



2030 DIGITAL DECADE

**Annex
Spain**

REPORT ON THE STATE OF THE DIGITAL DECADE 2023

Digital Decade Country Report 2023: Spain

Spain is expected to make a positive contribution to the collective efforts to achieve the EU's Digital Decade targets.

The Spanish authorities have made significant endeavours in recent years, laying the foundation for an ambitious digital transformation of the Spanish economy. Spain has made significant progress in all four dimensions of the Digital Decade. The 'Digital Spain 2026' strategy, which is aligned with the Digital Decade Policy Programme, was presented in 2022 to further promote the digital transformation through a set of reforms and significant public and private investments.

Spain is collaborating with other Member States in exploring the possibility to establish **European Digital Infrastructure Consortium (EDICs)** on: (i) the Alliance for Language Technologies, to develop a common infrastructure in the field of natural language processing and to develop large multi-language models; (ii) Genome, to enable effective and secure cross-border access to repositories of personal genomic datasets; (iii) and the Networked Local Digital Twins Towards CitiVerse project, using disruptive and immersive technologies for future city related projects.

DIGITAL SKILLS

More than one third of Spain's population does not have basic digital skills. Nonetheless, Spain is a good performer in at least basic and above basic digital skills, with 64% and 38% of the population benefiting from these skills respectively, which is above the EU average. The country continues to progress in increasing the percentage of ICT specialists the workforce, where it stands slightly below the EU average (4.3% vs 4.6%), and the percentage of ICT graduates, where it exceeds the EU average (4.8% vs 4.2%). The share of women among the ICT specialists is at 18% just below the EU average. This contributes to narrowing the gap to the continuously growing demand. Spain is implementing several measures to increase the number of ICT specialists, notably a new law to modernise the vocational education and training system (VET), approved in March 2022, and a new VET specialisation course on AI and big data.

Spain should accelerate its efforts in the area of digital skills, notably in the upskilling and reskilling of the labour force, in particular, in advanced and emerging technologies, to address the lack of ICT specialists. Additionally, Spain should continue to encourage more students to specialise in ICT and promote diversity and a gender-balanced uptake of this subject, reducing any possible stereotypes in the teaching and learning of informatics.

DIGITAL INFRASTRUCTURE

Spain is one of the EU's best performers in digital infrastructure, in particular in connectivity. In fixed very high-capacity networks it is significantly above the EU average (93% vs 73%), and in fibre to the premises coverage it exceeds the EU average by a wide margin (91% vs 56%). The country is only slightly above the EU average in overall 5G coverage (82% vs 81%) due to initial auction delays. However, Spain has now assigned 98% of all 5G pioneer bands and, under its RRP, it is implementing appropriate measures to achieve the Digital Decade targets. Spain adopted its new Telecommunication Law in 2022 and is promoting both 5G and broadband deployment. On semiconductors and cutting-edge technologies, in May 2022, Spain approved the Strategic Project for Economic Recovery and Transformation on microelectronics and semiconductors (PERTE Chip) to strengthen the industry's design and production capacity in Spain in order to foster national and EU strategic sovereignty. The country participates in the IPCEI on Microelectronics and Communication Technologies with 11 direct participants active in various fields (material, open-source design, equipment, packaging, connectivity, photonics). Spain is currently implementing several measures that could help achieve Europe's first computer with quantum acceleration by 2025.

Spain should continue implementing its policies on digital infrastructure, in particular accelerating 5G coverage. It should accelerate the setting up of 5G ecosystems in cities, factories and relevant rural zones, and, in this context, encourage partnerships between innovative companies and large-scale companies providing the infrastructure to be deployed. Measures taken by Spain in the field of semiconductors and quantum computing should continue in order to help the EU to become a strong market player in these areas.

DIGITALISATION OF BUSINESSES

The percentage of SMEs with a basic level of digital intensity is slightly below the EU average (68% vs 69%), although the Spanish authorities are making efforts to improve the enterprises' digitalisation. Concerning the integration of advanced technologies, 2022 data shows substantial progress as 12.3% of enterprises use AI and 14.3% use Big Data for internal analysis. Given its large number of SMEs and their important share in the Spanish economy, the reforms and investments aimed at improving scalability and digitalisation of SMEs will have an indirect multiplier impact. Spain launched the Digital Kit initiative to promote scalable, high-impact, and public-private collaboration mechanisms to accelerate the digitalisation of SMEs, and the Agents of Change programme to give SMEs grants to hire digital transformation experts. Under Spain's National AI Strategy, the country has taken important measures on AI which should support further development of these technologies and increase the take-up by enterprises. The country also participates in the IPCEI on Next Generation Cloud Infrastructure and Services. Additionally, several measures were launched to encourage a favourable environment for emerging companies and unicorns, notably the Start-ups Law.

Spain should continue implementing its policies in the area of digitalisation of businesses. In notably it should continue supporting the development and deployment of advanced technologies, in particular, in SMEs, and to provide supportive framework conditions for start-ups and scale-ups.

DIGITALISATION OF PUBLIC SERVICES

Spain is at the forefront of e-Government and digital public services in the EU and continues to update its services and infrastructure to bring them into line with rapid technological developments and the needs of citizens and businesses. Spain performs well above the EU average on the indicators measuring the number of internet users that use e-Government services (84% vs 74%), in digital public services for citizens (86) and for businesses (91), and in access to e-health records (83). Spain has one eID means, the Spanish ID card (DNIe) notified under the eIDAS regulation. Spain has made progress regarding the interoperability of digital public services at national, regional, and local levels.

Spain should continue implementing its policies to digitalise public services. Notably, it should continue to increase its efforts to connect additional kinds of healthcare provider to electronic health records until full coverage is achieved. Spain should also continue taking measures to ensure that a comparable quality of service and completeness of electronic health data is provided at regional level.

DIGITAL IN SPAIN'S RECOVERY AND RESILIENCE PLAN (RRP)

The Spanish Recovery and Resilience Plan devotes EUR 19.6 billion (28.2%) to the digital transformation, of which EUR 18.8 billion are expected to contribute to the Digital Decade targets ¹. Spain has successfully submitted three payment requests, covering many important milestones and targets for digital measures including: (i) the [strategy for the promotion of 5G technology](#); (ii) the [SME Digitalisation Plan](#) for 2021-2025; (iii) the national AI strategy; the assignment of the 700 MHz band and the legal act on the reduction of taxes on the 5G spectrum ; (v) the entry into force of Spain's General Telecommunications [Law 11/2022 of 28 June](#); (vi) the National Cybersecurity Industry Support program; and (vii) the [Organic Law 3/2022 of 31 March 2022](#) on the organisation and integration of vocational training. In June 2023, Spain submitted its addendum to the RRP, strengthening its digital dimension, which is being reviewed by the Commission.

¹ Based on Annex VII of the RRF Regulation. Furthermore, a qualitative assessment of the data took place to allow for an estimation of the possible contribution of RRF measures to the Digital Decade targets and the remaining part is also supporting the general objectives of the Digital Decade. This applies to all descriptions of the RRFs included in this Annex. The information provided refers to the Recovery and Resilience Plan as adopted by the Council before 1 September 2023, without prejudice to potential ongoing revisions of the plan.