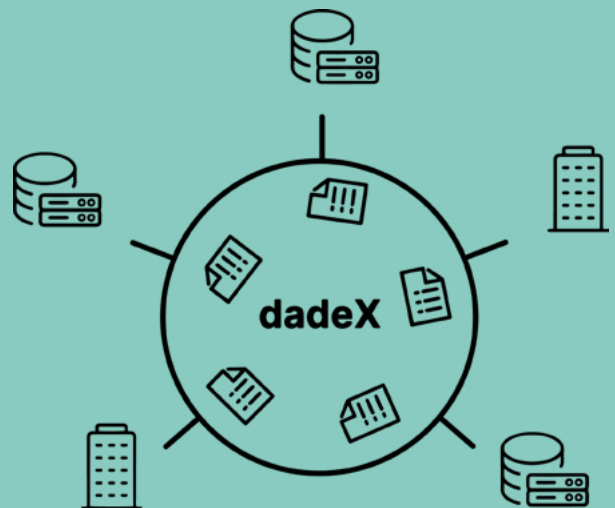
The dadeX technical system

The Digital Austria Data Exchange is implemented as a central platform based on the Enterprise Service Bus. Each data provider is connected to the dadeX via standardised interfaces. DadeX also provides the data consumer with a standardised interface that can be accessed via a web service. Data is delivered as structured data or files in JSON or XML format. DadeX has been integrated into the portal network and is available within the Austrian administration in accordance with the Corporate Service Portal Act.

The success story: Grants4Companies

DadeX is already being used successfully in the "Grants4Companies" service. This allows companies to discover suitable subsidies in the Business Service Portal. With a company's permission, the available register data is retrieved via dadeX and used to automatically identify suitable subsidies.

www.usp.gv.at



"DadeX" allows independent data exchange between administrative units



1ST place

*at the 22nd eGovernment
competition in the "Best Digitisation
Project" category*

"The Digital Austria Data Exchange (dadeX) forms the successful basis for the implementation of the once-only principle as a pillar of the EU's eGovernment strategy. The aim is to avoid having to repeatedly send standard information to the administration, as they can access existing data. Citizens don't notice much of this project, which was carried out together with the City of Graz, but they do feel the positive effects.

It makes it much easier to apply for aid, speeds up official procedures and improves the quality of data in the processes. The project is a prime example of how digitising the administration benefits citizens as well as government professionals. The technical concept of the dadeX platform and the powerful connection options for other administrative processes are very impressive. This is what a modern state should be!"

Martin Szelgrad, panel member
Editor-in-Chief of "Telekom & IT Report",
"Energie Report", Report Verlag



Smart government on a federal scale

Selected
departmental projects

Federal Chancellery
of the Republic of Austria

Combining forces intelligently

Austrian archives contain several 100 petabytes of data. With an innovative project, the Federal Chancellery is safeguarding Austria's digital memory, which is invaluable for the country's identity and future.



CDO
GL Erich Albrechtowitz

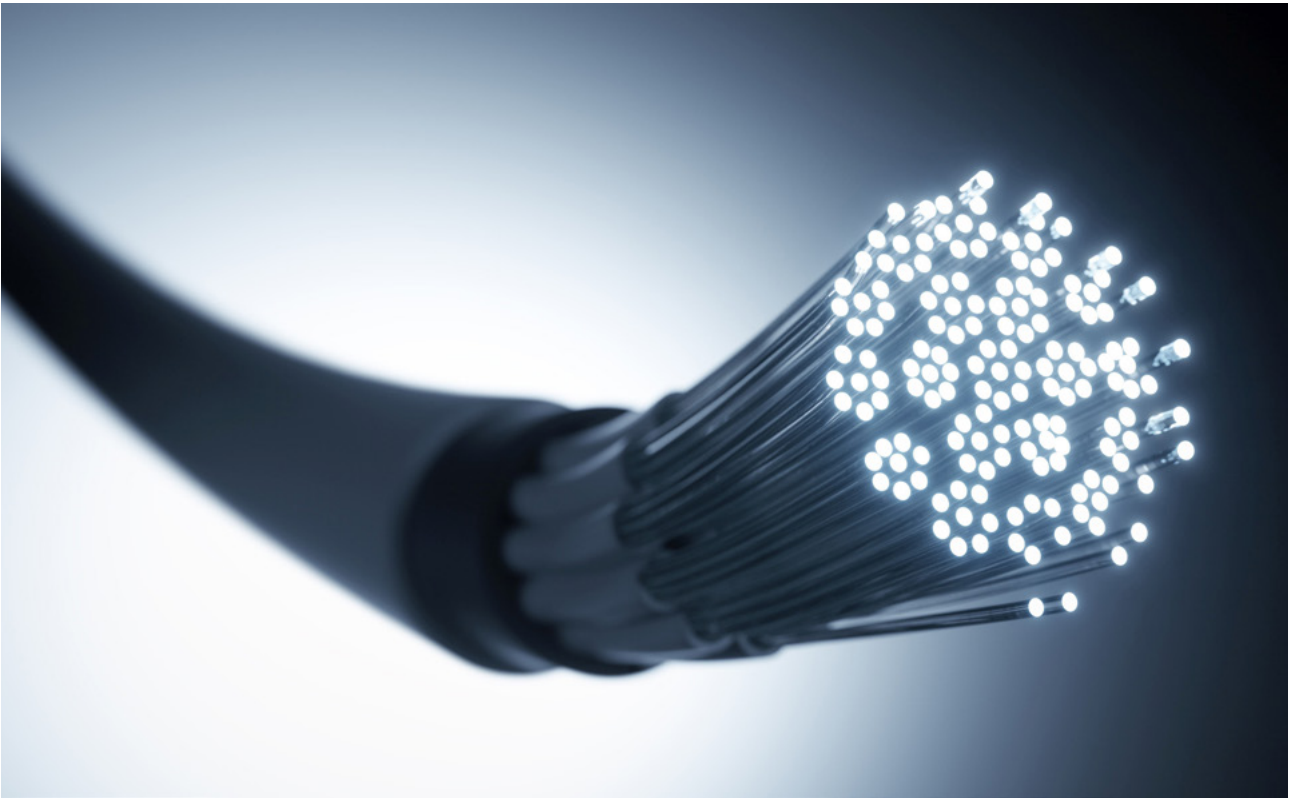
**“We use digitisation
to preserve our treasures
for future generations.”**

Administrative and cultural institutions in Austria hold a vast amount of collections and data – in the form of current and historical records, works of art or scientific papers. They all reflect the history of the country and form Austria's digital memory. Safeguarding this digital memory ensures that these treasures are preserved for use by future generations.

Protecting data in the event of a crisis

Crises are also a particular challenge for data repositories: the preservation of digital identity and the protection of administrative actions in the event of an incident must be ensured. Stringent security measures are required to protect data from cyberattacks and disasters such as fires or floods.

As information is increasingly created and stored in digital form, sustainable strategies for generating and securing this data are essential. A key focus is the digitisation of analogue records and the creation of digital long-term preservation or archiving facilities. Not only does this allow for efficient storage, but it also makes it easy to search for and update information. This is to preserve data for the long term and protect it from loss or damage.



Data preservation and usage platform

For this reason, the Federal Chancellery has developed a platform as a shared service that provides tools, processes and methods for generating, storing, preserving and using data. Parts of this platform include a central data catalogue for the administration, the Digital Ark or the Federal Archives and Long-Term Preservation System (BALES).

“Data Mesh” approach

In order to emphasise the sovereignty and generation of data products by the respective institutions and departments, a so-called “data mesh” approach was chosen. This ensures that the data remains the responsibility of the respective agencies and that the Federal Chancellery only provides the platform in line with the “Data Governance as a Service” approach. This makes it possible, for example, to digitise and preserve the approximately 400 km of archives held by the Austrian State Archives or the hundreds of thousands of slides held by the Federal Office for the Protection of Monuments.

Unlocking the data treasure trove with AI

The digitisation of records, however, is not only important for the preservation of data and the knowledge associated with it. Each dataset generated is also the basis for new projects, particularly in the field of artificial intelligence. The origin and credibility of the data can be described and emphasised through data governance practised prior to use (trustworthy data). This, in turn, makes it possible to support AI projects in achieving the “Trustworthy AI” label. As a result, Austria can unlock its data treasures in a way that is safe and secure in every respect.



400km

of archives held by the Austrian State Archives or the hundreds of thousands of slides held by the Federal Office for the Protection of Monuments were digitised and preserved using the “data mesh” approach.

Federal Ministry
of Labour and Economic Affairs



Going digital in business

The Federal Ministry of Labour and Economic Affairs (BMAW) is using innovative digital tools to support the digitisation of companies and the labour market.

9

Austrian companies are supported in their digital transformation by nine national and European Digital Innovation Hubs (DIH).

Supporting the digitisation of SMEs

Five Digital Innovation Hubs (DIH) and four European Digital Innovation Hubs (EDIH) in Austria are funded by the Austrian Federal Ministry of Economics and Labour (BMAW), the National Foundation for Research, Technology and Development (NFTE) and the European Union to support the digital transformation of Austrian small and medium-sized enterprises, in particular by providing expertise and infrastructure. Through these hubs, companies gain direct access to research and business partners – and to topics that are critical to competitiveness, such as artificial intelligence (AI), IT and cybersecurity, blockchain, big data, Industry 4.0 and digital transformation in general. The hubs are located throughout Austria and provide SMEs with a contact in their region.

Because successful digital transformation always requires digital skills, the BMAW is providing additional funding for training and further education as part of the qualification campaign, including skills cheques (subsidies for green and digital transition skills training that is available on the market), customised skills projects for companies, and skills labs where companies can test innovative skills training formats with research institutions.

Smart digital funding management

The BMAW agencies (aws, FFG, ABA) offer smart digital processes and platforms to help businesses quickly access the right funding and services:

- At aws, as a digital development bank, every step of the funding process – from application to signature and settlement – is digital. The aws funding configurator (aws-Förderkonfigurator) and the funding pilot (Förderpilot) can be used to find the right funding options.
- At FFG, eCall as a digital submission platform ensures that customers can submit their funding applications easily and without unnecessary bureaucracy. The project timeline allows them to see at any time what phase their project is in. Funding agreements can now be signed electronically, further reducing the “time to contract”.
- ABA provides advice and assistance to RWR and Blue Card applicants. With the Immigration Guide Austria, it has created a digital platform for skilled immigration.



The aws funding configurator (aws-Förderkonfigurator) and the funding pilot (Förderpilot) can be used to find the right funding options.



CDO
Mag. Andreas Moser, LLB

“Austrian companies receive targeted and intelligent support for their digital transformation.”

AMS: Skills matching

Given the shortage of labour and skilled workers in Austria, the efficient and rapid placement of workers is becoming increasingly important. The eAMS services already enable the electronic processing of administrative services. In 2022, the implementation of a skills matching system, which will be implemented in stages, was accelerated. This involves the automatic matching of labour supply and demand on the basis of skills and qualification indicators. The aim is to increase job opportunities for jobseekers, fill vacancies more accurately and get people into work more quickly. Matching shows the extent to which a person meets the competencies for a vacancy as a percentage – and highlights which competencies are missing. GEO features for geographic restrictions or distance-based results are also included. The first step in the implementation was the use of the tool by AMS staff: The new system will be fully operational in January 2024 and will be used in all AMS counselling centres throughout Austria.

Federal Ministry
of Education, Science and Research

Digitally fit and smart

When it comes to digital fitness for young people and teacher training, the Federal Ministry of Education, Science and Research (BMBWF) focuses on innovative and effective educational opportunities.



The Virtual PH offers a Massive Open Online Course (MOOC) for basic digital literacy.



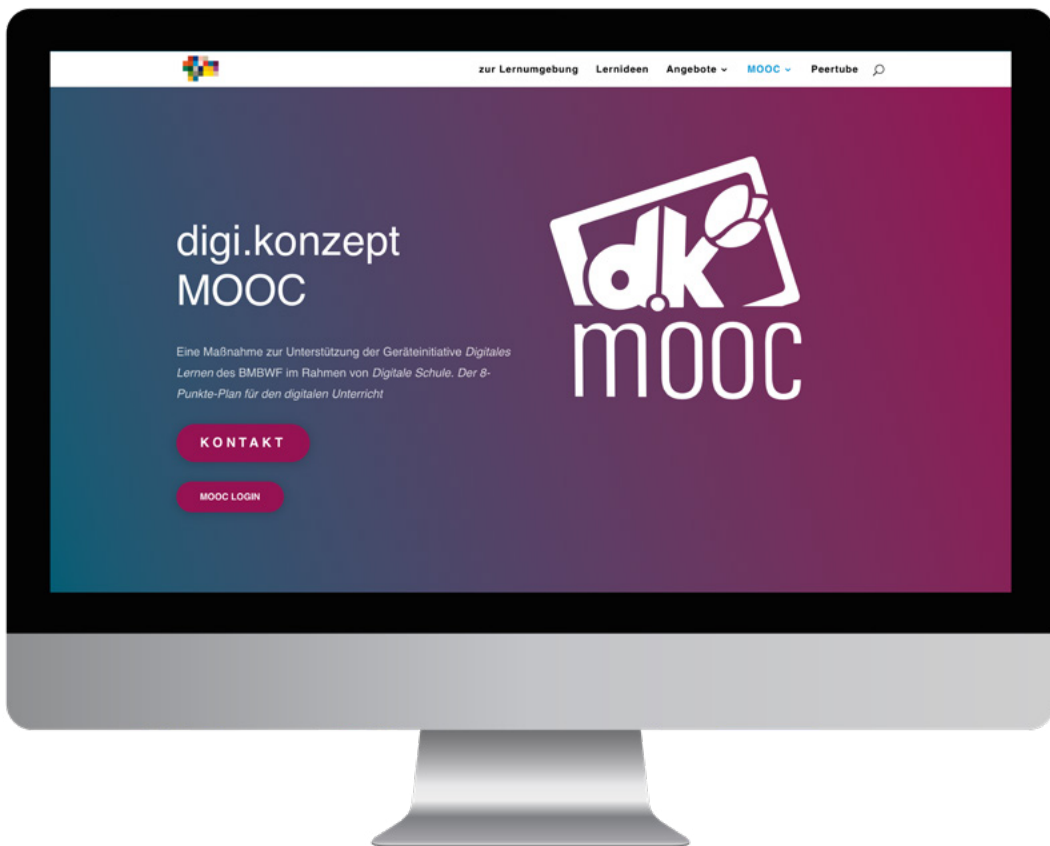
CDO
GL Mag. Martin Bauer, MSc

“Digital education also requires dealing with the impact of digital transformation.”

Basic education: Digital skills for all 10-14 year olds

From the school year 2022/23, the BMBWF has introduced a new compulsory subject “basic digital literacy” in secondary schools and AHS junior classes. Basic digital literacy is taught in grades 5 to 8 with at least one fixed lesson in the timetable. The new subject focuses on how digital technologies work, what social interactions result from their use, and what options for interaction and action students have. The basic digital literacy curriculum also serves as a preparation for computer science classes in grade 9. The same is true for the various computer science subjects taught in the vocational schools at the upper secondary level.

The compulsory subject of basic digital literacy is based on the EU’s DigComp framework and sustainably strengthens the digital skills of citizens. The BMBWF has already been implementing the rollout of digital end devices in secondary level 1 (AHS, middle school, special school) since September 2021.



The digital training courses can be completed by the participants on an individual and self-directed basis.

MOOCs in teacher training

To ensure that teachers are qualified to teach the new compulsory subject, the BMBWF is also supporting their digital training. The Virtual PH offers a Massive Open Online Course (MOOC) for basic digital literacy. The course can be completed by the participants on an individual and self-directed basis. It enables teachers to prepare for the new curriculum of the compulsory curriculum. Other Virtual PH courses focus on distance learning and DigiKonzept. The courses are available to all teachers throughout Austria.

Find out more at virtuelle-ph.at



Federal Ministry
for European and International Affairs

Smart across borders

The Federal Ministry for European and International Affairs (BMEIA) continued its digital activities in 2022 with innovative services and smart tools for Austrian success abroad.



“The foreign service app offers countless benefits for Austrians travelling and living abroad.”

Foreign service: Anytime, anywhere

The BMEIA’s foreign service is an intelligent tool to help citizens abroad efficiently and effectively. The services offered range from up-to-date immigration information to repatriation in the event of a crisis. The foreign service is available as an Android, iOS and browser app for all major platforms. Additional smart features can be used on mobile phones, including geo-location, push services, real-time feedback in the event of a crisis, App2App authentication via ID-Austria/ Digitales Amt or a mobile application for documents to be collected at embassies and consulates. Privacy-by-design principles were taken into account in the development from the very beginning. The smart app solution currently offers tangible benefits to around 150,000 travellers from Austria and 210,000 Austrians living abroad.

Protocol Service Portal: Digital diplomatic service

With Vienna as one of the four official seats of the UN, Austria is home to more than 750 intergovernmental organisations as well as bilateral and multilateral diplomatic missions. There are 16,000 diplomats, international officials and accompanying staff in the country. Austria “manages” them digitally and intelligently: thanks to the Protocol Service Portal (PSP), all processes relating to the registration of individuals, applications and procedures, or the issuing of photo IDs are being converted from paper-based to fully electronic processes. Although the target group consists almost exclusively of non-Austrian citizens, all project challenges were overcome through the use of central Austrian eGovernment services. For example, all organisations are recorded in the supplementary register of other persons concerned, and all applicants are recorded in the supplementary register of natural persons. The corporate service portal (USP) is used for authentication.

Digital tool for diplomatic visits

The BMEIA is also an active supporter of the internationalisation of the Austrian economy, which is important for value creation and employment. One of the objectives is to promote inter-institutional coordination of economically important “diplomatic visits” as part of Austria’s foreign trade strategy. For this purpose, an innovative tool was created with the “BD.Digital” project. Once registered with ID-Austria, it provides all participating organisations with easy, platform-independent and mobile access to up-to-date information on planned visits abroad. In addition to the departments responsible for foreign trade issues, these include the Office of the President, the Parliamentary Directorate, the Federal States, the Austrian Federal Economic Chamber and the Federation of Austrian Industries. The project demonstrates that solutions such as ID Austria are also the basis for new and innovative solutions for use cases within the administration.



CDO
AL Mag. Kristian Juric

“Smart digitisation enables us to provide tailored services to Austrian citizens around the world.”



Federal Ministry
of Finance

Strict accounting, smart service

As a pioneer of digitisation, the Federal Ministry of Finance (BMF) is taking the next steps towards even more citizen-friendliness and service quality with intelligent innovations.



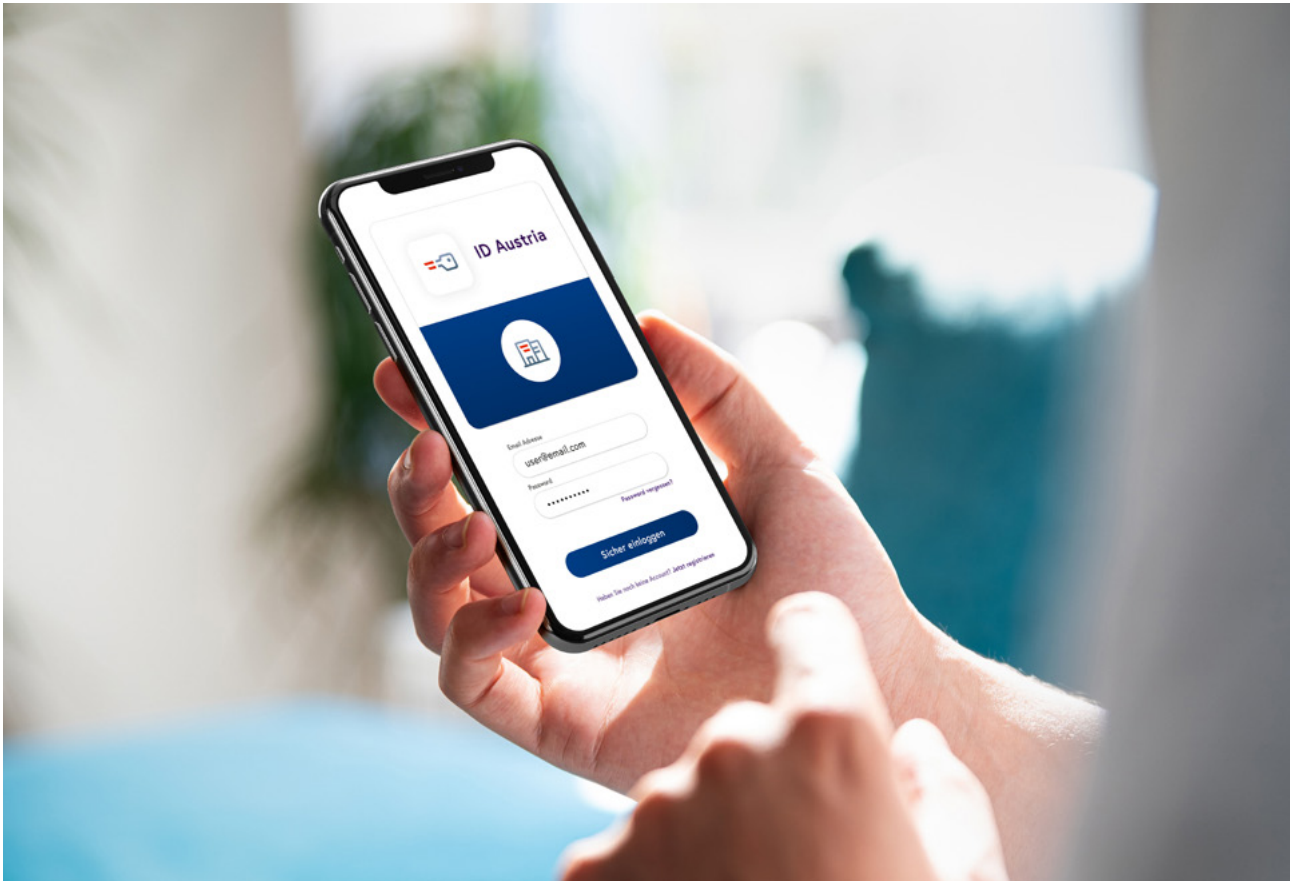
CDO
Dr. Manuel Zahrer

“Digital services are a benefit for citizens, businesses and the tax administration’s staff alike.”

Customer support & customer appointments via the Internet

Due in part to the GDPR, the interactive provision of personal information and services over the phone or Internet without strong authentication has so far been limited and in a legal grey area. In order to save customers time-consuming on-site appointments and to eliminate legal uncertainty for citizens and BMF employees, the BMF launched three smart innovations for secure customer contacts in 2022:

- Based on a mobile phone signature or ID-Austria, the BMF offers strongly authenticated, pre-arranged customer service via videoconferencing.
- The FinanzOnline login – which requires a mobile phone signature or ID-Austria – also ensures authenticated ad hoc telephony from a smartphone.
- In the future, international customers without an EIDAS-compliant ID will be able to open a FinanzOnline account using a video identification process linked to their ID card.



This enables customers of the Austrian tax authorities to obtain sensitive personal information without having to visit the tax office. They are also able to take advantage of corresponding customer service measures. The new services will also benefit the tax administration's staff: for them, they provide reliable legal certainty related to personalised customer service.

Automated family allowance eligibility check

A largely automated eligibility check based on external data matching (e.g. universities, schools) has been implemented in the online procedure for family allowances (FABIAN). This means that it is no longer necessary to submit paper documents or upload files via FinanzOnline as part of the procedure for continuing to receive family allowance. Citizens will no longer have to obtain and submit proof of their entitlement to family allowance. The administrative verification of eligibility for family allowances is simplified and accelerated. This means that the "once-only" principle also applies to the area of family allowances.



Authenticated ad-hoc telephony, even secured from a smartphone.

Federal Ministry of the Interior



Smart security

The Federal Ministry of the Interior (BMI) is also using smart digital tools to improve security in Austria – from more secure registration systems to safer elections.



The “secure registration office” improves data accuracy, standardises processes and supports investigations.

“Secure registration office”: Digital reporting process

In order to improve the quality of registration data, better detect forgeries and support municipal employees, the BMI launched the “secure registration office” project in 2022. The digital extension of the registration process offers registration offices the opportunity to develop an adequate protection mechanism against the illegal use of a registration confirmation by using high-quality passport and document readers for document verification. The intelligent digitisation project involves the collection and processing of data in the civil register using automation, and the reconciliation of data with other registers. In the future, online reporting to the police will be possible in case of suspected registration with forged or falsified travel documents.

The “secure registration office” reduces input errors, standardises processes and secures evidence (passport copy) for police and judicial investigations. With this project, the Federal Ministry of the Interior is making a concrete contribution to maintaining a high level of internal security and combating crime in a sustainable manner.

e-Learning for election administrators in national elections

The BMI also relied on digital tools to ensure a secure voting process for the 2022 federal presidential election. A separate e-learning course, which can also be accessed on mobile devices, was used to increase the certainty of action for the members of the electoral authorities in the national elections. Its contents range from the structure, organisation and role of the electoral authorities to the preparation, election day and counting of ballots, as well as knowledge relating to the validity or invalidity of ballots. The fact that election officials can be trained online, anywhere and anytime, ensures that they will be able to perform their duties within the electoral administration in a competent and correct manner in future elections.

Competence in dealing with dementia

The Federal Ministry of the Interior has developed a digital training programme with checklists, knowledge checks and learning videos to ensure that law enforcement officers can act confidently when dealing with people with dementia. At the end of 2022, more than 15,000 employees of the Federal Ministry of the Interior had completed the training. The e-learning offer can also be accessed on mobile devices. In this way, instructions can be used directly in the field to ensure a safe, humane and sensitive approach. The successful project was further developed for municipal employees by the BMW's E-Learning Centre in cooperation with an expert in dementia research from the Danube University Krems (Demenz.Aktivgemeinde).



CDO
GL Ing. Mag. Markus Popolari

“Smart digital solutions are an important tool for us to provide more security throughout Austria.”



18,000

employees have completed the course

Online training against computer and cybercrime

An online training course on computer and cybercrime awareness, originally developed for citizens, was made mandatory for all law enforcement officers as part of their general training in 2022. To date, around 18,000 employees have completed the course, which provides them with information on, among other things, different forms of cybercrime, password guidelines and technical solutions. The e-learning offering can also be accessed on mobile devices and includes, among other things, a self-assessment knowledge check.

Digital procedures

The Federal Ministry of Justice (BMJ) is expanding smart solutions for criminal and court proceedings. This results in time savings – and sustainable process modernisation.



CDO
Mag. Martin Hackl, BSc

“Digital processes speed up processes and make them more transparent – to the benefit of everyone involved.”

Digitising criminal proceedings with the help of AI

The digitisation of criminal proceedings involves challenging existing processes and rethinking and transforming them in a sustainable manner through innovative, technology-driven approaches. Building on the foundations already laid for digital file management in civil proceedings and judicial administration, working groups were set up in 2022 to assess the need for adaptation in the digitisation of criminal proceedings – and this has been taken into account in the ongoing development work.

Implementing this project will enable criminal proceedings to be fully digitised. This ranges from the preliminary proceedings of the public prosecutor’s office, through the referral of cases to magistrates and judges to the main proceedings in court and the electronic inspection of files via JustizOnline. This will enable significant process acceleration and quality improvements (such as measures to prevent leaks).

The digitisation of criminal proceedings also makes use of support tools based on artificial intelligence (AI). This involves, for example, AI-based support for legal research to identify citations relevant to legal work. In addition, AI-based systems can assist users in anonymising and subsequently publishing decisions.

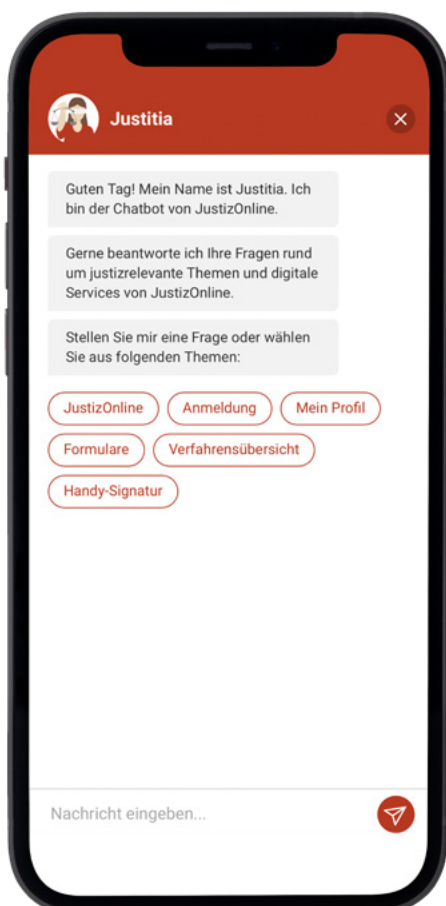
JustizOnline also for legal persons and public authorities

Since November 2020, private individuals have been able to conduct their court proceedings flexibly via the JustizOnline platform. This allows them to digitally access their case and make submissions to the court and prosecution. It is possible to inspect files electronically and check the status of cases at any time. The service, which is partly financed by the Digitisation Fund, was opened up to businesses and public authorities in 2022 after intensive preparations. To achieve this, the platform was “intelligently” linked to the company service portal during the authentication process. Anyone who has the appropriate authorisation in this portal, for example as a managing director, can also act on behalf of the company on JustizOnline.



Justitia
the JustizOnline chatbot

“In addition to private individuals, I now also support companies and representatives of public authorities with answers to their questions.”



The person concerned is provided with an online overview of all proceedings in which the company is involved. It is also possible to check at any time whether, for example, an opposition to a pending case has been received. Individual members of staff can be given different rights, for example, access to civil proceedings only or access to a particular case only. The system used to authenticate authorities is the nationwide Portalverbund protocol.

The Justitia chatbot now no longer only supports private individuals. It also helps businesses and government officials get their questions answered.

Federal Ministry

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

Intelligently protecting the climate

The Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK) is using smart solutions to improve service and planning.



Deputy Federal CDO
AL Ing. Joachim Tischler, MSc

“Smart digitisation is an important partner for effective climate protection.”

State-of-the-art transport planning

The development of transport policy strategies and measures requires the best possible assessment of the future development of transport – and of the effects of planned measures. The existing “Transport Model Austria” is outdated, and it does not even take into account newer mobility concepts such as sharing systems. The transport forecast for 2040 has therefore been redesigned from the ground up and conceived as a living model. The intention is to also make it possible to update individual modules during operation. The project worked with 16 contractors to integrate existing data and make it available for use in forecasting models. The BMK’s transport forecast 2040+ also takes into account socio-demographic, economic, social and technological developments. The forecast covers all modes of transport. Special attention is given to intermodal transport (e.g. use of park-and-ride facilities, freight transshipment hubs). As soon as the model system is available, the transport forecast 2040+ will be calculated as a model application. Digitisation therefore

provides a reliable, up-to-date basis for transport planning that can be used by all relevant levels of governance – from the federal level to state, city and local transport planning.



The BMK’s transport forecast 2040+ takes into account different developments.



Every second of phone time saved increases customer satisfaction and reduces costs.

Climate bonus: Customer service with artificial intelligence

The eco-social tax reform has put a price on CO₂ in Austria. It makes it more expensive to engage in behaviour that is harmful to the climate. To compensate for the associated price increases, funds from the CO₂ levy will be returned to the population in the form of a “climate bonus”. The disbursement is smart in every respect: it requires no application, no individual data management and no separate data collection. Anyone who has updated their account data on FinanzOnline after 1 January 2020 will have the climate bonus transferred directly to their account. In 2022, an AI solution was developed to make it quicker and easier to serve recipients of the regionally staggered climate bonus in 2023 if they have questions or concerns. The application, which was developed with four technology partners, makes it possible to identify almost any potential climate bonus recipient sufficiently to provide automated information and start a complaint process. So with your personal photo ID, you can easily access your personal climate bonus information online. Every second of phone time saved in this way means a higher level of customer satisfaction – and lower costs.

Hazardous waste: Fully electronic consignment note

If hazardous waste is to be transported in Austria, a consignment note must be issued and carried along at all times. The authorities must be notified of the consignment notes. In the past, drivers had to print out a detailed form and carry it with them. With the digitisation of the processing of consignment notes, this is now a thing of the past. An initial version was developed in conjunction with the Federal Environment Agency and then tested for practicality with community groups and businesses. On this basis, a cooperative system that integrates with the existing digitisation landscape was developed in collaboration with an external partner. This allows all parties involved in waste transport to interact electronically with the “Electronic Data Management Environment” and their business partners. In addition, a business-to-business messaging system makes it easier for companies to communicate with each other and exchange data. The process is made intelligent by the connection to the federal data infrastructure – and implements the “once only” principle. This is a win-win for business and the administration.



With the digitisation of consignment note processing, detailed printed forms to be carried along are a thing of the past.

Federal Ministry
of Arts, Culture, Civil Service and Sport

Secure electronic delivery for everyone

During the reporting period, the Federal Ministry of Arts, Culture, Civil Service and Sport (BMKOES) ensured that electronic delivery to all federal employees is secure. The rollout to all departments is expected to be completed in early 2024.



CDO
AL Mag. Florian Dohnal, MA

“Public service employees need digital solutions that are efficient, modern and secure.”

The 2nd Amendment to the Service Act 2022 legally paved the way for uniform, cost-effective and legally valid electronic delivery to all federal employees. This was followed by successful implementation: thanks to the exemplary project cooperation between the BMKÖS, BMF, BKA and BRZ – taking into account existing and established systems (such as Mein Postkorb, BRZ-Zustell-dienst and Serviceportal Bund) – it was possible to successfully design and technically implement electronic delivery. The same applies to the procedural and organisational framework.



Phased implementation

Since the beginning of 2023, the new electronic delivery system has been gradually introduced at a federal level. In February 2023, for example, an initial version was rolled out to all staff members in all departments who were already privately registered with Mein Postkorb. In July 2023, the full version of electronic delivery was rolled out across the Federal Ministry of Finance. Since autumn 2023, the rollout has been scheduled for all other departments that already use the full functional scope of electronic documentation and process management (eDok/Pro). Rollout to all other departments that meet the technical requirements will follow and is expected to be completed by the first quarter of 2024.

2-factor authentication enshrined in law

An important factor is to ensure that 2-factor authentication is in place in the departments. This has been and will continue to be emphasised in order to meet modern security requirements and to counter potential threats. 2-factor authentication is not only a technical security recommendation, but also a requirement for the use of the new electronic delivery system defined by law.



2-factor authentication is required by law for electronic delivery.

Federal Ministry
of Agriculture, Forestry, Regions and Water Management

Smart countryside

The Federal Ministry of Agriculture, Forestry, Regions and Water Management (BML) is making life and work easier for domestic agriculture with smart platform and app solutions.



eAMA simplifies the application process by using existing master data after registration.



Digital Funding Platform

Based on the joint strategic plan for the GAP funding period 2023-2027, the ministry has commissioned Agrarmarkt Austria (AMA) to digitise the application process for sector and project measures (beekeeping, fruit and vegetables, wine and rural development). A joint Digital Funding Platform (DFP) was developed for this purpose in 2022. It is used both by applicants to submit applications and by funding bodies to process, review and approve applications. Direct communication with the funding applicant is also possible. All relevant information and documents on the sector and project activities can be found on the information portal.

Since 2023, applications for sector and project measures must be submitted via the newly created platform. Applications via the Digital Funding Platform can only be submitted using a qualified electronic signature (ID Austria). The added value for applicants is considerable: after registering or logging in to eAMA, much of the existing data, especially master data, can be transferred and used directly. This makes the application process much easier.

Getting the full picture with the “AMA MFA Fotos App”

From 2023 onwards, many funding requirements (such as mowing dates, harvest, land cover) for area-based payments under the Common Agricultural Policy must be verified through an area monitoring system. This means an automated check of the request in multiple applications (MFA) and compliance with the management commitments made in order to achieve a better application quality. Monitoring is done by comparing current information from the Sentinel satellite data with information in the applications from the agricultural businesses.



CDO
SC Mag. DI DDr. Reinhard Mang

“We reduce distance and effort for all our audiences through intelligent digitisation.”



In the case of clearly identified and relevant discrepancies, agricultural businesses receive a request to clarify the facts, including through the “AMA MFA Foto App”. Using the smart application, farmers can quickly and easily send geolocated photo evidence with up to three photos or a correction, if necessary, to the AMA to quickly clarify or correct facts. This will significantly reduce the number and duration of on-site inspections on farms. It also means a significant reduction in the burden on businesses. In addition, this also helps to avoid possible reductions in aid and to improve the quality of applications.

Federal Ministry
of Defence

Smart armed forces

When it comes to education, sustainability and administration, the Federal Ministry of Defence (BMLV) lets the data do the running, not the soldiers.



The chat function enables direct communication between citizens and the responsible officials.

Digitising training safely

The BMLV has implemented Moodle as its learning management system. The innovative e-learning platform enables more efficient and flexible organisation of the entire training process. Teachers can make course contents available digitally. All employees have access to learning content and documents. A segmented (W)LAN infrastructure ensures the secure use of personal devices (“Bring Your Own Device”) in the academies and schools. Users can only access network resources that have been released to them.

„bundesheeronline“: Digital and direct communication

The eGovernment service ‘bundesheeronline’, which was prepared in 2022, has been offering the first processes for citizens in the Austrian Armed Forces in a fully digitised form since June 2023. By using Austrian eGovernment standard technologies (including ID-Austria, PVP portal interconnection technology), it is possible, for example, to submit applications for family allowances or bank data digitally without media discontinuity. A special feature is the possibility of direct communication between citizens and the responsible officials, which is guaranteed at all times by a ‘chat functionality’. Citizens are informed transparently about the processing status and can easily submit additional documents if necessary.



CDO GenMjr
Ing. Mag. Hermann Kaponig

“The development of military capabilities for standard, crisis and deployment operations is being jointly planned and implemented using the possibilities of digitisation. The successful implementation of the ÖBH2032+ development plan is unthinkable without simultaneous digitisation!”

Smart communication server

A variety of equipment (muscular strength chair, blood analysis equipment, etc.) is used for aptitude testing in the army's induction centres. In the past, this information was exchanged between systems by manual input. With an error rate of just one percent, this equates to 5,000 incorrect entries per year for an induction centre with approximately 500,000 records. Implementing the “Mirth Connect” open source communications server eliminated manual data entry, thereby reducing the error rate to zero. The communication server currently enables the interoperable integration of around 50 different devices and ensures that data is automatically exchanged between them as well as with other systems and applications. Mirth Connect also supports a wide range of plug-ins that allow the functionality of the platform to be intelligently adapted to individual requirements.



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

Cross-border healthcare

The Federal Ministry of Social Affairs, Health, Care and Consumer Protection (BMSGPK) uses ID Austria to ensure that citizens in other EU countries can safely obtain prescribed medicines.



CDO
SCⁱⁿ Mag.^a Dr.ⁱⁿ
Brigitte Zarfl

“Smart digital tools are an important recipe for medical care that can be relied on anytime, anywhere.”

Cross-border electronic health services are becoming increasingly important for mobile citizens in the European Union. The Federal Ministry of Social Affairs, Health, Care and Consumer Protection (BMSGPK) is actively involved in the MyHealth@EU project – and is implementing a much acclaimed smart solution that integrates ID Austria to securely identify Austrian patients when they use cross-border services. The “ePrescription” service enables electronic dispensing of Austrian prescriptions for medicines abroad. The big advantage for citizens: they can obtain the medicines they need through a low-threshold and secure identification process at a pharmacy in any other EU Member State that is already connected to the EU infrastructure. The prescriptions are transferred electronically from their country of residence to the country they are travelling in.



The “one-time token” service, which is currently being tested, will go live at the end of 2024.

Safety is key

Secure identification and authentication of citizens is an important prerequisite for this service. The BMGSPK ensures this through the use of ID Austria. The procedure is as follows:

- On your smartphone (or on your PC or laptop) you can open a website that is linked to the Austrian public health portal (gesundheit.gv.at/). There, you are informed about the use of the data by the foreign pharmacy.
- This is followed by a login process based on the ID Austria. The system creates what is known as a “one-time token”. This is an eight-digit code made up of letters and numbers that is only valid for a short time.
- This code is presented at the pharmacy via QR code or plain text and read or entered there. The code is transmitted via standardised, encrypted interfaces to Austria, where it is checked for validity.
- An encrypted “identifier” is then sent to the foreign pharmacy, which can use it to retrieve current prescriptions from the e-prescription system via an Austrian server.

The “one-time token” service, which is currently being tested, will go live at the end of 2024 as part of the ePrescription project.

Great interest

This method has already been demonstrated in various EU working groups – and has attracted great interest from other EU countries. The innovative health service is another useful application of ID Austria. The system developed can also be used in other areas where citizens need to be identified or authenticated with a high level of quality.





Smart government at state level

Selected projects
of the federal states



BURGEN LAND



Digitally social

Using smart solutions, Burgenland is making various administrative processes faster and more effective for everyone involved.



**Director of the State Office
Mag. Ronald Reiter, MA**

Quick and digital access to heating subsidies and capped heating prices

In July 2022, the government of Burgenland set up a Social and Climate Fund. It is used to finance measures to provide inflationary relief to less well-off persons whose main residence is in Burgenland. An application is submitted either by the applicant via ID-Austria or via the municipality of residence. For the digital registration of applications, a modern PVP application has been made available to the municipalities. The end-to-end digitisation of the application process allows for fast and unbureaucratic procedures. As a result, timely assistance was provided to approximately 10,000 citizens of Burgenland.

Building land mobilisation levy: Interconnection of cadastres and registers

In 2019, the parliament of Burgenland decided to introduce a tax on the mobilisation of building land. The aim of the resolution was to keep building land in Burgenland affordable. The provision has been in force since 2021. Since then, all undeveloped land has been subject to the levy. However, the law provides for a number of exceptions where no levy is payable. An intelligent eGovernment application is used to minimise the administrative work involved in collections. It is based on the interconnection of different cadastres and registers, such as the digital cadastre folder, the digital zoning plan, the land register, the central civil register and the business register. In addition,

an online form has been developed for landowners to report exceptional circumstances quickly and unbureaucratically in order to be exempted from the building land tax.

Digital facilitation for homes and district administration

The smart digitisation of billing in old people's, residential and nursing homes is benefiting home operators and the district administration in Burgenland. Background: Under Burgenland's social assistance scheme, the local district administration covers the costs of necessary institutional care for Burgenland residents if their own resources are insufficient. The assumption of costs is determined by an official decision. Based on this, the home concerned invoices the local administration for the costs incurred. It used to be very time-consuming to check the invoice for factual and arithmetical correctness and to issue payment instructions. As part of the end-to-end automation of home billing, there have been significant simplifications. These include electronic invoicing by home operators via USP, linking the social assistance database to the care information system, and automated verification of e-invoice items (valid decision, correct level of care, correct daily rate). In addition, invoicing parties are automatically notified of the status of the electronic invoice. The electronic invoice is prepared to allow the district administration authority to issue payment instructions.



CARINTHIA



Digital first with “diva”

The State of Carinthia ensures the end-to-end digital processing of files with the “diva” digital administrative act. The solution involves a paradigm shift towards smart technologies.



Director of the State Office
Mag. Dr. Dieter Platzer, MAS

The digital file is the leading medium and the original – paper documents, on the other hand, are no longer seen as anything more than working aids. This is the principle behind the “diva – digital administrative act” project, with which Carinthia is continuing the advancement of its administration to make it “simple, fast and clear”. Important steps were taken during the reporting period to implement the new solution, which will be fully operational from 2024.

End-to-end digital processing of business processes

The new solution was implemented on the basis of a clear requirement profile for a new ELAK system for Carinthia, which included, among other things, a high level of maturity, extensive standard functionality and good integration capability with the existing IT environment. The system is designed to enable business processes to be fully digitised, to provide the best possible support for administrative tasks and to improve the quality of work. Other desired effects include speeding up processing by making it easier to find information, minimising paper handling and providing a base system for further digitisation projects.

Eliminating duplication of effort and media disruption

The implementation of “diva” involved several project elements, including scanning of incoming mail in a way that ensures high quality, secure access to the IT system and digital document and file management, which “diva” enables end-to-end. “diva” is used to modernise the government’s workplace tools and to bring them up to date. The new solution also meets the increased requirements for data processing and data security. Duplication of effort and administrative barriers due to media disruption are eliminated.

Significant facilitation

For government employees, the use of “diva” makes their daily work much easier: workflows become faster (e.g. full text search for authorised persons across all files). Collaboration becomes easier (e.g. “team room” for working together on the same document bundle). New mobile tools (tablet, app) can also be used safely. In addition, “diva” ensures high availability and security of all files: nothing can be lost or tampered with, and history and different versions can be stored. In this way, “diva” ensures a state administration that works securely and intelligently.

Austrian
Association of Towns and Cities

Smart cities



Österreichischer
Städtebund

Whether it is cybersecurity, administrative procedures, whistleblower systems, construction processes or services for citizens: Austria's cities are systematically harnessing the potential of smart digital solutions.



100,000

online forms are used by cities and municipalities through the service

Inter-municipal cybersecurity initiative

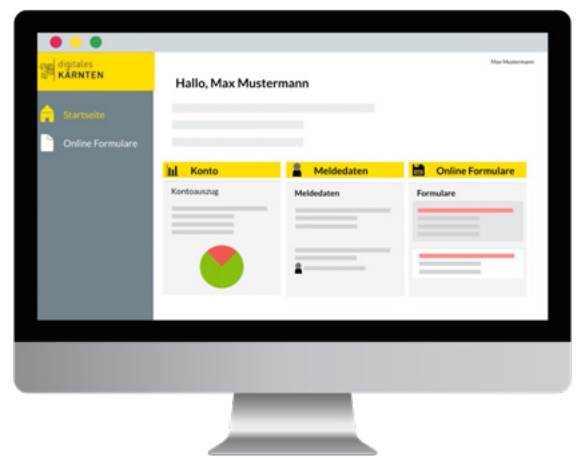
As part of a cross-city cybersecurity initiative, the Austrian Association of Towns and Cities initiated a cooperation with the Department of Secure Information Systems at Hagenberg University of Applied Sciences in 2022. The project is developing guidelines for self-assessment of IT security in cities and municipalities in line with the NIS2 Cyber Security Directive. This will make it easy to identify and eliminate potential weaknesses.

Standard for online forms

Also on the initiative of the Austrian Association of Towns and Cities, standardised municipal online form collections are made available as a central cloud service for each federal state under the name "amtsweg.gv.at". With more than 100,000 online forms, the service is already being used extensively by more than 1,100 cities and municipalities. The integration of online forms into oesterreich.gv.at and the "Digitales Amt" app, as well as the popular Gem2Go app especially for municipal citizens, ensures consistent, barrier-free and seamless eGovernment. Received applications are then securely transferred to the "municipality cloud". This is a centralised municipal cloud storage facility set up at the request of the Association of Towns and Cities.

Whistleblower system for cities and municipalities

In 2022, the European Union’s Whistleblower Directive was already in force, meaning that affected cities with more than 10,000 inhabitants had to provide an internal reporting unit for whistleblowers. Around three quarters of the cities (74 percent) have opted for the “Hinweisportal” whistleblowing system initiated and promoted by the Austrian Association of Towns and Cities, the Association of Municipal Enterprises and the Association of Public Enterprises and the Public Sector. The service is provided as a centralised Austrian cloud application. It offers far greater possibilities than required by the Whistleblower Protection Act for submitting completely anonymous information – and for far more offences than provided for by law.



Digital application for building permits in Vienna

BRISE, which stands for “Building Regulations Information for Submission Involvement”, brings a whole new dimension to the digitisation of building processes in Vienna. The BRISE project combines the high-tech methods of Building Information Modelling (BIM), Artificial Intelligence (AI) and Augmented Reality (AR) to create a comprehensive, end-to-end digital and automated approval process. Fully digital 3D building models are used instead of 2D paper plans. The BRISE solution ranges from planning and submission to on-site construction site inspection and acceptance of the finished building. The digital building permit process takes up to 50 percent less time, saving everyone involved time and money.



BRISE uses digital 3D building models

Award-winning citizens’ portal

The Carinthian citizens’ portal “Kaerstin.at” won the 2023 Austrian Administration Award in the category “Innovative Service Design and Digital Services”. It enables cities and municipalities to digitally and efficiently connect and engage with citizens. After logging in with ID-Austria, they can access administrative procedures across municipalities. Citizens receive all information and account statements on due taxes, fees and personal registration data centrally in their personal citizen service account. Existing data is used to pre-populate applications. Kaerstin.at offers municipal administrations a fast, easily scalable option for online services that also takes into account the “once only” principle.



LOWER AUSTRIA



Smart design & implementation approaches to digitisation

Lower Austria is raising awareness of smart digital solutions among employees in the state's administration – and putting them into practice.

“Trend management digitisation” workshop series

As part of the “Trend management digitisation” workshop series for the Lower Austrian state administration, 187 employees from the 11 groups of the Lower Austrian state administration and 65 employees from the 20 Lower Austrian district administrations were familiarised with technology and digitisation trends in 2022. The trends were directly related to the sphere of influence of the respective departments. A “future radar” was drawn up for each department, and concrete guidelines were formulated on how to handle digital opportunities responsibly. Sharing information across departmental and group boundaries is particularly important for smart applications.

“digiNet goes Campus” for enhanced digital skills

In every office of the Lower Austrian state administration, one person is appointed as a digitisation officer to support the digital transformation. The “digiNet goes Campus” initiative – launched in cooperation with the “House of Digitisation”, the Universities of Applied Sciences Krems, St. Pölten and Wiener Neustadt (FOTEC), Josephinum Research Wieselburg and the University of Continuing Education Krems – sharpens the digital skills of digitisation officers (digiNet) and brings science and administration closer together. Topics in 2022 included the Internet of Things, digital tools and practical applications from artificial intelligence to virtual reality.



Director of the State Office
Mag. Werner Trock

Digital fitness in state administration

The IT department of Lower Austria's state administration has created a new, tailor-made training programme to promote the digital skills of new employees for the specific systems used by the Lower Austrian state administration. Basic training is provided by the relevant department. Courses at the advanced level are offered by central trainers. There are classroom training units, e-learning units and learning objective assessments that are independent of time and place. For example, a first networking meeting for apprentices in the state civil service was held under the motto “Apprenticeship meets digitisation”. A showroom illustrated the use of modern technology in the state's government services. The Office of Technology and Digitisation was present with three interactive stations on robotics, artificial intelligence and augmented reality to raise awareness of these topics.

Smart road condition monitoring

Mobile working with smart devices is at the heart of road condition monitoring in Lower Austria's municipal road network. This involves recording 38,000 km of roads outside of urban areas and 14,000 km of roads within urban areas. All usage lanes (footpath, cycle path, carriageway, parking lane) are recorded on site and assessed with regard to their condition. Based on the condition assessment, the necessary actions and financial resources are identified and prioritised. The project includes the complete coverage of the usage lanes for the Graph Integration Platform (GIP). The recording software was implemented as a web application. The application can also be used to record the position and cross section of new roads and provide an immediate assessment of each lane. These roads are then added to GIP.



UPPER AUSTRIA



Smart location

Upper Austria is deploying smart services for businesses and citizens in areas ranging from economic development to housing, energy cost subsidies and health.



Director of the State Office
Mag. Thomas Schäffer

Upper Austrian Business Portal The first choice for businesses

The Upper Austrian Business Portal, which was intensively prepared during the reporting period, has been the central point of contact for applications and funding requests from Upper Austrian companies since January 2023.

After registering once with the business service portal, the registration with the business portal is done using the E-ID only.

This project is a first for Austria: in cooperation with the Federal Ministry of Finance (BMF), a generic link between the Upper Austrian Business Portal and the BMF's Business Service Portal was realised. This allows companies, for example, to administer their users themselves on the Business Service Portal. These users can then use the Upper Austrian Business Portal without having to register or log in again. In addition, the integration is the basis for further procedures and applications of the State of Upper Austria that require registration with the USP.

By uniquely identifying companies, the interconnection enables the transfer of verified data from registers via the network of registers and systems, which was also integrated for the first time in this project. This is in line with the "once-only" principle: companies save themselves the trouble of having to disclose data that already exists in registers. In turn, the employees of the State of Upper Austria are spared the need to manually compare or check the data entered. Automated register queries also improve data quality. Nearly 1,500 applications have already been submitted via the smart service in the first half of 2023. Currently, around 81% of all business funding cases in the state's Department of Business and Research are processed completely digitally.

Smart housing and energy cost bonus

To help households cope with rising housing and energy costs, Upper Austria offers the Upper Austrian housing and energy cost bonus to supplement the existing Upper Austrian heating and energy subsidy. The payment of the Upper Austrian housing and heating subsidy was fully automated: for each application, a cross-check with the central civil register (household query) and a household income query via the transparency database were carried out. This enabled 93% of the roughly 200,000 applications to be processed in a matter of weeks, without any human intervention.

Award-winning epidemic monitor

In Upper Austria, a separate application has been developed for epidemic management: the Epidemic Monitor. This enabled the automatic generation of notices, the sending of information to patients and contacts via SMS, the documentation of official orders and the provision of data for crisis teams to assess the situation. As a result, it was possible to handle processes completely digitally, with little or no manual intervention. Numerous interfaces were integrated or newly created for the Epidemic Monitor. In addition to the reconciliation with the central civil register and the link with the own file system, a data comparison with the epidemiological reporting system of the federal government was also carried out. Upper Austria's smart application was awarded the Austrian Administration Prize in 2023.



SALZBURG



Naturally digital

Smart digital solutions are also being used in Salzburg to protect natural resources and the environment.



Director of the State Office
DDr. Sebastian Huber, MBA

Digital procedures for drinking water supply

In Salzburg, procedures under the General Administrative Procedures Act (AVG) in the field of drinking water supply are being handled digitally. The system is based on cross-departmental AVG procedural standards, which are being piloted using LowCode technology. Submissions – usually by planning offices – are made via the Business Service Portal (USP) and via the portal of the State of Salzburg. The entire process is digital from end to end, including integration with the Opentext document management system, the geographic information system and other specialised applications (e.g. public water registry). Settlement is also automated, with delivery via dual service and electronic legal transactions.

Digital land transfers

Salzburg also uses the interdepartmental AVG procedural standard in spatial planning. Preparations for this were made in 2022. The new procedures in the area of land transactions (green, grey and basic transactions for foreigners) in the State of Salzburg, which are regulated by law as of 1 March 2023, have since been fully digitised. The submission is usually made by notaries and lawyers via the portal of the State of Salzburg. The automatically generated settlement letters are then transmitted digitally via electronic legal transactions and dual service.

Digitisation in mobile waste treatment plants

The new AVG procedural standards with Low-Code technology are also being used in Salzburg to digitise processes in the area of mobile waste treatment plants. Submissions in this area are normally made through the Business Service Portal. The project is set to be greatly expanded: based on the experience gained with mobile facilities, all other waste management processes will be fully digitised in the future.

Artificial intelligence for traffic and documents

The State of Salzburg is harnessing the power of artificial intelligence in a number of areas. For example, the large number of driver surveys sent in by car rental and insurance companies are digitally analysed and automatically processed with the help of AI. AI is also being used for official documents: the agricultural and forestry documents, which date back to around 1850 and are still legally binding today, are being scanned and – with the support of the University of Innsbruck – transcribed from the cursive script into a machine-readable form using AI. This not only preserves the documents, but also makes them readable and flexible for future use.

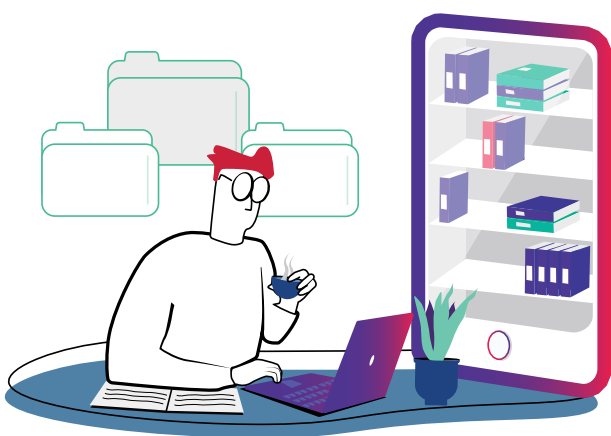
Austrian Association
of Municipalities

Smart on site

The development of smart services is continuing in many municipalities across Austria. Selected examples show where and how local authorities are breaking new digital ground to deliver real benefits to citizens.

Down to earth and smart

The municipality of St. Marien in Upper Austria has successfully completed the full digitisation of its municipal administration. Applications and submissions from citizens – regardless of how they are submitted – are converted into editable digital form and become triggers for digital municipal business processes. The municipal administration's output is also completely digital: regardless of whether it is an RsA or RsB letter, normal mailing or LetterLink – the data with the municipal correspondence is transmitted to Post AG, which then carries out the delivery as specified in the file. The digitisation of St Marien's administration is not only a convincing response to staff shortages, but also an expression of a smart digitisation philosophy: the municipality's stated aim is to be at the forefront of innovation while remaining down-to-earth. The technological backbone of the digital transformation of administrative processes is the SAP-based software "GemeindeOrganisator" (GeOrg). All elements in the e-files, links to the registers, bookings in accounting or data in the incoming mail book and in the dispatch module are tagged with links – and thus linked across all areas.



Pioneers in digital recycling

The municipalities of Horn and Tulln are using innovative technologies to dispose of waste glass and household waste: special sensors, smart platforms, artificial intelligence and wireless technology provided by Saubermacher, Magenta Telekom and start-up SLOC are used to significantly improve waste separation and glass disposal. During the pilot project, around 600 high-tech sensors (“ANDI2”) measured the contents of 300 used glass containers and transmitted them to an intelligent platform. Various parameters, such as container fill level or maximum truck load capacity, were combined to produce an overall optimised route plan. For example, containers should not be emptied if they are only half full. Households were also involved to reduce improper disposal. Based on the data collected, they received direct electronic feedback on their smartphone, such as: “Your residual waste contained a significant number of improperly sorted items. The main problem was lightweight packaging. Please follow the directions on how to sort waste correctly. You will be protecting the environment and the climate! Yours sincerely, your waste management association.” Improperly disposed waste is detected by a recyclables scanner in the collection vehicle. If the total number of items mis-sorted as residual waste across Austria were reduced, this could save around 350,000 tonnes of CO₂ per year. The smart system is now scheduled to be tested in larger regions.



350,000

*tonnes of CO₂ could be saved
if we reduced the number of items
mis-sorted as residual waste
across Austria.*



Österreichischer
Gemeindebund

Digitisation with a concept

Dornbirn in Vorarlberg shows how municipalities can strategically combine smart digitisation with smart climate protection. The Smart City Dornbirn Digital Strategy aims to harness the opportunities and potential of digitisation for citizens, businesses and the region as a whole. The strategy focuses on “smart administration”, “smart living” and “smart business”. The strategy is conceptually aligned with the overarching strategies of the Association of Municipalities, the State, the Federal Government and international best practice. On the basis of this strategy, Dornbirn City Hall is making targeted use of new technologies in its services. Applications, forms and information are exchanged and processed digitally.

Municipal “data warehouse”

Municipalities have a wide range of data at their disposal – from water supply and PV power generation to environmental and waste management data. With this in mind, the municipality of Laab im Walde in Lower Austria has developed a “data warehouse” to store, process and link digital data at the municipal level. Citizens benefit from this as well. They can, for example, use the digital map and toolbar to measure properties or create a PDF file. This provides valuable support for planning projects.



STYRIA



Smart infrastructures

During the reporting period, Styrian digitisation projects promoted digital infrastructures that support culture and youth in an innovative way.



**Director of the State Office
Mag. Brigitte Scherz-Schaar**

Digital skills for youth work

Youth culture has moved more and more online, not least because of the Covid-19 pandemic. Challenges of the digital world, such as cyberbullying, also require new strategies for youth work online. The Styrian Digital Society Competence Centre supports youth workers, school social workers and teachers in assisting young people online. To this end, training was provided in 2022 on how to successfully conduct online counselling sessions and deal with (cyber) bullying situations. The training also focused on the links between media consumption, digital filter bubbles and social division. Other measures included the publication of a guide for digital youth work and social media in collaboration with LOGO Jugendmanagement and the Styrian umbrella organisation for open youth work.

Smart infrastructures for digitisation and knowledge transfer

Efficient digital infrastructures are an important prerequisite for smart digital applications and solutions. That is why Styria has created important infrastructures for digitisation and knowledge transfer. With the DATA HOUSE, an innovation cluster for data sciences has been established on the Inffeldgasse campus of Graz University of Technology, which brings together various forms of research related to data analysis and data management. In addition, the EBS Centre (Electronics Based Systems) has been established to carry out thematic research in the fields of electronics, microelectronics, sensor technology and computer

science. These infrastructures aim to support technology transfer and collaboration between science and business. Both projects were funded by the European Union (ERDF) and the State of Styria.

PantherWeb: Digitising Styrian cultural heritage

The combination of tradition and innovation is encouraged in many ways in the cultural region of Styria. Digitisation is also a welcome approach to strengthening the museum landscape. Styria's PantherWeb collection object database creates a sustainable basis for preserving knowledge and stories about the common Styrian cultural heritage for future generations. Museums and collections that are open to the public and are not sponsored by the State of Styria can use the PantherWeb collection object database free of charge to inventory their museum objects. This relieves the participating museums and collections of organisational and financial burdens.

They can access the database system simultaneously from different end devices using an Internet browser. Uniform database masks and a standardised vocabulary ensure the quality and reuse of digital object data. All participants are assisted in the use of PantherWeb in the form of application support (Province of Styria) and museum science support (Museumsforum Steiermark).



TYROL



Smart pathways for everyone

The State of Tyrol is using intelligent digital solutions in a wide range of areas – from road maintenance to information for the fire brigade and nature conservation. Benefits for families are also managed digitally in a smart way.

Digital Family Pass: Smart voucher management

With the “Digital Family Pass” app, the State of Tyrol has digitally enhanced the existing voucher booklet for family pass holders. For families, this means: vouchers can be easily redeemed with service providers via smartphone. The search functions are particularly practical: all service providers are displayed on an interactive map. Users can search for and find them according to a variety of criteria. Changes, updates and corrections (e.g. to contact details or information texts) can be made at any time. This ensures that the Digital Family Pass is always up to date.

While pass holders can easily redeem their vouchers via the Land Tirol app without having to tear off paper vouchers, service providers receive a daily evaluation of the redeemed vouchers. The time consuming and costly process of printing the voucher booklet is no longer required. The app solution developed in 2022 was already installed on more than 40,000 end devices in the summer of 2023.

“Contwise Infra”: Proper trails for everyone

Tyrol supports the construction and required maintenance of the Tyrolean network of hiking, mountaineering and mountain biking trails. The “Bergwelt Tirol – Miteinander Erleben” (Tyrol’s Mountain World – Experiencing it Together) programme also promotes the unbundling of competing land use claims – for example, between sports and forestry – in the open countryside. For this, there is smart



Director of the State Office
Dr. Herbert Forster

digital support: with the Contwise Infra application, trail closures and the condition of trail installations or signage can be recorded and documented in situ – with mobile devices directly in the field. This information is made available to the system partners (e.g. tourism associations) via an interface in their systems and tourist map displays. Among other things, this makes it easier to plan routes correctly, while conflicts or dangerous situations are reduced. In addition, the application enables an efficient and transparent control of the guidance systems for all parties involved. This improves visitor guidance, safety and the experience of nature for locals as well as guests.

Local deployment information

With the webGIS application “tiris OEI – Örtliche Einsatzinformationen”, all 357 fire brigades in Tyrol can digitally record locally relevant deployment information. This means that the emergency services are already informed in advance about the situation at the scene of the incident and are prepared in the best possible way. Around 60 different mission-relevant editing topics are available for recording – enriched with associated sketches, documents or images. All applications are available as a web application or as a desktop version for a closed user group. The Water Operations module provides support in the event of accidents on Tyrolean watercourses. The Fire Water Calculation module helps to establish a fire water supply over long distances. Meanwhile, the Digital Radio module visualises the available network coverage of the digital public authority radio network “Digitalfunk BOS-Austria”. This supports tactical deployment planning for communications in the event of an incident.



VOR ARLBERG



Smart collaboration

Vorarlberg's innovative social intranet platform opens up new possibilities for collaboration in the public sector



Director of the State Office
Mag. Philipp Abbrederis

vConnect: Groundbreaking collaboration platform

As part of a joint project, the State of Vorarlberg and the Vorarlberg Association of Municipalities have built a social intranet platform called vConnect involving all 96 municipalities. Establishing vConnect in Vorarlberg represents a pioneering achievement in advancing administrative culture. The system enables targeted information and communication and opens up completely new possibilities for collaboration in the public service. The platform is based on the digitisation strategy "Digital administration – Vorarlberg", which was updated in 2021, and the New Work programme "Schaffa4Future". The platform brings many innovations, including a whole new quality of employee engagement and participation. From the very beginning, the platform has met with a broad acceptance and enormous popularity. Intuitive operation and location-independent access are some of its key benefits.

The first choice for geographical information

The geoportal of the State Office for Surveying and Geoinformation (vogis.vorarlberg.at) is a public and central access point to the state administration's geoinformation. It is available to interested lay people as well as professionals. Searching for geo-objects (e.g. addresses, properties) and geo-datasets leads users to the display, detailed information or the download of the data with just a few clicks. The automated, metadata-driven provision of geospatial information from the various state administration departments is an important contribution to an intelligent digital infrastructure for the state.

Digital tool for primary education

The "KIBE" application provides various digital modules for primary education, including the electronic collection of language proficiency assessment forms (BESK, BESZ DaZ), the annual opening notification, and the application and processing of various subsidies. In addition, KIBE can also be used for the digital processing of complex personnel cost subsidies. This inter-municipal application benefits not only the employees of the municipalities and the Office of the State Government, but also all private operators of facilities in the field of primary education that are connected to KIBE.

Online government services for all

"Amtswege Online" provides easy access to the online services provided by the State of Vorarlberg, its municipalities and the federal government. In addition to central access, the structure in administrative levels and an overview of all available services, the platform also offers a full-text search and easy filtering by subject area. Most of the services are provided automatically and make use of the synergies resulting from the close cooperation between the state and the municipalities in the area of web forms.



VIENNA



Digital service city

During the reporting period, Vienna continued to develop digital services for citizens and specific target groups: the goal is to have fast, intelligent and personalised access to digital services.



Director of the State Office
Mag. Dietmar Griebler

“Mein.Wien” (My.Vienna) at a glance

mein.wien is the personalised citizens' platform for fast access to the City of Vienna's digital services. During the reporting period, Mein.Wien (440,000 accounts) and the Stadt Wien (City of Vienna) app (370,000 downloads) were merged. This allows the 440,000 Stadt Wien users to log in on their mobile phones and have direct access to all official channels and services provided by Mein.Wien. By merging the two products into “Mein Wien auf einen Blick” (My Vienna at a Glance), users can access personalised information about their own neighbourhood – from events to e-refueling stations.

“BRISE” for residential construction

In 2021, 14,800 new apartments were approved in Vienna and 14,132 building applications were submitted to the City of Vienna. These were previously handled in a multi-step, paper-based process, resulting in an analogue file archive of approximately 200 tonnes of paper and an average processing time of one year per application. Against this background, the BRISE (Building Regulations Information for Submission Involvement) project has developed an innovative and intelligent eGovernment solution for an all-encompassing building permit process. The BRISE-Vienna approach combines Building Information Modelling (BIM) with Artificial Intelligence (such as Legal-Tech) and Augmented Reality to create a comprehensive, end-to-end digital and automated approval process. The integration of AI enables (partially) automated checks of legal and site-specific conditions, among other things, and supports administrative staff in official procedures. In addition to further developing the digital infrastructure, the processes, responsibilities, roles and organisational

units within the magistrate's departments have been adapted to modern requirements. Following the successful completion of the pilot phase – with an average reduction in approval times of 50% – the system will be integrated into regular processes. The results of the project will also be applied to other administrative processes.

Further development of “WienBot”

As a digital assistant, WienBot aims to make it easier for people to find information about the City of Vienna by providing direct answers to questions. Citizens are the main target group. To date, WienBot has already answered more than 13,000,000 questions. WienBot is integrated into many applications and services (web widget, Signal messenger, WienBot app, Stadt Wien app, wien.gv.at search, mein.wien). The bot provides content through editorial support and by querying various data sources. WienBot does not store any personal data. Questions are only processed anonymously. The aim is to improve the recognition of queries and expand the range of answers provided.

Cybercrime helpline

With the Cybercrime Helpline, the City of Vienna provides a first point of contact for cybercrime, such as online fraud, online extortion, data abuse, identity theft, phishing attacks, cyberbullying or online stalking. The hotline can be reached on weekdays from 7.30 am to 5 pm on 01 4000-4006. Individuals who suspect they have been a victim of cybercrime receive free initial information and advice on what to do. In addition, initial advice in writing is available via chat.

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