



# **PORTUGAL** 2024 Digital Public Administration Factsheet Supporting document



Main developments in digital public administrations and interoperability

JULY 2024



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Icons Glossary		
Political Communication	Legislation	Infrastructure
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**documents** support the objectives and targets of the Digital Decade programme. By referencing national initiatives on the digital transformation of public administrations and public services, as well as interoperability, they complement existing data and indicators included in the Digital Decade reports and related resources. They also highlight and promote key initiatives put in place or planned by EU countries to reach the Digital Decade's targets.

# **1. Interoperability State-of-Play**

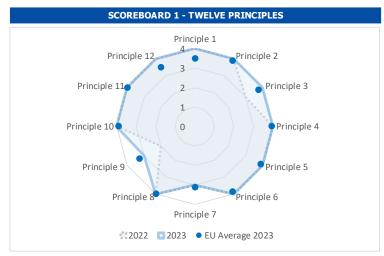
In 2017, the European Commission published the European Interoperability Framework (EIF) to give specific guidance on how to set up interoperable digital public services through a set of 47 recommendations divided in three pillars. The EIF Monitoring Mechanism (MM) was built on these pillars to evaluate the level of implementation of the framework within the Member States. The mechanism is based on a set of 91 Key Performance Indicators (KPIs) clustered within the three scoreboards (Principles, Layers, Conceptual model and Cross-border interoperability), outlined below.

Starting from the 2022 edition, an additional scoreboard, Scoreboard 4, focusing on cross-border interoperability, has been incorporated. This scoreboard assesses the adherence to 35 Recommendations outlined in the EIF framework. Specifically, it encompasses Interoperability Principles 2, and 4 through 11 from Scoreboard 1, all recommendations pertaining to Interoperability Layers from Scoreboard 2, as well as Conceptual Model recommendations 36 to 43 and 46 to 47 from Scoreboard 3.



Source: European Interoperability Framework Monitoring Mechanism 2023

Each scoreboard breaks down the results into thematic areas (i.e. principles). The thematic areas are evaluated on a scale from one to four, where one means a lower level of implementation and four means a higher level of implementation. The graphs below show the result of the EIF MM data collection exercise for Portugal in 2023, comparing it with the EU average as well as the performance of the country in 2022.



Source: European Interoperability Framework Monitoring Mechanism 2023

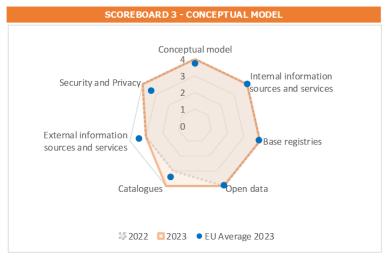
The Portuguese results on Scoreboard 1 demonstrate an overall good implementation of the 12 EIF Principles. Notably, the country has attained the highest score of four and exceeds the EU average on 9 out of 12 Principles. Portugal performs particularly well on Principle 1 (Subsidiarity and Proportionality) and Principle 12 (Assessment of Effectiveness and Efficiency), where it scores

significantly above the EU average. However, there are areas for potential improvement, such as Principle 9 (Multilingualism), despite notable efforts made in 2023 to narrow the gap to the European average. Specifically, Portugal should further utilise information systems and technical architectures that accommodate multilingualism when establishing European public services (Principle 9 – Recommendation 16). Additionally, Portugal has improved its score in Principle 3 (Transparency), achieving a result well above the European average, in 2023.



Source: European Interoperability Framework Monitoring Mechanism 2023

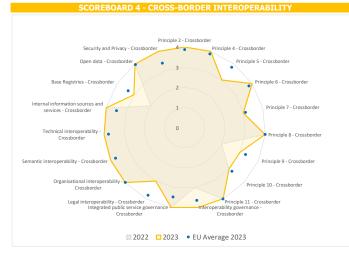
Portugal's results on Scoreboard 2 illustrate an overall good performance of the country with scores of three and four on all the interoperability layers. Areas of improvement to strengthen the country's implementation of the recommendations under Scoreboard 2 are mostly related to legal interoperability. More precisely, Portugal should continue to ensure that legislation is screened by means of 'interoperability checks', to identify any barriers to interoperability. In fact, when it drafts a new legislation, it should seek to make it consistent with relevant legislation, by performing a 'digital check' and considering data protection requirements (Legal interoperability – Recommendation 27). Compared to 2022, Portugal has increased its performance on interoperability governance. More precisely, the country has improved the use of a structured, transparent, objective and common approach to assess and select standards and specifications (Interoperability governance – Recommendation 22).



Source: European Interoperability Framework Monitoring Mechanism 2023

The Portuguese results on Scoreboard 3, focusing on the Conceptual model, reflect an overall good performance, with scores predominantly ranging between three and four. Notably, Portugal surpasses the EU average in 6 out of the 7 areas covered by the Conceptual model. An area with potential for improvement relates to External Information Sources and Services, while one recommendation linked to Base Registries, receiving a score of two, could also benefit from further enhancement. Specifically, Portugal should develop and adhere to data quality assurance plans for base registries and associated master data to improve its score in this area (Base Registries

 Recommendation 40). Furthermore, utilising external information sources and services during the development of European public services should be further encouraged (External Information Sources and Services – Recommendation 45). Compared to 2022, Portugal has made notable progress in enhancing Catalogues, which now achieving a result above the European average.



Source: European Interoperability Framework Monitoring Mechanism 2023

The results of Portugal on Scoreboard 4, focusing on Cross-Border Interoperability, demonstrates an overall good performance. Specifically, the country has achieved the maximum score of four for five EIF Principles, four interoperability layers, and three areas of the Conceptual model. However, there are still areas for improvement. Despite progress observed in 2023, Principle 9 (Multilingualism - Cross-border) and the Base Registries area could be further enhanced. Specifically, Portugal should continue to implement information systems and technical architectures that accommodate multilingualism when establishing European public services (Principle 9 – Multilingualism – Recommendation 16). Additionally, the country should strive to align each base registry with appropriate metadata, including descriptions of its content, service assurance and responsibilities, types of master data it manages, access conditions, relevant licences, terminology, a glossary, and information about any master data it utilises from other base registries (Base Registries – Recommendation 39). Similarly, Principle 5 (Cross-border Technological Neutrality and Data Portability), Principle 7 (Cross-border Inclusion and Accessibility), and Legal Interoperability could be further improved. In terms of Interoperability Governance, Portugal has made strides towards achieving an above-average performance compared to the European level.

Additional information on Portugal's results on the EIF Monitoring Mechanism is available online through interactive dashboards.

#### Curious about the state-of-play on digital public administrations in this country?

Please find here some relevant indicators and resources on this topic:

- Eurostat Information Society Indicators
- Digital Economy and Society Index (DESI)
- eGovernment Benchmark
- Repository of good practices on the EIF implementation

# 2. Digital transformation of public administrations

Main Digital Strategies, Action Plans and Legislations

### Strategy for the Digital Transformation of Public Administration 2021-2026

The Council for Information and Communication Technologies in the Public Administration (CTIC) defined the Strategy for the Digital Transformation of Public Administration 2021–2026 and the corresponding Action Plan for the Digital Transformation of Public Administration 2021–2023, both published in September 2021 (Resolution of the Council of Ministers No. 131/2021). These documents are duly aligned with other overarching national policies, namely the Strategy for Innovation and Modernisation in the State and Public Administration 2020–2023, the Action Plan for the Digital Transition of Portugal and the National Recovery and Resilience Plan.

The strategy aims to deliver simpler, more inclusive, integrated and transparent services to citizens and businesses, focusing on six lines of action: (i) digital public services; (ii) valorisation of data; (iii) reference architectures; (iv) ICT skills; (v) ICT infrastructure and services; and (vi) security and trust. The action plan initially encompassed the priority measures to be developed by 2023; an interim assessment was then carried out and an extension for the 2024–2026 period is being elaborated. The Strategy for the Digital Transformation of Public Administration 2021–2026 includes a report on the implementation of the previous ICT 2020 Strategy (in force between 2017 and 2020), which encompassed over 700 projects aimed to improve public services with estimated benefits of EUR 721 million. The Council for Information and Communication Technologies in the Public Administration has been mandated to implement it.

#### Recovery and Resilience Plan

The Portuguese Recovery and Resilience Plan (RRP), which was submitted in April 2021 to the European Commission, is a national investment plan, with an exceptional implementation period lasting until 2026. It is based on three structuring dimensions: resilience, climate change and digital transition. As to digital transition, the aim is to ensure that Portugal accelerates the transition to a more digital society. For that purpose, significant reforms and investments are planned in the following areas: empowerment and digital inclusion of people through education; training in digital skills and promotion of digital literacy; digital transformation of the business sector; and digitalisation of the State. The measures to support digital objectives represent 22% of the plan total allocation (ca. EUR 3,660 million), exceeding the threshold of 20% set by European regulation: 12 of the 20 components of the plan contribute directly to the achievement of the digital agenda. The 2023 RRP update introduced new measures and strengthened Component 19 - Public Administration Digitalization, Interoperability and Cybersecurity.

### SIMPLEX Programme

SIMPLEX is the Portuguese flagship simplification and modernisation programme. It follows a citizen-driven approach and has a strong focus on co-creation, with the ultimate goal of simplifying as much as possible citizens and businesses' everyday life, as well as their interaction with the public administration. SIMPLEX pursues in one single governmental programme the objectives of better regulation, administrative burden reduction, service interoperability, digitisation, red-tape reduction and digital government promotion. The programme is highly inclusive and innovative, involving citizens, entrepreneurs and public servants in determining and designing the initiatives to be implemented by the public administration. SIMPLEX has proven to be a successful and replicable model, with an average execution rate of 85% (for 1 103 measures) between 2016–2023 and positive feedback from the programme's stakeholders. The effectiveness of the SIMPLEX methodology has been further recognised by the European Institute of Public Administration, which awarded SIMPLEX the European Public Service Award 2019 in the European and national category.

#### National Strategy for Smart Territories

**B**V<sup>\*</sup> The National Strategy for Smart Territories (ENTI), launched in December 2023, aims to "transform data into action" to make life easier for citizens and companies. It was developed with local authorities, regional coordination and development commissions, inter-municipal communities and entities such as technology and telecom companies, higher education institutions and organizations integrated into the national science and technology system. ENTI encompasses 16 strategic initiatives and 31 recommendations, including the creation of a national Smart Territories Portal (coordinated by the Administrative Modernization Agency) to support the provision of value-added services and information based on interoperable platforms.

#### AP Digital Programme

The AP Digital Programme (an Incode 2023 initiative) aims to strengthen the digital skills of workers in public functions and accelerate the digital transformation of the public administration in three domains: digital productivity tools; training aimed at technicians in the IT career and/or performing-related functions; and training in emerging and management support technologies.

### Action Plan for the Digital Transition

The Digital Transition Action Plan was published on 21 April 2020 (Resolution of the Council of Ministers No.30/2020) and encompasses three pillars: (i) digital empowerment of people; (ii) businesses' digital transformation; and (iii) digitisation of the State, plus a cross-cutting catalyst dimension to accelerate the digital transition in Portugal.

The action plan consists of 12 flagship initiatives in total. In particular, the pillar relating to the digitisation of the State includes the following:

- Digitalisation of the 25 public services most used by citizens and companies, with the aim to ensure simplification of and online access to the 25 most used administrative services, and to ensure that all citizens have access to digital public services;
- Increase in the offer and translation of digital services of interest to the internationalisation of the ePortugal Portal, with the aim to ensure that the services provided on the ePortugal Portal have multi-language functions and information content, and that electronic forms are translated into languages other than Portuguese, ideally always by default into English;
- Implementation of a cloud strategy for the public administration, with the aim to create a strategic framework for the integration of the public administration in the cloud through the adoption of computing tools that work in the cloud; and
- Simplification of the procurement of ICT services by the public administration, with the aim to adopt an exceptional scheme for the acquisition of goods and services within the scope of information and knowledge technologies, as per the specific legislation.

The plan continues to be implemented with progressive results. Since 2020, the UPskill programme reached more than 15 000 candidates. In addition, 29 Test Beds have already been selected to make new services available, including testing and experimenting with innovative products and services, in physical or virtual spaces, for SMEs and startups (a new call is underway in 2024).

## Berlin Declaration on Digital Society and Value-Based Digital Government

In December 2020, the Portuguese government signed the Berlin Declaration on Digital Society and Value-Based Digital Government, thus re-affirming its commitment – together with other European Union (EU) Member States – to foster digital transformation in order to allow citizens and businesses to harness the benefits and opportunities offered by modern digital technologies. The Declaration aims to contribute to a value-based digital transformation by addressing and strengthening digital participation and digital inclusion in European societies. The Declaration acknowledges the public sector as an essential element for the European Single

Market and a driving force for new and innovative technological solutions for public services and societal challenges.

#### $\mathfrak{x} \in \mathbb{R}^{2}$ Lisbon Declaration - Digital Democracy with a Purpose

Presented in June 2021, during the Portuguese Presidency of the EU, the Lisbon Declaration – Digital Democracy with a Purpose aims to promote human rights and fundamental freedoms, the rule of law and democratic principles in the digital world. Supported by all Member States, it builds upon the European Commission's communication Digital Compass 2030: the European Path to the Digital Decade and the Berlin Declaration on the Digital Society and Value-Based Digital

Government, to ensure that new technologies, data flows, infrastructures, digital products and services and the use of personal data be in line with international law and guarantee full respect for human rights and fundamental freedoms.

#### Coordination of the Digital Component of the Recovery and Resilience Plan The Resolution of the Council of Ministers No. 129/2021 approved the coordination

The Resolution of the Council of Ministers No. 129/2021 approved the coordination procedure of the public administration's Digital Transition Initiatives integrated in the RRP. It further established that such investments must comply with the principles of digital government inscribed in the common model for the design and development of digital services, published on tic.gov.pt, as well as comply with current European or national regulations and standards, including those defined or approved by the CTIC. The Administrative Modernisation Agency (AMA) is responsible for ensuring the strategic compatibility of the projects to be implemented with the cross-cutting solutions included in the RRP component relating to the public administration's digital transition, as well as verifying technical requirements and dependencies and promoting an agile development and alignment with the goals and milestones defined in the RRP.

# Specific Regulation of the Innovation and Digital Transition Thematic Area

Ordinance No. 103-A/2023, of 12 April 2023, adopts the Specific Regulation of the Innovation and Digital Transition Thematic Area within the scope of the Portugal 2030 Incentive Systems. This regulation was proposed by the managing authorities of the Innovation and Digital Transition Thematic Programme and other regional programmes, based on the contribution of public entities and other relevant actors.

#### Decree-Law on Digital Services

Decree-Law No. 74/2014, of 13 May 2014, further amended by Decree-Law No. 105/2017, of 29 August 2017, introduced the rule of digital provision of public services by default. In parallel, it enshrined the principle of digital assistance via a physical Citizen Spot Network as an essential complement. In this way, those who cannot, will not or do not know how to use digital tools can benefit from the support and guidance of a public services. Further amendments, introduced by Decree-Law No. 104/2018, of 29 November 2018, implemented the framework for transferring powers to municipal bodies in the field of citizen service centres.

#### Decree-Law on Zero Licensing

The Portuguese Zero Licensing Programme is one of the most representative initiatives of the eGovernment agenda. Its main objective is to considerably simplify the licensing procedures necessary to carry out several economic activities by reducing red tape through an electronic single contact point. One of the first objectives was achieved in April 2011, with the approval of Decree-Law No. 48/2011, of 1 April 2011, further amended by Decree-Law No. 141/2012, of 11 July, and becoming effective on 2 May 2013, as established in Ordinance No. 284/2012, of 20 September 2012, which provided for a significant reduction in the required licences. The Programme was further strengthened with the approval of Decree-Law No. 10/2015, of 16 January 2015, which regulated the entire procedure for food and beverage establishments, as well as for trade and services establishments.

#### Decree-Law on the Responsible Industry System

Decree-Law No. 169/2012, of 1 August 2012, introduced the Responsible Industry System (SIR), which lays down the necessary procedures for industrial activities. The SIR was first amended by Decree-Law No. 73/2015, of 11 May 2015. All SIR procedures are carried out electronically on the SIR Platform, which is accessible through the Entrepreneur's Desk and competent public entities' in-service counters.

#### Decree-Law on Administrative Modernisation

Decree-Law on Administrative Modernisation of 22 April 1999, further amended by the Decree-Law No. 73/2014, approved in May 2014, introduced important administrative modernisation measures, including the Once-Only principle, whereby citizens shall not be obliged to give the public administration the same document twice. The Once-Only principle implies several standards being applied, particularly relating to administrative communications.

Decree-Law for Simplifying Urban Planning, Land use Planning and Industry Licensing (Urbanism Simplex)

Decree Law No. 10/2024, of 08 January 2024, reforms and simplifies licensing procedures in the areas of urban planning, land use planning and industry. It defines a new paradigm in the real estate and urban planning sector, by streamlining licensing procedures, authorisations, acts and disproportionate administrative requirements that generate costs for urban planning operations and by prioritizing successive administrative control, during and after the execution of works.

# Decree-Law for Simplifying Environmental Licensing (Environmental Simplex)

Decree Law No. 11/2023 of 10 October introduces new developments concerning the simplification of environmental matters. To this end, a measure was launched to carry out the necessary IT developments for the introduction of tacit approval by the competent entities. The measure came into effect in January 2024, and in the first three months of implementation records indicate that around 30 requests for certification of acts were not carried out by the competent authorities within the deadlines.

#### Dertuguese Charter on Human Rights in the Digital Age

Law No. 27/2021 of 17 May 2021 approved the Portuguese Charter on Human Rights in the Digital Age, promoting Portugal's participation in the global process of transforming the Internet into an instrument for achieving freedom, equality and social justice and a space for the promotion, protection and free exercise of human rights, with a view to social inclusion in a digital environment. The Charter includes 21 articles that provide for the rights, freedoms and guarantees of citizens in the cyberspace.

#### Digitalisation of Internal Processes

#### Dentre for Digital Competences of the Public Administration

Resolution of the Council of Ministers No. 22/2018 established TicAPP – the Public Administration Digital Competences Centre - as a specialised skills centre for the digital transformation of the public administration. In 2019, it started its operation within the Administrative Modernization Agency (AMA) to support different government areas in the process of digital transformation.

TicAPP's role is to act as a centre of digital expertise, developing projects across public administration in the fields of:

- Digital architecture: collaborating with public entities in defining and planning their corporate architecture and information systems, with a mapping exercise to identify building blocks;
- Digital transformation: providing support in the processes of modelling, optimisation, simplification and integration through IT resources; gathering, analysing and defining information systems requirements (in collaboration with public entities), including the exploration, design and development of prototypes and proofs of concept (PoCs); and elaborating technical specifications and clauses for the contracting of information systems, specifically in the areas of software and services; and
- Data science: developing quantitative and predictive models to use available data to support the political and administrative decision-making process.

It also supports the development and implementation of some SIMPLEX emerging technology measures in the domains of AI (gIAp) and blockchain (Participa 5.0).

#### Traffic Exchange Point

Resolution of the Council of Ministers No. 12/2012 of 7 February 2012, approved the Global Plan for Rationalisation and Cost Reduction concerning ICT in the public administration. It establishes a set of ground rules to rationalise the ICT assets used by the Portuguese government. As to consolidated ICT solutions, Decree-Law No. 151/2015, of 6 August 2015, foresees the creation of an infrastructure that supports (voice and data) communications between the public entities, in a private, secure environment and without the service fee charged by commercial providers, i.e. a Traffic Exchange Point (PTT) that guarantees direct access to all public entities while promoting a better service and secure, faster and easier access, with lower costs. The implementation of the PTT is still progressing towards the designated goal of covering the whole

public sector: the backbone link between the ICT entities of each one of the Ministries was achieved in early 2019, with more than 25 different services made available for common use. In October 2020, another goal was achieved, with the implementation of the second node of the PTT, thus increasing access redundancy and resilience. The rollout process will continue during the next years with the implementation of an increasing number of new services in the PTT.

#### ∋<sub>@</sub> Bussola.gov

The Bussola.gov is a SIMPLEX initiative that was launched in 2020 as an intranet portal for public servants, aiming to foster the sharing of knowledge and experiences, the collaboration between entities and the provision of content relating to careers, employment exchange, training, social services and existing protocols.

#### Digitalisation Supporting the EU Green Deal

#### <u>, ECO360</u>

The new green procurement strategy, ECO360, was launched in 2023 and foresees that by 2030 all public administration entities shall have a strategy or plan for integrating environmental criteria into the procurement strategy, and that half of the contracts for the purchase of goods and services shall include circularity criteria. The main goals of this strategy include: fostering the participation in ECO360 and maximising its role in transforming public administration and markets; promoting resource efficiency, as well as a sustainable bioeconomy and the transition to a circular economy; stimulating the Portuguese economy towards climate neutrality; and encouraging eco-innovation among industry and suppliers.

# सूरी Agendas for Business Innovation

Within the Portuguese Recovery and Resilience Plan, the Agendas for Business Innovation will fund projects that contribute directly or indirectly to the green transition, as well as to the valorisation of biodiversity and the protection of the environment. These projects will respect the principle "Do No Significant Harm" and they will also contribute to addressing the challenges of the Covenant for Mayors for Climate and Energy, and more specifically the national energy and climate objectives contained in the National Energy and Climate Plan 2030 and the Roadmap to Carbon Neutrality 2050.

# Policy Frameworks to Stimulate the Greening of SMEs and Green Entrepreneurship

In July 2023, a Technical Assistance Project was signed, with the aim to strengthen Portugal's policy framework, to stimulate the greening of SMEs and green entrepreneurship and to support start-ups and scale-ups in industrial ecosystems through incubation and acceleration. The project is led by the Directorate-General for Economic Activities under the Ministry of Economy and Maritime Affairs and is funded by the European Commission (DG REFORM) and OECD's Technical Assistance. It will run until March 2025.

#### Barómetro ECO.AP

Barómetro ECO.AP is an IT tool that supports the implementations and monitoring of the Resource Efficiency Programme in the Public Administration called 'ECO.AP 2030', which was approved by the Resolution of the Council of Ministers No.104/2020, on 24 November 2020. The tool aims to assess and compare the consumption of energy, water or other resources, the energy production and the greenhouse gas emissions of the public administration. It also aims to provide information to support consumption management and energy production capacity. Barómetro ECO.AP also foresees the incorporation of the ECO.AP 2030 Counter, which in turn strives for the enhancement of the economic viability of projects (including by achieving economies of scale), the identification of financing opportunities and suppliers, the establishment of competitive requirements, and the definition of requirements for measuring and verifying savings from implemented measures.

#### Boupa Energia

Poupa Energia is a platform for comparing electricity and natural gas fees, with the aim to provide the consumer with a tool to make an informed choice or change energy supplier, promoting efficiency in energy consumption. The purpose is to reduce energy costs, through an

informed, easy and direct change of energy supplier, as well as by helping citizens and companies to better understand energy themes, thus contributing to the energy literacy, the promotion of energy efficiency and the rational use of energy resources in Portugal.

#### Digitalization of Energy Networks

Regulation No. 817/2023, of 27 July 2023, introduces the digitalization of energy networks to respond to the various challenges arising throughout the energy value chain, from generation and transport to distribution, supply, and consumption, with investments in system management and network operation and the installation of electricity smart meters. These investments will allow the networks to incorporate more and more renewable energy, thus increasingly decarbonising consumption and reducing its footprint. As to energy consumers, a growing digitalisation through smart metering allows them to adopt behaviours that lead to greater energy efficiency. As for gas, investments make it possible to ensure that renewable gas mixtures fulfil the requirements of the networks and their consumers.

# 3. Interoperability and data

#### Interoperability Framework

#### National Digital Interoperability Regulation

Resolution of the Council of Ministers No. 91/2012 of 8 November 2012 introduced the National Digital Interoperability Regulation (RNID) and the standards that can be used to provide interoperability in public administrations' information systems. It was later updated by Resolution of the Council of Ministers No. 2/2018 of 5 January 2018.

#### Den Standards in Public Administration Information Systems

Law No. 36/2011, approved in June 2011, established the use of open standards in the public administrations' information systems. This was considered a fundamental step towards public institutions' autonomy and control over their own documents, thus reducing the dependence on businesses and external applications that can properly interpret electronically stored information.

Subsequently, the RNID – originally published in 2012 and updated in 2018 by the Resolution of the Council of Ministers No. 2/2018 – established (among other standards) the OpenDocument Format (ODF) 1.2 as a mandatory standard.

#### Platform for the Public Administration

Resolution of the Council of Ministers No. 42/2015 of 19 June 2015 foresaw the preferential adoption of the Interoperability Platform for the Public Administration (iAP) as primary means for exchanging information among public administration departments and entities.



#### Interoperability Platform of the Public Administration

The Interoperability Platform of the Public Administration (iAP) is a service-oriented central platform that aims to make available to all public administrations a shared tool that allows multichannel services for citizens and enterprises. The iAP comprises four independent services:

- 1. The 'Integration Platform' provides a simple and integrated delivery of cross-cutting electronic services, thus representing a cornerstone in the administrative modernisation process;
- 2. The 'Authentication Supplier' allows authentication using the Citizen Card in portals duly accredited and authorised for that purpose;
- 3. The 'Payments Platform' (PPAP) enables the availability and integrated management of multiple payment methods for different public service delivery channels. It guarantees full integration with operating systems via web services, simplified and secure operational management, and the use of the 3D Secure platform to prevent fraudulent use of cards; and
- 4. The 'SMS Gateway' (GAP) enables the sending and receiving of SMSs via short numbers between citizens and public administration bodies, thus enlarging the number of available contact channels for managing the relationship with citizens.

This interconnection tool between different systems allows for the provision of digital public services like dematerialised medical ePrescriptions (mandatory and fully electronic since 2016) and the automated social energy fare (automatically processing social benefits related to the energy bill by integrating social-security data). The public administration's interoperability platform has been progressively extended to the private sector, starting more than ten years ago with the integration of the electronic procurement platforms with Portal BASE and enabling the provision of services such as the dematerialised opening of a bank account, available since July 2018 and allowing banks and financial companies to obtain data on the professional situation of potential clients in a fully dematerialised way. In 2023, the iAP exchanged an average of 41 million messages per month, an increase of 17% compared to the previous year. Also, about 250 entities used the iAP in 2023, a yearly increase of 14%. In February 2024, a total of 1 003 services were available in the different components of the iAP, with the platform surpassing 3 820 million interactions since 2007. The Interoperability Platform for the Public Administration is connected to the base registries of social security, tax authority, health and justice, thus allowing for the collection of specific information within these base registries.

#### Data Access, Management and Reuse

#### Law on Access to Administrative Documents

Article 268(2) of the Portuguese Constitution provides for the fundamental right of access to administrative archives and registries, except for information related to State security, criminal investigation and personal privacy. In addition, Law No. 26/2016, of 22 August 2016, regulates access to administrative and environmental data, as well as the reuse of administrative documents. It transposes the European Parliament and Council Directive 2003/4/EC on public access to environmental information, and European Parliament and Council Directive 2003/98/EC on the re-use of public sector information. One of its highlights is the implementation of the principle of active information dissemination, by which entities falling within the scope of the law publish a set of updated information on their websites, without the citizen having to ask for it. Law No. 26/2016 was subject to an amendment process which resulted in Law No. 68/2021. The aim was to transpose Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information.

#### State Organisation Information System

The State Organisation Information System (SIOE), reformulated and expanded by Law No. 104/2019, of 6 September 2019, is an information system which provides information on the existing public administrations and the social activity of public employers. Besides extending the information scope to the social activity of public employers, it also expanded the type of data collected to include their characteristics, identification data and other employees' personal data. This extension relating the data collection and processing of employees' data is intended to achieve the following purposes:

- Collecting, preparing and producing information and indicators within the framework of labour market statistics and other management and planning indicators;
- Planning, implementing, monitoring and evaluating the budgeting and implementation of human resource management policies;
- Managing, controlling, monitoring and evaluating employees' movements;
- Managing and controlling the system of time credits and temporary transfers of public employees due to public interest within the scope of trade union activity and under the terms foreseen in the General Law of Labour in Public Functions; and
- Ensuring the electronic exchange of data within the social security systems coordination framework.

Regarding public employers' data, each public employer is to draft social balance sheets or equivalent management instruments built on their own internal data, which are compiled in specific tables and are based on relevant indicators. These documents will be included in their planning and management instruments.

The SIOE may also serve as a platform for the electronic processing of administrative procedures, for information provision and decision-making among public employers, or among these and other national entities - without sharing or using any of the employees' identification data or personal data - and among public employers and the institutions of the EU or its Member States, using workers' identification data and other personal data, limited to the strict pursuit of the identified objectives. The SIOE's goals may be pursued by sharing data via web services or by using open standards, in accordance with the law.

#### **Open Data**

#### Dpen Data in Science, Technology and Higher Education

Resolution of the Council of Ministers No. 21/2016, of 11 April 2016, established the guiding principles for the implementation of a national policy on open science and universal access to knowledge. It has direct implications at the level of public information access, knowledge sharing and dissemination, and the preservation of information for its reuse.

#### Den Data and Reuse of Public Sector Information

Law No. 68/2021, of 26 August, approved general principles on open data, transposing Directive (EU) 2019/1024 into Portuguese law. It formally recognized dados.gov.pt as the central catalogue of open data in Portugal, with the function of aggregating, referencing, publishing and

ר<del>ו</del>בן זוייל hosting open data from different bodies and sectors of the public administration, while encouraging dialogue to build a national data strategy.

#### OPENDATA – Portugal National Library

The Opendata website provides information about and access to the Portugal National Library (*Biblioteca Nacional de Portugal*, BNP) datasets. These datasets are available in open access and comprise metadata from the main BNP information systems such as the BNP Catalogue, the National Bibliographic Database (PORBASE), the Portuguese National Bibliography and the National Digital Library.

All data are released under the CC0 License (Creative Commons CC0 1.0 Universal Public Domain Dedication). As such, they are available for reuse for any purpose, commercial and non-commercial. All data services are free of charge and do not require authentication.

#### o Open Data Portal

Following international practices in the area (e.g. the US or the UK data.gov projects), the Portuguese Administrative Modernization Agency (AMA) committed to the development of a wide and open platform containing all kinds of data from public bodies. The objective of this policy is to facilitate citizens' access to public open data, in line with the right of all citizens to consult public administration information. As a result, the Open Data Portal offers citizens an extensive range of information from very diverse areas. The web-portal dados.gov was revamped in May 2018, thus updating the 2012 version, to conform to the best international practices in the field and incorporate innovative solutions in terms of user experience, content structure, data integration and user licenses.

Dados.gov, which is based on the French UDATA platform, which was developed by ETALAB, is managed by AMA and available in open source and already has over 9 702 datasets. It is free of charge and open to all users who want to access data, but also to citizens and organisations who wish to make data of public interest available. Pursuant to Directive (EU) 2019/1024, high-value datasets (HVD) continue to be incorporated into the portal; as of 31 December 2023, 1 008 of the total datasets in dados.gov are high-value data, as established by the Directive (geospatial, earth and environment observation, meteorological, statistics, company data, and mobility), and meet the defined technical availability requirements, namely they have an API and are machine-readable.

In January 2023, the Commission Implementing Regulation (EU) 2023/138 amended the HVD legislation, defining more specifically the structure of the various datasets to be published. AMA disseminated this alignment model to those entities wishing to produce more data.

The efforts made to streamline and promote the national open data ecosystem and community allowed Portugal to improve its rank in the Open Data Maturity Report, reaching the 14<sup>th</sup> position in the UE in 2023 and remaining in the 'Follower' category (the second maturity level within the four existing ones). The report identifies the following good practices by Portugal:

- Measures to build infrastructures that support data consumption in real time on the national open data portal;
- Free data analysis and visualisation tools on its national open data portal to support the reuse of its open data;
- The Lisbon Solar Potential Map in Portugal allows users to find information on the solar potential of all buildings in Lisbon;
- Internal monitoring dashboards for portal administrators;
- The metadata is automatically generated by actions on the datasets; and
- More than 90 % of published data are offered with linked data.

#### Law on the Governance Model of European Funds for 2021–2027

Decree-Law No. 5/2023 of 25 January sets out the governance model of European funds for the 2021–2027 programming period, thus allowing the full implementation of European funds. The new model adopts a more cross-cutting approach, clarifies the competences of governance bodies and integrates additional transparency and control requirements. The governance model applies to the funds comprising Portugal 2030 and its articulation with the Recovery and Resilience Plan. The operational structure of Portugal 2030 includes Innovation and Digital Transition among its four thematic programmes.

#### **Base Registries**

The following table lists the Portuguese base registries:

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National	
Business	The Commercial Registry is regulated by the Commercial Registry Code, managed by the Institute of Registries and Notary ( <i>Instituto dos Registos e do Notariado</i> , IRN), approved by Decree Law No. 403/1986, of 3 December, and subsequent amendments. This law defines the purposes of the registry, the entities subject to the business registry and the facts subject to registration in relation to each of them.
Transportation / Vehicles	The Vehicle Registry is regulated by Decree Law No. 54/1975 and subsequent amendments. This legislation describes a complex registration system for vehicles. Law No. 52/2015 mandates that public passenger transport services must be registered in the STePP national information system, managed by the Institute for Mobility and Transport (IMT) and the IRN.
Land	The Land Registry is regulated by Decree Law No. 224/1984 and managed by the IRN. It identifies the incidents that must be registered and describes the registration process. This legal act was revised multiple times.
Population	The Civil Registry, managed by the IRN, was first regulated by Decree Law No. 131/1995 and later repeatedly amended. This law prescribed the type of civil life events that must be registered, identified the civil registries and their mandates, and described the archiving procedures. Decree-Law No. 51/2018, of 25 June 2018, ensured that the documents to be registered in the Civil Registry can be written in foreign languages. To apply for such registration, applicants must make an appointment online.
Other: Public Contracts	Public contracts resulting from public procurement are recorded in a portal called BASE, which is intended to disseminate public information on public contracts subject to the regime of the Public Contracts Code, thus allowing their follow-up and monitoring. The management of the BASE Portal falls under the responsibility of the Institute of Public Markets, Real Estate and Construction (IMPIC), as provided for in Article 3(3)(f) of Decree-Law No. 232/2015, of 13 October and Article 3 of Ordinance No. 57/2018, of 26 February. To comply with the statistical obligations provided for in the EU Directives, IMPIC shall prepare and submit to the European Commission a statistical report on the contracts for the purchase and rental of goods and the purchase of services, public works contract and concession contracts for public works and services.
Sub-national	
Base Registries	

#### Information Sharing between the National Commercial Registry and EU Member States

Decree-Law No. 24/2019, of 1 February, sets the rules applicable to the access and exchange of information between the National Commercial Registry and the commercial registries of other European Union Member States, thus transposing Directive No. 2012/17/EU of the European Parliament and the Council of 13 June 2012, whose provisions were codified through Directive No. 2017/1132, of the European Parliament and of the Council, of 14 June 2017.

This decree-law also sets the rules applicable to the exchange of information relating to natural persons who are prohibited from carrying out commerce, from holding the position of manager, administrator or other member of a corporate body subject to registration or for the administration of other people's assets, between the National Commercial Registry and the commercial registries of other European Union Member States, provided for in Directive No. 2017/1132/EU

of the European Parliament and of the Council, of 14 June 2017, in its current wording.

#### Online Certificates for Organisations

Decree-Law No. 52/2018, of 25 June 2018, provided for the creation of online certificates for organisations. These certificates allow for an electronic search of organisations on the constantly updated Central Registry of Organisations.

#### **Data Platforms and Portals**

The following table lists the Portuguese data platforms and portal infrastructures:

	· · · · · · · · · · · · · · · · · · ·
Government Portal	The Government Portal is the institutional website of the Portuguese government, providing information to businesses and citizens on matters such as the government programme, the government composition and diverse documentation (e.g. political communications) or ongoing public consultations, as well as generic information about Portugal.
Tic.gov.pt	The tic.gov.pt portal, revamped in 2023, is a general communication channel for the planning, execution and monitoring of the public administration digital transformation strategy. It aggregates detailed information about the governance of digital transformation, the national strategies in this domain, the guidelines and resources for developers and a schedule of relevant events.
National Data	Portugal has been actively pursuing the development of both the Catalogue of Entities and Services (based on CPSV-AP) and its corresponding reuse as a central reference in the development of all interoperability and public data projects, and the National Data Catalogue (based on DCAT-AP) integrated with the directory of services and an API Catalogue.
Catalogues	In 2023, Portugal launched updated versions of central catalogues, as a public administration directories for citizen services description, data structures (metadata) and integration info for developers using interoperability standards to describe REST and SOAP services. This allows to simplify and standardize the access to integration components and leverage new interoperable services.
Recover Portugal	The Recover Portugal Portal ( <i>Recuperar Portugal</i> ) was developed to manage, monitor and execute the national RRP. It presents relevant statistics in this regard, namely the volume of contracts signed between Recover Portugal and the entities responsible for the implementation of investments with the respective plan funds.
Transparency Plus	Launched in April 2021, Transparency Plus is a digital platform that allows citizens to access easy-to-read information on public resources and policies. The portal kicked off with an area dedicated to European funding, which provides real-time, accessible information on the progress of measures and projects financed or co-financed by European funds, related to NextGenerationEU and the Multiannual Financial Framework 2021–2027 (including the national RRP). The platform also focuses on the National State Budget and the Municipalities, encompassing five areas of analysis: economic dynamics; financial management; administrative management; tax decisions; and decentralisation of competences. For each of these areas, a set of reference indicators is presented to provide a global picture for the 308 municipalities. All data updated on the portal are imported from the national open data portal dados.gov.pt, which led several entities to automate the publication of open data, thus producing an impact on society. The involvement of citizens with special needs in the design and testing of the platform allowed for improvements to be incorporated, guaranteeing accessibility for all citizens (it holds the golden badge for accessibility and usability, the highest national standard of compliance with best practices in this field). Transparency Plus was distinguished by the Open

	Government Partnership with the Open Government Award 2023, in the category Europe/National, and received approximately 360 000 visits in 2023.
Directorate-General of Employment and Labour Relations Portal	<ul> <li>The Directorate-General of Employment and Labour Relations (DGERT), within the scope of its attributions in terms of collective regulation and labour organisations, offers access to various information services targeting companies and workers, organizations representing workers and employers, public services and society in general, as well as access to data on trade unions and employers' organizations registered in this service since 1975, including, among others, elements relating to statutes, elected directors and instruments of collective labour regulations, which include:</li> <li>The search of collective labour agreements by Portuguese Classification of Economic Activities (CAE, Rev.3) and by geographical area;</li> <li>The status of requests for depositing collective bargaining agreements;</li> <li>The list of registered (active and cancelled) trade union and employer organizations and their contact details; and</li> <li>Data about trade unions and employers' organizations registered with DGERT on the DOT Platform (Data from Labor Organisations).</li> <li>The DGERT portal also includes information about the Portuguese Accreditation System for Training Providers. The process of certifying training providers, as well as all necessary dissemination and publicity activities, are entirely dematerialized at https://certifica.dgert.gov.pt/.</li> </ul>
National Official Statistics	The Portal for Official Statistics, the website of Statistics Portugal ( <i>Instituto Nacional de Estatística</i> , INE), allows citizens, companies and researchers to access official statistics about the Portuguese society, regarding the social, economic and environmental domains. It is available in Portuguese and English and data access is free of charge. It also displays a Web approach for electronic replies to official statistical surveys – the WebInq. The portal is optimised for access from mobile devices such as tablets and smartphones, and it offers a set of feeds (RSS, ICS and JSON) that provide direct connection to other third-party applications, allowing users to receive INE's news in real time on their IT systems or computers. It also provides a REST API that allows for the creation and extraction of a catalogue of indicators available in the website database, thus enabling users to extract statistical indicators and related metadata. The portal also includes an IT platform for Census 2021 final results, at parish level, allowing an easy access to census information.
Justice Open Data	The portal Partilha.justica.gov is an extension of the open government plan in the sector of justice used to publish high-value datasets with the aim to achieve more participation, more transparency and more justice. Increased accountability and availability of datasets give citizens and scholars the opportunity to adopt participatory and collaborative approaches to the management of the Portuguese justice system.
Justice Statistics	The Justice Statistical Information System covers several areas, including courts, registries and notaries, police forces and other investigative bodies, alternative dispute resolution bodies, rehabilitation, and the enforcement of sentences and measures. The Justice Statistical Information System includes information collected from different entities and services, which contributes to the portrayal of different topics of interest to society. This systems is fully available in English and all data sets are in open formats. It also offers geographical information on various justice services.
TravelBI	The business intelligence platform TravelBI, developed by the National Tourism Authority called <i>Turismo de Portugal</i> , integrates information from various national and international information systems, disseminating the main performance indicators of the tourism sector, competitive analyses

	and the continuous monitoring of the 25 main incoming markets for Portugal. Thereby, tourism investors and companies can easily access statistical information and analyses on tourism, the main markets, and national strategic and emerging market trends. In order to adapt to the need for more information of companies and the market, TravelBI includes a specific Open Data Portal.
Mobility and Transports Observatory	The Mobility and Transports Observatory, developed by the Mobility and Transports Authority, is a centralized repository of data collected from regulated entities and public entities, which come together in a Business Intelligence logic information system, whose central piece is a Data Warehouse, where the collected data - both metrics (indicators or facts) and contextual information (dimensions) - are stored in a structured manner, maintaining a persistent information history. The aim is to divulge and democratize access to the transportation sector information, concerning land, inland waterways, maritime transportation and logistics.
ConsultaLex	ConsultaLex is a central portal for public legislative consultations, accessible to all, which allows citizens to participate in the legislative process. Citizens can consult the files and formulate suggestions, as well as follow the drafting process of laws at all times, until their final approval. The creation of ConsultaLex is one of the measures foreseen by the first National Open Administration Action Plan, which was itself developed via a participatory process.
DGAEP Portal	The DGAEP (Directorate General for Administration and Public Employment) Portal provides information on the structure of public administration, public employment statistics, collective labour relations and public employment schemes. In the section 'Being an Employee', the professional life cycle of employees is presented, with information divided into three main blocks: Start; Performance; and End of Functions.
Local Administrations Portal	Managed by the Directorate-General of Local Administrations, the Local Administrations Portal gathers information on all Portuguese local administrations and provides several online services to support them, such as: (i) the Integrated Local Administrations Information System (SIIAL) and the Information System for the Local Administration Subsector (SISAL), which centralise the collection and validation of financial and non-financial information on local administrations; and (ii) the Information System for the Legal Regime of Urbanisation and Building, which simplifies and dematerialises the processes of urbanisation operations. The portal is directed to both public servants and citizens in general, as a complementary channel to the local administrations' institutional websites.
Online Knowledge Library	The Online Knowledge Library ( <i>Biblioteca do Conhecimento Online</i> , b-on) is a virtual library which provides unlimited and permanent access to international scientific journals from a wide range of publishers, through subscriptions negotiated on a national basis with publishing houses.
National Bibliographic Database	The primary objective of the National Bibliographic Database (PORBASE) is the permanent update and promotion of the National Library's general catalogue, current national bibliography and the Portuguese library's collective catalogue. It includes the collections of the National Library, and over 170 Portuguese private and public libraries. PORBASE currently contains over 1.5 million bibliographic records. The database is updated daily, and its average annual growth is estimated at 10 000 bibliographic records.
National Network of Public Libraries	The National Network of Public Libraries (RNBP) is a public library portal in Portugal. By consulting the database, users can access contacts and summary information regarding works provided in libraries that are part

	of the RNBP. The Portal offers a free search tool for information on works spread across several repositories. The future of the network's growth is articulated with the local government.
Portuguese Archives Portal	The Portuguese Archives Portal is a content aggregator of archival information (metadata and, whenever possible, images) of entities adhering to the Portuguese Archives Network (RPA), allowing simple or advanced search. It is the content provider to the European Archives Portal.
MatrizNet	The MatrizNet Portal, an online collective catalogue of Portuguese Museums, contains the national reference collections in the areas of art, archaeology and ethnology. It cross-researches in 34 databases that make up the Portuguese Museums Network, with contents being constantly updated. It is the information system that supports the National Inventory of Intangible Cultural Heritage, to fulfil the obligation of the Portuguese State expressed in Article 12 of the Convention for the Safeguarding of the Intangible Cultural Heritage (UNESCO, 2003).
MATRIZPIX	MatrizPIX is an information system designed for inventory, management, and online availability of photographic archives from the Directorate- General for Cultural Heritage (DGPC). It allows searching through digital collections, presenting virtual exhibitions, and selecting high-resolution images. The system manages photographic images and collections, including those in the invisible spectrum, and provides detailed recording of conservation status and interventions, usage for various purposes, and management of copyright rights.
Information System for Architectural Heritage	The SIPA Portal – Information System for Architectural Heritage - is an information and documentation system on Portuguese architectural, urban and landscape heritage and origin. It enables the production and collection, processing and conservation, access and use of authentic information and documentation on architecture and on architectural, urban and landscape heritage. It also contains a public Spatial Data Infrastructure (IDE) that allows to share and research georeferenced spatial data on Portuguese heritage in the country and overseas.
National Portal of State Suppliers	The National Portal of State Suppliers (PNFE) is an information system providing information on State suppliers that can be accessed online, with a secure connection. Through the Public Administration's interoperability platform, the portal can interact with the Public Procurement Portal (BASE Portal), the information systems of the entities that hold the portal's data, the electronic public procurement platforms and with the platforms of other public entities. The portal will also make it possible to structure a catalogue of State suppliers by type of goods, services or public works.
geoCATALOGO	The Geocatalogue (geoCATALOGO) is an online portal of the Institute for the Nature Conservation and Forests (ICNF) dedicated to the distribution and publication of geographic information in the form of open data and, wherever possible, to providing access to the data catalogue with format and interoperability criteria in accordance with the Inspire Directive. Some of the features of the Geocatalogue are: - Viewing geographic data provided by ICNF on various topics, such as nature conservation, distribution of species and habitats, forests, hunting, fishing and rural fires; - Exploring and downloading data by theme; and - Interacting with the data for a more detailed analysis.

#### **Cross-border Infrastructures**

The following table lists the European cross-border infrastructures which Portugal is part of:

Business Registers Interconnection System	For the purposes set out in Decree-Law No. 24/2019, of 1 February, the exchanges of information between the commercial registers of the European Union Member States and the provision of public information and documents contained in the National Commercial Registry, provided for in Directive (EU) 2017/1132 of the European Parliament and of the Council, of 14 June 2017, in its current wording, are carried out through the Business Registers Interconnection System (BRIS), which has already been implemented in Portugal. BRIS is constituted of: - The registers of the European Union Member States; - The European Central Platform; and - The European e-Justice Portal. The interoperability of the European Union Member States registers within BRIS is ensured through the European Central Platform, through the establishment of a common interface. The platform distributes information contained in each of the Member States, in a standardized message format and in the relevant language version. Access to information contained in the National Commercial Registry, to be made available to the public through BRIS, is ensured via the European e-Justice Portal.
EUCARIS	EUCARIS is a platform that allows Member States, through their national contact points, to have access to vehicle registration data for the purpose of fulfilling their legal obligations resulting from various directives, regulations or agreements within the European Union. Portugal, through its Institute of Registries and Notary (IRN), has implemented three services related to EUCARIS: - The cross-border exchange of information relating to vehicle registration, for the purposes of preventing and investigating criminal offenses; - The cross-border exchange of information related to the traffic offenses in a Member State of the European Union; and - The cross-border exchange of information relating to vehicle registers, namely (i) identification data relating to vehicles; and (ii) identification data relating to the owners and holders of the vehicle in whose name it is registered.
Beneficial Ownership Registers Interconnection System	The Beneficial Ownership Register Interconnection System (BORIS) is a tool for linking national central registers containing information on the beneficial owners of companies and other legal entities, trusts and other types of legal arrangements. In Portugal, the project is in the testing phase and not yet implemented.
European Land Registry Association	The European Land Registry Association (ELRA) is an international non- profit organization that aims at "the development and understanding of the role of land registration in real property and capital markets". Under the sponsorship of ELRA, the Institute of Registries and Notary (IR) works together with other Member States on the Interoperability Model for Land Registers (IMOLA) project, in order to produce a model for standardized land registry outputs - the European Land Registry Document (ELRD) - and achieve a semantic model.
European Land Register Interconnection Service	In addition to the IMOLA project the IRN carried out the analysis of the requirements necessary to implement the national component of the European Commission's Land Registers Interconnection (LRI) Platform and to connect the land registers of Portugal to the pan-European land register search engine at the e-Justice portal.
Trans European Services for Telematics between Administrations	The Trans European Services for Telematics between Administrations (TESTA) network is used for a number of cross-border use cases in Portugal.
Once-Only Technical System	The Once Only Technical System (OOTS) enables the sharing of information between public administrations across borders between EU countries, as defined by Article 14 of the Single Digital Gateway (EU)

	Regulation. Portugal is one of the 14 member States that have their
European Land Information Service	OOTS Access Point already connected. The Administrative Modernization Agency (AMA) has been working closely with authorities competent for administrative procedures so that they can provide evidence in digital format. In Portugal, most of the 23 procedures indicated in Annex II are already digitalised. Portugal is involved in the interconnection of the European Land Information Service (EULIS)
European Criminal Records Interconnection System	Portugal is part of the interconnection of the European Criminal Records Interconnection System (ECRIS), which allows the authorities to obtain information on EU nationals.
European Register of Road Transport Undertakings	Portugal is included in the interconnection of the European Register of Road Transport Undertakings (ERRU), with data provided by the Directorate-General of Traffic (DGT) through the intermediation platform (SARA + sTesta-II)
Internal Market Information System	Portugal is involved in the interconnection of the Internal Market Information System (IMI), facilitating the cross-border exchange of information between public authorities in multiple policy area
EU Gateway	Portugal is part of the interconnection of the EU Gateway, which stands as the EU interoperability infrastructure for the authentication of EU Digital COVID Certificates (DCC)
National Access Point	The Intelligent Transport Systems (ITS) Directive 2010/40/EU and its delegated Regulations require that each European Member State shall establish a National Access Point (NAP) for mobility data, which shall be as interoperable as possible with the other European NAPs, paving the way for a future European Access Point. In the Portuguese NAP, a set of data and/or metadata and/or links to data sets can be accessed.
MyHealth@EU – eHealth Digital Service Infrastructure	<ul> <li>The eHealth Digital Service Infrastructure (eHDSI) is an infrastructure ensuring the continuity of care for European citizens while they are travelling abroad in the EU. Thereby, EU countries have the possibility to exchange health data in a secure, efficient and interoperable way. Portugal is operational with the Patient Summary and ePrescription/eDispensation services, both as country of origin and country of treatment:</li> <li>Patient Summary – provides physicians with essential clinical information in their own language, including allergies, diagnoses, surgeries, chronic medication, vaccines and medical devices. Portuguese citizens can access this service in Malta, Croatia, Luxembourg, France, Czechia, Spain, the Netherlands and Estonia;</li> <li>Portuguese healthcare professionals are able to access the patient summary of Maltese, Croatian, Czechs, Spanish, Estonian and Luxembourgish citizens if they require unplanned care;</li> <li>ePrescription and eDispensation – allows citizens to obtain medicines in a pharmacy located in another EU country with a medical prescription issued in the country of origin of the citizen.</li> <li>Portuguese citizens can be dispensed medicines in Estonia, Finland, Croatia, Spain, Poland and Czechia; and</li> <li>Finnish, Croatian, Estonian, Spanish and Polish citizens can retrieve their prescription in Portuguese pharmacies.</li> </ul>
ENIC-NARIC networks	The ENIC-NARIC Networks result from an ongoing collaboration between the national information centres on academic recognition of qualifications of a total of 55 countries. The Portuguese ENIC/NARIC Center, created in 1986, is integrated into the Directorate-General for Higher Education. Following the implementation of the new regime for the recognition of foreign degrees and diplomas in Portugal (Decree-Law No. 66/2018, of 16 August 2018), a common platform was created, which is shared by all public higher education institutions and managed by the Directorate-General for Higher Education. It centralises the submission

	of all requests for recognition of foreign higher education degrees and diplomas, processes said requests and then issues the corresponding certificates.
eCertis	eCertis is the information system that helps to identify different certificates requested in procurement procedures across the EU. European companies wishing to participate in a public procurement procedure, or public buyers that have to evaluate bids received from various Member States, can use eCertis to understand what evidence is requested or provided by the other party. The IT system was developed by the European Commission however the information contained in the database is provided by the national authorities and updated on a regular basis. In Portugal, the national authority is IMPIC.
European Single Procurement Document	The European Single Procurement Document (ESPD) is a tool that makes it easier to take part in public procurement procedures. It is a self-declaration attesting to the aptitude, financial situation and capacities of companies, used as preliminary evidence in all public procurement procedures above the EU threshold. Under the public procurement directives, the ESPD must be made available exclusively in an electronic format. The electronic ESPD service provided by the European Commission was discontinued in April 2019. Since the obligation to use the ESPD remains in force, IMPIC now provides the same service, free of charge, on the BASE Portal.
Electronic Exchange of Social Security Information	The Electronic Exchange of Social Security Information (EESSI) system aims to establish a platform that will make it easier to exchange information between the 32 member States (27 European community and also Iceland, Liechtenstein, Norway, Switzerland and the United Kingdom). This exchange is carried out through Structured Electronic Documents (SEDs).

# 4. Digital transformation of public services

#### Digital Public Services for Citizens

#### Single Digital Address and Public Service of Electronic Notifications

Law No. 9/2017, of 3 March, authorised the government to create a public service consisting in electronic notifications associated with the unique digital address. Decree-Law No. 93/2017, of 1 August 2017, introduced the unique digital address, linking the electronic notifications public service to a unique digital address. The electronic notifications public service, associated to the single digital address, is regulated by Ordinance No. 365/2017, of 7 December 2017.

#### Citizen Shops

Citizen Shops is a concept of public service delivery that combines in the same physical space several public and private entities of public interest. It does so with the aim of expediting relations between citizens, companies and the public administration. The establishment of the first Citizen Shops took place in 1999 in Lisbon and Porto. Their opening was the first step in the direction of the one-stop-shop concept for public service delivery since citizens now have access to a wide range of public and private services in the same place. This model has been continuously developed to respond to the evolving needs of citizens and companies. Examples include the availability of free Wi-Fi and the possibility to automatically assess, through QR code or free SMS, the services provided in the shops. As of February 2024, the network of Citizen Shops comprises 71 one-stop-shops with 195 million accumulated attendances.

#### Citizen Spots

A Citizen Spot is a multiservice physical counter where a specialised mediator assists citizens in accessing a portfolio of digital public services, available on various websites, and further teaches them how to operate on their own thereafter. All spots are equipped with a double-screen system (one screen for the mediator and one for the citizen), which allows citizens to follow the steps taken by the mediator. In addition, all operations are supported by the national eID mechanisms, namely the PIN-protected Citizen Card and the Digital Mobile Key, thus strengthening the citizens' trust in digital services. The combination of public digital services with the onsite assistance of a specialised mediator, in a hybrid model of service delivery, has proven to be an effective way to engage citizens in the use of digital services. It makes everyone more aware of the available services and their respective benefits, and also of online security, which is fundamental to boost public confidence in the use of ICTs in general. As of February 2024, there were 870 Spots located in town halls, parishes or public libraries throughout the country (aiming to be close to citizens of all backgrounds) and also in the cities of São Paulo (Brazil), Paris (France), Brussels (Belgium) and London (UK), providing more than 50 services, in a base catalogue of 13 entities, with over 11 million attendances (accumulated). The Citizen Spot concept was extended with the launch of: (i) the Solidarity Citizen Spot, which specifically targets daycare centres, nursing homes and residential structures for the elderly, and includes the operation of mobile kits by a trained mediator; and (ii) the Mobile Citizen Spot, which foresees the use of minivans to provide digital assistance in remote locations or catastrophic situations.

#### Electronic Yellow Book

The Electronic Yellow Book, launched as a SIMPLEX+ initiative, allows businesses and citizens to leave a complaint or a suggestion, or write a compliment regarding the public administration and its services, namely the digital ones.

#### » ePortugal

ePortugal.gov was launched in February 2019 (Resolution of the Council of Ministers No. 46/2019, of 22 February 2019) as a Central Services Portal which centralises information about public services for both citizens and companies, as well as the information inscribed in the National

Catalogue of Entities and Services (directory of public entities, services, points of care, websites, mobile applications, etc.).

The portal was developed under SIMPLEX, the national simplification and modernisation programme, and is organised around topics and life and business events according to the core public service vocabulary (e.g. having a child, getting married and retiring). It provides both informational and transactional services, in line with the citizen-driven approach that the Portuguese government has been implementing for the last few years. Additionally, the portal integrates the Entrepreneur's Desk, which is the single point of contact for digital services related to the exercise of economic activity. The ePortugal Portal is dynamic and adaptable to individual users: it offers a Reserved Area where users can check information regarding their relationship with the public administration and access a documents folder, in which they can save and share files with other registered users or with public entities. Likewise, ePortugal provides innovative support instruments such as the Citizen Map (available as an app, for Android and iOS), which provides georeferenced information for all public services and digital queue tickets for onsite public services, and a generative AI Virtual Assistant (based on ChatGPT), that answers in writing and/or by voice to the citizens' questions and is currently available for questions about the Digital Mobile Key (national mobile eID, essential for accessing public/private services). ePortugal is constantly evolving and integrating new services and information, in line with the Single Digital Gateway Regulation (EU). New features include expansion of the business activities, integrating new information and services (2021) and new information for migrants living in Portugal (2022). The portal is also in line for a complete overhaul under RRP funding, being replaced by a new technological solution tied with a Design System, which will facilitate the transition to a complete Omnichannel strategy for public service delivery in Portugal.

#### App.gov.pt

App.gov.pt was launched in 2018 as a directory of mobile apps that centralised various applications made available by the public administration to make life easier for citizens. The app was developed and is managed by AMA, which ensured the indexation of the apps developed by the public bodies themselves. App.gov.pt is available for both Android and iOS devices.

#### eInvoicing

#### ☐ 1/2 e-invoicing in the Portuguese Public Administration

The e-invoicing initiative in the Portuguese Public Administration (FE-AP), managed by eSPap (Public Administration Shared Services Entity), contributes to the synergy between green and digital solutions, at two different levels. Firstly, at the digital transformation level, as FE-AP is a platform that allows the receipt and processing of electronic invoices, ensuring control and monitoring of all stages of the process for any public entity. This digital transformation not only streamlines the process but also reduces the need for physical documents, contributing to a reduction in paper waste. And secondly, at the level of efficiency and transparency, as FE-AP dematerializes the dialogue with suppliers, moving the process of conference to a digital format, thus increases efficiency and transparency, which can in turn lead to better resource management and reduced carbon footprint.

#### Delta eInvoicing Legislation

The Public Administration Shared Services Entity (eSPap) is the coordinating body for the implementation of electronic eInvoicing in the Portuguese Public Administration. The legislation in this field refers to the Public Procurement Code (PPC), which was reviewed in September 2017 (by Decree-Law No. 111-B/2017, of 31 August 2017) in order to transpose Directive 2014/55/EU. Decree-Law No. 123/2018, of 28 December 2018, which defined the governance model for the implementation of electronic invoicing in public contracts.

Decree-Law No. 28/2019, of 15 February 2019, regulated the obligations related to the processing of invoices and other fiscally relevant documents, as well as the bookkeeping obligations, including records and respective supporting documents, that apply to VAT taxable persons.

Decree-Law No. 84/2019, of 28 June 2019, established the State budget execution rules for 2019 within the scope of financial services, defining the conditions for the adoption of the accounting information system provided by eSPap. Furthermore, Ordinance No. 289/2019, of 5 September 2019, regulated complementary elements of the electronic invoice.



#### Electronic Invoicing Portal for the Public Administration

The Electronic Invoicing Portal for the Public Administration (FE-AP) was implemented in 2018 and allows for receiving invoices and rectifying documents in electronic format, ensuring the control and monitoring of all stages of the process. The solution is available to any public entity and allows direct integration with the Financial Resource Management in Shared Mode (GeRFiP) solution or via web services with any other accounting or document management system. In addition to the exchange of electronic documents, the technological solution also dematerialises the dialogue with suppliers, transforming the verification process into a digital format. The implementation programme of electronic invoicing in the public administration, executed by the Finance Shared Services, is based on the availability of two solutions around electronic billing: (i) FE-AP, to be used by public entities in the invoice reception and verification procedures (already in production); and (ii) Business to AP (B2AP), to be used by suppliers of the public administration, as co-contractors, in the monitoring of the electronic invoice delivery and status evolution (in the pilot phase). The use of electronic invoices in public contracts, both their issuance and reception, was gradually introduced by public contractors and co-contractors until 1 July 2022.

A collaborative process between the Unit for the Implementation of the Budget Framework Law (UniLEO) and eSPap is underway to promote the integration of electronic invoices into the new Information System for Public Financial Management (SIGFinP).

#### **eHealth and Social Security**

#### In Multipurpose One-Time Attestation

The Multipurpose One-Time Attestation (*Atestado Multiuso Uma Só Vez*), included as a measure in the 2023 SIMPLEX, will allow for the information contained in the Medical Certificate of Multipurpose Incapacity to be shared with the relevant entities (e.g. Social Security, Tax Authority, etc) The goal is to avoid citizens having to obtain information from one public department to then deliver it to a different one, since the information will be shared internally.

#### င္ရား CLIC

Launched in 2023, CLIC is a Social Security Digital Transformation Programme which aims to: (i) modernize and automate the allocation and management of benefits; (ii) simplify, reform and restructure contribution processes; (iii) modernize and personalize the responses provided by the system; (iv) modernize Social Security Direct (SSD) to meet current and future needs; (v) boost interoperability within the public administration and companies; (vi) upgrade the technological infrastructure, information security and data management capacity; (vii) strengthen tools that increase productivity; and (viii) make the fight against fraud more effective. In this context, the social security system intends to facilitate and maximize the relationship and interaction with citizens and companies, with measures such as the automatic family allowance, the automatic reimbursement of medicines and the launching of a new digital channel, the e-CLIC.

# न्तीः 360º Vision

The 360° Vision (*Visão* 360°) is a social security strategy which provides an integrated vision of the business and the relationship between citizens and companies and Social Security. By the end of 2023, the following functionalities were introduced: (i) intelligent search for frequently asked questions; (ii) activity management; (iii) online channel for registering contacts by citizens and companies; (iv) activity search; (v) assistant for sorting requests; and (vi) integrated business vision, using machine learning based on natural language.

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Announced as a SIMPLEX measure in 2023, the retirement certificates `+simples' (simpler) are set to debut as a platform simulator. This innovative tool offers valuable insights into the estimated value of the retirement benefit to be earned upon retirement age, thus empowering individuals to make informed decisions about their financial future. Users have the possibility of signing up immediately.



#### Social Security Legislation

The social security system in Portugal is supported by the following laws:

- Law No. 82/2023 (State Budget for 2024) Article 118 foresees the use of the social security electronic notification system for communicating decisions on applications for social benefits and social support; Article 88 provides for the direct consultation of the databases of the tax administration, social security, land registry, commercial registry, motor vehicle registry, civil registry and other similar registries or archives in social security enforcement proceedings and for the transmission of information preferably by electronic means;
- Regulatory Decree No. 3/2022 establishes that the right to the Child Guarantee is officially recognised by the entity managing the family allowance; and Ordinance No. 55/2023 which regulates the interconnection of data between social security and the tax authority to complement the Child Guarantee;
- Decree-Law No. 28-A/2023, 30-D/2022 and 42/2022 simplify the approval of a series of extraordinary social supports, with a view to compensating the most vulnerable families and pensioners from the effects of the energy crisis and inflation, either through Social Security, the Tax Authority and in coordination with the General Directorate of Geology and Energy, with regard to recipients of social energy tariffs;
- Law 82/2023 (State Budget for 2024), in Articles 212 and 213, provides for the interconnection of data, preferably carried out electronically, between public entities, services and bodies or other public institutions and other entities;
- Decree Law No.16-A/2021 implemented the 'Instant Pension', a SIMPLEX 20/21 measure that allows citizens to request their pension online, through Social Security Direct, with immediate communication of the provisional amount that will be awarded;
- Ordinance No. 358/2019 implemented electronic communications between courts, enforcement agents and Social Security in connection with the provision of social benefits and pensions.
- Decree-Law No. 126-A/2017 and Decree-Law No. 136/2019, of 6 September 2019, promote electronic information exchanges, allowing for greater effectiveness of the framework of social benefits in the area of disability;
- Law No. 100/2019 concerning the Informal Caregiver Statute, regulated the rights and duties of the caregiver and of the person being cared for, establishing the respective support measures and allowing for electronic information exchanges;
- Ordinance No. 191/2019 implemented the automation of the proof of schooling situation, aimed at obtaining information on the schooling situation for public education students. It simplifies and facilitates citizens' lives by reducing bureaucracy when proving eligibility to benefits such as family allowances and study grants; and
- Ordinance No. 348/2019 regulated the electronic communications between the judicial courts and Social Security within the scope of civil tutelary, and promotion and protection proceedings.



#### National Health System

The National Health System (*Serviço Nacional de Saúde*, SNS) Portal provides citizens with online access to a wide range of information and services, including a Transparency section centralising the data produced by health care entities and making it available for reuse without any restrictions. Once logged to SNS24, citizens and health professionals have direct access to the Portuguese Electronic Health Records (EHR) platform (RSE), which aims to facilitate the sharing of information between citizens, health professionals and public health entities. SNS24 also makes available a sign language video functionality that allows deaf citizens to communicate with SNS professionals with the support of a sign language interpreter. In the context of the fight against the COVID-19 pandemic, SNS24 allowed for the issuance of provisional declarations of precautionary isolation in an electronic format, and the 'Evaluate Symptoms' functionality was improved to cover COVID-19.

A new SIMPLEX measure was introduced for the end of 2023, namely a functionality to provide SNS24 users with information on their position on the waiting list for appointments, based on guaranteed average response times, thus increasing the transparency of the process for citizens. Moreover, in line with another SIMPLEX measure, the SNS24 will provide digital access to citizens to change the users' data in the National User Register, without having to go on-site to the responsible Health Unit (*Unidade de Saúde*). The goal is to avoid citizens having to travel to Health Units, while speeding up interaction with public health services.

#### Digital Declaration of Attendance

In the context of simplifying administrative processes (SIMPLEX), the Digital Declaration of Attendance offers several advantages, including greater convenience for the citizen and greater financial and ecological savings for the SNS. The functionality provides users with access to a

declaration of attendance whenever they are contacted for primary healthcare. The declaration is available on the SNS24 APP and on the SNS24 Portal, via an access code sent by SMS.

#### Social Security Direct

Via the Social Security Direct (SSD) Portal, citizens can access their social security data and perform a wide range of operations, from submitting requests for unemployment benefits, child allowances and leaves, to making payments, while enjoying and having access to the information they need regarding their rights and duties in the social security domains. The Portuguese Social Security has been strongly investing in a digital transformation strategy, to respond to the needs of citizens and economic agents, and providing them with a simple, inclusive, intuitive and transparent experience, which they can conveniently and autonomously perform in self-service mode. To this end, the Social Security Direct Portal currently offers over 250 digital services, including the possibility to request pensions and social benefits, consult and update information on one's contribution history and obtain an integrated overview of all credits and debits. In the portal, employers and self-employed workers may also find the main services that allow them to fulfil their obligations to Social Security. Finally, the Social Security Direct Portal includes the possibility of authentication with the Digital Mobile Key and the Citizen Card (eID). A lot of the information is already pre-filled, based on back-office automation and interconnection with other public organisations.

#### go Caixa Geral de Aposentações (Pensions)

Since 2018, the civil servants' retirement and survivor pensions fund Caixa Geral de Aposentações (CGA) has been investing in a digital transformation strategy to substantially improve its entire information system, with a special focus on its internet portal, in order to respond to the growing level of user demand and improve the level of service provided. This will enable faster decisions about users' requests and the satisfaction of their information needs in real time and in a more convenient way. For this purpose, CGA has introduced various functionalities in a restricted access area called CGADirecta, namely: (i) consulting information on the monthly pension and payment discounts going back up to one year; (ii) obtaining statements on the value of the pension (Multi-Purpose Declaration) and statements for Personal Income Tax (IRS) purposes; (iii) filling in and submitting the application for family benefits, survivor's pension, reimbursement of funeral expenses and death grant online; (iv) changing data and consulting the status of the retirement pension application in real time; and (v) consulting the administrative file. CGADirecta allows for the authentication and registration using the Citizen Card, the Digital Mobile Key or the Tax Identification Number with the access credentials to the Finance Portal or the CGA User Number with the access key. Access to the Pension Claim Platform was also made available, with pre-filled contents, thus meeting the users' needs, allowing applicants to automatically initiate a procedure with an almost fully completed form, which brings significant productivity gains.

#### **Other Key Initiatives**

## ر اً: Justice+ Plan 2022-2025

The Justice+ Plan (Justica+), which is in its third edition (2022–2025), aims to increase transparency and trust in judicial institutions, fostering citizens' participation in the ideas, initiatives and projects introduced to improve justice in Portugal. It encompasses four fundamental pillars:

- Efficiency, by simplifying and dematerialising procedures;
- Innovation, by modernising justice;
- Proximity, by offering citizens clear, transparent and accountable information; and
- Humanisation, by valuing tangible and intangible resources.

The methodological approach called for scheduled measures to be implemented in successive waves, with periods of analysis in collaboration with the judicial organisations and officials responsible for their implementation. The Directorate-General for Justice Policy is responsible for managing and monitoring the plan, in close coordination with the Ministry.

The Justice+ Plan 2022–2025 is evolving and has reached a total of 110 projects, 25 of which have been carried over from the second edition of the (former) Closer Justice Plan, whereas the remaining 85 projects are part of the Justice Recovery and Resilience Plan (RRP), which foresees the expansion of the simplified cadastral information system and the Single Desk for Property (BUPi) across the entire national territory. The total investment required for the execution of these

projects is estimated at EUR 339 million, with the budget allocated by the RRP amounting to EUR 321,9 million (excluding VAT). Hereafter are some of the ongoing projects:

- Judicial Core Systems Modernization, which pursues the evolution of the technological paradigm - digital by definition, information structuring, acceleration of interoperability and dematerialization of communications, use of automatic transcription technologies, incorporation of analytics and AI capabilities, etc. Focusing on simplifying procedural transactions and digitizing the entire judicial process, this transformation contributes to reducing backlogs and achieving appropriate speed. Different areas of intervention are covered: 'Magistratus' (Judicial area) and MP-Codex (Public Prosecutor's Office); modernization of systems for secretariats and legal representatives; and dematerialization of communications with various external agents.
- Integrated Services Platform for Businesses Business 2.0: the platform will be associated with life events, and include private areas for consultation, process monitoring, and transactional services execution (REP4 of 2019), thus enhancing positive returns for civil society, in Portugal and abroad, and on the dynamics of economic agents, including RCBE and synergies with Insolvency from risk phases to the management of recovery and asset liquidation.
- Digital Platform for Remote Work Management and Monitoring: it includes dynamic team management tools and integration with information systems that have data on telework activities.
- Common Services Platform of Justice: it includes shared applications such as: dynamic engine for creating notification templates; biometric database system for the citizen card; and document management system.
- Computer Platform to Support the Clearing of Financial and Procedural Flows in the context of executive action, with a view to its transfer to the substitute execution agent.
- Justice Digital Platform 2.0: Evolution of digital services for citizens (e-Records), businesses, courts (Courts.org), professionals, and justice stakeholders, including a support platform for insolvency and recovery processes (interoperability with STEPI+)
- Legal Language Simplification: Simplifying legal language is a fundamental element to make the justice system more accessible, understandable, and efficient. Clarity and transparency in legal communication are essential to strengthen citizens' trust in the justice system. By simplifying language, the justice system demonstrates a commitment to fairness, inclusion, and respect for the rights of all citizens, contributing to a more positive perception of justice and the institutions that represent it.
- DRAFTER+: The Drafter+ Normative Acts Production Support Platform is a significant initiative in the context of modernising the justice system, especially regarding the simplification of legal language and legislative clarity. Utilizing artificial intelligence to assist in drafting normative acts, this project aims to directly address challenges associated with the complexity and consistency of legislation.
- GPJ: It is a project which strives to make justice more accessible, understandable, and interactive for all citizens, perfectly aligning with the goal of simplifying language and improving access to legal information. The GPJ is a digital tool that facilitates access to legal information, allowing citizens to obtain clear and direct answers to common legal questions. By providing information on topics such as online criminal records, alternative dispute resolution, marriage, divorce, and business formation, the GPJ democratizes access to legal information, ensuring that citizens can make informed decisions.
- Platform for Justice Indicators, Statistics, and Open Data: The project for creating the
  platform for justice indicators, statistics, and open data represents a significant step towards
  digital transformation and transparency in the justice sector in Portugal. This ambitious
  projects strives to integrate data sources from various justice services and other entities,
  significantly improving the capacity for collection, processing, and presentation of legal and
  judicial information.
- Case Management System for Alternative Dispute Resolution Processes Evolution: The efforts made to develop and promote the RAL+ platform reflect a proactive strategy to modernize the justice system in Portugal, making it more accessible and efficient. Through the digitalization of services and the strengthening of user support, Portugal is moving towards a future where dispute resolution can be simpler and focus more on the needs of citizens, thus aligning with the vision of a more inclusive justice system adapted to the demands of contemporary society.

#### 1 Online Driving License Certificate

Launched in 2023 by IMT as a SIMPLEX measure, the Online Driving License Certificate aims to dematerialise the process of issuing driving licence certificates, allowing them to be requested online and made available on a platform accessible anywhere in the world, thus reducing travel costs and pressure on the IMT's face-to-face service.

#### 🛒 ြုံး OK Morada

Launched in 2023 as a SIMPLEX measure, OK Morada extended the change of address on the national ID Citizen Card to the address to be reckoned for bank account purposes.

#### National Action Plan for Open Administration

Portugal joined the Open Government Partnership (OGP) in 2017, publishing its first National Action Plan for Open Administration (NAP) in December 2018. The NAP was developed by the National Network for Open Administration through a process of co-creation with the public sector and civil society, including an online public consultation. The plan was implemented between January 2019 and August 2020 and included eight commitments to promote transparency and access to public sector information, foster public participation and boost the use of public open data. The second NAP, which includes nine commitments, was published in August 2021 and implemented until August 2023. It took some ideas from the co-creation workshops organized by the National Network for Open Administration, with the goal of collaboratively identifying the main challenges that citizens, civil society organizations and companies face in their relationship with the State and/or in their experience with public services, as well as signalling potential opportunities to apply the principles and values of Open Administration in solving these problems. The third NAP was co-created between June and December 2023 and includes seven commitments, which are being implemented since January 2024.

#### Platform for the Termination of Contracts

Law No 16/2022 of 16 August, which approved the new Electronic Communications Law, enshrined, among other matters, the possibility for consumers to exercise their rights through an electronic platform created and managed by the Directorate General for the Consumer. In order to facilitate the termination of contracts and the mobility of consumers, Ordinance No. 284/2022 of 28 November establishes the functionalities of a new Platform for the Termination of Contracts. In the first operational phase of the platform, consumers can exercise their right to cease their electronic communications contracts by termination; in the second operational phase of this digital tool, other functionalities will be made available. In particular, it will be possible for consumers to exercise the right to suspend their contracts or the right to cease contracts by expiry or cancellation. Furthermore, it will also be possible to communicate the death of parties to contracts.

#### Platform for the Information on the Coverage of Fixed and Mobile Networks

Decree-Law No. 40/2022 of 6 June of 2022 implements an information platform that allows citizens, businesses, the State and other entities to know the coverage and connectivity of mobile and fixed networks across the country.

#### Education Legislation

Executive Order No. 6/2018, of 12 April 2018, established the school registration procedures and their renewal, and the norms to observe concerning children and pupils' distribution. In this context, it established that the preferred channel for the enrolment of pupils should be the digital one. Decree-Law No. 65/2018, of 16 August 2018, amended the legal regime for higher education degrees and diplomas, previously established by Decree-Law No. 74/2006, of 24 March 2006, improving simplification and dematerialisation. Decree-Law No. 66/2018, of 16 August 2018, approved the legal regime for the recognition of academic degrees and diplomas of higher education awarded by foreign higher education institutions. In this context, it established that the recognition of foreign academic degrees and diplomas of higher education is carried out through an electronic platform. Decree-Law No. 55/2018, of 6 July 2018, established the curriculum for primary and secondary education, and the guiding principles for learning assessment. In line with the priorities of simplification and dematerialisation of the public administration, it is stated that the certificate and diploma templates for the various educational and training paths should be issued by schools in an electronic format. Resolution of the Council of Ministers No. 30/2020 approved the Action Plan for the Digital Transition, which recommends the provision of individual equipment to students and teachers (in various delivery phases), and

provides for the guarantee of free mobile connectivity for students and teachers and access to quality digital educational resources (e.g. digital manuals and repositories of digital educational resources, RED), as well as a strong commitment to a 'digital teacher' training plan. Ordinance No. 194/2021, of 17 September, defines the templates for the diplomas and certificates of basic and upper-secondary education pathways in an electronic format.

#### Code of Criminal Procedure

Law No. 1/2018, of 29 January 2018, amended the Code of Criminal Procedure, allowing to make notifications to legal representatives by electronic means.

### Electronic Processing of Cases in the Administrative and Fiscal Jurisdiction

Law No. 118/2019, of 17 September 2019, amending the Code of Procedure in Administrative Courts, modified procedural regimes within the administrative and fiscal jurisdiction, making it mandatory to process cases in administrative courts electronically. This allows for the speeding up of cases and increases efficiency in the processing of disputes. At the same time, the speeding up of proceedings improves the quality of services offered to citizens by the public administration.

#### Munting and Fishing Licences in Inland Waters

Within the framework of the SIMPLEX measures, as established by Ordinance No. 1509/2007, of 26 November 2007, it was possible to issue annual hunting licenses through the ATM network, with them being titled by the respective receipt. This action resulted in greater convenience for citizens, as recognized through the attribution of national awards (Good Practices Award in the Public Sector – Revenue Optimization) and European awards (European eGovernment Award) in the area of e-government in 2008 and 2009. As to fishing in inland waters, within the framework of SIMPLEX measures and in accordance with the provisions of specific legislation, from 2008 onwards, the procedure to obtain a fishing license for inland waters was dematerialized, thus offering citizens faster and more convenient procedures.

#### Nationwide Ticketing System for Public Transport Spots

Launched in 2023, the 1Bilhete.pt platform will enable interoperability between different ticketing systems, the universal use of different media (cards and tickets) and the integration of mobility services. The platform allows to acquire and validate transportation tickets from other systems with any public transportation card or mobile application, without the need to purchase a new card or install another application on the mobile phone. In addition, within the same account it will be possible to create public transportation travel tickets with national coverage and use bank cards, in a physical or virtual environment, and to acquire or validate transportation tickets, with all the benefits resulting from the use of a unified account.

#### Online Security Accreditation Platform

The Online Security Accreditation Platform (CRESO), managed by the National Security Office, was developed in the scope of the SIMPLEX Programme and aims to make it easier for citizens and companies to interact with the public administration, whenever it is necessary to obtain or renew a security clearance. For this purpose, the Resolution of the Council of Ministers No. 70/2019, of 11 April 2019, declassified some of the forms required to apply for accreditation.

#### Jostice Portal

The Justice Portal, launched by the Ministry of Justice in 2017, offers a wide catalogue of services related to the area of justice, including courts, registries and notary, reintegration and prison services, and industrial property. The platform congregates in a single website information about the judicial services in a clearer and more accessible language (all contents are written in plain language and can be easily searched by using a simple interface). The platform marked a watershed in how citizens, companies and their agents interact with the various services in the justice sector. The creation of a common network to aggregate the websites of the area of governance of Justice is also relevant with a view to enabling better sharing and availability of content, news, statistics and documents. In this context, the justica.gov.pt network integrates all fourteen Ministry of Justice's Departments websites.

#### CITIUS

CITIUS (the Latin word for 'faster' from the Olympic motto) is the project aimed at the dematerialisation of processes in judicial courts developed by the Ministry of Justice, encompassing computer applications for the various judicial operators (judicial magistrates, prosecutors, judicial officials and judicial agents). The CITIUS service enables the electronic submission of documents for their use in court cases. Lawyers can present evidence and documents to the courts, check their distribution, look up cases and keep track of fees electronically. For civil cases and injunctions, most correspondence can be conducted electronically. Sets of copies and duplicates are no longer needed. The system is secure in that the use of personal, non-transferable electronic certificates is required.

#### Employment Service

The IEFP Online Portal provides citizens and companies with a wide range of services related to job seekers, including unemployment allowances, browsing and applying for training opportunities, advertising jobs, automated cross-matching between employers and job seekers, and applying for support under the framework of labour market policies. With electronic authentication via Citizen Card or Digital Mobile Key, the portal allows for a totally dematerialised relationship between the user and the public employment service.



#### Public Employment Pool Platform

Managed by the Directorate-General for Administration and Public Employment (DGAEP), the Public Employment Pool BEP is a public employment website ensuring the connection between public employment supply and demand, simplifying and providing greater transparency and efficiency to the recruitment and mobility processes. The platform will be gradually replaced by the new platform empregopublico.gov.pt, also managed by DGAEP and which is already used for the centralised recruitment procedure.

#### ANACOM's Geospatial Platform

GEO.ANACOM allows to view information about electronic communications and postal services in a geographic, georeferenced and easy-to-use format on any device. The aim is to provide answers to practical day-to-day questions, such as which operator has the best mobile broadband coverage, quality of service and fixed broadband coverage in a certain location. This technology ecosystem comprises three portals for geographic visualisation: (i) the Internal Portal; (ii) the SIIA Infrastructure Information System Portal; and (iii) the Public Portal.

#### Carteria Section 2017

The Ministry of Finance makes available to citizens and companies a web portal allowing for tax submission and the consultation of their fiscal situation, in addition to a wide range of other digital services. The Tax Authority Portal (Portal das Finanças) allows for secure authentication via the Citizen Card and the Digital Mobile Key. The portal also offers users access to their tax files, statistics, and simulation tools. Advanced features have been added to enhance usability, simplifying interactions between citizens and tax authorities. Notably, the pre-filling of various declarations has significantly improved efficiency. The income tax declaration, initiated years ago, is now fully automated, requiring no intervention from taxpayers. Developed as a SIMPLEX measure, this feature automatically populates the income statement with relevant data while adhering to data protection regulations. Users can electronically confirm declaration receipts and final tax calculations. Similarly, the VAT declaration is pre-filled based on invoice values from the e-invoice system. In 2023, the urban property assessment declaration also began the prefilling with data from local authorities. In recent years, the focus has been placed on providing innovative services to support self-employed taxpayers without organised accounting, approximately 1 million citizens in Portugal. To streamline tax compliance and reduce associated costs, a paradigm shift was implemented in the portal by moving from template forms to an interview-style approach. This interactive system guides taxpayers step-by-step through a dynamic guestionnaire tailored to their specific circumstances, significantly improving the process and the relationship between tax authorities and taxpayers. The New Activity Declaration is accessible in the 'Activities' area of the portal, thus providing a centralized platform for taxpayers and their representatives (namely, accountants) to initiate, modify, or close activities and fulfil related tax obligations. Working on a multi-channel ecosystem perspective, the Portuguese Tax Authority has complemented the portal with a set of mobile apps, in order to address specific taxpayers' needs:

- IRS Targeted at taxpayers who have to submit their Personal Income Tax (PIT) declaration, it allows eligible automated PIT taxpayers to confirm their statement and access the already submitted declarations;
- e-Fatura Targeted at individuals, it allows them to see and classify the invoice issued to them in order to get PIT benefits on eligible expenses; it also allows the user to communicate an invoice that has not been received by the Tax Administration using the QRCode printed thereon;
- Fatura da Sorte Targeted at individuals, it allows accessing the information of the lucky draw on invoices that the Tax Administration has in place, showing the dates and prizes of the next draw and the coupons that have been assigned based on the invoices that where issued to the Tax Identification Number of the person using the app;
- Situação Fiscal Targeted at both taxpayers and businesses, the app provides payment reference for any amount for which payment is pending and allows the user to pay it with a direct association to MBWay (payment system integrated with banking institutions). The app also allows the taxpayer to track any reimbursement that is due or that was received in the past from the Tax Administration;
- ATGo Integrated Activity Management: it allows self-employed taxpayers to manage their professional activity intuitively, without having to use other channels. At the first login, the user has access to the Onboarding, that is an overview of the app's resources is displayed and, throughout the navigation within the application, tutorials and 'humanized' help topics are made available to guide the taxpayer in making the best use of the existing features. Contextual help is also made available and general help can be selected from the main menu. The user can provide their opinions and suggestions, which has already contributed to the constant adaptation of existing options and the provision of more useful features.

The development of solutions such as the abovementioned New Activity Declaration and ATGo reinforces AT's technological innovation matrix and its commitment to providing personalized services adapted to the needs of different segments of taxpayers.

#### OGP Portugal Portal

The OGP Portugal Portal was developed within the scope of the Portuguese participation in the Open Government Partnership (OGP), to centralise all information about the process, progress, evolution and monitoring of the National Open Administration Action Plan, and to foster public participation. Citizens are invited to contribute to the promotion of open administration in Portugal; the portal collects the contributions and ensures that feedback is given to them. The activities of OGP Portugal are allowing for a free exchange of ideas and suggestions between civil society organisations and public entities, highlighting the relevance of including civil society topics to keep promoting open administration in Portuguese public entities, namely the digital transition process and the guarantee of a wider inclusion and representativeness within the participation in State activities.

#### Forest Fire Information System Portal

The Forest Fire Information System (SGIF) is an information management system capable of automatically producing and sending daily alerts to a selected set of recipients belonging to entities in charge of operational intervention in fire prevention and combat actions (ICNF, ANEPC, GNR, AGIF, firefighting teams Forestry Sappers, Municipal Councils). Focused on producing alerts and situation reports with associated statistical and geographic data, the platform has more than 600 000 registered users and processes more than 1 million requests from citizens and companies annually, while establishing connections between more than 300 public entities.

#### Integrated System of the Institute of Cinema and Audiovisual

The Institute of Cinema and Audiovisual (ICA) is a public institute that supports the development of cinematographic and audiovisual activities. The HAL Platform was implemented in 2021, in view of a digital transition and a continuous improvement aimed at strengthening and simplifying the relationship between the ICA and its beneficiaries, promoting gains in effectiveness and efficiency in the procedural process, both in terms of applications and in terms of monitoring the implementation of the supported projects.

#### 🕺 General Inspectorate of Cultural Activities - Online Registries

The General Inspectorate of Cultural Activities (IGAC) is responsible for protecting copyright and related rights, together with other competencies in the field of cultural activities. Its web portal offers online services such as: the registry of cultural professionals (under the artist

statute); the registry of literary and artistic works; the registry of promoters of artistic shows; and the title application process for cinematographic or audiovisual works distributed in Portugal. Since February 2024, a new online service has been introduced for the classification and authentication of cultural works and contents.

#### Culture Portal

The Culture Portal aggregates relevant information on the national cultural offer, cultural routes and cultural spaces all across the country. The portal has been evolving with new functionalities, including the addition of customisation options and a module for the acquisition of tickets for public buildings (museums, palaces and monuments) and guided visits, as well as the georeferencing of cultural sites and relevant entities. Since December 2023, a new feature has been introduced with information on the European financing mechanisms available for cultural sector entities.

#### The Portuguese Contemporary Art Network

The Portuguese Contemporary Art Network (RPAC) is an online space that brings together and stimulates different centres of Portuguese contemporary art. This network envisages to promote objectives of social, cultural, and artistic responsibility, namely through bringing citizens closer to contemporary art, training teams, promoting multidisciplinary, multiculturalism, accessibility and internationalization.

#### National Register of Digital Objects

The National Register of Digital Objects (*Registo Nacional de Objetos Digitais*, RNOD) is a central point for accessing and sharing digitised national bibliographic heritage. RNOD is an aggregator of digital and digitised content provided by Portuguese entities, which aims to coordinate and disseminate these resources, nationally and internationally, namely through the Europeana Portal and other similar tools. It currently aggregates over 150 000 digital objects from a network of 49 participant entities.

#### National Repository of Objects in Alternative Formats

The National Repository of Objects in Alternative Formats (*Repositório Nacional de Objetos em Formatos Alternativos*, RNOFA) is a platform which pursues the general objective of facilitating access to resources provided by Portuguese entities in alternative formats (e.g. printed and digital Braille, audio and digital texts) aimed at people with disabilities, particularly visually impaired. RNOFA is structured as a collaborative system, gathering and networking information on these resources and establishing conditions and mechanisms to access them.

#### National Cinema Plan Film platform

The National Cinema Plan (PNC) Film Platform is a public and free service for schools enrolled in the PNC. Conceived as a technological platform to support the PNC, it serves the digitisation and preservation of cinematographic heritage, in particular of Portuguese cinema, and enables schools to have digital access to the films included in the PNC Film List. The platform was developed under the Cooperative Holistic View on Internet and Content CHIC Project.

The PNC Film Platform offers an exclusive and free streaming service for schools, operated in a school environment, and/or through screenings in movie theatres.

#### Digital Cinematheque

Created in 2011, the Digital Cinematheque contains films for consultation online, with a view to expanding access to the film heritage that has been conserved and preserved by the Portuguese Cinematheque (*Cinemateca Portuguesa*) over the years. The list of titles has been expanding, with over 1 200 titles currently available. The contents of the Digital Cinematheque are also available through the portals Europeana (www.europeana.eu) and the European Film Gateway (www.europeanfilmgateway.eu).

#### 🗐 🛛 🖉 Balcão Artes

Balcão Artes is a database launched in 2021 by the Directorate-General for the Arts (DGARTES), that envisages a simpler and more functional access to all relevant information regarding financial support programmes for the Arts. Through an e-register, it is possible to fill in and submit financial support requests, as well as monitor the supported projects and programmes. The system also aims to give more visibility to the entities supported by DGARTES, showcasing

their activities and projects in the fields of performing arts, visual arts, and other interdisciplinary fields. It provides detailed information about each entity, including their history, contacts, image galleries, videos, and links to social media. With 140 entities and 1 500 images, there are plans to add more content soon. Key features include searches and listings by artistic field, region, and years of support, simplifying procedures for application and contract monitoring.

#### European Capital of Culture Portugal 2027

Created in 2021, the European Capital of Culture website is intended to accompany the process of the European Capital of Culture in 2027, where a Portuguese city and a Latvian city will be named European Capitals of Culture. This initiative seeks to provide Europeans with the opportunity to learn from each other about their respective cultures, enjoy their history and common values, experience the feeling of belonging to the same European community, strengthen ties and develop European cultural partnerships, as well as highlight the role of culture in development of cities.

#### Portugal: Art and Heritage Project

The project 'Portugal: Art and Heritage' is a partnership between Google Arts & Culture and the Ministry of Culture, through the Directorate-General for Cultural Heritage (DGPC). It offers anyone, anywhere in the world, the possibility to know more about the collections of the museums and national monuments under its care.



#### Portugal Contemporary Art Guide

Portugal Contemporary Art Guide is a project supported by DGARTES and RPAC (National Network for Contemporary Arts). This guide is a free app for android and IOS whose goal is to map the universe of contemporary art at a national level. It works as an agenda, guide and map, simultaneously, widening the possibility of dissemination of the various activities developed, in addition to the promotion of artists, existing equipment, and the various collections, among others.



#### Only Portugal: Meet the Country

The website www.onlyportugal.pt is a gateway to Portugal aimed at buyers, investors, foreign students, tourists or the public in general, and works as a single access point to information about buying, investing, studying, traveling and getting to know Portugal.

#### Travel Arbitral Commission

The online platform 'Turismo de Portugal ' makes it simpler and faster for travellers to submit and pursue cases before the Arbitral Commission charged with the resolution of disputes arising from their dealings with travel and tourism agencies, when the Travel and Tourism Guarantee Fund (FGVT) is activated. To the benefit of all concerned parties, the procedure can now take place entirely in digital and dematerialised form, also contributing to the strategic goal of digitising this sector.



#### National Commission for the Promotion of the Rights and the Protection of Children and Young People Portal

The National Commission for the Promotion of the Rights and the Protection of Children and Young People (CNPDPCJ) runs the CNPDPCJ Portal, which provides a wide variety of information on:

- The promotion and protection of children and young people;
- Activities carried out by the CNPDPCJ in the pursuit of its mission and attributions, as well as by other national, European and international entities whose operations contribute towards common goals;
- The national and international frameworks of the activities developed by the CNPDPCJ;
- The Portuguese system of promotion and protection of children and young people in danger; and
- Useful resources for children, professionals and the society at large, on various subjects, mainly regarding the promotion of the rights and the protection of children and young people.

The CNPDPCJ Portal also conveys updated data and assessment reports on the activity of the local Commissions for the Protection of Children and Young People and offers an additional channel for reporting situations of children and young people at risk or in danger, including an online form whose submission prompts its automatic forwarding to the competent Local Commission.



#### Education and Training Courses Portal

The Education and Training Courses Portal is a national technological platform that allows for a personalised search of education and training offers currently available in the Portuguese education and training system.

#### Qualifica Portal

The Qualifica Portal aims to ease access to information, services and tools included in the Qualifica Programme (i.e. the National Credit System for vocational education and training and the Qualifica Passport). It targets trainees, employers, and adult education and training providers. It enables citizens to find a Qualifica Centre, to consult education and training opportunities, and to update the Qualifica Passport. The Qualifica Passport is an online tool that records the education and training pathways attained; it also provides guidance to pathways in order to complete or obtain a new qualification, taking into consideration the already attained training and the acquired skills.



#### National Catalogue of Qualifications

The National Catalogue of Qualifications has been renewed to become more user-friendly, clearer and more suitable to the needs of its main users. As such, the new website:

- Increases the visibility of the set of activities and skills associated with each qualification, and clearly shows how to access those qualifications;
- Integrates short and medium-term training pathways, for young people and adults, in emerging areas with added value for the economy, namely in the field of digital and green skills, and Portuguese courses for non-native speakers;
- Integrates Competence Units (UC)/Short Term Training Units (UFCD) related to transversal competences that are of crucial importance for education, training and work, in emerging domains such as 'soft skills', new ways of working, digital and leadership;
- Integrates curriculum competences by qualification, with regard to the different professional courses' modalities;
- Allows the search of qualifications by Sectorial Council for Qualification;
- Allows the integration of qualifications structured in UC, based on and described in learning outcomes;
- Allows users to independently search for UC integrated in the key competences' standards for adult education and training basic level and secondary level;
- Presents a simpler search of UC/UFCD which allows the use of a broader set of search filters; and
- Allows access to a diverse set of information on the home page, namely catalogue updates, news and events.



#### Housing Portal

The Housing Portal was created by the Institute for Housing and Urban Rehabilitation, I.P. (IHRU, I.P.) to provide information and support to citizens, families and companies in various aspects related to housing and urban rehabilitation in Portugal (e.g., social rental housing, development and financial support for housing rehabilitation, programmes for the promotion of affordable housing, laws and regulations related to housing programmes and initiatives).

#### Centre for Innovation in the Public Sector

The Centre for Innovation in the Public Sector LabX was created in 2017 with the mission of contributing to the Public Administration innovation ecosystem, by promoting the renewal of the public services offer in line with citizens' and businesses' real needs. With a small multidisciplinary team, LabX focuses on evidence-based knowledge, collaborative exchanges, experimentation, and impact assessment, using different approaches from service design and gamification to behavioural sciences and participatory techniques, and privileging liaisons with civil society organisations, national research and development centres or the community of entrepreneurs. LabX' work is internationally recognised, having received the EPSA 2021 Award in the Innovative Public Administration category and, more recently, the Global Government Excellence Award as Distinguished Initiative in Government Innovation during the 2023 World Government Summit.



#### Incentive System for Innovation in Public Management

The Incentive System for Innovation in Public Management (SIIGeP) is a programme which aims to foster innovation capacity in human resources to improve the work environment and the development of management models. The coordination of the programme falls upon AMA, INA and the Directorate-General for Administration and Public Employment (DGAEP). The SIIGeP includes a set of incentives to promote innovative practices in valuing human resources, improving the work environment and developing management models, which can be of three types: training actions, i.e. work experiences in innovative international institutions and other similar incentives; support to the development of experimental projects, through privileged access to training for innovation, tools that facilitate the elaboration of projects and the possible temporary suspension of legal regimes in force for the duration of the project (the 'right to challenge' mechanism); and awarding of a prize to innovative management projects that present measurable results.

#### Digital Public Services for Businesses

#### Decree-Law No. 125/2006

The Decree-Law No. 125/2006 of 29 June created the 'online company', through a special regime for the online incorporation of commercial and civil companies under commercial form, and created the 'brand on the spot'

#### Clean&Safe Stamp

The Clean & Safe Stamp was created in 2020 by *Turismo de Portugal* to recognise companies and leisure activities compliant with health safety recommendations issued by the National Tourist Authority according to National Health Authority guidelines in view of avoiding the risks of contagion by COVID-19. The 2023 version of the Clean & Safe Stamp maintains the focus on the health component but extends its scope to other possible public health crises and to a cross-cutting safety dimension for tourists, associated with possible vulnerabilities and risks inherent to their various experiences, such as those resulting from extreme phenomena (rural fires, floods, earthquakes or tsunamis) and international constraints (cybercrime, refugees). This stamp is free, optional and valid until June 2024, as long as compliance with the established procedures is maintained.

#### EmpresasTurismo 360º Programme

With the aim of promoting sustainability guidelines in the sector's value chain and boosting its potential within the framework of the 2030 Agenda, Turismo de Portugal launched the 'Empresas Turismo 360°' Programme. It focuses on building a global model for measuring and evaluating tourism companies' environmental, social and governance performance.

The concern to create means for companies to analyse inefficiencies and vulnerabilities in their systems and build new paths to grow lies at the heart of the design of an exclusive portfolio covering the entire process of collecting, measuring, reporting, and monitoring environmental, social and governance practices, which is anchored in ESG factors. This portfolio includes an innovative digital tool for the collection, management and reporting of data associated with sectoral ESG performance indicators, which is only accessible to companies within the Empresas Turismo 360° Programme. As a sustainability performance analytics and reporting tool, FOREST (Organizational Sustainability Reporting Tool in Tourism, *Ferramenta Organizacional de Reporte da Sustentabilidade no Turismo*) allows to automate the collection, management and reporting of data associated to the sector and prepared in accordance with global standards, also capturing and aggregating business intelligence data enabling the comparability of information.

#### Buy from Portugal

This 'business match-making' tool, managed by the AICEP Academy, makes it possible to showcase the national offer in a valuable, filtered and customised way, providing tailor-made solutions to international online demand. The website delivers all the necessary information about Portuguese companies, their products, services and brands, promoting new contacts, networking and business opportunities.



### Invest in Portugal and Investment Optimiser

Developed as a one-stop-shop for foreign entrepreneurs who are searching and selecting new countries for investment, expansion and business growth, the Investment Optimiser is a simulator that helps users to spot the top places to invest in Portugal, according to their profile and priorities. This tool gathers data from multiple sources at a national, regional and county level, and crosses every relevant indicator to deliver a consistent list of ranked suggestions. An interface with the local administration is associated to the Optimiser to support the investment process through the development of a collaborative pilot project. It is beneficial for the management and conduction of operational activity, transformation, automation and standardisation of processes, leading to increased local efficiency when preparing, promoting and attracting investments.

#### **Public Procurement**

## Procurement Legislation

The Public Procurement Code (PPC), approved by Decree-Law No. 18/2008, of 29 January 2008, transposed the following EU public procurement acts:

- Directive 2014/23/EU of the European Parliament and of the Council of 26 February 2014 on the award of concession contracts;
- Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC;
- Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/ EC;
- Directive 2014/55/EU of the European Parliament and of the Council of 16 April 2014 on electronic invoicing in public procurement; and
- Delegated Regulation (EU) 2019/1828 of the European Commission amending Directive 2014/24/EU of the European Parliament and of the Council regarding thresholds for public supply contracts, public service contracts and public building contract, as well as for design contests.

#### Further laws that relate to the PPC:

- Law no. 30/2021 approved special measures for public procurement and amended PPC.
- Law No. 96/2015, of 17 August 2015, regulates the availability and use of electronic platforms for public procurement. Currently, two platforms are used for procurement: (i) the BASE Portal, an online platform that enables the processing of contracts in the context of public procurement both in the pre- and post-award phase; and (ii) the *Plataforma Eletrónica de Compras*, a central online platform that manages a series of public eProcurement procedures, including eInvoicing, in the context of the framework contracts established by the government Shared Services Entity (eSPap).
- Ordinances 318-A/2023 and 318-B/2023, both from 25 October, define the new forms used by public procurement notices at national level, in line with the EU regulation 2019/1780, from 23 September. A national decision was approved aimed to revise all the notices published in Portugal, so as to ease the administrative burden by ensuring convergency with the European forms that are submitted to TED.
- Finally, Decree-Law No. 72/2018 mandated the creation of the National State Suppliers Portal, whose purpose is to simplify and expedite the procedures to verify that there are no impediments to contracting, as provided for in the PPC.

## Prior Opinion

Decree-Law No. 107/2012, of 18 May 2012, regulated the duty to provide information and the issuing of an opinion prior to the acquisition of ICT goods/services costing EUR 10 000 or more. It applies to both direct and indirect administration bodies and State services. AMA is the entity responsible for assessing the compatibility of the acquisition proposals with the strategic objectives of the digital transformation of the public administration (including, for example, an assessment of free and open source software solutions, whose total ownership cost is lower than that of a solution entailing proprietary software or specific licensing).

## `More Science, Less Bureaucracy' Programme

The XXI Constitutional Government prioritized innovation, democratization of access to knowledge, and investment in science and technology. This is outlined in the government's programme, which also focuses on strengthening, simplifying, and digitizing the administration through the SIMPLEX+ Programme. In line with the 'Simpler R&D Contracting' and the first steps of the 'Simplification Programme for Research and Science Funding (PROCIENCIA)' initiatives under SIMPLEX+ 2018, the 'More Science, Less Bureaucracy' Programme aims is to simplify procedures in science and technology. This approach responds to concerns expressed by stakeholders operating in the national scientific and technological areas, in light of strong European and international competition for Research and Development (R&D) projects. Decreelaw n.º 60/2018 introduced changes to the Public Contracts Code, narrowing its scope and allowing direct contracting for R&D services. Several measures have been implemented to increase administrative efficiency in scientific activity, such as the 'Zero Stamp FCT' and the simplification of equipment depreciation. The decree-law seeks to reform the administrative framework for science and technology to stimulate research and development activities, creating an attractive and competitive international environment. It foresees a derogation to the application of the Public Contracts Code - Part II for contracts concerning the leasing or acquisition of movable goods and services necessary for R&D activities below specified thresholds. Additionally, measures are introduced to simplify and streamline procedures for science and technology funding entities and improve coordination with beneficiaries.

## Public eProcurement Platforms

There are five private platforms, certified by the National Security Office (GNS) and licensed by the Institute of Public Markets, Real Estate and Construction (IMPIC), through which all public procurement procedures have to be conducted, regardless of the nature of the contracting entities. The National Public Procurement Portal (BASE), established in 2008 following the Public Procurement Code (Decree-Law No. 18/2008), publishes all notices and contract announcements electronically and lists all certified eTendering platforms. Public entities can acquire eTendering services with minimal effort. Calls for tender are published in the Electronic Official Journal (DRE). Publication requests can only be submitted electronically. Some innovations are not commonly used (e.g. eAuctions and dynamic purchasing systems) and eProcurement in the post-award phase (e.g. invoicing and contract management) is still in its infancy. All public administration contracts are required to be published on the BASE Portal. Among other actions, a user can perform a thorough search and analyse expenses by the public sector, public bodies and enterprises. This portal is one of the key examples of transparency efforts involving all public administration activities. In 2019, eSPap developed a platform for the Annual Procurement Plan (PAN). The eAggregation solution became available in early March 2020 and its main objective is to reduce the administrative burden associated with the process of preparing the National Public Procurement Plan (PNCP) and allow those involved to invest more time in analysing the collected data and not in the process itself, as the data aggregation process is automatic. The portal of the National Public Procurement System, launched in 2020, centralises the tools related to the management of this ecosystem. In 2021, the Needs Aggregation Tool (FAN) was made available to all National Public Procurement System (SNCP) entities, integrated in the National Public Procurement Catalogue (CNCP) portal. Also, an Electronic Public Procurement platform was made available, in 2021, to the approximately 2 500 voluntary purchasing entities that make up the SNCP and to the co-contractors of the framework agreements.

## BASE Portal

The BASE Portal is the public procurement portal and an instrument for monitoring public procurement, transparency, and accountability, as well as the fundamental source for drawing up statistics and reports and encouraging certain practices in public procurement. Under the terms of the Public Contracts Code, the conclusion of any contracts following prior consultation or direct award must be publicised by the contracting authority on the public contracts portal and is a condition for the effectiveness of the respective contract, regardless of whether or not it is in writing, namely for the purposes of any payments.

## ]e PROCURE+i

PROCURE+i, the Portuguese Competence Centre for Innovation Public Procurement, is a joint initiative of the National Innovation Agency (ANI) and IMPIC to promote Innovation Public Procurement (IPP) in Portugal by raising awareness to the advantages of this strategic

procurement. This facilitates the expansion of knowledge on IPP across all public contracting authorities and improves market conditions to bring the supply and the demand closer together. PROCURE+i is the main platform for those who are unfamiliar with innovation public procurement and want to receive information, guidance and support services.

Through PROCURE+I, a national innovation procurement community will be created, in order to raise awareness about the advantages and opportunities of innovation procurement in Portugal. The major objective of PROCURE+i is to change the status of low national performance in innovation public procurement, within five years of its creation.

### Digital Inclusion and Digital Skills

## द्ती Eigital Skills Training

Digital skills is a strategic training area for the public administration, as established through Ministerial Order No. 3431/2019 of 19 March 2019 of the Minister for Finance, following a proposal by the National Institute of Administration (INA). This strategic training area is implemented by the INA Training Centre through the Programme for the Development of Digital Skills (supported by the national Recovery and Resilience Plan), which includes four training syllabuses with different training paths:

- 1. Training programme for zero info-exclusion, aimed to foster digital inclusion through the promotion of the ability to use essential digital tools;
- 2. Training programme for the digital transformation of public administration, focused on skills in emerging technologies;
- Training programme for digital tools, aimed to develop the ability to work with wordprocessing tools, edit spreadsheets, manage databases and other relevant digital tools; and
- 4. Training programme for the development of IT staff skills, aimed to provide and update specific ICT skills.

Additionally, amongst other areas of training, INA is also providing specific training programmes for public sector leaders (middle and top managers), with a focus on understanding digital trends, supporting digital procurement and managing change driven by digital technology within public sector organisations, as well as a training offer in consortium with Higher Education Institutions, in the following areas: (i) accessibility and usability; (ii) reference architecture; (iii) cybersecurity; (iv) cloud computing; (v) data; (vi) ethics and digital responsibility; (vii) digital identity; (viii) artificial intelligence; (ix) interoperability; (x) other emerging technologies; (xi) smart territories; and (xii) 5G.

Moreover, Ordinance No. 250-A/2020, of 23 October 2020, created the Programme 'Jovem + Digital', targeting the development of digital skills in young adults aged between 18 and 35, with the strategic objective of enhancing the quality, efficiency and agility of training and professional qualification. Another important initiative is the training programme provided by the AMA Academy to all Citizen Shops and Citizen Spots professionals across the country, empowering their role in raising awareness and preparing for the digital transformation the citizens they provide their services to. In pursuing this objective, the AMA Academy has developed several training courses and training events, webinars and workshops with the aim of sharing good practices, debating ideas and, above all, involving everyone in the digital transformation of public services, helping stakeholders to change their mindset and be inspired by the good results of partners or colleagues with whom they work.

Within the Digital skills training, Ordinance No. 179/2021, of 27 August, created the Programme 'Digital Skills Certificate', which aims to improve the digital skills of the Portuguese population, aged 18 or over interested to obtain training, skills recognition or certification of skills in the digital area. The certification awarded is in line with the Digital Competence Dynamic Reference Framework, corresponding to levels one, two and three.

## Portugal INCoDe.2030

The National Digital Competences Initiative 'Portugal INCoDe.2030', launched in April 2017, is an inter-ministerial action that brings together the areas of economy, digital transition, science, technology, higher education, labour, solidarity and social security. It aims to upgrade the ICT basic skills of Portuguese citizens, preparing them for emerging and digitally-based employment opportunities. This initiative is structured around five main axes: (i) vocational education and training; (ii) qualification and requalification; (iii) inclusion; (iv) advanced training; and (v) research. It includes a variety of measures to be implemented by different governmental

bodies in collaboration with the private sector, academia and civil society. In May 2021, Portugal revised its National Digital Skills Initiative (INCoDe.2030) to promote, amongst others, the Digital Public Administration Programme (AP Digital), aimed to reinforce the digital skills of public servants and to accelerate the digital transformation of the public administration. In 2022, within the scope of the AP Digital Programme (a programme that aims to qualify and retrain around 9 800 public administration workers) and in partnership with the National Institute of Administration (INA), a MOOC was created on emerging digital technologies for senior managers and public administration technicians. The INCoDe.2030 Programme created an action INCoDe.2030 seal for individuals, organisations and public and private entities which contribute to the improvement of digital skills in Portugal. The regulation of this seal was revised and a new regulation was published in February 2023.

# Decree-Law on the Accessibility of Public Sector's Websites and Mobile Applications

Decree-Law No. 83/2018 of 19 October 2018 transposed Directive (EU) 2016/2102 on the accessibility of public sector's websites and mobile applications into Portuguese law. According to this decree-law, all public sector bodies shall comply with the EU standards and best practices adopted, namely EN301549 or WCAG 2.1 'AA' from W3C, thus making their websites and mobile applications more accessible to users and allowing everyone, including people with disabilities, to use the available information. AMA shall ensure that the public sector's websites and mobile applications comply with these rules. For that purpose, a set of tools have been made available, including an Accessibility and Usability Kit for public sector's websites, an Accessibility WCAG 2.1 Validator – AccessMonitor -, the Accessibility Statement Generator and the Usability and Accessibility Seal of Excellence. To raise awareness of the importance of accessibility, Portugal also created the Portuguese Observatory of Digital Accessibility, where each public body may observe the level of accessibility of their own website(s).

#### Innovators Network, Public Sector Innovation and Experimentation Laboratories Network

In its mission of being a reference for innovation and experimentation in the Portuguese public administration, the Centre for Innovation in the Public Sector `LabX', an organic unit of AMA, has been launching network-based initiatives to bridge the existing capacity and expertise within both the public sector and the innovation ecosystem. Among the initiatives developed in this context, the following stand out:

- The Network of Innovators is a community of practices, with 845 members, aiming to
  promote collaborative work sessions among public administration workers to share
  knowledge and experiences resulting from projects and/or experimental approaches. The
  network has at its disposal three instruments to promote its dynamisation: (i) LabXpresso,
  a quarterly newsletter where projects, case studies and tools applied by the LabX team
  are presented; (ii) WORKSHOP@LabX, face-to-face or virtual sessions that take place in
  an informal environment and can have different formats, where participants can identify
  challenges and opportunities for innovation within the public administration; and (iii)
  Innovators in Residence, an immersive experience program for public servants including
  an immersive, 1-month stay in LabX, learning how to design public services through the
  LabX methodology and guidelines, so they can use this knowledge in their own entities;
- The Public Sector Innovation and Experimentation Laboratories Network is a community of practices within the Portuguese public administration that gathers several public laboratories and innovation teams from different public entities, providing them a safe space to debate ideas and share good practices among peers and equipping them to design better public services in their entities. The network comprises ten public innovation laboratories that went through a mentoring program developed by LabX, or innovation teams already established in the Portuguese public sector. Since 2021, the network began with regular meetings to share experiences, projects, innovative practices, and case studies and constitute itself as a support structure to new members. These events are held in a decentralized manner and seven have already been held. Recently, the network has also started organizing online meetings, focused mostly on analysing projects between peers.



#### Web Accessibility and Usability Ecosystem

AMA is responsible for developing, promoting and monitoring the implementation of usability and accessibility guidelines and regulations, ensuring compliance with national and

international standards and best practices (namely EN301549 and WCAG 2.1 from W3C) and enabling citizens, especially those with disabilities, to access and use public services online. To this end, AMA provides an ecosystem, aggregated in the acessibilidade.gov.pt web portal, with information about laws, guidelines and best practices, as well as practical online tools for public entities, which include:

- An accessibility and usability kit for public sector's websites (all resources on Github);
- An accessibility WCAG 2.1 validator;
- An accessibility statement generator;
- An Observatory of Digital Accessibility; and
- A usability and accessibility seal of excellence.

The Usability and Accessibility Seal, in particular, is an indicator of the quality of the contents and services made available by public and private entities online, according to three levels of compliance with standard requirements: bronze seal (lowest level of conformity, i.e. to level 1 requirements), silver seal (intermediate level of conformity) and gold seal (highest level of conformity). For instance, all the websites and mobile applications that have a gold seal were subject to usability tests that involved participants with disabilities.

## Education Human Resources Interactive System

The Education Human Resources Interactive System (SIGRHE) is a web platform based on open-source technology, whose function is to manage the education human resources processes and dematerialise the administrative procedures. This platform, which was conceived as a shared service, has currently about 400 000 registered users and is available 24/7. SIGRHE users are extremely varied, covering the whole of the educational community. Besides individual users, such as teachers or non-teaching staff, also other actors, such as representatives of school clusters/non-clustered schools and parents' associations or local authorities, use the platform for various purposes. SIGRHE also allows access to various services to the different bodies of the Ministry of Education, for which it works as a tool for consultation, analysis, control and/or validation of data on both staff and schools, always in strict compliance with data protection regulations. Developed in 2011, SIGRHE is a dynamic platform designed to allow constant development and upgrade by adding and configuring other applications, according to the needs of the Directorate-General for School Administration (DGAE) and the whole education system, as well as by introducing changes, corrections and adaptations that may seem necessary. Amongst the functions provided by the SIGHRE platform, module E72 (made available in March 2020) stands out as a digital communication service (available 24h/day) conceived to respond to citizens and organisations within 72 hours, as part of a centralised communication policy.

## Tourism Digital Academy

The Tourism Digital Academy was created for the development and training of people in the tourism sector. It is a gateway for those who want to train, access workshops and seminars, or join tailor-made training services, provided by the 12 Turismo de Portugal Hotel Schools. The platform manages all the executive training courses provided by Turismo de Portugal and its schools, facilitating access to free and diversified training that contributes to the improvement of professional qualifications, as a complement to the on-site training carried out in the network of Turismo de Portugal schools.

## AICEP Academy

The AICEP Academy provides an e-learning platform for training actions in various areas related to international trade, investment and internationalization of companies. This platform aims to provide quality training content, accessible to all companies interested in expanding their knowledge in these areas. This digital platform offers flexibility in training (asynchronous courses, webinars and synchronous programmes), which is developed by leading experts in their areas. The AICEP Academy also includes an area dedicated to Internal Training with the aim of developing valuable programmes aimed at qualifying its human resources that contribute to improving the service provided to the agency's clients.

## Bo Academia Portugal Digital

Launched in 2022 to promote professional qualification and requalification, Academia Portugal Digital is a tool for assessing and self-diagnosing digital skills and providing a 'digital shop' of online courses that aim to provide digital skills. This free course aggregator platform incorporates courses from the private sector and MOOCs, allowing everyone to assess their digital skills, receive training and explore career opportunities. The tool offers multiple options to help test, improve, and certify the digital level of the users. Throughout 2023, Academia Portugal Digital provided more than 240 000 digital skills assessments and self-diagnostics, relating users' needs with the suggestion of training actions and providing access to more than 2 100 online courses in order to improve digital skills of its users. The Academia's website has been updated with new features and it's now possible for users to access it with eID (via Autenticacao.gov).

## Be LGP Academy

The LGP Academy project, which is currently in the process of renovating and implementing a new digital platform, started in the Casa Pia de Lisboa, after the identification of specific necessities due to the lack of vocabulary in Portuguese Sign Language in the school curriculum. In this way, the LGP Academy provides the hearing-impaired with hundreds of mathematics, physics, chemistry, history, art and design, philosophy and sports videos among other curriculums of different educational stages. The videos are in bilingual format, i.e. in Portuguese (written and oral) and Portuguese Sign Language (LGP). This work allows for the creation and dissemination of bilingual pedagogical materials (LGP and LP) from preschool education to the 12<sup>th</sup> grade in order to fill a gap that exists in the national education of the hearing-impaired. The perspective is to build bilingual pedagogical materials that could be tested and applied in the classroom, thus contributing to the development of hearing-impaired education at national level.

## National Arts Plan

Developed by the governing areas of Culture and Education, the National Arts Plan (PNA) aims to make art and culture more accessible to citizens, particularly children and young people, through the educational community. It promotes the participation, enjoyment and cultural creation, in a logic of inclusion and lifelong learning. In its online platform, teaching resources are accessible to support the work of teachers, parents and students, and to allow for a more integrated learning. These teaching resources combining arts, heritage and culture with the different scientific areas of the school curricula are available for early childhood education, primary education and secondary education.

## 👌 AMA Academy

Implemented by AMA, the AMA Academy develops projects in the areas of training, qualification and skills development for the Public Service Network, composed by the Citizen Shops and the Citizen Spots located both in Portugal and abroad. It also designs training solutions for the whole public administration, allowing the public bodies and their employees to keep abreast of digital government innovations, new electronic public procedures and guidelines within the scope of administrative modernisation, thus collaborating in the simplification of their internal processes and the relationship with their end-users.

Furthermore, the AMA Academy develops tailor-made training solutions for public and private partners, both national and from Portuguese-speaking countries, through face-to-face pedagogical methodologies, eLearning, virtual action learning and serious games. Throughout 2023, the AMA Academy provided more than 38 000 hours of training for public workers and issued more than 5 000 certificates, with an average course satisfaction of 82%. The Academy has been updated (2.0 AMA Academy) with new functionalities for all its users: trainees, trainers, team leaders and the general public. Now, users can access it via autenticação.gov in a personal user areas where all the information relating to the training process can be consulted and managed.

## Massive Open Online Courses Platform

The Distance Education and Training of Public Administration for Large Audiences (Sempre a Aprender, NAU) is the platform that results from the national initiative to build and operate a technological platform to support the publication and promotion of content in Massive Open Online Courses (MOOC). Initially courses were only in Portuguese, but now there are also some training programmes in English. This project is also part of the transversal actions of the Portugal INCoDe.2030 initiative, as it promotes the digital development, digital inclusion, literacy, education and qualification of the active population. INA, as well as other public entities, already uses this tool to make some of its training offer available (in an asynchronous format). In addition, INA will use this platform to make available most of the programs for digital capability. In 2022 the NAU platform received more than 202 000 registrations to the courses offered and 55 000 new registrations on the platform. Throughout 2023, NAU issued more than 93 000 certificates, with an average course completion rate over 43%. In the same period, the platform introduced five new courses per month and made 64 courses available during the year, thus reaching its maximum number of simultaneously open courses, with 237 courses available at the same time. In 2023, the nau.edu.pt website generated 6 523 560 pageviews, representing a significant increase compared to 2022. Integrated into the Recovery and Resilience Plan, NAU will receive support of EUR 2.5 million in 2024, an amount to be implemented by the beginning of 2026. INA, as well as other public entities, such as AMA, already use this tool to make some of their training offer available (in an asynchronous format). In addition, INA and AMA will use this platform to offer most of the programmes for digital capability.

## Digital Coalition - Digital Skills and Jobs

Launched in October 2022, the Digital Coalition – Digital Skills and Jobs aims to be a repository of initiatives, actions, studies, resources, events, news, training, jobs and funding opportunities in the field of digital skills. With this platform, any citizen or entity can find out what is done at national level to promote digital skills, and also what is being done in other European countries, through the interoperable connection with the central services platform of the European Union (the Digital Coalition Platform is linked to the European platform via API since December 2022).

## 5. Trust and Cybersecurity

## eID and Trust Services

## Digital Identification Mechanisms

The development of Portuguese digital identification mechanisms and the promotion of their uptake by citizens, businesses and the public administration itself are at the top of the political agenda, with ongoing initiatives targeting different end-users. The constant addition of new features (e.g. mobile eSignature), the swift integration of these mechanisms in digital public services delivered by different areas of government, and their steady adoption by the private sector (e.g. banking, utilities) are some of the positive outcomes of setting electronic identification (eID) as a political priority. Furthermore, the Strategy for the Digital Transformation of Public Administration 2021–2026 includes a target to increase the number of public services that require authentication through the national public eID ecosystem. This element is also inscribed in the national RRP, which ensures due funding.

### 😥 Law on Citizen Card

Law No. 7/2007, of 5 February 2007, introduced the Citizen Card and regulated its issuance, replacement, use and cancellation. Article 18 outlined the provisions for digital certificates, i.e. electronic documents using a digital signature. The eSignature based on a qualified certificate is optional and can only be activated and used by citizens over the age of 16. No eSignature based on a related qualified certificate can be activated if the holder requesting a Citizen Card is deemed unsuitable.

Law No. 32/2017 of 1 June 2017, introduced significant changes to the Citizen Card, in particular the integration of the Professional Attributes Certification System (SCAP), which allows citizens to use their national eID card to digitally sign not only as citizens, but also as certified professionals of a specific recognised profession (e.g. as an engineer or as a physician). The law is in the process of being amended to comply with Regulation (EU) 2019/1157 of the European Parliament and of the Council of 20 June 2019, which aims to strengthen the security of Union citizens' identity cards, and residence permits issued to citizens of the Union and their family members.

Law No. 19-A/2024, of 7 February, further amended Law No. 7/2007, as well as Law 37/2014, of June 26th, which establishes an alternative and voluntary system of authentication of citizens in Public Administration portals and websites called Digital Mobile Key - Chave Móvel Digital, and Law No. 13/99, of March 22, which establishes the new legal regime for voter registration, and Decree-Law No. 135/99, of April 22, which defines the general principles of action that Public Administration services and bodies must comply with in their actions towards citizens. With these amendments, all documents in the Portuguese digital wallet (id.gov) have the same legal value as the physical ones, are renewable through more digital channels and may include more legal references if the citizen so desires. It also introduces the possibility of including a social address, reinforcing human rights, namely in vulnerable communities.

## Dirust Services

Decree-Law No. 12/2021 of 9 February 2021, provided the framework for the application of the regime introduced by Regulation (EU) No. 910/2014 of the European Parliament and of the Council, of 23 July 2014, on electronic identification and trust services for electronic transactions in the internal market (eIDAS Regulation). In particular, it regulates the activities of trust service providers established in Portugal, designating and establishing the Portuguese authorities with the powers to carry out the supervisory activities provided for in the regulation, as well as defining the sanctioning framework applicable in case of violation of the regulation's rules. At the same time, the opportunity was taken to consolidate the existing legislation both on the validity, effectiveness and probation value of electronic documents, and on the State's Electronic Certification System - Public Key Infrastructure.

## Law on the Digital Mobile Key

Law No. 37/2014 of 26 June 2014, established the Digital Mobile Key, an alternative and voluntary system allowing citizens to authenticate in portals and websites of the public

administration. The introduction of Law No. 32/2017, of 26 June 2017, added eSignature features, allowing citizens to digitally sign documents by entering a mobile phone number, followed by a permanent password and a unique, temporary and automatically generated numeric code received by SMS or via a specific smartphone app.

Administrative Rule No. 73/2018 is also relevant in this context, as it defines the terms and conditions for use of the SCAP (Professional Attributes Certification System) for the certification of professional, business and public attributes through the Citizen Card and the Digital Mobile Key, as is Administrative Rule No. 77/2018, which regulates the use of the Digital Mobile Key for digitally signed documents.

### Electronic Authentication Platform

The Electronic Authentication Platform brings together the different authentication and electronic signature solutions available to citizens, allowing them secure access and authentication in the portals and internet sites of different public entities (such as the Citizen Portal or the Tax Authority Portal). Available authentication tools are the Citizen Card, the eID-based Portuguese identity card and the Digital Mobile Key, an ID mobile solution that allows citizens to authenticate solely with a mobile device, thus eliminating the need to use a personal computer with a smartcard reader. 2017 saw the release of a Digital Mobile Key dedicated app to facilitate the use of the eID from the smartphone. Another feature of autenticacao.gov is the Professional Attributes Certification System (SCAP), which allows citizens to authenticate and/or sign as certified professionals of a specific recognised profession (e.g. as an engineer or a physician).

#### Electronic Identity Card – Citizen Card

The Citizen Card (*Cartão de Cidadão*) is the Portuguese civil and eID card that provides both visual identity authentication and electronic identity authentication using biometrics and electronic signatures. It allows the holder to provide secure authentication when dealing with digital services and to digitally sign electronic documents. Citizens can thereby take advantage of a multichannel service delivery in their interactions with public and private services. In 2023, as part of the modernisation of Citizen Card services, Portuguese Recovery and Resilience Plan funding, for a value of EUR 9 million, included investments in the complete renovation of the biometric kiosk park, and the development of alternative solutions to customer service and the integration of services. The national eIDAS node is implemented and in production on the ePortugal.gov.pt web portal. The Citizen Card notification was published in the Official Journal of the European Union (OJEU) 2019/C 75/04 with a 'high' level of assurance.

## 臭 Mobile Identification - Digital Mobile Key

The Digital Mobile Key (Chave Móvel Digital) is a mobile authentication and signature mechanism associated with the Citizen Card and other documents. It is a form of secure online citizens' authentication and signature, based on a system similar to home banking solutions, through the introduction of a username (citizen's mobile number), password (chosen by the citizen) and a one-time password sent by SMS, e-mail or Twitter account (also chosen by the citizen). Since December 2017, citizens can also use a Digital Mobile Key app for receiving the one-time password associated with each authentication through push notifications on their smartphones. More recently, in April 2018, the Digital Mobile Key was upgraded with a remote qualified signature feature, in line with the eIDAS Regulation. The main objective is to offer a complementary authentication solution through mobile devices, safer than access via username and password (ensuring more security to the State) and simpler for the citizen (ensuring more effectiveness and efficiency for citizens and companies). As of February 2023, more than 4.7 million citizens have already been enrolled in the Digital Mobile Key system. Since January 2023, it is possible to activate the Digital Mobile Key using biometrics, through a simpler process that quarantees data protection. The eID scheme concerning the Digital Mobile Key was published in the Official Journal of the European Union (OJEU) 2020/C 116/01 with a 'high' level of assurance.

## ID.gov.pt

The ID.gov.pt app, as established by Law No. 37/2014 of 26 June 2014, later amended by Article 407 of Law No. 2/2020, is a digital wallet available for iOS and Android that allows citizens to view, save and share certified versions of personal identification documents, including the national ID card (Citizen Card), the driver's licence and the vehicle registration document (to name just a few of the twelve documents already available). The digital documents generated by the app, which requires secure authentication via the eIDAS-compliant Digital Mobile Key, have the same legal value as the original paper versions, and can be validated by public and private

authorities in real-time through a QR code available in the application or through the insertion of a temporary code in a reserved area of autenticacao.gov.pt. The undisputable identification of citizens is essential for the good provision of services. Hence, ID.gov.pt is part of the national strategy for dematerialising the citizen-State relationship with a focus on the mobile channel, which has a high uptake in Portugal. Since October 2023, ID.gov.pt features the possibility to automatically renew the driving license within the app: the citizen receives a notification five months before the licence' expiration date and only needs to pay for the renewal, receiving the new licence in the app and by post. More recently, Law No. 19-A/2024 established that the digital documents/data presented in real time to third parties in the national territory, through the ID.gov application, are presumed to conform to the original documents, with equal legal and probative value and dispensing additional validation by authorities.

### Portuguese Electronic Passport

The Portuguese Electronic Passport (PEP) represents the beginning of a new generation of eID documents with the most rigorous security patterns. While preserving the features of traditional passports as to the identification of its holder, it also integrates innovative components ranging from facial recognition to the incorporation of a contactless chip that allows for the automatic processing of entries and exits. All the information contained in the chip can only be read by the specialised equipment of the State Electronic Certification System (SCEE).

## State Electronic Certification System

The State Electronic Certification System (SCEE) is an infrastructure of public keys which supports electronic signatures and other electronic security services activated by public keys (algorithms). The SCEE architecture constitutes a hierarchy of trust that guarantees the electronic security of the State and the strong digital authentication of electronic transactions among several public services and organisations, and between the State, citizens and businesses. It allows interoperability with the infrastructures that fulfil the necessary rigorous authentication requirements through adequate technical mechanisms and compatibility in terms of certification policies, primarily within the scope of the EU Member States.

## 🗐 eIDAS

The national eIDAS node is already implemented and in production on the ePortugal.gov.pt web portal, with the eID scheme concerning the Citizen Card (national eID card) published in the European Union Official Journal (EUOJ) on 28 February 2019 and attaining a 'high' level of assurance. Additionally, the eID scheme concerning the Digital Mobile Key (mobile eID mechanism) was also published in the EUOJ with a 'high' level of assurance.

#### Cybersecurity

## ∏ National Strategy for Cyberspace Security 2019–2023

The National Strategy for Cyberspace Security 2019-2023 (Resolution of the Council of Ministers No. 92/2019), published on 5 June 2019, aims to deepen the security of network and information systems as a way to protect the cyberspace of national interest and to promote its free, safe and efficient use for all citizens, companies, and other public and private entities. This strategy, which is annually assessed by the High Council of Cyberspace Security, has been developed based on the lessons learned and the developments in the digital domain since the approval of the first version in 2015. It establishes three strategic objectives for 2019–2023: (i) maximising resilience, i.e. overcoming the threats that could compromise cyberspace of national interest's security; (ii) promoting innovation, i.e. affirming the cyberspace as a domain for the economic, social and cultural development and prosperity; and (iii) generating and ensuring resources, i.e. contributing to achieving adequate resources to guarantee the country's cyberspace security capabilities. In the context of the objectives established by the National Strategy for Cyberspace Security 2019–2023, the National Cybersecurity Centre (CNCS) created the Public Administration Cybersecurity Forum, which aims to identify and disseminate cybersecurity best practices within public administration and to foster information sharing at management and policy levels. It is also worth mentioning that, in August 2019, Portugal became a participating State in the European Centre of Excellence for Countering Hybrid Threats (Hybrid CoE), as part of the objective of creating a national plan to counter disinformation and cyberattacks in Portugal, thus repealing Law No. 67/1998.

### 1 National Cyber Defence Strategy

The Resolution of the Council of Ministers No. 106/2022 of 2 November approved the National Cyber Defence Strategy. The resolution aims to characterise and substantiate the strategic vision and the inter-organisational framework and ensure the development of this capacity, which is crucial for digital sovereignty.

## ∏ National Cybersecurity Framework ☐

In 2019, the National Cybersecurity Centre (CNCS) published the National Cybersecurity Framework to allow organisations to reduce the risk associated with cyberthreats, providing the basis for any entity to meet the minimum security requirements of networks and information systems. In 2022, the CNCS developed a national certification scheme of compliance with the National Cybersecurity Framework which will enable public and private organisations to certify the implementation of their organisational, procedural, technological and cybersecurity practices complying with the National Cybersecurity Framework. This certification scheme can streamline public administration while strengthening the levels of cybersecurity.

## Cybersecurity Competences Framework

The National Cybersecurity Centre (CNCS) provides a Cybersecurity Competences Framework gathering information on the references and knowledge required to fulfil cybersecurity roles and tasks, thus allowing all those who have an interest in training and hiring professionals with high cybersecurity skills. Besides contributing to the development of the cybersecurity sector, this tool will also foster decision-making processes, including the definition and formulation of relevant public policies.

## Cybersecurity Digital Innovation Hub

The Cybersecurity Digital Innovation Hub (C-Hub) is a consortium led by the National Cybersecurity Centre comprising members from public and private sectors as well as R&D institutions and, besides integrating the European Digital Innovation Hubs Network (EDIH), it was also recognised as a national Digital Innovation Hub (DIH) in June 2021. The C-Hub aims at the implementation of digital transformation processes embedding cybersecurity, by providing innovative services, advice and planning to both public and private entities (in particular SMEs).

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The National Communications Authority (ANACOM) is responsible for defining and implementing a set of actions in the Action Plan of the National Strategy for Cyberspace Security 20192023. The coordination with the National Cybersecurity Centre (CNCS) and the entities that make up the State Electronic Certification System is particularly relevant in this field, with a view to defining and operationalizing models for sharing information on cybersecurity threats and incidents.

In this regard, ANACOM has undertaken the operationalization of the Sectoral Computer Security Incident Response Team (CSIRT-ANACOM), with the purpose of supporting and protecting ANACOM, supporting the Communications Emergency Planning Commission, and the main stakeholders of the sectors regulated by ANACOM, as well as implementing and reinforcing effective cooperation with the CNCS to ensure the efficient handling of security incidents in the communications sector.

## Digital Services Act

Regulation (EU) No. 2022/2065 (Digital Services Regulation), relating to a single market for digital services, defines a set of obligations for providers of very large online platforms, aiming to create a safer online environment for digital users and companies and to protect fundamental rights in the digital space. ANACOM was appointed coordinator of digital services by Decree-Law No. 20-B/2024, of February 16, exercising the powers assigned to it by the European Digital Services Regulation, such as cooperation with digital service coordinators from other Member States, authorizing data access to qualified researchers, granting trust flag status, guaranteeing the right to complain, and mutual assistance duties.

## Solution Cybersecurity Legislation

Decree-Law No. 69/2014 defined the functioning of the National Cybersecurity Centre (CNCS) and Law No. 46/2018 of 13 August 2018 established the national legal regime for the

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security of cyberspace, transposing Directive (EU) 2016/1148 of the European Parliament and of the Council, of 6 July 2016, concerning measures for a high common level of security of network and information systems across the Union, and opting to add public administration in its scope. Law No. 46/2018 was complemented by the Regulation No. 183/2022 published on 21 February and the Decree-Law No. 65/2021 of 30 July ruling the national legal framework and defining cybersecurity certification obligations in compliance with Regulation (EU) 2019/881 of the European Parliament of 17 April 2019. In 2022, the ministerial order 11491/2022 signed by the Minister of Economy and Sea, the Minister of Science Technology and Higher Education and the Secretary of State for Digitalisation and Administrative Modernisation designated the Portuguese National Coordination Centre in line with Regulation (EU) 2021/887 of the European Parliament and of the Council of 20 May 2021 establishing the European Cybersecurity Industrial, Technology and Research Competence Centre and the Network of National Coordination Centres. The Portuguese National Coordination Centre will help decision-making processes seeking to establish synergies with relevant activities at national, regional and local level, namely national policies on research, development and innovation in the area of cybersecurity.

## & Law on the Protection of Personal Data

Law No. 41/2004 of 18 August 2004, transposed into national law Directive (EU) 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector, except for Article 13, which concerned unsolicited communications. This legislation applies to the processing of personal data within the context of publicly available electronic communications services and networks, while complementing the provisions of Law No. 67/1998 (Law on the Protection of Personal Data). Its provisions ensure protection of the legitimate interests of legal entities' subscribers, to the extent that such protection is consistent with their nature. On 8 August 2019, Law No. 58/2019 was published, establishing the application of Regulation (EU) 2016/679 of the European Parliament and the Council of 27 April 2016, on the protection of individuals with regard to the processing of personal data and to the free movement of such data (GDPR).

#### C-Academy – Cybersecurity Advanced Training Programme

The C-Academy is an advanced training programme in cybersecurity assembling different levels of training on cybersecurity related matters, providing sets of technical and cross-cutting skills and know-how to qualify and upskill human resources in public administration and private sector. The C-Academy is developed by the National Cybersecurity Centre (CNCS) under the Recovery and Resilience Plan with the purpose of specialising at least 9 800 trainees until the first quarter of 2026. The 44 courses available in the C-Academy are managed by the CNCS and held by Higher Education Institutions.

## 6. Innovative technologies

### Artificial Intelligence

## GuIA - Guide for Artificial Intelligence

GuIA – Guide for Artificial Intelligence – was launched in 2022 as a reference to help public entities devise AI-based solutions, so that these solutions are transparent and auditable, do not discriminate or increase biases. The guide, whose development included a public consultation to collect contributions, considers five dimensions to evaluate AI projects:

- Accountability responsibility and possibility of audit/inspection;
- Transparency access to components and procedures;
- Explainability explanation of how it works;
- Fairness protection and guarantees for users and beneficiaries; and
- Ethics effective mechanisms for mitigating unexpected biases.

The model for developing AI projects rests on concrete steps, resources and methodologies for participatory, responsible and sustainable ideation processes such as: (i) creating an Ethics Committee and a Committee of Experts, with professionals from the areas where AI technologies are used; (ii) choosing an adequate project management methodology, aligned with a communication strategy with stakeholders and adjusted to expectations; (iii) including training/qualification programmes for human resources and users/beneficiaries; and (iv) designing a roadmap around Responsible AI.

Additionally, an online tool for self-assessment of risk was made available to be applied to AI projects. The tool was developed in line with the guide and recommends concrete actions and suggestions for further readings, depending on the level of maturity of the users.

All documents, as well as the online tool, are accessible here.

Despite the focus on the public sector, these instruments can be used in other contexts, namely in the private sector and academia. The tool's evolution, with necessary adjustments to the latest advancements in AI — specifically Generative AI and the utilization of General-Purpose Models— has become imperative. This adaptation is driven by the emergence of unknown risks associated with models that defy understanding of their capabilities and limitations (systemic risk). The guide and the self-assessment tool are a work in progress, open to society's participation and contributions.

## National Strategy for Artificial Intelligence: AI Portugal 2030

The National Strategy for Artificial Intelligence (AI Portugal 2030), launched in June 2019, was promoted by the Portugal INCoDe.2030 coordination structure in cooperation with the Science and Technology Foundation (FCT), the National Innovation Agency (ANI), *Ciência Viva* and the Administrative Modernisation Agency (AMA).

Developed within Portugal INCoDe.2030's axis 5 ('Research'), the strategy is aligned with the European Coordinated Plan on Artificial Intelligence and is based on seven pillars:

- Promoting a better society;
- Fostering AI skills and 'digital minds' for all;
- Promoting new jobs and developing an economy of AI services;
- Fostering Portugal as a living lab for experimenting new developments;
- Securing AI niche markets through key specialised services in Portugal;
- Contributing to generating knowledge and new developments through AI research and innovation; and
- Providing better public services for citizens and businesses and adopting evidence-based approaches in public policies and decision-making processes.

More in general, the strategy aims to improve the frontline position in fundamental and applied AI research and increase the qualifications of the labour force and the added value brought by AI technologies to the economic growth.

In the scope of the national strategy for AI, INCoDe.2030 foresees the following initiatives:

- Actions to publicize and promote initiatives developed at national level by public and private entities, academia, innovation centres, etc;
- Webinars on AI-related topics;
- Development of PT AI WATCH platform, which will allow the mapping of projects in AI;

- Promotion of actions aimed at the development of digital skills, namely in AI technologies; and
- Review of the current strategy and development of a new National AI Strategy and Implementation Plan.

A new strategy, more closely aligned with the European Union's Digital Decade and the developments so far attained, is being drafted to create a thriving AI ecosystem, drive economic growth, and improve citizens' lives through responsible AI adoption and innovation.

#### Portuguese Charter on Human Rights in the Digital Age

Law No. 27/2021 of 17 May adopted the Portuguese Charter on Human Rights in the Digital Age. Article 9 states that the use of AI and robots shall be "guided by the respect of fundamental rights, guaranteeing a fair balance between the principles of explicability, security, transparency and responsibility, which takes into account the circumstances of each specific case and establishes processes aimed at avoiding any prejudice and any form of discrimination".

## Justice Practical Guide

The online Justice Practical Guide is a strategic project devised within the scope of the national RRP. It aims to promote a fast and simplified channel of information, based on AI, promoting an informed exercise of citizens' rights but also, in a larger time framework, competitiveness for companies and investors, as it will gradually comprise different areas of interaction with the judiciary system and its services. The first approach focuses on family law, particularly divorce and marriage. The main objective is to ensure that citizens who seek information on how to proceed in these situations are able to access it and in a clear language. The project is based in a system that grants an adequate and correct language and wider possibilities of use and interaction – the GPT 3.5 language – that seems to offer the best possibilities to support the project as it has innovative and particularly future-focused skills.

### AI4PA – AI and Data Science for the Public Administration

Integrating both the National and the European Digital Innovation Hub Networks, the AI4PA - Artificial Intelligence & Data Science for the Public Administration aims to support the digital transition of public administration using Artificial Intelligence and other innovative technologies. Aggregating over 20 entities from central, regional and local administration, universities and private companies, it intends to increase the effectiveness of public policies and the quality of public services, as well as empowering all levels of public administration and SMEs offering digital solutions tailored to the needs of the State - both at the national and European level. AI4PA is funded by the national RRP.

## Citizen-centred AI: a Systemic Approach to Assessing Virtual Assistants in Public Services

The Citizen-centred AI project, piloted by LabX, led to the development of a systemic approach to assessing Virtual Assistants (VAs) in public services. In order to assess Portuguese public entities, a new approach was designed. This approach can fully capture the different facets associated with VAs, as it combines the analysis of the technology in terms of its readiness level with the analysis of the users' evaluation, as well as of the study on the interaction between humans and machines.

The methodology developed, even if still experimental, revealed the potential to be used by the public administration for assessing and optimizing VAs.

#### ePortugal Virtual Assistant

In May 2023, Portugal developed a generative AI virtual assistant (VA) on ePortugal.gov.pt – the national single digital gateway – to further support citizens in accessing digital public services. It is one of the first generative Artificial Intelligence solutions (based on CHATGPT 3.5 turbo) made available to citizens. This VA offers a permanent service and the avatar answers in writing and by voice (with lip sync) to citizens' queries. Currently responding to eID-related questions (with an increase of 10% in eID activations), its aim is to expand both the number of services supported and the number of recognized languages, with a view to make it more effective and relevant for the population in general and, in particular, for the foreign community living in Portugal.



#### Intelligent Solution for Face-to-face Services

gIAp is a technological solution based on advanced data analysis and AI tools that aims to balance the demand and offer of onsite public services. To this end, it allows to evaluate the efficiency of services in the face-to-face channel, the simulation scenarios and the respective impacts on the service at a given time, as well as the solutions proposed for improvement. gIAp contains specific dashboards to assist managers in making decisions at both operational and strategic levels. This solution was designed in such a way that it is possible to include more services, entities and service points easily, as well as other service channels, in addition to the face-to-face. In 2022, gIAp incorporated three new data sources - the Electronic Yellow Book and ePortugal.gov's Satisfaction and Feedback forms - and analysed millions of transactions from four citizen interaction systems; in 2023, gIAp integrated four new data sources - Contact Center, Public Services Platform, Citizen Card Services and Change of Address Services - and analysed millions of transactions from eight citizen interaction systems. To optimize the user experience and ensure informed decision-making, a set of specific alarms were defined throughout 2023 for different profiles and entities that have access to qIAp. Based on business areas and different users (managers, operators, etc.), critical values that deserve attention were identified. These values may be related to waiting time, the number of attendances, the availability of resources, among others. The intelligent use of alarms and alerts in gIAP aims to contribute to a more effective and proactive management of public services, ensuring that decisions are based on relevant data, allowing for an agile response to anomalous situations and improving the guality of service to citizens.

#### AI for Cybersecurity

Via SAMA2020, the National Cybersecurity Centre (CNCS) is developing AI-based processes to improve cybersecurity management procedures and allow for a better identification of threats through trends detection.

## Social Security - Artificial Intelligence

In 2019, the Social Security Informatics Institute developed a prototype machine-learning project. This project focused on the social security inspection system and aimed to test the possibility of complementing the inspection activity with predictive models that, managed by AI/machine learning methodologies, points out which entities need to be supervised based on the learning algorithms results, using the Social Security Information System (SISS) historical data.

## 👰 Social Security - Chatbot

Social Security adopted a chatbot solution in response to the COVID-19 crisis to support automated responses to the citizens' main questions. The second phase is currently being launched: it is foreseen to implement the contextual integration with the Social Security Portal and AI features, in order to automate more responses. A live chat with human Contact Centre agents is also planned.

## Caixa Geral de Aposentações - Chatbot

With the aim to improve the service provided to users and its own efficiency, *Caixa Geral de Aposentações*, I.P introduced in its portal an AI-based virtual assistant to answer to the users' FAQs, thus reducing the waiting time for answers and the navigation time through the site.

### Ministry of Economy and Maritime Affairs - Chatbot

The Ministry of Economy and Maritime Affairs adopted chatbots to interact with and answer to users' questions in some areas of business. These new virtual assistants support automated responses to economic operators and entities. This functionality involves a dialogue structure developed through an AI tool.

### **Distributed Ledger Technologies**

## ਜ਼੍ਹੀ⊧ Blockchain

Portugal is one of the signatories of the agreement that established the European Blockchain Partnership (EBP) and is one of the current co-chairs of the group, a position that significantly facilitates the access to information about the European Blockchain Services Infrastructure (EBSI). The Portuguese node has been finalised and is under management by Imprensa Nacional – Casa da Moeda. The Portuguese Blockchain Innovation Hub was created at the city of Guarda, so that Portugal would become technically part of EBSI and the Portuguese Public Administration had the necessary tools to start using blockchain technology. There are also research centres and several companies in Portugal developing use cases, pilots, and products in the area, for other companies and public institutes. A Working Group was established under the coordination of the INCoDe.2030, tasked with developing a National Blockchain Strategy and an action plan for its implementation.



#### Participa.gov

Participa.gov is a centralised platform that supports all of Public Administration's participatory processes (e.g. participatory budgets), either open to the population or restricted to the public sector (nationwide or local processes). End-users can participate in open calls by submitting their own proposals and/or by voting on their preferred ones, making use of secure authentication and voting mechanisms, namely the national eID mechanisms (recognized by the European eIDAS Regulation with the highest level of assurance) and blockchain technology, guaranteeing transparency, security and anonymity in the voting process and preventing fraud.

#### Big Data

## Social Security – Big Data Platforms for Monitoring

The Social Security Informatics Institute builds in-house infrastructure monitoring solutions using big data tools and methodologies. The technological stack consists of a large number of mostly open-source components (e.g. HDFS,YARN, ZooKeeper, Kafka, Kudu and Fluent), as well as a few proprietary ones, mainly for administration and data visualisation. The main component is a Cloudera Cluster running on Linux over commodity hardware. This toolset allows for the development of efficient pipelines for the ingestion, processing and sharing of large volumes of very heterogeneous data within a short time to market. The ingested data consist mostly of application and system logs, data obtained by querying business databases and instrumentation tools, along with a few more unusual sources. The result is a near real-time update of a few hundred system indicators (and some business performance ones). The big data platform with a few additional software components (e.g. Sqoop and Spark job), is also the foundation on which some business intelligence jobs are built, particularly oriented to data quality (consolidation of data with more than a single source of truth) and fraud detection.

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### Platform of Justice Indicators, Statistics and Open Data

The project aims to develop a platform of indicators, official statistics and open data that enables the collection and processing of justice data (Big Data), integrating data sources from judiciary services and other public and private entities, whenever possible, with the creation of communication services with the source information systems, promoting interoperability with initiatives from civil society and the business sector. The purpose is to expand the information services and products, boosting knowledge, mobilising professionals, the scientific community and society for an informed evaluation and debate, in order to define measures and policies suitable for the improvement of justice.

## Cloud & Edge Computing

## Public Administration Cloud Strategy

The CTIC created a working group (CloudAP) that presented a Strategy for Cloud Computing to be adopted by the public administration with a view to increasing reliability, efficiency and flexibility, and pushing forward innovation and digital transformation. The Cloud Strategy for the public administration has already been published and, at the moment, instruments are being made available for their adoption in the public administration. This strategy aims at the adoption of a public cloud, but it also allows for other scenarios, if appropriate. The CloudAP group also created subgroups to identify barriers and deploy actions to accelerate Cloud adoption by the public sector. The subgroups are working on the following goals:

• Creating a common framework for evaluating the Go/No Go for Cloud (completed);

- Making this framework available online and part to the ICT procurement process (completed);
- Identifying barriers in the legal framework and proposing solutions in several dimensions: procurement, financing, accounting and budgeting (completed);
- Making standard tender documents available (completed);
- Creating and implementing capacity for the public sector (in progress, with ongoing training courses); and
- Making cloud framework agreements available (in progress).

A dedicated team will be set up to support the various governmental areas in adopting the cloud strategy, and INA is responsible for presenting a proposal for a training plan for this digital area.

#### Social Security - Service Edge

Edge computing is a distributed computing paradigm that brings computation and data storage closer to the location where it is needed to improve response times and save bandwidth. Social Security is adopting this new concept to accelerate the internal services in the network edge (20 edge locations already implemented all across the country) and support working from home for a large number of remote users (more than 5 290 users) who adopt Secure Access Service Edge (SASE) technology to get secure access to the services and applications with the best user experience and highest security.

## Internet-of-Things (IoT)

## ्र्री: Use of the Internet of Things

In January 2021, ANACOM published the report 'Use of the Internet of Things (IoT) 2021'. This report presents the available sample information on the use of IoT equipment in Portugal and the European Union, and the main characteristics of its users. In the case of IoT equipment being used by companies, the information dates back to 2021 and, in the case of the use by households, the most recent information dates back to 2020.

## Quantum Computing

## The Advanced Computing Portugal 2030

Advanced Computing Portugal 2030 (ACP.2030), which falls within the scope of Portugal INCoDe.2030 and is closely related to AI Portugal 2030, is a science, innovation and growth strategy aimed at promoting and expanding advanced supercomputing infrastructure in Portugal until 2030. Its purpose is to generalise access to scientific computing, foster cooperation based on advanced scientific computer networks and promote international collaboration to support advances in different areas and fields. ACP.2030 encompasses three major domains of activity: (i) creating a national supercomputing infrastructure at the service of research and innovation; (ii) developing and retaining high-value people with advanced computing skills; and (iii) implementing a public policy info-structure to fill in the gap between infrastructures and people in a way that fosters the creation of high-value services and software. A relevant initiative in this domain has been the inauguration, in July 2019, of the Minho Advanced Computing Centre (MACC), home of the first supercomputer operating in Portugal (BOB). This machine is part of the Iberian Advanced Computing Network and marks the start of the Portuguese participation in the European High-Performance Computing initiative (EuroHPC). Deucalion, the second supercomputer to operate in Portugal under the EuroHPC, will also be installed at MACC. The national HPC network and the forthcoming Digital Innovation Hub's network should bring new offers to the cloud-to-edge market and foster cloud adoption.

## Quantum Communication

The National Security Office (GNS) is involved in a Euro QCI project through the PTQCI Digital Europe Programme, which aims to establish the national first instance of an ultra-secure quantum communications technology infrastructure, which will be a component of the larger Euro QCI project. While delivering the initial segments of the network, this project will evolve, covering not only other areas of the country (namely Azores and Madeira through satellite links), but also cross-border connections, thus enlarging the European Union network based on this type of

technology. The consortium that has been created to put this project forward is composed of several entities from industry, academia, and governmental agencies.

## Gigabit and Wireless High-speed Networks

## ccl fight 5G Strategy

The Resolution of the Council of Ministers No. 7-A/2020 approved the strategy for 5G adoption in Portugal. This 5G Strategy set out 13 different action points, covering specific KPIs and associated timelines. All action points/goals are aimed at ensuring strategically selected and geographically cohesive coverage, with major milestones to be reached by 2020, 2023, 2024 and 2025. This resolution was amended with Rectification Statement No. 16-A/2020, of 7 April.

The 5G auction carried out by ANACOM at the end of 2021 safeguarded the national objectives defined for mobile broadband, namely through the imposition of various coverage and network development obligations, including in the most remote areas. It is also worth mentioning that ANACOM has completed a project concerning the availability of an integrated geographic information platform on the coverage of fixed and mobile electronic communications networks.

In addition, ANACOM has committed to the project of public funding for the installation of VHCN networks in 'white areas' (through a public tender launched in 2024), which aims to provide gigabit connectivity in a fixed network to places without such coverage. Finally, the National Strategy for Connectivity in Very High-Capacity Electronic Communications Networks for the period 2023–2030 was approved with the Resolution of the Council of Ministers No. 139/2022 of 28 December. Furthermore, the Administrative Modernization Agency (AMA) is working on a model to assess the impact of 5G use cases in the public administration.

## Broadband Universal Service

Decree-Law No. 66/2021, of 30 July 2021, approved the creation of a social tariff for the provision of broadband internet access services in Portugal in the scope of universal service. The social tariff is made available by all companies that provide this type of service to low income consumers or consumers with special social needs, with the aim of mitigating the high price of access as a barrier to the use of broadband Internet. The tariff comprises a monthly fee of EUR 5 (EUR 6.15 including 23% VAT) for the broadband internet access service and a one-off maximum price of EUR 21.45 (EUR 26.38 with 23% VAT) for activating the service and/or to access equipment. The procedures and conditions necessary for the application of Decree-Law No. 66/2021 of 30 July are regulated by Ordinance No. 274-A/2021 of 29 November.

## Coverage of Fixed and Mobile Networks

Decree-Law No. 40/2022 of 6 June (DL 40/2022) establishes the general rules applicable to the implementation of an information platform on the coverage of the fixed and mobile networks of companies offering public electronic communications networks, hereinafter referred to as 'operators of electronic communications networks', within the national territory. According to the decree-law, ANACOM is responsible for providing this platform with up-to-date information on the coverage of fixed and mobile electronic communications networks within the national territory, enabling the availability of voice and internet access services to be verified, as well as, in the case of mobile networks, short message services (SMS) and mobile message services (MMS).

## National Strategy for Connectivity in Very High Capacity Networks 2023–2030

Resolution of the Council of Ministers No. 139/2022 of 28 December approved the National Strategy for Connectivity in Very High Capacity Networks (VHCN) 2023–2030. This strategy takes into account the preparatory work carried out in 2021 and 2022 to guarantee access for the entire population to VHCN, which resulted in public consultations, launched on 6 January and 26 October 2022, on the coverage of such networks and on the options regarding the installation of these networks with recourse to public funding, including from the European Union, in addition to private investment, in so-called white areas. It also formalises and aggregates the government options regarding the policies to be pursued in order to achieve total national coverage with these networks.



#### Broadband Internet Access Service throughout the Territory

Resolution of the Council of Ministers No. 18/2020 of 27 March approves the revision of the broadband internet access service throughout the territory and, in particular, in inland Portugal, and recognises the importance of regularly updated information on network coverage.

#### age Gigabit Network

In order to ensure coverage of all households, in the national territory, with a Gigabit network by 2030, the government mandated the National Communications Authority (ANACOM) with the aim: (i) to collect up-to-date information on the coverage of very high capacity networks (VHCN), including information on plans of any undertaking to roll out broadband networks, including VHCN; (ii) to designate the geographical areas without VHCN ('white areas') based on the information collected; and (iii) to prepare the proposals for the specifications of the tendering procedures to be carried out by the government for the installation, operation and maintenance of Gigabit networks in the identified areas. As to the provision of mobile services, including broadband services to achieve Gigabit connectivity, the 5G auction regulation established coverage and network development obligations, thus creating an environment that fosters the development of population's digital skills, economic growth, social inclusion, and the competitiveness of the country and all regions.

#### New Submarine Cable system

In March 2024, the contract for the Execution of the Design, Construction, Supply, Installation, Assembly and Entry into Operation of the Submarine Telecommunications Fiber Optic Cable of the new CAM Ring (CAM-Continente Açores Madeira) was signed between IP and Alcatel Submarine Networks (ASN). The new CAM Ring system will have a total length of 3 812 kilometers of submarine cable and will have a ring topology, with six fiber optic pairs and an estimated total capacity of at least 150 Tbps, much higher than the current capacity of the existing submarine cable system. In addition to its telecom purpose, the CAM Ring will also include an innovative SMART (Science Monitoring And Reliable Telecommunications) component, for seismic detection, climate and environmental monitoring and data transmission for scientific purposes. In fact, the submarine cable repeaters will be equipped with wet sensors that will allow to collect real time data on key oceanographic and environmental parameters such as temperature at the bottom of the sea, level of the sea, salinity, and others. The collection of real-time data will imply that the new submarine cable system will comprise data storage and data processing for the benefit of the community. The new CAM Ring is expected to be one of the first in the world with a SMART Component.

#### GovTech

## Justice Govtech Strategy

Launched in February 2023, the Justice Govtech Strategy comprises innovation and digital transformation projects developed in collaboration with universities, research centers and startups with the aim of making justice services more agile and efficient. Aligned with the Portuguese Recovery and Resilience Plan, the Justice Govtech Strategy is the result of long collaboration with stakeholders in all stages of innovation, from the concept to the final product, so that the different problems in the justice area are addressed together: from authentication to new business models, automation, data exploration and more. Some of the initiatives are: (i) an access to Justice guide, the first advanced language model developed with machine learning in Justice, using innovative technology (similar to ChatGPT); (ii) automation of the 'Company and Name Exchange', using AI to automatically create company names. The functionality that will make it possible to suggest names based on the company's area of activity is under development and so is simpler Portuguese citizenship application, supported by an AI tool that allows the service to be provided online, through automatic document authenticity validation. In the first phase of the project, the online application will have to be made by representatives.

## Other Innovative Technologies

## Reference National Smart Cities Strategy

The National Smart Territories Strategy (ENTI), launched in December 2023, aims to "transform data into action" to make life easier for citizens and companies. It was developed with local authorities, regional coordination and development commissions, inter-municipal communities and entities such as technology and telecom companies, higher education institutions and organizations integrated into the national science and technology system. ENTI foresees 16 strategic initiatives and 31 recommendations, including the creation of a national Smart Territories Portal (coordinated by the Administrative Modernization Agency) to support the provision of value-added services and information based on interoperable platforms.

## Free Technological Zones

Resolution of the Council of Ministers No. 29/2020 established general principles for the creation and regulation of Free Technological Zones (ZLT), which are physical environments geographically located in a real or near-real environment, aimed at the safe testing of technologies, products, services and innovative technological processes with the support and monitoring of the respective competent authorities. Decree-Law No. 67/2021 established the basic legal framework applicable to the governance model to promote technological innovation with the setup of ZLTs. In addition, in 2022, Ordinance No. 189/2022 created the ZLT Infante D. Henrique - managed by the Portuguese Navy, in order to experiment and test unmanned security and defence systems and other technologies in subsurface, surface and air environments - and, in 2023, Ordinance No. 165/2023 created the ZLT Matosinhos - managed by the association CEiiA (Centre of Engineering and Development), in the area of mobility towards carbon neutrality of cities. Currently, there are other ZLTs in the process of being established, with a view to test solutions in areas such as IA, IoT, XR (metaverse), Cloud Computing, Blockchain or Cybersecurity.

#### Social Security - Process Automation and Mining

Social Security adopted the Robotic Process Automation (RPA) technology and implemented automation of several business processes, including European pensions forms E250/P5000 and special needs education forms. At present, it is starting to evaluate, by means of process mining, other business processes which could be automated. The use of these technologies aims to significantly reduce the process execution time, eliminate the backlog and free human resources to execute other processes. Automation examples: Instant NISS (Social Security Identification Number); P5000/E205; Special Needs Education; etc.

#### Social Security - Video Attendance

Video Attendance is an innovative form of assistance that allows citizens to access social security services, regardless of their geographic location, residence status in the country or abroad, and mobility status. Having the characteristics of a personalised service, it offers the same products made available in the face-to-face channel, including the delivery of documents and, additionally, it makes it possible to accompany customers looking for a service available online, thus promoting the use of Direct Social Security services. The appointment website is multilingual and offers the possibility to choose the language of the assistance service. Videoconference assistance proved to be an efficient management factor of the service network resources, maximising and optimising it immediately and without allocation of resources or additional costs.

#### 🚂 Caixa Geral de Aposentações - Process Automation

Caixa Geral de Aposentações, I.P. uses Robotic Process Automation (RPA) technology to update scheme member personal data, namely to perform the re-enrolment of teachers, and to prevent external fraud, through automatic detection of illicit instances of pension and salary overlapping.

### Caixa Geral de Aposentações - Digital Proof of Life

The electronic proof of life for pensioners living abroad compares the biometric data of the image taken from the identification document and a real time video of the pensioner and replaces consular services in a much more convenient way.

## 7. Digital Public Administration Governance

For more details on Portugal's responsible bodies for digital policy and interoperability, its main actors, as well as relevant digital initiatives, please visit the NIFO collection on Joinup.

#### National

#### Minister of Youth and Modernisation

The Minister of Youth and Modernisation is responsible for the modernisation of public administration and digital government.

#### Secretary of State for Digitalisation and Administrative Modernisation

The Secretary of State for Digitalisation and Administrative Modernization is responsible for the modernisation of public administration and digital government, under the direct tutelage of the Minister of Youth and Modernisation.

#### Administrative Modernisation Agency

Created in 2007, the Administrative Modernisation Agency (AMA) is the public institute in charge of digital government and administrative modernisation and simplification, under the superintendence and authority of the Secretary of State for Digitalisation and Administrative Modernisation. AMA's activity is divided into three major areas:

- 1. Digital transformation;
- 2. Public services delivery (both physical and digital); and
- 3. Innovation and public participation.

AMA operates in areas such as ICT strategy and governance, administrative simplification, services redesign and experimentation, digital identity, interoperability, single digital gateway, open data, emerging technologies, AI and other building blocks of the digital government in Portugal. AMA is also the responsible body for interoperability activities in Portugal.

## Council for Information and Communication Technologies in Public Administration

The Council for Information and Communication Technologies in Public Administration (CTIC), created by the Resolution of the Council of Ministers No. 33/2016 of 3 June 2016, is the coordination structure responsible for developing and managing the ICT strategy and the overall action plan for ICT in the Portuguese public administration. It is intended to effectively articulate with the SIMPLEX Programme to recover measures that take advantage from the transformative potential of ICTs and to implement new measures that will improve the quality of citizens' lives and reduce the costs for companies. The CTIC brings an ICT governance model in the public administration that is open to society and well-adjusted to the government's objectives, thereby enabling the effective development of a global ICT strategy.

The CTIC responds directly to the Prime Minister, who delegated this attribution to the Secretary of State for Digitalization and Administrative Modernisation. Its Technical Committee (which includes a representative of each Ministry) is chaired by AMA, thus giving that entity a cross-sectorial management role in the Portuguese eGovernment policy domain.

The mandate of the Council run until December 2023, through the Resolution of the Council of Ministers No. 84/2020 of 1 October 2020. It is, to the date of June 2024, underway a new Resolution of the Council of Ministers about this matter.

#### Interministerial Network for Administrative Modernisation

The Interministerial Network for Administrative Modernisation (RIMA), established by Decree-Law No. 4/97 and reviewed by Decree-Law No. 72/2014, brings together representatives from all government areas to pursue a collaborative work in the field of administrative simplification and modernisation, and streamlines the relationship between the State, citizens and businesses.

In particular, it establishes administrative modernisation measures on the methodology and mechanisms for regulatory impact assessment of normative acts.

#### Commission for Administrative Modernisation

The Commission for Administrative Modernisation brings together business associations, social partners, consumer protection organisations, professional associations and representatives of both central and local government, with the aim of promoting the sharing of ideas between the different stakeholders and partners in the modernisation of public administration.

#### Management Centre for the Electronic Government Network

The Management Centre for the Electronic Government Network (CEGER), under the Minister of the Presidency's Office, provides IT support to government bodies. It is responsible for the management of all the technological infrastructure of the government network, including maintenance of the Data Processing Centre, technological equipment, systems and the electronic communication network. In addition, CEGER focuses on electronic security and advanced systems in support of government decision-making. It also acts as the certification manager for the State Electronic Certification System - Management of Public Keys (SCEE). Finally, it is the responsible entity for registration of gov.pt internet sub-domains.

#### **Government Shared Services Entity**

The Government Shared Services Entity (eSPap) ensures the development and provision of public services, and designs, manages and evaluates the national procurement system. In addition, it ensures the management of the PVE (State Vehicle Fleet). It supports the development of strategic policies by the Ministry the Presidency and the Ministry of Finance in the area of ICT. It also ensures the planning, designing, execution and evaluation of digitisation initiatives of the respective services and organisations.

## Subnational (Federal, Regional and Local)

#### Secretary of State for Modernization and Digitalization

The Secretary of State for Modernization and Digitalization is responsible for the modernisation of public administration and digital government, under the guidance of the Minister of Youth and Modernization.

#### Secretary of State for Planning and Regional Development

The Minister in the Cabinet of the Prime Minister and for Territorial Cohesion is responsible for formulating, implementing and evaluating a comprehensive and coordinated policy in agreement with local governments, through the Secretary of State for Planning and Regional Development.

#### Directorate-General for Local Administrations

The Directorate-General for Local Administrations (DGAL) is a service integrated in the Minister in the Cabinet of the Prime Minister and for Territorial Cohesion, whose mission is to design, study, coordinate and implement measures to support local administrations, and to strengthen cooperation between the latter and the central administration. Its tasks include, for example, the design and development of information systems in the areas of financial, patrimonial, administrative and human resources management.

#### Administrative Modernisation Agency

The Administrative Modernisation Agency (AMA) coordinates administrative modernisation programmes and involves, via a very active model, most of the municipalities on how to implement them at regional and local level. Many of the several existing initiatives focus on areas such as co-financing (SAMA), licensing (Zero Licensing and Industrial Licensing) and Citizen Spots (multiservice physical desks for assisted digital service delivery, in partnership with municipalities).

#### **Regions and Municipalities**

Regions and municipalities are in charge of policies/strategies within the scope of their competences.

## National Association of Portuguese Municipalities

The National Association of Portuguese Municipalities (ANMP) is the representative body of the Portuguese municipalities. It promotes their interests and provides support services in various areas, including ICT and public management

## 8. Cross border Digital Public Administration Services for Citizens and Businesses

Further to the information on national digital public services provided in the previous chapters, this final chapter presents an overview of the basic cross-border public services provided to citizens and businesses in other European countries. Your Europe is taken as reference, as it is the EU one-stop shop which aims to simplify the life of both citizens and businesses by avoiding unnecessary inconvenience and red tape in regard to 'life and travel', as well as 'doing business' abroad. In order to do so, Your Europe offers information on basic rights under EU law, but also on how these rights are implemented in each individual country (where information has been provided by the national authorities). Free email or telephone contact with EU assistance services, to get more personalised or detailed help and advice is also available.

Please note that, in most cases, the EU rights described in Your Europe apply to all EU member countries plus Iceland, Liechtenstein and Norway, and sometimes to Switzerland. Information on Your Europe is provided by the relevant departments of the European Commission and complemented by content provided by the authorities of every country it covers. As the website consists of two sections - one for citizens and one for businesses, both managed by DG Internal Market, Industry, Entrepreneurship and SMEs (DG GROW) - below the main groups of services for each section are listed.

## Life and Travel

For citizens, the following groups of services can be found on the website:

- Travel (e.g. Documents needed for travelling in Europe);
- Work and retirement (e.g. Unemployment and Benefits);
- Vehicles (e.g. Registration);
- Residence formalities (e.g. Elections abroad);
- Education and youth (e.g. Researchers);
- Health (e.g. Medical Treatment abroad);
- Family (e.g. Couples);
- Consumers (e.g. Shopping).

#### **Doing Business**

Regarding businesses, the groups of services on the website concern:

- Running a business (e.g. Developing a business);
- Taxation (e.g. Business tax);
- Selling in the EU (e.g. Public contracts);
- Human Resources (e.g. Employment contracts);
- Product requirements (e.g. Standards);
- Financing and Funding (e.g. Accounting);
- Dealing with Customers (e.g. Data protection).

## The Digital Public Administration Factsheets

The factsheets present an overview of the state and progress of Digital Public Administration and Interoperability within European countries.

The factsheets are published on the Joinup platform, which is a joint initiative by the Directorate General for Digital Services (DG DIGIT) and the Directorate General for Communications Networks, Content & Technology (DG CONNECT). This factsheet received valuable contribution from the Administrative Modernization Agency (AMA) and several sectoral public entities.

The Digital Public Administration Factsheets are prepared for the European Commission by Wavestone.

## An action supported by Interoperable Europe

The ISA<sup>2</sup> Programme has evolved into Interoperable Europe - the initiative of the European Commission for a reinforced interoperability policy.

The work of the European Commission and its partners in public administrations across Europe to enhance interoperability continues at full speed despite the end of the ISA<sup>2</sup> programme. Indeed, enhanced interoperability will be necessary to unlock the potential of data use and reuse for improved public services, to enable cross-border collaboration, and to support the sector-specific policy goals set by the Commission for the future.

Interoperable Europe will lead the process of achieving these goals and creating a reinforced interoperability policy that will work for everyone. The initiative is supported by the *Digital Europe Programme*.

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